Texas Commission on Environmental Quality

Edwards Aquifer Application Cover Page

Our Review of Your Application

The Edwards Aquifer Program staff conducts an administrative and technical review of all applications. The turnaround time for administrative review can be up to 30 days as outlined in 30 TAC 213.4(e). Generally administrative completeness is determined during the intake meeting or within a few days of receipt. The turnaround time for technical review of an administratively complete Edwards Aquifer application is 90 days as outlined in 30 TAC 213.4(e). Please know that the review and approval time is directly impacted by the quality and completeness of the initial application that is received. In order to conduct a timely review, it is imperative that the information provided in an Edwards Aquifer application include final plans, be accurate, complete, and in compliance with 30 TAC 213.

Administrative Review

1. Edwards Aquifer applications must be deemed administratively complete before a technical review can begin. To be considered administratively complete, the application must contain completed forms and attachments, provide the requested information, and meet all the site plan requirements. The submitted application and plan sheets should be final plans. Please submit one full-size set of plan sheets with the original application, and half-size sets with the additional copies.

   To ensure that all applicable documents are included in the application, the program has developed tools to guide you and web pages to provide all forms, checklists, and guidance. Please visit the below website for assistance: http://www.tceq.texas.gov/field/eapp.

2. This Edwards Aquifer Application Cover Page form (certified by the applicant or agent) must be included in the application and brought to the administrative review meeting.

3. Administrative reviews are scheduled with program staff who will conduct the review. Applicants or their authorized agent should call the appropriate regional office, according to the county in which the project is located, to schedule a review. The average meeting time is one hour.

4. In the meeting, the application is examined for administrative completeness. Deficiencies will be noted by staff and emailed or faxed to the applicant and authorized agent at the end of the meeting, or shortly after. Administrative deficiencies will cause the application to be deemed incomplete and returned.

   An appointment should be made to resubmit the application. The application is re-examined to ensure all deficiencies are resolved. The application will only be deemed administratively complete when all administrative deficiencies are addressed.

5. If an application is received by mail, courier service, or otherwise submitted without a review meeting, the administrative review will be conducted within 30 days. The applicant and agent will be contacted with the results of the administrative review. If the application is found to be administratively incomplete, it can be retrieved from the regional office or returned by regular mail. If returned by mail, the regional office may require arrangements for return shipping.

6. If the geologic assessment was completed before October 1, 2004 and the site contains "possibly sensitive" features, the assessment must be updated in accordance with the *Instructions to Geologists* (TCEQ-0585 Instructions).

Technical Review

1. When an application is deemed administratively complete, the technical review period begins. The regional office will distribute copies of the application to the identified affected city, county, and groundwater conservation district whose jurisdiction includes the subject site. These entities and the public have 30 days to provide comments on the application to the regional office. All comments received are reviewed by TCEQ.

2. A site assessment is usually conducted as part of the technical review, to evaluate the geologic assessment and observe existing site conditions. The site must be accessible to our staff. The site boundaries should be

clearly marked, features identified in the geologic assessment should be flagged, roadways marked and the alignment of the Sewage Collection System and manholes should be staked at the time the application is submitted. If the site is not marked the application may be returned.

3. We evaluate the application for technical completeness and contact the applicant and agent via Notice of Deficiency (NOD) to request additional information and identify technical deficiencies. There are two deficiency response periods available to the applicant. There are 14 days to resolve deficiencies noted in the first NOD. If a second NOD is issued, there is an additional 14 days to resolve deficiencies. If the response to the second notice is not received, is incomplete or inadequate, or provides new information that is incomplete or inadequate, the application must be withdrawn or will be denied. Please note that because the technical review is underway, whether the application is withdrawn or denied **the application fee will be forfeited**.

4. The program has 90 calendar days to complete the technical review of the application. If the application is technically adequate, such that it complies with the Edwards Aquifer rules, and is protective of the Edwards Aquifer during and after construction, an approval letter will be issued. Construction or other regulated activity may not begin until an approval is issued.

Mid-Review Modifications

It is important to have final site plans prior to beginning the permitting process with TCEQ to avoid delays.

Occasionally, circumstances arise where you may have significant design and/or site plan changes after your Edwards Aquifer application has been deemed administratively complete by TCEQ. This is considered a "Mid-Review Modification". Mid-Review Modifications may require redistribution of an application that includes the proposed modifications for public comment.

If you are proposing a Mid-Review Modification, two options are available:

- If the technical review has begun your application can be denied/withdrawn, your fees will be forfeited, and the plan will have to be resubmitted.
- TCEQ can continue the technical review of the application as it was submitted, and a modification application can be submitted at a later time.

If the application is denied/withdrawn, the resubmitted application will be subject to the administrative and technical review processes and will be treated as a new application. The application will be redistributed to the affected jurisdictions.

Please contact the regional office if you have questions. If your project is located in Williamson, Travis, or Hays County, contact TCEQ's Austin Regional Office at 512-339-2929. If your project is in Comal, Bexar, Medina, Uvalde, or Kinney County, contact TCEQ's San Antonio Regional Office at 210-490-3096

Please fill out all required fields below and submit with your application.

1. Regulated Entity Name: San Antonio Water System Los Reyes						**2. Regulated Entity No.:**			
3. Customer Name: San Antonio Water System						**4. Customer No.: 600529069**			
5. Project Type: **(Please circle/check one)**	New		Modification			Extension		Exception	
6. Plan Type: **(Please circle/check one)**	WPAP	CZP	SCS	UST	AST	EXP	EXT	Technical Clarification	Optional Enhanced Measures
7. Land Use: **(Please circle/check one)**	Residential		Non-residential			**8. Site (acres):**		1.418	
9. Application Fee:	650		**10. Permanent BMP(s):**			Proposed			
11. SCS (Linear Ft.):	N/A		**12. AST/UST (No. Tanks):**			1			
13. County:	Bexar		**14. Watershed:**			Leon			

Application Distribution

Instructions: Use the table below to determine the number of applications required. One original and one copy of the application, plus additional copies (as needed) for each affected incorporated city, county, and groundwater conservation district are required. Linear projects or large projects, which cross into multiple jurisdictions, can require additional copies. Refer to the "Texas Groundwater Conservation Districts within the EAPP Boundaries" map found at:

http://www.tceq.texas.gov/assets/public/compliance/field_ops/eapp/EAPP%20GWCD%20map.pdf

For more detailed boundaries, please contact the conservation district directly.

Austin Region			
County:	**Hays**	**Travis**	**Williamson**
Original (1 req.)	___	___	___
Region (1 req.)	___	___	___
County(ies)	___	___	___
Groundwater Conservation District(s)	___Edwards Aquifer Authority ___Barton Springs/ Edwards Aquifer ___Hays Trinity ___Plum Creek	___Barton Springs/ Edwards Aquifer	NA
City(ies) Jurisdiction	___Austin ___Buda ___Dripping Springs ___Kyle ___Mountain City ___San Marcos ___Wimberley ___Woodcreek	___Austin ___Bee Cave ___Pflugerville ___Rollingwood ___Round Rock ___Sunset Valley ___West Lake Hills	___Austin ___Cedar Park ___Florence ___Georgetown ___Jerrell ___Leander ___Liberty Hill ___Pflugerville ___Round Rock

San Antonio Region					
County:	**Bexar**	**Comal**	**Kinney**	**Medina**	**Uvalde**
Original (1 req.)	_X_	___	___	___	___
Region (1 req.)	_X_	___	___	___	___
County(ies)	_X_	___	___	___	___
Groundwater Conservation District(s)	___ Edwards Aquifer Authority _X_Trinity-Glen Rose	___Edwards Aquifer Authority	___Kinney	___EAA ___Medina	___EAA ___Uvalde
City(ies) Jurisdiction	___Castle Hills ___Fair Oaks Ranch _X_Helotes ___Hill Country Village ___Hollywood Park ___San Antonio (SAWS) ___Shavano Park	___Bulverde ___Fair Oaks Ranch ___Garden Ridge ___New Braunfels ___Schertz	NA	___San Antonio ETJ (SAWS)	NA

I certify that to the best of my knowledge, that the application is complete and accurate. This application is hereby submitted to TCEQ for administrative review and technical review. **Aaron Bentley, E.I.T.**
Print Name of Customer/Authorized Agent Aaron Bentley Digitally signed by Aaron Bentley DN: C=US, E=aaron.bentley@westonsolutions.com, OU="Weston Solutions, Inc.", CN=Aaron Bentley Date: 2024.09.11 10:24:22-05'00'
Signature of Customer/Authorized Agent Date

FOR TCEQ INTERNAL USE ONLY				
Date(s)Reviewed:		Date Administratively Complete:		
Received From:		Correct Number of Copies:		
Received By:		Distribution Date:		
EAPP File Number:		Complex:		
Admin. Review(s) (No.):		No. AR Rounds:		
Delinquent Fees (Y/N):		Review Time Spent:		
Lat./Long. Verified:		SOS Customer Verification:		
Agent Authorization Complete/Notarized (Y/N):		Fee Check:	Payable to TCEQ (Y/N):	
Core Data Form Complete (Y/N):			Signed (Y/N):	
Core Data Form Incomplete Nos.:			Less than 90 days old (Y/N):	

GENERAL INFORMATION FORM (TCEQ 0587)

General Information Form

Texas Commission on Environmental Quality

For Regulated Activities on the Edwards Aquifer Recharge and Transition Zones and Relating to 30 TAC §213.4(b) & §213.5(b)(2)(A), (B) Effective June 1, 1999

To ensure that the application is administratively complete, confirm that all fields in the form are complete, verify that all requested information is provided, consistently reference the same site and contact person in all forms in the application, and ensure forms are signed by the appropriate party.

Note: Including all the information requested in the form and attachments contributes to more streamlined technical reviews.

Signature

To the best of my knowledge, the responses to this form accurately reflect all information requested concerning the proposed regulated activities and methods to protect the Edwards Aquifer. This **General Information Form** is hereby submitted for TCEQ review. The application was prepared by:

Print Name of Customer/Agent: Aaron Bentley, E.I.T.

Date: 9/10/2024

Signature of Customer/Agent:

Aaron Bentley Digitally signed by Aaron Bentley DN: C=US, E=aaron.bentley@westonsolutions.com, OU=Weston Solutions, Inc.", CN=Aaron Bentley Date: 2024.09.11 10:23:27-05'00'

Project Information

1. Regulated Entity Name: San Antonio Water System Los Reyes
2. County: Bexar
3. Stream Basin: San Antonio River Basin
4. Groundwater Conservation District (If applicable): Trinity Glen Rose GCD
5. Edwards Aquifer Zone:

   ☒ Recharge Zone
   ☐ Transition Zone

6. Plan Type:

   ☐ WPAP
   ☐ SCS
   ☐ Modification
   ☒ AST
   ☐ UST
   ☐ Exception Request

7. Customer (Applicant):

   Contact Person: Dr. Saqib Shirazi, P.E., PMP
   Entity: San Antonio Water System
   Mailing Address: 2800 US Highway 281 N
   City, State: San Antonio, TX Zip: 78212
   Telephone: 210-704-7297 FAX: N/A
   Email Address: saqib.shirazi@saws.org

8. Agent/Representative (If any):

   Contact Person: Aaron Bentley, E.I.T.
   Entity: Weston Solutions, Inc
   Mailing Address: 70 NE Interstate 410 Loop #200
   City, State: San Antonio, TX Zip: 78216
   Telephone: 210-308-4311 FAX: NA
   Email Address: aaron.bentley@westonsolutions.com

9. Project Location:

   ☐ The project site is located inside the city limits of _____.
   ☒ The project site is located outside the city limits but inside the ETJ (extra-territorial jurisdiction) of Helotes.
   ☐ The project site is not located within any city's limits or ETJ.

10. ☒ The location of the project site is described below. The description provides sufficient detail and clarity so that the TCEQ's Regional staff can easily locate the project and site boundaries for a field investigation.

    The Site is located off Rovelo Drive within the property 15810 Canyonside. The property perimeter is surrounded by a wooden fence and extends to the road.

11. ☒ **Attachment A – Road Map**. A road map showing directions to and the location of the project site is attached. The project location and site boundaries are clearly shown on the map.

12. ☒ **Attachment B - USGS / Edwards Recharge Zone Map**. A copy of the official 7 ½ minute USGS Quadrangle Map (Scale: 1" = 2000') of the Edwards Recharge Zone is attached. The map(s) clearly show:

    ☒ Project site boundaries.
    ☒ USGS Quadrangle Name(s).
    ☒ Boundaries of the Recharge Zone (and Transition Zone, if applicable).
    ☒ Drainage path from the project site to the boundary of the Recharge Zone.

13. ☒ **The TCEQ must be able to inspect the project site or the application will be returned**. Sufficient survey staking is provided on the project to allow TCEQ regional staff to locate the boundaries and alignment of the regulated activities and the geologic or manmade features noted in the Geologic Assessment.

☐ Survey staking will be completed by this date: _____

14. ☒ **Attachment C – Project Description**. Attached at the end of this form is a detailed narrative description of the proposed project. The project description is consistent throughout the application and contains, at a minimum, the following details:

    ☒ Area of the site
    ☒ Offsite areas
    ☒ Impervious cover
    ☒ Permanent BMP(s)
    ☒ Proposed site use
    ☒ Site history
    ☒ Previous development
    ☒ Area(s) to be demolished

15. Existing project site conditions are noted below:

    ☐ Existing commercial site
    ☐ Existing industrial site
    ☒ Existing residential site
    ☐ Existing paved and/or unpaved roads
    ☐ Undeveloped (Cleared)
    ☐ Undeveloped (Undisturbed/Uncleared)
    ☐ Other: _____

Prohibited Activities

16. ☒ I am aware that the following activities are prohibited on the Recharge Zone and are not proposed for this project:

    (1) Waste disposal wells regulated under 30 TAC Chapter 331 of this title (relating to Underground Injection Control);

    (2) New feedlot/concentrated animal feeding operations, as defined in 30 TAC §213.3;

    (3) Land disposal of Class I wastes, as defined in 30 TAC §335.1;

    (4) The use of sewage holding tanks as parts of organized collection systems; and

    (5) New municipal solid waste landfill facilities required to meet and comply with Type I standards which are defined in §330.41(b), (c), and (d) of this title (relating to Types of Municipal Solid Waste Facilities).

    (6) New municipal and industrial wastewater discharges into or adjacent to water in the state that would create additional pollutant loading.

17. ☒ I am aware that the following activities are prohibited on the Transition Zone and are not proposed for this project:

    (1) Waste disposal wells regulated under 30 TAC Chapter 331 (relating to Underground Injection Control);

(2) Land disposal of Class I wastes, as defined in 30 TAC §335.1; and

(3) New municipal solid waste landfill facilities required to meet and comply with Type I standards which are defined in §330.41 (b), (c), and (d) of this title.

Administrative Information

18. The fee for the plan(s) is based on:

☒ For a Water Pollution Abatement Plan or Modification, the total acreage of the site where regulated activities will occur.
☐ For an Organized Sewage Collection System Plan or Modification, the total linear footage of all collection system lines.
☐ For a UST Facility Plan or Modification or an AST Facility Plan or Modification, the total number of tanks or piping systems.
☐ A request for an exception to any substantive portion of the regulations related to the protection of water quality.
☐ A request for an extension to a previously approved plan.

19. ☒ Application fees are due and payable at the time the application is filed. If the correct fee is not submitted, the TCEQ is not required to consider the application until the correct fee is submitted. Both the fee and the Edwards Aquifer Fee Form have been sent to the Commission's:

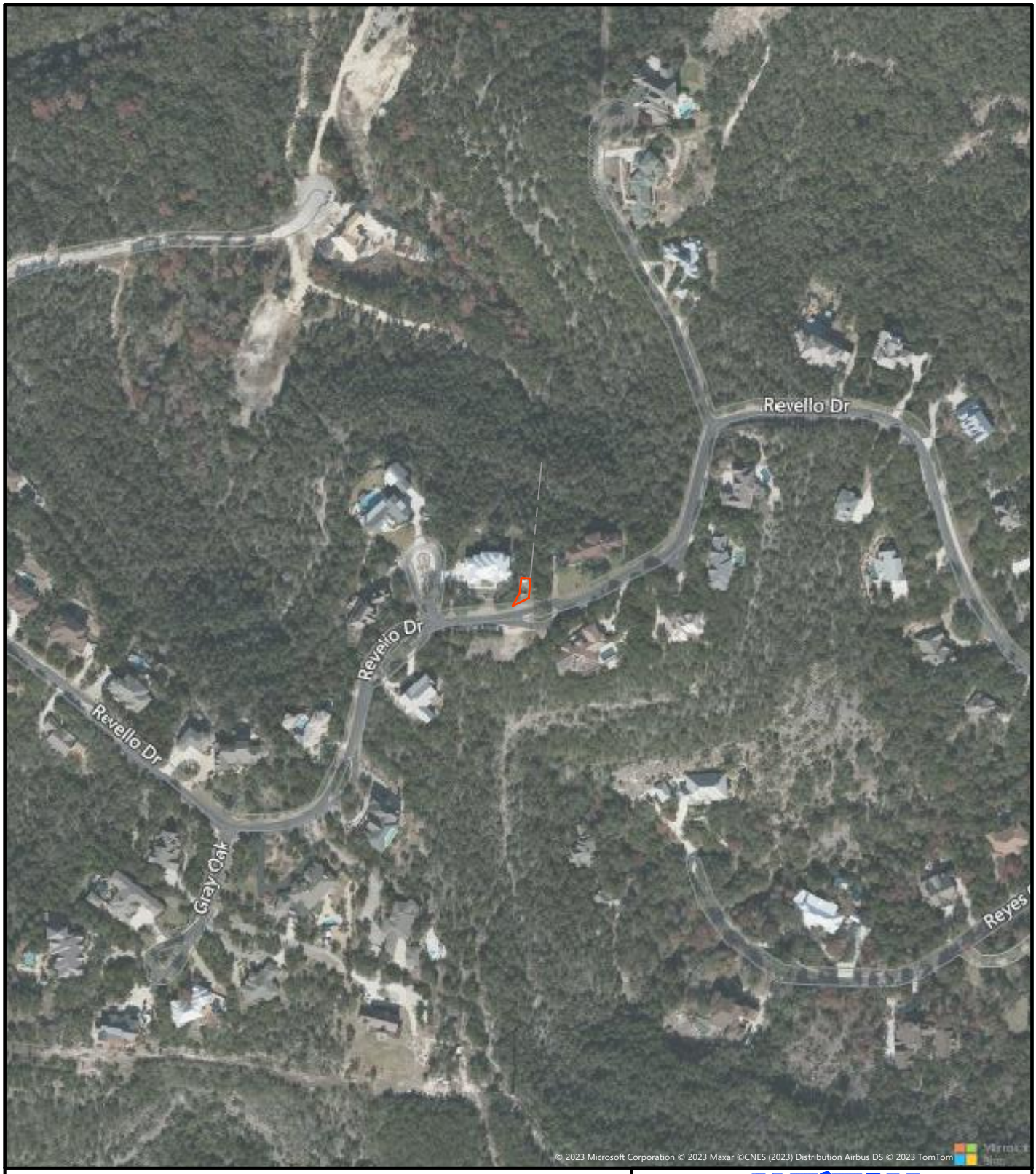
☐ TCEQ cashier
☐ Austin Regional Office (for projects in Hays, Travis, and Williamson Counties)
☒ San Antonio Regional Office (for projects in Bexar, Comal, Kinney, Medina, and Uvalde Counties)

20. ☒ Submit one (1) original and one (1) copy of the application, plus additional copies as needed for each affected incorporated city, groundwater conservation district, and county in which the project will be located. The TCEQ will distribute the additional copies to these jurisdictions. The copies must be submitted to the appropriate regional office.

21. ☒ No person shall commence any regulated activity until the Edwards Aquifer Protection Plan(s) for the activity has been filed with and approved by the Executive Director.

ATTACHMENT A

ROAD MAP

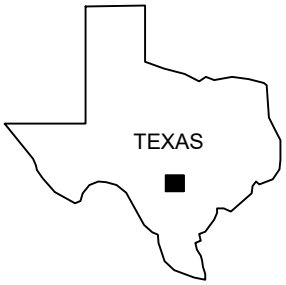


LEGEND:

SITE LOCATION

0 150 300

SCALE IN FEET



N

WESTON

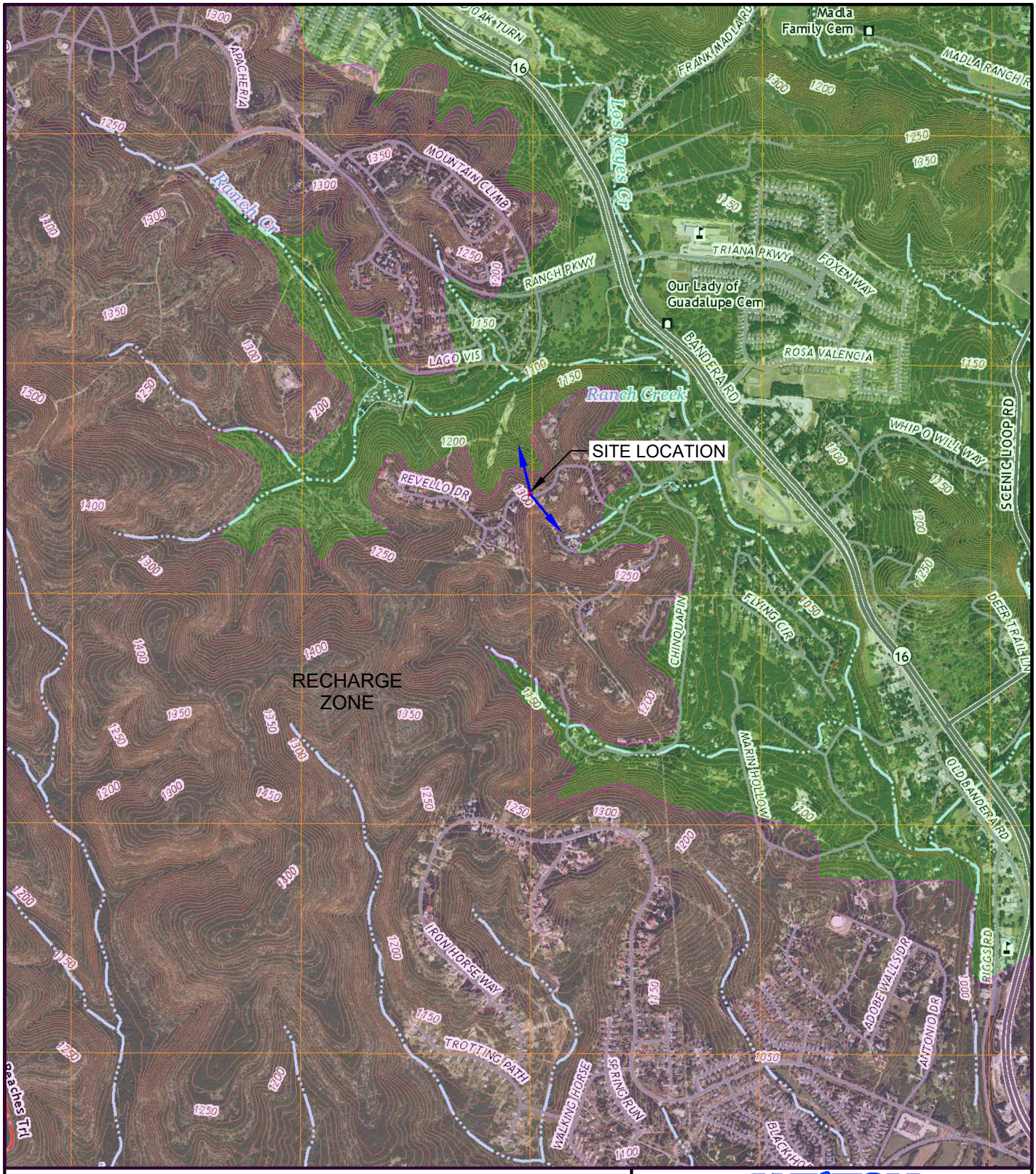
FIGURE 1
ROAD MAP

15810 CANYONSIDE
CITY OF SAN ANTONIO

DATE	PROJECT NO.	SCALE
NOV 2023	10412.031.001.0005	AS SHOWN

ATTACHMENT B

USGS/EDWARDS AQUIFER RECHARGE ZONE MAP

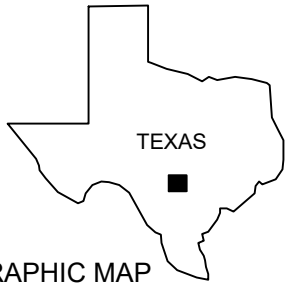


LEGEND:

SITE LOCATION

0 1000 2000

SCALE IN FEET



N

SOURCE:
USGS 7.5 MINUTE TOPOGRAPHIC MAP
HELOTES, TEXAS QUADRANGLE

WESTON

FIGURE 1
SITE LOCATION MAP

15810 CANYONSIDE
CITY OF SAN ANTONIO

DATE	PROJECT NO.	SCALE
NOV 2023	10412.031.001.0005	AS SHOWN

ATTACHMENT C

PROJECT DESCRIPTION

PROJECT DESCRIPTION

AREA OF THE SITE

The project will remove existing waterlines and asphalt driveway and install new waterlines, a new concrete generator pad, new electrical wiring, a new generator, and a new asphalt driveway. The Los Reyes pump station project site is an approximately 0.0603 acre area located at 15810 Canyonside in Helotes, Texas (The Site). The Site slopes gently downward to the north. The site is currently used as a public utility site conveying waste to the surrounding properties. The project scope at this site is relocating the waterlines at the site and installing a new generator for the pump station.

OFFSITE AREAS

A Geologic Assessment performed as part of this WPAP application (included in Geologic Assessment section) showed that there are no environmentally sensitive features within a 50 ft buffer of the proposed construction limits.

IMPERVIOUS COVER

The project scope involves the demolition of 0.00661 acres of existing impervious cover and installation of approximately 0.0236 acres of impervious cover.

TEMPORARY AND PERMANENT BMPs

Temporary BMPs are designed with respect to local and state regulations to ensure construction does not contaminate the nearby residential and public properties. Any defects will be repaired within one year of discovery. Due to the small size of the project site, Permanent BMPs will not be necessary after construction has concluded.

PROPOSED SITE USE

Once construction has been completed, the site will be utilized as a fully operating pump station. It will be the responsibility of the Owner to operate and maintain the system beyond the one-year warranty time frame.

SITE HISTORY

The Site had previously been used as a pump station site.

PREVIOUS DEVELOPMENT

The site was previously developed to contain a Pump Station over an approximately 0.0574 acre area.

AREA(S) TO BE DEMOLISHED

The project will demolish 0.00661 acres of the existing asphalt driveway and 70 LF of existing waterlines.

GEOLOGICAL ASSESSMENT (TCEQ 0585)

Geologic Assessment

Texas Commission on Environmental Quality

For Regulated Activities on The Edwards Aquifer Recharge/transition Zones and Relating to 30 TAC §213.5(b)(3), Effective June 1, 1999

To ensure that the application is administratively complete, confirm that all fields in the form are complete, verify that all requested information is provided, consistently reference the same site and contact person in all forms in the application, and ensure forms are signed by the appropriate party.

Note: Including all the information requested in the form and attachments contributes to more streamlined technical reviews.

Signature

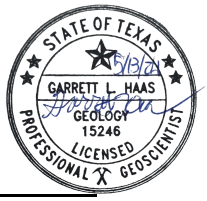
To the best of my knowledge, the responses to this form accurately reflect all information requested concerning the proposed regulated activities and methods to protect the Edwards Aquifer. My signature certifies that I am qualified as a geologist as defined by 30 TAC Chapter 213.

Print Name of Geologist: Garrett Haas, PG Telephone: 210-630-1098

Date: May 13, 2024 Fax: _____

Representing: Weston Solutions, Inc. (Name of Company and TBPG or TBPE registration number)

Signature of Geologist:



Regulated Entity Name: Not applicable

Project Information

1. Date(s) Geologic Assessment was performed: October 4, 2023
2. Type of Project:

   ☒ WPAP ☒ AST
   ☐ SCS ☐ UST
3. Location of Project:

   ☒ Recharge Zone
   ☐ Transition Zone
   ☐ Contributing Zone within the Transition Zone

4. ☒ **Attachment A - Geologic Assessment Table**. Completed Geologic Assessment Table (Form TCEQ-0585-Table) is attached.

5. ☒ Soil cover on the project site is summarized in the table below and uses the SCS Hydrologic Soil Groups* (Urban Hydrology for Small Watersheds, Technical Release No. 55, Appendix A, Soil Conservation Service, 1986). If there is more than one soil type on the project site, show each soil type on the site Geologic Map or a separate soils map.

Table 1 - Soil Units, Infiltration Characteristics and Thickness

Soil Name	Group*	Thickness(feet)
Eckrant-Rock Outcrop	C	0-2
Eckrant Cobbly Clay	C	0-2

** Soil Group Definitions (Abbreviated)*

A. Soils having a high infiltration rate when thoroughly wetted.
B. Soils having a moderate infiltration rate when thoroughly wetted.
C. Soils having a slow infiltration rate when thoroughly wetted.
D. Soils having a very slow infiltration rate when thoroughly wetted.

