

Date: 08/19/2024

Texas Commission on Environmental Quality Waste Permits Division Correspondence Cover Sheet

Nature of Correspondence:

Facility Name: <u>City of Del Rio Landfill</u> Permit or Registration No.: <u>MSW 207C</u>	☐ Initial/New ☐ Response/Revision to TCEQ Tracking No.: 29656107 (from subject line of TCEQ letter regarding initial submission)
Affix this cover sheet to the front of your submission to for type of correspondence. Contact WPD at (512) 239	
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 & Hazard	ous 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:	



August 19, 2024

Savannah Rains
Solid Waste Permit Section MC-109
Texas Commission on Environmental Quality
12100 Park 35 Circle
Austin, TX 78753

Re: Response to Technical Notice of Deficiency (NOD)

City of Del Rio

Del Rio, Val Verde County, Texas

Proposed Municipal Solid Waste Permit No: 207C Tracking No. 29656107; RN102143294/CN600756290

Permit Major Amendment Application

Dear Ms. Rains,

On behalf of the City of Del Rio, please find attached a response to the technical notice of deficiency for the referenced permit amendment application. The replacement pages enclosed have been updated to incorporate comments included in the 1st Technical NOD letter.

To facilitate your review, the NOD Table with the comments and response is enclosed. A complete replacement of Appendix IIIH, IIIK, IIIL, and IIIN have been provided with this submittal. In addition, to the redline strikeout copy, a complete replacement of the application is submitted with this application to include page numbers on all the sheets. If you have any questions, please do not hesitate to contact me.

Sincerely,

Tewobista Metaferia, P.E.

Project Engineer

cc: Manuel Chavez, Interim City Manager TCEQ Region 16

ID	App. Part	App. Section	Location	Citation	Error Type	Deficiency Description/Resolution
NT1	3	General	305.45(a)	Part III Appendix IIIB	Omitted	Comment: Provide a completed TCEQ Transportation Data and Report (Form No. 20719) in Part II of the application. Response: The completed TCEQ Transportation Data and Report From have been included in Appendix I/IIE.
NT2	4	General	305.45(a)	Part III Appendix IIIE-B	Inconsistent	Comment: The final cover components (side slope erosion layer thickness and infiltration layer permeability) described in III.A of Form 20720 are different than what is stated in Section 2.2 of appendix IIIE and Table 4-1 of appendix IIIA. Revise to clarify the proposed final cover design. Response: TCEQ Form 20720 (page 3) included in Appendix IIIE-A has been revised to be consistent with the permeability stated in other parts of the permit.
Т3	11	General	330.57(d)		Ambiguous	Comment: It is unclear where the waste acceptance and handling procedures are located. Either remove Note 4 in Figure I/IIA.2 or add reference to where proper waste acceptance and handling procedures are contained (e.g., Part II, WAP; Part IV, SOP). Response: Note 4 has been removed from Figure I/IIA.2.
NT4	14	General	330.57(e)	Hard copies sent to TCEQ	Omitted	Comment: The application does not use proper separators/ tabs. Per 330.57(g)(7), provide copies of the application with the required tabs. Response: Tabs have been included for all the Appendices with this submittal.
T5	16	General	330.57(f)		Inconsistent	Comment: The engineering firm names listed on Page 1s of TCEQ Forms 20721 and 20722 contained in Appendix IIIG (CP&Y, Inc.) are different than the name shown on title pages of Appendix IIIG and other appendixes (STV Inc). It is also noted that Part I Form lists STV Inc. as the consultant. Explain the discrepancies and/or revise to consistently identify the engineering/consulting firm(s). It is noted that the same Firm Registration Number is provided for both firms. Response: The company name has been revised throughout the application to reflect CP&Y an STV Company.
NT6	21	General	330.57(g)(2)	All cover sheets	Inconsistent	Comment: Revise all appendices to have consistent numbering, naming conventions, title page formatting, appropriate seals, and the date of the current application submittal. Response: Appendices have been revised to have consistent numbering, naming convention, title page formatting, appropriate seals, and date of the current application submittal.
NT7	22	General	330.57(g)(3)	On all the Table of Contents	Incomplete	Comment: Each volume of the application needs to have a Title page followed by a Table of Contents detailing what is contained within it that is appropriately sealed. Revise throughout. Response: Table of Contents for each Volume have been included with this submittal.
NT8	24	General	330.57(g)(5)	Page numbers provided on all sheets	Incorrect	Comment: Sequential page numbering should be used throughout the entire document including cover pages, table of contents, drawings, attachments, etc. The overall sequential page numbering should be added under any section/appendix specific numbering with the current date of submission and with future revision dates as they occur. When previous submittals, such as the 2022-approved Leachate Generation Model in Appendix IIIK-A are included, they should have the current application sequential numbering and date applied, plus an indication that they are from a previous submittal including the previous date of submittal/approval. Response: The page numbers have been added or revised as requested.

ID	App. Part	App. Section	Location	Citation	Error Type	Deficiency Description/Resolution
Т9	25	General	330.57(h)(1)	All drawings	Inconsistent	Comment: Revise Figure I/IIA.2 to provide correct cross-section reference index. Response: The cross-section reference has been updated on I/IIA.2.
T10	27	General	330.57(h)(3)	All drawings	Inconsistent	Comment: a) Revise Figure I/IIA.3 to ensure use of correct cut/fill markers. Revise all relevant drawings in the application to ensure that correct cut/fill markers are used (for example, but not limited to, Figures IIIA-B.2 and IIIC-3.1). It is noted that Figure I/II-2.2 shows a legend for cut/fill markers. b) Revise the table of contents for Appendix IIIC to include Figure IIIC-3.1 Leachate Collection System Plan. Response: a) Figures I/II2.2, I/IIA.3, IIIA-B.2, and IIIC-3.1 have been updated to show the correct cut/fill markers. In addition, the permitted leachate system has been added to these drawings. b) The Table of Contents for Appendix IIIC has been updated to include Figure IIIC-3.1 (page IIIC-11)
T11	32	General	330.57(h)(4)(E)	All drawings	Incomplete	Comment: a) Many drawings/figures in this application do not have page numbers. Revise drawings/figures to have page numbers continuous with page numbers for non-drawing/figure pages. b) Revise Lists of Drawings/Figures as necessary. Response: a) Page numbers has been added to all the drawings/figures to have continuous page numbers with non-drawing pages. b) The Table of Contents has been updated to show the correct page numbers for the drawings/figures.
T12	79	Part I	305.45(a)(6)(A)		Incomplete	Comment: Include any wells and springs on the general topographical map Figure I/II 4.2. Response: Figure I/II 4.2 has been updated to show water wells. There are no springs in this area.
NT13	89	Part I	330.59(d)(2)		Incorrect	Comment: Section 14 of Part I/II General Application Requirements needs to be updated since John Sheedy IV is no longer the City Manager. If a permanent City Manager is hired during the application process, this will need to be updated again. Response: Section 14 has been updated.
NT14	99	Part I	330.59(f)(4)		Incorrect	Comment: Revise Section 16 of Part I/II General Application requirements to update the City Manager. If a permanent City Manager is hired during the application process, this will need to be updated again. Response: Section 16 has been revised to remove name of the City Manager as well as the Public Works Director since both are no longer at the City. The City is currently looking for a replacement for both positions. In addition, Section 16.2.5 has been updated.
NT15	105	Part I			Incorrect	Comment: Update the delegated signatory authority in Section 15 of Part I/II General Application Requirements since John Sheedy IV is no longer the City Manager. If a permanent City manager is hired during the application process, this will need to be updated again. Response: The delegated signatory authority (Page I/II-33) has been updated with the Interim City Manager. In addition, the property owner's affidavit has also been replaced to update to remove John Sheedy's name.

ID	App. Part	App. Section	Location	Citation	Error Type	Deficiency Description/Resolution			
NT16	122	Part l	305.45(a)(8)(C)		Incomplete	Comment: a) Fill out page 12 of the Part I Form to indicate where the Part I attachments are located. b) Provide the Spanish Plain Language Summary in accordance with 39.405(k). c) Our records indicate that there is a pending notice modification requesting to authorize a change in operator from Red River Service Corporation to Platform Waste Solutions LLC. Since this application lists the operator as Platform Waste Solutions, that notice modification will need to be issued before this major amendment can be declared technically complete. d) Submit a new Core Data Form (TCEQ-10400) with an updated authorized signature since John Sheedy IV is no longer the City Manager. Response: a) Page 12 of the Part I Form has been updated to indicate where the attachments are located. b) A summary of the application has been provided in Spanish in Part I of the application. c) The notice permit modification requesting to authorize change in operator has been withdrawn by Platform Waste Solutions. The operator change will be part of this permit amendment. A new Core Data Form has been included for Platform Waste Solutions. d)The Owner's Core Data Form signature page has been updated and provided in this submittal.			
NT17	141	Part II	330.61(i)(4)	I/IIB	Omitted	Comment: Provide all coordination with TxDOT. All coordination should include initial requests, cover letters, submittals for review, and response letters. Response: A letter has been sent to TXDOT and currently waiting for a response. The letter is included in Appendix I/IIB.			
NT18	142	Part II	330.61(i)(5)	Parts. I/II Section 8	Omitted	Comment: The determination of no hazard to air navigation letters were granted in 2022 and expire 6/27/24. A new FAA review is required. Provide all coordination with the FAA. Response: The coordination letter sent out August 14, 2024 to FAA is included in Appendix I/IIB. A new determination of no hazard to air navigations has been obtained from the FAA and is included in this submittal.			
NT19	146	Part II	330.545(b)	I/IIB	Omitted	Comment: Include the notifications to airports located within a 6-mile radius of the facility in Appendix I/IIB: coordination with Federal Aviation Administration. Response: The notifications to airports have been sent out. Letter is included in Appendix I/IIB.			
T20	160	Part II	330.61(l)(2)	Section 7, Figure I/II-7.4	Omitted	Comment: Figure I/II-7.4 does not include the locations of the oil and gas wells discussed later in Appendix IIIJ, include them on the figure. Additionally, discuss them within the text of Section 7, after the discussion of the water well information. Response: The oil and gas wells have been shown on Figure I/II-7.4. Text in Sections 2.5 and 7 have been updated.			
NT21	163	Part II	330.61(m)(2)	Parts I/II Section 11, Appendix I/IIC Section 7	Incomplete	Comment: Provide all coordination with the U.S. Army Corps of Engineers. In the correspondence, provide information on the 404 Nation Wide permit referenced in Section 11.2 of Part I/II General Application Requirements. Response: Text in Section 11.2 has been updated. A 404 Nation Wide permit is not needed for the expansion area.			

ID	App. Part	App. Section	Location	Citation	Error Type	Deficiency Description/Resolution
NT22	166	Part II	330.61(n)(2)	Parts I/II Section 12, Appendix I/IIC Section 6	Incomplete	Comment: The coordination with Texas Parks and Wildlife Department (TPWD) was from the previous amendment. Obtain current coordination agreements with TPWD and the U.S. Department of the Interior Fish and Wildlife Service as required for all major amendments. Include all coordination in the application. Response: The updated letter sent to the Texas Parks and Wildlife Department has been included with this submittal. Currently waiting for a response from the TPWD.
NT23	167	Part II	330.61(o)	Parts I/II Section 2.2	Incomplete	Comment: Provide all coordination with the Texas Historical Commission. Response: All the coordination with the Texas Historical Commission have been included in this submittal.
NT24	168	Part II	330.61(p)	Parts I/II Section 2.4	Omitted	Comment: Provide documentation that Parts I & II of the application were submitted for review to the Middle Rio Grande Development Council. Provide all coordination in Appendix I/II B. Response: Documentation sent to the Middle Rio Grande Development Council (MRGDC) has been included with this submittal. Currently waiting for a response from the MRGDC.
T25	176	Part II	330.61(c)(6)	Appendix I/IIA	Ambiguous	Comment: The following comments are related to Figure I/IIA.1. a. Show latitudes and longitudes. b. Clarify if the monument 12002/Site Benchmark, located in the closed landfill area, is meant to be the permanent benchmark required by 330.143(8). Note that per 330.143(8), the permanent benchmark location needs to be readily accessible and may not be in waste footprint. Revise to show a compliant permanent benchmark with required data. Response: a) Figure I/IIA.1 has been revised to show latitudes and longitudes. b) The callout has been moved to show the correct benchmark location and note 3 has been added for clarification.
T26	180	Part II	330.61(c)(10)	Appendix I/IIA	Ambiguous	Comment: Regarding Figure I/IIA.1: a. Revise to provide legends for easements or revise to refer to where relevant easement information is contained. b. Revise to clearly show the electric easement limits at the southwest perimeter of Cell 5. (refer to the above comment) Response: a) The easement line has been added to the legend. b) The drawing has been revised to clearly show the 15-foot electrical easement limits near Cell 5.

ID	App. Part	App. Section	Location	Citation	Error Type	Deficiency Description/Resolution
Т27	181	Part II	330.61(c)(11)	Appendix I/IIA	Incomplete	Comment: The following comments are related to Figure I/IIA.7 in Appendix I/IIA. a. Revise to make the intended feature (fence) more prominent. b. Figure I/IIA.7 appears to show that only a small section of the permit boundary on the northwest side will have site fence. Note 1 indicates dense foliage and vegetation as part of the access control. Explain if the existing dense foliage and vegetation alone can be a reliable access control measure for large livestock and animals or revise to have fence (and gate) on the entire permit perimeter. Revise other portions of the application as necessary. Response: a. The drawing has been updated to make the fence more prominent. b. The City of Del Rio has an existing fence aexisting fence that surrounds the property. The drawing has been updated to make the existing fence stand out.
T28	186	Part II	330.61(d)(2)	Appendix I/IIA	Incomplete	Comment: Please delineate interior roads on a Figure, or Figures, in Appendix I/IIA. Response: The major interior road has been delineated on Figure I/IIA.7.
T29	187	Part II	330.61(d)(3)	Appendix I/IIA	Incomplete	Comment: Note 9 to Figure I/IIA.6 is unclear; revise as appropriate. Response: Note 9 has been revised.
T30	194	Part II	330.61(d)(9)(B)	Appendix I/IIA	Omitted	Comment: Provide Figure I/IIA.4, Sector Development Sequence, which is missing from Appendix I/IIA. Response: The Sector Development Plan I and Sector Development Plan II have been provided in this submittal.
NT31	202	Part II	330.61(h)(1)	Figure I/II 7.2	Incomplete	Comment: Revise the zoning map, Figure I/II-7.5, to show the two-mile radius around the facility. Response: The zoning map has been updated to show a two-mile radius.

ID	App. Part	App. Section	Location	Citation	Error Type	Deficiency Description/Resolution
T32	266	Part II	330.559	Parts I/II Section 9, Appendix I/IIC Section 8	Incomplete	Comment: The following comments are related to stability analysis included in Appendix IIIL: a. Table of Contents for Appendix IIIL lists Appendix IIIL-A (Slope Stability Analysis) and Appendix IIIL-B (Settlement and Heave Analysis). Contents for Appendix IIIL-A and Appendix IIIL-B are missing. Provide Appendices IIIL-A-1, IIIL-A-2, IIIL-B 1, and IIIL-B-2 for review b. Revise Section 5.4 of Appendix IIIL to discuss how representative properties are determined for the three strata of multiple constituents described in Section 3.2 (including clay, caliche, sand, shale, gravel, etc.) c. Revise Section 3.3 to ensure all components in the liner, over liner, and final cover are included in the stability analysis. Revise other portions of the application as necessary. (Refer to comments on MRI IDs 359 and 685). d. Revise Section 5.0 to clarify if veneer stability analysis has been conducted for liner system and final cover system; or, revise to include veneer stability analysis. (Refer to MRI IDs 359 and 685 for components in the liner and final cover systems). Ensure the analyzed scenarios include those when components are saturated with liquids/water. e. Revise Table 5-1 to clarify if (and explain why) the material strength parameters are representative of the materials to be used for the construction of the liner and final cover. Revise other relevant portions of the application as necessary. f. Revise Section 5.2 to clarify if all worst-case critical sections have been selected and analyzed for stability. Revise as necessary. g. Section 5.3 indicates that excavation slopes will be as steep as 2H:1V. Revise to include stability analysis for excavation slopes and liner slopes under dynamic load conditions. Justify if no dynamic load analysis is included. Respnse: A complete replacement of Appendix IIIL has been provided with this submittal.
NT33	289	Part III	330.63(c)	Site Development Plan Section 3, Appendix IIIH	Incomplete	Comment: a. Revise the table of contents for Appendix IIIH to include appendix IIIH-A, IIIH-B, IIIH-C, IIIH-D, and IIIH-E. b. Most of the appendices in IIIH are missing data. Review appendix IIIH and its sub appendices to include all their contents in the application. Also, ensure the individual appendices' table of contents are correct. c. Revise either the table of contents for Appendix IIIH or Figure IIIH.7 to consistently name the figure. Response: a. The TOC for Appendix IIIH has been updated. b. Complete replace of Appendix IIIH has been provided with this submittal. All the sub appendices have been included in this submittal. c. The TOC has been udpated to match the figure name.

ID	App. Part	App. Section	Location	Citation	Error Type	Deficiency Description/Resolution
T34	290	Part III	330.305(a)	Site Development Plan Section 3, Appendix IIIH	Incomplete	Commnet: The following comments are related to Appendix IIIII. a. Figure I/II-2.2 shows two detention ponds under the currently permitted conditions, and one detention pond under the proposed MSW 207C. The pond at the northwestern portion of the site is removed by this amendment application. To avoid repeating the long text descriptions for each pond and possible misidentification, revise Appendix IIIII to provide a short and proper ID to each of these detention ponds. b. Revise Appendix IIIII to include design for the detention pond and discussions on how the changes proposed in this application affect the detention, design, and function. Revise to include plan view and cross sections for the pond. c. Discuss what impact the proposed expansion will have on those drainage channel(s) that previously discharged into the northwest pond (consider such items as capacity, freeboard, flow direction, etc.). And, if necessary, provide detailed designs and revisions. d. Revise Section 4.0 to discuss discharge structures at the discharge points (refer to the structure drawings as necessary). e. Most discharge points shown in Figure IIIIII.1 have very high discharge velocities (e.g., 28 FPS). Revise Section 4.2.4 to discuss how surface erosion will be controlled at the discharge points under the post-development conditions. f. Revise to discuss discharge conditions from the landfill perimeter channels at the expansion area (flow status, velocities, erosion control measures, etc.) g. Figure IIIII.1 shows some gas probes in or very close to the discharges from the down chutes (e.g., GP-2). Relocate gas probes away from the drainage discharge points or provide a discussion of how the gas probes will not affect flow and will not be damaged. h. Revise Appendix IIII to clarify if the most recent rainfall data can be downloaded from the agency's webpage at https://www.tceq.texas.gov/downloads/permitting/waste-permits/msw/docs/rainfall-ests.pdf. Response: a. A short and proper ID for proposed detention ponds has been pro

ID	App. Part	App. Section	Location	Citation	Error Type	Deficiency Description/Resolution
T35	292	Part III	330.305(c)	Appendix IIIH		Comment: Revise Appendix IIIH to include design and operation procedures for surface runoff at the working face (diversion berm, containment berm area/volume, management of contained contaminated runoff). If this information is already included in the application, revise to refer to where the relevant information is contained. Response: This information is included in Appendix IIIC-C (permit page # 736).
Т36	293	Part III	330.305(d)	Appendix IIIH	Incomplete	Comment: Appendix IIIH-E does not include sufficient information to demonstrate compliance with 330.305(d). Revise to provide necessary information on design and inspection/maintenance activities (including, but not limited to, maximum spacing between swales, minimum vegetation coverage, calculated maximum soil loss.) Note that drainage analysis and erosion control is expected to follow TCEQ guidance RG-417, which is posted at the agency's website at https://www.tceq.texas.gov/downloads/permitting/waste-permits/publications/rg-417.pdf. If the required information is already included in the application, revise Appendix IIIH to refer to where it is contained. Response: A complete replacement of Appendix IIIH-E has been included in this submittal.
Т37	294	Part III	330.305(d)(1)	Appendix IIIH		Comment: Revise Appendix IIIH to include information satisfying 330.305(d) and (e). Refer to comments on MRI ID 293. Response: A complete replacement of Appendix IIIH has been provided with this submittal.
T40	305	Part III	330.63(c)(1)(B)	Appendix IIIH	Incomplete	Comment: Revise Appendix IIIH to provide cross sections of each segment of channels/ditches with grades. Provide relevant information for the detention pond. Include sufficient freeboard as applicable. Response: The corss section for the channel 2, 3, 4, 5 and 6 have been provided in Appendix IIIH-C. The cross sections for channel 1, 6, 7 and 8 will be provided with the second round of TCEQ comments.
T41	306	Part III	330.63(c)(1)(B)	Appendix IIIH	Incomplete	Comment: Revise Appendix IIIH to provide cross sections of each segment of channels/ditches with data required by 330.63(c)(1)(B), including water flow rates, elevations, velocities, and flow line elevations. Response: The corss section for the channel 2, 3, 4, 5 and 6 have been provided in Appendix IIIH-C. The cross sections for channel 1, 6, 7 and 8 will be provided with the second round of TCEQ comments.
T42	350	Part III	330.63(d)(4)(D)	SDP pg10	Ambiguous	Comment: The following comments are related to Appendix IIIB. a. Revise to explain how the 309-day operating schedule specified in Section 2.1 was determined. b. Revise to clarify if the total capacity of 35.02 million cubic yards in Section 3.0 is the capacity/total airspace to be authorized under MSW 207C, if issued. Section 3.0 specifies that the total capacity includes airspace for "in-place" waste and daily cover. c. Revise Section 3.0 to remove "in-place." d. Revise Section 3.0 to explain how the total capacity is calculated. It is noted that under MSW 207B, "the total waste disposal capacity of the landfill (including waste and daily and intermediate cover) is 29,377.617 million cubic yards." e. Revise Section 3.0 to specify the remaining (available) airspace which is used for estimating the remaining site life. It is noted that Step 1 on Page IIIB-5 lists Permitted Remaining Airspace and Expansion Airspace. Clarify if Expansion Airspace includes airspace to be gained through vertical expansion of the developed areas.

ID	App. Part	App. Section	Location	Citation	Error Type	Deficiency Description/Resolution
						Response: a) A note has been added to Table 1-1 (page IIIB-1) to explain how the operating schedule for the year is calculated. b) Text has been revised. c) Text has been removed. d) Text has been revised. e) Text has been revised. Comment:
T43	359	Part III	330.331(a)(2)	SDP pg8, IIIA-1	Incomplete	a. Provide Figures IIIA-A.1 and IIIA-A.1a, which are missing in Appendix IIIA-A. b. Based on the cross sections included in Appendix IIIA-B, top of waste elevations in the developed area (Cells 3, 4, 5, and 6) will increase variably from the elevations permitted under MSW 207B. Consistent with 330.331(a), revise to provide an overliner system that meets 330.331(a)(2) and 330.33; or revise to maintain the final waste/cover configurations/elevations permitted under MSW 207B. Revise all relevant portions of the application (text and drawings) accordingly (including, but not limited to, Appendix IIID). c. Consistent with 330.331(a), revise Section 2.0 in Appendix IIIA, to specify a liner system meeting 330.331(a)(2) and 330.333 for the lateral expansion cells (Cells 7 thru. 10). Revise all relevant portions of the application (text and drawings) accordingly (including, but not limited to, Section 4.3.3 in Part III, Appendix IIIC, Appendix IIID). d. It is noted that Section 2.3.2 in Appendix IIID specifies the permeability of the clay liner to be 1x10E-7 cm/sec. Revise other portions of the application for consistency (for example, but not limited to, Appendix IIIA). Response: a) Figures IIIA-A.1 has been provided with this submittal. The overliner information is included on Figure IIIA-A.1 so Figure IIIA-A.1a has been removed from the table of contents. b) Cells 3,4 and 5 are located over a previously approved Alternate Liner in accordance with TAC 330.331(a)(1). This Alternate Liner was originally approved in 1995. This Alternate Liner was again approved as a part of 207B in November 2022 after a demonstration. The actual leachate was sampled and Models were run to establish that the concentration levels of the chemicals listed in Table 1 of TAC330.331(a)(1) were not exceeded in the uppermost aquifer at the point of compliance. This demonstration is included in the Application as Appendix IIIK. Consequently an overliner system is not required in this area as it is underlain with an Approved Alternate Liner.

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T44	374	Part III	330.333	Appendix IIIC	Incomplete	Comment: a. Revise Appendix IIIC to include design and operation for leachate collection and removal for a liner system with a geomembrane component. Properly distinguish between liners with and without geomembrane component. Refer to Comments on MRI ID 359. b. Revise Section 3.4 and other relevant portions of the application to specify the mechanism (automatic or manual) that monitor the leachate depth, and the start-up and shut-down of the pumps. It is noted that Section 5.0 mentions measuring leachate depth by pressure transducer. c. Revise Table 3-3 in Appendix IIIC, to define "periodically" and specify the frequency and procedures for inspection and maintenance/repair of the leachate monitoring and removal system. d. Revise Section 3.4 and Table 3-3 in Appendix IIIC, to state that a malfunctioning pump will be repaired or replaced as soon as possible after discovery. Also revise to state that a pump with bigger capacity will be installed as soon as the need for a bigger pump is determined. e. Revise to route collected leachate from overliner system to leachate sumps in cells with liner system consistent with 330.331(a)(2); or provide other appropriate system (e.g., their own sumps). Response: a. The revised cross section will be included in the 143:156 b) Text in Section 5 has been updated. c) Text in Table 3-3 and Section 3-4. e) The leachate in the overliner system over Cells 1 and 2 is currently routed to collection sumps. There is no need for additional routing of any leachate in the other areas as there is no overliner and the leachate will be collected in the geocomposite system and routed to the sumps.
T45	376	Part III	330.333(A)-(G)	Appendix IIIC	Incomplete	Comment: Revise Section 5.0 in Appendix IIIC to include information on authorization and testing for discharge of leachate and contaminated water into offsite manholes. Revise other relevant portions of the application as necessary (including, but not limited to, Appendix IIIG). Response: The text in Section 5.0 has been revised.
T46	397	Part III	330.339(a)		Incomplete	Comment: Per 330.339(a)(2) and 330.339(c), revise Section 1.0 in Appendix IIID to clarify if the LQCP is prepared/updated consistent with the current TCEQ guidance RG-534 (Rev. September 2017); and, if applicable, revise Appendix IIID to be consistent with RG-534. The current RG-534 can be downloaded from the agency's website at https://www.tceq.texas.gov/downloads/permitting/waste-permits/publications/rg-534.pdf . Response: Section 1.1 text has been revised.
T47	398	Part III	330.339(a)	Appendix IIID	Incomplete	Comment: a. Revise Section 4.0 in Appendix IIID to include QA/QC procedures for installation of the geomembrane liner component selected per the responses to MRI ID 359 (refer to comments on MRI ID 359). b. Revise the table of contents for Appendix IIID to include all the subsections for Section 2.4.2 Constructed Clay Liners. Response: a) QA/QC procedures for the Overliner Membrane installation over Cells 1 and 2 are included in Section 4.3.3 of Appendix IIID. No other geomembrane liner is anticipated with the continued approval of the Alternate Clay Liner. b) The subsection for Section 2.4.2 have been added to the table of contents.

ID	App. Part	App. Section	Location	Citation	Error Type	Deficiency Description/Resolution
T48	400	Part III	330.339(a)(2)	Appendix IIID	Incomplete	Comment: Revise Appendix IIID to include QA/QC procedures for installation of composite liner system and leachate collection/removal system (refer to comments on MRI ID 359). Response: This revision is not necessary as there is no composite liner anticipated as discussed in the Response to Comment T32b. The leachate collection/removal system has been addressed in the Response to T44
T49	402	Part III	330.339(a)(2)	Appendix IIID	Ambiguous	Comment: Revise Section 1.0 in Appendix IIID to clearly identify RG-534 as the current TCEQ technical guidance. Refer to Comment on MRI ID 397. Response: Section 1.0 text has been revised.
NT50	474	Part III	330.63(e)&(1)(A)	Ш	Inconsistent	Comment: Volume 3, which only includes the Geology report, is dated February 2023 inside, while the outside cover and the rest of the application is dated September 2023. Please include a Cover Page with the current submittal date as requested in MRI22. Response: Cover page has been revised.
T51	494	Part III	330.63(e)(4)(G)	IIIJ	Incomplete	a. The site plan showing the lines of cross-section is not legible due to using an aerial photograph. Please revise for legibility and to show the entire permitted boundary and include a scale. b. The cross-sections should show the proposed limits of excavation for the proposed expansion area along with any current limits of excavation in the current permitted area. c. Cross-sections should be extended through the existing permitted area where possible to provide correlation and should be printed in color on 11" x 17" paper. Response: a) The site plan have been revised in Appendix IIIJ-D has been revised. b) The cross sections have been revised to extend through the entire permit boundary and shown on 11 x 17 paper. c) The cross sections have been revised to extend through the entire permit boundary and shown on 11 x 17 paper.
NT52	550	Part III	330.401(a)- (c)		Inconsistent	Comment: a. Update the title page for Appendix IIIN, No Migration Demonstration, to reflect the major amendment application revision date. b. Include the missing Appendix IIIN Figure 2.1, Site Plan, in the application. c. Revise the table of contents for Appendix IIIN to reflect the section numbers on page IIIN-10. d. Add the appropriate table name to Table 6-4 located on page IIIN-15. Response: a) Cover page has been revised b) Figure 2.1 in Appendix IIIN has been included. c) The table of contents have been revised. d) Page IIIN-15 has been revised.
T53	660	Part III	330.371(c)(3)	Appendix IIIM	Incomplete	Comment: Revise Section 5.1 of Appendix IIIM to state that the remediation plan submitted to the ED will describe the nature and extent of the problem and the proposed remedy. Additionally, state that that ED may require additional remedial measures. Response: Section 5.1 has been revised to include the requested language.

ID	App. Part	App. Section	Location	Citation	Error Type	Deficiency Description/Resolution
T54	738	Part III	330.457(a)	Appendix IIIE	Incomplete	Comment: The following comments are related to final cover design discussed in Section 4.3 of Part III, Site Development Plan. a. Revise Section 4.3 to clarify if the final cover designs specified in Table 4-3 are the designs approved in MSW 207B. b. Revise Section 4.3 to clarify if the final cover installed in the closed areas is of the same design specified in Table 4-3. c. The final cover designs listed in Table 4-3 are different than those specified in Table 4-1 of Appendix IIIA; explain the differences or revise for correctness and consistency. Infiltration layer hydraulic conductivity specified in Appendix IIIA, Table 4-1 is also different than Figure IIIA-A.6; explain or revise, as necessary. d. Revise Section 4.3 to specify a final cover system consistent with 330.457(a)(1) for proposed new cells and developed cells/area where the liner includes a geomembrane component (refer to comments on MRI ID 359). Revise all relevant portions of the application (text and drawings) as necessary (including, but not limited to, Appendix IIIA, Appendix IIIG). e. Revise Section 4.3 to provide design and installation requirements (text and drawings) for the transition between two different final covers (refer to the above comment). Revise all relevant portions of the application (text and drawings) as necessary (including, but not limited to, Appendix IIIA, Appendix IIIG). f. The final cover slope at the toe is shown to be 3:1 TYP in Figure IIIA-A.7, while the final cover slopes are specified and illustrated to be 4:1 (e.g., Figure IIIA-A.6). Explain the discrepancy or revise as necessary. Response: a) Section 4.3 on page III-10 has been revised. b) Section 4.3 has been revised. c) The Table 4-1 in Appendix IIIA (page IIIA-3) has been updated to match Table 4-1 in the SDP narrative (Page III-10) d) The proposed (previously approved Alternate Liner) liner for the new cells does not include a geomembrane component and 330.457(a)(1) does not apply. The proposed final cover is designed in accordance with 330.357(a)(

ID	App. Part	App. Section	Location	Citation	Error Type	Deficiency Description/Resolution
NT55	738	Part III	330.503(a)	Appendix IIIG	Incorrect	Comment: Tables 1-1 and 1-2 were not included in the application. Provide the missing tables or revise the table of contents for Appendix IIIG accordingly. Response: Table 1-1 and Table 1-2 have been included in this submittal.
NT56	762	Part IV	330.121(a)	Section 2, Page IV- 2	Incomplete	Comment: Resubmit the table included after Section 35 of the Site Operating Plan in a legible format. Also, revise the Part IV SOP table of contents to include this table. Response: The TOC has been modified.
NT57	790	Part IV	330.127(3)	Section 6	Omitted	Comment: Provide the missing appendix IV-A-1 Synthetic Tarp Approval and Specifications and Appendix IV-B Landfill Checklist. Response: Appendix IV-A-1 and Appendix IV-B have been included in this submittal.
T58	808	Part IV	330.133(a)	Section 11	Ambiguous	Comment: Discuss how acceptance of the wastes listed Section 8.4 at this facility will not violate 330.15(e). Identify the "separate permit" that authorizes the facility to accept and store the wastes listed in Section 8.4. Lastly, provide classification of antifreeze and how its handling will comply with MSW rule and any other applicable rules. Response: Section 8.4 has been updated to discuss how acceptance of the wastes listed Section 8.4 will not violate 330.15(e).
NT59	828	Part IV	330.137	Section 13	Incorrect	Comment: Update the site sign description in Section 13 to reflect the permit number if the amendment is approved. Response: Section 13.0, Page IV-33 has been updated to reflect the permit number.
NT60	849	Part IV	330.143(b)(8)	Section 16	Incomplete	Comment: Address the rule and include language in Section 16.2 of the SDP that the permanent benchmark is a bronze survey marker set in concrete and must have the benchmark elevation and survey date stamped on it. The benchmark elevation must be surveyed from a known United States Coast and Geodetic Survey benchmark or another reliable benchmark. Response: Section 16.2 has been updated to include language that the permanent benchmark is a bronze survey marker set in concrete with the elevation and survey date stamped on it.
NT61	857	Part IV	330.149	Section 19	Incorrect	Comment: Revise the Part IV Site Operating Plan table of contents to have the correct table number for Table 19-1 Odor Control Measures. Response: Table of Contents has been corrected.
T62	885	Part IV	330.165(d)(1)(A)- (E)	Appendix IV-A	Omitted	Comment: Section 2.1 of Appendix IV-A states that the TCEQ approval letter, typical specifications, and chemical characteristics for the synthetic tarps proposed to be used as ADC are in Appendix IV-A-1. Provide these details in Appendix IV-A-1. Include a sealed title page for this attachment with the current amendment date. Response: The TCEQ approval letter typical specifications, and chemical characteristics for the synthetic tarps proposed to be used as ADC have been included in this submittal. A sealed Cover page and table content for Appendix IV-A-1 is also included in this submittal.
Т63	921	Part IV	330.171(c)	Section 8.6	Ambiguous	Comment: It is unclear whether the special wastes listed in 8.6 require a written request and approval from the ED. Revise Section 8.6 of the Site Operating plan to clarify that the special wastes listed in 330.171(c)(1) - (7) do not specifically require written authorization for acceptance provided the waste is handled in accordance with the noted provisions for each waste. Response: Section 8.6, Page IV-20, add the following at the beginning of the Section, "In accordance with 330.17(b),(c), and (d), the following special wastes do not require any further written approval from the Executive Director if they are accepted and handled in accordance with the procedures outlined below. Any other special wastes require written approval from the Executive Director before acceptance."