6. ☒ **Attachment B – Stratigraphic Column**. A stratigraphic column showing formations, members, and thicknesses is attached. The outcropping unit, if present, should be at the top of the stratigraphic column. Otherwise, the uppermost unit should be at the top of the stratigraphic column.

7. ☒ **Attachment C – Site Geology**. A narrative description of the site specific geology including any features identified in the Geologic Assessment Table, a discussion of the potential for fluid movement to the Edwards Aquifer, stratigraphy, structure(s), and karst characteristics is attached.

8. ☒ **Attachment D – Site Geologic Map(s)**. The Site Geologic Map must be the same scale as the applicant's Site Plan. The minimum scale is 1": 400'

   Applicant's Site Plan Scale: 1" = 400'
   Site Geologic Map Scale: 1" = 400'
   Site Soils Map Scale (if more than 1 soil type): 1" = _____'

9. Method of collecting positional data:

   ☐ Global Positioning System (GPS) technology.
   ☒ Other method(s). Please describe method of data collection: No features identified

10. ☒ The project site and boundaries are clearly shown and labeled on the Site Geologic Map.

11. ☒ Surface geologic units are shown and labeled on the Site Geologic Map.

12. ☐ Geologic or manmade features were discovered on the project site during the field investigation. They are shown and labeled on the Site Geologic Map and are described in the attached Geologic Assessment Table.

    ☒ Geologic or manmade features were not discovered on the project site during the field investigation.

13. ☒ The Recharge Zone boundary is shown and labeled, if appropriate.

14. All known wells (test holes, water, oil, unplugged, capped and/or abandoned, etc.): If applicable, the information must agree with Item No. 20 of the WPAP Application Section.

    ☐ There are _____ (#) wells present on the project site and the locations are shown and labeled. (Check all of the following that apply.)
    - ☐ The wells are not in use and have been properly abandoned.
    - ☐ The wells are not in use and will be properly abandoned.
    - ☐ The wells are in use and comply with 16 TAC Chapter 76.

    ☒ There are no wells or test holes of any kind known to exist on the project site.

Administrative Information

15. ☒ Submit one (1) original and one (1) copy of the application, plus additional copies as needed for each affected incorporated city, groundwater conservation district, and county in which the project will be located. The TCEQ will distribute the additional copies to these jurisdictions. The copies must be submitted to the appropriate regional office.

ATTACHMENT A

GEOLOGICAL ASSESSMENT TABLE

GEOLOGIC ASSESSMENT TABLE			PROJECT NAME: Los Reyes Pump Station																	
LOCATION			FEATURE CHARACTERISTICS											EVALUATION			PHYSICAL SETTING			
1A	1B *	1C*	2A	2B	3	4			5	5A	6	7	8A	8B	9	10		11		12
FEATURE ID	LATITUDE	LONGITUDE	FEATURE TYPE	POINTS	FORMATION	DIMENSIONS (FEET)			TREND (DEGREES)	DOM	DENSITY (NO/FT)	APERTURE (FEET)	INFILL	RELATIVE INFILTRATION RATE	TOTAL	SENSITIVITY		CATCHMENT AREA (ACRES)		TOPOGRAPHY
						X	Y	Z		10						<40	>40	<1.6	>1.6	
None																				

* DATUM:_____

2A TYPE	TYPE	2B POINTS
C	Cave	30
SC	Solution cavity	20
SF	Solution-enlarged fracture(s)	20
F	Fault	20
O	Other natural bedrock features	5
MB	Manmade feature in bedrock	30
SW	Swallow hole	30
SH	Sinkhole	20
CD	Non-karst closed depression	5
Z	Zone, clustered or aligned features	30

8A INFILLING	
N	None, exposed bedrock
C	Coarse - cobbles, breakdown, sand, gravel
O	Loose or soft mud or soil, organics, leaves, sticks, dark colors
F	Fines, compacted clay-rich sediment, soil profile, gray or red colors
V	Vegetation. Give details in narrative description
FS	Flowstone, cements, cave deposits
X	Other materials

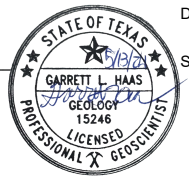
12 TOPOGRAPHY

Cliff, Hilltop, Hillside, Drainage, Floodplain, Streambed

I have read, I understood, and I have followed the Texas Commission on Environmental Quality's Instructions to Geologists. The information presented here complies with that document and is a true representation of the conditions observed in the field.
My signature certifies that I am qualified as a geologist as defined by 30 TAC Chapter 213.

Date 5/13/2024

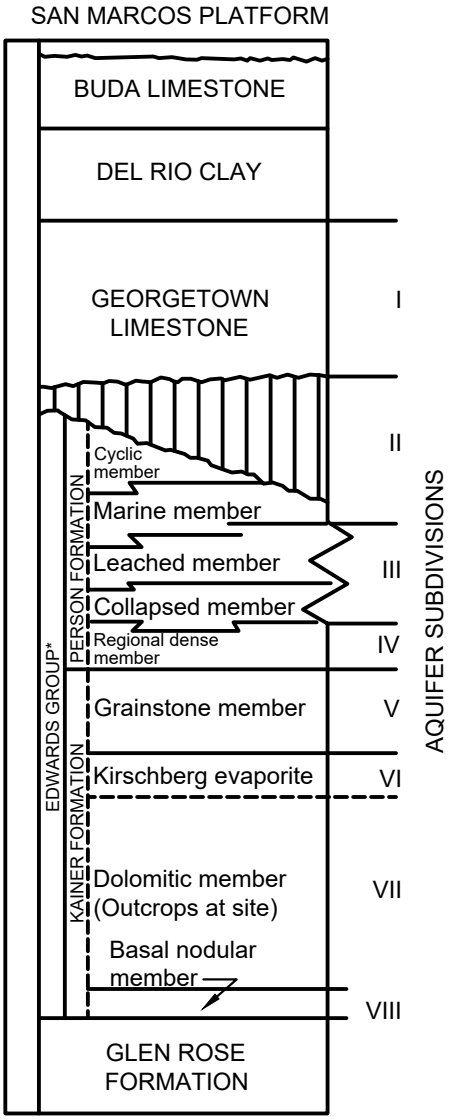
Sheet ___1___ of __1____



TCEQ-0585-Table (Rev. 10-01-04)

ATTACHMENT B

STRATIGRAPHIC COLUMN



*The Edwards Limestone was raised to a stratigraphic group by Rose (1972).

SOURCE: Texas Water Development Board, 1986. Carbonate Geology and Hydrology of the Edwards Aquifer of the San Antonio Areas, Texas – Report 296. Figure 7, Page 23.

WESTON SOLUTIONS

FIGURE 5

STRATIGRAPHIC SEQUENCE
LOS REYES PUMP STATION
HELOTES, TEXAS

DATE	PROJECT NO.	SCALE
OCT. 2023	10412.031.001.0005	AS SHOWN

ATTACHMENT C

SITE GEOLOGY NARRATIVE

GEOLOGIC ASSESSMENT
LOS REYES PUMP STATION
HELOTES, TEXAS

Prepared for:
San Antonio Water System
2800 US Hwy. 281 North
San Antonio, Texas 78212

Prepared by:
WESTON SOLUTIONS, INC.
70 NE Interstate 410 Loop, #200
San Antonio, Texas 78216
210-308-4300

May 2024

W.O. No. 10412.031.001

STATE OF TEXAS
GARRETT L. HAAS
GEOLOGY
15246
LICENSED
PROFESSIONAL GEOSCIENTIST
5/13/24

P.G. No. 164; TBPG Firm No. 50258

Weston Solutions, Inc.
70 NE Interstate 410 Loop; #200
San Antonio, TX 78216
210-308-4300
WestonSolutions.com

13 May 2024

Saqib Shirazi, P.E.
Interim Manager – Operations Support Engineering
San Antonio Water System (SAWS)
2800 US Hwy. 281 North
San Antonio, Texas 78212

Re: Geologic Assessment
Los Reyes Pump Station
Off Revello Drive
Helotes, Texas

Dear Mr. Shirazi:

Weston Solutions, Inc. (WESTON®) completed the enclosed Geologic Assessment (GA) prepared for the above referenced project pursuant to 30 Texas Administrative Code (TAC) §213.5(b)(3). The GA was performed in accordance with the Texas Commission on Environmental Quality (TCEQ) "Instructions to Geologists", TCEQ-0585-Instructions (Rev. 10-1-04).

Thank you for the opportunity to assist San Antonio Water System on this project. Please contact me at 210-308-4371 with questions or comments you might have regarding this report.

Sincerely,

WESTON SOLUTIONS, INC.

Garrett Haas, P.G.
Project Geoscientist
P.G. No. 15246, TBPG Firm No. 50258

TABLE OF CONTENTS

Section **Page**

LIST OF FIGURES

Attachments:
Attachment 1 - Geological Assessment Form and Table (TCEQ Form 0585)

1. PURPOSE AND SCOPE OF SERVICES

Weston Solutions, Inc. (WESTON®) has conducted a Geologic Assessment (GA) of the Los Reyes Pump Station as part of permitting requirements for planned engineering improvements to the property. This assessment was conducted in accordance with Edwards Aquifer Protection Plans described in the Texas Commission on Environmental Quality (TCEQ) Edwards Aquifer Rules promulgated in 30 TAC 213.5(b)(3), Geologic Assessments.

1.1 PROJECT DESCRIPTION

Planned engineering improvements of the pump station include the construction of a generator pad and installation of a tier II diesel generator. This will include the preparation of the construction area, installation of electrical connections to the existing pump station, and connection of the tier II diesel generator to the pump station.

1.2 LOCATION

The Los Reyes Pump Station is an approximately 1,350-square foot parcel of land located off Revello Drive in Helotes, Texas (The Site). The Site is currently a water pump station for residential distribution of potable water by San Antonio Water System (SAWS). The general Site area and topography are depicted in the included Site Location Map (**Figure 1**), and a view of the Site and 50-foot border are shown on the attached Site Map (**Figure 2**).

2. GEOLOGIC ASSESSMENT

2.1 COMPONENTS OF REPORT

In accordance with the Instructions to Geologists, the attached GA form includes the following attachments or documentation:

- Soils description
- Site geologic map
- Stratigraphic column
- Geologic assessment table

- Narrative description of site geology

The Geologic Assessment Form TCEQ-0585, (Rev. 2-11-15), Stratigraphic Column, and the Geologic Assessment Table have been completed for the Site and are attached.

2.2 REVIEW OF EXISTING INFORMATION

A desktop review was performed of available information, including:

- U.S.D.A. Soil Survey of Bexar County, Texas (web-based viewer).
- U.S. Geological Survey (U.S.G.S.) 7.5 Minute Quadrangle Maps, Helotes (2016),
- TCEQ Edwards Aquifer Map Viewer (web-based viewer),
- Geologic Atlas of Texas, San Antonio Sheet,
- Flood Insurance Rate Maps (FIRM) from the Federal Emergency Management Agency (FEMA),

3. DESCRIPTION OF STUDY AREA

3.1 SOILS

According to the National Resource Conservation Service Web Soil Survey (USDA, 2023), the soils at the Site consist of the Eckrant-Rock Outcrop and the Eckrant cobbly clay. The Eckrant series consists of thin cobble sandy clay at surface that are very well drained, moderately slowly permeable, and are very shallow to shallow over indurated limestone. These nearly level to very steep soils formed in residuum derived from limestone and occur on summits, shoulders, and backslopes of ridges on dissected plateaus. A copy of the Web Soil Survey Map with a superimposed Site boundary is attached (**Figure 3**).

3.2 TOPOGRAPHY

According to the U.S.G.S. 7.5-Minute Quadrangle Map, Helotes, Texas Quadrangle Map (2016), the project Site elevation is approximately 1,300 feet above mean sea level, and the Site is generally flat. The 7.5-minute topographic quadrangle and Site location are depicted on **Figure 1**.

3.3 GEOLOGY

Regional Geology

According to the Geologic Atlas of Texas San Antonio Sheet, the Site is situated over the Edwards Limestone Formation (Ked). The Edwards Limestone Formation is described as 20 to 350 feet of highly fractured and thickly bedded to massive limestone or dolomite, with minor shale, clay, and siliceous limestone. (TWDB, 2003), and correlates as the Edwards Aquifer in the subsurface. A copy of the Geologic Map with site location is depicted on F**igure 4**.

In Central Texas, the Balcones Fault Zone, a belt of northeast-trending, downthrown, normal faults, has created hydrologic connectivity between exposed limestone formations at the surface (Edwards Limestone), and the Edwards Aquifer in the subsurface. Blocks of Edwards and associated limestone exposed at the surface on the west side of the fault zone are connected to downthrown blocks of Edwards and associated limestone in the subsurface on the east side of the faults, resulting in the communication of groundwater from the exposed blocks of the Edwards and associated limitations to the Edwards Aquifer in the subsurface. The Edwards Aquifer is an important underground karst aquifer which supplies drinking water to local municipalities, and is characterized by large-diameter secondary porosity, fracture porosity, and high velocity, fracture- and conduit-dominated flow characteristics. The project area is in the southernmost segment of the Edwards Aquifer, the San Antonio segment (TWDB, 2003).

Site Specific Geology

The San Antonio segment of the Edwards Aquifer is broken down into distinct depositional facies related to major deposition provinces that exited during early cretaceous time. The major deposition facies include the Edwards Plateau, Maverick Basin and Devils River Trend, and San Marcos Platform (TWDB, 1986). The site is situated over the San Marcos Platform and a Stratigraphic Section is included as **Figure 5**. Stratigraphic units of interest in the study area include early cretaceous aged geologic groups and formations of the Comanche Series. Major Geologic formations and groups, listed from oldest to youngest, include the Glen Rose Formation (lower confining unit), Edwards Group (A.k.a Edwards Aquifer/Edwards Limestone), Georgetown Limestone, Del Rio Clay (upper confining unit), Buda Limestone, Eagle Ford Group, and Austin Chalk. In the study, area the Georgetown limestone is considered part of the Edwards Aquifer (TWDB, 1986).

The Edwards Group/Edwards Limestone within the San Marco Platform is divided into the lower Kainer Formation and upper Person Formation, with their respective members. The Kainer Formation is described as approximately 250 feet thick and divided between three members. The three members of the Kainer Formation (listed from oldest to younger) are identified as the basal nodular member, which is a marine deposit consisting of massive, nodular wackestones; The dolomitic member which consists mostly of intertidal and tidal, burrowed and dolomitized wackestones with significant permeability, and the upper part contains leached evaporitic deposits of the Kirschberg evaporite; And the grainstone member, which is a shallow marine deposit that marks the beginning of another cycle of sedimentation started by a transgressing sea, and consists of well-cemented, miliolid grainstones with lesser quantities of mudstone (TWDB, 1986). The Site outcrops on the lower dolomitic member of the Kainer Formation as shown in **Figure 6** (USGS, 2005).

3.4 EDWARDS AQUIFER RECHARGE/TRANSISTION/CONTRIBUTION ZONE

According to the Edwards Aquifer Map Viewer, the Site is located within the Edwards Aquifer Recharge Zone (EARZ). A copy of the EARZ map with the Site identified is included as **Figure 7**.

3.5 FLOOD PRONE AREAS

According to the Federal Emergency Management Agency (FEMA) National Flood Hazards Layer online mapping of Flood Insurance Rate Maps (FIRMs), the Site is located in "Zone X", which represents mapped areas of minimal flood hazard. A copy of the FEMA FIRM map with the Site identified is included as **Figure 8**.

4. SURVEY METHODOLOGY

4.1 FIELD PROCEDURES

After reviewing the available information, a field investigation was performed to identify any geologic or manmade potential recharge features, including faults. The project area was transected on foot and around the perimeter of the fenced-in substation, as recommended in the "Instructions to Geologists" TCEQ-0585-Instructions (Rev. 10-1-04). The GA was performed on 4 October 2023, by

Mr. Kevin Wooster, P.G., with Weston Solutions, Inc. Mr. Wooster is a licensed Professional Geoscientist in the State of Texas (License No. 164).

4.2 SUMMARY OF FINDINGS

The Site is currently a pump station and the entire site is covered with paved areas or gravel and above ground features. No geologic features were identified. No potential recharge features, faults, springs, or sinkholes were identified on the Site.

The TCEQ Geological Assessment form and Table (TCEQ Form 0585) are included as **Attachment 1** of this report. Since no geologic features were identified a photographic log is not included in this report.

5. RECOMMENDATIONS

If voids (i.e. solution cavities, caves, sinkholes) that could be potential recharge features are discovered during excavation activities, construction should be halted so that an evaluation can be made of the newly discovered feature(s). Propper stormwater management and spill containment and control measures should be implemented during all phases of construction.

6. REFERENCES

University of Texas Bureau of Economic Geology. Geologic Atlas of Texas - San Antonio Sheet. Published 1974; Revised 1982.

Federal Emergency Management Agency (FEMA) Nation Flood Hazard Layer Flood Insurance Rate Map online viewer (FEMA FIRMette). Accessed 29 September 2023. https://msc.fema.gov/portal/home.

Texas Commission on Environmental Quality (TCEQ) Edwards Aquifer Map Viewer. Accessed 28 September 2023. https://tceq.maps.arcgis.com/apps/webappviewer/index.html.

TCEQ-0585-Instructions (Rev. 10-1-04), "Instructions to Geologists for Geologic Assessments on the Edwards Aquifer Recharge/Transition Zone".

Texas Water Development Board (TWDB) - Report 358, 2003. *Groundwater Availability Modeling: Northern Segment of the Edwards Aquifer, Texas*. Jones, Ian C. Ph.D., P.G. December 2003.

TWDB – Report 296, 1986. *Carbonate Geology and Hydrology of the Edwards Aquifer in the San Antonio Area, Texas*. Maclay, R.W. and Small, T.A. November 1986.

USDA (U.S. Department of Agriculture, National Resource Conservation Service) 2023. Web Soil Survey. Accessed 28 September 2023. https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx

USGS (U.S. Geological Survey). 2016. 7.5-minute quadrangle map for Helotes, Texas.

USGS, 2005. *Geologic Map of the Edwards Aquifer Recharge Zone, South -Central Texas*. 2005.

FIGURES

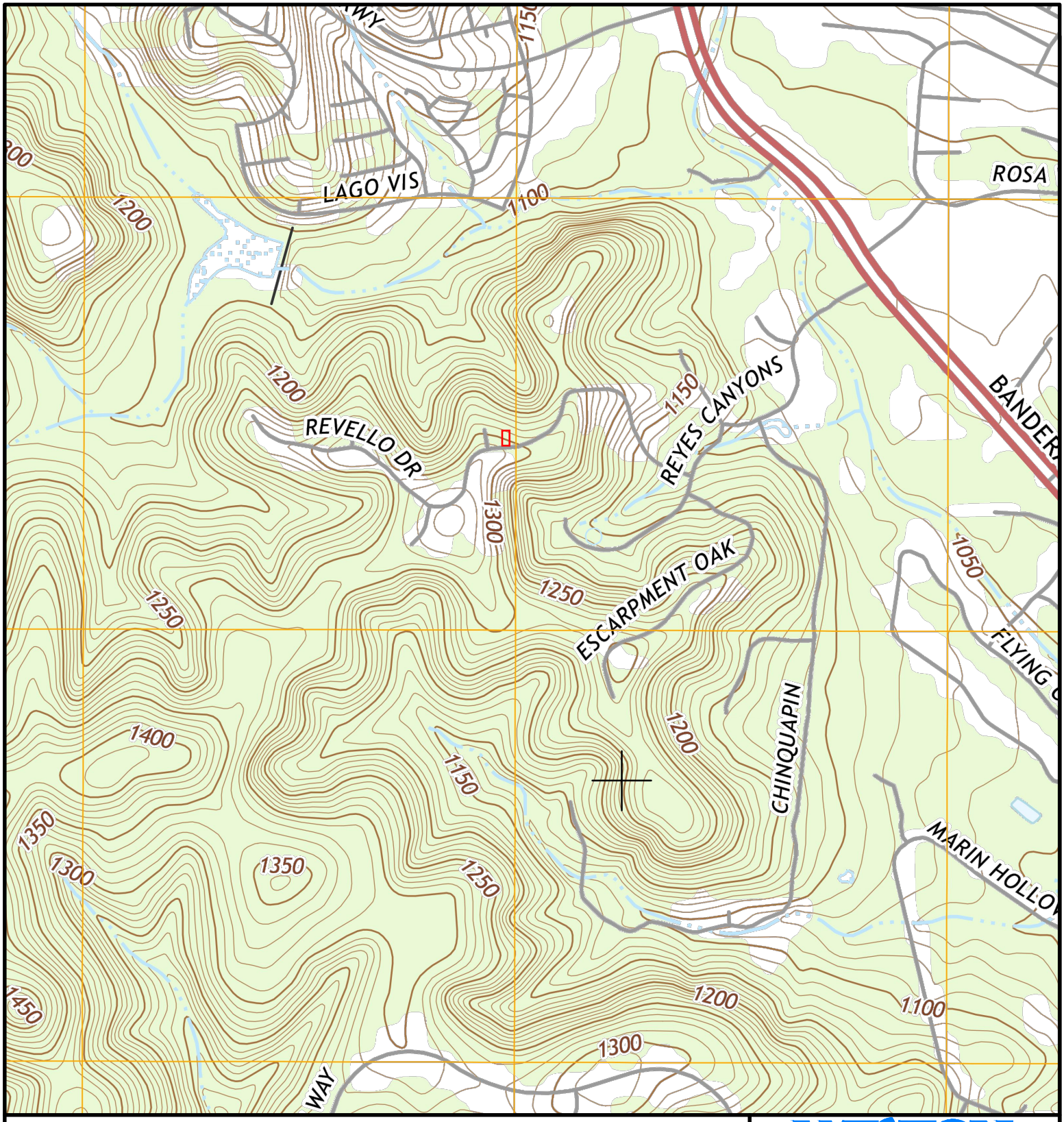
ATTACHMENTS

ATTACHMENT D

SITE GEOLOGIC MAPS

ATTACHMENT D-1

SITE LOCATION MAP



0 1000' 2000'

LEGEND

PROJECT SITE

SOURCE: U.S. GEOLOGIC SURVEY 7.5 MIN TOPOGRAPHIC QUADRANGLE
DISCLAIMER: THIS FIGURE IS PREPARED FOR REFERENCE PURPOSES AND IS NOT INTENDED FOR SURVEY OR ENGINEERING PURPOSES.

WESTON SOLUTIONS

FIGURE 1

SITE LOCATION MAP
LOS REYES PUMP STATION
HELOTES, TEXAS

DATE	PROJECT NO.	SCALE
OCT. 2023	10412.031.001.0005	AS SHOWN

SERS\CAMANORS\WESTON SOLUTIONS, INC\HERNANDEZ, DAVE – DAVEH\SATX GEO ASSESSMENTS CAD FIGURES\LOS_REYES – FIGURE 1.DWG 10/13/2023 8:42 AM CAMANORS

ATTACHMENT D-2

SITE MAP

0 400' 800'

LEGEND

PROJECT SITE

SOURCE: U.S. GEOLOGIC SURVEY 7.5 MIN TOPOGRAPHIC QUADRANGLE
DISCLAIMER: THIS FIGURE IS PREPARED FOR REFERENCE PURPOSES AND IS NOT INTENDED FOR SURVEY OR ENGINEERING PURPOSES.

WESTON SOLUTIONS

FIGURE 2

SITE MAP
LOS REYES PUMP STATION
HELOTES, TEXAS

DATE	PROJECT NO.	SCALE
OCT. 2023	10412.031.001.0005	AS SHOWN

SERS\CAMANORS\WESTON SOLUTIONS, INC\HERNANDEZ, DAVE – DAVEH\SATX GEO ASSESSMENTS CAD FIGURES\LOS_REYES – FIGURE 2.DWG 10/13/2023 8:42 AM CAMANORS

ATTACHMENT D-3

SOIL MAP

Figure 3

Soil Map—Bexar County, Texas
(Los Reyes)

Map Scale: 1:148 if printed on A portrait (8.5" x 11") sheet.

N

Meters
0 2 4 8 12

Feet
0 5 10 20 30

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 14N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Bexar County, Texas
Survey Area Data: Version 26, Aug 24, 2022

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Dec 15, 2020—Dec 25, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
TaB	Eckrant cobbly clay, 1 to 8 percent slopes	0.1	69.9%
TaD	Eckrant-Rock outcrop association, 8 to 30 percent slopes	0.0	30.1%
Totals for Area of Interest		**0.1**	**100.0%**

ATTACHMENT D-4

GEOLOGIC MAP

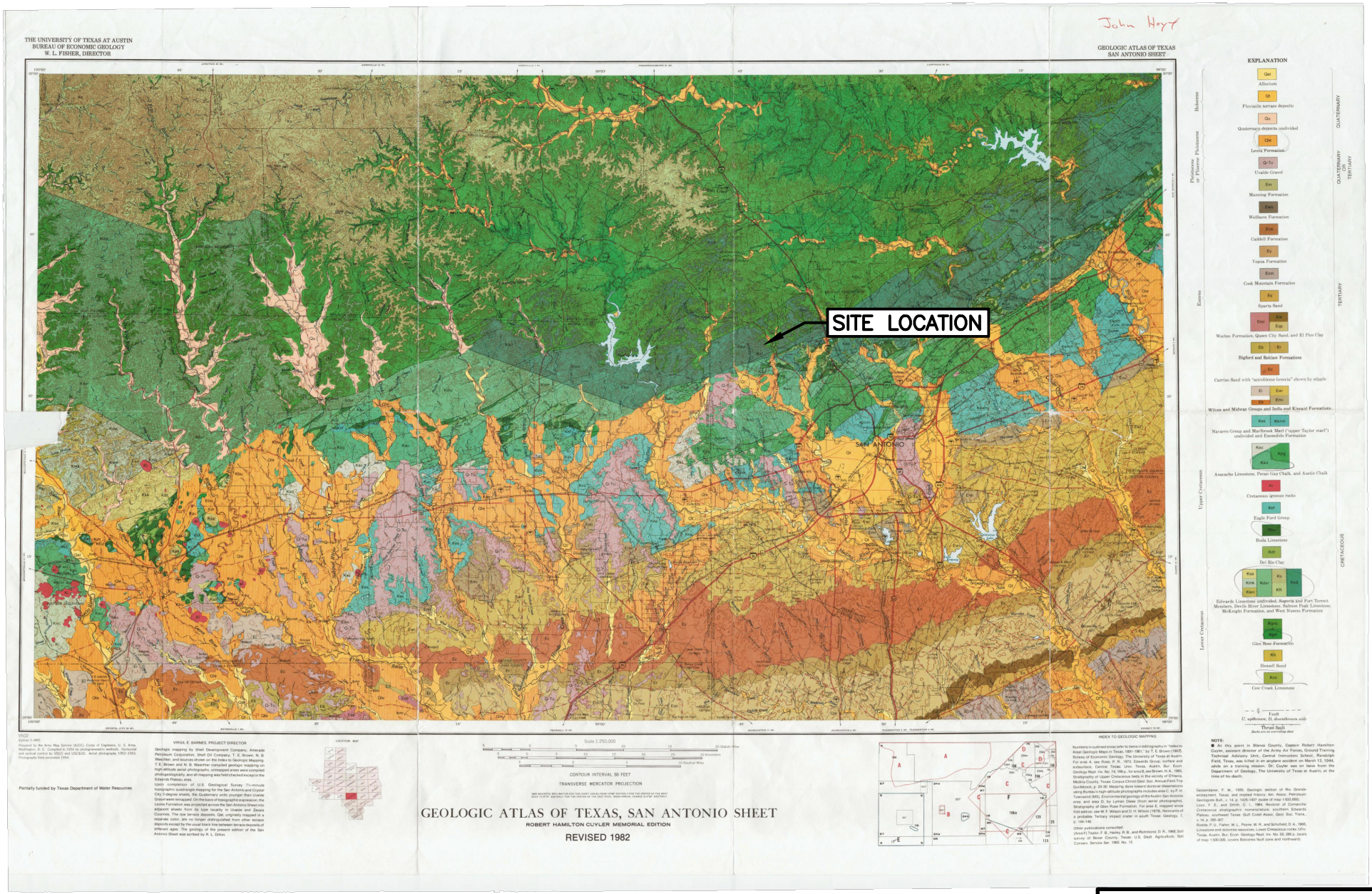
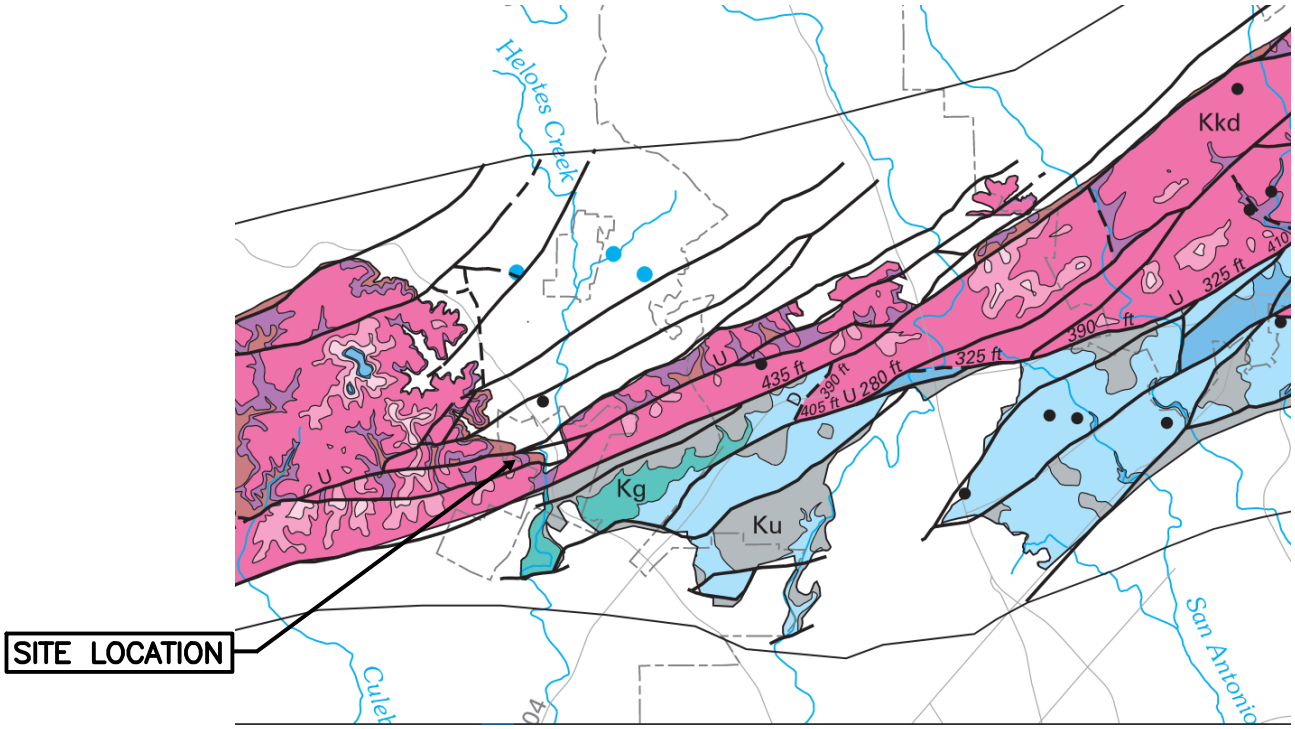


FIGURE 4

REGIONAL GEOLOGIC MAP
LOS REYES PUMP STATION
HELOTES, TEXAS

DATE	PROJECT NO.	SCALE
OCT. 2023	10412.031.001.0005	AS SHOWN

C:\USERS\CAMANORS\WESTON SOLUTIONS, INC\HERNANDEZ, DAVE – DAVEH\SATX GEO ASSESSMENTS CAD FIGURES\LOS_REYES – FIGURE 4.DWG 10/13/2023 8:42 AM CAMANORS



SAN MARCOS PLATFORM

Qal	Alluvium	Quaternary
Ku	Upper confining units, undivided	Upper Cretaceous
Knt	Navarro and Taylor Groups, undivided	
Ka	Austin Group	
Kef	Eagle Ford Group	
Kb	Buda Limestone	
Kdr	Del Rio Clay	
Kg	Georgetown Formation	Lower Cretaceous
Person Formation: Kpcm	Cyclic and marine member	
Person Formation: Kplc	Leached and collapsed member	
Person Formation: Kprd	Regional dense member	
Kainer Formation: Kkg	Grainstone member	
Kainer Formation: Kkke	Kirschberg evaporite member	
Kainer Formation: Kkd	Dolomitic member	
Kainer Formation: Kkbn	Basal nodular member	
Kgru	Upper member of the Glen Rose Limestone	

STATE OF TEXAS
GARRETT L. HAAS
GEOLOGY
15246
LICENSED
PROFESSIONAL GEOSCIENTIST
5/13/24

Source: *Geologic Map of the Edwards Aquifer Recharge Zone, South-Central Texas*. United States Geological Survey. 2005

WESTON SOLUTIONS

FIGURE 6

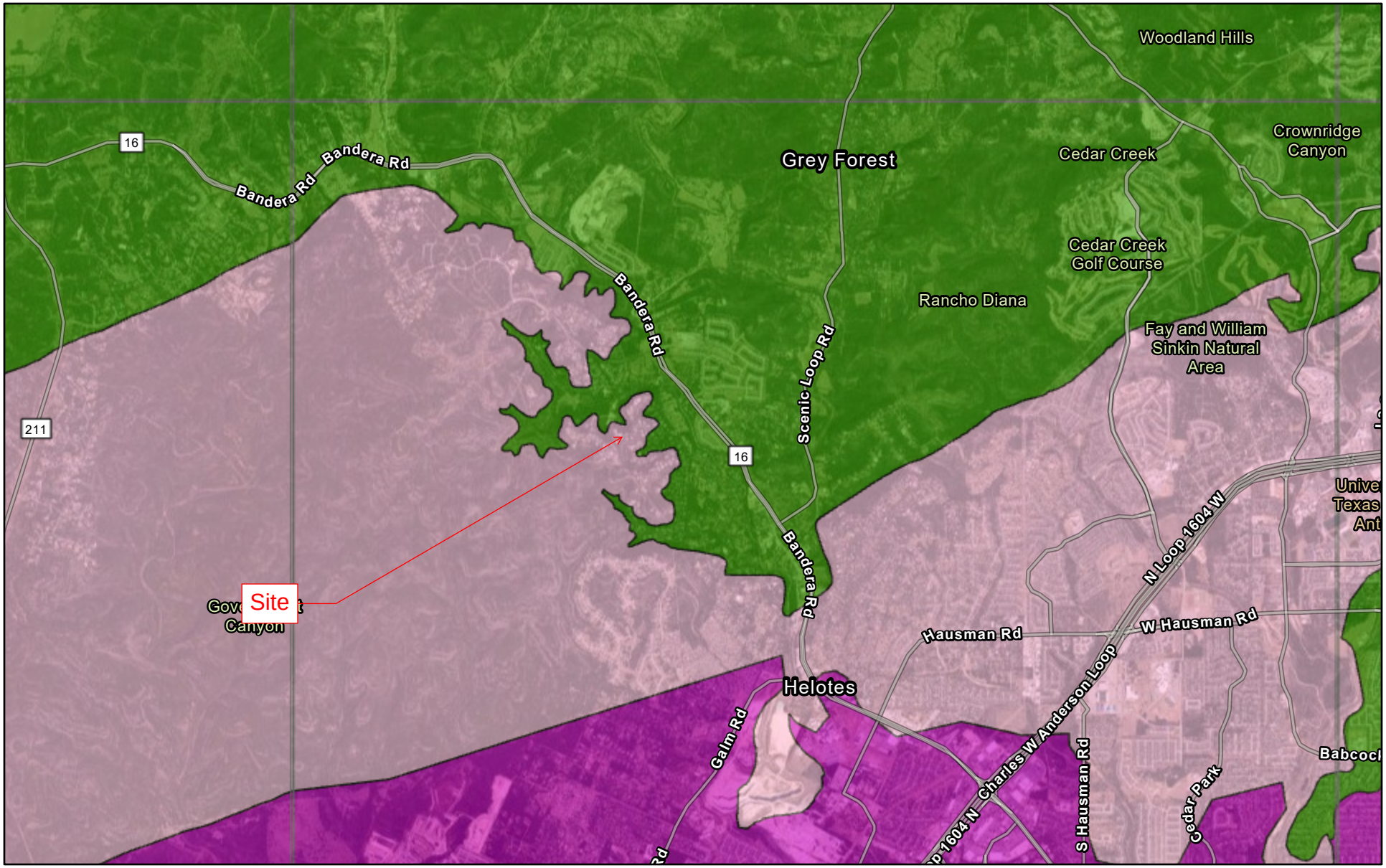
EDWARDS AQUIFER GEOLOGIC MEMBERS MAP
LOS REYES PUMP STATION
HELOTES, TEXAS

DATE	PROJECT NO.	SCALE
OCT. 2023	10412.031.001.0005	AS SHOWN

APPENDIX A

EDWARDS AQUIFER RECHARGE ZONE MAP

Figure 7 - Los Reyes
Edwards Aquifer Viewer



9/28/2023, 1:39:52 PM

Edwards Aquifer
- Recharge Zone
- Transition Zone
- Contributing Zone
- Contributing Zone within the Transition Zone
- TX Counties
- 7.5 Minute Quad Grid
- TCEQ_EDWARDS_OFFICIAL_MAPS

1:72,224

0 0.5 1 2 mi

0 0.75 1.5 3 km

Earthstar Geographics, TCEQ, Texas Parks & Wildlife, CONANP, Esri, HERE, Garmin, Foursquare, SafeGraph, GeoTechnologies, Inc, METI/NASA,

Web AppBuilder for ArcGIS

TCEQ | Earthstar Geographics | Texas Parks & Wildlife, CONANP, Esri, HERE, Garmin, Foursquare, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA |

APPENDIX B

FLOOD INSURANCE RATE MAP (FEMA)

Figure 8 - Los Reyes

National Flood Hazard Layer FIRMette

FEMA

98°42'58"W 29°35'41"N

98°42'21"W 29°35'10"N

Feet 1:6,000

0 250 500 1,000 1,500 2,000

Basemap Imagery Source: USGS National Map 2023

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 Cross Sections with 1% Annual Chance
- 17.5 Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 9/28/2023 at 3:08 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

APPENDIX C

PHOTO LOG (NOT APPLICABLE – NO GEOLOGIC FEATURES)

ABOVE GROUND STORAGE TANK (AST) FACILITY PLAN

Aboveground Storage Tank Facility Plan Application

Texas Commission on Environmental Quality

For Permanent Storage on The Edwards Aquifer Recharge and Transition Zones And Relating to 30 TAC §213.5(e), Effective June 1, 1999

To ensure that the application is administratively complete, confirm that all fields in the form are complete, verify that all requested information is provided, consistently reference the same site and contact person in all forms in the application, and ensure forms are signed by the appropriate party.

Note: Including all the information requested in the form and attachments contributes to more streamlined technical reviews.

Signature

To the best of my knowledge, the responses to this form accurately reflect all information requested concerning the proposed regulated activities and methods to protect the Edwards Aquifer. This **Aboveground Storage Tank Facility Plan Application** is hereby submitted for TCEQ review and Executive Director approval. The application was prepared by:

Print Name of Customer/Agent: Aaron Bentley, E.I.T.

Date: 9/10/2024

Signature of Customer/Agent:

Aaron Bentley Digitally signed by Aaron Bentley
DN: C=US, E=aaron.bentley@westonsolutions.com, OU="Weston Solutions, Inc.", CN=Aaron Bentley
Date: 2024.09.11 10:24:57-05'00'

Regulated Entity Name: San Antonio Water System Los Reyes

Aboveground Storage Tank (AST) Facility Information

1. Tanks and substance stored:

Table 1 - Tank and Substance Storage

AST Number	*Size (Gallons)*	*Substance to be Stored*	*Tank Material*
1	737	Diesel Fuel	Double-walled Steel Tank
2			
3			
4			

AST Number	*Size (Gallons)*	*Substance to be Stored*	*Tank Material*
5			

Total x 1.5 = 1,105.5 **Gallons**

2. ☐ The AST will be placed within a containment structure that is sized to capture one and one-half (1 1/2) times the storage capacity of the system. For facilities with more than one tank system, the containment structure is sized to capture one and one-half (1 1/2) times the cumulative storage capacity of all systems.

   ☒ **Attachment A - Alternative Methods of Secondary Containment**. Alternative methods for providing secondary containment are proposed. Specifications that show equivalent protection for the Edwards Aquifer are attached.

3. Inside dimensions and capacity of containment structure(s):

Table 2 - Secondary Containment

Length (L) (Ft.)	*Width (W) (Ft.)*	*Height (H) (Ft.)*	*L x W x H = (Ft3)*	*Gallons*
15	3.33	3.5	174.825	1,307.69

Total: 1,308 **Gallons**

4. ☒ All piping, hoses, and dispensers will be located inside the containment structure.

   ☐ Some of the piping to dispensers or equipment will extend outside the containment structure.
   - ☐ The piping will be aboveground
   - ☐ The piping will be underground

5. ☒ The containment area must be constructed of and in a material impervious to the substance(s) being stored. The proposed containment structure will be constructed of Steel; Double-walled Steel Tank.

6. ☒ **Attachment B - Scaled Drawing(s) of Containment Structure**. A scaled drawing of the containment structure that shows the following is attached:

   - ☒ Interior dimensions (length, width, depth and wall and floor thickness).
   - ☒ Internal drainage to a point convenient for the collection of any spillage.
   - ☒ Tanks clearly labeled.
   - ☒ Piping clearly labeled.
   - ☒ Dispenser clearly labeled.

Site Plan Requirements

Items 7 - 18 must be included on the Site Plan.

7. ☒ The Site Plan must have a minimum scale of 1" = 400'.

   Site Plan Scale: 1" = 400'.

8. 100-year floodplain boundaries:

   ☐ Some part(s) of the project site is located within the 100-year floodplain. The floodplain is shown and labeled.

   ☐ No part of the project site is located within the 100-year floodplain.

   ☒ The 100-year floodplain boundaries are based on the following specific (including date of material) sources(s): Panel 0205.

9. ☒ The layout of the development is shown with existing and finished contours at appropriate, but not greater than ten-foot contour intervals. Show lots, recreation centers, buildings, roads, etc.

   ☐ The layout of the development is shown with existing contours. Finished topographic contours will not differ from the existing topographic configuration and are not shown.

10. All known wells (oil, water, unplugged, capped and/or abandoned, test holes, etc.):

    ☐ There are _____ (#) wells present on the project site and the locations are shown and labeled. (Check all of the following that apply):

    ☐ The wells are not in use and have been properly abandoned.

    ☐ The wells are not in use and will be properly abandoned.

    ☐ The wells are in use and comply with 16 TAC § 76.

    ☒ There are no wells or test holes of any kind known to exist on the project site.

11. Geologic or manmade features which are on the site:

    ☐ All sensitive geologic or manmade features identified in the Geologic Assessment are shown and labeled.

    ☒ No sensitive geologic or manmade features were identified in the Geologic Assessment.

    ☐ **Attachment C - Exception to the Geologic Assessment**. A request and justification for an exception to a portion of the Geologic Assessment is attached.

12. ☒ The drainage patterns and approximate slopes anticipated after major grading activities.

13. ☒ Areas of soil disturbance and areas which will not be disturbed.

14. ☒ Locations of major structural and nonstructural controls. These are the temporary and permanent best management practices.

15. ☒ Locations where soil stabilization practices are expected to occur.

16. ☐ Surface waters (including wetlands).

    ☒ N/A

17. ☐ Locations where stormwater discharges to surface water or sensitive features.

    ☒ There will be no discharges to surface water or sensitive features.

18. ☒ Legal boundaries of the site are shown.

Best Management Practices

19. ☒ Any spills must be directed to a point convenient for collection and recovery. Spills from storage tank facilities must be removed from the controlled drainage area for disposal within 24 hours of the spill.

    ☒ In the event of a spill, any spillage will be removed from the containment structure within 24 hours of the spill and disposed of properly.

    ☐ In the event of a spill, any spillage will be drained from the containment structure through a drain and valve within 24 hours of the spill and disposed of properly. The drain and valve system are shown in detail on the scaled drawing.

20. ☒ All stormwater accumulating inside the containment structure will be disposed of through an authorized waste disposal contractor.

    ☐ Containment area will be covered by a roof.

    ☐ Containment area will not be covered by a roof.

    ☐ A description of the alternate method of stormwater disposal is submitted for the executive director's review and approval and is attached.

21. ☒ **Attachment D - Spill and Overfill Control**. A site-specific description of the methods to be used at the facility for spill and overfill control is attached.

22. ☒ **Attachment E - Response Actions to Spills**. A site-specific description of the planned response actions to spills that will take place at the facility is attached.

Administrative Information

23. A Water Pollution Abatement Plan (WPAP) is required for construction of any associated commercial, industrial or residential project located on the Recharge Zone.

    ☒ The WPAP application for this project was approved by letter dated May 24, 2024. A copy of the approval letter is attached at the end of this application.

    ☐ The WPAP application for this project was submitted to the TCEQ on _____, but has not been approved.

    ☐ A WPAP application is required for an associated project, but it has not been submitted.

☐ There will be no building or structure associated with this project. In the event a building or structure is needed in the future, the required WPAP will be submitted to the TCEQ.

☐ The proposed AST is located on the Transition Zone and a WPAP is not required. Information requested in 30 TAC 213.5 subsection (b) (4)(B) and (C) and (5) is provided with this application. (Forms TCEQ-0600 Permanent Stormwater Section and TCEQ-0602 Temporary Stormwater Section or Stormwater Pollution Prevention Plan/SW3P).

24. ☒ This facility is subject to the requirements for the reporting and cleanup of surface spills and overfills pursuant to 30 TAC 334 Subchapter D relating to Release Reporting and Corrective Action.

25. ☒ Submit one (1) original and one (1) copy of the application, plus additional copies as needed for each affected incorporated city, groundwater conservation district, and county in which the project will be located. The TCEQ will distribute the additional copies to these jurisdictions. The copies must be submitted to the appropriate regional office.

26. ☒ Any modification of this AST Facility Plan application will require executive director approval, prior to construction, and may require submission of a revised application, with appropriate fees.

ATTACHMENT A

ALTERNATIVE METHODS OF SECONDARY CONTAINMENT

ALTERNATIVE SECONDARY CONTAINMENT METHODS

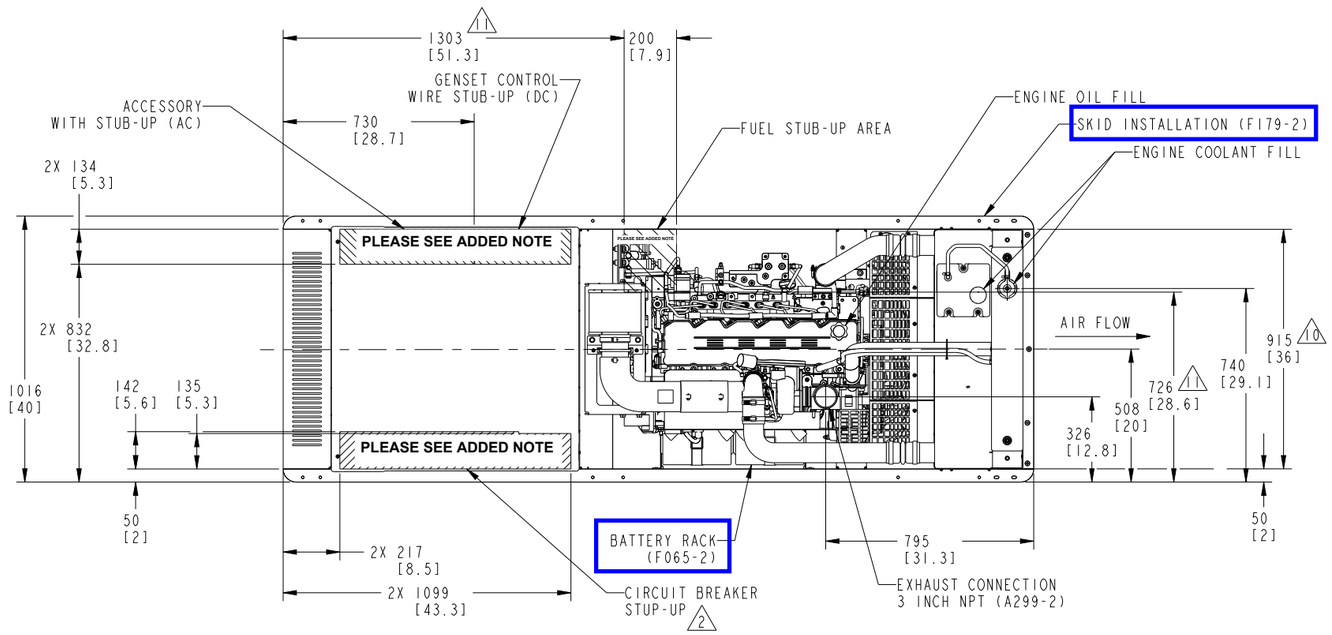
The secondary containment method to be used will be a double-walled steel tank. In the event of a spill or overflow, the fuel would be contained by the second tank wall. Additionally, in the event of a leak from the primary tank, the fuel will be contained by the secondary tank wall.

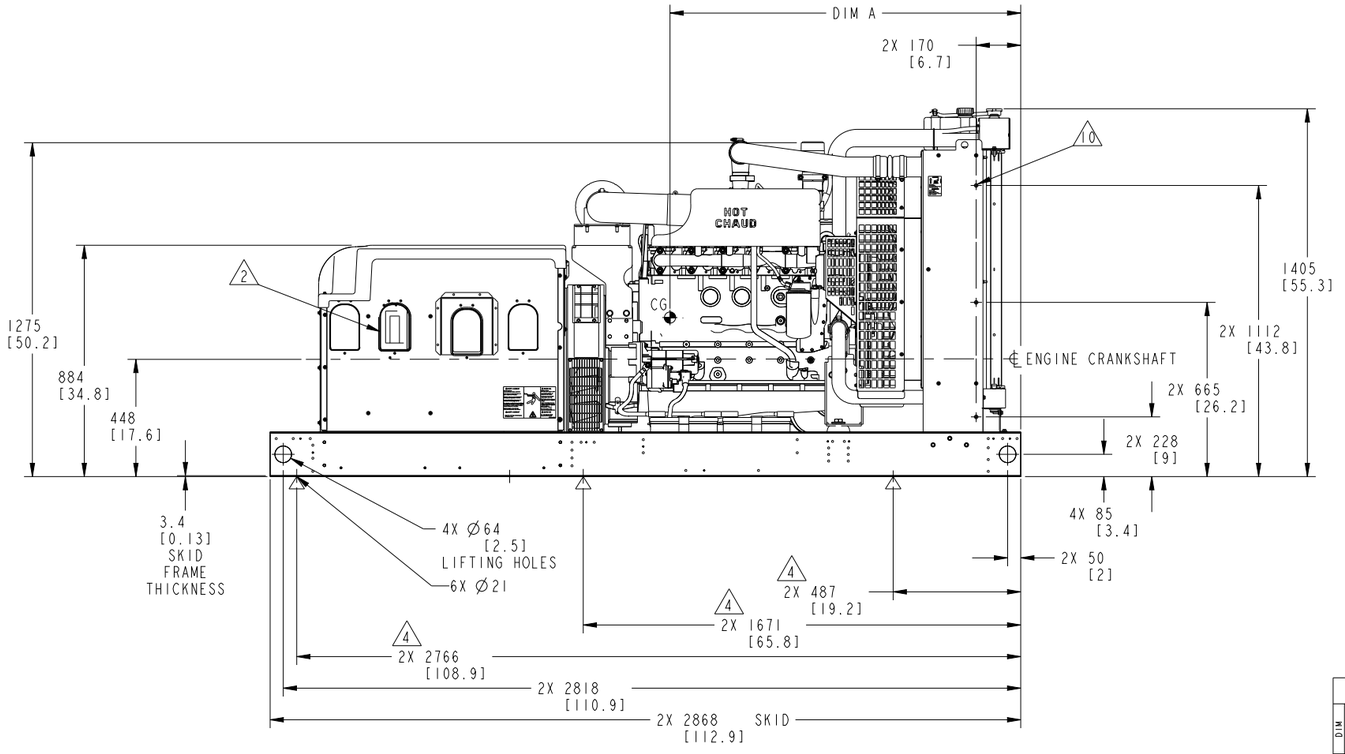
ATTACHMENT B

SCALED DRAWING(S) OF CONTAINMENT STRUCTURE

PTC® Creo® Parametric

REL NO	REV	NO	REVISION	DWN	CKD	APVD	DATE
ECO-176532	A	1	PRODUCTION RELEASE	DAH	DAH	GILLETT	04APR18





NOTES:

1. ALL DIMENSIONS ARE REFERENCE, UNLESS SPECIFICALLY TOLERANCED.
2. REFER TO CIRCUIT BREAKER OUTLINE DRAWING FOR ELECTRICAL STUB-UP AREA FOR SPECIFIC BREAKERS.
3. CONTROL INTERFACE CONNECTIONS SHOULD BE MADE WITH FLEXIBLE CONNECTIONS.
4. Ø21 [0.8] HOLES MARKED BY △ FOR SECURING TO MOUNTING SURFACE. HOLES IN GENERATOR SET BASE AT THESE LOCATIONS ARE INTENDED FOR ATTACHMENT TO THE MOUNTING SURFACE. IF GENERATOR SET IS MOUNTED ON A FUEL TANK, REFER TO FUEL TANK OUTLINE DRAWING FOR LOCATION OF TANK ATTACHMENT POINTS.
5. REFER TO GENSET OR FUEL TANK FOUNDATION OUTLINES FOR ELECTRICAL, FUEL AND OTHER FOUNDATION SPECIFICS.
6. GENSET SUPPLIED WITH FLEXIBLE FUEL LINES THAT CAN BE CONNECTED TO ENGINE INTERFACE POINTS.
   - 6.1 FUEL SUPPLY LINE: 670 [26] LONG WITH 1/4 INCH NPT MALE TERMINATION.
   - 6.2 FUEL RETURN LINE: 930 [37] LONG WITH 1/4 INCH NPT MALE TERMINATION.
7. OIL DRAIN EXTENSION: 5/8 INCH HOSE I.D.
8. FOR IBC SEISMIC CERTIFIED INSTALLATIONS, SEE GENSET IBC SEISMIC INSTALLATION REQUIREMENTS DRAWING.
9. DRY WEIGHT = WET WEIGHT - 38.5 KG (85 LB).
10. 6X Ø7.3 HOLES FOR CUSTOMER-SUPPLIED COOLING EXHAUST AIR DUCT ADAPTER.
11. FUEL SUPPLY AND RETURN STUB-UP AREA.

Note: This drawing is not to be used for stub up dimensional information. Please refer to drawing# A060C864 for exact stub up dimensional information.

TABULATION				
ALT DATA SHEET #	DIM A	DIM B	GENSET WET WEIGHT	
			KG	LB
ADS-208	1414	504	1340	2955
ADS-209	1443	502	1390	3064
ADS-210	1470	500	1442	3179
ADS-211	1493	499	1480	3262
ADS-212	1526	495	1583	3491
ADS-213	1526	495	1583	3491

C125D6D, C150D6D, C175D6D, C200D6D

UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN MILLIMETERS
DIM: X ±1; .X ±0.8; .XX± 0.38
HOLE: 0.00- 4.99 +0.15/-0.08; 5.00- 9.99 +0.20/-0.10; 10.00-17.49 +0.25/-0.13; 17.50-24.99 +0.30/-0.13
ANG TOL ± 1.0°
SCALE 3:32
SIM TO .
DO NOT SCALE PRINT

DWN D HOFMEISTER
CKD D HOFMEISTER
APVD D GILLETT
DATE 04APR18
FOR INTERPRETATION OF DIMENSIONING AND TOLERANCING, SEE ASME Y14.5-2009
FIRST USED ON ARROW

Cummins®
CUMMINS POWER GENERATION
OUTLINE, GENSET
SITE CODE PGF
ENG SIZE D
A060C858
CAD SHEET 1 OF 2

Drawing Name: A060C859 Revision: A
Part Name: A060C858 Revision: A
ECO-176532 Sheet 1 of 3

PTC® Creo® Parametric

REL NO	REV	NO	REVISION	DWN	CKD	APVD	DATE
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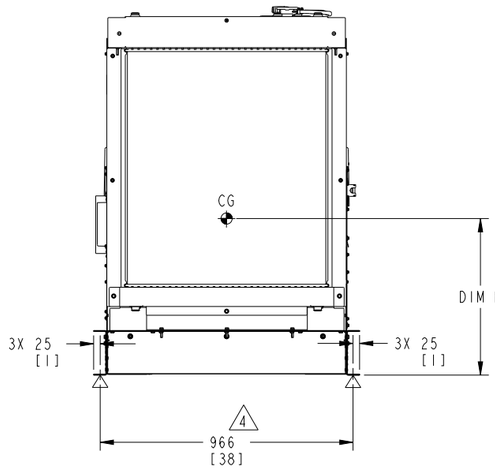
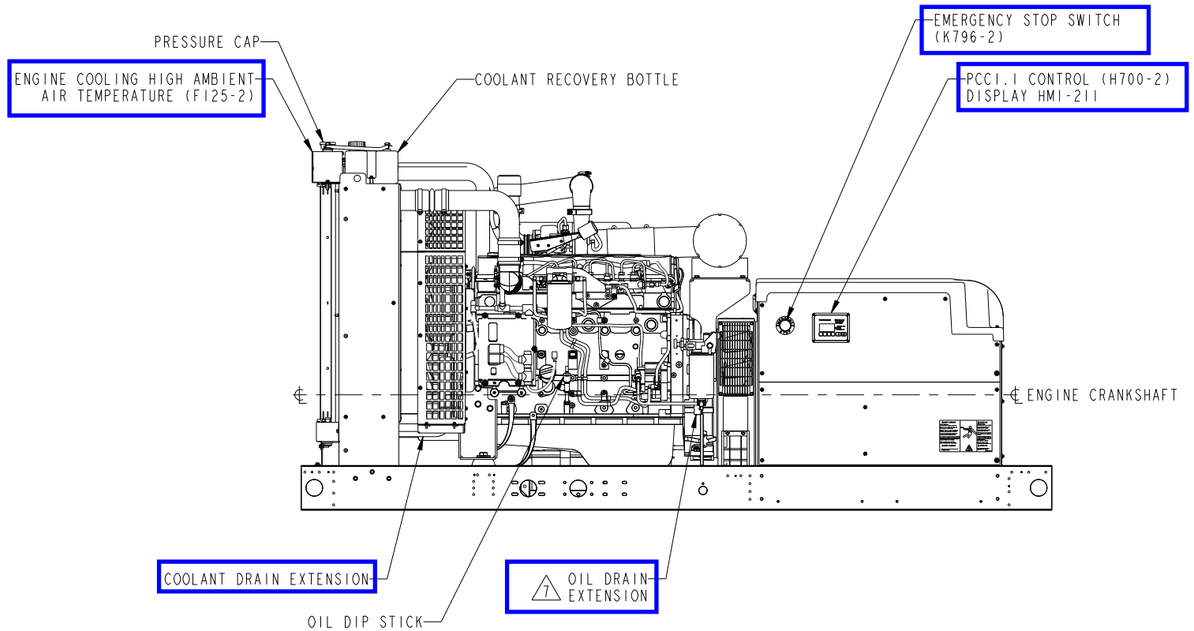




UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN MILLIMETERS

DIM: X ±1 | .X ±0.8 | .XX± 0.38

HOLE: 0.00- 4.99 +0.15/-0.08 | 5.00- 9.99 +0.20/-0.10 | 10.00-17.49 +0.25/-0.13 | 17.50-24.99 +0.30/-0.13

ANG TOL ± 1.0°

SCALE 3:32

SIM TO .