ID	App. Part	App. Section	Location	Citation	Error Type	Deficiency Description/Resolution
NT64	936	Part IV	330.175	Sec 31 IV-37	Omitted	Comment: Revise Section 32 of the Site Operating Plan to indicate that the executive director may require visual screening. Response: Section 31, Page IV-47, has been updated to indicate that the executive director may require visual screening.
T65	1027	Part IV	330.211	Section 29	Omitted	Comment: Revise Section 29 of the SOP to clarify storage and process activities at the facility, and how this will affect the need for nonreusable and reusable containers. If storage occurs, specify if it takes place inside an enclosed building or out in the open. Response: Section 29, Page IV-47-At the end of this Section add the following-"The facility is not a storage or processing facility. However, recyclables noted in Table 8-2 will be temporarily stored as they are collected prior to pickup for recycling. The containers for collection and temporary storage are noted in Table 8-2 and are located outside of any building and outside of the permit boundary. They are not a part of this permit."

CITY OF DEL RIO LANDFILL

VAL VERDE COUNTY, TEXAS TCEQ PERMIT NO. MSW-207C

MAJOR PERMIT AMENDMENT APPLICATION PART I FORM, CORE DATA FORM, PLAIN LANGUAGE SUMMARY FROM, PUBLIC INVOLVEMENT PLAN FORM & MAILING LABELS

Prepared for City of Del Rio

September 2023 Revision 1 March 2024 Revision 2 August 2024



Prepared by

CP&Y, an STV company Inc.

TPBE Registration No. F-1741

13155 Noel Road 1820 Regal Row, Suite 200

Dallas, TX 7524035

214-638-0500

This document is intended for permitting purposes only.

CITY OF DEL RIO LANDFILL

VAL VERDE COUNTY, TEXAS TCEQ PERMIT NO. MSW-207C

MAJOR PERMIT AMENDMENT APPLICATION

TCEQ PART I APPLICATION FORM, CORE DATA FORM,

AND MAILING LABELS

CONTENTS

TCEQ PART I FORM

CORE DATA FORMS

CITY OF DEL RIO

PLATFORM WASTE SOLUTIONS LLC

PLAIN LANGUAGE FORMS

ENGLISH

SPANISH

PUBLIC INVOLVEMENT PLAN FORM

MAILING LABELS



TCEQ PART I FORM



Application Tracking Information

Texas Commission on Environmental Quality

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

Facility Name: City of Del Rio Landfill Permittee or Registrant Name: City of Del Rio MSW Authorization Number: 207C Initial Submission Date: _03/04/2024 Revision Date: <u>08/19/2024</u> Instructions for completing this Part I Application Form are provided in TCEQ 00650-instr¹. 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	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									

 $^{^{1}\ \}underline{www.tceq.texas.gov/downloads/permitting/waste-permits/msw/forms/00650-instr.pdf}$

www.tceq.texas.gov/goto/coredata

17. Facility Contact Information	
Site Operator (Permittee or Registrant)	
Name: City of Del Rio	
Customer Reference Number: CN 600756290	<u>_</u>
Contact Name: Manuel Chavez	Title: Interim City Manager
Mailing Address: 114 W. Martin St.	
City: Del Rio County: Va	Il Verde State: TX Zip Code: 78840
Phone Number: 830-774-8558	
Email Address: manuel.chavez@cityofdelrio.com	
Texas Secretary of State (SOS) Filing Numb	er:
Operator (if different from Site Operator	r)
Name: Platform Waste Solutions LLC	
Customer Reference Number: CN 606151371	_
Contact Name: Tim Giardina	Title: COO
Mailing Address: 833 SW Lemans	
	ckson State: MO Zip Code: 64082
Phone Number: 614-593-1852	
Email Address: tim@platform-waste.com	
Texas Secretary of State (SOS) Filing Numb	er: <u>804609048</u>
Consultant (if applicable)	
Firm Name: CP&Y an STV company	
Consultant Name: CP&Y an STV company	
Texas Board of Professional Engineers Firm	Registration Number: F-1741
Contact Name: Tewobista Metaferia, P.E.	Title: Project Engineer
Mailing Address: 13155 Noel Road, Suite 200	
City: Dallas County: Da	dlas State: TX Zip Code: 75240
Phone Number: (214)-589-6944	
Email Address: tewobista.metaferia@stvinc.com	
Agent in Service (required for out-of-st	ate applicants)
Name: Not Applicable	
Mailing Address:	
City: County:	State: <u>TX</u> Zip Code:
Phone Number:	
Email Address:	

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.

violations.
Name: Manue B Chave Title: Intrim City Manuer
Email Address: Mannel. Chaver @ Cityofdelrio-com,
Signature: 1/100 C Date: 8/15/2014
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 MMUL B. CHAVIC
on this 19 day of August, 2024
My/commission expires on the 05 day of 17 , 20

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	Parts I/II - Section 1
Property Legal Description	Parts I/II - Section 13
Property Metes and Bounds Description	Parts I/II - Section 13
Facility Legal Description	Parts I/II - Section 13
Facility Metes and Bounds Description	Parts I/II - Section 13
Metes and Bounds Drawings	Parts I/II - Section 13
On-Site Easements Drawing	Parts I/II - Section 13
Land Ownership Map	Parts I/II - Section 5
Landowners List	Parts I/II - Section 5
Mailing Labels (printed and electronic)	Part I
Texas Department of Transportation (TxDOT) County Map	Parts I/II - Section 4
General Location Map	Parts I/II - Section 5
General Topographic Map	Parts I/II - Section 5
Verification of Legal Status	N/A
Property Owner Affidavit	Parts I/II - Section 14
Evidence of Competency	Parts I/II - Section 16

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)	Part I
■ Signatory Authority Delegation	Parts I/II - Section 15
■ Fee Payment Receipt	Part I
☐ Confidential Documents	
☐ Waste Storage, Processing and Disposal Ordinances	
☐ Final Plat Record of Property	

CORE DATA FORMS

City of Del Rio

Municipal Solid	Waste	New Source Review Air	OSSF]	Petroleum	Storage Tank	☐ PWS		
☐ Sludge		Storm Water	☐ Title V Air		Tires		Used Oil		
		_	_						
☐ Voluntary Clear	р	Wastewater	☐ Wastewater Agricu	ilture [Water Rigi	nts	Other:		
	16								
SECTION :	(V: Pr	eparer In	<u>formation</u>						
40. Name: Te	wobista Met	taferia		41. Title:	Project M	lanager			
42. Telephone Nu	mber	43. Ext./Code	44. Fax Number	45. E-Ma	il Address				
(214) 589-6944			(214)638-3723	tewobista	metaferia@s	vinc.com			
SECTION Y	V: Au	thorized S	Signature						
,		• • • • • • • • • • • • • • • • • • • •	nowledge, that the informatection II, Field 6 and/or as re	•		,	te, and that I have signature authorits, entified in field 39.		
Company:	City of De	el Rio		Job Title:	Interim	City Manager			
Jame (in Print): Manuel Chavez					-1-	Phone:	(830) 774- 8558		
Signature:	yr	128	C(Date: 8/05/2014					
	/	/-				1	///		

☐ Edwards Aquifer

☐ Emissions Inventory Air

☐ Industrial Hazardous Waste

□ Dam Safety

Districts

Platform Waste Solutions LLC

10. DUNS Number (if

applicable)



Platform Waste Solutions, LLC

0804609048

7. TX SOS/CPA Filing Number

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 In	<u>formation</u>					
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 submi	Other					
2. Customer Reference Number (if issued)	Follow this link to search for CN or RN numbers in	3. Regulated Entity Reference Number (if issued)				
CN 606151371	Central Registry**	RN 102143294				
SECTION II: Customer	<u>Information</u>					
4. General Customer Information	5. Effective Date for Customer Info	rmation Updates (mm/dd/yyyy)	07/17/2024			
☐ New Customer	pdate to Customer Information	☐ Change in Regulated Entity Ownership				
Change in Legal Name (Verifiable with the Te	xas Secretary of State or Texas Comptrolle	r of Public Accounts)				
The Customer Name submitted here may	be updated automatically based on v	what is current and active with the Texas Se	cretary of State			
(SOS) or Texas Comptroller of Public Accou	unts (CPA).					
6. Customer Legal Name (If an individual, pri	nt last name first: eg: Doe, John)	If new Customer, enter previous Custon	mer below:			
		I I				

8. TX State Tax ID (11 digits)

32085041419

881040861 Individual ☐ Corporation Partnership: \square General \boxtimes Limited 11. Type of Customer: Government: \square City \square County \square Federal \square Local \square State \square Other ☐ Sole Proprietorship Other: LLC 12. Number of Employees 13. Independently Owned and Operated? \square 0-20 \boxtimes 21-100 \square 101-250 \square 251-500 \square 501 and higher X 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 Operator Owner Owner & Operator Other: Occupational Licensee Responsible Party 15. Mailing 1020 VIRGINIA ST Address: City Del Rio State ZIP 78840 ZIP + 47336 16. Country Mailing Information (if outside USA) 17. E-Mail Address (if applicable) delrio@platform-waste.com 18. Telephone Number 19. Extension or Code 20. Fax Number (if applicable)

9. Federal Tax ID

(9 digits)

TCEQ-10400 (11/22) Page 1 of 3

(830) 775-2715		() -
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SECTION III: Regulated Entity Information

21. General Regulated En	tity Info	rmat	tion (If 'New Re	gulate	ed Entity" is selec	ted, a	new pe	rmit (applica	ition is a	ilso red	quired.)				
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																
The Regulated Entity Namas Inc, LP, or LLC).	ne subm	ittea	d may be upda	ited, i	in order to mee	t TC	EQ Core	e Dat	ta Sta	ndards	(rem	oval of	organi	ization	al endings s	such
22. Regulated Entity Nam	ie (Enter i	name	e of the site whe	re the	regulated action	is tal	king pla	ce.)								
City of Del Rio Landfill																
23. Street Address of the Regulated Entity:	1897 Railway Rd															
(No PO Boxes)	City		Del Rio		State	TX		ZIP		7884	0		ZIP	+ 4		
24. County	Val Verd	de					•			•			•			
			If no Stre	et Ad	dress is provid	ed, fi	ields 25	5-28	are re	quired						
25. Description to																
Physical Location:																
26. Nearest City										State				Nea	est ZIP Cod	е
Latitude/Longitude are re used to supply coordinate	-		-	-				ata S	stando	ırds. (G	еосос	ding of	the Ph	ysical .	Address ma	y be
27. Latitude (N) In Decim	al:				28. Longit			ngitu	ude (W) In Decimal:							
Degrees	Minutes	Seco		Seco	conds		Degrees			Minutes				Seconds		
29. Primary SIC Code	:	30. S	Secondary SIC	31. PI			Filliary NAICS Code				condary NAICS Code					
(4 digits)	1	(4 dig	gits)			(5 oı	r 6 digits	5)		(5 or 6 digits				ts)		
4953																
33. What is the Primary B	Business	of th	nis entity? (D	o not	repeat the SIC or	NAIC	S descri _l	ption.)							
34. Mailing																
Address:																
Address.	City	′			State			7	ZIP				ZIF	P + 4		
35. E-Mail Address:			ı													
36. Telephone Number				37.	Extension or (Code			38. F	ax Nun	nber (if applic	able)			
	5. 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.

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☐ Dam Safety		Districts	☐ Edwards Aquifer	Emissions Inventory Air		☐ Industrial Hazardous Waste	
☑ Municipal Solid Waste		New Source	□ OSSF		Petroleum Storage Tank	□ PWS	
☐ Sludge		Storm Water	☐ Title V Air		Tires	Used Oil	
☐ Voluntary Cleanup		☐ Wastewater	☐ Wastewater Agriculture		Water Rights	Other:	
ECTIO	N IV: P	reparer Inf	ormation			1	
40. Name:	rme: Laken Burpo			41. Title:	Regional Director		
42. Telephon	e Number	43. Ext./Code	44, Fax Number	45. E-Ma	il Address		
[731] 446-2436			() - lak		laken@platform-waste.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:	Platform Waste Solutions, LLC	Regional Director		
Name (In Print):	Laken Burpo	Phone:	(731) 446- 2436	
Signature:	Yaka Ma	Date:	7-18-24	

Page 3 of 3 TCEQ-10400 (11/22)

PLAIN LANGUAGE SUMMARY FORMS

English



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.

Α.	Purpose of the Proposed Facility						
	The City of Del Rio Landfill has provided municipal solid waste disposal needs for the City of Del Rio and surrounding areas for over 30 years. This expansion amendment will allow the City to continue to provide solid waste disposal needs to the residents of Del Rio and surrounding areas.						
В.	Information About the Applicant						
	Name: City of Del Rio						
	Applicant Type: Government						
	Facility Name: City of Del Rio Landfill						
	Permit Application Number: 207C						
	Customer Number (CN): 600756290						
	Regulated Entity Reference Number (RN): 102143294						
C.	Location of the Proposed Facility Facility Address (or description of site location if no address):						
	1897 Railway Ave., Del Rio, TX 78840						
	Link to Map of Facility Location (TCEQ Location Mapper ²): https://arcg.is/1Xn9eD0						
D.	Information about Facility Operation						
	What types of waste would be received?						
	Municipal Solid Waste, Household Waste, Yard Waste, Commercial Solid Waste, Industrial Waste (Nonhazardous), Construction-Demolition Waste and special waste.						
	Refer to Section 2.1.4 Waste Acceptance Plan of the Parts I/II General Application Requirements for more information.						
	What geographical area would the wastes come from?						
	Val Verde County						

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?

Waste acceptance 7:00 am to 7:00 pm, Monday - Friday, Saturday 7:00 am to 2:00 pm, Facility operations and maintenance 5:00 am to 9:00 pm

At what rate would wastes be accepted?

Current rates are 152 tons per day, with a maximum projected rate 248 tons/day in year 2068.

How would wastes be managed?

The facility is a landfill.

E. Pollution Control Methods

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

- 1. Minimize the size of the working face to minimize odors
- 2. Spills of odorous materials should be immediately cleaned up or properly covered
- 3. Repair areas where soil cover has eroded by placing additional cover material.
- 4. Identify any waste stream that requires special attention to control odor.
- 5. Evaluate the possible use of misters and chemical deodorizers when other controls do not reduce or eliminate significant odors.

Refer to Section 19 Odor Management Plan of the Site Operating Plan for more information.

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

- 1. Vehicles hauling waste to the facility are enclosed or provided with a tarpaulin, net or other means to effectively secure the load in order to prevent wind blown waste or spilling.
- 2. Control windblown waste by promptly landfilling the waste then spread and compact it as rapidly as possible.
- 3. Provide portable litter control fences and individual litter control fence sections of the landfill. Operator will inspect the site daily, and collect and return to the working face any windblown waste that has been scattered on-site, or has accumulated on fences, gates, and access roads on days when the facility is in operation. (Refer to Section 14 and 17 of the Site Operation Plan for more information)

Spanish



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 City of Del Rio Landfill has provided municipal solid waste disposal needs for the City of Del Rio and surrounding areas for over 30 years. This expansion amendment will allow the City to continue to provide solid waste disposal needs to the residents of Del Rio and surrounding areas.								
В.	Information About the Applicant								
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	Applicant Type: Government								
	Facility Name: City of Del Rio Landfill								
	Permit Application Number: 207C								
	Customer Number (CN): 600756290								
	Regulated Entity Reference Number (RN): 102143294								
_									
C.	Location of the Proposed Facility								
	Facility Address (or description of site location if no address):								
	1897 Railway Ave., Del Rio, TX 78840								
	Link to Map of Facility Location (<u>TCEQ Location Mapper</u> ²): https://arcg.is/1Xn9eD0								
D.	Information about Facility Operation								
	What types of waste would be received?								
	Municipal Solid Waste, Household Waste, Yard Waste, Commercial Solid Waste, Industrial Waste (Nonhazardous), Construction-Demolition Waste and special waste.								
	Refer to Section 2.1.4 Waste Acceptance Plan of the Parts I/II General Application Requirements for more information.								
	What geographical area would the wastes come from?								
	Val Verde County								

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?

Waste acceptance 7:00 am to 7:00 pm, Monday - Friday, Saturday 7:00 am to 2:00 pm, Facility operations and maintenance 5:00 am to 9:00 pm

At what rate would wastes be accepted?

Current rates are 152 tons per day, with a maximum projected rate 248 tons/day in year 2068.

How would wastes be managed?

The facility is a landfill.

E. Pollution Control Methods

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

- 1. Minimize the size of the working face to minimize odors
- 2. Spills of odorous materials should be immediately cleaned up or properly covered
- 3. Repair areas where soil cover has eroded by placing additional cover material.
- 4. Identify any waste stream that requires special attention to control odor.
- 5. Evaluate the possible use of misters and chemical deodorizers when other controls do not reduce or eliminate significant odors.

Refer to Section 19 Odor Management Plan of the Site Operating Plan for more information.

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

- 1. Vehicles hauling waste to the facility are enclosed or provided with a tarpaulin, net or other means to effectively secure the load in order to prevent wind blown waste or spilling.
- 2. Control windblown waste by promptly landfilling the waste then spread and compact it as rapidly as possible.
- 3. Provide portable litter control fences and individual litter control fence sections of the landfill. Operator will inspect the site daily, and collect and return to the working face any windblown waste that has been scattered on-site, or has accumulated on fences, gates, and access roads on days when the facility is in operation. (Refer to Section 14 and 17 of the Site Operation Plan for more information)

CITY OF CITY OF DEL RIO LANDFILL

VAL VERDE COUNTY, TEXAS TCEQ PERMIT NO. MSW-207C

MAJOR PERMIT AMENDMENT APPLICATION PART I/II – GENERAL APPLICATION REQUIREMENTS

Prepared for City of Del Rio

September 2023 Revision 1 August 2024



Prepared by

CP&Y an STV CompanyInc.

TPBE Registration No. F-1741

13155 Noel Road1820 Regal Row, Suite 200

Dallas, TX 7524035

214-638-0500

This document is intended for permitting purposes only.

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2.2 Regulatory Agency Coordination

Documentation of coordination with the following regulatory agencies is included in Appendix I/IIB:

- Federal Aviation Administration
- Texas Historical Commission
- Texas Department of Transportation
- Texas Parks and Wildlife Department
- U.S. Army Corps of Engineers
- U.S. Department of the Interior, Fish and Wildlife Service
- Middle Rio Grande Development Council

2.3 Texas Historical Commission Review

As noted in Section 2.2, a THC coordination letter is included in Appendix I/IIB. The THC concluded that no historic properties will be affected by the proposed expansion. The expansion of the City of Del Rio Landfill will follow the Natural Resources Code 191, Texas Antiquities Code.

2.4 Middle Rio Grande Development Council

The expansion of the City of Del Rio Landfill is consistent with the MRGDC Regional Solid Waste Plan. The continued development of the facility will provide a regional facility that will ensure long-term, cost-effective, and environmentally suitable disposal capacity for the region. This is a major goal of the MRGDC Regional Plan. The City has requested a review letter from MGRDC, to confirm that this expansion is in compliance with local solid waste plans. The coordination with MRGDC will be included in Appendix I/IIB.

2.5 Abandoned Oil and Water Wells

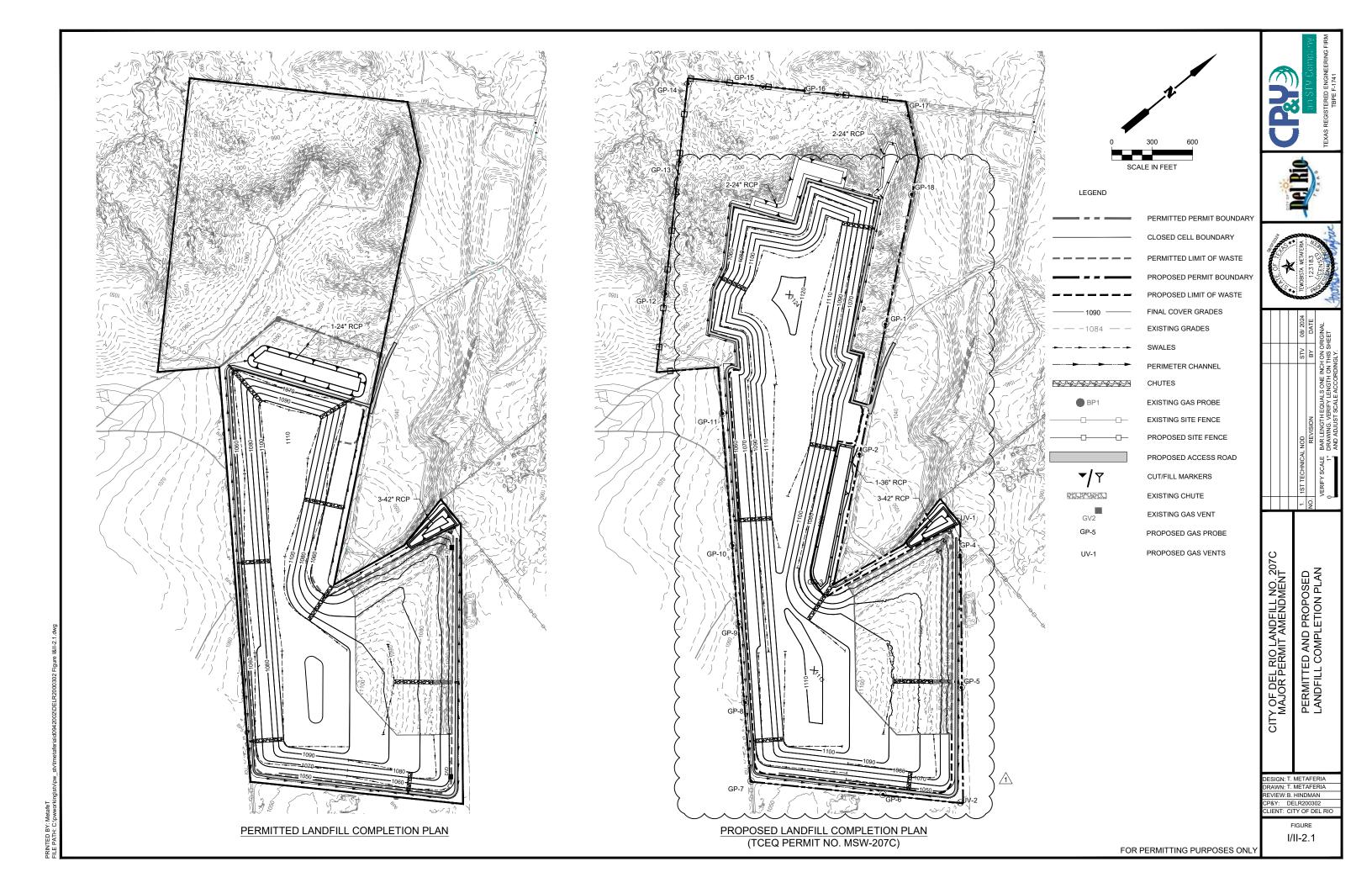
Search for water wells within a one-mile radius of the landfill was on December 16, 2022 by Environmental Risk Information Services (ERIS). The ERIS report included a review of records from the Texas Water Development Board, the TCEQ, and other database records. According to the ERIS report included in Appendix IIIJ, no groundwater wells exist within the permit boundary. The other located groundwater wells are located outside of the permit boundary.

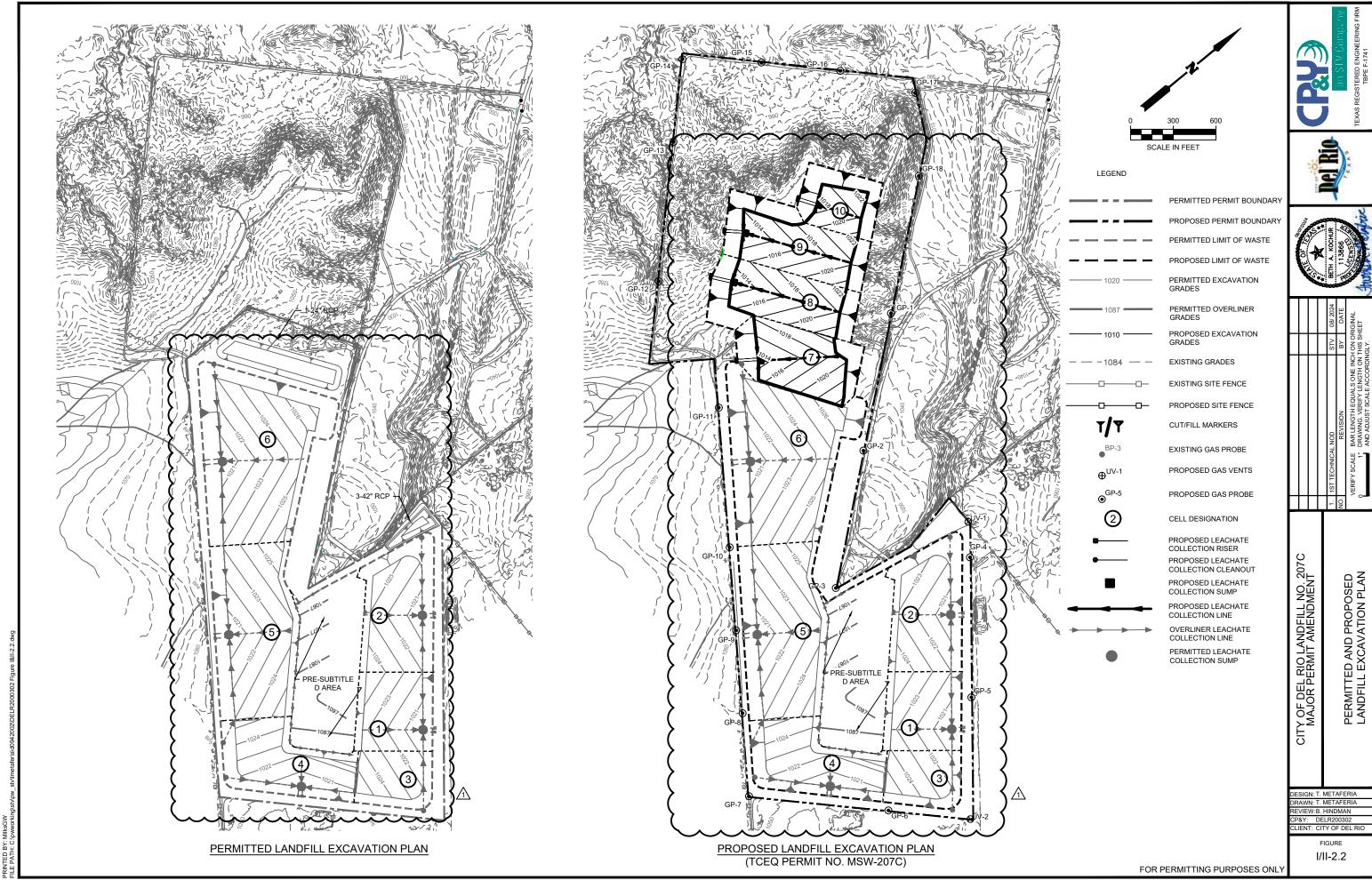
If an abandoned oil, gas, or water well is located during facility development, the Landfill Coordinator will provide written notification to the TCEQ's Executive Director of their location within 30 days after discovery. As the site is developed, if any wells are encountered, they will be exposed, the casing cut to a minimum of 2 feet below the excavation, and the well plugged-in accordance with all applicable rules and regulations of the TCEQ, the Railroad Commission of Texas, or other applicable state agency.

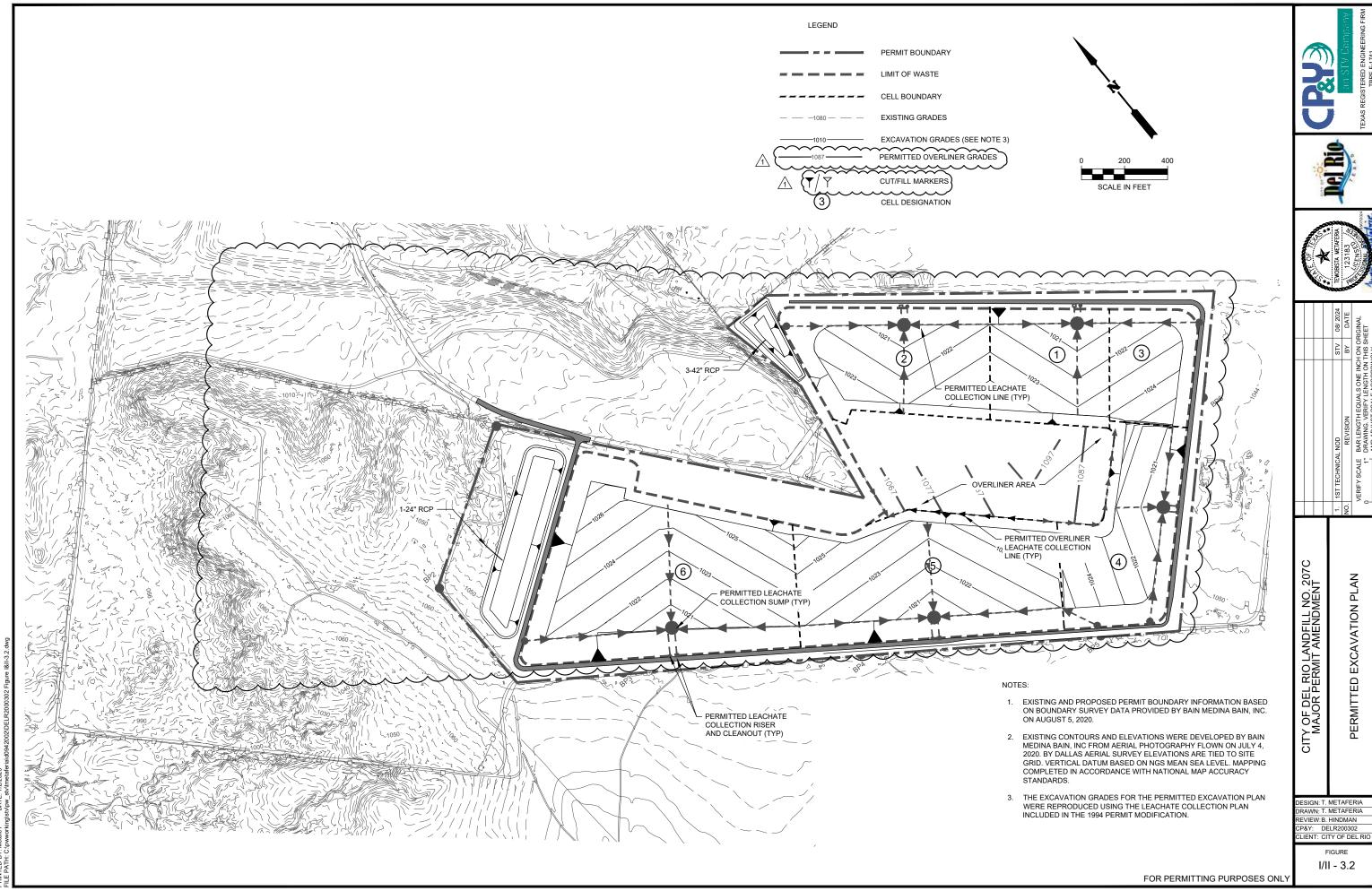
The Landfill Coordinator will provide written notification to the Executive Director of the location of any existing or abandoned water wells within the facility upon discovery during site development. Within 30 days of such a discovery, the Landfill Coordinator will provide written notification and certification to the Executive Director of the TCEQ that all such wells have been plugged, capped, and closed in accordance with all applicable rules and regulations of the TCEQ or other applicable state agency.

Although the ERSI search shows an oil gas well within the permit boundary, as shown on Figure I/II-7.4, There are no known oil or natural gas wells within the permit boundary. For crude oil or natural gas wells,

City of Del Rio Landfill
Parts I/II General Application Requirements







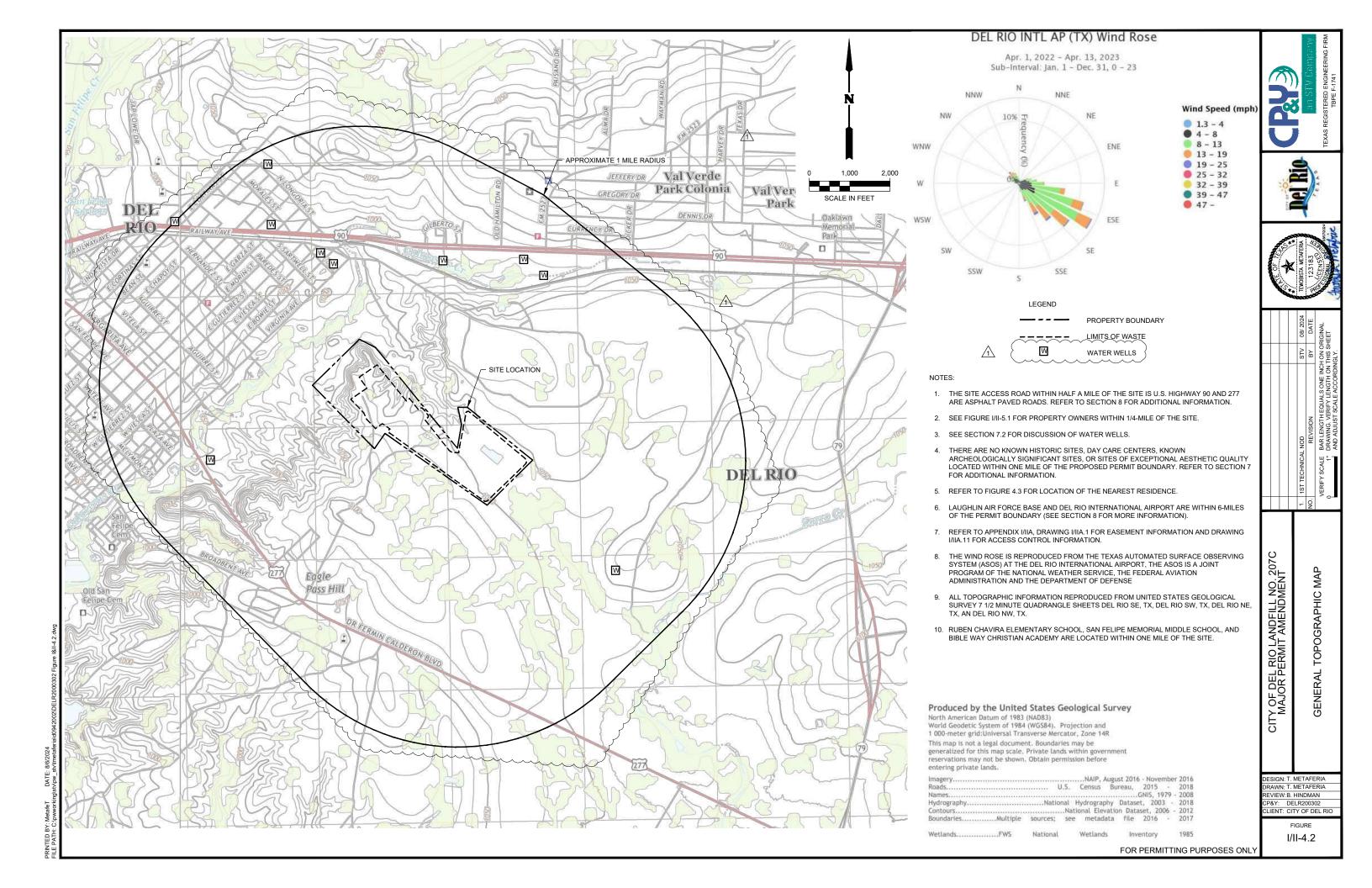


Table 7-1 Population Growth Trends

Finition	2000	2010	Growth Rate			
Entity	Census	Census	2020	2030	2040	2050
Del Rio	33,867	37,024	38,083	40,524	42,887	45,315
Val Verde County	44,856	51,312	54,694	60,389	65,902	71,566

7.5 Proximity to Residences and Other Uses

The nearest residence is approximately 250 feet from the southwestern portion of the permit boundary (300 feet from the limits of waste - refer to Figure I/II-7.1).