DO NOT SCALE PRINT

FOR INTERPRETATION OF DIMENSIONING AND TOLERANCING, SEE ASME Y14.5-2009

FIRST USED ON ARROW

DWN	D HOFMEISTER
CKD	D HOFMEISTER
APVD	D GILLETT
DATE	04APR18

SITE CODE PGF

CUMMINS POWER GENERATION

OUTLINE, GENSET

DWG SIZE D | A060C858 | CAD SHEET 2 of 2

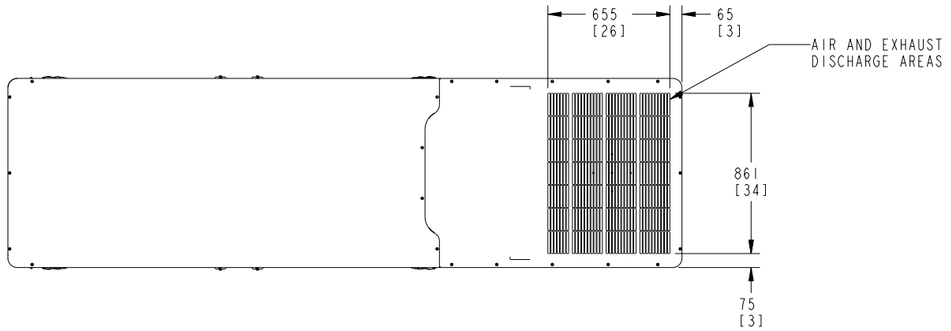
Drawing Name: A060C859 Revision: A
Part Name: A060C858 Revision: A
ECO-176532 Sheet 2 of 3

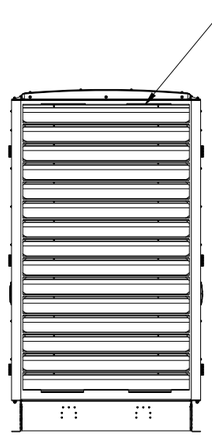
PTC® Creo® Parametric

REL NO	REV	NO	REVISION	DWN	CKD	APVD	DATE
ECO-181040	B	1	VIEW FROM AIR OUTLET SIDE WAS AIR OUTLET VIEW	DAH	DAH	GILLETT	19OCT18
		2	ADD DISCHARGE DIMENSIONS TO TOP VIEW	DAH	DAH	GILLETT	19OCT18

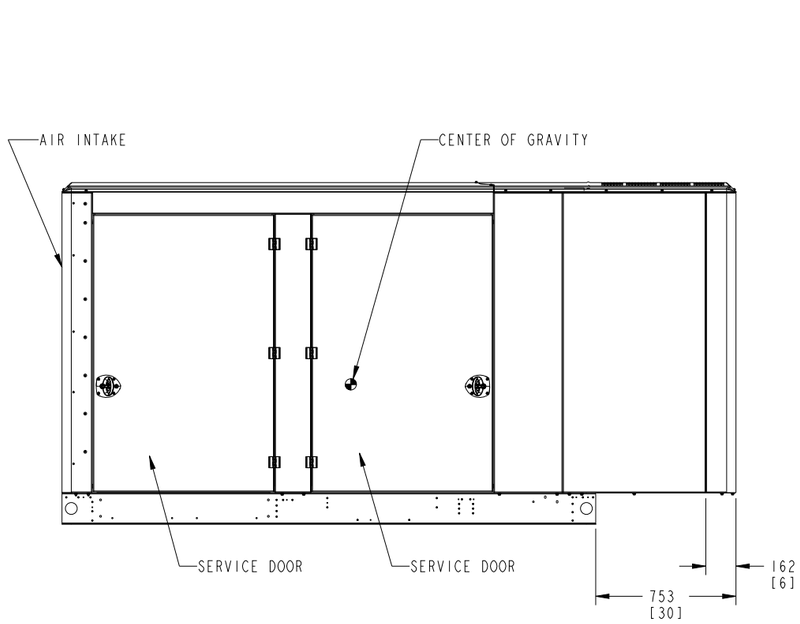
NOTES:

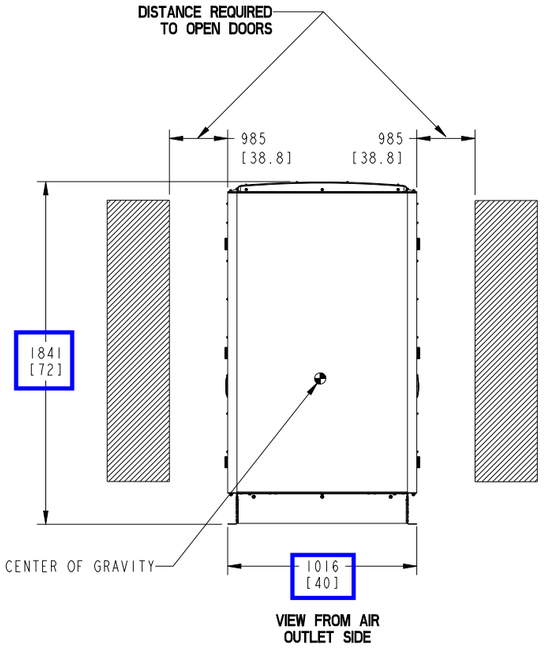
1. DIM [] IN INCHES
2. WITH F231-2 ENCLOSURE INSTALLED THE GENERATOR SET WEIGHT INCREASES BY 179 KG (395 LBS).
   WITH F217-2 ENCLOSURE INSTALLED THE GENERATOR SET WEIGHT INCREASES BY 195 KG (429 LBS).
3. WITH F231-2 INSTALLED THE CENTER OF GRAVITY OF THE GENERATOR SET SHIFTS APPROXIMATELY 42 MM (1.7 INCH) TOWARDS THE AIR DISCHARGE END AND 61MM (2.4 INCH HIGHER.
   WITH F217-2 INSTALLED THE CENTER OF GRAVITY OF THE GENERATOR SET SHIFTS APPROXIMATELY 57 MM (2.2 INCH) TOWARDS THE AIR DISCHARGE END AND 61MM (2.4 INCH) HIGHER.
   CHANGES IN CENTER OF GRAVITY LISTED ARE FOR GENERATOR SETS WITHOUT SUBBASE FUEL TANKS.
   REFER TO OPEN GENERATOR SET OUTLINE DRAWING FOR CG LOCATIONS PRIOR TO ENCLOSURE INSTALLATION.



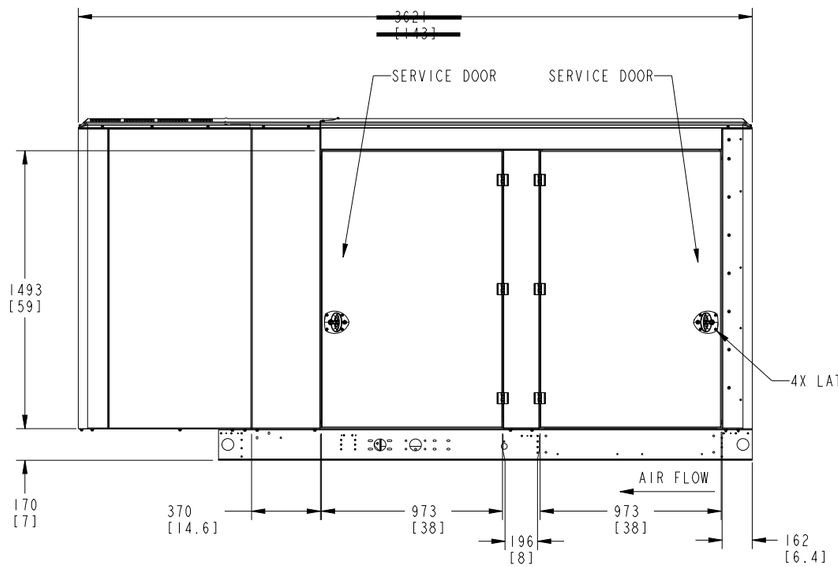


AIR INTAKE VIEW





VIEW FROM AIR OUTLET SIDE



C125D6D, C150D6D, C175D6D, C200D6D

F231-2 ENCLOSURE CONFIGURATION

UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN MILLIMETERS		SIM TO A055V240	DWN D HOFMEISTER	CUMMINS POWER GENERATION	
DIM: X ±1, .X ±0.8, .XX± 0.38 — TOLE: 0.00- 4.99 +0.15/-0.08; 5.00- 9.99 +0.20/-0.10; 10.00-17.49 +0.25/-0.13; 17.50-24.99 +0.30/-0.13		DO NOT SCALE PRINT	CKD D HOFMEISTER		
			APVD D GILLETT	OUTLINE, ENCLOSURE	
			DATE 29MAR18	SITE CODE	
ANG TOL ± 1.0°	SCALE 1/15	THIS DOCUMENT (AND THE INFORMATION SHOWN THEREON) IS CONFIDENTIAL AND PROPRIETARY AND SHALL NOT BE DISCLOSED TO OTHERS IN HARD COPY OR ELECTRONIC FORM, REPRODUCED BY ANY MEANS, OR USED FOR ANY PURPOSE WITHOUT WRITTEN CONSENT OF CUMMINS INC.	FOR INTERPRETATION OF DIMENSIONING AND TOLERANCING, SEE ASME Y14.5-2009 FIRST USED ON ARROW	PGF	DWG SIZE D — A060C609 — CAD SHEET 1 OF 2

PTC® Creo® Parametric

REL NO	REV	NO	REVISION	DWN	CKD	APVD	DATE
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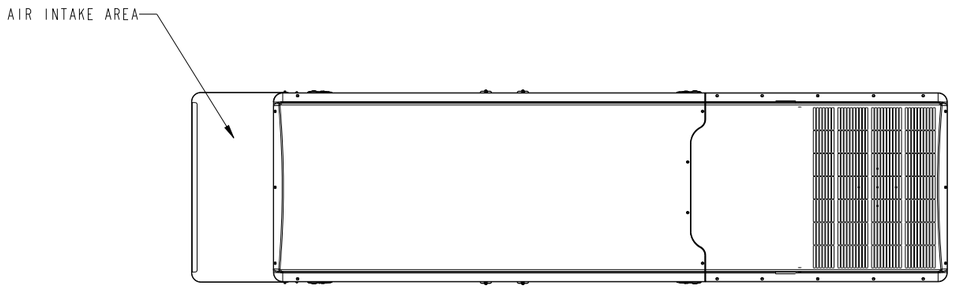
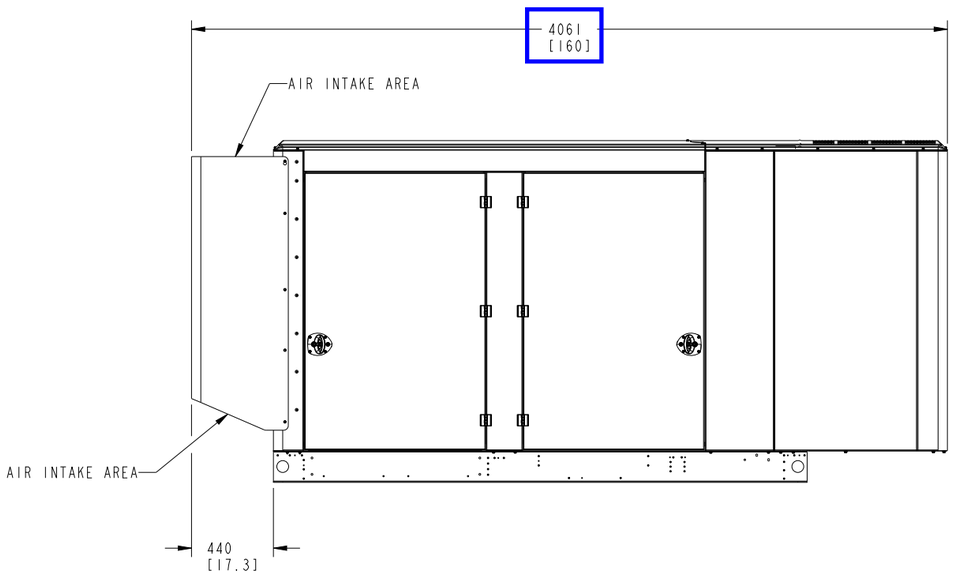
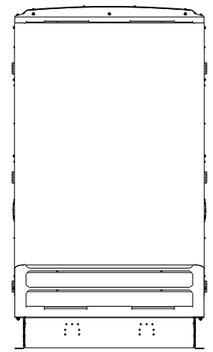


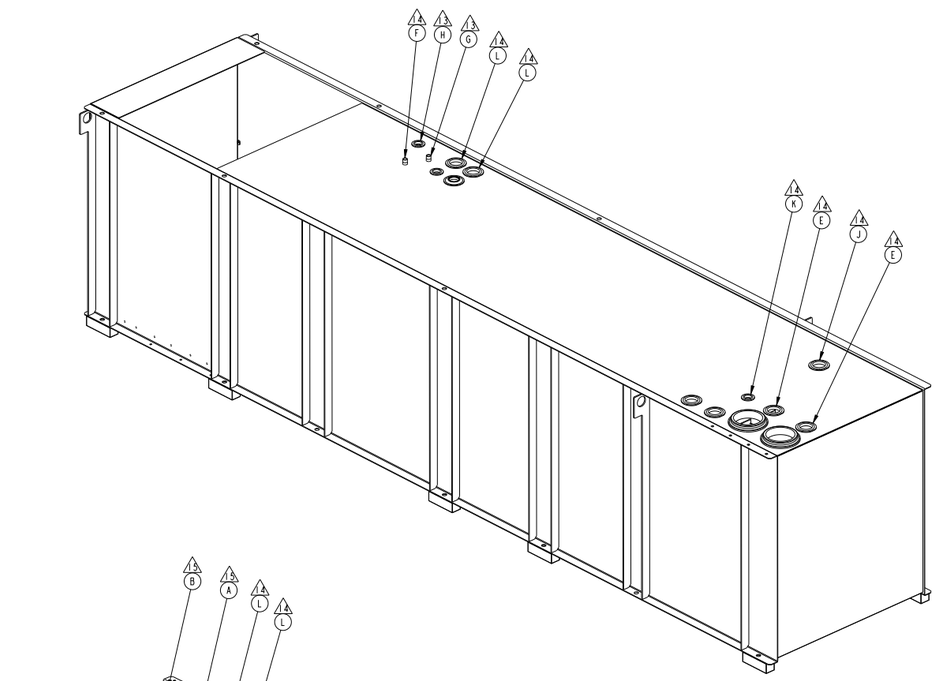


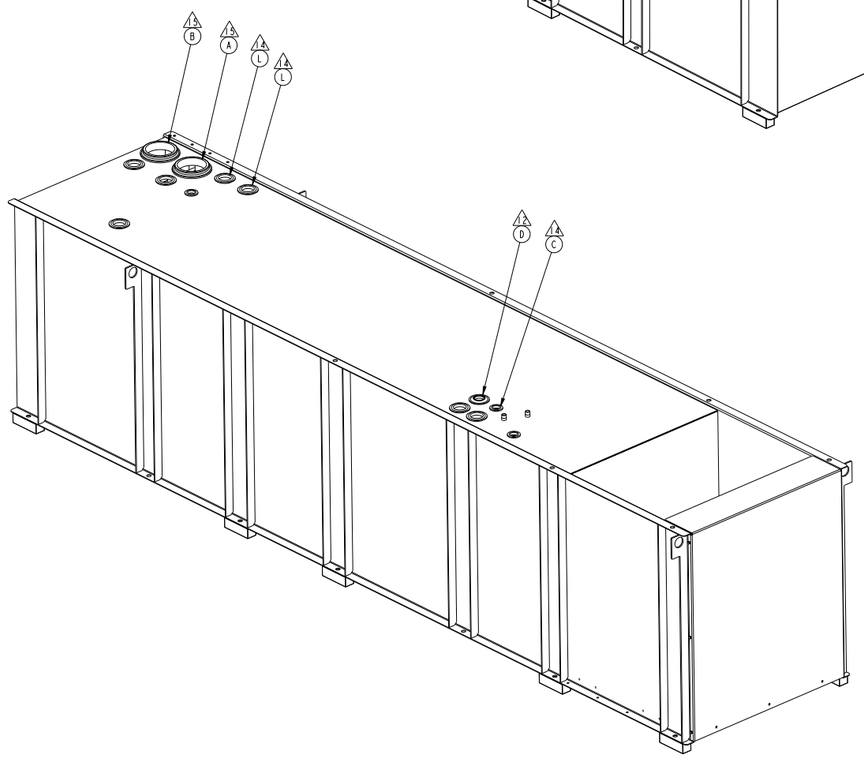


F217-2 ENCLOSURE CONFIGURATION

REFER TO PAGE 1 (F231-2 ENCLOSURE) FOR OTHER F217-2 ENCLOSURE DIMENSIONS

UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN MILLIMETERS	SIM TO A055V240	DWN D HOFMEISTER	Cummins®	CUMMINS POWER GENERATION	
DIM: X ±1, .X ±0.8, .XX± 0.38 — TOLE: 0.00- 4.99 +0.15/-0.08; 5.00- 9.99 +0.20/-0.10; 10.00-17.49 +0.25/-0.13; 17.50-24.99 +0.30/-0.13	DO NOT SCALE PRINT	CKD D HOFMEISTER		OUTLINE, ENCLOSURE	
		APVD D GILLETT	SITE CODE		
		DATE 29MAR18			
ANG TOL ± 1.0°	SCALE 1/15	THIS DOCUMENT (AND THE INFORMATION SHOWN THEREON) IS CONFIDENTIAL AND PROPRIETARY AND SHALL NOT BE DISCLOSED TO OTHERS IN HARD COPY OR ELECTRONIC FORM, REPRODUCED BY ANY MEANS, OR USED FOR ANY PURPOSE WITHOUT WRITTEN CONSENT OF CUMMINS INC.	FOR INTERPRETATION OF DIMENSIONING AND TOLERANCING, SEE ASME Y14.5-2009	FIRST USED ON ARROW	PGF	DWG SIZE D A060C609	CAD SHEET 2 of 2





FUEL TANK COMPONENT LIST	
A	PRIMARY EMERGENCY VENT
B	SECONDARY EMERGENCY VENT
C	LOW FUEL SWITCH
D	FUEL GAUGE
E	NORMAL VENT
F	ENGINE SUPPLY
G	ENGINE RETURN
H	RUPTURE BASIN SWITCH
J	FUEL FILL
K	HIGH FUEL ALARM
L	SPARE

NOTES:

1. TANKS ARE UL142 LISTED, SECONDARY CONTAINMENT FUEL TANK. REFER TO TANK LABELS AND LOCAL CODE TO DETERMINE VENTING REQUIREMENTS FOR BOTH COMPARTMENTS.

2. SUBBASE FUEL TANK MOUNTING. EXCESSIVE TWISTING OF THE FUEL TANK MAY RESULT IN STRUCTURAL FAILURE OF THE TANK. TO ENSURE THE INSTALLATION DOES NOT EXCESSIVELY TWIST THE FUEL TANK, THE FOLLOWING PROCEDURE MUST BE OBSERVED:

   2.1 REFER TO APPLICATION MANUAL T030 FOR GENERAL SET MOUNTING GUIDELINES.

   2.2 AFTER PLACING SET ON FOUNDATION, VERIFY ALL FOUR MOUNTING PADS CONTACT FOUNDATION.

   2.3 THERE ARE SHIMS ATTACHED TO EACH FUEL TANK. THESE ARE INTENDED TO FILL ANY GAP BETWEEN THE MOUNTING PADS AND FOUNDATION.

   2.4 INSERT THE MAXIMUM HEIGHT STACK OF SHIMS THAT WILL SLIDE INTO THE GAP.

   2.5 TIGHTEN TANK HOLD DOWN MOUNTING FASTENERS.

3. FOR IBC SEISMIC CERTIFIED INSTALLATIONS, SEE GENSET IBC SEISMIC INSTALLATION REQUIREMENTS DRAWING.

4. FUEL TANK HAS A FLANGE THICKNESS OF UP TO 10 mm [0.394 in], ALLOW EXTRA LENGTH ON HARDWARE FOR UNEVENNESS OF MOUNTING SURFACE.

5. LIFTING BASE OF FUEL TANK PERIMETER IS SHOWN. FOUNDATION SHOULD BE EXTENDED BEYOND THIS PERIMETER. SEE T-030 APPLICATION MANUAL FOR FURTHER INSTRUCTIONS.

6. REMOVABLE STUB-UP ACCESS PANEL.

7. MAINTAIN MIN 51 mm [2] CLEARANCE ABOVE E-VENT.

8. WEIGHT AND CENTER OF GRAVITY INFORMATION IS ESTIMATED AND CHANGES WITH TANK FEATURE INSTALLATION.

9. DRY WEIGHT REFERS TO TANK WITH NO LIQUID. WET WEIGHT REFERS TO TANK FILLED WITH DIESEL TO MAXIMUM USEABLE VOLUME.

10. NOMINAL TANK VOLUME REFERS TO OVERALL TANK VOLUME. USEABLE TANK VOLUME REFERS TO MAXIMUM FILL VOLUME OF TANK.

11. CENTER OF GRAVITY DIMENSIONS REFER TO A DRY TANK.

12. HEIGHT FROM TANK SURFACE TO TOP OF RISER IS 9.52 MM [0.37]

13. HEIGHT FROM TANK SURFACE TO TOP OF RISER IS 21.52 MM [0.84]

14. HEIGHT FROM TANK SURFACE TO TOP OF RISER IS 7.94 MM [0.31]

15. HEIGHT FROM TANK SURFACE TO TOP OF RISER IS 26.97 MM [1.06]

Cummins Inc.		
DIMENSIONS ARE IN: MILLIMETERS [ ] ARE IN: -	SIZE: A0	SCALE: 1/16
DIMENSIONING AND TOLERANCING PER: ASME Y14.5-2009	THIRD ANGLE PROJECTION	CAD SYSTEM: PTC® Creo® Parametric

Part Number: **A057P198** Part Revision: **D**

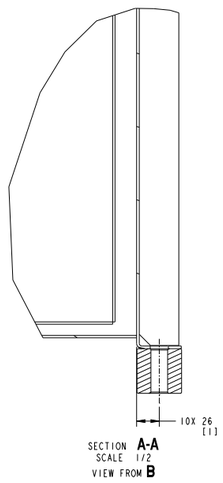
Part Name: **OUTLINE,TANK**

Drawing Category: **Outline** State: **Released**

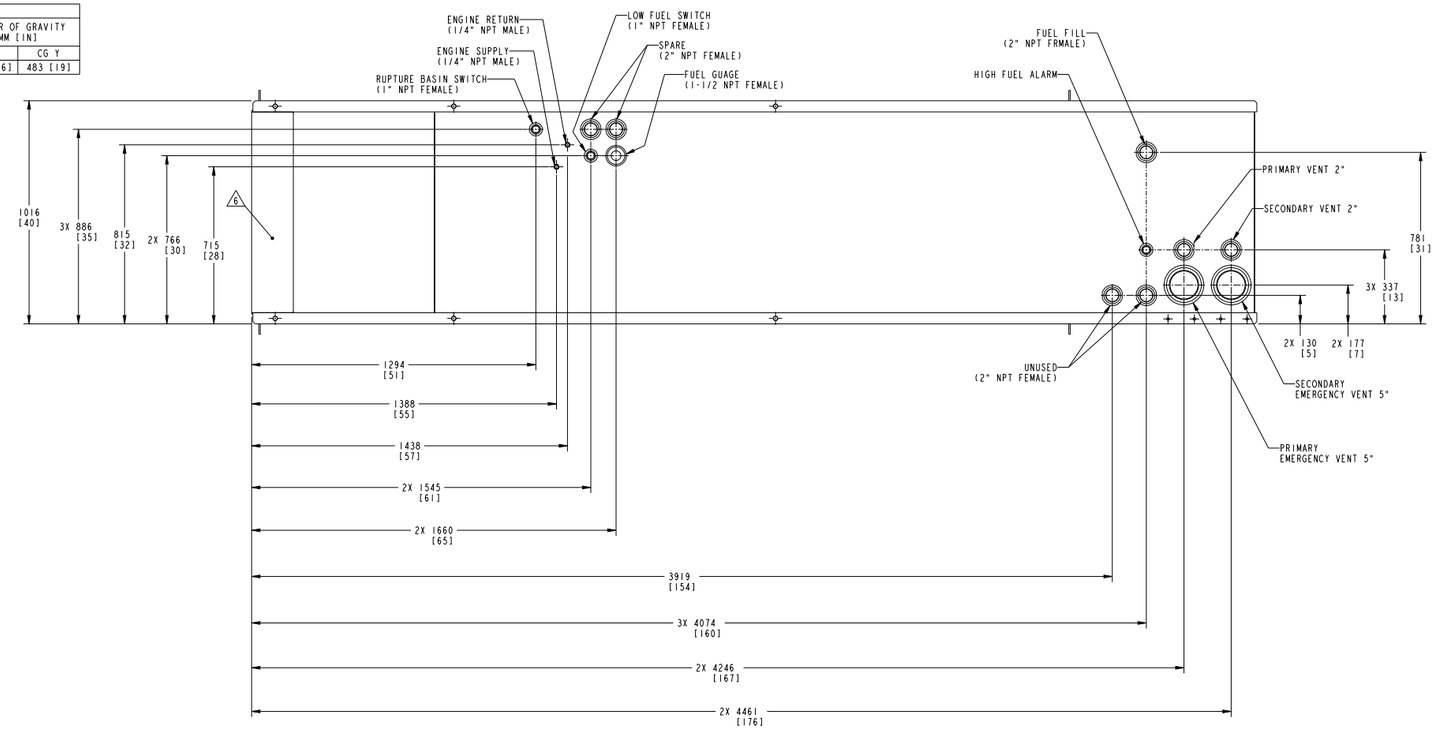
737 GALLON FUEL TANK (A056Y394)

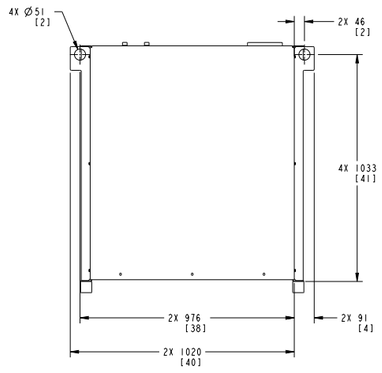
TABULATION

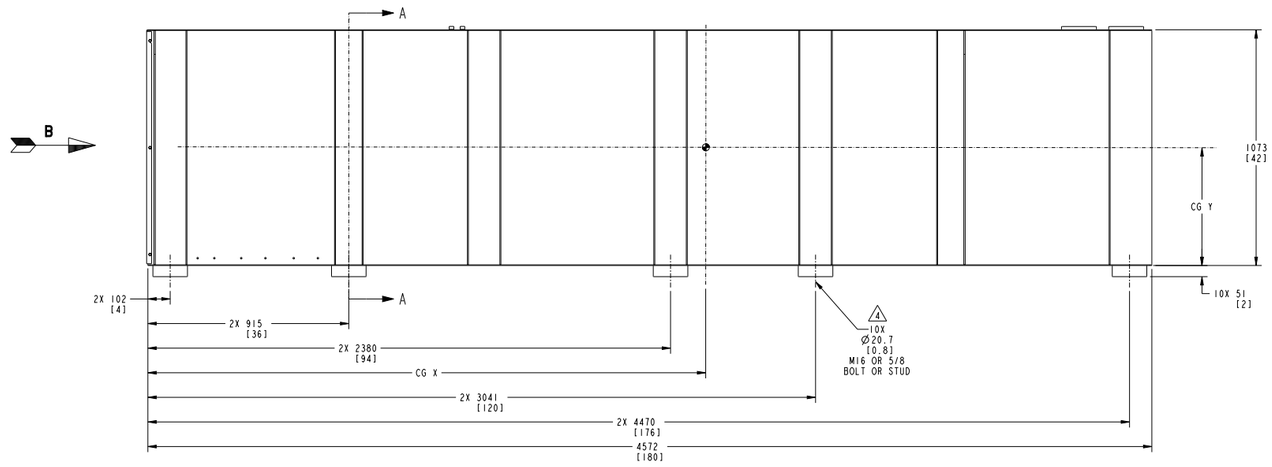
WEIGHT KG [LBS]		TANK VOLUME LITERS [GAL]		TANK HIGHT MM [IN]		CENTER OF GRAVITY MM [IN]	
DRY	WET	NOMINAL	USEABLE	EXTERNAL	INTERNAL	CG X	CG Y
1045 [2302]	3421 [7535]	2975 [785]	2793 [737]	1073 [42]	1028.7 [40.5]	2449 [96]	483 [19]