There are three schools within a one-mile radius (San Felipe Memorial Middle School, Bible Way Christian Academy, and Ruben Chavira Elementary School). There are three religious buildings within a one-mile radius of the site (Bible Way Church of Our Lord, Iglesia de Cristo, and Ruben Kikes P). The Simply Kids Learning Center is a day care facility within one mile of the site. There are no hospitals, cemeteries, archaeologically significant sites, historical sites, or sites of exceptional aesthetic quality within one-mile of the permit boundary. The proximity of residences and other uses are shown on the Land Use Map - Aerial (Figure I/II-7.1).

7.6 Land Use Conclusions

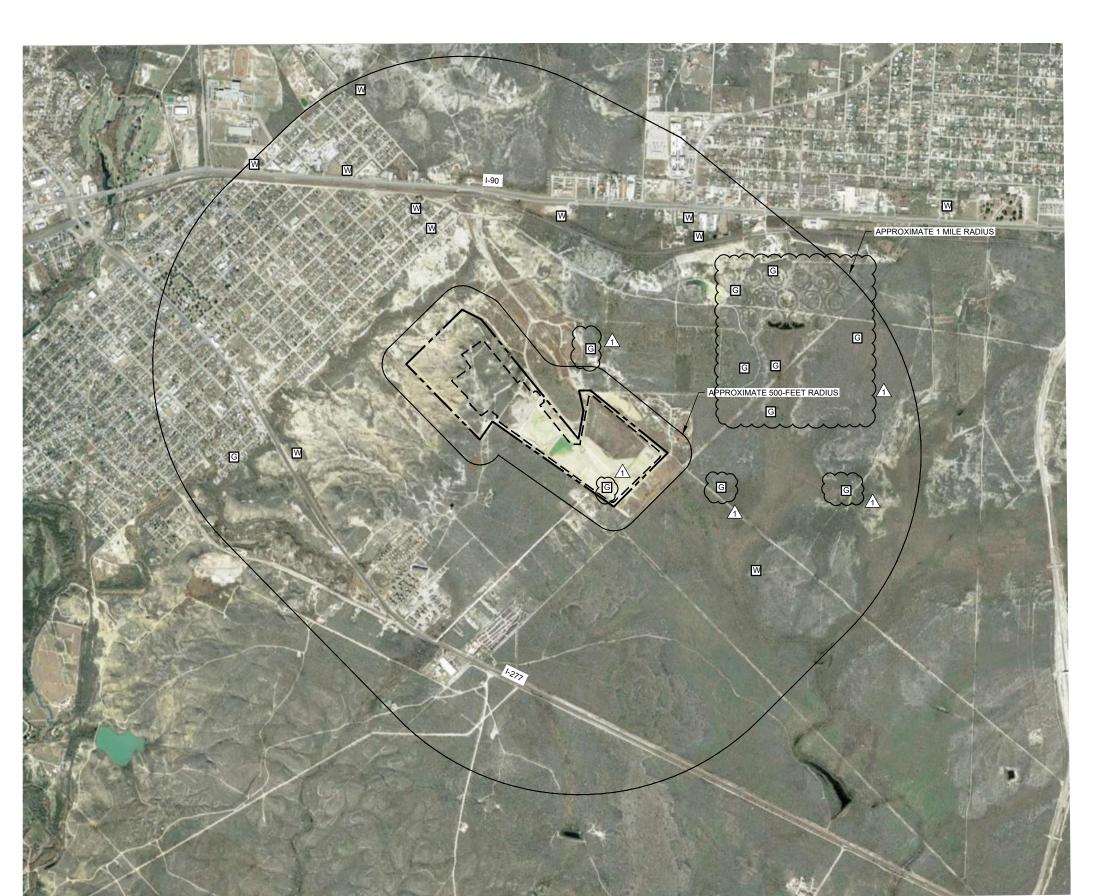
The use of the existing and expansion area land for a municipal solid waste site represents a compatible land use for the following reasons.

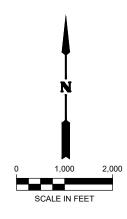
- The site has been permitted as a landfill since 1972. Prior to the operation of this facility, an adjacent property was used as a landfill.
- The landfill waste placement footprint is considerably buffered from nearby uses.
- The site has not and will not affect area growth trends.
- The generally undeveloped nature of the existing land uses in the area is compatible with the proposed expansion.

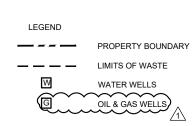
In summary, the existing site has long been established as a disposal facility. The expansion of the City of Del Rio Landfill will provide extended waste disposal for area communities at a facility that will continue to be developed to meet or exceed all regulatory requirements. The facility will cause no likely adverse impact on the City, communities, property owners or individuals. There are currently no windbreaks, greenbelt, or visual screening utilized by the facility.

7.7 Water and Gas Wells Within 500 Feet

A water <u>and gas</u> well search was conducted by Environmental Risk Information Services (ERIS) in December 2022. The results from the search are included in Appendix IIIJ-A. The search included a review of records from the <u>Texas Railroad Commission</u>, TWDB and the TCEQ database. The search results show that there are no known active water wells located within 500 feet of the permit boundary. There are abandoned monitoring wells within the permit boundary from the 1989, 1994, and 2020 geotechnical investigations. Figure I/II-7.4 shows the registered water <u>and gas</u> wells within a one-mile radius of the permit boundary. As shown in Figure I/II-7.4, there is a gas well shown within the developed area of the landfill. That gas well is associated with the site's gas monitoring system. In addition, no gas well were discovered during the construction of Cell 4.







NOTES:

- AERIAL PHOTOGRAPH OBTAINED FROM GOOGLE EARTH, DATED JANUARY 19, 2017.
- WATER WELLS SHOWN WITHIN THE ONE-MILE BOUNDARY OF THE SITE ARE BASED ON THE ERIS SEARCH CONDUCTED IN DECEMBER 16, 2022.





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CITY OF DEL RIO LANDFILL NO. 207C MAJOR PERMIT AMENDMENT OIL & GAS AND WATER WELL MAP

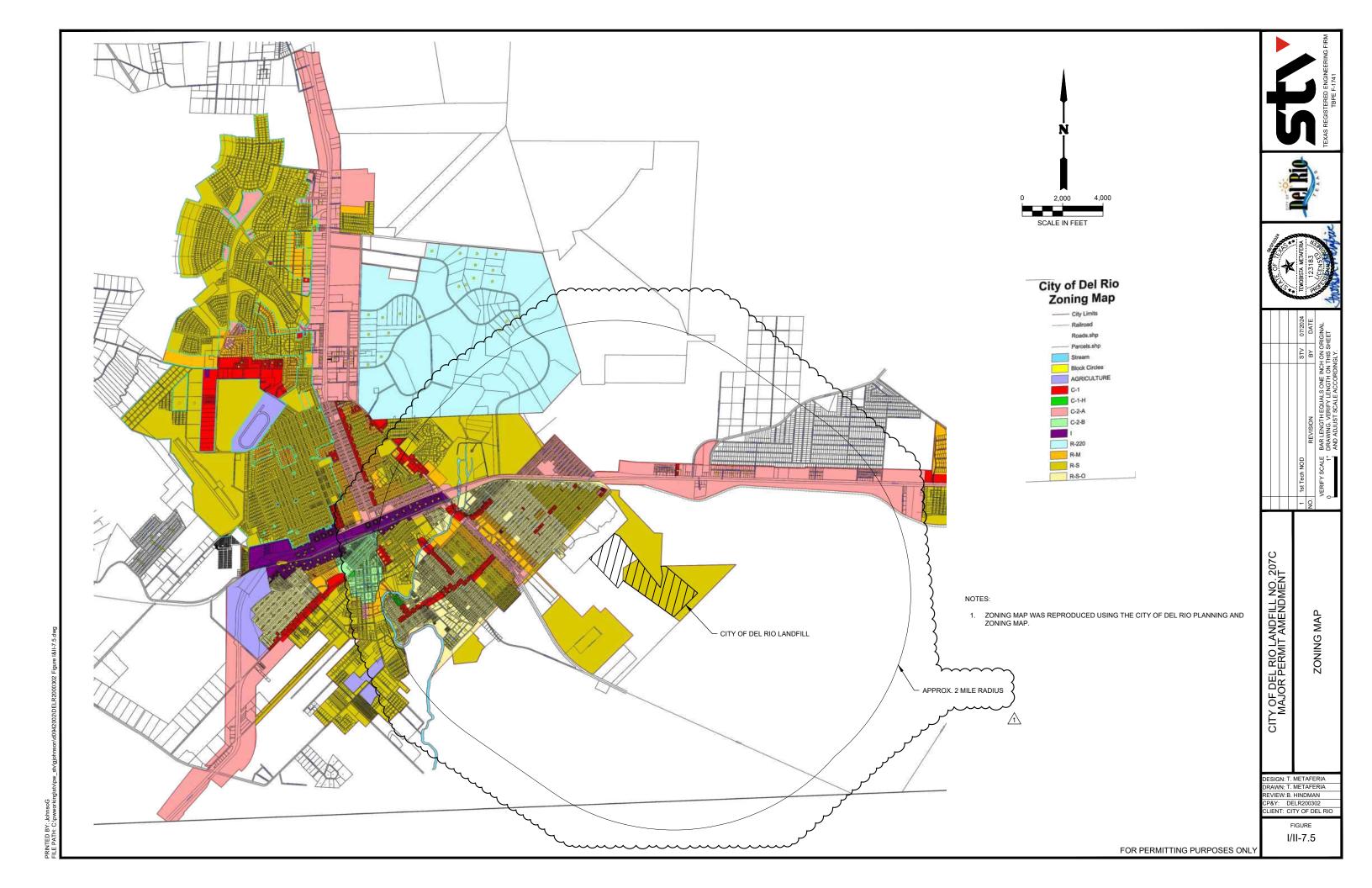
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CP&Y: DELR200302

CLIENT: CITY OF DEL RIO

FIGURE

1/11-7.4



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 of 1972 for the protection of marine sanctuary.

11.0 FLOODPLAINS AND WETLANDS STATEMENT

11.1 Floodplains Statement

As shown on Figure I/II-11.1, the existing landfill permit boundary is not located within the 100-year floodplain as defined by the Federal Emergency Management Agency (FEMA), Flood Insurance Rate Map (FIRM) for Val Verde County, Texas and incorporated areas.

Compliance with the floodplain location restriction is further discussed in Appendix I/IIC.

11.2 Wetlands Statement

The area within the permit boundary of the City of Del Rio Landfill was evaluated for compliance with wetlands provisions, including the determination and identification requirements in Title 30 TAC §330.61(m)(2) and (3) and the wetlands location restriction in §330.553(b). Although there are wetlands within the permit boundary of the City of Del Rio Landfill, the limit of waste is not located in wetlands. There will be some areas of the wetlands that will be filled for channel and road grading. The water areas that will be filled will be less than one tenth of an acre at any single and complete crossing and would therefore be covered by the Nationwide Permit (NWP) 14 for linear transportation projects without notifying the USACE. The project will adhere to all requirements outlined in NWP 14. The wetland areas that will be filled will be less than tenth of an acre and will be covered under a 404 Nation Wide permit during construction. No waste will be placed within the wetland areas: therefore, the site is in compliance with the wetland's location restriction.

PROPERTY OWNER'S AFFIDAVIT

On this day,, appe	eared before me. the undersigned notary public, and
after I administered an oath to him, upon	this oath he said:
	I am the <u>Interim</u> City Manager of the City of Del Rio, ollowing statements on behalf of the City of Del Rio.
included the tract(s) described in included in the permitted area of i	of certain real property in Val Verde County, Texas, Exhibit A attached hereto ("the Property"), which is its Del Rio Landfill municipal solid waste landfill facility dment of Texas Commission on Environmental quality
•	vledges that the State of Texas may hold the property severally responsible for the operation, maintenance, of the Facility on the Property.
responsibility to file in the deed readvising that the Property will be used facility actually begins operating Property, and to file a final recording	nowledges that the owner of the Property has the records of Val Verde County an affidavit to the public used for a solid waste facility prior to the time that the g as a municipal solid waste landfill facility on the ng upon completion of disposal operations and closure y in accordance with 30 TAC §330.19.
	edges that the Facility owner or operator and the State Property during the active life and post-closure care of ection and maintenance.
	Manuel Chavez John A. Sheedy IV Interim City Manager City of Del Rio
SWORN TO AND SUBSCRIBED before me b of, 202 3 4.	y on the day
	Notary Public

DELEGATED SIGNATORY AUTHORITY

Tony Baker Executive Director Texas Commission on Environmental Quality P.O. Box 13087 Austin, Texas 78711-3087	
Dear Mr. Baker:	
I am an Authorized Agent of the City of Del Rio.	
I certify under penalty of law that this document and direction or supervision in accordance with a system properly gather and evaluate the information submit persons who manage the system, or those person information, the information submitted is, to the best and complete. I am aware there are significant princluding the possibility of fine and imprisonment for	designed to assure that qualified personnel tted. Based on my inquiry of the person or ins directly responsible for gathering the of my knowledge and belief, true, accurate, enalties for submitting false information,
Sincerely,	
Many of Change Tales A. Changle W.	
Manuel Chavez John A. Sheedy IV Interim City Manager	
SWORN TO AND SUBSCRIBED BEFORE ME by of, 2023, which witness my hand ar	•
	Notary Public in and for the State of Texas
	Printed Name

City of Del Rio Landfill
Parts I/II General Application Requirements

My Commission Expires_____

16.2.1 John A. Sheedy IV, City Manager

The Responsibility for overall facility management and operation rests with the Del Rio City Council. The Council working through the City Manager is responsible for assuring adequate personnel and equipment are available for facility operation in accordance with the landfill permit. The City Manager delegates responsibility to the City's Public Works Director/City Engineer for directing the activities of the City of Del Rio Landfill.

16.2.2 Alberto Quintanilla P.E., Public Works Director/City Engineer

The Public Works Director/City Engineer is designated as the contact person for matters related to regulatory compliance and management of the refuse collection and Landfill Operator. Public Works Director/City Engineer plans, organizes, directs, and controls the activities of the department, and specifically supervises the Refuse Department (waste collection and disposal). The Public Works Director/City Engineer has project management responsibility for the landfill, a long-term civil project, including working with outside consulting engineers on landfill construction and planning projects. The Public Works Director/City Engineer oversees landfill development, operation performance of mandated controls, and permit compliance; ensures the timely preparation of recurring reports, such as reports to regulatory agencies; and administers contracts. The Public Works Director/City Engineer studies new regulations, outlining proposed compliance plans, studies and reports of new procedures and equipment, implementation of control procedures including personnel training, and provides administrative continuity in the absence of the Director.

16.2.3 Rene Maldonado, Landfill Coordinator

Duties include supervising landfill crews, coordinating with the Landfill Contractor (Platform Waste Solutions LLC) on the planning, organizing, and direct daily oversight of landfill operations; conducting a variety of technical tasks including scheduling of City's manpower and equipment; assigning and prioritizing work assignments for the City landfill crews; managing waste disposal and diversion; supervising the construction of earthwork projects (levees, berms, ditches, stockpiles, etc.) with onsite labor and equipment; coordinating with other departments and contract construction crews as needed; ensure that the landfill is operating within the local, state, and federal regulations pertaining to solid waste; managing concerns and complaints from citizens and other landfill users, providing and coordinating City staff training and discipline procedures, and maintaining thorough effective communications with the Landfill Contractor. A high school diploma or equivalent, four years increasingly responsible experience and a Class B Texas driver's license is required for the position. Additional experience in landfill work, computer usage, and supervision is preferred. The Landfill Coordinator shall possess a TCEQ issued Class A License prescient to 30 TAC Chapter 30, Subsection F, and a waste screening certificate.

16.2.4 Chris Bix, Chief Executive Officer – Platform Diversified Logistics

Chris Bix joined Platform Capital in 2021, serving as CEO of Platform Logistics. Mr. Bix holds a BS degree in Engineering Management from Missouri University of Science and Technology. Mr. Bix is a seasoned executive with President, Chief Operating Officer and Chief Information Officer experience in Mid-Market and private equity owned arenas. Known for learning the business at the ground level, building teams and developing talent. Mr. Bix has successfully executed 3 acquisitions and 2 private equity sales processes. Mr. Bix's career has included building high performing teams in Transportation, Retail, Tax Software and IT Consulting for both Mid-Market companies and Fortune 500 companies. Experience includes Team DriveAway, Beauty Brands, HR Block, and Accenture. Known for building high performing teams through positive, servant leadership which translates across all industries.

16.2.5 Tim Giardina, Chief Operating Officer - Platform Waste Solutions

Mr. Giardina is a high energy executive with proven track record of successfully transforming underperforming businesses for national companies. Forward thinking, results oriented, focused with proven analytical ability. A business growth-oriented change leader experienced in safety and compliance, customer service, sales, employee relations, maintenance, profit and loss, forecasting, and performance management responsibilities. Mr. Giardina has over 37 years' landfill, hauling and MRF experience in the waste industry with national providers of waste services.

16.2.6 Kenny McCarty, Sr. Operations Manager – Platform Waste Solutions

Mr. McCarty is a 35-year veteran of the solid waste industry and assists with oversight over all operational programs within the Company. A graduate of Western Kentucky University, Mr. McCarty joined Browning-Ferris Industry in the Washington, D.C. market and later directed the company's fleet operations for the Northeast US and Canada. In addition to overseeing all equipment maintenance programs, he also assisted in design / build projects for recycling processing as well as medical waste autoclaving and incineration plants. Leaving the Corporate environment, he later started and grew his own solid waste operations becoming the largest independent full-service hauler in his marketplace. After selling his operations to Veolia Waste, Mr. McCarty assumed regional management positions for industry leaders Waste Management and Advanced Disposal. Just prior to joining Platform Waste Solutions, he served as Corporate Fleet Director for Meridian Waste

16.2.716.2.6 Jose Huerta, General Manager – Platform Waste Solutions, Del Rio Office

Mr. Huerta is a 16-year veteran of the waste and recycle industry. He is the General Manager for the hauling and landfill operations in Del Rio. Mr. Huerta started his career working for crown recycling as a machine operator and moved his way up to General Manager of Platform Waste. Mr. Huerta oversees the day-to-day operation of all landfill and hauling operations in compliance with federal, state and local laws.

16.3 Equipment

The equipment listed in Part IV, Site Operating Plan is used to operate this site. Additional or different units of equipment may be provided as necessary to enhance operational efficiency. Other equivalent types of equipment may be substituted for this equipment on an as-needed basis.

CITY OF CITY OF DEL RIO LANDFILL

VAL VERDE COUNTY, TEXAS TCEQ PERMIT NO. MSW-207C

MAJOR PERMIT AMENDMENT APPLICATION PARTS I/II – GENERAL APPLICATION REQUIREMENTS

APPENDIX I/II A FACILITY LAYOUT FIGURES

Prepared for City of Del Rio

September 2023 Revision 1 August 2024



Prepared by

<u>CP&Y an STV Company Inc.</u>

TPBE Registration No. F-1741

<u>13155 Noel Road 1820 Regal Row</u>, Suite 200

Dallas, TX 7524035

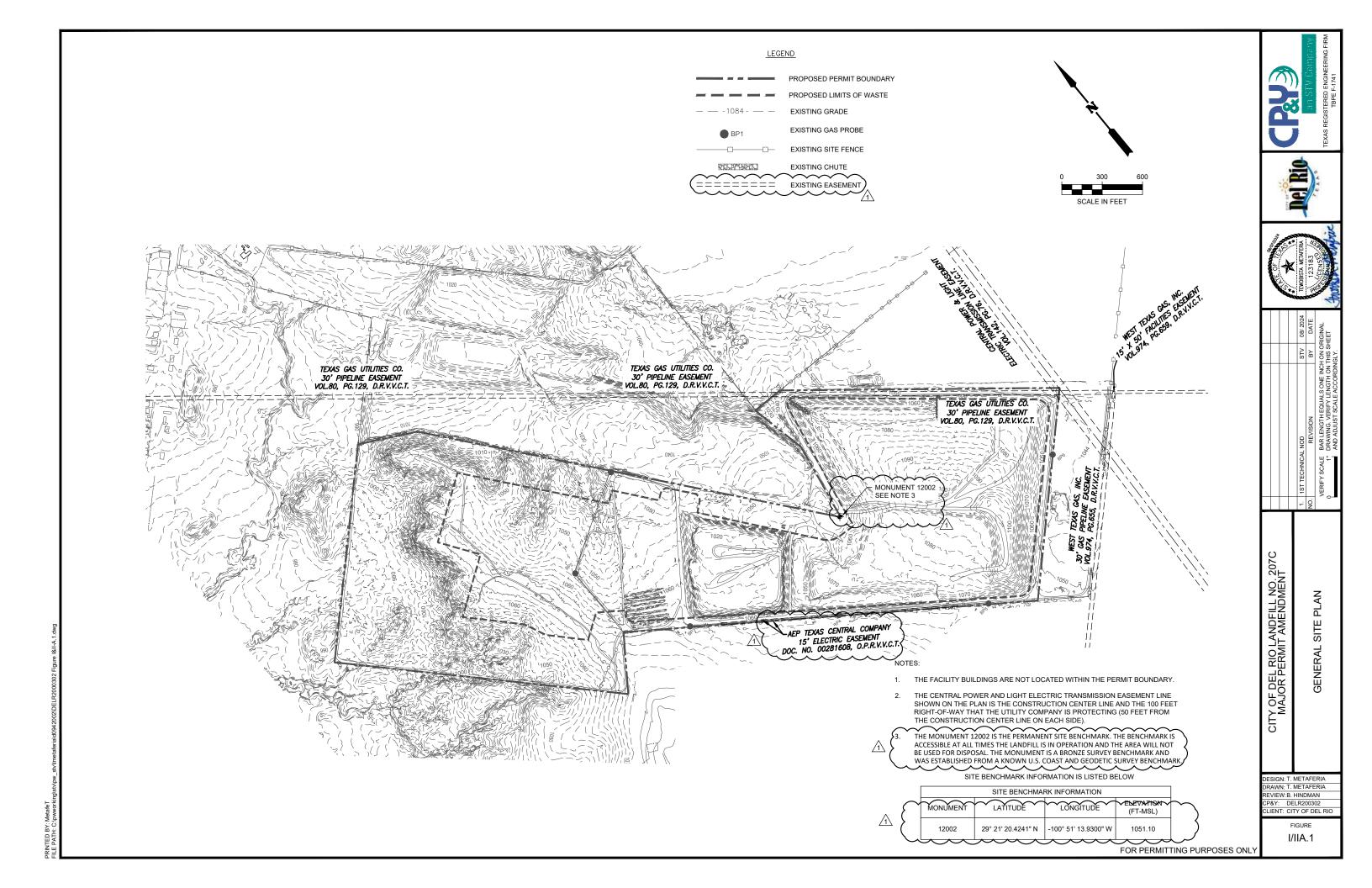
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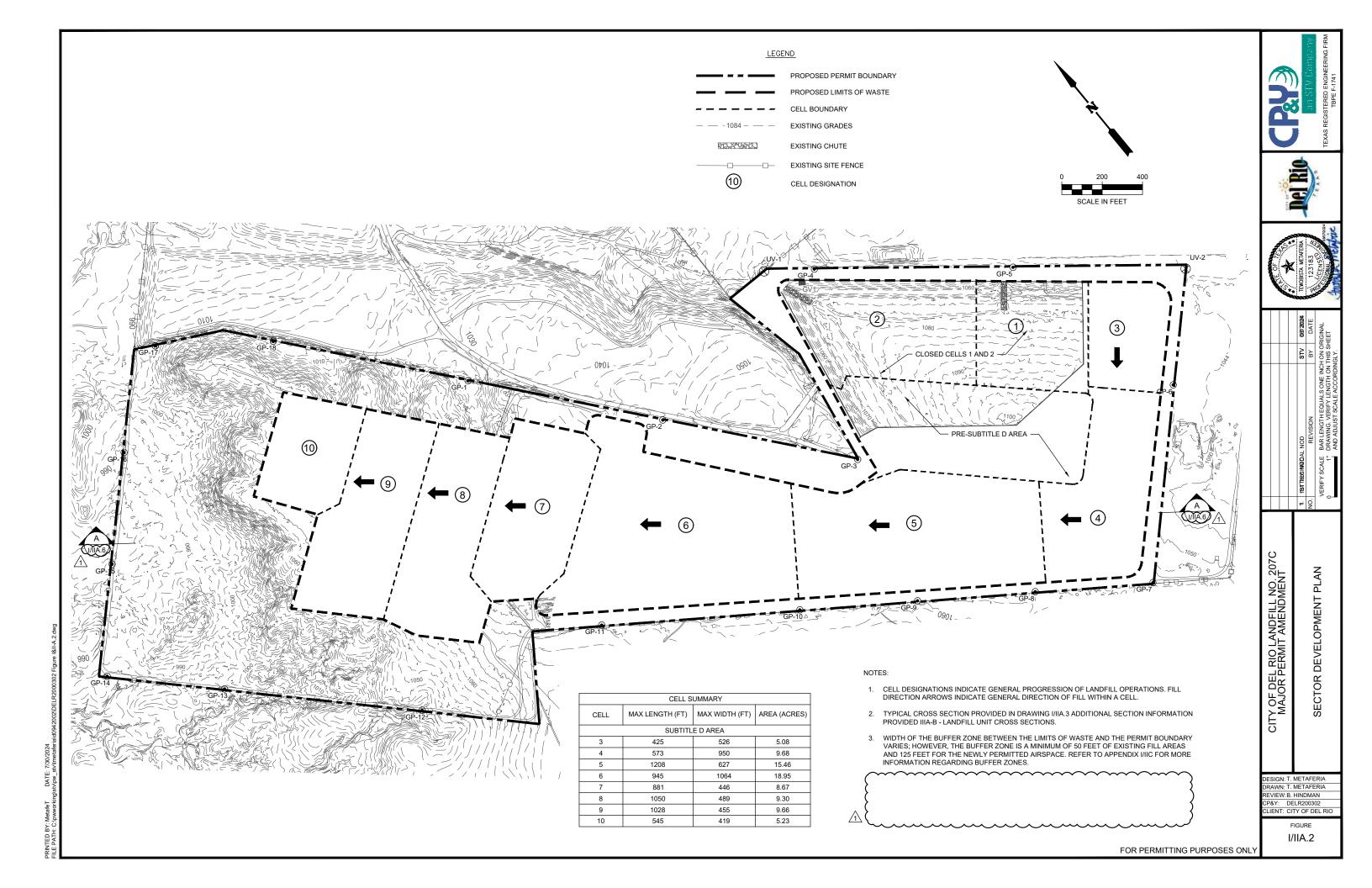
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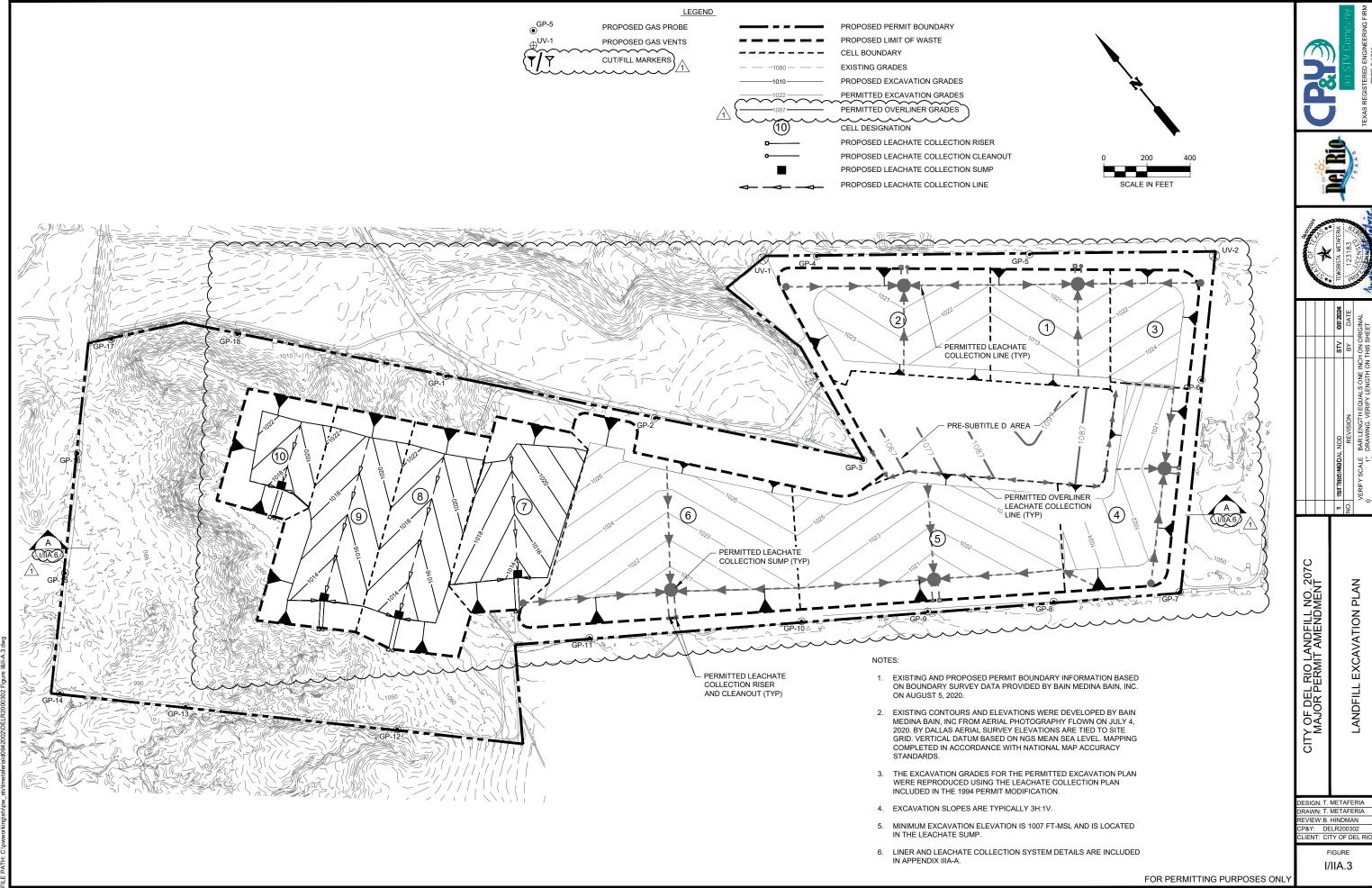
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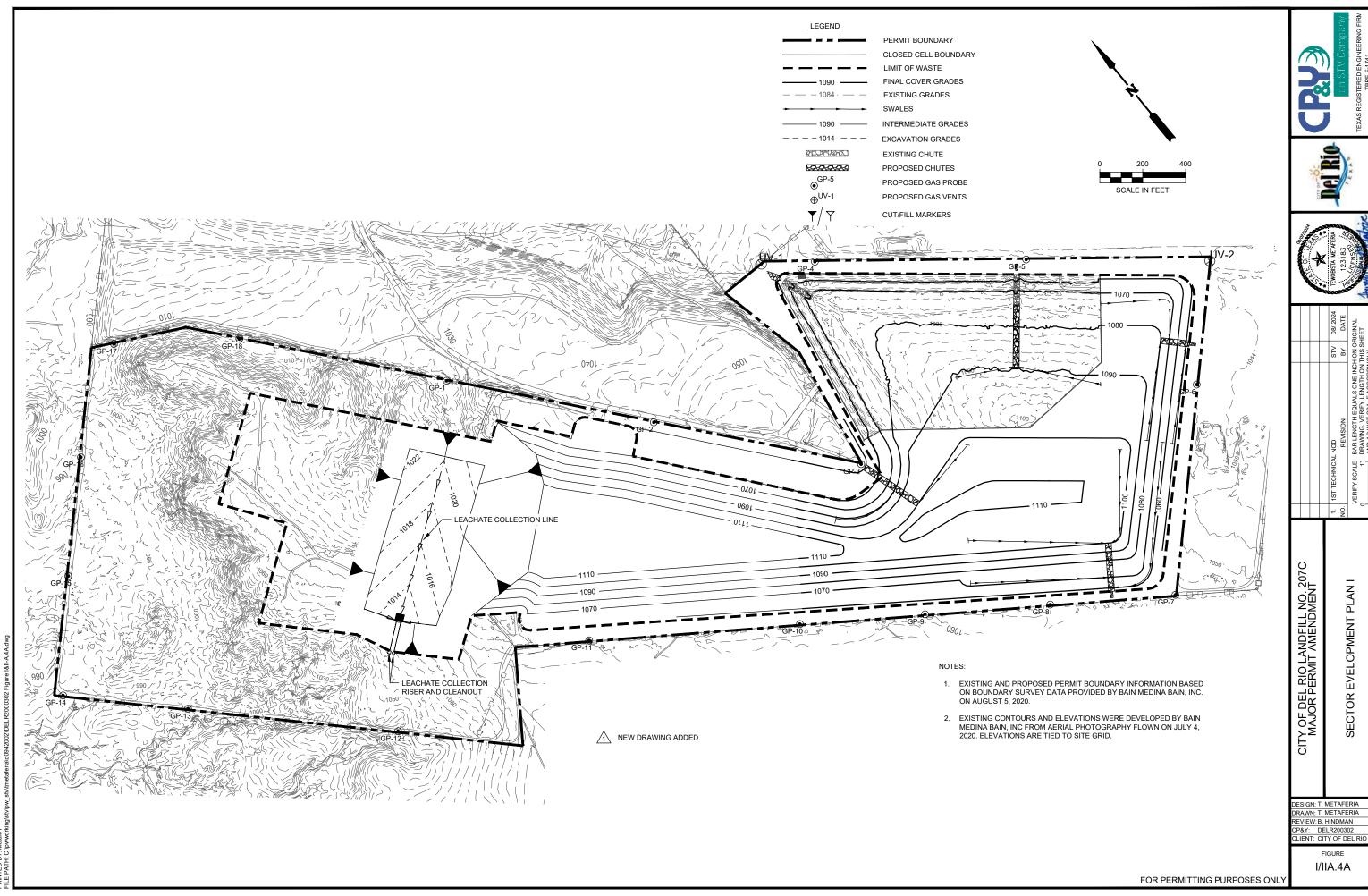


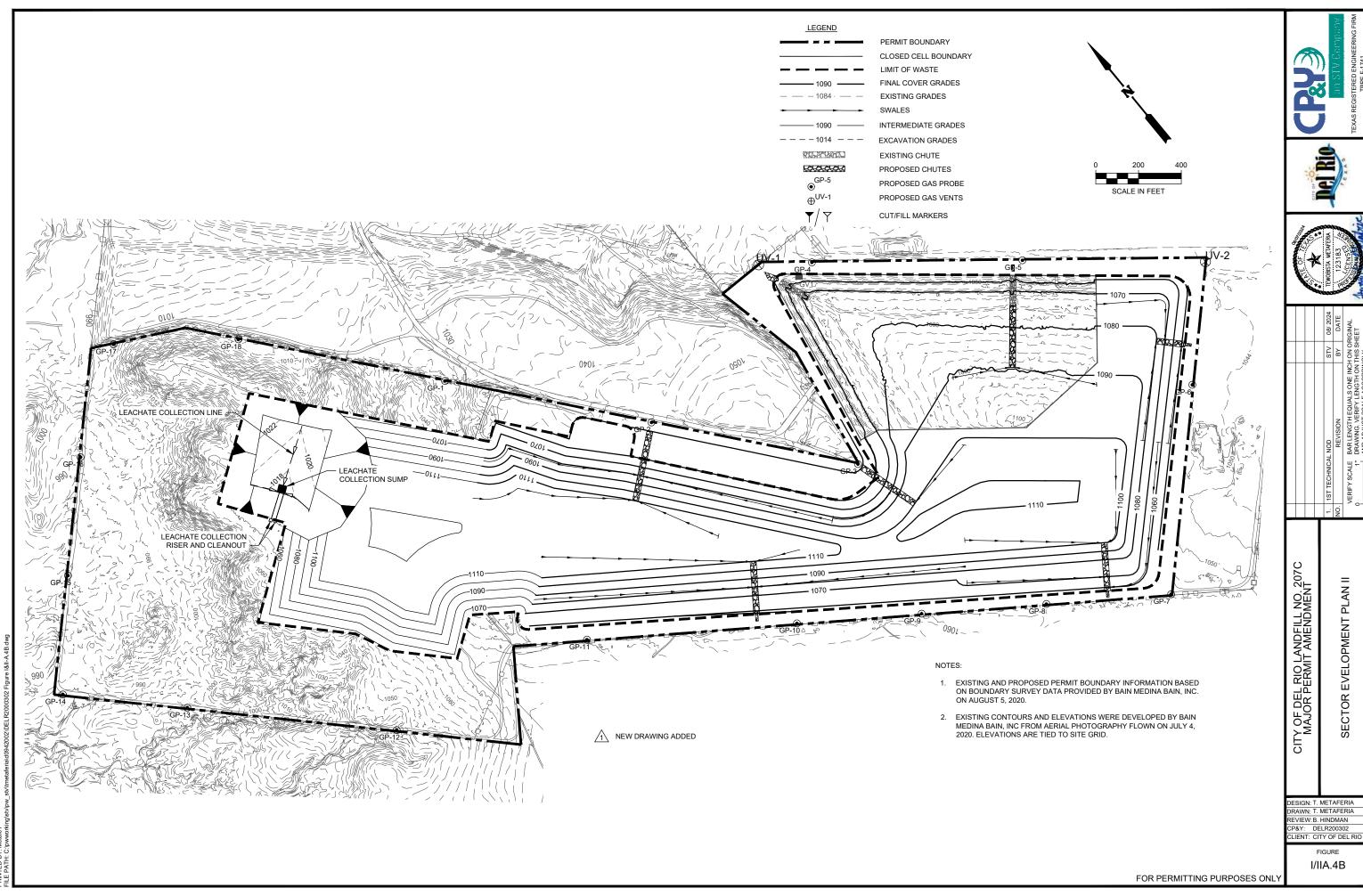


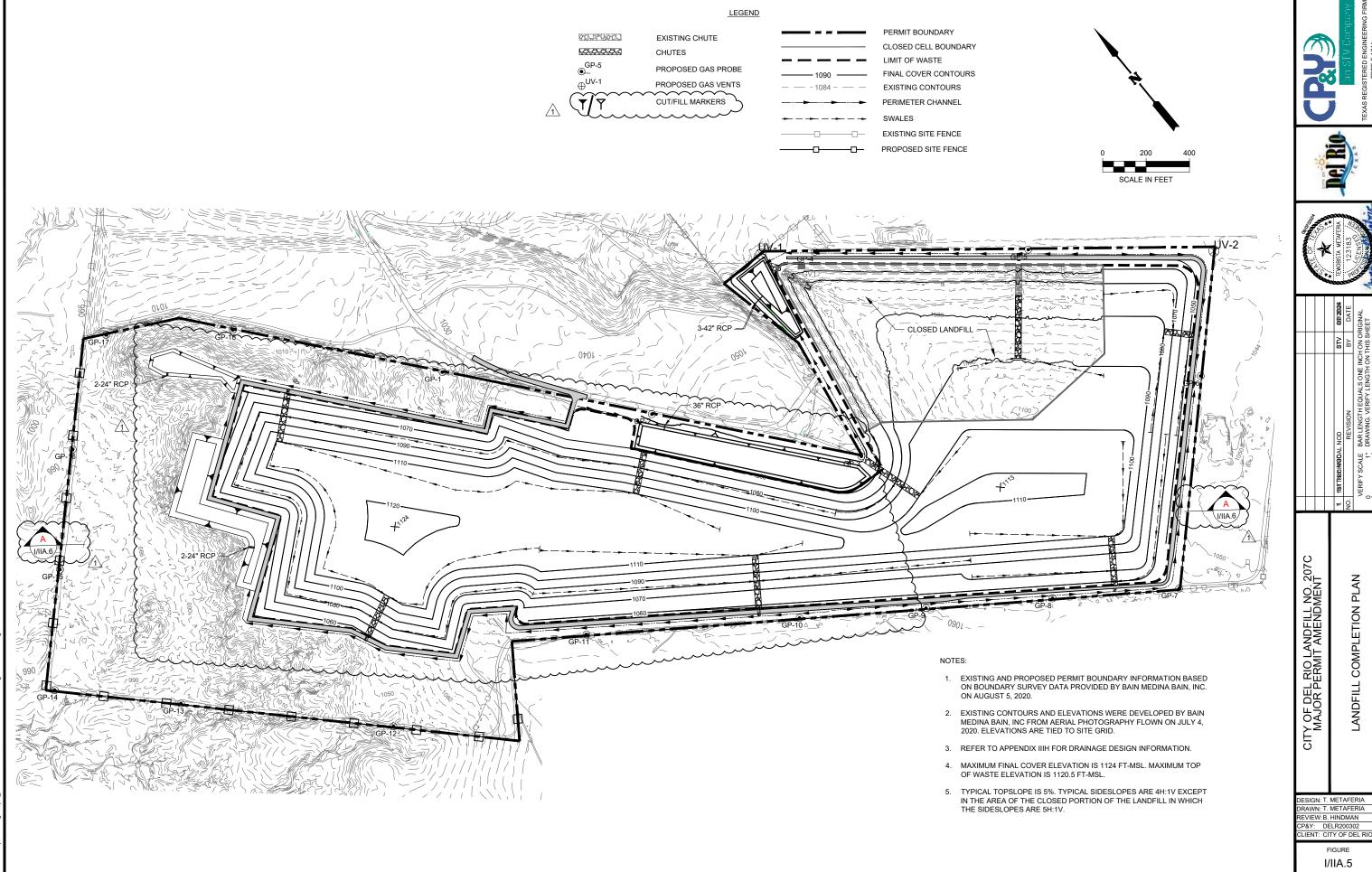




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RAWN: T. METAFERIA REVIEW: B. HINDMAN

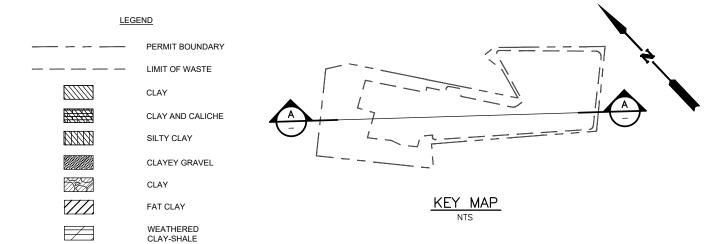
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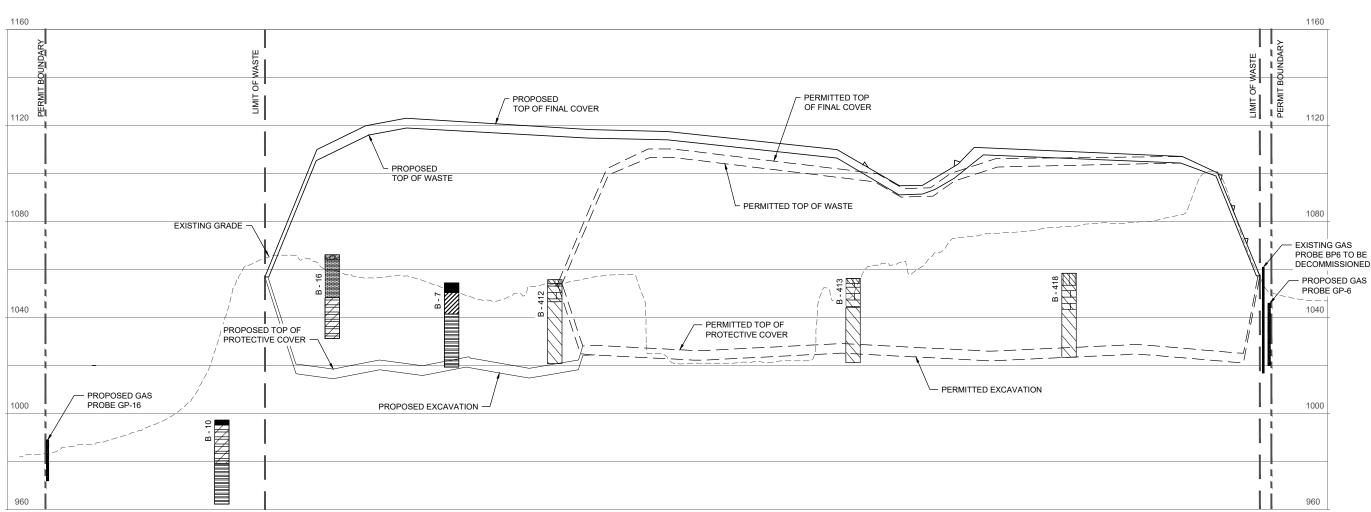
NOTES:

- TOPOGRAPHIC MAP WAS COMPLETED FROM PHOTOGRAMMETRIC METHODS BY
 DALLAS AERIAL SURVEY. VERTICAL DATUM BASED ON NGS MEAN SEA LEVEL. MAPPING
 COMPLETED IN ACCORDANCE WITH NATIONAL MAP ACCURACY STANDARDS.
- REFER TO APPENDIX IIIA-A FOR LINER, LEACHATE COLLECTION, AND FINAL COVER SYSTEM DETAILS.
- 3. SEE APPENDIX IIIJ FOR BORING DATA. BORINGS PROJECTED INTO THE LINE OF SECTION.
- 4. AS SHOWN IN APPENDIX I/IIC, THE BUFFER ZONES VARY AROUND THE PERIMETER OF THE SITE, BUT IN NO CASE ARE THEY LESS THAN 50-FEET FOR EXISTING WASTE.
- 5. REFER TO APPENDIX IIIM, FOR DETAILS OF THE LANDFILL GAS MANAGEMENT PLAN.
- 6. DRAINAGE DESIGN INFORMATION IS PROVIDED IN APPENDIX IIIH-SURFACE WATER DRAINAGE PLAN.
- 7. MAXIMUM TOP OF FINAL COVER ELEVATION IS 1124 FT-MSL.
- 8. REFER TO APPENDIX IIIC FOR LEACHATE COLLECTION SYSTEM (LCS) INFORMATION.

9. THE SITE DOES NOT HAVE ANY GROUNDWATER MONITORING WELLS.
REFER TO APPENDIX III I AND APPENDIX IIIN FOR ADDITIONAL INFORMATION ON GROUNDWATER MONITORING AT THE SITE.

10. THIS SITE DOES NOT ACCEPT ANY CLASS I WASTE.





CLAY-SHALE



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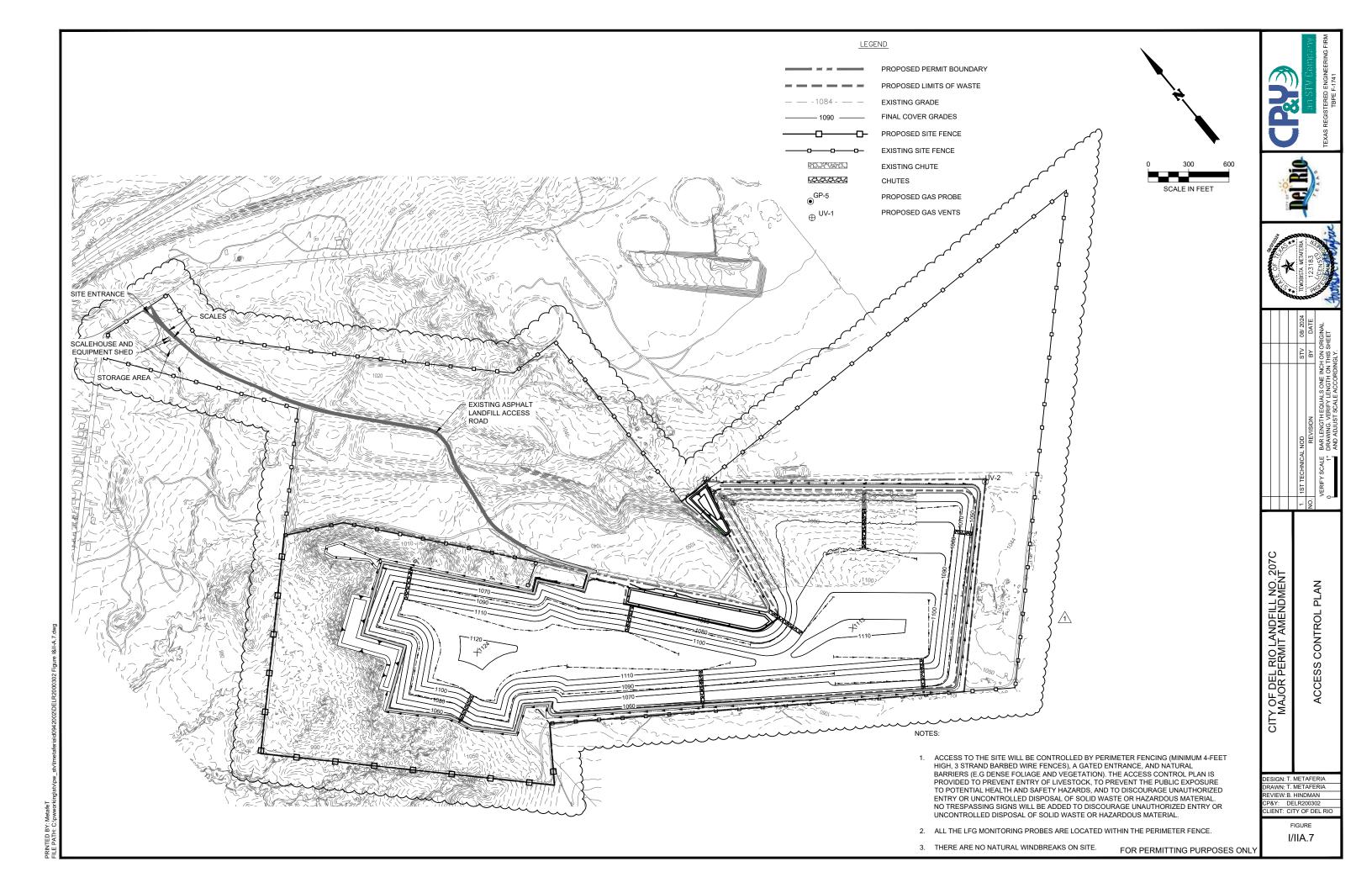
CITY OF DEL RIO LANDFILL NO. 207C
MAJOR PERMIT AMENDMENT
CROSS SECTION A

DESIGN: T. METAFERIA DRAWN: T. METAFERIA REVIEW: B. HINDMAN CP&Y: DELR200302 CLIENT: CITY OF DEL RIC

FIGURE

FOR PERMITTING PURPOSES ONLY

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CITY OF CITY OF DEL RIO LANDFILL

VAL VERDE COUNTY, TEXAS TCEQ PERMIT NO. MSW-207C

MAJOR PERMIT AMENDMENT APPLICATION PARTS I/II – GENERAL APPLICATION REQUIREMENTS

APPENDIX I/II B COORDINATION DEMONSTRATION

Prepared for City of Del Rio

Revision 1 August 2024

Prepared by
CP&Y an STV company
TPBE Registration No. F-1741
13155 Noel Road, Suite 200
Dallas, TX 75240
214-638-0500

This document is intended for permitting purposes only.

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COORDINATION WITH FEDERAL AVIATION ADMINISTRATION

- FAA Determination of No Hazard to Air Navigation Letter has not been received yet.
- August 14, 2024 Request for Review Letter regarding hazards to air navigation and hazards to air traffic due to birds.

COORDINATION WITH TEXAS HISTORICAL COMMISSION

- August 7, 2024 THC conclusion that no historic properties are affected by landfill expansion letter.
- July 5, 2024 Letter requesting THC concurrence that no historic properties are affected by the landfill.

COORDINATION WITH TEXAS DEPARTMENT OF TRANSPORTATION

- TXDOT conclusion of no objections or concerns with potential traffic impact letter has not been received yet.
- July 5, 2024, Request for Review Letter.

COORDINATION WITH TEXAS PARKS AND WILDLIFE DEPARTMENT

- TPWD conclusion of no anticipated significant adverse impacts to rare, threatened or endangered species or other fish and wildlife resources letter has not been received yet.
- July 5, 2024, Request for Review Letter.

COORDINATION WITH U.S. ARMY CORPS OF ENGINEERS

- August 13, 2023, USAGE determination that authorization pursuant to Section 404 is not required.
- August 2023, Jurisdictional Determination Report

COORDINATION WITH U.S. DEPARTMENT OF THE INTERIOR FISH AND WILDLIFE SERVICE

- July 8, 2024, U.S. Department of the Interior Fish and Wildlife Service conclusion of no impact on Fish and Wildlife.
- July 5, 2024, Request for Review Letter.

COORDINATION WITH MIDDLE RIO GRANDE DEVELOPMENT COUNCIL

 July 17, 2024 letter requesting MRGDC concurrence that the landfill expansion is consistent with the Regional Solid Waste Plan

CITY OF CITY OF DEL RIO LANDFILL

VAL VERDE COUNTY, TEXAS TCEQ PERMIT NO. MSW-207C

MAJOR PERMIT AMENDMENT APPLICATION PARTS I/II – GENERAL APPLICATION REQUIREMENTS

APPENDIX I/II C LOCATION RESTRICTION DEMONSTRATION

Prepared for City of Del Rio

September 2023 Revision 1 August 2024



Prepared by

<u>CP&Y an STV CompanyInc.</u>

TPBE Registration No. F-1741

13155 Noel Road 1820 Regal Row, Suite 200

Dallas, TX 7524035

214-638-0500

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CITY OF CITY OF DEL RIO LANDFILL

VAL VERDE COUNTY, TEXAS TCEQ PERMIT NO. MSW-207C

MAJOR PERMIT AMENDMENT APPLICATION PART I/II – GENERAL APPLICATION REQUIREMENTS

APPENDIX I/II D TPDES PERMIT

Prepared for City of Del Rio

Revision 1 August 2024

Prepared by
CP&Y an STV company.
TPBE Registration No. F-1741
13155 Noel Road, Suite 200
Dallas, TX 75240
214-638-0500

CITY OF CITY OF DEL RIO LANDFILL

VAL VERDE COUNTY, TEXAS TCEQ PERMIT NO. MSW-207C

MAJOR PERMIT AMENDMENT APPLICATION PART I/II – GENERAL APPLICATION REQUIREMENTS

APPENDIX I/II E WASTE ACCEPTANCE PLAN TCEQ FORMS

20873

<u>Prepared for</u> <u>City of Del Rio</u>

Revision 1 August 2024



Prepared by
CP&Y an STV company.
TPBE Registration No. F-1741
13155 Noel Road, Suite 200
Dallas, TX 75240
214-638-0500

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City of Del Rio Landfill Parts I/IIE – TCEQ Forms

TCEQ FORM 20873 WASTE ACCEPTANCE PLAN

TCEQ FORM 20719 TRANSPORTATION DATA AND REPORT FORM



Texas Commission on Environmental Quality

Transportation Data and Coordination Report Form for Municipal Solid Waste Type I Landfills

This form is for use by applicants or site operators of Municipal Solid Waste (MSW) Type I landfills to provide data and information to address the availability and adequacy of access roads to a landfill site, the volume of vehicular traffic on and generated by the facility on area roadways, and to provide coordination information as required under 30 TAC §330.61(i). Roadways that provide primary access to a landfill facility must be adequate and possess appropriate design capacity to safely accommodate the additional volumes and weights of traffic generated or expected to be generated by this landfill facility during its active life. Data provided in this form should correspond with data contained in the coordination documents submitted to the Texas Department of Transportation or other agency that has jurisdiction over affected area roads.

If you need assistance in completing this form, please contact the Municipal Solid Waste Permits Section of the Waste Permits Division at (512) 239-2335.

I.	General Information
Fac	ility Name: City of Del Rio Landfill
MS	W Permit No.: 207C
Site	Operator/Permittee Name and Mailing Address: City of Del Rio 114 W Martin St., Del Rio, TX 78840
11.	Documentation of Coordination with the Texas Department of Transportation (TXDOT) for Traffic and Location Restrictions
1.	A traffic study document and cover letter was submitted to TXDOT as Coordination for traffic and location restrictions for the subject facility and a copy of the documents submitted to TXDOT is attached herein: \boxtimes Yes \square No
	If you checked "No", provide explanation:
2.	Date of submission of the coordination documents to TXDOT: 07/05/2024
3.	TXDOT's response received? ☐ Yes 🔀 No
	If "No" is checked in response to Item I.3 above, complete Items I.4 and I.5 below only after TxDOT's response is received.
4.	Did TxDOT's response include recommendation of improvements to any of the roadways or intersections that lead to the site? \square Yes \square No
5.	If you checked "Yes" in Item I.5 above, proceed to Section III., TxDOT's

Recommended Roadway or Intersection Improvements (as applicable).

Facility Name: <u>City of Del Rio Landfill</u> Revision No.: <u>0</u>

Permit No: MSW-207C Date: August 7, 2024

6. If you checked "No" in Item I.5 above, provide TxDOT's response to the traffic and location restrictions compliance coordination for the subject site: (Enter TxDOT's response to coordination correspondence) Still waiting for response from TxDOT

III. TxDOT Recommended Roadway or Intersection Improvements (as applicable)

Enter TxDOT's recommendations for improvement of roadways or intersections that lead to the site:

- 1. NA at this time
- 2.
- 3.
- IV. Documentation of Coordination of Improvement Designs of Public Roadways (turning lanes, storage lanes, acceleration/deceleration lanes, etc.) at and Near the Site Entrances with Agencies that Exercise Maintenance Responsibility
- 1. Complete Table 1 with information regarding documentation of coordination of improvement designs for existing and proposed roads.

Table 1: Public Roadway Improvements Coordination

Existing and Proposed Roads Associated with the Site Entrance(s)	Agency Exercising Maintenance Responsibility	Date of Coordination Correspondence from the Applicant or Site Operator to the Agency Responsible	Date of the Coordination Response Letter from the Agency Responsible	Did the Agency Responsible Require Improvements to the Roadway(s) Associated with the Site Entrance(s) (check Yes or No as applicable)
Railway Ave	City of Del Rio	Landfill is Owned by the City	NA	□Yes ⊠No
US 90	TxDOT	July 5, 2024	Still waiting on response	□Yes □No
US 277	TxDOT	July 5, 2024	Still waiting on response	□Yes □No
				□Yes □No

Transportation Data and Coordination Report for MSW Type I Landfills Facility Name: City of Del Rio Landfill Revision No.:0 Permit No: MSW-207C Date: August 7, 2024 2. If you checked "Yes" in the last column of Table 1, indicating that improvements are required, address the following: (a) Briefly describe the improvements proposed for the public roadway(s) associated with the site entrance(s): A copy of the proposed improvement design submitted to the agency (b) exercising maintenance responsibility over the roadway is attached herein: Yes No. If you checked "No" please explain: A copy of the response letter from the agency exercising maintenance (c) responsibility over the roadway(s) associated with the site entrance(s) approving the improvement design is attached herein: \(\simegraphi\)Yes \(\simegraphi\)No. If you checked "No" please explain: V **Facility Location and Operation Information Used in Estimating Transportation Data** 1. Facility Location Information City of Del Rio Landfill 1987 Railway Ave Del Rio, Val Verde County, Texas 78840 2. Waste Acceptance Rates Initial Waste Acceptance Rate: 47,068 tons/year (a) (b) Estimated Maximum Waste Acceptance Rate at any Time During Facility Life: 76,752 tons/year 3. Hours of Operation and Site Life Operating Hours: Monday - Friday 6:00 AM to 6:00 PM (a) Saturday 7:00 AM - 3:00 PM (b) Waste Acceptance Hours: Monday - Friday 7:00 AM to 5:00 PM Saturday 8:00 AM - 2:00 PM

Other Information Used or Assumed in Estimating Transportation Data: NA

(c)

4.

Estimated Site Life: **44 years**

Facility Name: <u>City of Del Rio Landfill</u> Revision No.: <u>0</u>

Permit No: MSW-207C Date: August 7, 2024

¥I. Facility Daily Traffic Volume Data

1. Complete Table 2 with estimated existing daily volume of traffic generated by the facility.

Table 2: Estimated Existing Daily Volume of Traffic Generated

Vehicle Type	Traffic Volume to Facility (vehicles per day, vpd)	Traffic Volume from Facility (vpd)					
Trucks	224	224					
Employee Vehicles	15	15					
Visitors Vehicles	15 (assumed based on City personnel's comments)	15 (assumed based on City personnel's comments)					
Other Vehicles	10 (assumed based on City personnel's comments)	10 (assumed based on City personnel's comments)					
Summation of Daily Volume of Traffic to and from the Facility							
Total Daily Volume of Traffic	264	224					

- (a) Describe the source(s) of or method(s) used to obtain the existing daily volume of traffic generated by the facility: **Truck traffic count based on scale house**
- (b) Location(s) of traffic counts (if applicable): **Facility entrance**
- 2. Complete Table 3 with estimated future daily volume of traffic generated by the facility.

Table 3: Estimated Future Daily Volume of Traffic Generated

Vehicle Type	Traffic Volume to Facility (vpd)	Traffic Volume from Facility (vpd)
Trucks	362	362
Employee Vehicles	25	25
Visitors Vehicles	15 (assumed based on City personnel's comments)	15 (assumed based on City personnel's comments)
Other Vehicles	10 (assumed based on City personnel's comments)	10 (assumed based on City personnel's comments)
Summation of I	Daily Volume of Traffic to and fro	om the Facility
Total Daily Volume of Traffic	412	412

3. Describe the method(s) used to obtain the estimated future daily volume of traffic generated by the facility, including dates, traffic growth rates, and sources of the

Facility Name: <u>City of Del Rio Landfill</u> Revision No.: <u>0</u>

Permit No: MSW-207C Date: August 7, 2024

growth rates: The projected traffic volumes were obtained using projected growth rates for the surrounding population area growth rate

4. Maps showing the facility boundary and roads within 1 mile of the facility that provide access to the site are attached herein. Yes ⋈ No. If you checked "No" please explain:

VII. Availability and Adequacy of Roads

1. Complete Table 4 with information regarding the primary access roadways.

Table 4: Roadway Characteristics of the Primary Access Roadways

List the roads that the owner or operator will use as primary access to the site	Annual Average Daily Traffic on	Traffic on	Existing Roadway	Expected Roadway Capacity	Gross		Vertical Clearance		Service	by the	Expected Traffic Generated by the Facility on Each Roadway
Railway Ave	2,371	3,835				35		2-lane Asphal t		224	362
US 90	18,394	29,751				60		4-lane asphal t		224	362

2. Complete Table 5 with information regarding other access roadways within one mile.

Table 5: Roadway Characteristics of Other Access Roadways within One Mile of the Facility Boundary

	Existing Annual Average Daily Traffic on Roadway		Existing Roadway	Expected Roadway Capacity	Gross		Vertical Clearance		Service		by the
US 277	18,473	29,879				30		4-lane asphal t		224	362

Facility Name: <u>City of Del Rio Landfill</u> Revision No.: <u>0</u>

Permit No: MSW-207C Date: August 7, 2024

3. Complete Table 6 with information regarding access roadway intersections within one mile.

Table 6: Roadway Intersection Characteristics

Please list major (signalized) roadway intersections for access roads within 1 mile of facility	Existing Capacity	Existing Level of Service
Railway Ave and US 90	NA	NA

4.	(For applicants that conducted traffic counts) Peak period traffic counts were
	conducted at critical intersections and roadways in the area: \Box Yes \Box No

If "No" is checked, please explain: The traffic count coming into the facility is minimal when compared to the overall traffic on the road.

VIII. Conclusions on the availability and adequacy of roads to be used for accessing the facility

Enter conclusions regarding the availability and adequacy of roads to be used for accessing the facility using information obtained from access roadway data; data on the volume of existing and expected vehicular traffic on the access roads within one mile of the facility; and the projection of the volume of traffic expected to be generated by the facility on the access roads:

Based on the traffic count provided by TxDOT for US 90 and US 277, the traffic volume created by the facility is minimal and will not adversely impact the availability and adequacy of the roads to be used for accessing the facility.

IX. Highway Beautification

Enter facility distance from interstate or primary highways and screening information as required by 30 TAC 330.23(a).

- 1. Distance of Facility from Interstate or Primary Highway: 0.5 miles
- 2. Type of Facility Screening Provided, if applicable: Facility located far enough from US 90 and cannot be seen from the highway.

Facility Name: City of Del Rio Landfill

Permit No: MSW-207C Date: August 7, 2024

Revision No.:0

X. Analysis of the Impact of the Facility upon Airports

Enter the Part, Appendix, Attachment, Section, and Page Number of the application where analysis of the impact of the facility upon airports is provided: **Parts I/II Section 8**, **page I/II-9**

XI. Documentation of Coordination with the Federal Aviation Administration for Compliance with Airport Location Restrictions

- 1. Applicant has submitted written information to FAA describing the facility location, maximum height of waste units, type of waste accepted at the facility, and other facility-relevant data and information as required: \square Yes \square No
 - (a) Enter Date of Coordination Letter to FAA: July 5, 2024
 - (b) Enter Date of FAA Response: Still waiting for a response
- 2. Indicate FAA Response and Final Action:

☐ FAA Acknowledged No Adverse Imp	act
-----------------------------------	-----

☐ FAA Recommended Safety Improvements. (*Complete Section XII if you check this item.*)

3. A copy of the Documentation of Coordination with FAA for compliance with airport location restrictions is attached herein.

☐ Yes ☐ No. If you checked "No" please explain:

Coordination with FAA is documented in Appendix I/IIB.

XII. FAA Recommended Changes or Improvements for Airport Safety, (as applicable)

Enter FAA's recommended changes or improvements to the facility for airport safety or for compliance with airport location restrictions.

Still waiting for a response from FAA

Facility Name: <u>City of Del Rio Landfill</u> Revision No.: 0

Permit No: MSW-207C Date: August 7, 2024

XIII. Attachments

• Maps showing the facility boundary and roads within 1 mile of the facility.

- Documentation of coordination of all designs of proposed public roadway improvements associated with site entrances with the agency exercising maintenance responsibility of the public roadway involved; and the response letter received from the agency, as applicable.
- Documentation of coordination with the Texas Department of Transportation (TxDOT) for traffic and location restrictions, including any traffic study report; and the response letter received from TxDOT.
- Documentation of coordination with the Federal Aviation Administration for compliance with airport location restrictions; and the response letter received from FAA.
- Other documents attached:

CITY OF DEL RIO LANDFILL

VAL VERDE COUNTY, TEXAS TCEQ PERMIT NO. MSW-207C

MAJOR PERMIT AMENDMENT APPLICATION PART III – SITE DEVELOPMENT PLAN

SITE DEVELOPMENT PLAN

Prepared for City of Del Rio

September 2023 Revision 1 August 2024



Prepared by

CP&Y an STV Company Inc

TPBE Registration No. F-1741

1820 Regal Row13155 Noel Road, Suite 200

Dallas, TX 7524035

214-638-0500

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4.3.4 Final Cover System

The final cover system will provide a low maintenance cover, protect against erosion, reduce rainfall percolation through the cover system, and subsequently minimize leachate generation within the landfill. As depicted on Appendix IIIA, Figure IIIA-A.2 - Landfill Completion Plan, a maximum of 5 percent topslopes and 4H:1V sideslopes are provided to minimize erosion and facilitate drainage of the landfill. A final cover will be constructed over the existing pre-Subtitle D and Subtitle D waste disposal areas. The final cover system components are described in Table 4-3 with layers listed from top to bottom. The maximum waste and final cover elevations are 1120.5 ft-msl and 1124 ft-msl, respectively.

A demonstration that the specified final cover design will provide effective long-term erosional stability is included in Part III, Appendix IIIH - Surface Water Drainage Plan (Appendix IIIH-D). The final cover system will be constructed as outlined in Appendix E – Closure Plan.

Top Slopes	Side Slopes
12-inch-thick erosion layer	24-inch-thick erosion layer
18-inch-thick compacted clay infiltration layer with K =10 ⁻⁵ cm/s	18-inch-thick compacted clay infiltration layer with K = 10 ⁻⁵ cm/s

Table 4-3 Final Cover System Components

The closed landfill cells (Cells 1 and 2) are built consistent with the final cover system shown in Table 4-3, which was approved as part of MSW Permit 207B.

4.4 Estimated Rate of Solid Waste Deposition (§330.63(d)(4)(D))

The City of Del Rio Landfill primary serves residences and businesses in the City of Del Rio and Val Verde County. The major classifications of solid waste to be accepted by this facility for disposal include both residential and commercial MSW. Such waste consists of household wastes, construction-demolition waste, and various non-hazardous industrial and special wastes as authorized by the TCEQ. Based on the 2022 fiscal year TCEQ Annual Report, the landfill waste inflow is 47,067 tons (152 tons per day based on a 309-day operating schedule).

After 2022, the waste inflow rate is assumed to increase consistent with the projected growth rate for the facility's general service area. The projected growth rate is based on the TWDB population growth projections for the area and may vary. Based on the projected yearly waste inflow over the site life of the facility, this service area will generate an average of approximately 60,486 tons per year (196 tons per day based on a 309-day operating schedule).

CITY OF DEL RIO LANDFILL

VAL VERDE COUNTY, TEXAS TCEQ PERMIT NO. MSW-207C

MAJOR PERMIT AMENDMENT APPLICATION PART III – SITE DEVELOPMENT PLAN

APPENDIX IIIA LANDFILL UNIT DESIGN INFORMATION

Prepared for City of Del Rio

September 2023 Revision 1 August 2024



Prepared by

CP&Y an STV Inc Company

TPBE Registration No. F-1741

13155 Noel Road 1820 Regal Row, Suite 200

Dallas, TX 7524075235

214-638-0500

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1.0 INTRODUCTION

The purpose of this appendix is to present the details of the liner system and final cover system consistent with Title 30 Texas Administrative Code (TAC) §330.331, §330.333, and §330.457. The following subsections have been developed to provide detailed information for the existing liner system and final cover system.

2.0 PERMITTED LINER SYSTEM FOR THE SUBTITLED D AREA

The permitted liner system is designed to meet the requirements of Title 30 TAC §330.331(a)(12) and §330.331(e). Table 2-1 lists the components of the permitted liner system at the City of Del Rio Landfill. Cells 1 through 6 were constructed to Subtitle D standards under Permit No. MSW-207A using the permitted liner system. The expansion area Cells 7 through 10 are proposed to be built with the approved liner system for the facility.

Table 2-1 Liner System Components

Permitted Subtitle D Composite Liner System

2-foot-thick Soil Protective Cover

Drainage Geocomposite Leachate Collection Layer

2-foot-thick Compacted Clay Liner

Figure IIIA-A.1 in Appendix IIIA-A shows the excavation plan for the expansion area and the permitted excavation grades for the facility. The site does not have any shallow groundwater. Therefore, the liner system does not include any hydrostatic pressure relief system. The permitted liner system is designed with a leachate collection system as shown on Figures IIIA-A.3 through IIIA-A.5. The design of the leachate collection system components, including the drainage geocomposite leachate collection layer, leachate collection piping, chimney drains, sumps, and pumps are provided in Appendix IIIC. Material specifications, construction, and testing requirements for the permitted liner and leachate collection system are provided in Appendix IIID - Liner Quality Control Plan.