SECTION **A-A**
SCALE 1/2
VIEW FROM **B**







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DIMENSIONING AND TOLERANCING PER: ASME Y14.5-2009	THIRD ANGLE PROJECTION	CAD SYSTEM PTC® Creo® Parametric

Document Generated: **01APR2022 11:17 GMT**

Part Number: **A057P198** Part Revision: **D**

Part Name: **OUTLINE,TANK**

Drawing Category: **Outline** State: **Released**

A056Y394 TANK DEPTH CHART			
HEIGHT(IN)	HEIGHT(MM)	USABLE VOLUME (GAL.)	TOTAL VOLUME (GAL.)
0.35	12.7	3	10
2	50.8	32	39
4	101.6	71	77
6	152.4	109	116
8	203.2	148	155
10	254.0	187	194
12	304.8	226	232
14	355.6	264	271
16	406.4	303	310
18	457.2	342	349
20	508.8	381	387
22	558.8	419	426
24	609.6	458	465
26	660.4	497	504
28	711.2	536	542
30	762.0	574	581
32	812.8	613	620
34	863.6	652	659
36	914.4	691	697
38.4	975.9	737	744
40	1016.0		775
40.5	1028.7		785

A056Y392 TANK DEPTH CHART			
HEIGHT(IN)	HEIGHT(MM)	USABLE VOLUME (GAL.)	TOTAL VOLUME (GAL.)
0.35	8.9	0	7
2	50.8	32	39
4	101.6	71	77
6	152.4	109	116
8	203.2	148	155
10	254.0	187	194
12	304.8	226	232
14	355.6	264	271
16	406.4	303	310
18	457.2	342	349
18.5	468.9	351	358
19.3	490.2		374

Cummins Inc.		
DIMENSIONS ARE IN: MILLIMETERS [ ] ARE IN:	SIZE: A0	SCALE:1/16
DIMENSIONING AND TOLERANCING PER: ASME Y14.5-2009	THIRD ANGLE PROJECTION	CAD SYSTEM PTC® Creo® Parametric

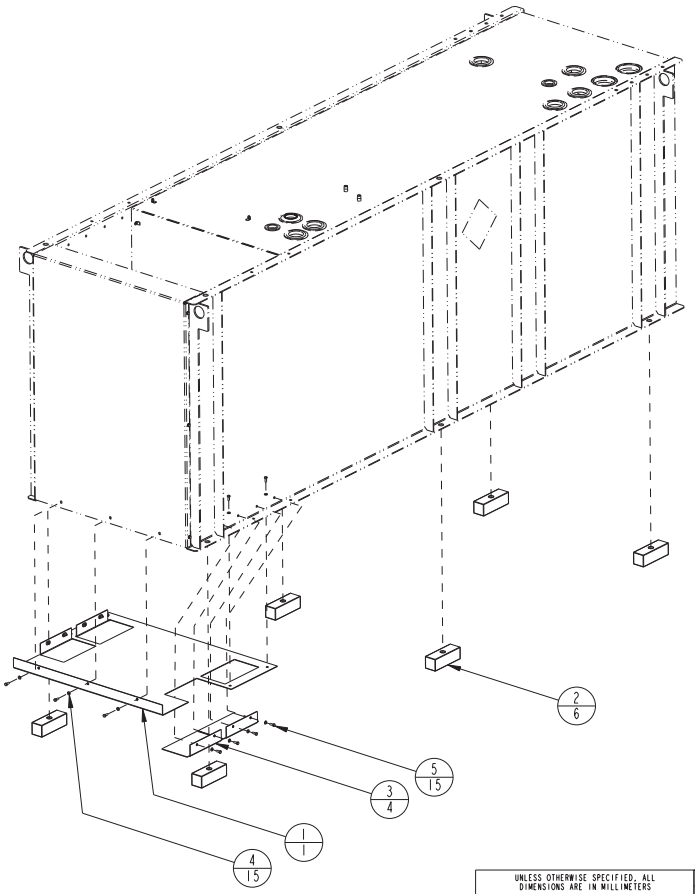
Document Generated: **01APR2022 11:17 GMT**

PTC® Creo® Parametric

REL NO	LTR	NO	REVISION	DWN	CKD	APVD	DATE
ECO-143577	B	1	PRODUCTION RELEASE	TAS	BJE	M.GRIFFITH	13MAY14

NOTES:

1. PARTS TO BE SHIPPED LOOSE.

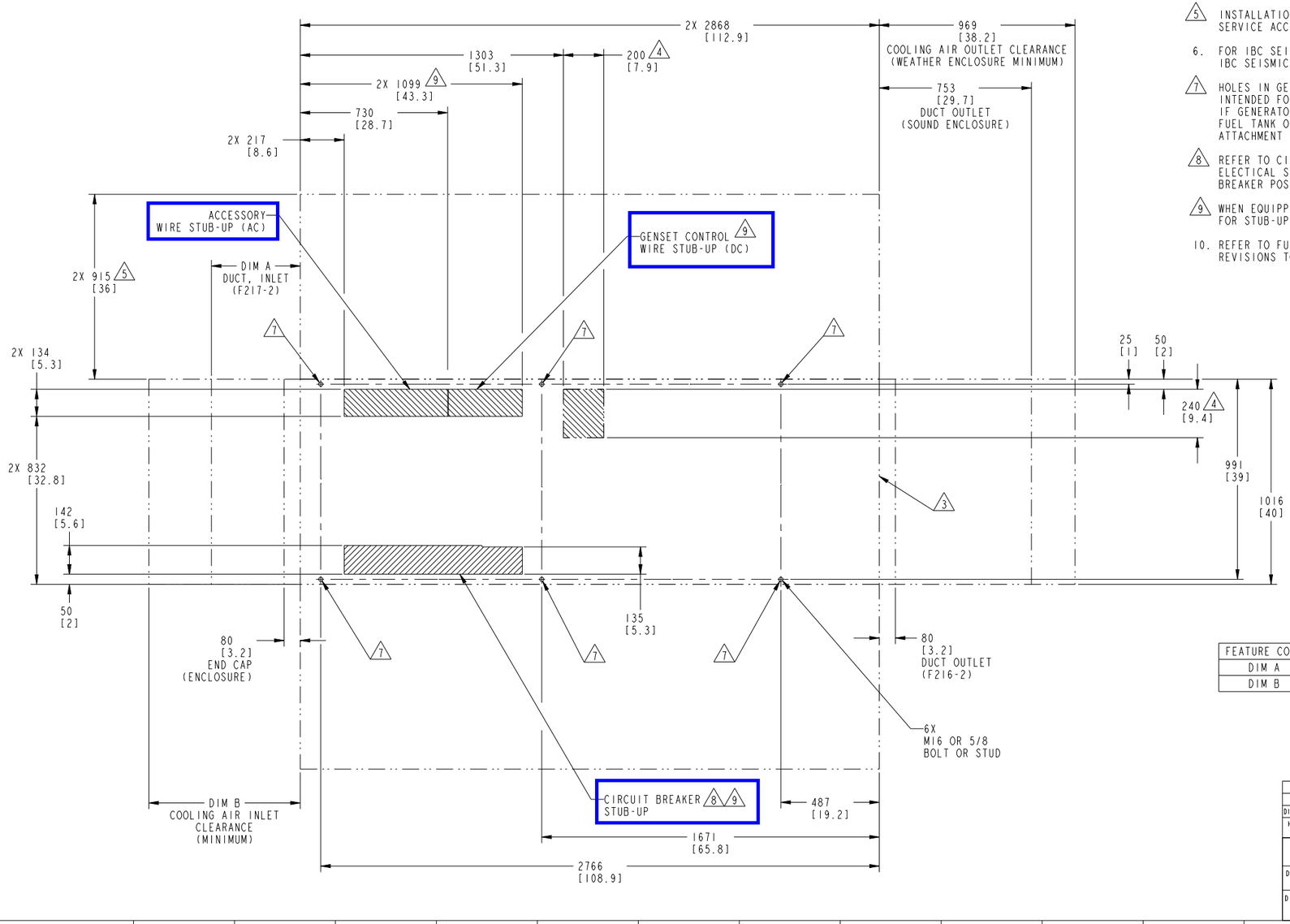


Please refer to drawing# A057P198 for location of the riser.

UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN MILLIMETERS	SIM TO .	DWN A.KAPADIA	CUMMINS POWER GENERATION
DIM: X ±1, .X ±0.8, .XX± 0.38 — HOLE: 0.00- 4.99 +0.15/-0.08, 5.00- 9.99 +0.20/-0.10, 10.00-17.49 +0.25/-0.13, 17.50-24.99 +0.30/-0.13	DO NOT SCALE PRINT	CKD M.GRIFFITH	KIT,FUEL SYSTEM
ANG TOL: ± 1.0° SCALE: 3:32	- CONFIDENTIAL - PROPERTY OF CUMMINS POWER GENERATION GROUP	APVD M.GRIFFITH	FUEL TANK RISERS
		DATE 07NOV13	SITE CODE: PGF
	FOR INTERPRETATION OF DIMENSIONING AND TOLERANCING, SEE ASME Y14.5M-1994	FIRST USED ON ARROW	DWG SIZE C: A048C547 — SHEET 1 of 1 — DWG REV B

NOTES:

1. DIMENSIONS IN [ ] ARE IN INCHES.
2. GENERATOR SET BASE FLANGE THICKNESS 3.42 MM. MOUNTING HARDWARE MUST ACCOUNT FOR UNEVENESS OF MOUNTING SURFACE.
3. GENERATOR SET BASE PERIMETER IS SHOWN. FOUNDATION SHOULD BE EXTENDED BEYOND THIS PERIMETER. SEE (T030) APPLICATION MANUAL.
4. FUEL SUPPLY AND RETURN STUB-UP AREA. THIS STUB-UP AREA NOT AVAILABLE WITH UNDER SKID TANK.
5. INSTALLATION AND REMOVAL LIFTING AND SERVICE ACCESS CLEARANCE (SUGGESTED MINIMUM).
6. FOR IBC SEISMIC CERTIFIED INSTALLATION, SEE GENSET IBC SEISMIC INSTALLATION REQUIREMENTS DRAWING.
7. HOLES IN GENERATOR SET BASE AT THESE LOCATIONS ARE INTENDED FOR ATTACHMENT TO THE MOUNTING SURFACE. IF GENERATOR SET IS MOUNTED ON A FUEL TANK, REFER TO FUEL TANK OUTLINE DRAWING FOR LOCATION OF TANK ATTACHMENT POINTS.
8. REFER TO CIRCUIT BREAKER OUTLINE DRAWING FOR COMPLETE ELECTICAL STUB-UP INFORMATION FOR SPECIFIC BREAKERS AND BREAKER POSITIONS.
9. WHEN EQUIPPED WITH FUEL TANK REFER TO FUEL TANK OUTLINE FOR STUB-UP AREA LENGTH.
10. REFER TO FUEL TANK OUTLINE DRAWINGS FOR REQUIRED REVISIONS TO FOUNDATION DIMENSIONS.



GENSET MODEL APPLICATION
C125D6D
C150D6D
C175D6D
C200D6D

FEATURE CODE	F231-2 OR F217-2 OR F216-2	F269-2
DIM A	440 [17.3]	625 [24.6]
DIM B	750 [29.5]	935 [36.1]

MODEL/PLATFORM: ARROW	THIS PART IS SIMILAR TO: A055J590
UNLESS OTHERWISE SPECIFIED THE FOLLOWING SHALL APPLY	ANG. TOL.: ± 1.0°
DIMENSIONAL TOLERANCES: X ± 1 .X ± 0.8 .XX ± 0.38	
HOLE SIZE 0.00-4.99 TOL. +0.15/-0.08 / HOLE SIZE 5.00-9.99 TOL. +0.20/-0.10 / HOLE SIZE 10.00-17.49 TOL. +0.25/-0.13 / HOLE SIZE 17.50-24.99 TOL. +0.30/-0.13	
Cummins Inc.	
DIMENSIONS ARE IN: MILLIMETERS [ ] ARE IN: - / SIZE: A1 / SCALE:1:10	
DIMENSIONING AND TOLERANCING PER: ASME Y14.5-2009 / THIRD ANGLE PROJECTION	CAD SYSTEM PTC® Creo® Parametric

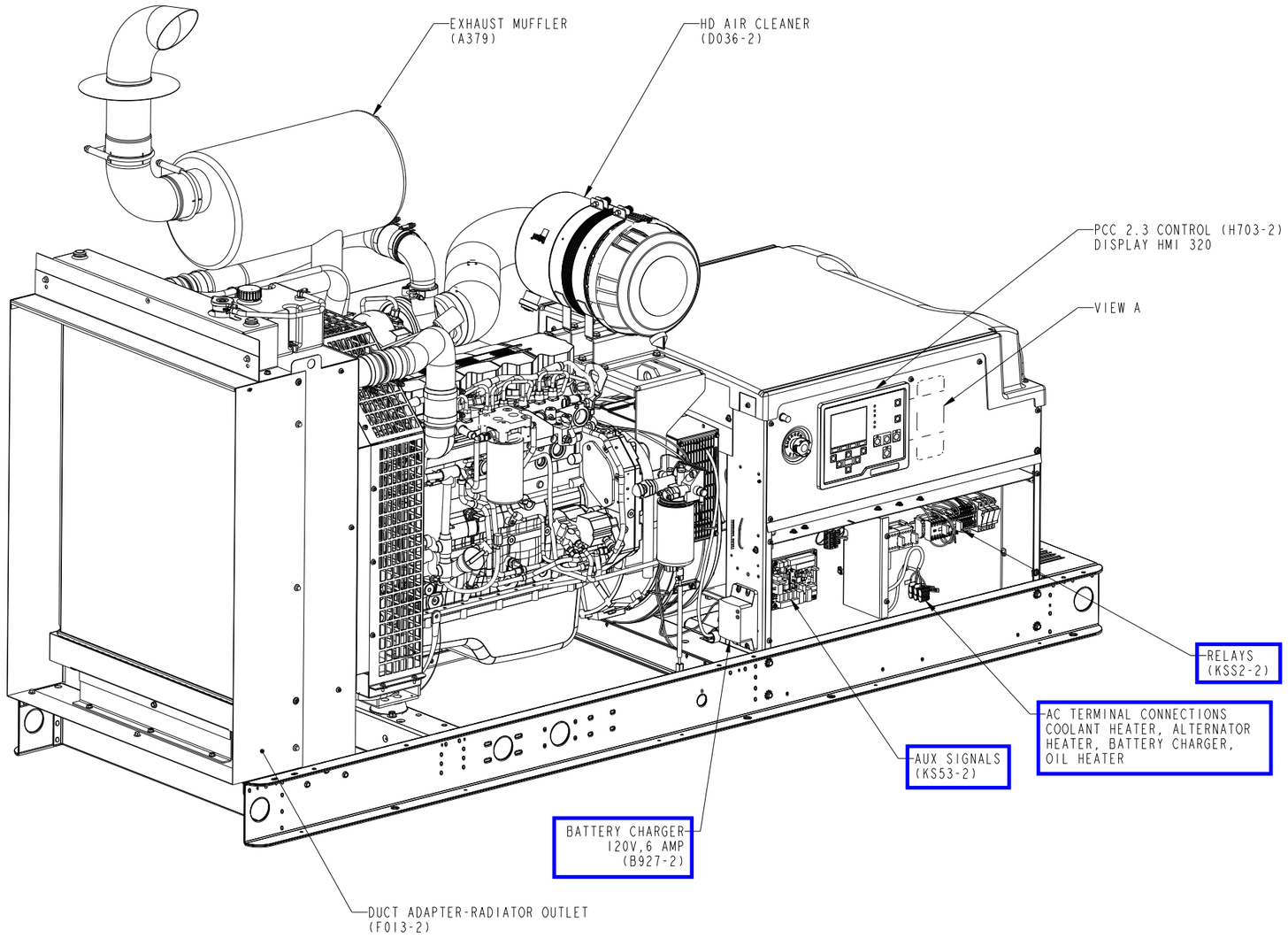
Part Number: **A060C864** Part Revision: **B**
Part Name: **OUTLINE,GENSET**
Drawing Category: **Detail** State: **Released**

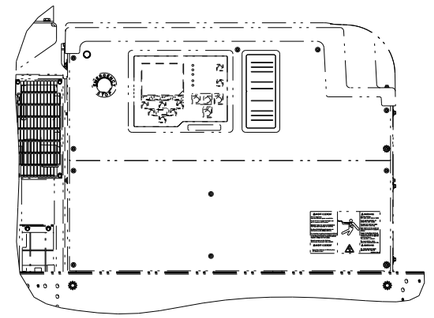
PTC® Creo® Parametric

REL NO	REV	NO	REVISION	DWN	CKD	APVD	DATE
ECO-176532	A	1	PRODUCTION RELEASE	DAH	DAH	GILLETT	10APR18

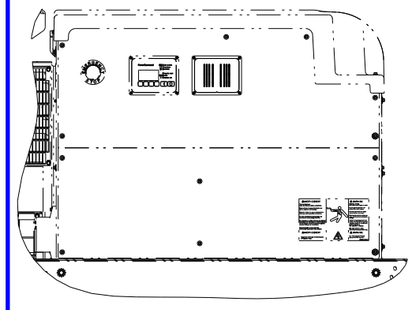
NOTE:

1. DIMENSIONS SHOWN IN [ ] ARE IN INCHES.





BARGRAPH OPTION
(H606-2) FOR H703-2 CONTROL



BARGRAPH OPTION
(H606-2) FOR H700-2 CONTROL

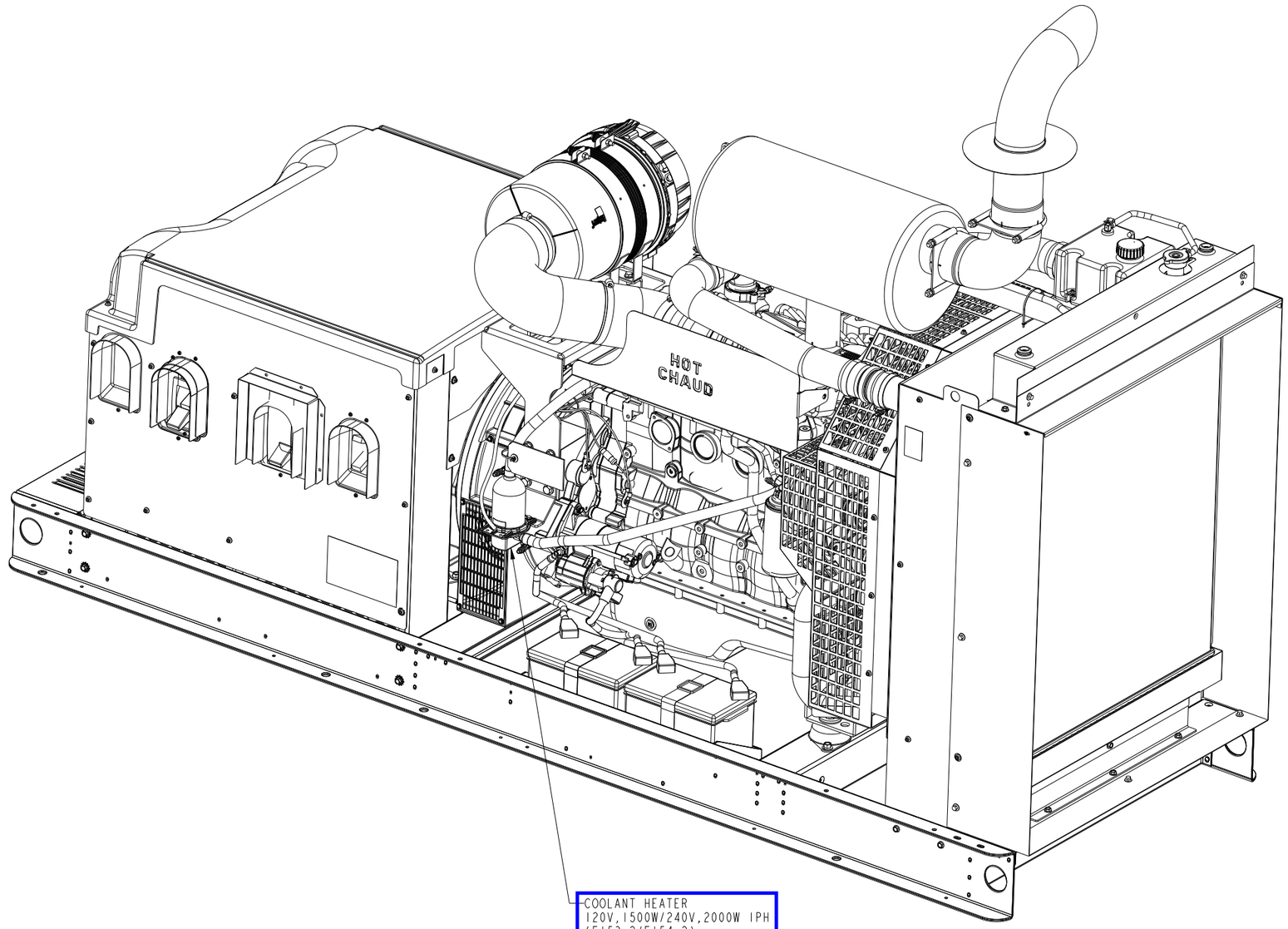
VIEW A

UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN MILLIMETERS		SIM TO A055J592	DWN D HOFMEISTER	CUMMINS POWER GENERATION	
DIM: X ±1, .X ±0.8, .XX± 0.38 — HOLE: 0.00- 4.99 +0.15/-0.08; 5.00- 9.99 +0.20/-0.10; 10.00-17.49 +0.25/-0.13; 17.50-24.99 +0.30/-0.13		DO NOT SCALE PRINT	CKD D HOFMEISTER	OUTLINE, GENSET OPTIONS	
			APVD D GILLETT		
			DATE 10APR18	SITE CODE	
ANG TOL ± 1.0°	SCALE 3:16	THIS DOCUMENT AND THE INFORMATION SHOWN THEREON IS CONFIDENTIAL AND PROPRIETARY AND SHALL NOT BE DISCLOSED TO OTHERS IN HARD COPY OR ELECTRONIC FORM, REPRODUCED BY ANY MEANS, OR USED FOR ANY PURPOSE WITHOUT WRITTEN CONSENT OF CUMMINS INC.	FOR INTERPRETATION OF DIMENSIONING AND TOLERANCING, SEE ASME Y14.5-2009 — FIRST USED ON ARROW	PGF	DWG SIZE D — A060G756 — CAD SHEET 1 OF 3

Drawing Name: A060G757 Revision: A
Part Name: A060G756 Revision: A
ECO-176532 Sheet 1 of 4

PTC® Creo® Parametric

REL NO	REV	NO	REVISION	DWN	CKD	APVD	DATE
ECO-176532	A	1	PRODUCTION RELEASE	DAH	DAH	GILLETT	10APR18



COOLANT HEATER
120V,1500W/240V,2000W 1PH
(E153-2~~HE154-2~~)

UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN MILLIMETERS			SIM TO A055J592	DWN D HOFMEISTER	CUMMINS POWER GENERATION
DIM: X ±1, .X ±0.8, .XX± 0.38 — HOLE: 0.00- 4.99 +0.15/-0.08; 5.00- 9.99 +0.20/-0.10; 10.00-17.49 +0.25/-0.13; 17.50-24.99 +0.30/-0.13			DO NOT SCALE PRINT	CKD D HOFMEISTER	OUTLINE, GENSET OPTIONS
				APVD D GILLETT	
				DATE 10APR18	SITE CODE: PGF
ANG TOL ± 1.0°	SCALE 3:16	THIS DOCUMENT (AND THE INFORMATION SHOWN THEREON) IS CONFIDENTIAL AND PROPRIETARY AND SHALL NOT BE DISCLOSED TO OTHERS OR REPRODUCED BY ANY MEANS, OR USED FOR ANY PURPOSE WITHOUT WRITTEN CONSENT OF CUMMINS INC.	FOR INTERPRETATION OF DIMENSIONING AND TOLERANCING, SEE ASME Y14.5-2009	FIRST USED ON ARROW	DWG SIZE D — A060G756 — CAD SHEET 2 OF 3

PTC® Creo® Parametric

REL NO	LTR	NO	REVISION	DWN	CKD	APVD	DATE
ECO-182667	B	1	UPDATE DRAWING	RAH	DGP	D_PRIEM	03JAN19

SEISMIC INSTALLATIONS NOTES:

1. THE DESIGN OF POST-INSTALLED ANCHORS IN CONCRETE USED FOR THE COMPONENT ANCHORAGE IS PRE-QUALIFIED FOR SEISMIC APPLICATIONS IN ACCORDANCE WITH "ACI 355.2-07" AND DOCUMENTED IN A REPORT BY A REPUTABLE TESTING AGENCY. (EX. THE EVALUATION SERVICE REPORT ISSUED BY THE INTERNATIONAL CODE COUNCIL)

2. ANCHORS MUST BE INSTALLED TO AN EMBEDMENT DEPTH AS RECOMMENDED IN THE PRE-QUALIFICATION TEST REPORT AS DEFINED IN NOTE 1. FOR "CBC 2013" APPLICATIONS.

3. ANCHORS MUST BE INSTALLED IN MINIMUM 3000 PSI COMPRESSIVE STRENGTH NORMAL WEIGHT STRUCTURAL CONCRETE. CONCRETE AGGREGATE MUST COMPLY WITH "ASTM C33".

4. ANCHORS MUST BE INSTALLED TO THE TORQUE SPECIFICATION AS RECOMMENDED BY THE ANCHOR MANUFACTURER.

5. ANCHORS MUST BE INSTALLED IN LOCATIONS SPECIFIED ON THIS INSTALLATION DRAWING.

6. WASHERS MUST BE INSTALLED AT EACH ANCHOR LOCATION BETWEEN THE ANCHOR HEAD AND EQUIPMENT FOR TENSION LOAD DISTRIBUTION. WASHERS MUST BE TYPE A OR B PLAIN WASHERS MEETING ASME B18.21.1-2009. WASHER SIZE TO MATCH ANCHOR DIAMETER.

7. CONCRETE FLOOR SLAB AND CONCRETE HOUSEKEEPING PADS MUST BE DESIGNED FOR SEISMIC APPLICATIONS IN ACCORDANCE WITH "ACI 318-11".

8. ALL HOUSEKEEPING PAD THICKNESSES MUST BE DESIGNED IN ACCORDANCE WITH THE PRE-QUALIFICATION TEST REPORT AS DEFINED IN NOTE 1 OR A MINIMUM OF 1.5X THE ANCHOR EMBEDMENT DEPTH, WHICHEVER IS LARGEST (UNLESS NOTED OTHERWISE).

9. ALL HOUSEKEEPING PADS MUST BE DOWELLED OR CAST INTO THE BUILDING STRUCTURAL FLOOR SLAB AND DESIGNED FOR SEISMIC APPLICATION PER "ACI 318-11" AND AS APPROVED BY THE STRUCTURAL ENGINEER OF RECORD.

10. FLOOR MOUNTED EQUIPMENT (WITH OR WITHOUT A HOUSEKEEPING PAD) MUST BE INSTALLED TO A STEEL REINFORCED STRUCTURAL CONCRETE FLOOR THAT IS SEISMICALLY DESIGNED AND APPROVED BY THE ENGINEER OF RECORD TO RESIST ALL LOADS FROM EQUIPMENT BEING ANCHORED TO THE FLOOR.

11. COORDINATE REINFORCEMENT OF SUPPORT STRUCTURE WITH EQUIPMENT ANCHOR LOCATIONS.

12. ATTACHING SEISMIC CERTIFIED EQUIPMENT TO FLOOR OTHER THAN THOSE DESIGNED TO ACCEPT THE SEISMIC LOADS FROM CERTIFIED EQUIPMENT BY THE STRUCTURAL ENGINEER OF RECORD IS PROHIBITED.

13. INSTALLATION ONTO A STEEL ROOF STRUCTURE OR MANUFACTURED STEEL CURB SHALL BE COORDINATED WITH THE STRUCTURAL ENGINEER OF RECORD.