The impact of differential settlement on the performance of the currently constructed leachate collection systems in the Subtitle D areas is analyzed in Appendix IIIL and summarized in Table 2-2. A demonstration that the existing leachate collection system will continue to function in a manner that meets all regulatory requirements is included in Appendix IIIC.

Table 2-2 Leachate Collection Layer Analysis Summary for the Developed Subtitle D Areas

	Design Slope	Design Slope of	Post-Settlement	Post-Settlement Slope of
	between Cell	Leachate	Slope between Cell	Leachate Collection Pipe
Sector	Ridgeline and	Collection Pipe	Ridgeline and	(percent)
Sector	Leachate	(percent)	Leachate Collection	
	Collection Pipe		Pipe	
	(percent)		(percent)	
Cells 1 - 6	1.08 %	1.08 %	1.15%	1.15%

City of Del Rio Landfill
Appendix IIIA – Landfill Unit Design Information

3.0 PERMITTED OVERLINER SYSTEM

The pre-Subtitle D area is located in between the Subtitle D Areas as shown on Figure IIIA-A.1a and is approximately 12.3 acres. Consistent with MSW regulations at that time, the pre-Subtitle D liners consisted of in-situ clay liners. The overliner system for the pre-Subtitle D area of the landfill has been previously permitted and is designed consistent with the requirements listed in Title 30 TAC §330.331(a)(1). The system is designed to convey leachate generated over the existing pre-Subtitle D area to sumps located in the Subtitle D area. The overliner system is described in Table IIIA 3-1.

The top of overliner plan and details are shown on Figure IIIA-A.8. Material specifications, construction, and testing requirements for the overliner system are provided in Appendix IIID - LQCP.

Table 3-1 Overliner System Components

Component	Description			
Geosynthetic Clay Liner (GCL)	The reinforced GCL will be installed on top of the prepared soil foundation layer. Detailed specifications and construction procedures foundation preparation for the overliner GCl are listed in Appendix IIID - LQCP provides.			
40-mil LLDPE Textured Geomembrane Liner	The 40-mil LLDPE geomembrane textured on both sides will be installed on top of the GCL. Refer to Appendix IIID - LQCP for detailed specifications and construction procedures for the overliner geomembrane.			
Leachate Collection Layer	The leachate collection layer will consist of a geocomposite layer (double-sided for all slopes) that will be placed directly over the textured 40-mil LLDPE textured geomembrane to collect and convey leachate to the leachate collection system sumps through pipes. The geocomposite will consist of a 300-mil-thick HDPE geonet with a 6 oz/sy non-woven geotextile heat-bonded to both sides of the geonet. CQA procedures for the geocomposite layer are detailed in Appendix IIID.			
Leachate Collection Piping	The leachate collection layer discussed above will convey collected leachate to leachate collection system trenches which will contain a perforated leachate collection pipe surrounded by drainage stone and separated from the protective cover layer by a geotextile. The leachate collection pipes will direct collected leachate to the Subtitle D area. The proposed leachate collection pipes will be SDR 17 HDPE smooth wall pipe or equivalent. The leachate collection system is designed with cleanout risers at the end of each of the collection pipes to allow the pipes to be periodically flushed to remove any collected sediment.			

As noted in Appendix IIID, prior to the construction of the overliner system, the existing intermediate cover will be reworked to provide a 12-inch overliner foundation layer between existing waste and the GCL.

The overliner area grades will be at permitted top of waste grades included in TCEQ Permit No. 207 CB. The slope of the overliner varies between 20 to 5 percent.

4.0 FINAL COVER SYSTEM

Once the site reaches the permitted waste fill grades, a final cover system will be installed to limit the infiltration of stormwater into the landfill. The completion plan for the City of Del Rio Landfill is shown on Figure IIIA-A.2. The final cover system for the City of Del Rio Landfill is shown in Table IIIA 4-1. Details of the final cover system design is discussed in section below and shown on Figures IIIA-A.6 and IIIA-A.7.

Material specifications along with construction and testing procedures for the final cover system are provided in Appendix IIID.

Subtitle D Composite Final Cover SystemTop SlopesSide Slopes12-inch-thick erosion layer24-inch-thick erosion layer18-inch-thick compacted clay infiltration layer with $k \le 10^{-57}$ cm/s18-inch-thick compacted clay infiltration layer with $k \le 10^{-57}$ cm/s

Table 4-1 Final Cover System Components

As part of the final cover construction, an erosion layer capable of sustaining native vegetation will be constructed. Areas that receive final cover will be seeded upon completion of final cover placement. A soil loss and sheet flow velocity demonstration for the erosion layer is included in Appendix IIIH. The erosion layer will include a vegetation layer that provides for a 90 percent ground coverage. If there are areas that do not maintain at least 90 percent coverage they will be re-seeded until at least 90 percent coverage is maintained.

In addition, permanent final cover erosion control structures (swales and chutes) will be constructed upon installation of the final cover. The stormwater controls for the landfill have been designed consistent with the TCEQ regulations for Type I MSW landfills. The stormwater runon/runoff controls have been designed for a 25-year frequency storm event. These include drainage controls for the final cover, perimeter drainage channels, culverts, and detention ponds, including pond outfalls. The design details of the final cover system erosion control structures is provided in Appendix IIIH - Surface Water Drainage Report.

Final cover has been constructed over Cells 1, 2 and a portion of the pre-Subtitle D as shown in Figure IIIA-A.2. The TCEQ acceptance letter for the closure is included in Appendix IIID-A. The constructed final cover over the portion of the pre-Subtitle D and subtitled D areas will remain in place.

A stability analysis for the proposed excavation and proposed final cover systems is provided in Appendix IIIL - Geotechnical Report.

Page IIIA -3

CITY OF DEL RIO LANDFILL

VAL VERDE COUNTY, TEXAS TCEQ PERMIT NO. MSW-207C

MAJOR PERMIT AMENDMENT APPLICATION PART III – SITE DEVELOPMENT

APPENDIX IIIA-A LINER, OVERLINER AND FINAL COVER SYSTEM DETAILS

Prepared for City of Del Rio

September 2023 Revision 1 August 2024



Prepared by

<u>CP&Y an STV CompanyIne</u>

TPBE Registration No. F-1741

13155 Noel Road1820 Regal Row, Suite 200

Dallas, TX 7524075235

214-638-0500

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Figure IIIA-A.4 - Liner System Details II (Currently Approved Plan)

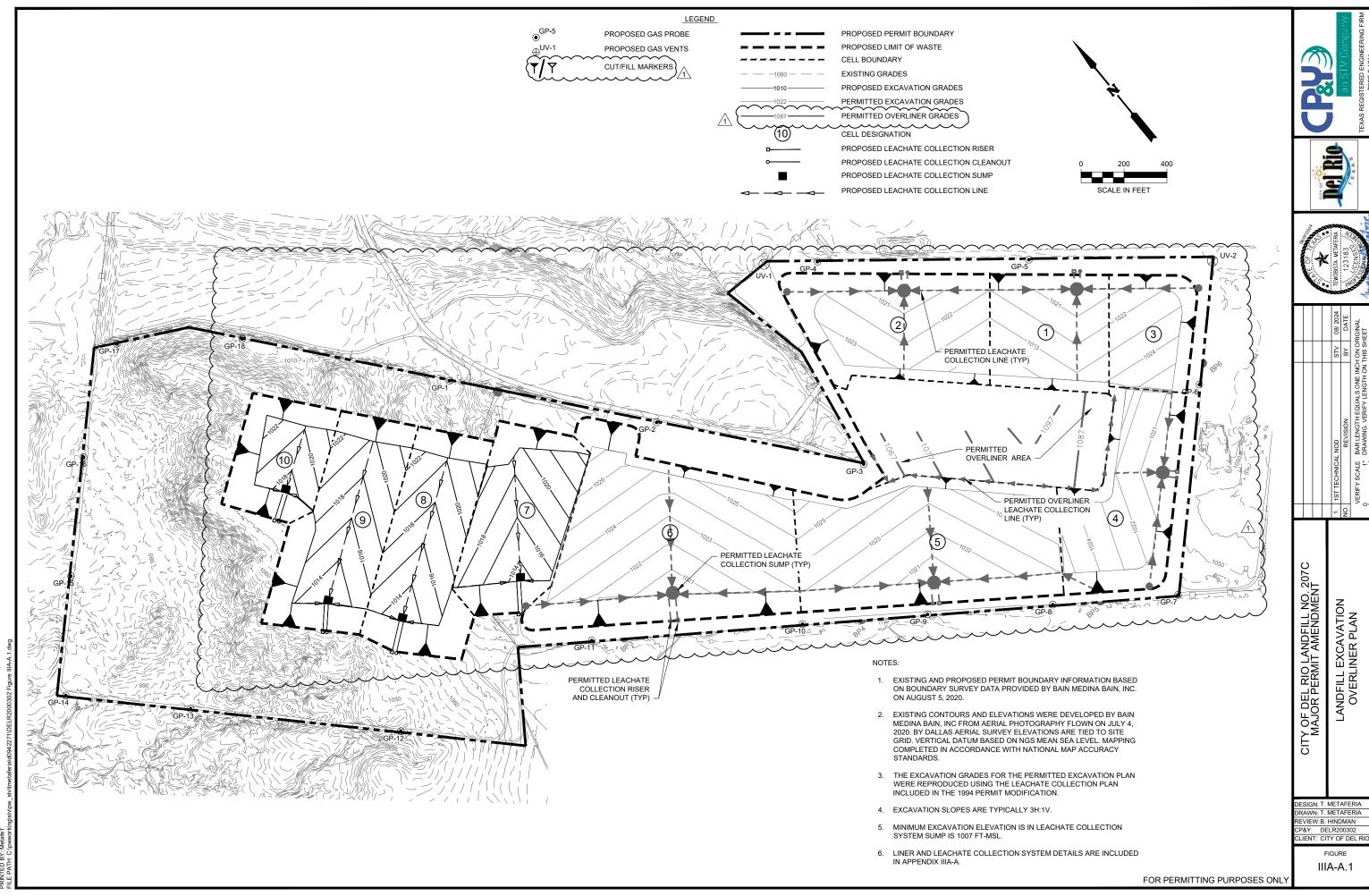
Figure IIIA-A.5 - Leachate Collection System Details

Figure IIIA-A.6 - Final Cover Details I (Currently Approved Plan)

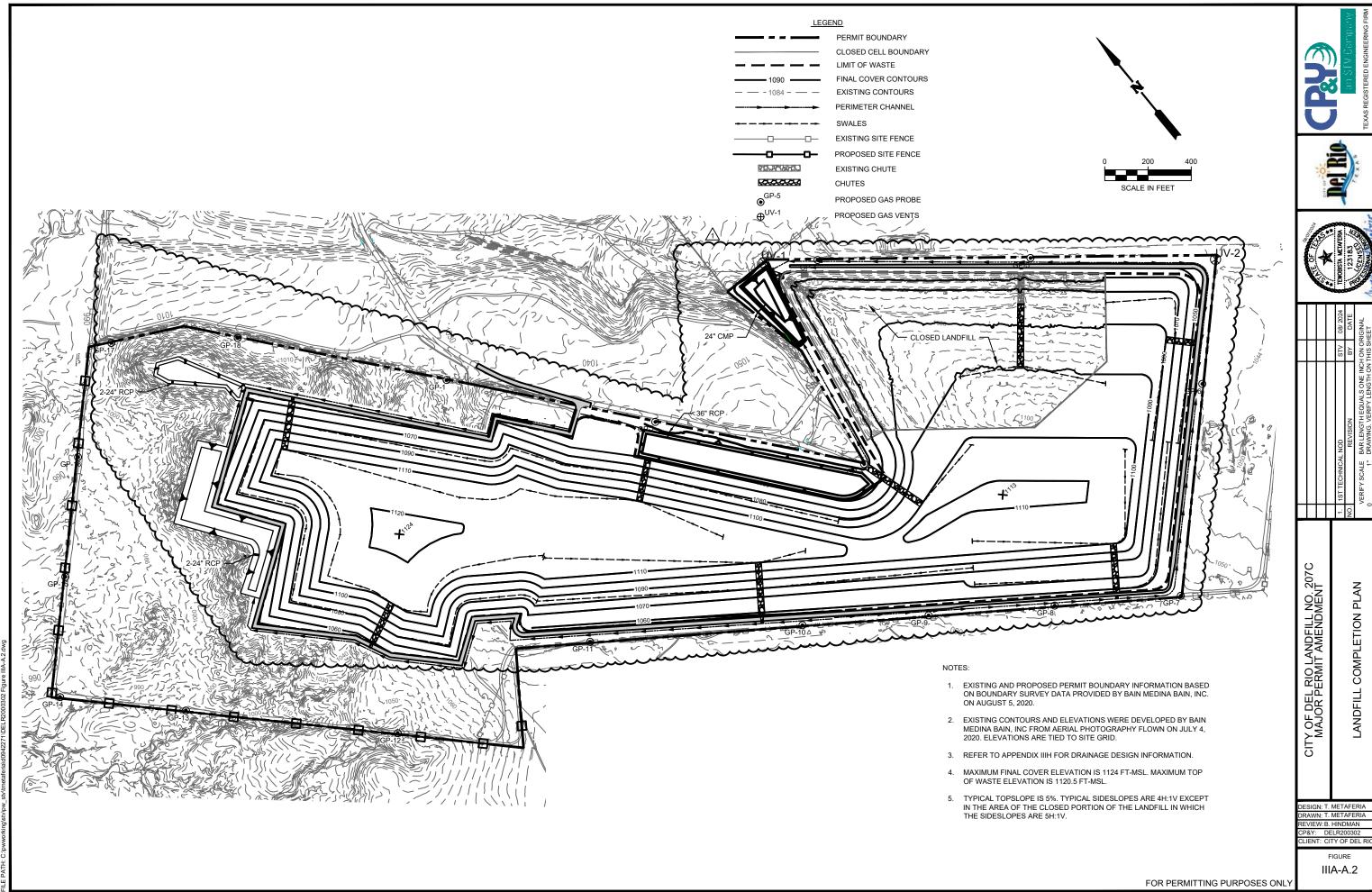
Figure IIIA-A.7 - Final Cover Details II (Currently Approved Plan)

Figure IIIA-A.8 – Overliner Details (Currently Approved Plan)









NOTES:

- 1. EROSION LAYER WILL BE CAPABLE OF SUSTAINING SELECTED VEGETATION.
- 2. FINAL COVER COMPONENTS WILL BE CONSTRUCTED ACCORDING TO FCQCP (APPENDIX IIIJ-A)
- 3. EROSION LAYER MAY CONSIST OF BOTH ONSITE AND OFF-SITE SOILS. BORROW SOURCE TO BE SELECTED BY OWNER PRIOR TO CONSTRUCTION.
- 4. REFER TO APPENDIX H FOR THE PERIMETER CHANNEL DESIGN.



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		1ST TECHNICAL NOD	REVISION	VERIFY SCALE BAR LENGTH EQUALS ONE INCH ON ORIGINAL 1" DRAWING, VERIFY LENGTH ON THIS SHEET AND ADJUST SCALE ACCORDINGLY.
		-	ON.	0
	T			

CITY OF DEL RIO LANDFILL NO. 207C
MAJOR PERMIT AMENDMENT
FINAL COVER DETAILS II

DESIGN: T. METAFERIA DRAWN: T. METAFERIA REVIEW: B. HINDMAN CP&Y: DELR200302 CLIENT: CITY OF DEL RIO

FIGURE

CITY OF DEL RIO LANDFILL

VAL VERDE COUNTY, TEXAS TCEQ PERMIT NO. MSW-207C

MAJOR PERMIT AMENDMENT APPLICATION PART III – SITE DEVELOPMENT

APPENDIX IIIA-B LANDFILL UNIT CROSS SECTIONS

Prepared for City of Del Rio

September 2023 Revision 1 JulyAugust 2024



Prepared by

CP&Y, an STV company Inc

TPBE Registration No. F-1741

13155 Noel Road 1820 Regal Row, Suite 200

Dallas, TX 7524075235

214-638-0500

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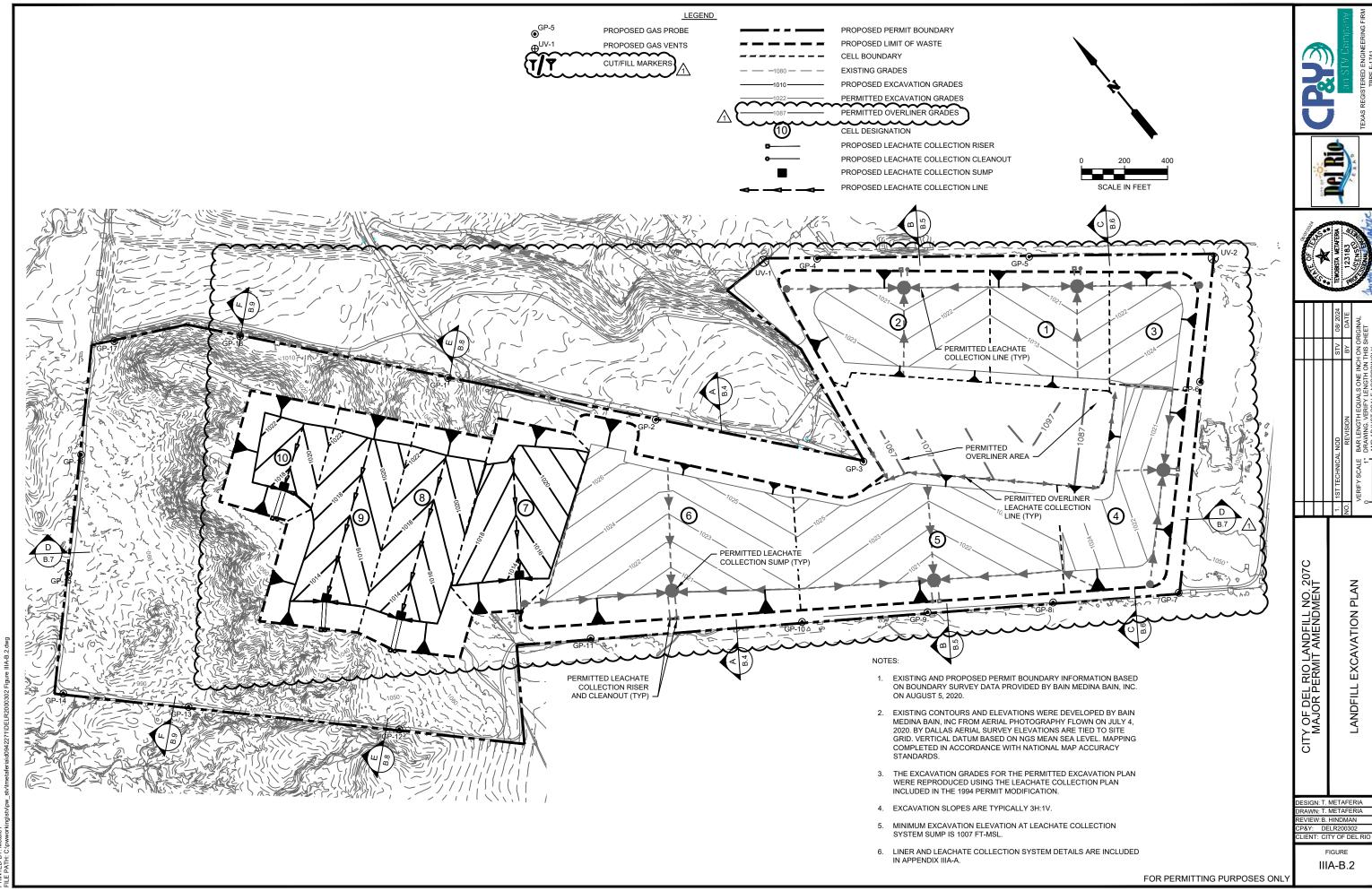
Figure IIIA-B.6 - Typical Cross Section C

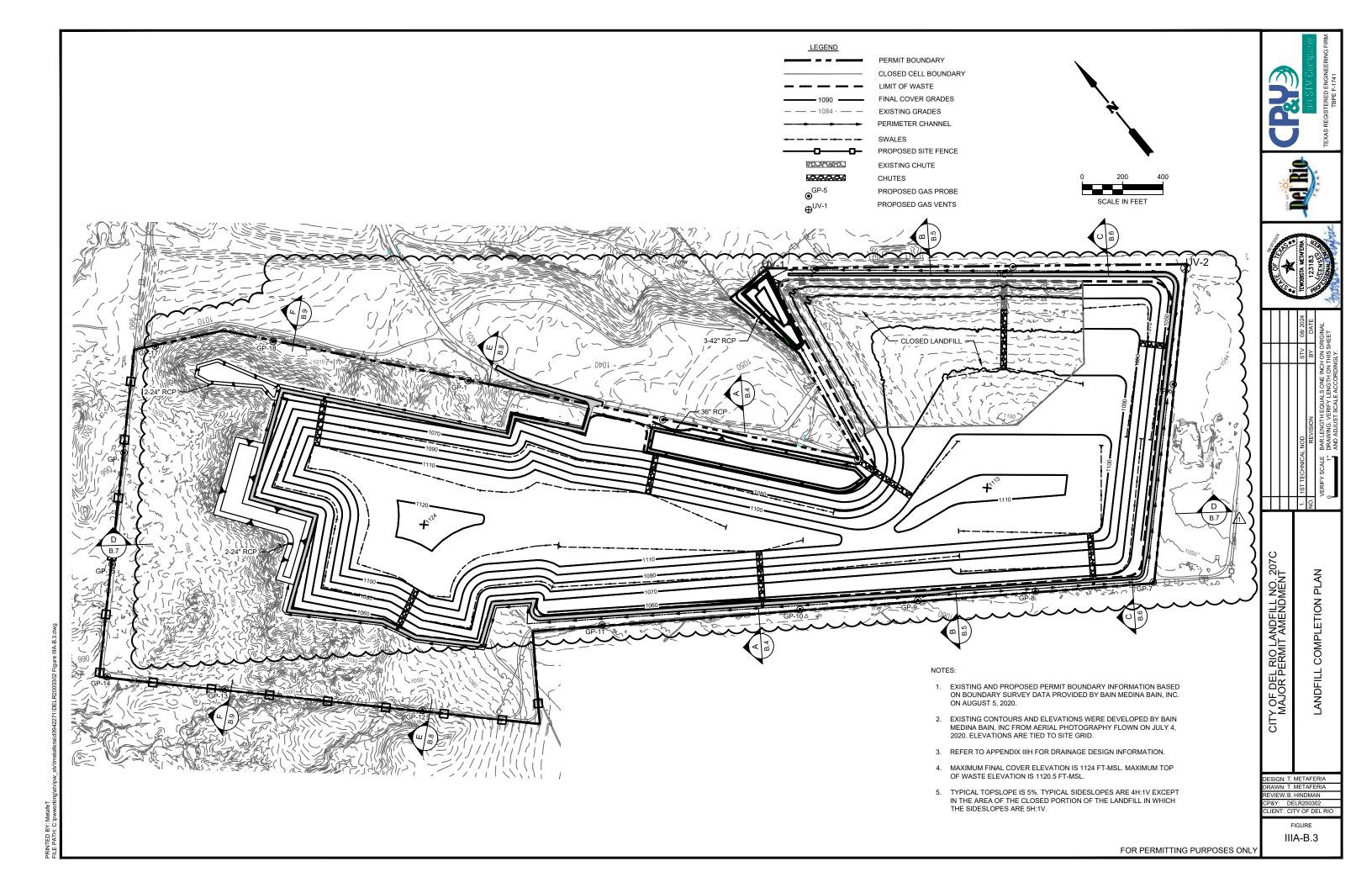
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CITY OF DEL RIO LANDFILL

VAL VERDE COUNTY, TEXAS TCEQ PERMIT NO. MSW-207C

MAJOR PERMIT AMENDMENT APPLICATION PART III – SITE DEVELOPMENT PLAN

APPENDIX IIIB SITE LIFE CALCULATIONS

Prepared for City of Del Rio

September 2023 Revision 1 August 2024



Prepared by

CP&Y an STV CompanyInc

TPBE Registration No. F-1741

182013155 Noel Road-Regal Row, Suite 200

Dallas, TX 7524035

214-638-0500

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1.0 SITE LIFE

1.1 Solid Waste Generation

Two estimates have been developed provide an assessment of the solid waste generation rate for the Del Rio Landfill. The estimate included in Section 1.1.1 is based on the City's knowledge of the current market condition and population. The estimate included in Section 1.1.2 is based on historical waste inflow data. The projection based on historical data is provided for informational purposes and is not considered in any calculation or demonstration in this application

It is important to note that the estimates included in both sections are based on numerous assumptions and may vary as market conditions change.

1.1.1 Solid Waste Generation Information Using Population Projections

Over the last few years, the waste inflow rate at Del Rio Landfill has varied from 136 tons per day to 188 tons per day as listed below. Since Del Rio is a US/Mexico border city, the yearly fluctuation in the flow of waste is partly due to the migration of people through the city. So₂ the waste inflow is impacted by the permanent population as well as the migratory population.

Table 1-1 Del Rio Landfill Historical Waste Acceptance

Fiscal Year	Waste Inflow	Typical Daily Waste Inflow Rate Based on a 309-Day Operating Schedule ²
2015	44,708 tons/year	145 tons/day
2016	54,092 tons/year	175 tons/day
2017	51,764 tons/year	168 tons/day
2018	42,072 tons/year	136 tons/day
2019	45,399 tons/year	147 tons/day
2020	54,488 tons/year	176 tons/day
2021	58,055 tons/year	188 tons/day
2022	47,067 tons/year	152 tons/day
Average	49,706 tons/year	161 tons/day

^{1.} Information obtained from the TCEQ MSW Annual Reports.

After 2022, the waste inflow rate is assumed to increase consistent with the projected population growth rate for the facility's general service area which for this analysis is assumed to be Val Verde County. The census information and growth trends for Del Rio and Val Verde are presented on page IIIB-5. The population growth projections were obtained from the Texas Water Development Board (TWDB). It is assumed that area growth patterns will be consistent with the growth patterns published by the TWDB. Therefore, the 2022 waste inflow was increased by the annual population growth percentage until the landfill capacity was reached as shown on page IIIB-6.

^{1.2......}The facility's yearly operating scheduel is based on the landfill operating Monday through Saturday. The facility is closed on Sundays and four designated holidays (New Year's, 4th of July, Thanksgiving, and Christmas).

2.0 POPULATION EQUIVALENT

2.1 Del Rio Landfill Population Projections

Using the average waste inflow rate of 60,486 tons per year discussed in Section 1.1.1 (an average daily volume of 196 tons per day based on a 309-day operating schedule) and assuming 5 pounds of waste is generated per capita per day, the population equivalent is:

$$\frac{(60,486 \ tons \ per \ year)x \ (2,000 \frac{pounds}{ton})}{(5 \ pounds \ per \ person/day)x \left(365 \frac{days}{year}\right)} = 66,286 \ persons$$

2.2 Historical Data

Using the average of the actual waste inflow rate of 63,174 tons per year discussed in Section 1.1.2 (an average daily volume of 204 tons per day based on a 309-day operating schedule) and assuming 5 pounds of waste is generated per capita per day, the population equivalent is:

$$\frac{(63,174 tons per year)x (2,000 \frac{pounds}{ton})}{(5 pounds per person/day)x \left(365 \frac{days}{year}\right)} = 69,232 persons$$

3.0 LANDFILL CAPACITY

The estimated total capacity of <u>in-place</u> waste and daily cover over the active life of the facility, <u>as of January 19,2023</u>, is approximately 35.02 million cubic yards. The total <u>remaining</u> volume available for solid waste, <u>and</u> daily cover, <u>and intermediate cover</u> is estimated to be 5,646,162 cubic yards. This airspace estimate includes the remaining available volume in the existing permitted area, <u>vertical expansion in the permitted landfill footprint</u>, and the proposed 75-acre horizontal expansion.

4.0 SITE LIFE CALCULATIONS

The site life calculations based on projected population growth rates in Val Verde County are presented on pages IIIB-5 and IIIB-7. The site life is projected to be approximately 46.6 years, which would result in the site's closure during the year 2069.

The site life calculations based on historical waste inflow data are presented on pages IIIB-8 and IIIB-10. The site life is projected to be approximately 44.1 years, which would result in the site's closure during the year 2067.

CITY OF DEL RIO LANDFILL

VAL VERDE COUNTY, TEXAS TCEQ PERMIT NO. MSW-207C

MAJOR PERMIT AMENDMENT APPLICATION PART III – SITE DEVELOPMENT PLAN

APPENDIX IIIC LEACHATE AND CONTAINATED WATER MANAGEMENT PLAN

Prepared for City of Del Rio

September 2023 Revision 1 August 2024



Prepared by

<u>CP&Y an STV Company-Inc</u>

TPBE Registration No. F-1741

<u>13155 Noel Road 1820 Regal Row</u>, Suite 200

Dallas, TX 7524035

214-638-0500

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.....IIIC-11

3.4 Leachate Sumps and Pumps

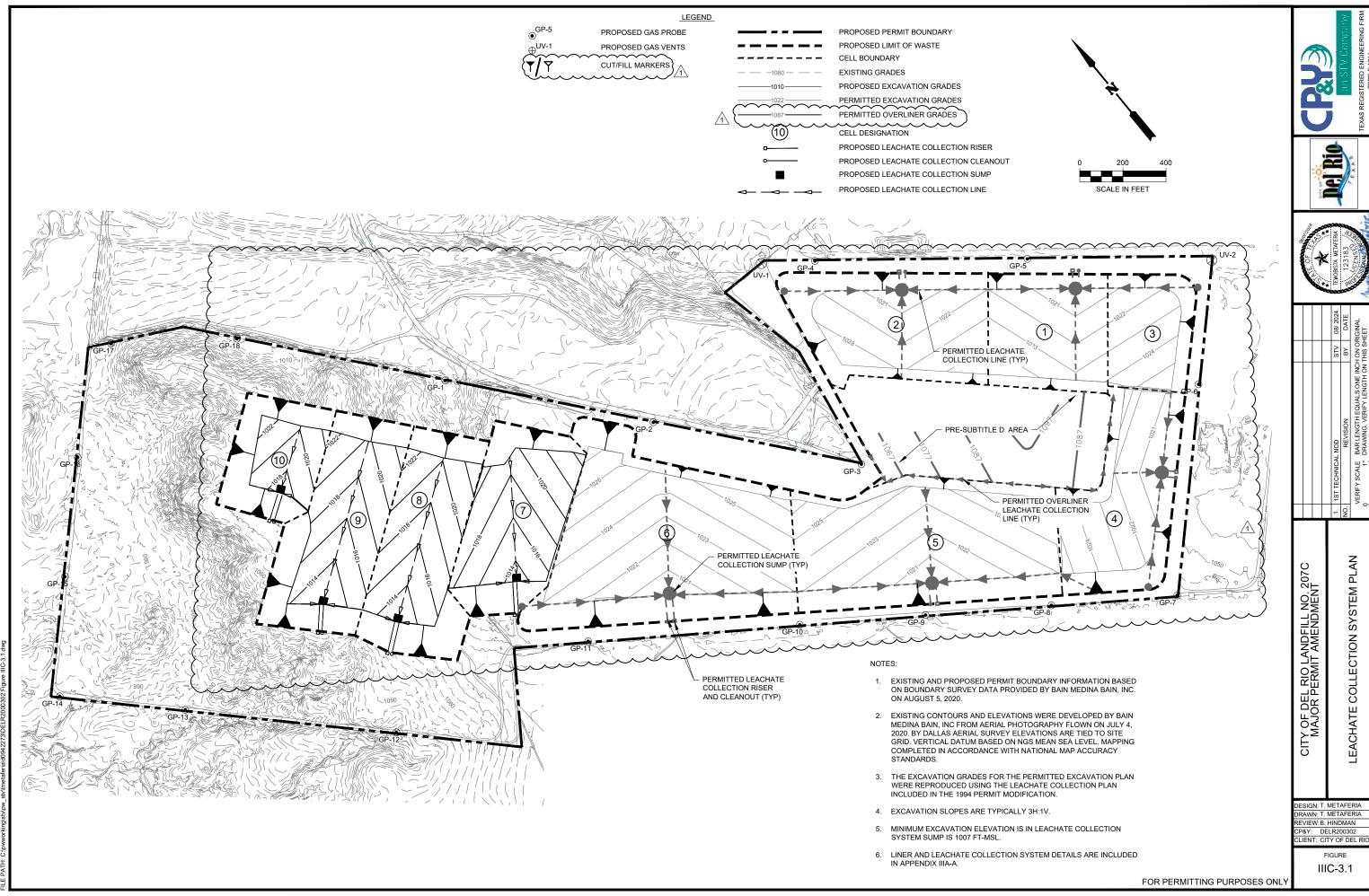
The leachate collection sumps and pumps have been sized to comply with the regulatory design standard listed in §330.331(a)(2). The leachate collection sumps and pumps have been designed to maintain less than 12 inches (30 cm) depth of leachate over the liner. The leachate sump operating plan is included in Table 3-3.

Each leachate sump will be sized based on the amount of leachate generation taking into consideration the contributing area from the Subtitle D cells. The minimum sump size for the undeveloped cells and overliner will be 2 feet deep with minimum dimensions of approximately 27 by 27 feet at the landfill floor and 15 by 15 feet at the sump base and will store a minimum of 906 cubic feet of leachate. The size and capacity of the sumps are presented in Appendix IIIC-B. New sump will be backfilled with drainage stone meeting the gradation in accordance with ASTM D 448, size number 467 (nominal aggregate size is 2 inches to 3/16 inches). Each sump will be emptied by a submersible pump located in an 18-inch nominal diameter sidewall riser pipe which extends into the bottom of the sump and is perforated in the sump. Pumps will be operated manually. Control levels for the pump will be set to maintain sump liquid levels between the lip of the sump and pump intake. The objective of the pump operation is to ensure that a free-flowing condition is maintained in the LCS. If the pump malfunctions, the pump will be removed, repaired, and replaced, or a new pump will be used (see Table 3-3 for additional information). If it is determined that the pump is malfunctioning, it will be removed and replaced immediately. In addition, the pumps will be replaced when it is determined that a larger capacity pump is needed based on existing conditions. The leachate depth monitoring procedure and leachate removal will be the same for all disposal areas.

The specified pump will have the capacity to pump leachate at a rate of 20 gpm or 28,800 gpd. The maximum estimated flow to be pumped from the largest cell is 745 gpd. If the specified leachate sump pumps are not able to empty the sump and maintain less than 12 inches of head on the liner at reasonable cycle times, then a pump with more capacity will be used (refer to Section 4.1 for more information).

Table 3-3 Leachate Sump Operating Plan

Leachate Level Description	Condition	Action Required
Leachate level between lip of sump and pump intake at the bottom of the sump.	System is functioning as designed. The drainage geocomposite leachate collection layer installed on the floor of the landfill is designed to convey the estimated peak leachate flow rate without the leachate level within the geocomposite exceeding the thickness of the geocomposite. The operation of the leachate sump and the conveyance capacity of the geocomposite leachate collection layer work in tandem to maintain compliance with the design standard listed in §330.331(a)(2).	The depth of leachate in the sump is monitored by a landfill personnel at least 4 times per monthperiodically. Leachate flow to the sump and sump pump capacity are listed in Table 4-1. The sump design is discussed in Section 3.4.
Leachate level between the lip of the sump and 12 inches (30 cm) above the lip of the sump.	The 12-inch design standard listed in §330.331(a)(2) has not been exceeded.	For these two conditions, the sump operation will be monitored daily until the leachate is pumped out by the Operator. For both conditions, the leachate levels in the sump
Leachate level over 12 inches above the lip of the sump.	The design standard listed in §330.331(a)(2) has been exceeded.	will be recorded daily. If it is determined that the pump is malfunctioning, it will be removed and replaced immediately. In addition, the pumps will be replaced when it is determined that a larger capacity pump is needed based on existing conditions. As noted in the EPA Technical Manual Solid Waste Disposal Facility Criteria, EPA530-R-93-017, "The 30-cm head allowance is a design standard and the [EPA] recognizes that this design standard may be exceeded for relatively short periods of time during the active life of the unit."





LEACHATE

RAWN: T. METAFERIA REVIEW: B. HINDMAN CP&Y: DELR200302

5.0 LEACHATE AND CONTAMINATED WATER DISPOSAL

5.1 Leachate Storage System Operation and Disposal

Leachate that is generated at the site will be conveyed to the leachate collection sumps. Leachate levels in the sumps are <u>manually</u> measured and recorded to evaluate leachate production and fluctuations. A form to record leachate measurements is kept in the Site Operating Record and is used to evaluate the effectiveness of the leachate monitoring and control facilities. The depth of leachate in the sump will be monitored by the pressure transducer <u>manually by site personnel which will be calibrated to provide direct read-out of the leachate level in the sump</u>. Leachate will be pumped from the leachate sumps and disposed.

The collected leachate will be pumped into a truck for discharge into the off-site manhole for treatment at the City's wastewater treatment plant or transported off-site for disposal. For leachate transported off-site, sampling and analysis will be limited to the disposal facility's requirements. The results of leachate monitoring required by the off-site permitted disposal facility will be kept in the Site Operating Record.

5.2 Contaminated Water Disposal

Contaminated water that collects behind the containment berm will be pumped into a truck and transported to the off-site manhole for treatment at the City's wastewater treatment plant. Contaminated water will be removed as soon as practicable from the area behind the contaminated water containment berm (refer to Section 33 of the SOP for additional information and record keeping requirements).

CITY OF DEL RIO LANDFILL

VAL VERDE COUNTY, TEXAS TCEQ PERMIT NO. MSW-207C

MAJOR PERMIT AMENDMENT APPLICATION PART III – SITE DEVELOPMENT PLAN

APPENDIX IIID LINER QUALITY CONTROL PLAN

Prepared for City of Del Rio

September 2023 Revision 1 August 2024



Prepared by

<u>CP&Y an STV CompanyInc</u>

TPBE Registration No. F-1741

<u>13155 Noel Road1820 Regal Row</u>, Suite 200

Dallas, TX 7524035

214-638-0500

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1.0 INTRODUCTION

1.1 **General**

This Liner Quality Control Plan (LQCP) is prepared to fulfill the requirements of Title 30 Texas Administrative Code (30 TAC) Chapter 330, Subchapter H, relating to Liner System Design and Operation and with the current Texas Commission on Environmental Quality (TCEQ) Guidance RG-534 (Rev. September 2017). This document presents the Operator, Design Engineer, Construction Quality Assurance Professional of Record, and the Contractor the means to govern the construction quality and to satisfy the environmental protection requirements under current Texas Commission on Environmental Quality (TCEQ) Municipal Solid Waste Rules (MSWR). More specifically, the LQCP addresses the soil and geosynthetic components of the liner system. The provisions of this LQCP were developed based on the latest technical guidelines of the TCEQ, including quality control of construction, testing frequencies and procedures, and quality assurance of sampling and testing procedures.

The LQCP shall be used in conjunction with the Site Development Plan Appendices and final construction drawings and specifications. The 24-inch clay/soil liner will be constructed in the new cells with drainage geocomposte leachate collection system layer. The overliner will be constructed in the portion of the pre-Subtitle D area and will consist of a geosynthetic clay liner, a 40-mill LLDPE texture geomembrane and drainage geocomposite leachate collection layer. The LQCP address the following:

- Construction Quality Assurance for Earthwork
- Construction Quality Assurance for Geosynthetics
- Construction Quality Assurance for Leachate Drainage Aggregates and Piping
- **Geotechnical Strength Testing Requirements**
- Documentation

1.2 **Definitions**

This section provides the definitions for terms used in this LQCP.

- ASTM The American Society for Testing and Materials
- Construction Quality Assurance (CQA) A planned system of activities that provides the Operator and permitting agency assurance that the facility was constructed as specified in the design. Construction quality assurance includes observations and evaluations of materials, and workmanship necessary to determine and document the quality of the constructed facility. Construction quality assurance (CQA) refers to measures taken by the CQA organization to assess if the installer or contractor is in compliance with the plans and specifications for a project.
- Construction Quality Assurance Professional of Record (POR) The POR is an authorized representative of the Owner and has overall responsibility for construction quality assurance that confirms that the facility was constructed in accordance with plans and specifications approved by the permitting agency. The POR must be registered as a Professional Engineer in Texas and experienced in geotechnical testing and its interpretations. Experience and education must include geotechnical engineering, engineering geology, soil mechanics,

City of Del Rio Landfill Rev 1, August 2024 Page IIID-1

CITY OF DEL RIO LANDFILL

VAL VERDE COUNTY, TEXAS TCEQ PERMIT NO. MSW-207C

MAJOR PERMIT AMENDMENT APPLICATION PART III – SITE DEVELOPMENT PLAN

APPENDIX IIIE CLOSURE PLAN

Prepared for City of Del Rio

September 2023 Revision 1 August 2024



Prepared by CP&Y an STV Company STV Inc

TPBE Registration No. F-1741

13155 Noel Road, Suite 200 1820 Regal Row, Suite 200

Dallas, TX 7524035

214-638-0500

This document is intended for permitting purposes only.

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2.0 FINAL COVER SYSTEM

2.1 Introduction

The final cover system for the City of Del Rio Landfill has been developed to incorporate the requirements of Title 30 TAC §330.457(f)(4). The rules state that the owner or operator of a MSW landfill unit shall complete closure activities for the unit in accordance with the approved closure plan within 180 days following the initiation of closure activities (closure activities for MSW landfill units shall begin no later than 30 days after the date on which the unit receives the known final recent receipt of wastes, or, if the unit has remaining capacity and there is a reasonable likelihood that the unit will receive additional wastes, no later than one year after the most receipt of wastes). Such a system will include installation of a final cover system and a storm water runoff control system. The storm water runoff controls are addressed in Appendix IIIH – Surface Water Drainage Plan. The final cover system design is discussed below and is also detailed in Appendix IIIA-A. Cross-sections are provided in Appendix IIIA-B.

2.2 Final Cover System Design

The final cover system will consist of a cover system for both pre-Subtitle D and Subtitle D areas. The final cover system will provide a low maintenance cover, protect against erosion, reduce rainfall percolation through the cover system and subsequently minimize leachate generation within the landfill. As depicted on Figure IIIE-1, a maximum slope of 5 percent is provided for the top slopes. Side slopes of the final cover for all above-ground disposal areas are 4H:1V and will not exceed a 25% grade. The top and side slopes specified are sufficient grades to preclude ponding of surface water when total fill height and expected subsidence are taken into consideration.

Subtitle D Composite Final Cover System

- An erosion layer consisting of a earthen material capable of sustaining vegetative growth. The vegetation will consist of native or introduced grasses, as well as a mixture of Bermuda, vetch, rye, wheat grass, wildflowers, and other flowering plants capable of providing 90 percent coverage over the cover system. The erosion layer will be 12-in thick on the top slope and 24-in thick on the sideslopes.
- An 18-inch-thick compacted clay infiltration layer with a coefficient of permeability of less than or equal to $1x10^{-57}$ cm/s.

The low permeability component of the final cover system (the 18-inch-thick clay infiltration layer) is designed to minimize infiltration of surface water into the underlying waste material. Details of the final cover system are shown on Drawings A.6 and A.7 in Appendix IIIA-A. Material specifications, construction, and testing procedures are provided in Appendix IIIE-A Final Cover System Quality Control Plan.

Vegetation will be established over the installed final cover system to minimize the erosion potential of the cover slopes. The erosion layer was evaluated using the universal soil loss equation (USLE) developed by the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS). The evaluation is presented in Appendix IIIH – Surface Water Drainage Plan.

Landfill gas generated in the landfill will be managed as discussed in Appendix IIIM – Landfill Gas Management Plan. The landfill gas system will monitor the gas generated by deposited waste.

Appendix IIIE-B TCEQ FORM 20720

Closure Plan for Type I Landfill Unit and Facility

Facility Name: City of Del Rio Landfill Revision No.:1

Permit No: 207C Date:8/07/2024

VII. Professional Engineer's Statement, Seal, and Signature

Name: Tewobista Metaferia

Title: Project Engineer

Date: August 7, 2024

Company Name: CP&Y an STV Company Inc.

Firm Registration Number: F-1741

Professional Engineer's Seal



Signature

CITY OF DEL RIO LANDFILL

VAL VERDE COUNTY, TEXAS TCEQ PERMIT NO. MSW-207C

MAJOR PERMIT AMENDMENT APPLICATION PART III – SITE DEVELOPMENT PLAN

APPENDIX IIIF POST-CLOSURE CARE PLAN

Prepared for City of Del Rio

September 2023 Revision 1 August 2024



Prepared by

CP&Y an STV Company Inc

TPBE Registration No. F-1741

13155 Noel Road 820 Regal Row, Suite 200

Dallas, TX 7524035

214-638-0500

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Post-Closure Care Plan for Type I Landfill Units and Facility

Facility Name: City of Del Rio Landfill Revision No.:1

Permit No: 207C Date: 08/07/2024

XI. Engineer's Seal and Signature

Name: Tewobista Metaferia, P.E. Title: Project Manager

Date: 08/07/2024

Company Name: CP&Y an STV Company Firm Registration Number: F-1741

Professional Engineer's Seal



Signature

CITY OF DEL RIO LANDFILL

VAL VERDE COUNTY, TEXAS TCEQ PERMIT NO. MSW-207C

MAJOR PERMIT AMENDMENT APPLICATION PART III – SITE DEVELOPMENT PLAN

APPENDIX IIIG CLOSURE AND POST-CLOSURE CARE COST ESTIMATE

Prepared for City of Del Rio

September 2023 Revision 1 August 2024



Prepared by

<u>CP&Y an STV Company-Inc</u>

TPBE Registration No. F-1741

<u>13155 Noel Road 1820 Regal Row</u>, Suite 200

Dallas, TX 7524035

214-638-0500

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City of Del Rio Landfill Rev 1, August 2024 IIIG-i

TABLE 1-1 CLOSURE COST ESTIMATES ACTIVE LANDFILL (55.5 acres)

Client: City of Del Rio
Project: Major Permit Amendment

Description: Closure Cost Estimates

Date: 8/1/2024 Job No: DELR1700633

By: T. Metaferia

Checked By: B. Hindman

Description	Quantity	Unit	Unit Cost 2023	Total Cost
ENGINEERING				
Topographic Survey	1	LS	\$24,594.58	\$24,594.58
Boundary Survey for Affidavit	1	LS	\$10,810.00	\$10,810.00
Site Evaluation	1	LS	\$6,442.97	\$6,442.97
Development of Plans	1	LS	\$55,750.00	\$55,750.00
Contract Administration (bidding and award)	1	LS	\$15,610.00	\$15,610.00
Closure Inspection and Testing	1	LS	\$173,138.06	\$173,138.06
Affidavit to the Public	1	LS	\$1,878.55	\$1,878.55
TPDES, Other Permits	1	LS	\$8,670.24	\$8,670.24
Engineering Total				\$296,894.40
Legal Fees	25%			\$74,223.60
CONSTRUCTION				
Infiltration Layer ¹	179,080	CY	\$8.24	\$1,475,619.20
Erosion/vegetation layer (soil and topsoil)	89,540	CY	\$5.78	\$517,541.20
Revegetation	55.5	Acre	\$2,839.50	\$157,592.25
Site grading and drainage	55.5	Acre	\$1,647.35	\$91,427.93
Subtotal				\$2,242,180.58
Mobilization, bonds, insurance	10%			\$224,218.06
TCEQ Administration	5%			\$112,109.03
Construction Total				\$2,578,507.67
Subtotal Closure Cost (Engineering + Legal + Construction)		·		\$2,949,625.67
Contingency	10%	•		\$294,962.57
Contract Performance Bond	2%			\$58,992.51
Third Party Administration and Project Management	2.5%			\$73,740.64
Subtotal		•	-	\$427,695.72
TOTAL CLOSURE COST			-	\$3,377,321.39

Note:

^{1.} The top and sideslopes have a 1.5-foot and 2.0-foot infiltration layer respectively. The infiltration quantity is based on a 2-foot infiltration layter for both the sideslopes and top slope to be conservative.

TABLE 1-2 POST-CLOSURE COST ESTIMATES 30-YEAR POST-CLOSURE PERIOD

Client: City of Del Rio
Project: Major Permit Amendment
Description: Post-Closure Cost Estimates

Date: 8/1/2024
Job No: DELR1700633
By: T. Metaferia
Checked By: B. Hindman

Description	Quantity	Unit	Unit Cost 2023	Total Cost
ENGINEERING				
Site Inspection and Recordkeeping	30	YR	\$1,408.91	\$42,267.30
Correctional Plans and Specifications	30	YR	\$1,650.23	\$49,506.90
Methane Monitoring ¹	30	YR	\$5,613.98	\$168,419.40
LFG Probe Plugging and Abandoment	6	EA	\$9,905.75	\$59,434.50
Engineering Total				\$319,628.10
CONSTRUCTION				_
Grading/revegetation of Final Cover and Drainage Ditches	30	YR	\$ 10,073.34	\$302,200.20
LFG Probe Maintenance	30	YR	\$439.31	\$13,179.30
Perimeter Fence and Gates Maintenance	1	LS	\$6,690.00	\$6,690.00
Access Roads Maintenance	1	LS	\$11,150.00	\$11,150.00
Construction Total				\$333,219.50
LEACHATE DISPOSAL ²				_
75,795 gallons/year@\$0.60/gal	30	YR	\$45,477.00	\$1,364,310.00
Sutotal Post-Closure Cost (Current Cost of Engineering + Construction + Leachate)				\$2,017,157.60
Contingency	10%			\$201,715.76
Third Party Administration and Project Management Costs	2.5%			\$50,428.94
Total Post-Closure Cost (Current Cost of Engineering + Construction + Leachate)				\$2,269,302.30

Note:

^{1.} Methane monitoring is preformed quarterly

^{2.} The disposal rate is assumed to be to \$0.58/gallon in 2021 cost estimate has been updated based on the inflation factor.

Appendix A. TCEQ Forms 20721 and 20723



Texas Commission on Environmental Quality

Closure Cost Estimate Form for Municipal Solid Waste Type I Landfills

This form is for use by applicants or site operators to provide cost estimates for closure of MSW Type I landfills to meet the requirements in 30 Texas Administrative Code (TAC) Chapter 330, Section 330.63(j) and 30 TAC Chapter 330 Subchapter L. The costs to be provided herein are cost estimates for hiring a third party to close the largest waste fill area that could potentially be open in the year to follow and those areas that have not received final cover. If you need assistance in completing this form, please contact the MSW Permits Section in the Waste Permits Division at (512) 239-2335.

Facility Name: City of Del Rio Landfill

MSW Permit No.: 207C

Site Operator/Permittee Name and Mailing Address: City of Del Rio, 114 W Martin St

Del Rio, TX 78840

Total Closure Cost Estimate (2022 Dollar Amount): \$3,173,736.983,377,321.39

I. Professional Engineer's Statement, Seal, and Signature

I am a licensed professional engineer in the State of Texas. To the best of my knowledge, this Closure Cost Estimate has been completed in substantial conformance with the facility Closure Plan and, in my professional opinion, is in compliance with Title 30 of the Texas Administrative Code, Chapter 330.

Name: **Tewobista Metaferia**, **P.E.** Title: **Project Manager**

Date: **0**8/**0**7/**2024**9/30/2023

Company Name: CP&Y an STV Company, Inc. Firm Registration Number: F-1741

Professional Engineer's Seal



Professional Engineer's Signature

Facility Name: City of Del Rio Landfill Revision No.: 1

Permit No: 207C Date: 08/07/2024

improvements to bring the site into compliance with the permit, the closure schedule, and coordination with the TCEQ and provision of closure notice to the

1,5. Contract Administration (bidding and award)

The third-party consultant will advertise the project, receive the bids, evaluate the bids, award the closure construction contract and administer the contract during construction.

1,6, Closure Inspection and Testing

The professional of record will observe closure construction, perform cover thickness and permeability verification, and prepare an evaluation report upon completion of closure.

1.7. TPDES and other Permits

The third-party consultant will prepare plans, specifications, and other documents necessary for compliance with applicable federal and state laws and requirements, including the Clean Water Act, for the proper closure of the site.

1.8. Additional Engineering Cost Items Not Listed on the Worksheet

List the Attachment(s) detailing any additional engineering cost items necessary to close the site that is not already included as a line item on the worksheet:

Affidavit to the public (\$1,878.55755.56)

Also, reference these Attachments in the "Units" column on this line of the worksheet. Provide the total cost of all additional engineering cost items in the "Cost" column.

1.9. Engineering Costs Subtotal

1.9.1. Enter the sum of engineering costs in Items 1.1 through 1.8.

2. Construction Costs

Closure construction costs include those for construction of the final cover system, site grading, and drainage improvements. Other costs may be added as site-specific issues warrant.

2.1. Mobilization

2.1.1. Mobilization of Personnel and Equipment

The cost of mobilizing personnel and construction heavy equipment must be included as part of the construction costs.

2.2. Final Cover System

The owner or operator must install a final cover system that is designed to minimize infiltration and erosion. The final cover system is subdivided into the sideslope cover and cap cover with their associated components to facilitate cost calculations. If an alternative final cover is proposed, the closure cost estimate will still be based on a design that utilizes the conventional composite cover system.

Facility Name: City of Del Rio Landfill Revision No.: 1

Permit No: 207C Date: 08/07/2024

D. Closure Cost Estimates Worksheet

If any item listed in this worksheet is not applicable to the subject facility, enter "NA" (Not Applicable) in the affected field.

Table 1. Closure Cost Estimates Worksheet.

Item No.	Item Description	Units ¹	Quantity	Unit Cost	Cost	Source of Unit Cost Estimate ²
		1.	Engineeri	ng Costs		
1.1	Topographic Survey	Lump Sum	1	\$ 24,594.58 <u>24</u> <u>594.58</u>	\$ 22,984.35 <u>24,</u> <u>594.58</u>	4
1.2	Boundary Survey	Lump Sum	1	\$10,810.00	\$10,810.00	4
1.3	Site Evaluation	Acres	1	\$6,442.97	\$6,442.97	4
1.4	Development of Plans	Lump Sum			\$ 52,100.00 <u>55,</u> <u>750.00</u>	2
1.5	Contract Administration (bidding and award)	Lump Sum			\$ <mark>14,588.00</mark> 15, 610.00	2
1.6	Closure Inspection and Testing	Lump Sum	1	\$173,138.06	\$173,138.06	4
1.7	TPDES and other Permits	Lump Sum			\$8, 102.59 670. 24	4
1.8	Additional Engineering Cost Items (describe in attachments)	Lump Sum			\$ <u>1,878.55</u> 74,2 36.09	
1.9 E	ngineering Costs Sul	ototal	_			
1.9.1	Engineering Costs Subtotal (including Legal Fees)				\$ <u>296,894.40</u> 36 2,401.91	
		2.	Constructi	ion Costs		
	, ·					1
2.1	Mobilization of Personnel and Equipment	Lump Sum			\$2 <u>24,218.06</u> 09 ,514.85	4
2.2 F	inal Cover System					
2.2.1	Side Slope Cover					

Facility Name: City of Del Rio Landfill Revision No.: 1

Item No.	Item Description	Units ¹	Quantity	Unit Cost	Cost	Source of Unit Cost Estimate ²
2.2.1a	Infiltration Layer – Compacted Clay	Cubic Yards	1 <u>79,080</u> 34,310	\$7.70	\$1, <u>475,619.20</u> 378,916.00	4
2.2.1b	Infiltration Layer – Geosynthetic Clay Liner	Square Feet	NA	NA	NA	NA
2.2.1c	Flexible Membrane Cover – HDPE	Square Feet	NA	NA	NA	NA
2.2.1d	Flexible Membrane Cover – LLDPE	Square Feet	NA	NA	NA	NA
2.2.1e	Drainage Layer – Aggregate	Cubic Yards	NA	NA	NA	NA
2.2.1f	Drainage Layer – Drainage Geocomposite Material	Square Feet	NA	NA	NA	NA
2.2.1g	Erosion Layer	Cubic Yards	89,540 1 39,715	\$5.40	\$ <u>517,541.20</u> 48 3,516.00	4
2.2.1h	Vegetation	Acres	55.5	\$2, <u>839.50</u> 653	\$1 <u>57,592.25</u> 47 ,274.80	4
2.2.2	Top Slope Cover					
2.2.2a	Infiltration Layer – Compacted Clay	Cubic Yards	NA	NA	NA	NA
2.2.2b	Infiltration Layer –	Square	NA	NA	NA	NA
2.2.20	Geosynthetic Clay Liner	Feet				
2.2.2c	Geosynthetic Clay	Feet Square Feet	NA	NA	NA	NA
	Geosynthetic Clay Liner Flexible Membrane	Square	NA NA	NA NA	NA NA	NA NA
2.2.2c	Geosynthetic Clay Liner Flexible Membrane Cover – HDPE Flexible Membrane	Square Feet Square				
2.2.2c 2.2.2d	Geosynthetic Clay Liner Flexible Membrane Cover – HDPE Flexible Membrane Cover – LLDPE Drainage Layer –	Square Feet Square Feet Cubic	NA	NA	NA	NA
2.2.2c 2.2.2d 2.2.2e	Geosynthetic Clay Liner Flexible Membrane Cover – HDPE Flexible Membrane Cover – LLDPE Drainage Layer – Aggregate Drainage Layer – Drainage Geocomposite	Square Feet Square Feet Cubic Yards Square	NA NA	NA NA	NA NA	NA NA

Facility Name: City of Del Rio Landfill Revision No.: 1

Item No.	Item Description	Units ¹	Quantity	Unit Cost	Cost	Source of Unit Cost Estimate ²					
2.2.3a	Dike Construction	NA	NA	NA	NA	NA					
2.3 Site Grading											
2.3.1	Site Grading	Acres	55.5	\$1, <u>647.35</u> 539 .49	\$ <u>91,427.93</u> 85, 441.70	4					
2.4 S	2.4 Site Fencing and Security										
2.4.1	Site Fencing and Security	NA	NA	NA	NA	NA					
2.5 La	2.5 Landfill Gas Monitoring and Control System										
2.5.1	Gas Control Wells	specify									
2.5.2	Gas Header Piping	specify									
2.5.3	Gas Lateral Piping	specify									
2.5.4	Flare Station	Lump Sum			NA	NA					
2.5.5	Condensate Sumps	specify									
2.5.6	Completion of LFG Monitoring System	specify									
2.6 G	roundwater Monitor	ing Syste	m – City h	as a waiver fo	r groundwater i	monitoring					
2.6.1	Groundwater Monitoring Well Installation	Each	NA	NA	NA	NA					
2.6.2	Piezometer and Monitor Well Plugging and Abandonment	Each	NA	NA	NA	NA					
2.7 L	eachate Managemen	it	•								
2.7.1	Completion of Leachate Management System	NA	NA	NA	NA	NA					
2.8 S	2.8 Stormwater Management										
2.8.1	Stormwater Drainage Management System	NA	NA	NA	NA	NA					
2.9 0	2.9 Other Cost Items										

Facility Name: City of Del Rio Landfill Revision No.: 1

Item No.	Item Description	Units ¹	Quantity	Unit Cost	Cost	Source of Unit Cost Estimate ²
2.9.1	Additional Construction Cost Items (describe in attachments)	Refer to page IIIG-2			\$ <u>112,109.03</u> 10 4,757.43	
2.10	Construction Costs S	Subtotal				
2.10. 1	Construction Costs Subtotal				\$2, <u>578,507.67</u> 409,420.78	
3. Store	age and Processing	Unit Closu	re Costs			
3.1	Waste Disposal	☐ Tons ☐ Cubic Yards	NA	NA	NA	NA
3.2	Material Removal and Disinfection	NA	NA	NA	NA	NA
3.3	Demolition and Disposal Units	NA	NA	NA	NA	NA
3.4	Additional Storage and Processing Unit Closure Cost Items (describe in attachments)	NA			NA	
3.5 Sto	rage and Processing	Unit Clos	ure Costs	Subtotal		
3.5.1	Storage and Processing Unit Closure Costs Subtotal				NA	
4. Sum	of Engineering, Con	struction,	and Stora	ge and Proces	sing Unit Closu	re Costs
4.1	Sum of Engineering, Construction, and Storage and Processing Unit Closure Cost Subtotals Legal fees is estimated to be 25% of the total engineering cost				2, <u>949,625.67</u> 71,822.69	

Facility Name: City of Del Rio Landfill Revision No.: 1

Item No.	Item Description	Units ¹	Quantity	Unit Cost	Cost	Source of Unit Cost Estimate ²			
5. Contingency									
5.1	Contingency (10% of Sum of Engineering, Construction, and Storage and Processing Unit Closure Cost Subtotals)				\$2 <u>94,962.57</u> 77 ,182.27				
		6. Cont	ract Perfo	rmance Bond					
6.1	Contract Performance Bond (2% of Sum of Engineering, Construction, and Storage and Processing Unit Closure Cost Subtotals)				\$5 <u>8,992.51</u> 5,4 36.45				
7. Thir	d Party Administratio	on and Pro	oject Mana	gement Costs					
7.1	Third Party Administration and Project Management Costs (2.5% of Sum of Engineering, Construction, and Storage and Processing Unit Closure Cost Subtotals)	NA	NA	NA	\$ <u>73,740.64</u> 69, 295.57	NA			
8. Total Closure Costs									
8.1	Total Closure Costs (sum of amounts in Sections 4, 5, 6, and 7)				\$3, <u>377,321.39</u> 173,736.98	NA			

¹ For items marked "specify," the responsible professional engineer will enter appropriate unit of measurement

² Sources of Unit Costs for Cost Estimates table may include:

⁽¹⁾ Published Cost Estimator Manuals (e.g., RS Means);

⁽²⁾ Third Party Quotes (e.g., Environmental Field Services Contractors);

⁽³⁾ Verifiable Data based on Actual Operations; or

⁽⁴⁾ Other sources of cost acceptable to the executive director of the TCEQ.



Texas Commission on Environmental Quality Post-Closure Care Cost Estimate Form for Municipal Solid Waste Type I Landfills

This form is for use by applicants or site operators to provide post-closure care cost estimates for post-closure care of MSW Type I landfills to meet the requirements in 30 Texas Administrative Code (TAC) Chapter 330, Section 330.63(j) and 30 TAC Chapter 330 Subchapter L. The costs to be provided herein are cost estimates for hiring a third party to conduct post-closure care of the largest waste fill area that has been certified closed in writing by the TCEQ executive director.

If you need assistance in completing this form, please contact the MSW Permits Section in the Waste Permits Division at (512) 239-2335.

I. General Information

Facility Name: City of Del Rio Landfill

MSW Permit No.: 207C

Date: 09/30/202308/07/2024

Revision Number: 10

Site Operator/Permittee Name and Mailing Address: City of Del Rio 114 W Martin St

Del Rio, TX 78840

Total Post-Closure Care Cost Estimate (2023 Dollar Amount): \$2,269,302.30346,189.62

II. Professional Engineer's Statement, Seal, and Signature

I am a licensed professional engineer in the State of Texas. To the best of my knowledge, this Post- Closure Care Cost Estimate has been completed in substantial conformance with the facility Post-Closure Care Plan and, in my professional opinion, is in compliance with Title 30 of the Texas Administrative Code, Chapter 330.

Name: Tewobista Metaferia, P.E. Title: Project Engineer

Date: 08/07/202409/30/2023

Company Name: CP&Y as STV Company, Inc. Firm Registration Number: F-1741

Professional Engineer's Seal



Signature

Post-Closure Care Cost Estimate for MSW Type I Landfills

Facility Name: City of Del Rio Landfill

Permit No: 207C Date: 08/07/2024

Revision No.: 1

Table 1: Post-Closure Care Cost Estimates

Item No.	Item Description	Units	Annual Qty.	Unit Cost	Annual Cost	Source of Unit Cost Estimate ⁱ					
	1.0 Engineering Costs										
1.1	Site Inspection and Recordkeeping ⁱⁱ	YR	30	\$1, 316.67 4 08.91	\$ 39,500.10 42,2 67.30	4					
1.2	Correctional Plans and Specifications	YR	30	\$1, 542.19 6 50.23	\$4 6,265.70 9,50 6.90	4					
1.3 Sit	1.3 Site Monitoring										
1.3.1 G	1.3.1 Groundwater Monitoring System										
1.3.1(a)	Sampling and Analysis of GW Monitoring Wells (Quantity = 2 x Number of wells)	Wells	NA	NA	NA	NA					
1.3.1(b)	Piezometers/Well Abandonment	Each	NA	NA	NA	NA					
1.3.2 L	FG Monitoring System										
1.3.2(a)	LFG Quarterly Monitoring (Quarterly)	Year	30	\$5, 246.43 <u>6</u> 13.98	\$ 157,392.90 <u>16</u> 8,419.40	4					
1.3.2(b)	LFG Probe Plugging and Abandonment	Each	<u>6</u> 18	\$ 9,257.21 <u>9</u> ,905.75	\$ 166,629.78 <u>59,</u> 434.50	2					
1.4 Ad	ditional Engineering Cost It	ems (Det	tail in Attach	ments)							
1.4.1	Additional Engineering Cost Items (describe in attachments)	NA			NA						
1.5 Engineering Costs Subtotal											
1.5.1	Engineering Costs Subtotal				\$409,788.48 <u>31</u> 9,628.10						
2.0 Construction and Maintenance Costs											
2.1	Cap and Sideslopes Repairs and Revegetation	YR	30	\$ 9,413.83 1 0,073.34	\$ 282,414.90 30 2,200.20	4					
2.2	Mowing and Vegetation Management	Acres	The cost for this line item is included in line item 2.1								

Post-Closure Care Cost Estimate for MSW Type I Landfills

Facility Name: City of Del Rio Landfill

Permit No: 207C Date: 08/07/2024

Revision No.: 1

	Item No.	Item Description	Units	Annual Qty.	Unit Cost	Annual Cost	Source of Unit Cost Estimate ⁱ		
	2.3	Groundwater Monitoring System Maintenance	NA	NA	NA	NA	NA		
	2.4	LFG Monitoring Probes Maintenance	YR	30	\$ 410.55 <u>43</u> 9.31	\$ 12,316.50 13,1 79.30	4		
	2.5	LFG Collection System Maintenance	YR	30					
	2.6	Perimeter Fence and Gates Maintenance	LS	1	\$ 6,252.00 <u>6</u> ,690.00	\$6, 252.00 690.0 <u>0</u>	1		
	2.7	Access Roads Maintenance	LS	1	\$ 10,420.00 <u>11,150.00</u>	\$ 10,420.00 11,1 50.00	1		
	2.8	Drainage System Cleanout/Repairs	The cost for this line item is included in line item 2.1						
Ī	2.9 Add	ditional Construction and M	aintenan	ce Cost Iten	ns (Details in	Attachments)			
	2.9.1	Additional Construction and Maintenance Cost Items (details in attachments)	NA			NA			
	2.10 Cd	onstruction and Maintenand	ce Costs Subtotal						
	2.10.1	Construction and Maintenance Costs Subtotal				\$ 311,403.40 33 3,219.50			
3.0 Leachate Management									
	3.1	Leachate Management System Operation and Maintenance	NA	NA	NA	NA	NA		
Ī	3.2	Leachate Disposal	Gals/yr	75,795.24	\$0.60	\$1,364,310.00	2		
	3.3 Add	ditional Leachate Managem	nent Cost Items (Details in Attachments)						
	3.4	Additional Leachate Management Cost Items (details in attachments)	NA			NA			
Ī	3.5 Lea	nchate Management Costs S	ubtotal						
	3.5.1	Leachate Management Costs Subtotal				\$1,364,310.00			

Post-Closure Care Cost Estimate for MSW Type I Landfills

Facility Name: City of Del Rio Landfill

Permit No: 207C Date: 08/07/2024

Revision No.: 1

Item No.	Item Description	Units	Annual Qty.	Unit Cost	Annual Cost	Source of Unit Cost Estimate ⁱ
	4.0 Sum of Engineering	g, Constru	uction, and L	eachate Man	agement Costs	
4.1	Sum of Engineering, Construction, and Leachate Management Cost Subtotals				\$2,0 85,501.88 <u>1</u> 7,157.60	
		5.0	Contingency			•
5.1	Contingency (10% of Sum of Engineering, Construction, and Leachate Management Cost Subtotals)				\$20 8,550.19 1,7 15.76	
	6.0 Third Party Ad	ministrat	ion and Pro	ject Managen	nent Costs	
6.1	Third Party Administration and Project Management Costs (2.5% of Sum of Engineering, Construction, and Leachate Management Cost Subtotals)				\$ 52,137.55 <u>50,4</u> 28.94	
		7. Total F	Post-Closure	Cost		
7.1	Total Annual Post-Closure Cost (Sum of amounts in Sections 4, 5, and 6)				\$2, 346,189.62 2 69,302.30	
7.2	30 Year Post-Closure Costs (Total Annual Post-Closure Cost x 30)				\$ 70,385,688.60 68,079,069.00	

ⁱ Sources of Unit Cost Estimates may include:

⁽¹⁾ Published Cost Estimator Manuals (e.g., RS Means);

⁽²⁾ Third Party Quotes (e.g., Environmental Field Services Contractors); or

⁽³⁾ Verifiable Data based on Actual Operations

ii Example Description for Item No. 1.1 – "Includes costs for site inspection performed at least annually for identification of areas experiencing settlement or subsidence, erosion or other drainage-related problems, inspection of the leachate collection system, gas monitoring system and LFG monitoring system."

CITY OF DEL RIO LANDFILL

VAL VERDE COUNTY, TEXAS TCEQ PERMIT NO. MSW-207C

MAJOR PERMIT AMENDMENT APPLICATION PART III – SITE DEVELOPMENT PLAN

APPENDIX III I GROUNDWATER SAMPLING AND ANALYSIS PLAN

Prepared for City of Del Rio

September 2023
Revision 1 August 2024



Prepared by

<u>CP&Y an STV Company Inc</u>

TPBE Registration No. F-1741

13155 Noel Road 820 Regal Row, Suite 200

Dallas, TX 7524035

214-638-0500

This document is intended for permitting purposes only.