14. CONNECTIONS TO THE EQUIPMENT, INCLUDING BUT NOT LIMITED TO CONDUIT, WIRING FROM CABLE TRAYS, OTHER ELECTRICAL SERVICES OR OTHER CONNECTIONS, ARE THE RESPONSIBILITY OF THE INSTALLING CONTRACTOR AND BEYOND THE SCOPE OF THIS DOCUMENT. FLEXIBLE ATTACHMENTS MUST BE USED FOR SEISMIC CONNECTIONS TO ISOLATED COMPONENTS OR ISOLATED EQUIPMENT. THE FLEXIBLE ATTACHMENT MUST PROVIDE FOR ENOUGH RELATIVE DISPLACEMENT TO REMAIN CONNECTED TO THE EQUIPMENT AND FUNCTIONAL DURING AND AFTER A SEISMIC EVENT.

15. REFER TO GENSET OUTLINE DRAWINGS FOR WEIGHT, CG AND CONFIGURATION SPECIFICS.

UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN MILLIMETERS
DIM: X ± 1; .X ± 0.8; .XX± 0.38
HOLE: 0.00- 4.99 +0.15/-0.08; 5.00- 9.99 +0.20/-0.10; 10.00-17.49 +0.25/-0.13; 17.50-24.99 +0.30/-0.13
ANG TOL: ± 1.0° SCALE: 1/1

SIM TO A051N157
DO NOT SCALE PRINT
- CONFIDENTIAL - PROPERTY OF CUMMINS POWER GENERATION GROUP

DWN D HOFMEISTER
CKD D HOFMEISTER
APVD G STAFFENHAGEN
DATE 05MAR18
FOR INTERPRETATION OF DIMENSIONING AND TOLERANCING, SEE ASME Y14.5M-1994 | FIRST USED ON ARROW

SITE CODE PGF

CUMMINS POWER GENERATION
INSTALLATION,GENSET
SEISMIC REQUIREMENTS
DWG SIZE D | A058C559 | SHEET 1 OF 6 | DWG REV B

Regulatory Review and Approval is required prior to changing this item per PGG 1-01-01-116. This item impacts compliance with these External Regulations: IBC,OSHPD

Drawing Name: A058C560 Revision: B
Part Name: A058C559 Revision: B
ECO-182667 Sheet 1 of 7

REL NO	LTR	NO	REVISION	DWN	CKD	APVD	DATE
ECO-182667	B	1	UPDATE DRAWING	RAH	DGP	D_PRIEM	03JAN19

GRADE MOUNTED GENERATOR SETS

CUMMINS GENSET MODEL	CONFIGURATION	ATTACHMENT TO CONCRETE						
		CBC 2018 EVALUATION PARAMETERS	IBC 2018 EVALUATION PARAMETERS	CONCRETE ANCHORS	ANCHOR EMBEDMENT	ANCHOR SPACING	DISTANCE TO NEAREST EDGE	CONCRETE SLAB THICKNESS
C125D6D C150D6D C175D6D C200D6D	GENERATOR SET WITH OR WITHOUT ENCLOSURE NO FUEL TANK	Sds <= 2.5 Ip <= 1.5 ap/Rp <= 1.0/1.5 z/h = 0 Ω = 2.5	Sds <= 2.5 Ip <= 1.5 ap/Rp <= 1.0/1.5 z/h = 0 Ω = 2.5	NOTE: TYPE OF ANCHOR, ANCHOR ATTACHMENT SPECIFICS AND MINIMUM SLAB THICKNESS TO BE DESIGNED BY ENGINEER OF RECORD.				

GRADE/ROOF MOUNTED GENERATOR SETS WITH FUEL TANKS

CUMMINS GENSET MODEL	CONFIGURATION	ATTACHMENT TO STEEL		
		CBC 2018 EVALUATION PARAMETERS	IBC 2018 EVALUATION PARAMETERS	STEEL BOLTS
C125D6D C150D6D C175D6D C200D6D	GENERATOR SET WITH OR WITHOUT ENCLOSURE, WITH FUEL TANKS. FUEL TANKS: A056Y392, A056Y394, A055S002	Sds <= 2.0 Ip <= 1.5 ap/Rp <= 1.0/1.5 z/h <= 1.0	Sds <= 2.5 Ip <= 1.5 ap/Rp <= 1.0/1.5 z/h <= 1.0	(QTY 6) 5/8" DIAMETER ASTM A325N OR A490 BOLTS WITH WASHERS THROUGH THE BASE RAIL MOUNTING HOLES OR FUEL TANK MOUNTING HOLES.

UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN MILLIMETERS
DIM: X ±1 | .X ±0.8 | .XX± 0.38
HOLE: 0.00- 4.99 +0.15/-0.08 | 5.00- 9.99 +0.20/-0.10 | 10.00-17.49 +0.25/-0.13 | 17.50-24.99 +0.30/-0.13
ANG TOL: ± 1.0° SCALE: 1/1

SIM TO A051N157
DO NOT SCALE PRINT
- CONFIDENTIAL -
PROPERTY OF CUMMINS POWER GENERATION GROUP

DWN D HOFMEISTER
CKD D HOFMEISTER
APVD G STAFFENHAGEN
DATE 05MAR18
FOR INTERPRETATION OF DIMENSIONING AND TOLERANCING, SEE ASME Y14.5M-1994
FIRST USED ON ARROW

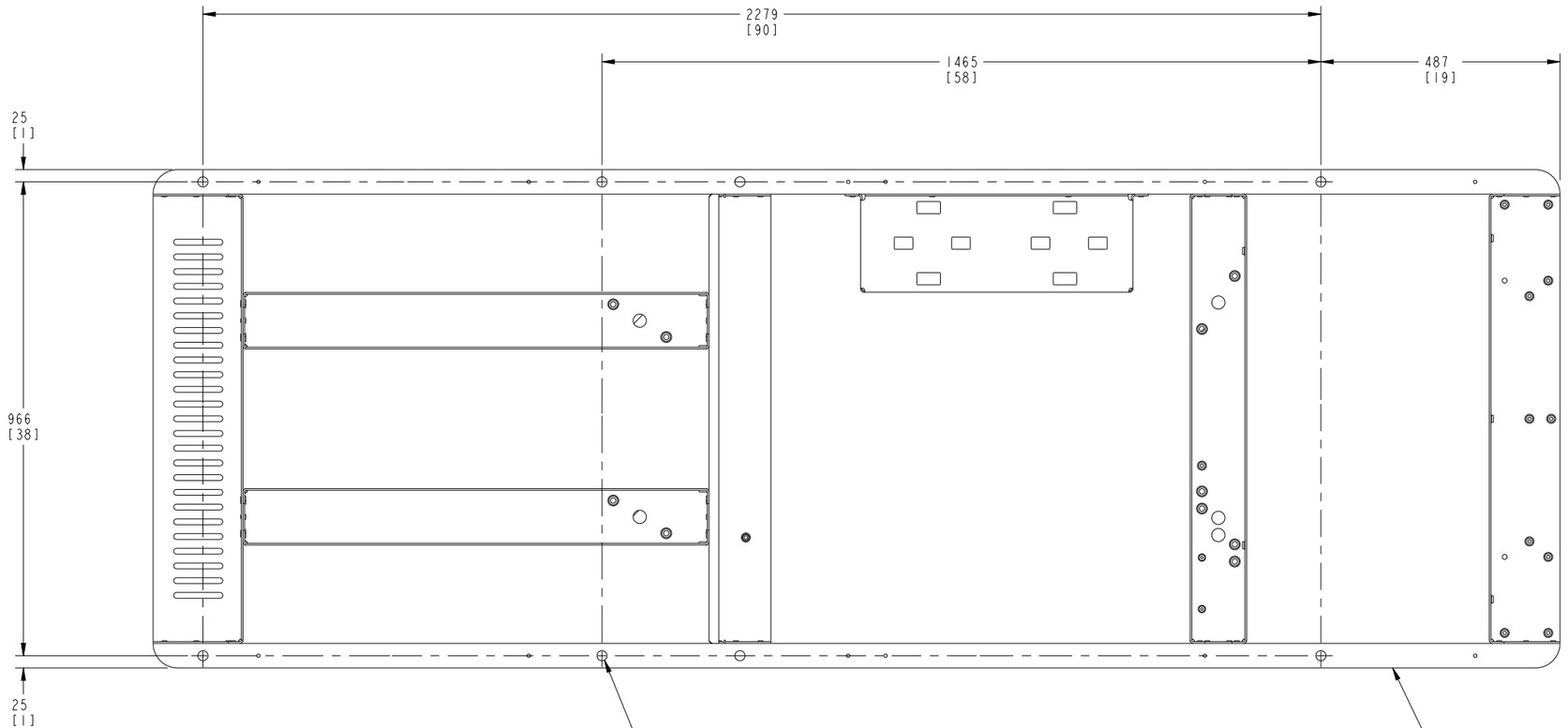
SITE CODE PGF

CUMMINS POWER GENERATION
INSTALLATION, GENSET
SEISMIC REQUIREMENTS
ENG SIZE D | A058C559 | SHEET 2 OF 6 | DRG REV B

Regulatory Review and Approval is required prior to changing this item per PGG 1-01-01-116. This item impacts compliance with these External Regulations: IBC,OSHPD

PTC® Creo® Parametric

REL NO	LTR	NO	REVISION	DWN	CKD	APVD	DATE
ECO-182667	B	1	UPDATE DRAWING	RAH	DGP	D_PRIEM	03JAN19



UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN MILLIMETERS

DIM		HOLE	
	X ± 1		0.00- 4.99 +0.15/-0.08
	.X ± 0.8		5.00- 9.99 +0.20/-0.10
	.XX± 0.38		10.00-17.49 +0.25/-0.13
			17.50-24.99 +0.30/-0.13

ANG TOL: ± 1.0° SCALE: 1/1

SIM TO A05IN157

DO NOT SCALE PRINT

- CONFIDENTIAL -
PROPERTY OF CUMMINS POWER GENERATION GROUP

DWN D HOFMEISTER
CKD D HOFMEISTER
APVD G STAFFENHAGEN
DATE 05MAR18

FOR INTERPRETATION OF DIMENSIONING AND TOLERANCING, SEE ASME Y14.5M-1994 | FIRST USED ON ARROW

SITE CODE PGF

CUMMINS POWER GENERATION

INSTALLATION, GENSET
SEISMIC REQUIREMENTS

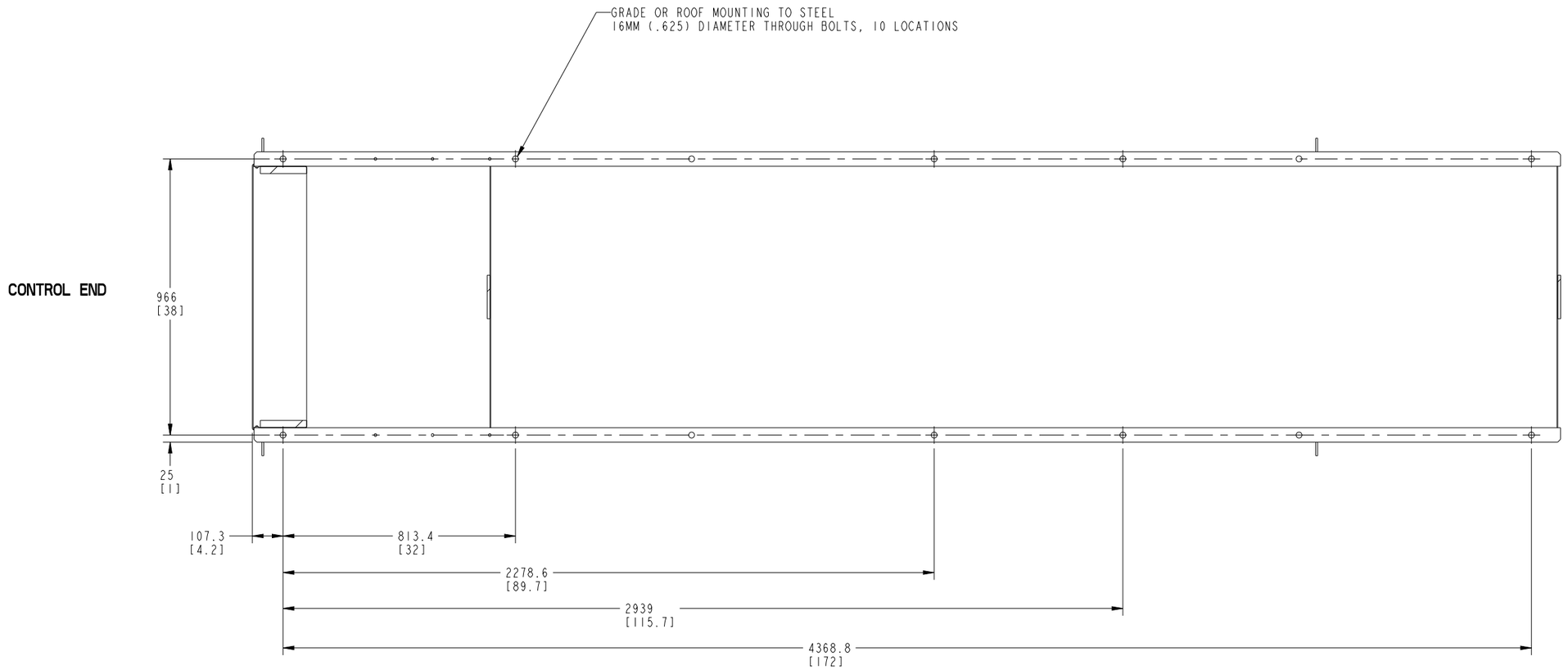
DWG SIZE D | A058C559 | SHEET 3 of 6 | DWG REV B

Regulatory Review and Approval is required prior to changing this item per PGG 1-01-01-116. This item impacts compliance with these External Regulations: IBC,OSHPD

PTC® Creo® Parametric

REL NO	LTR	NO	REVISION	DWN	CKD	APVD	DATE
ECO-182667	B	1	UPDATE DRAWING	RAH	DGP	D_PRIEM	03JAN19

MOUNTING HOLE LOCATIONS FOR FUEL TANK WITH 10 BOLTS TO MOUNTING STRUCTURE



C125D6D, C150D6D, C175D6D, C200D6D: FUEL TANKS WITH 10 HOLE ATTACHMENTS
FUEL TANK: A056Y392, A056Y394

UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN MILLIMETERS

DIM		HOLE	
	X ± 1		0.00- 4.99 +0.15/-0.08
	.X ± 0.8		5.00- 9.99 +0.20/-0.10
	.XX± 0.38		10.00-17.49 +0.25/-0.13
			17.50-24.99 +0.30/-0.13

ANG TOL: ± 1.0° SCALE: 1/1

SIM TO A05IN157
DO NOT SCALE PRINT
- CONFIDENTIAL -
PROPERTY OF CUMMINS POWER GENERATION GROUP

DWN D HOFMEISTER
CKD D HOFMEISTER
APVD G STAFFENHAGEN
DATE 05MAR18
FOR INTERPRETATION OF DIMENSIONING AND TOLERANCING, SEE ASME Y14.5M-1994
FIRST USED ON ARROW

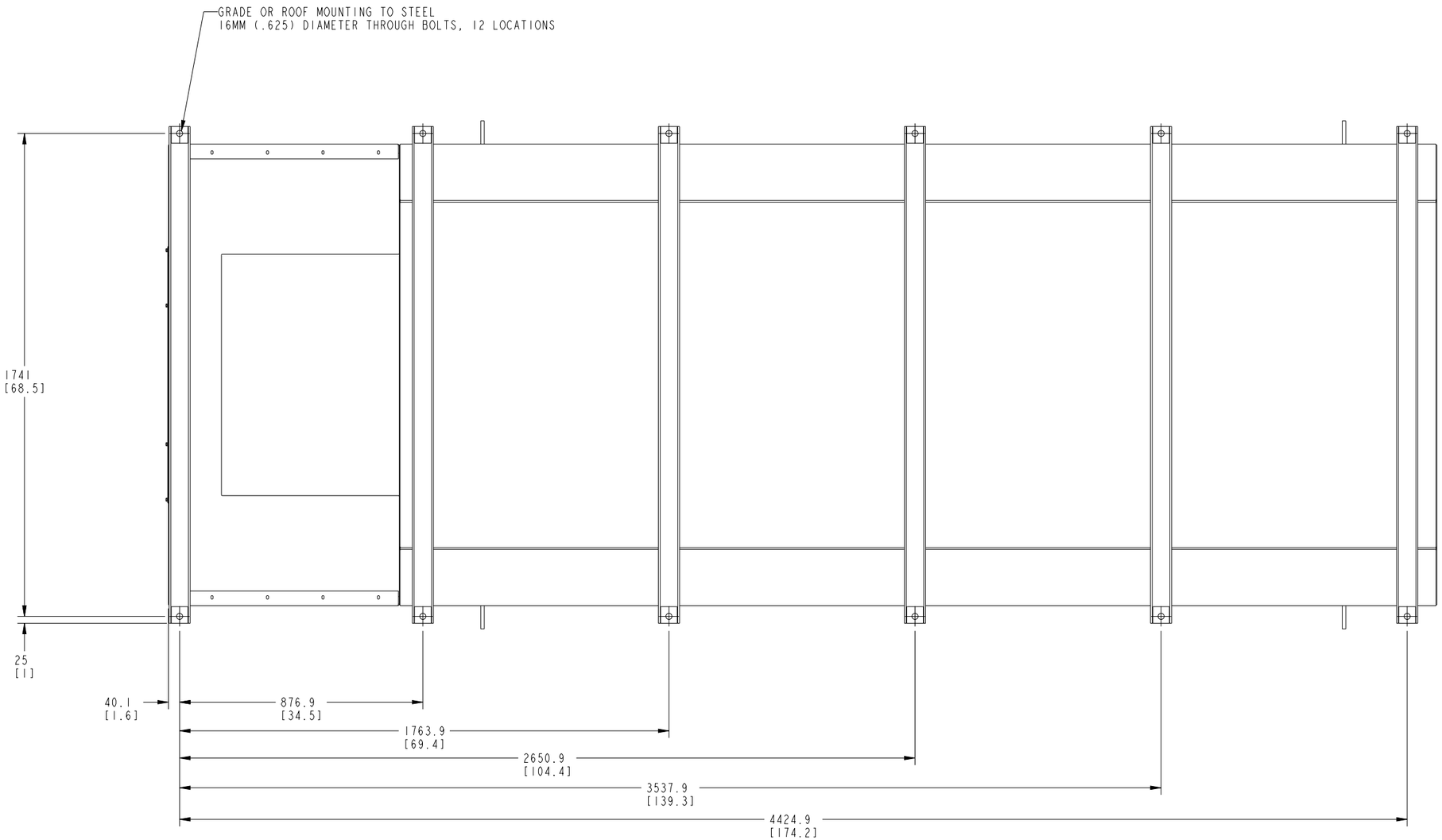
CUMMINS POWER GENERATION
INSTALLATION,GENSET
SEISMIC REQUIREMENTS
SITE CODE PGF
DWG SIZE D
A058C559
SHEET 4 OF 6
DWG REV B

Regulatory Review and Approval is required prior to changing this item per PGG 1-01-01-116. This item impacts compliance with these External Regulations: IBC,OSHPD

PTC® Creo® Parametric

REL NO	LTR	NO	REVISION	DWN	CKD	APVD	DATE
ECO-182667	B	1	UPDATE DRAWING	RAH	DGP	D_PRIEM	03JAN19

MOUNTING HOLE LOCATIONS FOR FUEL TANK WITH 12 BOLTS TO MOUNTING STRUCTURE



C125D6D, C150D6D, C175D6D, C200D6D: FUEL TANKS WITH 12 HOLE ATTACHMENTS
FUEL TANK: A055S002

UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN MILLIMETERS

DIM		HOLE	
X	± 1	0.00- 4.99	+0.15/-0.08
.X	± 0.8	5.00- 9.99	+0.20/-0.10
.XX	± 0.38	10.00-17.49	+0.25/-0.13
		17.50-24.99	+0.30/-0.13

ANG TOL: ± 1.0° SCALE: 1/1

SIM TO A051N157
DO NOT SCALE PRINT
- CONFIDENTIAL -
PROPERTY OF CUMMINS POWER GENERATION GROUP

DWN D HOFMEISTER
CKD D HOFMEISTER
APVD G STAFFENHAGEN
DATE 05MAR18
FOR INTERPRETATION OF DIMENSIONING AND TOLERANCING, SEE ASME Y14.5M-1994
FIRST USED ON ARROW

SITE CODE PGF

CUMMINS POWER GENERATION
INSTALLATION, GENSET
SEISMIC REQUIREMENTS

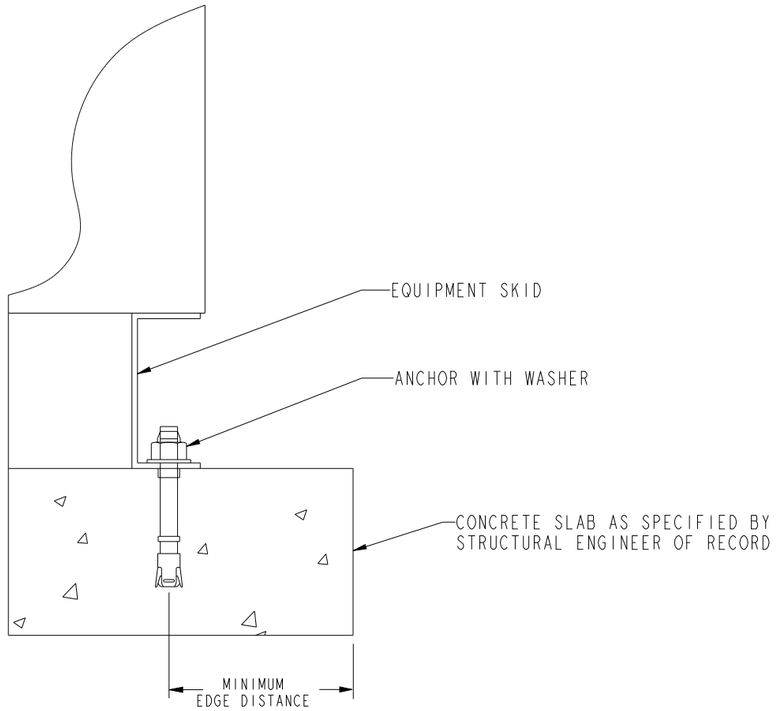
DWG SIZE D | A058C559 | SHEET 5 OF 6 | DWG REV A

Regulatory Review and Approval is required prior to changing this item per PGG 1-01-01-116. This item impacts compliance with these External Regulations: IBC,OSHPD

Drawing Name: A058C560 Revision: B
Part Name: A058C559 Revision: B
ECO-182667 Sheet 5 of 7

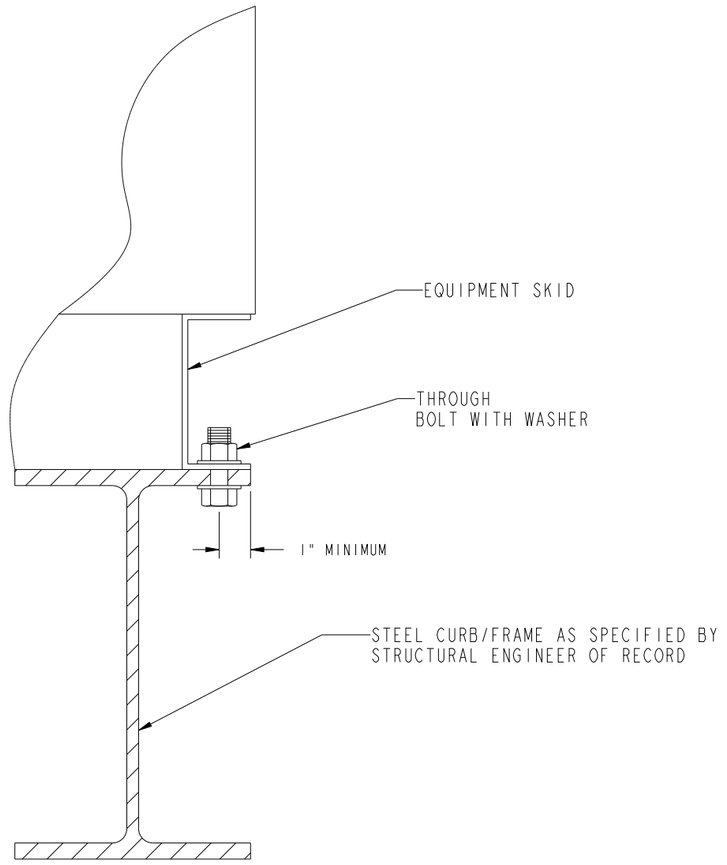
PTC® Creo® Parametric

REL NO	LTR	NO	REVISION	DWN	CKD	APVD	DATE
ECO-182667	B	1	UPDATE DRAWING	RAH	DGP	D_PRIEM	03JAN19



TO BE DESIGNED BY ENGINEER OF RECORD

CONCRETE CONNECTION



STEEL CONNECTION

UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN MILLIMETERS

DIM: X ±1; .X ±0.8; .XX±0.38

HOLE: 0.00-4.99 +0.15/-0.08; 5.00-9.99 +0.20/-0.10; 10.00-17.49 +0.25/-0.13; 17.50-24.99 +0.30/-0.13

ANG TOL: ± 1.0° SCALE: 1/1

SIM TO A051N157

DO NOT SCALE PRINT

- CONFIDENTIAL -
PROPERTY OF CUMMINS POWER GENERATION GROUP

DWN D HOFMEISTER
CKD D HOFMEISTER
APVD G STAFFENHAGEN
DATE 05MAR18

FOR INTERPRETATION OF DIMENSIONS AND TOLERANCES, REF. ASME Y14.5M-1994

FIRST USED ON ARROW

SITE CODE PGF

CUMMINS POWER GENERATION

INSTALLATION, GENSET
SEISMIC REQUIREMENTS

DWG SIZE D | A058C559 | SHEET 6 OF 6 | DWG REV B

Regulatory Review and Approval is required prior to changing this item per PGG 1-01-01-116. This item impacts compliance with these External Regulations: IBC,OSHPD

Drawing Name: A058C560 Revision: B
Part Name: A058C559 Revision: B
ECO-182667 Sheet 6 of 7

Part A058C559 B

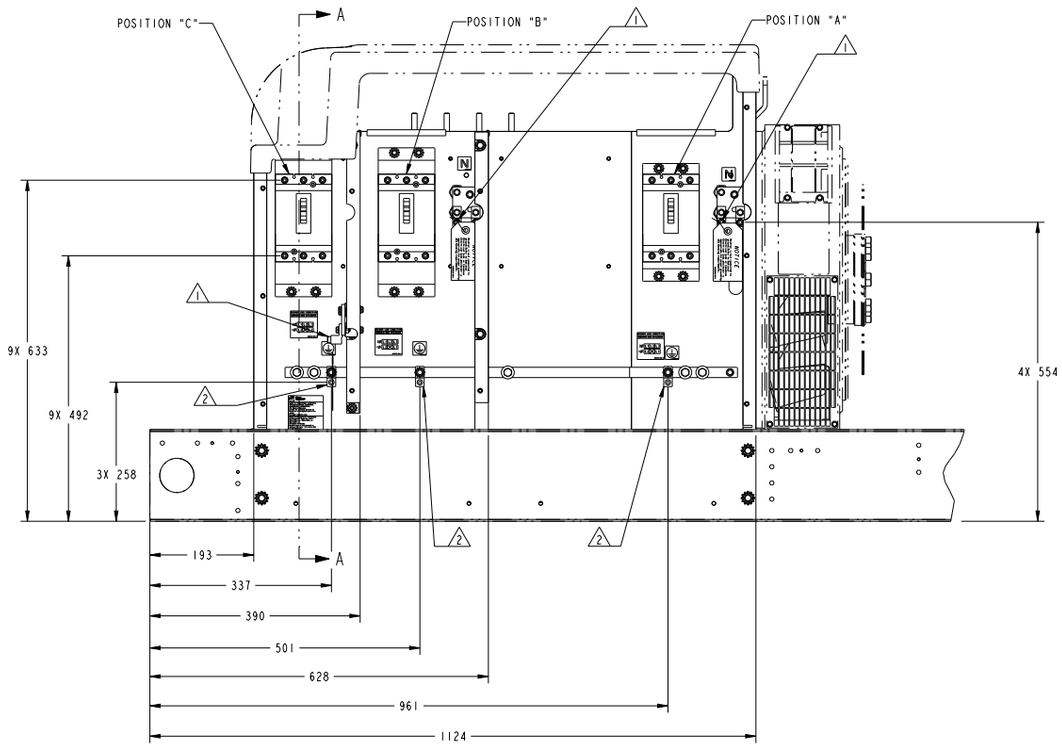
Description	Legacy Name	External Regulations	Application Status	Release Phase Code	Security Classification	Alternates
INSTALLATION,GENSET	A058C559	IBC,OSHPD	Production Only	Production	Confidential	

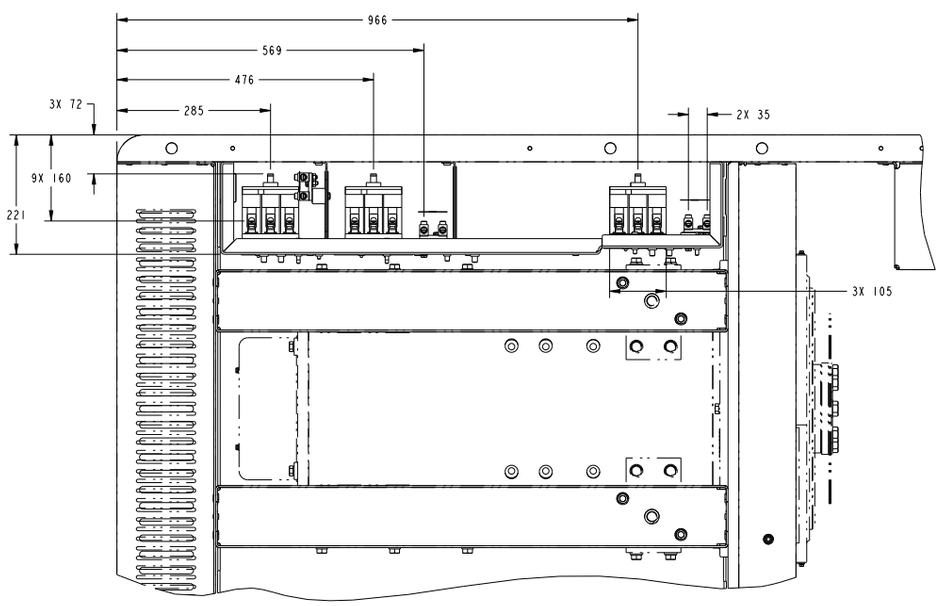
Part Specifications :A058C559 B

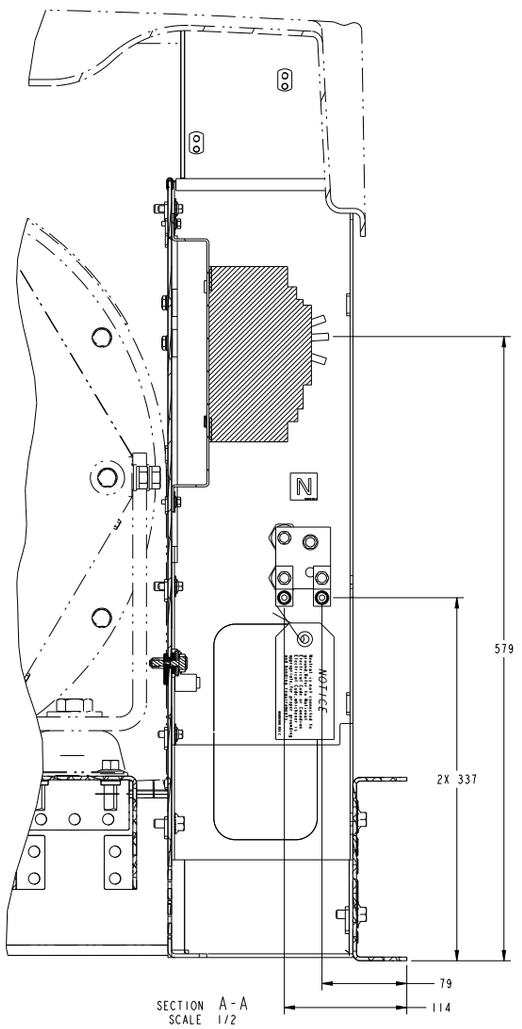
Name	Description	Legacy Name
A030B356	SPECIFICATION,MATERIAL	CES10903
A058C560	DRAWING,ENGINEERING	A058C560

REL NO	REV	NO	REVISION	DRN	CKD	APVD	DATE
ECO-181477	E	1	ADD SHEET 6	RT	MT	M.TULADHAR	05NOV18
		2	ZONE (A1) ADD TABLE	RT	MT	M.TULADHAR	05NOV18
		3	ZONE (B1) UPDATE "CIRCUIT BREAKER ACCESSORIES" TABLE	RT	MT	M.TULADHAR	05NOV18

"H" FRAME SHOWN (15 - 150 amp)







SECTION A-A
SCALE 1/2

NOTES:

1. NEUTRAL LUG (1) #14-2/0.
2. GROUND LUG (1) #14-1/0.
3. NEUTRAL LUG (1) #6-350 kcmil.
4. NEUTRAL LG (2) #2-600 kcmil OR (4) 1/0-250 kcmil.