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CITY OF DEL RIO LANDFILL VAL VERDE COUNTY, TEXAS TCEQ PERMIT NO. MSW 207C

MAJOR PERMIT AMENDMENT APPLICATION PART III – SITE DEVELOPMENT PLAN

APPENDIX IIIJ GEOLOGY REPORT

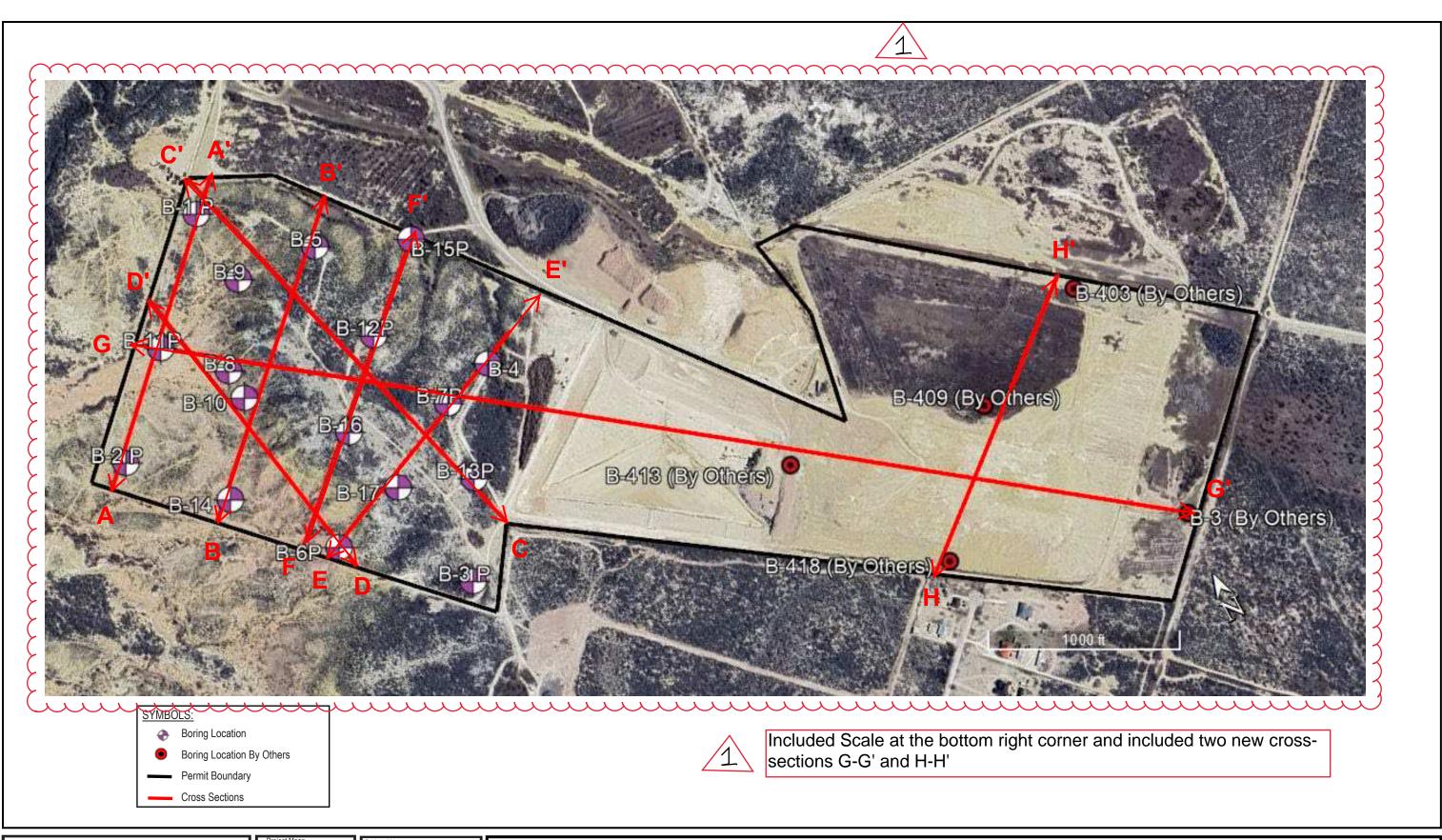
Prepared by:



WSP USA Environment & Infrastructure Inc. 16414 San Pedro Avenue, Suite 425 San Antonio, Texas 78232

> Project No. 5020210002 February 2023 Revision 1, August 2024

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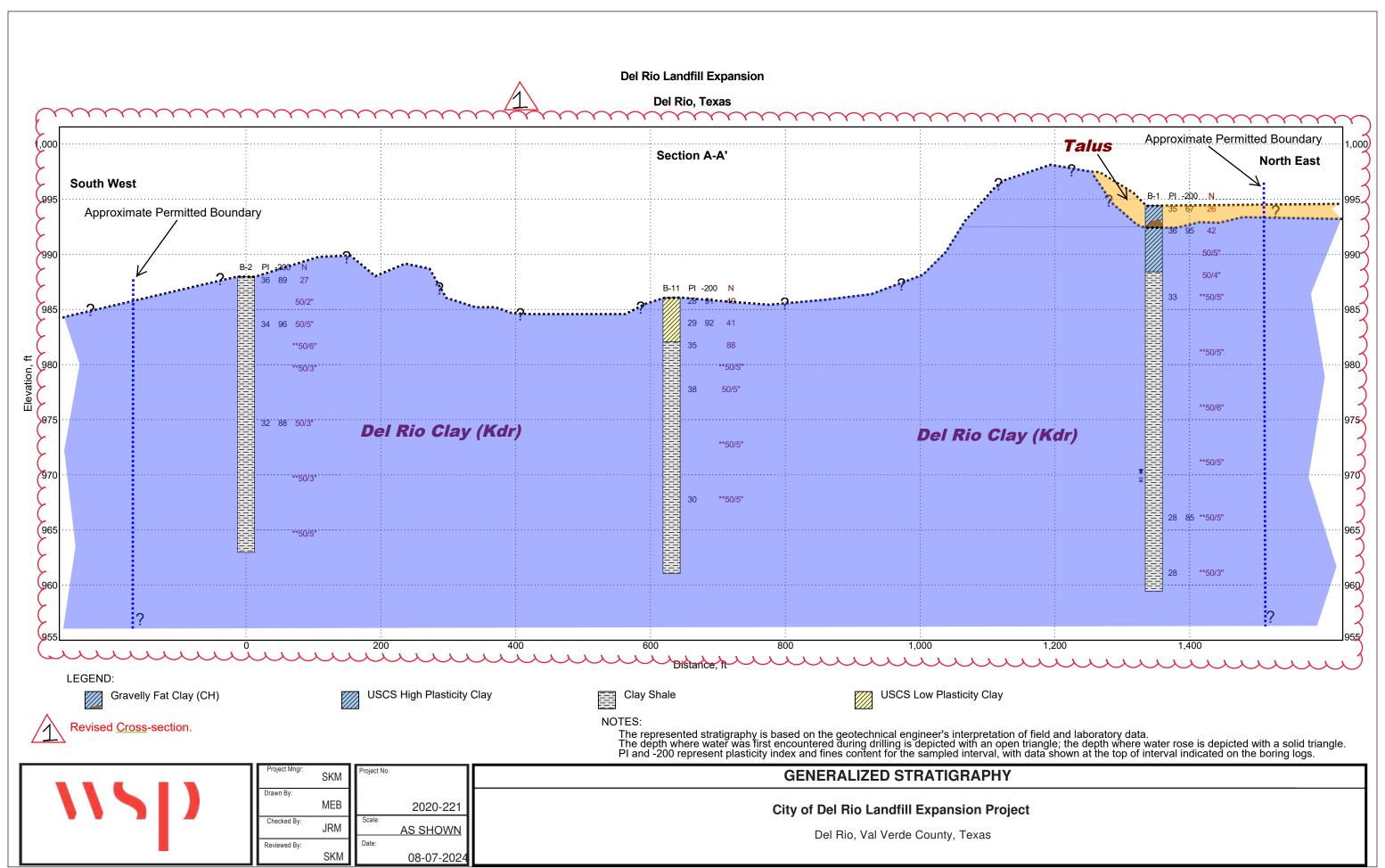
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	MEB
Checked By:	JRM
Reviewed By:	
	SKM

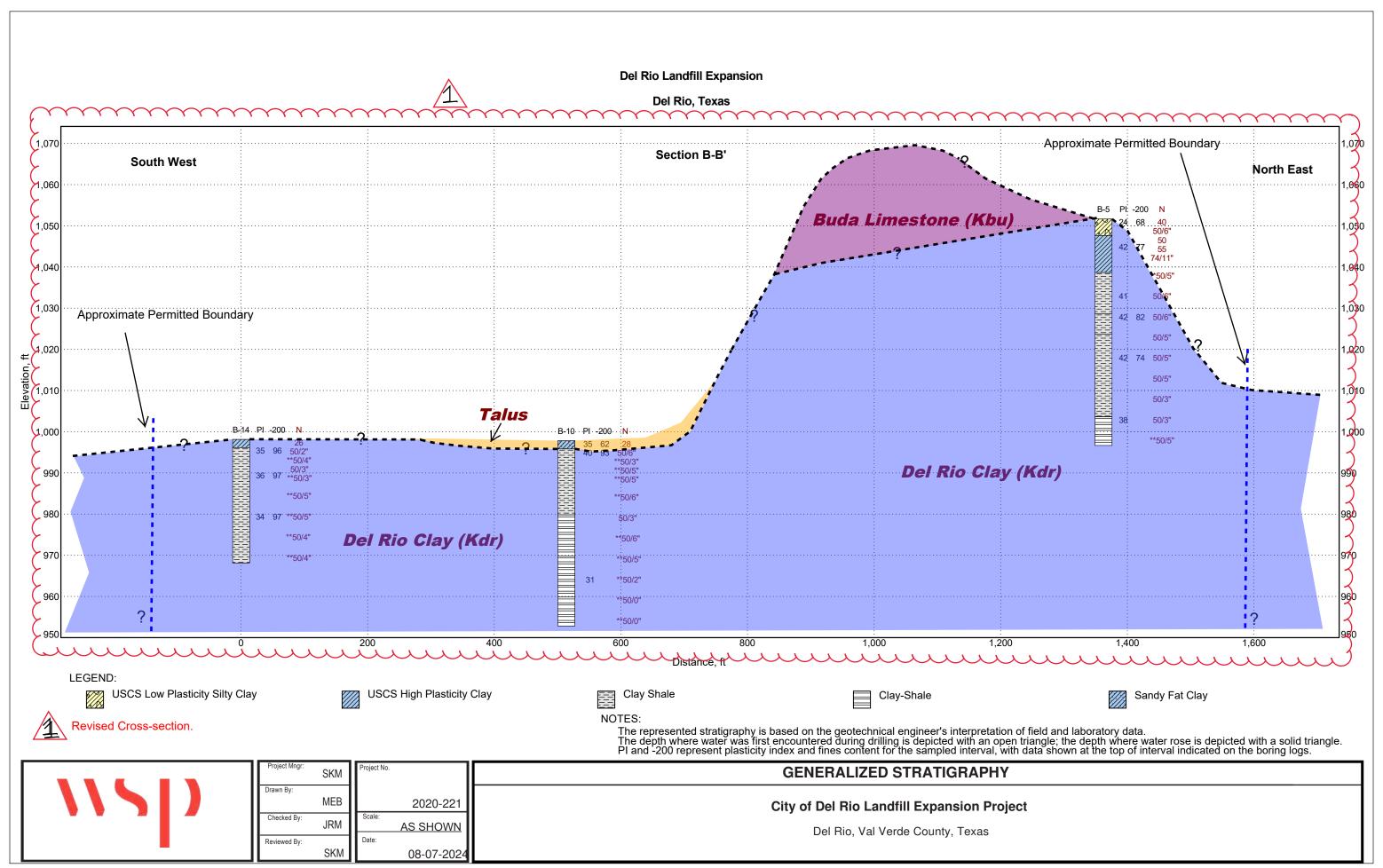
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Scale:
As Shown
Date:
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08-07-2021

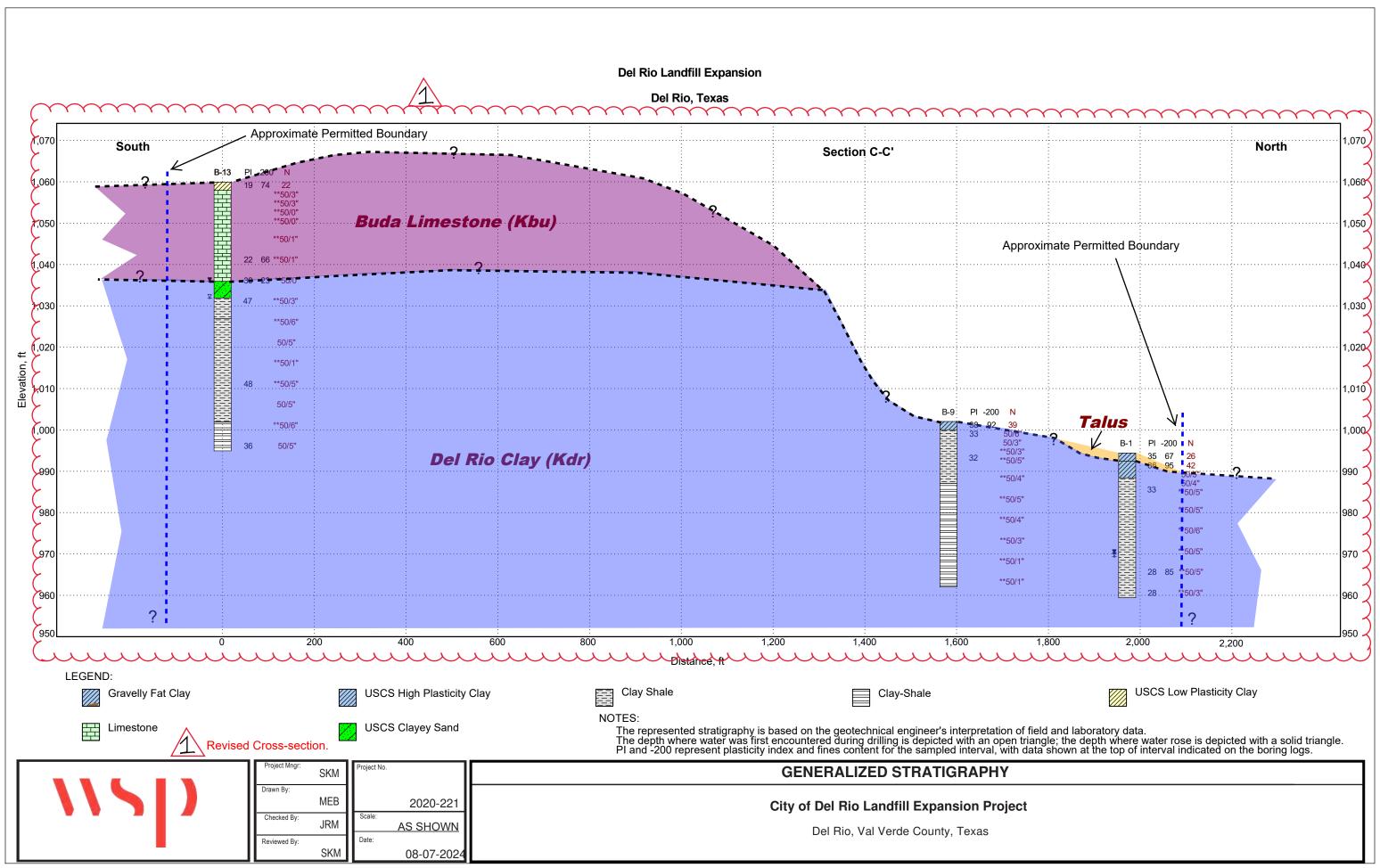
BORING LOCATION PLAN

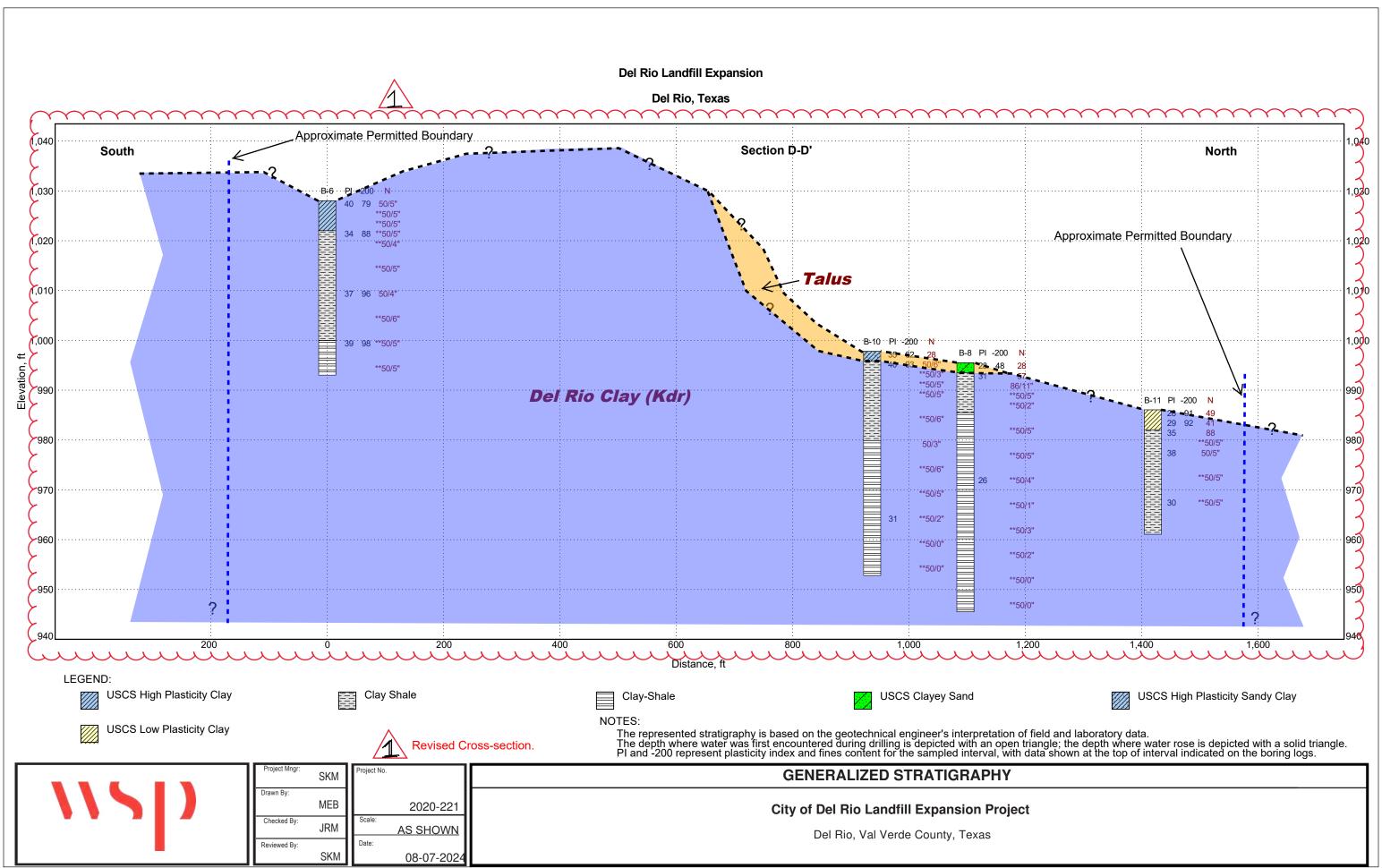
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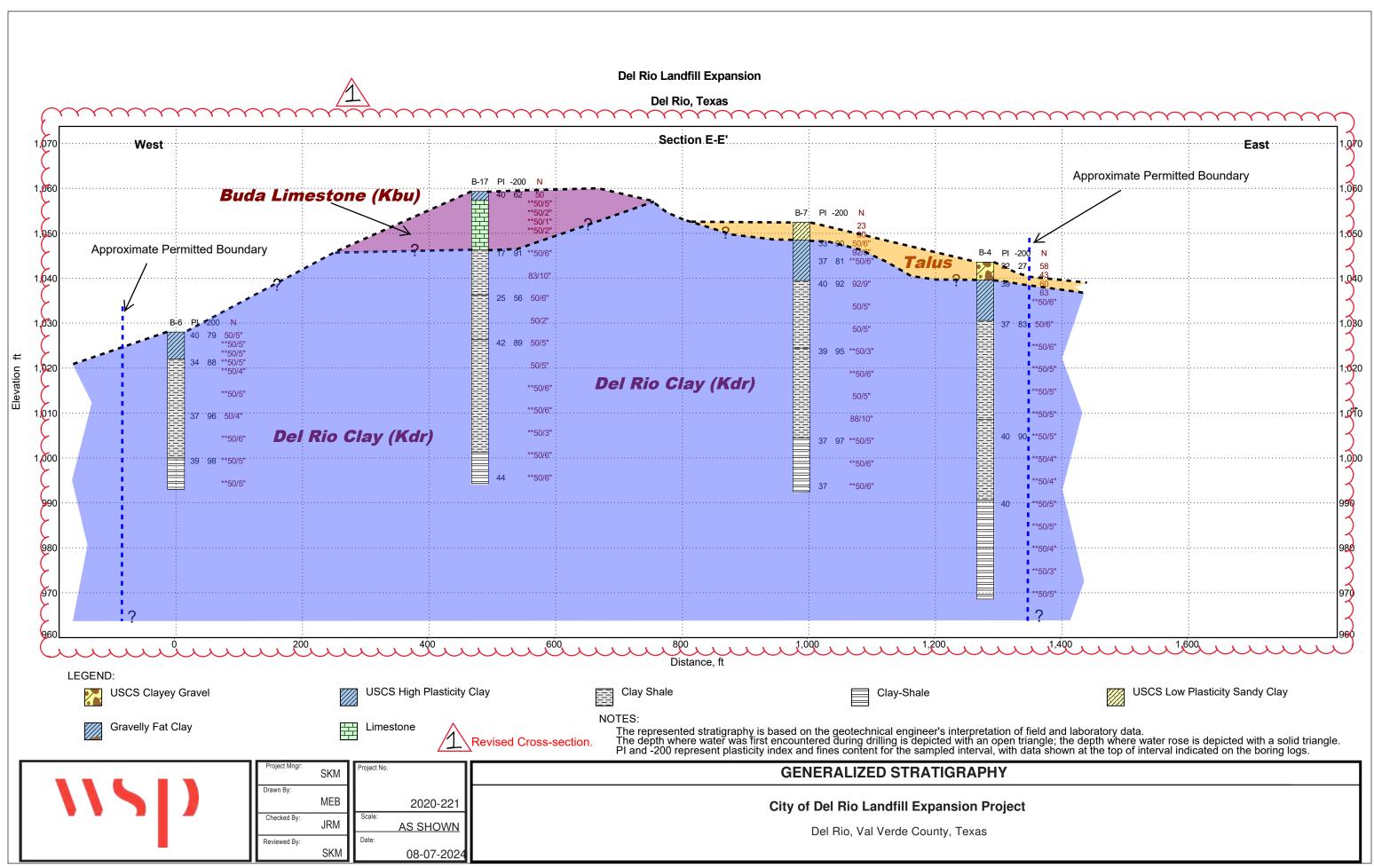
Del Rio, Val Verde County, Texas

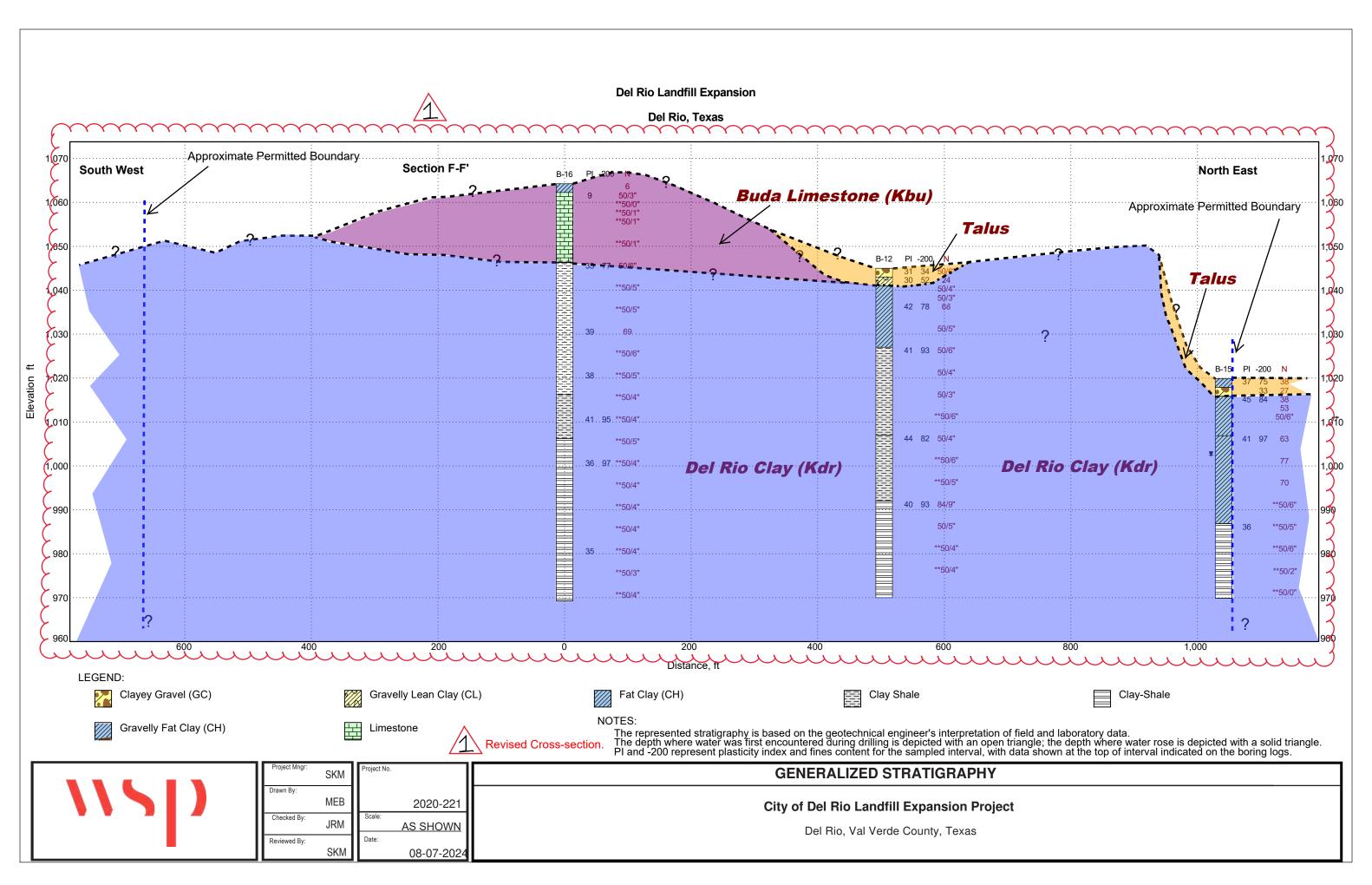


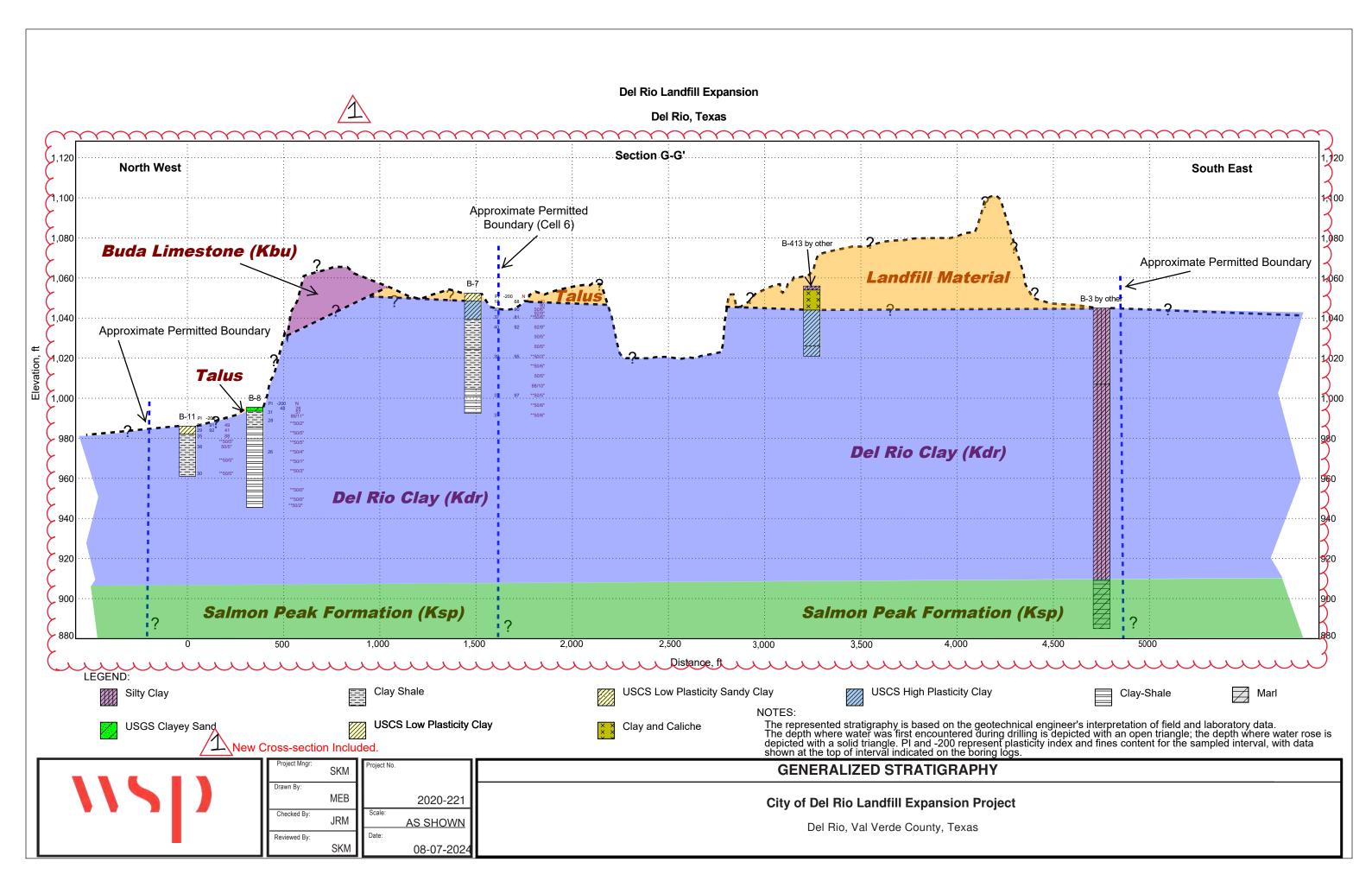


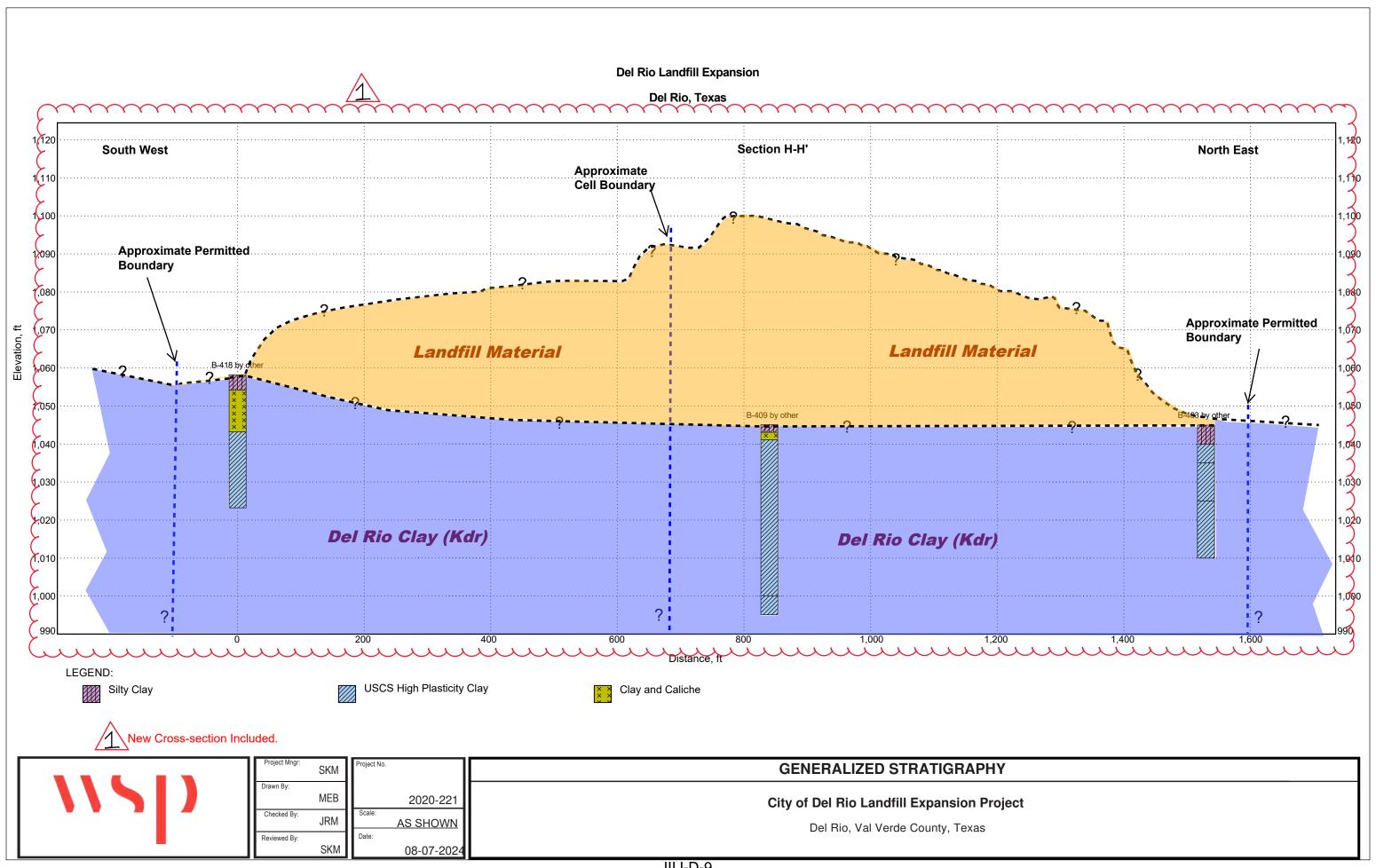












CITY OF DEL RIO LANDFILL VAL VERDE COUNTY, TEXAS TCEQ PERMIT NO. MSW 207C

PERMIT AMENDMENT APPLICATION

PART III – FACILITY INVESTIGATION AND DESIGN APPENDIX IIIM LANDFILL GAS MANAGEMENT PLAN

Prepared for

City of Del Rio

September 2023 Revision 1 August 2024



Prepared by

BIGGS & MATHEWS ENVIRONMENTAL

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

TEXAS BOARD OF PROFESSIONAL ENGINEERS FIRM REGISTRATION NO. F-256 TEXAS BOARD OF PROFESSIONAL GEOSCIENTISTS FIRM REGISTRATION NO. 50222

5.1 Remediation Plan

If methane levels above regulatory limits are encountered in the buildings/structures or in one or more LFG monitoring points, probes, subsurface soils, or other matrices, remediation actions will be implemented within 60 days. The first action will be an investigation of the cause of the methane levels. The investigation may include some or all of the following elements, depending on the circumstances:

- Bar-hole probe or hydropunch testing in the vicinity of the impacted monitoring probe
- Sampling and laboratory analysis of LFG monitoring probe samples to determine concentration of methane and trace compounds
- Additional LFG probe monitoring
- Installation of additional monitoring probes

Using accumulated data, an assessment will be made to determine an appropriate course of action to manage and control the migration of LFG. Such actions will vary with the specific incident. An incident-specific remediation plan, based on results of the investigation, will be submitted within 60 days of detection. This remediation plan will describe the determined nature and extent of any potential LFG migration as well as the proposed remedy. Copies of the remediation plan will be placed in the site operating record and provided to the executive director of the TCEQ along with notification that the plan has been implemented. The executive director may establish an alternative schedule for demonstrating compliance or require additional remedial measures.

CITY OF DEL RIO LANDFILL

VAL VERDE COUNTY, TEXAS TCEQ PERMIT NO. MSW-207C

MAJOR PERMIT AMENDMENT APPLICATION PART IV – SITE OPERATING PLAN

Prepared for City of Del Rio

TEWOBISTA METAFERIA

123183

CENSE

SSIGNAL

September 2023 Revision 1 August 2024

Prepared by

CP&Y an STV Inc-Company
TPBE Registration No. F-1741
1820-13155 Noel RoadRegal Row, Suite 200
Dallas, TX 7524035
214-638-0500

This document is intended for permitting purposes only.