FRAME	LUG	LUG WIRE RANGE	WIRE STRIP LENGTH	CB LUG TORQUE
H-FRAME THERMAL-MAGNETIC 15-150 AMP 80% RATED	AL150HD	(1) AL #14 - 3/0 AWG (1) CU #14 - 3/0 AWG	0.65 inch	#14 - #10 50 lb-in (6.0 Nm) #8 - 3/0 120 lb-in (14.0 Nm)
J-FRAME THERMAL-MAGNETIC 175 AMP 80% RATED	AL175HD	(1) AL #4 - 4/0 AWG (1) CU #4 - 4/0 AWG	1.00 inch	225 lb-in (26.0 Nm)
J-FRAME THERMAL-MAGNETIC 200-250 AMP 80% RATED	AL250JD	(1) AL 3/0 - 350 kcmil (1) CU 3/0 - 350 kcmil	1.00 inch	225 lb-in (26.0 Nm)
J-FRAME LSI ELECTRONIC TRIP ADJUSTABLE TRIP 70-250 AMP 100% RATED, COPPER CONDUCTORS ONLY	CU250JD	(1) CU 1/0 - 300 kcmil	1.00 inch	250 lb-in (28.0 Nm)
L-FRAME (400) LSI ELECTRONIC TRIP ADJUSTABLE TRIP 125-400 AMP 80% RATED	AL400L61K3	(1) AL #2 - 500 kcmil (1) CU #2 - 600 kcmil	1.20 inch	442 lb-in (50 Nm)
L-FRAME (400) LSI ELECTRONIC TRIP ADJUSTABLE TRIP 125-400 AMP 100% RATED, COPPER CONDUCTORS ONLY	AL600LS52K3	(2) CU 2/0 - 500 kcmil	(1) 1.20 inch (1) 2.40 inch	442 lb-in (50 Nm)
L-FRAME (600) LSI ELECTRONIC TRIP ADJUSTABLE TRIP 200-600 AMP 80% RATED 100% RATED, COPPER CONDUCTORS ONLY	AL600LS52K3	(2) AL 2/0 - 500 kcmil (2) CU 2/0 - 500 kcmil	(1) 1.20 inch (1) 2.40 inch	442 lb-in (50 Nm)
P-FRAME MANUAL & AUTOMATIC LSI ELECTRONIC TRIP ADJUSTABLE TRIP 400, 600 & 800 AMP 80% AND 100% RATED	AL800LS52K3	(3) AL 3/0 - 500 kcmil (3) CU 3/0 - 500 kcmil	(3) 1.20 inch	442 lb-in (50 Nm)

CIRCUIT BREAKER ACCESSORIES	
1	SHUNT TRIP (MX) P/N A043X760 12 VDC COIL BURDEN < 5 WATTS 10 AMP IN-RUSH
2	AUXILIARY CONTACTS P/N A043X785 OPEN/CLOSED (OF) TRIP INDICATION (SD) FORM C CONTACTS RATING: 6 AMPS AT 24 VAC, 48 VAC, 110 VAC 6 AMPS AT 24 VDC, 2.5 AMPS AT 48 VDC 0.6 AMPS AT 110 VDC H & J FRAME, MAXIMUM OF 4 CONTACTS PER CIRCUIT BREAKER L FRAME, MAXIMUM OF 5 CONTACTS PER CIRCUIT BREAKER P FRAME, MAXIMUM OF 5 CONTACTS PER CIRCUIT BREAKER
3	ACCESSORY KIT P/N A060M822 FOR TOP ENTRY LOAD CABLE ENTRY APPLICABLE FOR MODEL AND BREAKER CONFIGURATION AS PER "TABLE 1"

TABLE 1

KIT PART NUMBER	MODELS AFFECTED		ENCLOSURES AFFECTED
A060M822	C125 N6-C150 N6		OPEN ONLY
	C125 D6D- C200 D6D		
KIT PART NUMBER	NUMBER OF CB'S	LIMITATION		
		POS A	POS B	POS C
A060M822	1	ANY RATING	-	-
	2	ANY RATING	600A OR BELOW	-
	3	ANY RATING	400A OR BELOW	250A OR BELOW

UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN MILLIMETERS

DIM: X ±1; .X ±0.8; .XX± 0.38

DECIMAL: 0.00- 4.99 +0.15/-0.08; 5.00- 9.99 +0.20/-0.10; 10.00-17.49 +0.25/-0.13; 17.50-24.99 +0.30/-0.13

ANG TOL ± 1.0°

SCALE 1/4

THIS DOCUMENT AND THE INFORMATION SHOWN THEREON IS CONFIDENTIAL AND PROPRIETARY AND SHALL NOT BE DISCLOSED TO OTHERS OUTSIDE THE RECIPIENT'S ORGANIZATION OR BE USED FOR ANY PURPOSE WITHOUT WRITTEN CONSENT OF CUMMINS INC.

SIM TO .

DO NOT SCALE PRINT

DRN A.JOHNSON

CKD A.JOHNSON

APVD P.LARSON

DATE 02MAY16

FOR INTERPRETATION OF DIMENSIONS AND TOLERANCES SEE ASME Y14.5-2009

FIRST USED ON ARROW

SITE CODE PGF

CUMMINS POWER GENERATION

OUTLINE,CIRCUIT BREAKER

DWG NO E A055B603

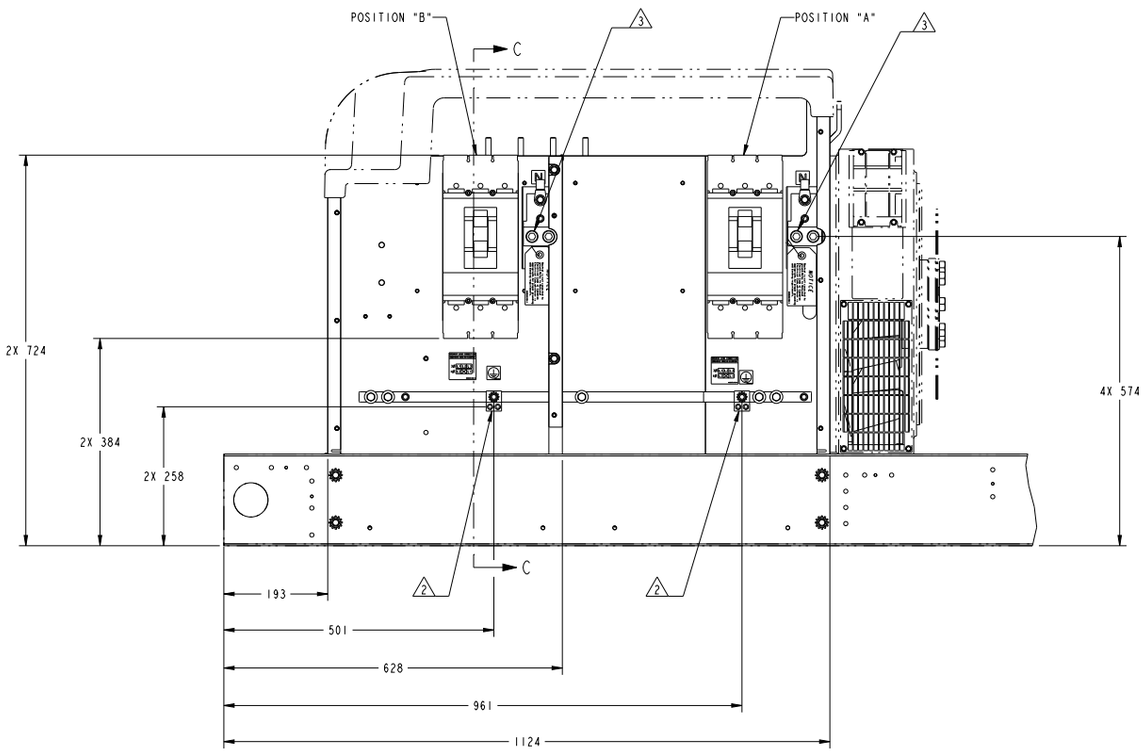
CAD SHEET 1 of 6

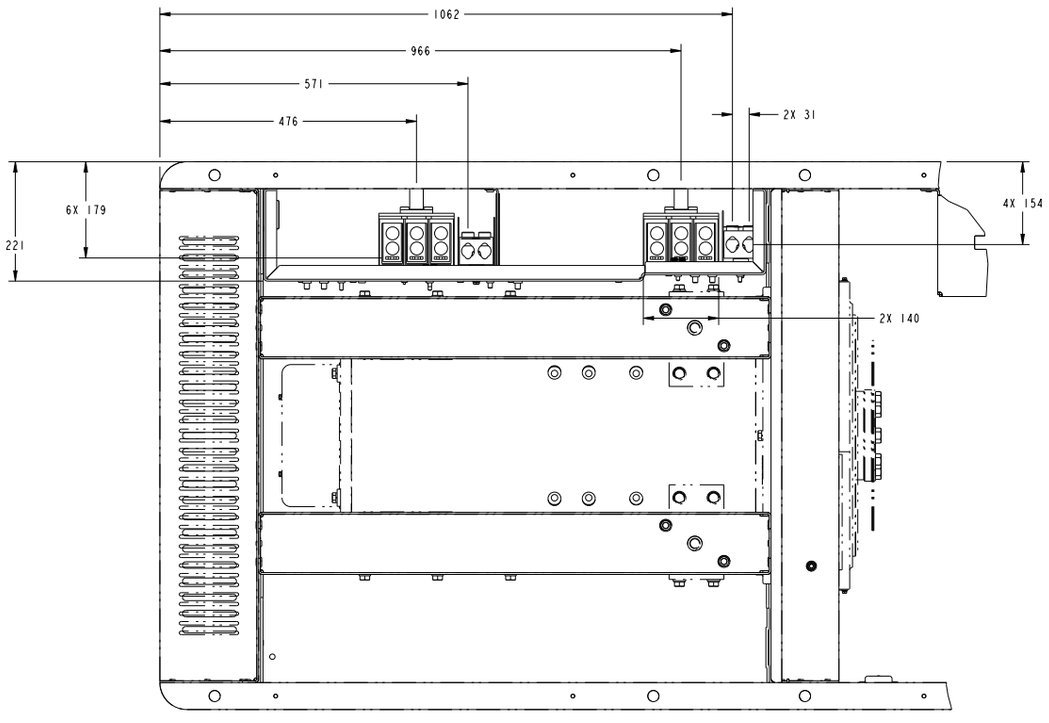
Regulatory Review and Approval is required prior to changing this item per PGG 1-01-01-116. This item impacts compliance with these External Regulations: UL,CSA

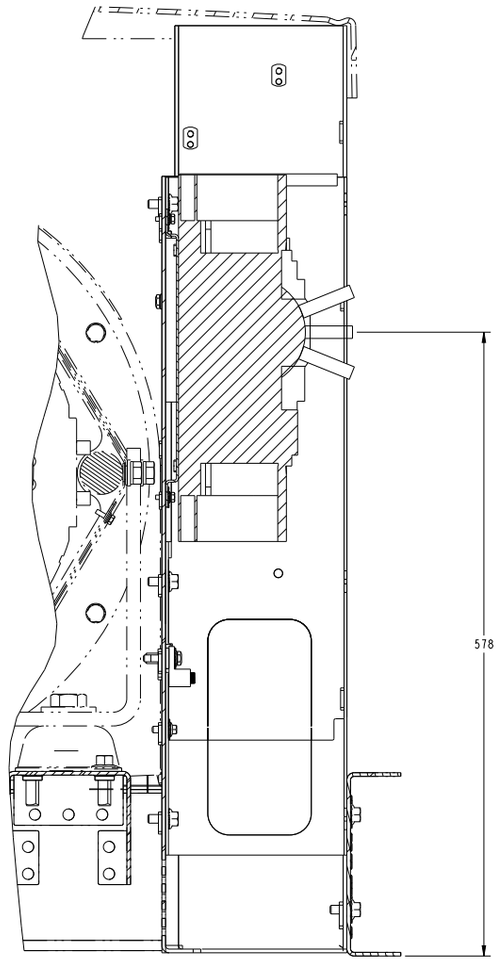
PTC® Creo® Parametric

REL NO	REV	NO	REVISION	DRN	CKD	APVD	DATE
ECO-181477	E	-	---	RT	MT	M_TULADHAR	05NOV18

"L" FRAME SHOWN (400 - 600 amp)







SECTION C-C
SCALE 1/2

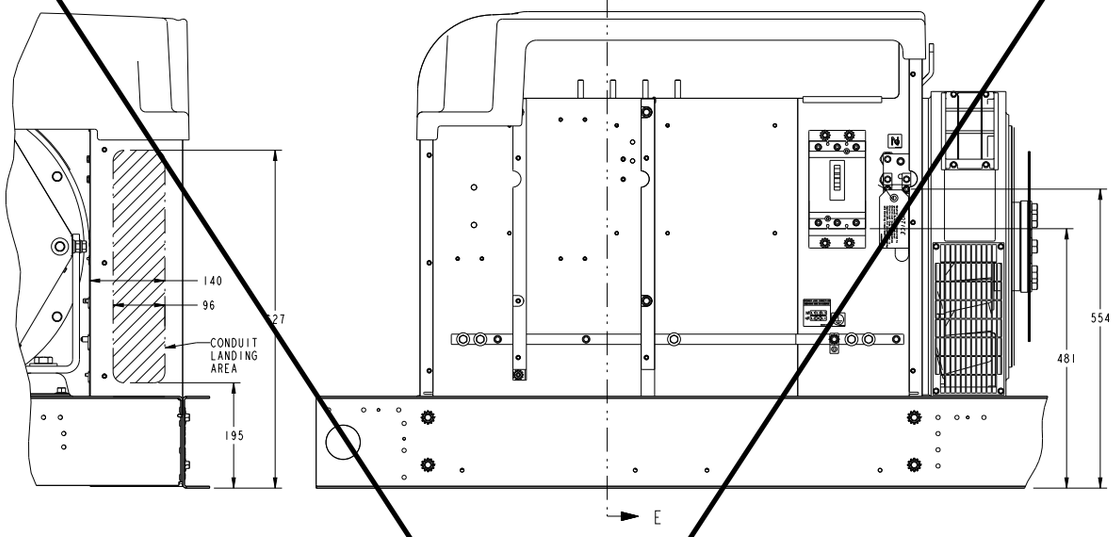
UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN MILLIMETERS						
DIM	X ± 1	ROUGH	0.00- 4.99 +0.15/-0.08	Scale to DO NOT SCALE PRINT	DRN A_JOHNSON	CUMMINS POWER GENERATION
	.X ± 0.8		5.00- 9.99 +0.20/-0.10		CKD A_JOHNSON	
	.XX± 0.38		10.00-17.49 +0.25/-0.13		APVD P_LARSON	OUTLINE,CIRCUIT BREAKER
			17.50-24.99 +0.30/-0.13		DATE 02MAY16	SITE CODE
ANG TOL ± 1.0°	SCALE 1/4	THIS DOCUMENT AND THE INFORMATION SHOWN THEREON IS UNPUBLISHED AND CONFIDENTIAL AND PROPRIETARY TO CUMMINS INC. AND SHALL NOT BE REPRODUCED, DISCLOSED OR USED FOR ANY PURPOSE WITHOUT WRITTEN CONSENT OF CUMMINS INC.		FOR INTERPRETATION OF DIMENSIONS AND TOLERANCES SEE ASME Y14.5-2009	FIRST USED ON ARROW	PGF	REV E	A055B603	CAD SHEET 3 of 6

Regulatory Review and Approval is required prior to changing this item per PGG 1-01-01-116. This item impacts compliance with these External Regulations: UL,CSA

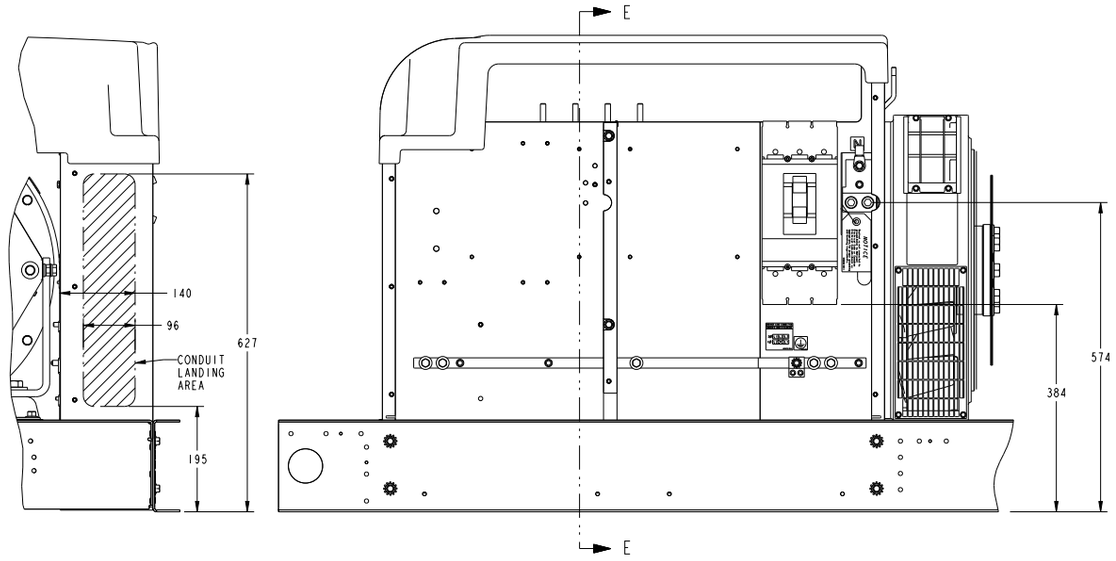
PTC® Creo® Parametric

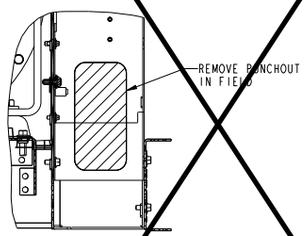
REL NO	REV	NO	REVISION	DRN	CKD	APVD	DATE
ECO-181477	E	-	---	RT	MT	M_TULADHAR	05NOV18

"H" FRAME SHOWN (15 - 150 amp)



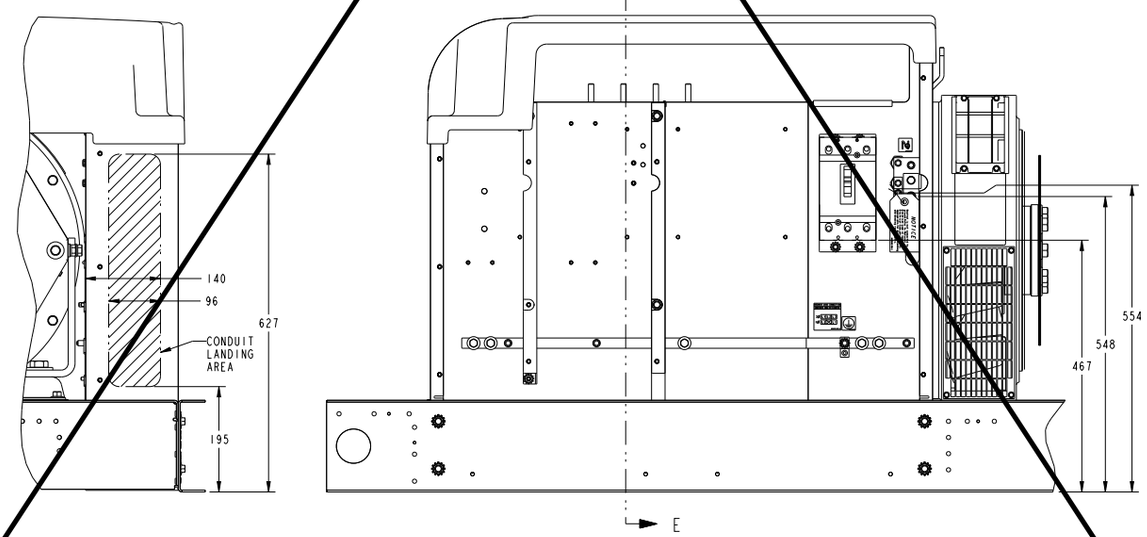
"L" FRAME SHOWN (400 - 600 amp)



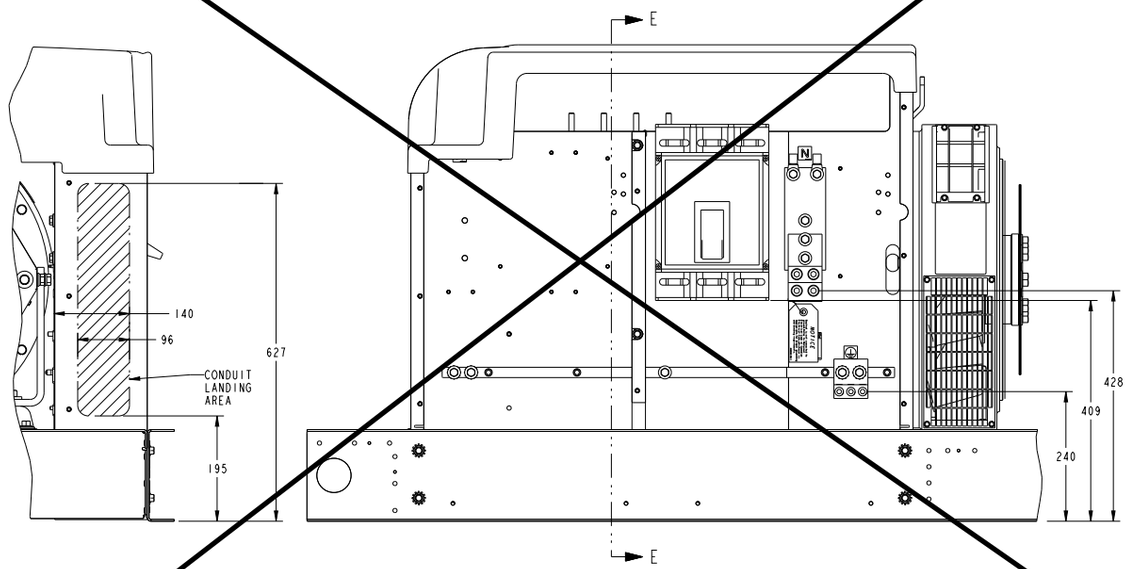


SECTION E-E

"J" FRAME SHOWN (175 - 250 amp)



"P" FRAME SHOWN (400-800 amp)



UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN MILLIMETERS			DRN A_JOHNSON	CUMMINS POWER GENERATION	
DIM X ±1 .X ±0.8 .XX± 0.38	DECIMAL 0.00- 4.99 ±0.15/-0.08 5.00- 9.99 ±0.20/-0.10 10.00-17.49 ±0.25/-0.13 17.50-24.99 ±0.30/-0.13	DO NOT SCALE PRINT	CKD A_JOHNSON APVD P_LARSON DATE 02MAY16	SITE CODE PGF	OUTLINE,CIRCUIT BREAKER
ANG TOL ± 1.0°	SCALE 1/4	THIS DOCUMENT AND THE INFORMATION SHOWN THEREON IS CONFIDENTIAL AND PROPRIETARY TO CUMMINS INC. AND IS NOT TO BE REPRODUCED OR USED FOR ANY PURPOSE WITHOUT THE EXPRESSED WRITTEN CONSENT OF CUMMINS INC.	FOR INTERPRETATION OF DIMENSIONS AND TOLERANCES, SEE ASME Y14.5-2009	FIRST USED ON ARROW	DWG SIZE E A055B603	CAD SHEET 5 of 6

Regulatory Review and Approval is required prior to changing this item per PGG 1-01-01-116. This item impacts compliance with these External Regulations: UL,CSA

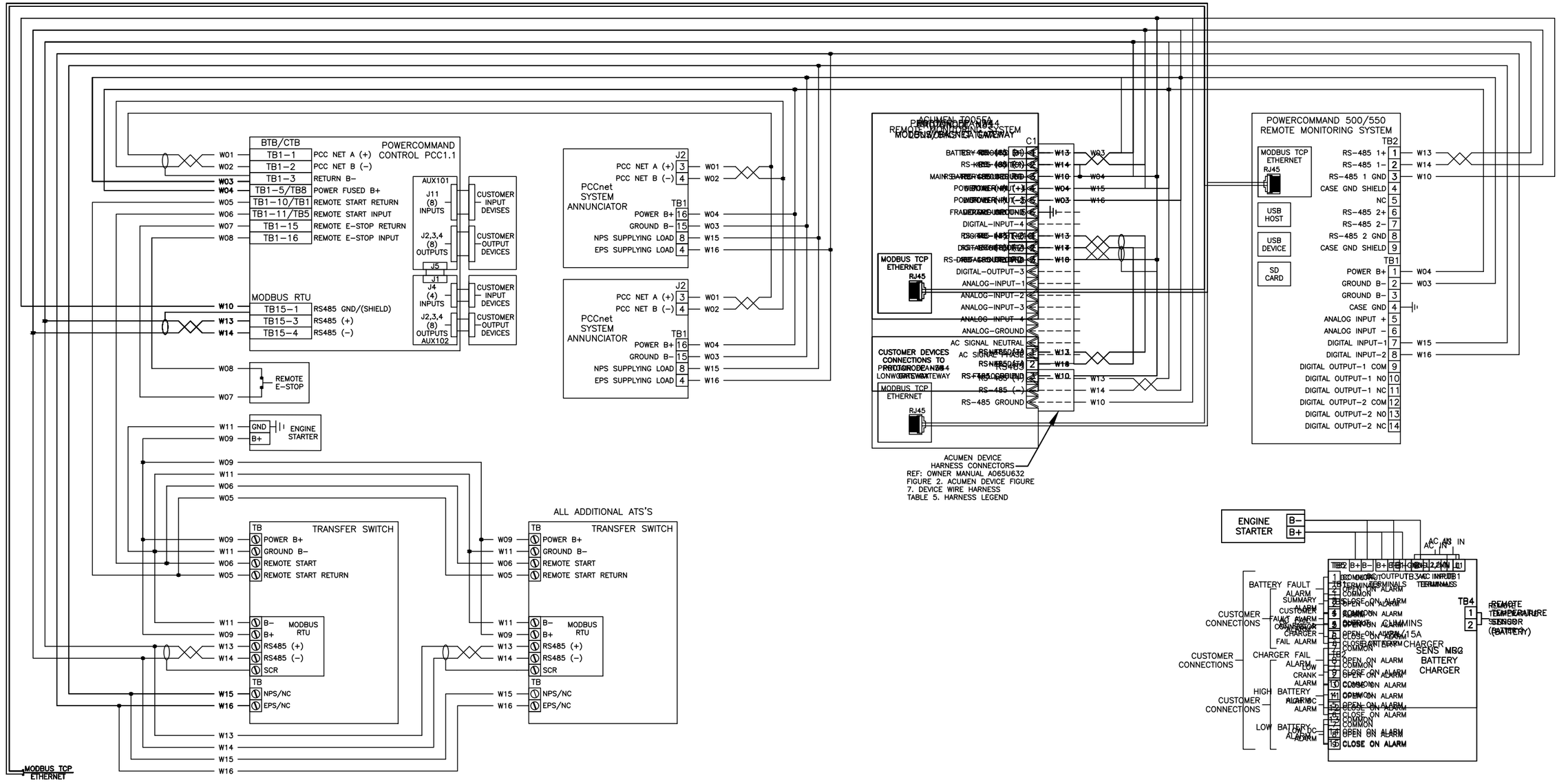
Drawing Name: A055B604 Revision: E
Part Name: A055B603 Revision: E
ECO-181477 Sheet 5 of 7

UNLESS OTHERWISE SPECIFIED,
ALL DIMENSIONS ARE IN INCHES

TOLERANCES:
FRACTIONAL: .06
.X: .03
.XX: .01
.XXX: .5°
ANGLES:

REFERENCES	
A057P963	
A065K034	
A065H780	

–	–	–		
FINISH: N/A	MODIFIED BY: –	CHKD BY: –	PREP. BY: KDU	
	–	–	11/03/23	
GENERIC ATS		PCC1302	ENGINE FAMILY:	



- ALL INTERCONNECT WIRING AND DATA CABLING IS TO BE DONE WITH STRANDED WIRE PER NFPA 110.
- PCC NET CABLE: BELDEN 9729. (24 AWG, STRANDED, SHIELDED, TWISTED PAIR)
- OTEC PC40 MODBUS RS485 CABLE: BELDEN 9841. (22 AWG, STRANDED, SHIELDED, TWISTED PAIR)
- TOTAL NETWORK LENGTH NOT TO EXCEED 4000 FT.