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8.4 Unloading Areas

Table 8-2 Unloading Areas

Unloading Area	Number	Maximum Area Size	Description
Lead Acid Batteries	1	20 ft x 10 ft	Housed in metal cargo box
Motor Oil and Anti- freeze	1	20 ft x 10 ft	Stored in separate 275 gal containers, housed in metal cargo box
Tires	1	65 ft x 18 ft	Tires stored in 53 ft enclosed trailer
White Goods	1	30 ft x 20 ft	Items placed in 40 yd roll-offs
Working Face	1	Normal 40 ft x 75 ft Max 50 ft x 100 ft	

- Lead Acid batteries are not accepted at the working face but are collected in the designated area. Batteries are temporarily stored in a 20 ft x 10 ft area within a metal cargo/storage box. The batteries are hauled off by a local recycler on a regular basis. If necessary, the recycler shall be called for additional pickups. Acceptance of these materials meet the requirements of 330.15(e) because they are not knowingly intentionally accepted for disposal, but only accepted for recycling.
- Motor oil, filters, and anti-freeze are not accepted at the working face, but are collected in the designated area. Although antifreeze is classified as a Hazardous Waste, it is considered a Household Hazardous Waste in accordance with chapter 335, subchapter N and may be accepted for recycling. Therefore 335, Subchapter N does not apply as noted in paragraph 335.401(c) as it is accepted for recycling and not disposal. —Motor oil is stored in 275 gal containers, anti-freeze is stored in drums, and filters are stored in metal drums. These materials are picked up by a local recycler on a regular basis. The recycler is called if additional pickups are needed. Acceptance of these materials meet the requirements of 330.15(e) because they are not knowingly intentionally accepted for disposal, but only accepted for recycling.
- Tires are collected separately and stored in an enclosed 53 ft trailer. The trailer is hauled away and replaced with an empty trailer by a local recycler as needed. <u>Acceptance of these materials meet the requirements of 330.15(e) because they are not knowingly intentionally accepted for disposal, but only accepted for recycling.</u>
- White goods are separated from other waste as they enter the landfill gate, and are stored temporarily in 40 SY roll-off containers. As these containers fill, they are transported to a local salvage operation. Any CFC containing materials are included in this category. <u>Acceptance of these materials meet the requirements of 330.15(e) because they are not knowingly intentionally accepted for disposal, but only accepted for recycling.</u>

The facility is authorized to accept and store the special waste listed above under a separate permit. The containers that store the waste are located outside the permit boundary and are not part of this

permit. These special wastes are received and stored outside of the permit boundary and are not part of this Permit.

8.5 Waste Unloading Procedures

Landfill Attendants, Equipment Operators, Laborers, and Spotters will monitor the incoming waste. Landfill Attendants control site access and monitor incoming vehicles for unauthorized or prohibited wastes by (1) receiving manifests and other shipping documents, (2) recording incoming waste loads, and (3) interviewing the driver, as necessary. Any nonconforming issues will be reported to the Landfill Coordinator or designee. If the non-conforming issues involve Special or Industrial wastes, the Landfill Coordinator or designee will review the SOP to verify that all requirements for acceptance of Special and Industrial waste have been met before the material is accepted for disposal. The procedures for handling prohibited waste that is not discovered until after it is unloaded are discussed in Section 8.2.

Equipment Operators, Spotters, Laborers, or other field personnel will be present at all areas where waste is being unloaded to monitor unloading of waste. These personnel will be familiar with the rules and regulations governing the various types of waste that can or cannot be accepted into this facility and will be trained to identify prohibited wastes before being assigned to this task. The personnel will also be trained and have a basic understanding of both industrial and hazardous waste and their transportation and disposal requirements. The Spotters and Equipment Operators have the authority and responsibility to reject unauthorized loads, have unauthorized material removed by the transporter, or have the unauthorized material removed by on-site personnel or otherwise properly managed by the facility. In the event an unauthorized load is discovered at an unloading area, the Spotter, Laborer or Equipment Operator (i.e., working face staff) will notify the Landfill Superintendent or Landfill Coordinator immediately. The Landfill Superintendent or Landfill Coordinator will verify that the appropriate action is taken. In addition, if the unauthorized load is discovered at the site entrance, the Landfill Attendant will notify the Landfill Superintendent or Landfill Coordinator immediately to verify that the appropriate action is taken. A record of each unauthorized material removal event will be maintained in the Site Operating Record.

Solid waste unloading will be controlled to prevent disposal in locations other than those specified by site management. For example, random load inspections will be conducted as outlined in Section 8.3 of this SOP. Any allowable waste deposited in an unauthorized area will be immediately removed and disposed of properly at the current working face. The Spotters and Equipment Operators or other site personnel will actively investigate any approved waste haul vehicles that do not dispose of their waste in an authorized area. In the event that an authorized load of waste has been deposited in an unauthorized area, site personnel will notify the Landfill Superintendent and the waste load will be promptly relocated to the authorized working face area.

8.6 Special Waste Acceptance Procedure

In Accordance with 330.17(b),(c) and (d), the following special wastes do not require any further written approval from the Executive Director if they are accepted and handled in accordance with the procedures outlined below. Any other special wastes require written approval from the Executive Director before acceptance. In accordance with current City policy, acceptance procedures for special waste are as follows:

Water and wastewater treatment plant sludges that have been tested with the Method 9095 Paint Filter Liquids Test and are certified to contain no free liquids, which have been treated or processed, are not hazardous, and are not hauled in vacuum, may be accepted at this

13.0 SITE SIGN

Signs shall be posted on site to alert customers to operational procedures, facility rules, regulatory provisions, and traffic control procedures.

A sign shall be located at the site entrance and be readable from outside of the entrance gate. The sign shall measure at least 4 feet square with 3-inch lettering. At a minimum, the sign shall state the following: City of Del Rio Landfill, Type I, TCEQ Permit No. MSW 207 B, the hours and days of operation, a 24-hour emergency contact phone number, and local fire department emergency contact phone number(s).

A sign shall also be posted and maintained near the site entrance outlining the prohibited waste, hazardous waste, and other unpermitted special waste that will not be accepted. A sign shall also be located at the site entrance or gatehouse prohibiting uncovered or unsecured loads. A "No Smoking" sign shall also be prominently displayed at the site entrance or gatehouse. Signs shall be inspected monthly and repaired or replaced as necessary.

14.0 CONTROL OF WINDBLOWN SOLID WASTE AND LITTER

Windblown waste will be controlled by combining several measures:

All waste transportation vehicles using this facility will be required to have in place adequate covers or other means of containment for the waste they transport, in accordance with City ordinance and state law. The adequacy of covers or containment of incoming waste will be checked at the facility entrance. Signs will be posted and offenders will be reported to law enforcement officials. Appropriate surcharges and fines will be levied for non-compliance.

Another method to control windblown waste is the prompt landfilling of the waste which have been deposited near the working face. Landfill equipment will be positioned to spread and compact it as rapidly as possible. This will minimize the amount of time the waste remains exposed to the wind and thereby minimize the potential for windblown waste. Also, soil cover or other cover will be placed on the deposited waste as needed during the day's operation to prevent the material from becoming airborne. The size of the working face will be kept as small as practical for solid waste operations.

To further minimize windblown waste, the Landfill Operator will provide portable litter control fences, as necessary, at appropriate locations near the working face and elsewhere. The litter control fences are constructed of a mesh material attached to a free-standing metal frame. The individual litter control fence sections will be located as close as practical to the active area. The screens are transported by landfill equipment or pickup trucks and can be deployed by hand. Multiple sections will be used as required. Screening barriers such as the temporary berms will serve as additional wind breaks.

During extremely windy periods, additional temporary litter control fences will be erected as needed. Also, on days when prevailing winds are from a certain direction, it may be possible to locate the working face operation in a protected or semi-protected area of the site.

Landfill Operator shall inspect the site daily, and collect and return to the working face any windblown waste that has been scattered on-site, or has accumulated on fences, gates, and access roads on days when the facility is in operation. A log of litter inspection and control activities should be maintained in the Site Operating Record to demonstrate compliance.

It shall be the Landfill Operator's responsibility to provide enough personnel or mechanical means to be able to collect and dispose of all windblown litter that occurs in a day's time. Litter shall be collected from site access roads on a daily basis.

• 100-year flood limits (if applicable) – (N/A to this site)

Markers shall be color coded per the following:

Table 16-1 Marker Color

Marker	Color
Site Boundary	Black
Buffer Zone	Yellow
Easements	Green
Grid System	White
SLER	Red
Floodplain	Blue

The ED may modify specific marker requirements to accommodate unique site-specific conditions.

The markers shall consist of posts extending no less than 6 feet above the ground and shall not be obscured by vegetation or other obstructions. There shall be sufficient numbers of markers to clearly define the significant feature, but the markers shall be placed no further apart than 300 feet for each significant feature. All markers must be maintained to retain visibility. Markers which are damaged or removed must be replaced or repaired within 15 days of the discovery of damage, or removal of the marker. Markers must be inspected and maintained at least monthly. The documentation of marker inspection and maintenance should be maintained in the facility records.

To facilitate the operations and waste volume calculations, a grid reference system is currently in use for the entire landfill area and will continue to be used at the facility unless written approval of the ED allows its removal. The system consists of numbered markers along the east and west sides of the landfill and lettered markers on the north and south sides of the landfill. The north-to-south grid lines (spaced 100 feet apart) will be perpendicular to the west-to-east grid lines forming squares. The grid marker system will be altered as required to accommodate the TCEQ Rules & Regulations. The grid markers are white 6-foot posts placed to mark 100-foot grid intervals.

The grid markers will be referenced for daily operations. For each submittal of monitoring well installation, each SLER report, each Methane Detection report, and other general references, the site will use either the on-site monuments which are tied to a known datum or the grid markers.

16.2 Site Benchmark

The landfill has multiple_benchmark monuments on the site. The primary permanent benchmark monument is located on the northwest side of the landfill as follows:

<u>Latitude and Longitude</u>	X and Y Coordinates	<u>Elevation</u>
29° 21' 20.4241" N	1378001.94 E	1051.10
-100° 51' 13.9300" W	13681568.26 N ₋ -	

This monument is accessible at all times the landfill is in operation. In accordance with 330.143(b)(8), this monument is accessible at all times the landfill is in operation and the area will not be used for disposal. The monument is a bronze survey marker set in concrete and has the benchmark elevation and

<u>survey date stamped on it. The benchmark was established from a known U.S. Coast and Geodetic Survey Benchmark.</u>

17.0 MATERIALS ALONG THE ROUTE TO THE SITE

The operator shall take steps to encourage that vehicles hauling waste to the facility are enclosed or provided with a tarpaulin, net or other means to effectively secure the load in order to prevent the escape of any part of the load by blowing or spilling. All uncovered waste hauling vehicles will be charged 200 percent of the current gate fee. In addition, litter cleanup crews will inspect the major public access roads serving the facility daily and collect any litter for a distance of 2 miles in each direction from the site entrance. Roadways include: 1) Railway Avenue southeast from De La Rosa Street and south from U.S. Highway 90 to the Site Entrance, 2) Virginia Street east from Dr. Fermin Calderon Blvd. to the entrance to the landfill, and 3) Access Road from the gate to the active landfill site. A log indicating the date and time of these inspections and cleanup activities should be maintained at the site.

Between the hours of 7:00 am and 7:00 pm, the City Streets and Drainage Department and Landfill site shall maintain telephone service to allow the report of any liter along the roads to the site. Between 7:00 pm and 7:00 am, any liter that could be considered a road hazard can be reported to the police department who in turn will call an emergency contact with the City.

Since the City of Del Rio has maintenance authority over all roadways providing a route to the site, the appropriate City departments are aware that landfill personnel, or persons under the direction of landfill personnel, patrol, and collect landfill related litter along the roadways surrounding the site, as described above. The Landfill Coordinator or his designee will consult with TxDOT officials (or other applicable local agencies with maintenance authority over the roads) concerning cleanup of state highways and rights-of-way consistent with §330.145. The TxDOT District Office or other applicable local agencies will be contacted to discuss the procedures for litter cleanup on, and within, rights-of-way along state highways in the vicinity of the site. Documentation of this TxDOT coordination will be maintained in the Site Operating Record. If TxDOT will not allow access to their right-of-way for litter cleanup, this documentation will be maintained in the Site Operating Record.

18.0 DISPOSAL OF LARGE ITEMS

The facility shall have an established area for the acceptance of large items, including, but not limited to, white goods (stoves, dishwashers, and other household appliances), air conditioner units, and large metal pieces. The area provided for the collection and temporary storage of these items is located just inside the landfill entrance and adjacent to the road leading to the back of the landfill. Large metal items are placed in roll-off-type bins or other containers to minimize exposure or contact to stormwater.

Large items collected at the site will be removed and recycled as demand warrants, and care should be taken to not create nuisance conditions or a source of disease vectors, and to prevent the discharge of pollutants. Large items that are not recycled should be disposed of at the working face. Care should be taken to minimize the potential for damage to the landfill liner system by excluding large items from the first 5 feet of waste placed over the protective cover or liner, placing large items so that they do not interfere with continued landfill operations, and placing and compacting other smaller waste around any large item.

Any item (refrigerator, freezer, air conditioner, etc.) containing chlorinated fluorocarbon (CFC) must be handled in accordance with 40 CFR §82.156(f), as amended. It is preferred that all CFC present has been

29.0 WASTE IN ENCLOSED CONTAINERS AT TYPE IV LANDFILLS

There is no waste in enclosed containers at the City of Del Rio Landfill. (This section is not applicable to this site as it is a Type 1 Facility). The facility is not a storage or processing facility. However, recyclables noted in Table 8-2 will be temporarily stored as they are collected prior to pickup for recycling. The containers for collection and temporary storage are noted in Table 8-2 and are located outside of any building and outside of the permit boundary. They are not part of this permit.

30.0 DISPOSAL OF SPECIAL WASTE

The landfill is permitted to receive only municipal solid waste and those special solid waste allowable under §330.171. The site is not authorized to receive hazardous waste regulated by the TCEQ, PCB waste, or prohibited waste as discussed in Section 8.

Special waste will not be handled at this landfill except in accordance with TCEQ Rules & Regulations, and only when appropriate provisions have been made at the site for proper disposal. City ordinance currently prohibits receipt of any special waste, with the exception of medical waste, municipal water/wastewater sludges, slaughterhouse waste, dead animals, pesticide containers, and RACM in accordance with Section 8.6 of this SOP. If other special waste is considered in the future for disposal at this site, approval must be obtained from the TCEQ as outlined in §330.171.

31.0 DISPOSAL OF INDUSTRIAL WASTE

This site does not accept Class I Industrial Waste. Class II and Class III Industrial Waste may be accepted, provided disposal of these waste does not interfere with the proper operations of the facility and the waste acceptance plan required by §330.61(b). The Waste Acceptance Plan is included in Appendix I/IIE. Class 2 industrial solid waste, except special waste as defined in 330.3 may be accepted provided the acceptance of this waste does not interfere with facility operations.

32.0 VISUAL SCREENING OF DEPOSITED WASTE

The landfill site is located in a relatively undeveloped area generally remote from residential property. The setting for the landfill features relatively flat topography with desert vegetative cover. The City's old closed-out landfill and City-owned property borders the landfill to the northwest. Undeveloped desert landscape borders the landfill on the remaining sides. A buffer zone of at least 50 feet wide and, in most areas, several hundred feet wide, surrounds the property. The nearest residence is located approximately 350 feet away from the permit boundary on the south side of the facility. Refer to the Land Use Map on Figure I/II-7.1 located in Parts I/II. If the Executive Director determines that additional screening is necessary, it will be provided.

Site Inspections are summarized here and any corrective actions taken shall be documented in the Site Operating Record.

ITEM INSPECTED	TASK	Frequency	Inspector	Referenced In this SOP
Fence/Gates	Inspect perimeter fence and gates for damage. Make repairs if necessary.	Weekly	Landfill Coordinator or Designee	Section 10.2
Windblown Waste	Police working face area, access roads, entrance areas, and perimeter fence for loose trash. Clean up as necessary.	Daily	Landfill Superintendent or Designee	Section 14
Waste Spilled on Route to the Site	Police the entrance areas and all roads at least 2 miles from the site entrances for loose trash. Clean up as necessary.	Daily	Landfill Superintendent or Designee	Section 17
Landfill Markers	Inspect all landfill markers for damage, color-coding, and general location. Correct or replace damaged markers within 15 days of discovery.	Monthly	Landfill Coordinator or Designee	Section 16.1
Site Access Road	Inspect site access road for damage from vehicle traffic, erosion, or excessive mud accumulation. Maintain as needed. Grading equipment will be used control or remove mud accumulations on roads as well as minimize depressions, ruts, and potholes.	Daily – more often during wet weather or	Landfill Coordinator & Superintendent or Designee	Section 21
Daily Cover	Inspect for erosion, proper placement, thickness, and compaction. Correct problems as needed. Verify that vectors are not an issue.	Daily at the active face and all daily cover areas will be inspected.	Landfill Superintendent or Designee	Section 27.1
Intermediate Cover	Inspect for proper placement, thickness, erosion, compaction, settlement, and for presence of waste or other contamination. Correct problems as needed.	Weekly and within 72-hours of a rainfall event of 0.5 inches or more.	Landfill Superintendent or Designee	Section 27.3
Final Cover	Inspect for proper placement, thickness, compaction, slope, settlement and erosion. Maintenance will be ongoing throughout post-closure care period. Correct problems as needed.	Weekly and within 72-hours of a rainfall event of 0.5 inches or more.	Landfill Superintendent or Designee	Section 27.4
Leachate	Measure depth of leachate in sump, as required.	Weekly	Landfill Coordinator or Designee	Section 33
Leachate Odor	Inspect the caps and piping of the cleanout riser and sump riser of the leachate collection system to prevent potential odor escape.	Monthly	Landfill Coordinator or Designee	Table 19.1
Site Signs	Inspect all site signs for damage, general location, and accuracy of posted information.	Weekly	Landfill Coordinator or Designee	Section 13
Ponded Water	Inspect site for ponded water areas. Correct problems as needed.	Weekly and within 72-hours of a rainfall event of 0.5 inches or more.	Landfill Superintendent or Designee	Section 28 & 33
Odor	Inspect the perimeter of the site to assess the performance of site operations to control odor.	Daily	Landfill Coordinator & Superintendent or Designee	Section 19.2
Perimeter Channels/Ponds/Chutes/ Swales	Inspect perimeter channels, berms/dikes, chutes and swales for erosion, settlement, obstructions, silt and sediment build-up to verify that they are functioning as designed. Inspect for presence of sediment discharges along the site boundary in areas which have been disturbed by site activities.		Landfill Coordinator & Superintendent or Designee	Section 33

CITY OF DEL RIO LANDFILL

VAL VERDE COUNTY, TEXAS TCEQ PERMIT NO. MSW-207C

MAJOR PERMIT AMENDMENT APPLICATION PARTS IV – SITE OPERATING PLAN

APPENDIX IV-A ALTERNATE DAILY COVER OPERATING PLAN

Prepared for City of Del Rio

September 2023 Revision 1 August 2024



Prepared by

<u>CP&Y an STV Inc Company</u>

TPBE Registration No. F-1741

<u>1820-13155 Noel Road Regal Row</u>, Suite 200

Dallas, TX 7524035

214-638-0500This document is intended for permitting purposes only.

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Appendix IV-A-1 – Synthetic Tarp Approval and Specification



APPENDIX IV-A-1 SYNTHETIC TARP APPROVAL AND SPECIFICATIONS

TEXAS NATURAL RESOURCE CONSERVATION COMMISSION



MODIFICATION TO

MUNICIPAL SOLID WASTE PERMIT № MSW-207A

City of Del Rio Municipal Landfill, Val Verde County

Municipal Solid Waste Permit No. MSW-207A is hereby modified as follows:

Description of Change:

Permit Modification to use Alternate Daily Cover (ADC). The City will use manually-applied reusable 50' X 50' tarps. The maximum working face is approximately 40' X 75' and can be covered easily by two tarps consisting of woven coated polypropylene fabric as manufactured by Linq Industrial Fabrics, Summervill, South Carolina. The thickness is 22 mils and the weight is 6.5 ounces per square yard. The cover has safety webbing around its entire outer edge with heavy-duty straps and "D" rings every 10 feet.

A status report on the ADC will be submitted on a quarterly basis to the executive director in accordance with 30 TAC §330.133(c)(2). This report will describe the effectiveness of the ADC, any problems that may have occurred, and corrective actions required because of such problems.

Permit Sections Revised: Site Operating Plan

This modification is a part of Permit No. MSW-207A and should be attached thereto.

APPROVED, ISSUED, AND EFFECTIVE in accordance with 30 Texas Administrative Code Section 305.70(g)(16).

ISSUED DATE:

SEP 1 3 2000

For the Commission

LING INDUSTRIAL FAD

12002/007



MATERIAL SAFETY DATA SHEET

LING INDUSTRIAL FABRICS, 2550 WEST FIFTH NORTH STREET, SUMMERVILLE, SC 29483

WOVEN COATED POLYPROPYLENE FABRIC

(IBC SERIES)

PAGE:

DATÉ PREPARED:

3/4/99

MSDS NO:

IBC-100B

SECTION 1 PRODUCT IDENTIFICATION & EMERGENCY INFORMATION

PRODUCT NAME: WOVEN COATED POLYPROPYLENE FABRIC

(IBC SERIES)

CHEMICAL NAME:

Polypropylene

CHEMICAL FAMILY:

Blend of materials; primarily polypropylene

PRODUCT DESCRIPTION:

White coated intermediate bulk container fabric (IBC)

EMERGENCY TELEPHONE NUMBERS: LING INDUSTRIAL FABRICS

CHEMTREC

(843) 873-5800

(800) 424-9300

SECTION 2 HAZARDOUS INGREDIENT INFORMATION

The following ingredients are listed as hazardous materials according to CFR1910.1200 (Hazardous Communication Standard-USA) and as controlled substances under WHMIS (Workplace Hazardous materials Information System-Canada)

PIGMENTS: NOT APPLICABLE VEHICLE: NOT APPLICABLE ADDITIVES: NOT APPLICABLE

IMPORTANT NOTE:

PIGMENTS, VEHICLES, AND ADDITIVES ARE FULLY ENCAPSULATED IN RESIN AND ARE NOT EXPECTED TO CAUSE ANY HAZARDOUS CONDITIONS WHEN PROCESSED IN ACCORDANCE WITH GOOD MANUFACTURING PRACTICES.

LING INDUSTRIAL FAB

W003/007



MATERIAL SAFETY DATA SHEET

LUNQ INDUSTRIAL FABRICS, 2560 WEST FIFTH NORTH STREET, SUMMERVILLE, SC 29483

WOVEN COATED POLYPROPYLENE FABRIC

(IBC SERIES)

PAGE:

DATE PREPARED:

3/4/99

MSDS NO:

IBC-1008

SECTION 3 HEALTH INFORMATION AND PROTECTION

NATURE OF HAZARD

EYE CONTACT:

Particulates may scratch eye surfaces/cause mechanical irritation

SKIN CONTACT:

No hazard in normal industrial use.

INHALATION:

No hazard in normal industrial use.

INGESTION:

No hazard in normal industrial use.

FIFIST AID

EYE CONTACT:

This product is an inert solid. If in eye, remove as one would any foreign object. If irritation persists, contact physician,

SKIN CONTACT:

Wash with soap and water. If irritation persists, contact physician.

INHALATION:

In case of adverse reaction, immediately remove the affected victim from exposure to fresh air. If adverse conditions persist, contact physician.

INGESTION:

First aid is normally not required.

WORKPLACE EXPOSURE LIMITS

No workplace exposure limits have been established for this product.

OSHA REGULATION 29CFR1910.1000 REQUIRES THE FOLLOWING PERMISSIBLE EXPOSURE LIMITS

5 mg/m³ (respirable dust), and 15 mg/m³ (total dust) based on the OSHA PEL for huisance dust.

The recommended permissible exposure levels indicated above reflect the levels revised by OSHA in 1989 or in subsequent regulatory activity. Although the 1989 levels have since been vacated by the 11th Circuit Court of Appeals, LINQ Industrial Fabrics recommends that the lower exposure levels be observed as reasonable worker protection.

THE ACGIH RECOMMENDS THE FOLLOWING THRESHOLD LIMIT VALUES:

a TWA of 10 mg/m3 (total dust) for nuisance dust.

LING INDUSTRIAL FAB

23004/007



MATERIAL SAFETY DATA SHEET

LING INDUSTRIAL FABRICS, 2550 WEST RIFTH NORTH STREET, SUMMERVILLE, SC 28483

WOVEN COATED POLYPROPYLENE FABRIC

PAGE:

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(IBC SERIES)

DATE PREPARED: MSDS NO: 3/4/99 IBC-1008

PRECAUTIONS

PERSONAL PROTECTION

Not required in normal industrial use. Where overexposure by inhalation may occur and engineering, work practice or other means of exposure reduction are not adequate, approved respirators may be necessary.

VENTILATION

Local ventilation may be required to control dust.

SECTION 4 FIRE & EXPLOSION HAZARD

FLASHPOINT:

570 Deg F NOTE; Decomposes > 570 degrees F

FLAMMABLE LIMITS:

NOTE: Not Applicable

AUTOIGNITION TEMPERATURE: NOTE: >575°F for polypropylene

GENERAL HAZARD

Solid material, may burn at or above the flashpoint, and airborne dust may explode if ignited. If thermally decomposed, flammable/toxic gases may be released. Toxic gases will form upon combustion.

FIRE FIGHTING

Use water spray to cool fire exposed surfaces and to protect personnel. Isolate "fuel" supply from fire. Extinguish the fire by cooling with water spray. Respiratory and eye protection required for fire fighting personnel.

DECOMPOSITION PRODUCTS UNDER FIRE CONDITIONS

Carbon monoxide and irritating smoke under oxygen lean conditions

SECTION 5 SPILL CONTROL PROCEDURE

LAND SPILL

Recover spilled material and place in suitable containers for recycle or disposal. Consult an expert on disposal of recovered material and ensure conformity to local disposal regulations. **WATER SPILL**

Recover spilled material and place in suitable containers for recycle or disposal. Consult an expert on disposal of recovered material and ensure conformity to local disposal regulations.

07/28/00 08:21A P.005

06/05/00 13:40 FAX 8438758276

LING INDUSTRIAL FAB

2005/007



MATERIAL SAFETY DATA SHEET

LING INDUSTRIAL FABRICS, 2550 WEST FIFTH NORTH STREET, SUMMERVILLE, SC 29483

WOVEN COATED POLYPROPYLENE FABRIC
(IBC SERIES)

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SECTION 6 NOTES

No notes applicable.

SECTION 7 REGULATORY INFORMATION

DEPARTMENT OF TRANSPORTATION (DOT):

DOT HAZARD CLASS: Not Regulated DOT IDENTIFICATION NUMBER: Not Available

FLASHPOINT:

> 600°F. (for polypropylene)

TOXIC SUBSTANCES CONTROL ACT (TSCA):

This product contains the following chemicals subject to the reporting requirements of the Toxic Substances Control Act (TSCA):

None

CERCLA:

Under the Comprehensive Response, Compensation, and Liability Act, (CERCLA), certain releases to air, land, or water may be reportable to the National Response Center at 800-424-8802. Circumstances surrounding the release and cleanup determine reportability. This product is not subject to CERCLA reporting requirements.

SARA TITLE HE

Under the provisions of Title III, Sections 311/312 of the Superfund Amendments and Reauthorization Act (40CFR 372), this product is classified into the following hazard categories:

Not Hazardous...

This product contains the following chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and the Community Right-to-Know Act of 1986, also known as Title III of SARA (Superfund and Reclamation Act) and of 40 CFR 372.

NONE

This information must be included in all MSDSs that are copied and distributed with this material

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MATERIAL SAFETY DATA SHEET

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WOVEN COATED POLYPROPYLENE FABRIC

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OZONE DEPLETING SUBSTANCES

This product is not formulated with nor does the process utilize any known Class I or Class II Ozone Depleting Substances regulated by the EPA Clean Air Act (40CFR Part 82)

SECTION 8 TYPICAL PHYSICAL & CHEMICAL PROPERTIES

SP. GRAVITY:

0.90

VAPOR PRESSURE, mmHg at °F:

Not Applicable

SOLUBILITY IN WATER, WT. % AT of:

Insoluble

VISCOSITY OF LIQUID, eST at °F:

Not Applicable

SP. GRAVITY OF VAPOR, at 1 ATM AIR = 1: FREEZING/MELTING POINT, °F:

Not Applicable

Varies by grade/ > 225°F

EVAPORATION RATE, n-BU ACETATE = 1: BOILIN

Not Applicable

BOILING POINT, °F:

Not Applicable

SECTION 9 FIEACTIVITY DATA

STABILITY:

Stable

HAZARDOUS POLYMERIZATION:

Will not occur

CONDITIONS TO AVOID INSTABILITY:

Not Applicable

MATERIALS CONDITIONS TO AVOID INCOMPATIBILITY:

Temperatures over 480°F/250°C may cause resin degradation

HAZARDOUS DECOMPOSITION PRODUCTS:

Olefinic or paraffinic hydrocarbons

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06/05/00 13:40 FAX 8438758276

LING INDUSTRIAL FAB

Ø007/007



MATERIAL SAFETY DATA SHEET

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SECTION 10 TRANSPORT AND STORAGE

U.S. DOT CLASSIFICATION:

Not Regulated

STORAGE TEMPERATURE, °F:

LOADING/UNLOADING TEMPERATURE, °F

Ambient

Ambient

STORAGE/TRANSPORT PRESSURE, mmHg;

Atmospheric

VISCOSITY AT LOADING/UNLOADING TEMPERATURE, CST

Not Applicable

SECTION 11 O'THER INFORMATION

None

REVISION SUMMARY:

Since JULY 7, 1995 this MSDS has been revised in Section(s): 7, 10.

Area Code updated 3/4/99.

REFERENCE NUMBER:

DATE PREPARED:

SUPERSEDES ISSUE DATE:

MSDS-IBC-1008

March 4, 1999

October 25, 1995

HAZARDOUS DATA CONTAINED HEREIN WAS OBTAINED FROM RAW MATERIAL SUPPLIERS FOR ADDITIONAL PRODUCT INFORMATION CONTACT YOUR TECHNICAL SALES REPRESENTATIVE FOR ADDITIONAL HEALTH/SAFETY INFORMATION CALL (843) 873-5800

THIS INFORMATION RELATES TO THE SPECIFIC MATERIAL DESIGNATED AND MAY NOT BE VALID FOR SUCH MATERIAL USED IN COMBINATION WITH ANY OTHER MATERIALS OR IN ANY PROCESS. SUCH INFORMATION IS TO THE BEST OF OUR KNOWLEDGE AND BELIEF, ACCURATE AND BILLIABLE AS OF THE DATE COMPILED. HOWEVER, IN REPRESENTATION, WARRANTY OR GUARANTEE IS MADE AS TO ITS ACCURACY, RELIGIBLITY OR COMPLETENESS. IT IS THE DISERTS RESPONSIBILITY TO SATISTY MIMBELL AS TO THE SUITABILITY AND COMPLETENESS OF SUCH INFORMATION FOR HIS DWY PARTICULAR USS. WE DO NOT ACCEPT LIABILITY FOR ANY LOSS OR DAMAGE THAT MAY OCCUR PROMITE USE OF THIS INFORMATION NOR OD WE OPPER WARRANTY ATAINST PATRIT INFRINCEMENT.

APPENDIX IV-B LANDFILL CHECKLIST



CITY OF DEL RIO MUNICIPAL LANDFILL CHECKLIST

Evaluator Date		Date of Revie	of Review	
Wea	ther Co	onditions		
A.	Entr	Entrance and Roadways		No
	1.,	Are the required signs posted (Hours, Rates, No Hazardous Waste)?	-	
	2.	Is the entrance secured when the site is not in use?		4
	3.	Are the roadways to the landfill and entrance cleans and free of litter; does the entrance have a neat appearance?	_	-
	4.	Are the access roads to the landfill and the temporary access road within the landfill graded and crowned?	-	-
	5.	Are the drainage ditches along the roads free of debris and overgrown vegetation?	-	
	6.	Is mud tracked onto public roads during or after rain storms?		_
	7.	If yes above, does the site operator clean the roads?		_
В.	Perso	onnel		
	I.	Number of Personnel:		
		Operators Spotters Mechanics Other (Specify)		
	2.	Is there a full time gate attendant present?		
	3.	Is safety equipment (e.g., protective clothing, respirators) provided and used?	-	_
	4.	Are training and safety meetings held on a regular basis?		-
	5.	Is salvaging or scavenging prohibited?		

	1.	In use:		
	2.	Under maintenance:		
	3.	In reserve/backup:		
D.	<u>Oper</u>	rations	Yes	No
	1.	Is the unloading area clearly marked?	_	1
	2.	Is a spotter used at the unloading area?	_	
	3.	How many vehicles per day use the site?		
	4.	What is the width of the operating face?		
	5.	Is it confined to the smallest practical width?		
	6.	Is there sufficient compaction?		
	7.	Is the face covered every day?	N	12
	8.	Are the grades being set and checked daily?		_
	9.	Has final cover been applied to within 100 feet of the working face (applies only to final lift)?	_	_
	10.	Is there a completed area that has not had final cover applied and graded such that there is no ponding of water?	_	
	11.	Is the completed section at grade?	_	6 <u></u>
	12.	Have the completed areas been seeded, season permitted?		
	13.	Is there blown litter around the site?		_
	14.	Is there an odor problem?		-

C.

Equipment

			Yes	No	
	15.	Is cover application log up to date?	_	_	
	16.	Are grid markers and buffer zone markers in place?		_	
	17.	Are gas pipeline easement and electrical power line easement markers in place?		_	
E.	Wate	er Management			
	1.	Has settlement on completed areas caused any ponding of water?		_	
	2.	Does storm runoff drain onto the actual operating face?		_	
	3.	Is there an erosion problem on any slope?			
	4.	Is detention basin clean, silt removed, proper freeboard?		-	
F.	Water Quality				
	1.	Does the site have any leachate seeps?		_	
	2.	If so, describe corrective action to be taken:			
G.	Methane Gas				
	1.	Evidence of gas migration?	_	_	
	2.	Any historical problems?	_	_	
		If so, short explanation:			
	3.	Date of last gas migration survey:			
	4.	Do results of last migration survey indicate need for installation of barrier/vent systems?		_	
Н.	Fire F	Protection			
	1.	Water available at working face?	_		

			Yes	No		
	2.	Stockpiled soil available?		12		
	3.	Fire extinguisher on all equipment?	_	-		
	4.	Communications available at working face?	_	-		
I.	Hous	Housekeeping				
	1.	Litter at entrance or along access road?	_	_		
	2.	Litter scattered around site?	_	_		
	3.	Litter cleanup program in effect?	_	_		
	4.	Unnecessary junk present on site (e.g., containers, trucks, heavy equipment)?		_		
J.	Vecto	or and Animal Controls				
	I.	Rodent problem apparent?		_		
	2.	Rodent control measures being implemented?		_		
	3.	Bird problem?		_		
	4.	Is there a bird control program in effect?				
	5.	Is an insect problem apparent?	-			
K.	<u>Documents</u>					
	I.	Is the permit or license prominently shown or available at the site?		_		
	2.	Are the engineering plans on site?				
	3.	Are the above plans being followed?				
	4.	Are the TNRCC municipal solid waste management regulations on-site?	_	_		
	5.	Are inspection records, training procedures, and notification procedures relating to excluding receipt of regulated hazardous waste and PCB waste on site?		_		

		ies	140
6.	Are results of gas monitoring on site?	_	
NOTES:			