CSSNA POWER GEN	SITE NAME: – –	CONTACT NAME: –	CUSTOMER PROJECT NO: –	TITLE: PCC1.1 CONTROL / GENERIC ATS QSB5..QSB7
	CONTRACTOR NAME: –	CONTACT NO: –	CSSNA PROJECT NO: –	SIZE: B DWG NO: PCC1.1 INTERCONNECT REV 1
				SCALE: NONE DO NOT SCALE PRINT SHEET 1 OF 1

ATTACHMENT C

EXCEPTION TO THE GEOLOGIC ASSESSMENT (NOT APPLICABLE)

ATTACHMENT D

SPILL AND OVERFILL CONTROL

SPILL AND OVERFILL CONTROL

In the case of a spill or overflow, the fuel would be contained by the second tank wall. Additionally, in the event of a leak from the primary tank, the fuel will be contained by the secondary tank wall.

ATTACHMENT E

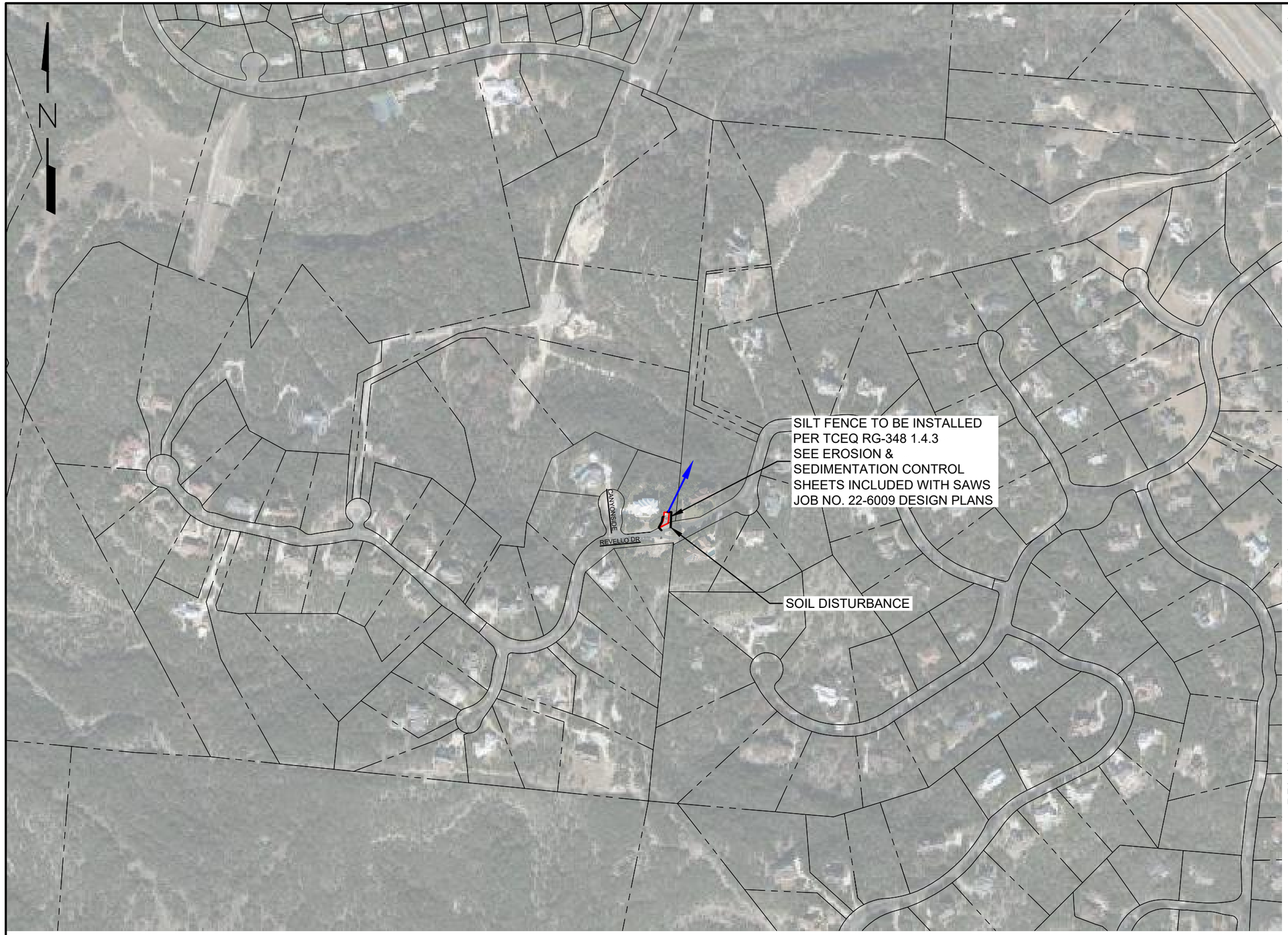
RESPONSE ACTIONS TO SPILLS

RESPONSE ACTIONS TO SPILLS

In the event of a spill, the double-walled tank would catch the fuel. The spilled fuel will be promptly collected from the double-walled tank, and properly disposed of.

APPENDIX A

SITE PLAN



1. A WRITTEN NOTICE OF CONSTRUCTION MUST BE SUBMITTED TO THE TCEQ REGIONAL OFFICE AT LEAST 48 HOURS PRIOR TO THE START OF ANY REGULATED ACTIVITIES. THIS NOTICE MUST INCLUDE:
- THE NAME OF THE APPROVED PROJECT;
- THE ACTIVITY START DATE; AND
- THE CONTACT INFORMATION OF THE PRIME CONTRACTOR.
2. ALL CONTRACTORS CONDUCTING REGULATED ACTIVITIES ASSOCIATED WITH THIS PROJECT MUST BE PROVIDED WITH COMPLETE COPIES OF THE APPROVED WATER POLLUTION ABATEMENT PLAN (WPAP) AND THE TCEQ LETTER INDICATING THE SPECIFIC CONDITIONS OF ITS APPROVAL. DURING THE COURSE OF THESE REGULATED ACTIVITIES, THE CONTRACTORS ARE REQUIRED TO KEEP ON-SITE COPIES OF THE APPROVED PLAN AND APPROVAL LETTER.
3. IF ANY SENSITIVE FEATURE(S) (CAVES, SOLUTION CAVITY, SINK HOLE, ETC.) IS DISCOVERED DURING CONSTRUCTION, ALL REGULATED ACTIVITIES NEAR THE SENSITIVE FEATURE MUST BE SUSPENDED IMMEDIATELY. THE APPROPRIATE TCEQ REGIONAL OFFICE MUST BE IMMEDIATELY NOTIFIED OF ANY SENSITIVE FEATURES ENCOUNTERED DURING CONSTRUCTION. CONSTRUCTION ACTIVITIES MAY NOT BE RESUMED UNTIL THE TCEQ HAS REVIEWED AND APPROVED THE APPROPRIATE PROTECTIVE MEASURES IN ORDER TO PROTECT ANY SENSITIVE FEATURE AND THE EDWARDS AQUIFER FROM POTENTIALLY ADVERSE IMPACTS TO WATER QUALITY.
4. NO TEMPORARY OR PERMANENT HAZARDOUS SUBSTANCE STORAGE TANK SHALL BE INSTALLED WITHIN 150 FEET OF A WATER SUPPLY SOURCE, DISTRIBUTION SYSTEM, WELL, OR SENSITIVE FEATURE.
5. PRIOR TO BEGINNING ANY CONSTRUCTION ACTIVITY, ALL TEMPORARY EROSION AND SEDIMENTATION (E&S) CONTROL MEASURES MUST BE PROPERLY INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE APPROVED PLANS AND MANUFACTURERS SPECIFICATIONS. IF INSPECTIONS INDICATE A CONTROL HAS BEEN USED INAPPROPRIATELY, OR INCORRECTLY, THE APPLICANT MUST REPLACE OR MODIFY THE CONTROL FOR SITE SITUATIONS. THESE CONTROLS MUST REMAIN IN PLACE UNTIL THE DISTURBED AREAS HAVE BEEN PERMANENTLY STABILIZED.
6. ANY SEDIMENT THAT ESCAPES THE CONSTRUCTION SITE MUST BE COLLECTED AND PROPERLY DISPOSED OF BEFORE THE NEXT RAIN EVENT TO ENSURE IT IS NOT WASHED INTO SURFACE STREAMS, SENSITIVE FEATURES, ETC.
7. SEDIMENT MUST BE REMOVED FROM THE SEDIMENT TRAPS OR SEDIMENTATION BASINS NOT LATER THAN WHEN IT OCCUPIES 50% OF THE BASIN'S DESIGN CAPACITY.
8. LITTER, CONSTRUCTION DEBRIS, AND CONSTRUCTION CHEMICALS EXPOSED TO STORMWATER SHALL BE PREVENTED FROM BEING DISCHARGED OFFSITE.
9. ALL SPOILS (EXCAVATED MATERIAL) GENERATED FROM THE PROJECT SITE MUST BE STORED ON-SITE WITH PROPER E&S CONTROLS. FOR STORAGE OR DISPOSAL OF SPOILS AT ANOTHER SITE ON THE EDWARDS AQUIFER RECHARGE ZONE, THE OWNER OF THE SITE MUST RECEIVE APPROVAL OF A WATER POLLUTION ABATEMENT PLAN FOR THE PLACEMENT OF FILL MATERIAL OR MASS GRADING PRIOR TO THE PLACEMENT OF SPOILS AT THE OTHER SITE.
10. IF PORTIONS OF THE SITE WILL HAVE A TEMPORARY OR PERMANENT CEASE IN CONSTRUCTION ACTIVITY LASTING LONGER THAN 14 DAYS, SOIL STABILIZATION IN THOSE AREAS SHALL BE INITIATED AS SOON AS POSSIBLE PRIOR TO THE 14TH DAY OF INACTIVITY. IF ACTIVITY WILL RESUME PRIOR TO THE 21ST DAY, STABILIZATION MEASURES ARE NOT REQUIRED. IF DROUGHT CONDITIONS OR INCLEMENT WEATHER PREVENT ACTION BY THE 14TH DAY, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS POSSIBLE.
11. THE FOLLOWING RECORDS SHALL BE MAINTAINED AND MADE AVAILABLE TO THE TCEQ UPON REQUEST:
- THE DATES WHEN MAJOR GRADING ACTIVITIES OCCUR;
- THE DATES WHEN CONSTRUCTION ACTIVITIES TEMPORARILY OR PERMANENTLY CEASE ON A PORTION OF THE SITE; AND
- THE DATES WHEN STABILIZATION MEASURES ARE INITIATED.
12. THE HOLDER OF ANY APPROVED EDWARD AQUIFER PROTECTION PLAN MUST NOTIFY THE APPROPRIATE REGIONAL OFFICE IN WRITING AND OBTAIN APPROVAL FROM THE EXECUTIVE DIRECTOR PRIOR TO INITIATING ANY OF THE FOLLOWING:
   A. ANY PHYSICAL OR OPERATIONAL MODIFICATION OF ANY WATER POLLUTION ABATEMENT STRUCTURE(S), INCLUDING BUT NOT LIMITED TO PONDS, DAMS, BERMS, SEWAGE TREATMENT PLANTS, AND DIVERSIONARY STRUCTURES;
   B. ANY CHANGE IN THE NATURE OR CHARACTER OF THE REGULATED ACTIVITY FROM THAT WHICH WAS ORIGINALLY APPROVED OR A CHANGE WHICH WOULD SIGNIFICANTLY IMPACT THE ABILITY OF THE PLAN TO PREVENT POLLUTION OF THE EDWARDS AQUIFER;
   C. ANY DEVELOPMENT OF LAND PREVIOUSLY IDENTIFIED AS UNDEVELOPED IN THE ORIGINAL WATER POLLUTION ABATEMENT PLAN.

AUSTIN REGIONAL OFFICE
12100 PARK 35 CIRCLE, BUILDING A
AUSTIN, TEXAS 78753-1808
PHONE(512) 339-2929
FAX(512) 339-3795

SAN ANTONIO REGIONAL OFFICE
14250 JUDSON ROAD
SAN ANTONIO, TEXAS 78233-4480
PHONE(210) 490-3096
FAX (210) 545-4329

LEGEND

PROPERTY BOUNDARY

SILT FENCE

DRAINAGE PATTERN

0 200 400

SCALE IN FEET

WESTON

FIGURE 1
SITE PLAN

15810 CANYONSIDE
CITY OF SAN ANTONIO

DATE	PROJECT NO.	SCALE
June 2024	10412.031.001.0005	AS SHOWN

TEMPORARY STORMWATER (TCEQ 0602)

Temporary Stormwater Section

Texas Commission on Environmental Quality

for Regulated Activities on the Edwards Aquifer Recharge Zone and Relating to 30 TAC §213.5(b)(4)(A), (B), (D)(I) and (G); Effective June 1, 1999

To ensure that the application is administratively complete, confirm that all fields in the form are complete, verify that all requested information is provided, consistently reference the same site and contact person in all forms in the application, and ensure forms are signed by the appropriate party.

Note: Including all the information requested in the form and attachments contributes to more streamlined technical reviews.

Signature

To the best of my knowledge, the responses to this form accurately reflect all information requested concerning the proposed regulated activities and methods to protect the Edwards Aquifer. This **Temporary Stormwater Section** is hereby submitted for TCEQ review and executive director approval. The application was prepared by:

Print Name of Customer/Agent: Aaron Bentley, E.I.T.

Date: 9/10/2024

Signature of Customer/Agent:

Aaron Bentley

Digitally signed by Aaron Bentley
DN: C=US, E=aaron.bentley@westonsolutions.com, OU="Weston Solutions, Inc.", CN=Aaron Bentley
Date: 2024.09.11 10:25:43-05'00'

Regulated Entity Name: San Antonio Water System Los Reyes

Project Information

Potential Sources of Contamination

Examples: Fuel storage and use, chemical storage and use, use of asphaltic products, construction vehicles tracking onto public roads, and existing solid waste.

1. Fuels for construction equipment and hazardous substances which will be used during construction:

   ☒ The following fuels and/or hazardous substances will be stored on the site: Diesel Fuel

   These fuels and/or hazardous substances will be stored in:

   ☐ Aboveground storage tanks with a cumulative storage capacity of less than 250 gallons will be stored on the site for less than one (1) year.

☐ Aboveground storage tanks with a cumulative storage capacity between 250 gallons and 499 gallons will be stored on the site for less than one (1) year.

☒ Aboveground storage tanks with a cumulative storage capacity of 500 gallons or more will be stored on the site. An Aboveground Storage Tank Facility Plan application must be submitted to the appropriate regional office of the TCEQ prior to moving the tanks onto the project.

☐ Fuels and hazardous substances will not be stored on the site.

2. ☒ **Attachment A - Spill Response Actions**. A site specific description of the measures to be taken to contain any spill of hydrocarbons or hazardous substances is attached.

3. ☒ Temporary aboveground storage tank systems of 250 gallons or more cumulative storage capacity must be located a minimum horizontal distance of 150 feet from any domestic, industrial, irrigation, or public water supply well, or other sensitive feature.

4. ☒ **Attachment B - Potential Sources of Contamination**. A description of any activities or processes which may be a potential source of contamination affecting surface water quality is attached.

Sequence of Construction

5. ☒ **Attachment C - Sequence of Major Activities**. A description of the sequence of major activities which will disturb soils for major portions of the site (grubbing, excavation, grading, utilities, and infrastructure installation) is attached.

   ☒ For each activity described, an estimate (in acres) of the total area of the site to be disturbed by each activity is given.

   ☒ For each activity described, include a description of appropriate temporary control measures and the general timing (or sequence) during the construction process that the measures will be implemented.

6. ☒ Name the receiving water(s) at or near the site which will be disturbed or which will receive discharges from disturbed areas of the project: Los Reyes Creek

Temporary Best Management Practices (TBMPs)

Erosion control examples: tree protection, interceptor swales, level spreaders, outlet stabilization, blankets or matting, mulch, and sod. Sediment control examples: stabilized construction exit, silt fence, filter dikes, rock berms, buffer strips, sediment traps, and sediment basins. Please refer to the Technical Guidance Manual for guidelines and specifications. All structural BMPs must be shown on the site plan.

7. ☒ **Attachment D – Temporary Best Management Practices and Measures**. TBMPs and measures will prevent pollution of surface water, groundwater, and stormwater. The construction-phase BMPs for erosion and sediment controls have been designed to retain sediment on site to the extent practicable. The following information is attached:

☒ A description of how BMPs and measures will prevent pollution of surface water, groundwater or stormwater that originates upgradient from the site and flows across the site.

☒ A description of how BMPs and measures will prevent pollution of surface water or groundwater that originates on-site or flows off site, including pollution caused by contaminated stormwater runoff from the site.

☒ A description of how BMPs and measures will prevent pollutants from entering surface streams, sensitive features, or the aquifer.

☒ A description of how, to the maximum extent practicable, BMPs and measures will maintain flow to naturally-occurring sensitive features identified in either the geologic assessment, TCEQ inspections, or during excavation, blasting, or construction.

8. ☒ The temporary sealing of a naturally-occurring sensitive feature which accepts recharge to the Edwards Aquifer as a temporary pollution abatement measure during active construction should be avoided.

☐ **Attachment E - Request to Temporarily Seal a Feature**. A request to temporarily seal a feature is attached. The request includes justification as to why no reasonable and practicable alternative exists for each feature.

☒ There will be no temporary sealing of naturally-occurring sensitive features on the site.

9. ☒ **Attachment F - Structural Practices**. A description of the structural practices that will be used to divert flows away from exposed soils, to store flows, or to otherwise limit runoff discharge of pollutants from exposed areas of the site is attached. Placement of structural practices in floodplains has been avoided.

10. ☒ **Attachment G - Drainage Area Map**. A drainage area map supporting the following requirements is attached:

☐ For areas that will have more than 10 acres within a common drainage area disturbed at one time, a sediment basin will be provided.

☐ For areas that will have more than 10 acres within a common drainage area disturbed at one time, a smaller sediment basin and/or sediment trap(s) will be used.

☐ For areas that will have more than 10 acres within a common drainage area disturbed at one time, a sediment basin or other equivalent controls are not attainable, but other TBMPs and measures will be used in combination to protect down slope and side slope boundaries of the construction area.

☐ There are no areas greater than 10 acres within a common drainage area that will be disturbed at one time. A smaller sediment basin and/or sediment trap(s) will be used in combination with other erosion and sediment controls within each disturbed drainage area.

☒ There are no areas greater than 10 acres within a common drainage area that will be disturbed at one time. Erosion and sediment controls other than sediment basins or sediment traps within each disturbed drainage area will be used.

11. ☐ **Attachment H - Temporary Sediment Pond(s) Plans and Calculations**. Temporary sediment pond or basin construction plans and design calculations for a proposed temporary BMP or measure have been prepared by or under the direct supervision of a Texas Licensed Professional Engineer. All construction plans and design information must be signed, sealed, and dated by the Texas Licensed Professional Engineer. Construction plans for the proposed temporary BMPs and measures are attached.

☒ N/A

12. ☒ **Attachment I - Inspection and Maintenance for BMPs.** A plan for the inspection of each temporary BMP(s) and measure(s) and for their timely maintenance, repairs, and, if necessary, retrofit is attached. A description of the documentation procedures, recordkeeping practices, and inspection frequency are included in the plan and are specific to the site and/or BMP.

13. ☒ All control measures must be properly selected, installed, and maintained in accordance with the manufacturer's specifications and good engineering practices. If periodic inspections by the applicant or the executive director, or other information indicate a control has been used inappropriately, or incorrectly, the applicant must replace or modify the control for site situations.

14. ☒ If sediment escapes the construction site, off-site accumulations of sediment must be removed at a frequency sufficient to minimize offsite impacts to water quality (e.g., fugitive sediment in street being washed into surface streams or sensitive features by the next rain).

15. ☒ Sediment must be removed from sediment traps or sedimentation ponds not later than when design capacity has been reduced by 50%. A permanent stake will be provided that can indicate when the sediment occupies 50% of the basin volume.

16. ☒ Litter, construction debris, and construction chemicals exposed to stormwater shall be prevented from becoming a pollutant source for stormwater discharges (e.g., screening outfalls, picked up daily).

Soil Stabilization Practices

Examples: establishment of temporary vegetation, establishment of permanent vegetation, mulching, geotextiles, sod stabilization, vegetative buffer strips, protection of trees, or preservation of mature vegetation.

17. ☒ **Attachment J - Schedule of Interim and Permanent Soil Stabilization Practices**. A schedule of the interim and permanent soil stabilization practices for the site is attached.

18. ☒ Records must be kept at the site of the dates when major grading activities occur, the dates when construction activities temporarily or permanently cease on a portion of the site, and the dates when stabilization measures are initiated.

19. ☒ Stabilization practices must be initiated as soon as practicable where construction activities have temporarily or permanently ceased.

Administrative Information

20. ☒ All structural controls will be inspected and maintained according to the submitted and approved operation and maintenance plan for the project.

21. ☒ If any geologic or manmade features, such as caves, faults, sinkholes, etc., are discovered, all regulated activities near the feature will be immediately suspended. The appropriate TCEQ Regional Office shall be immediately notified. Regulated activities must cease and not continue until the TCEQ has reviewed and approved the methods proposed to protect the aquifer from any adverse impacts.

22. ☒ Silt fences, diversion berms, and other temporary erosion and sediment controls will be constructed and maintained as appropriate to prevent pollutants from entering sensitive features discovered during construction.

ATTACHMENT A

SPILL RESPONSE ACTIONS

SPILL RESPONSE ACTIONS

Upon determination that a spill of petroleum products has occurred exceeding the Final Reportable Quantity of 25 gallons, immediate action is required. These actions include abating and containing the spill by stopping the spill, minimizing impact to the public health and environment, neutralizing the effects of the incident, removing the spilled substance, and managing the wastes. The contractor shall notify the TCEQ as soon as possible but not more than 24 hours after discovery of the spill. The notification report will include the following:

1. The name address and telephone number of the person making the report;
2. The date, time and location of the spill;
3. A specific description of the substance that was spilled;
4. An estimate of the quantity of the spill;
5. The duration of the incident;
6. The source of the spill;
7. A description of the extent of actual or potential harmful impacts to the environment or anticipated health risks;
8. A description of any actions that have been taken, are being taken, or will be taken to contain and respond to the spill;
9. The identity of any third parties responding to the spill.

The report shall be submitted to the State Emergency Response Center at 1-800-832-8224 or to the regional office of the TCEQ if the notification report is submitted during normal business hours.

If the spill constitutes an immediate health threat, the contractor shall immediately notify and cooperate with local emergency authorities to support and implement appropriate notification and response actions. Within two weeks of the spill, the contractor will reasonably attempt to notify the owner or occupant of the property upon which the spill occurred as well as the occupants of any property that the contractor reasonably believes will be adversely affected.

Within 30 days of the spill, the contractor shall submit in writing to the TCEQ regional manager details of the spill and verification that the spill response was adequate. The submission will include one of the following:

1. A statement that the spill response actions have been completed and a description of how the response action was conducted. The statement must include the information contained in the notification report.
2. A request for an extension of time to complete the response action along with the reasons for the request. A projected work schedule outlining the time required to complete the response action is also should also be included. The executive director may grant an extension of up to six months from the sate of the spill was reported.
3. A statement that the spill response has not been completed and will not be completed within the maximum allowable six month extension. The statement should include why the completion of the response actions is not feasible and a projected work schedule outlining the remaining tasks necessary to complete the response actions.

ATTACHMENT B

POTENTIAL SOURCES OF CONTAMINATION

POTENTIAL SOURCES OF CONTAMINATION

Potential sources of sediment to stormwater runoff:

Surface runoff of dirt, tracking of mud, construction debris, and windblown dust will be controlled through the use of temporary erosion control practices.

Potential pollutants and sources, other than sediment, to stormwater runoff:

Temporary potential sources of contamination include:

1. Equipment fuel and oil
2. Concrete
3. Asphalt pavement products

ATTACHMENT C

SEQUENCE OF MAJOR ACTIVITIES

SCHEDULE OF MAJOR ACTIVITIES

ACTIVITY	AREA DISTURBED (ac)	TEMPORARY CONTROLS
Remove existing pipeline	0.00482	Silt fence
Install new waterline	0.00502	Silt Fence
Demolish asphalt driveway	0.00661	Silt fence
Install concrete generator pad	0.00110	Silt fence
Install asphalt drive	0.0236	Silt fence
Final Grading and Restoration	0.00502	Silt fence

ATTACHMENT D

TEMPORARY BEST MANAGEMENT PRACTICES AND MEASURES

TEMPORARY BEST MANAGEMENT PRACTICES AND MEASURES

The general construction sequence will be as follows:

1. Schedule and conduct the preconstruction conference.
2. Install temporary erosion controls, pedestrian protection measures, and traffic control measures.
3. Clear site and complete excavation and site work for installation of waterlines, concrete pads, and asphalt driveways.
4. Remove existing waterlines.
5. Excavate and install new valves, tie-ins, and waterlines.
6. Complete demolition of existing structures as needed for installation of proposed structures.
7. Excavate and construct concrete generator pad and asphalt driveway.
8. Install electrical conduits wires, and controls.
9. Install generator.
10. Complete rough grading as major structures are completed.
11. Complete final grading and restoration of project site.
12. Final dress site and remove temporary erosion controls.

As stated in 2. the temporary erosion controls will be installed before any other construction activity commences.

The temporary erosion controls are listed below. The mulch sock inlet protection and silt fence will prevent the pollution of surface water, groundwater and stormwater by not allowing the sediment from construction activities to leave the site. All sediment contained in flows that cross the site, including flow that originates upstream of the site, will be filtered by the temporary erosion controls listed. The mulch sock inlet protection filters will filter out sediment in the stormwater as it leaves the site. The measures will then be cleaned, as described on the schedule below, to ensure that they remain functioning.

BMP Description: Silt Fence

Installation Schedule:	Prior to commencement of construction activity
Maintenance and Inspection:	Weekly and after each significant rainfall
Responsible Staff:	TBD

ATTACHMENT E

REQUEST TO TEMPORARILY SEAL A FEATURE (NOT APPLICABLE)

ATTACHMENT F

STRUCTURAL PRACTICES

STRUCTURAL PRACTICES

Within the project area, silt fencing will be installed to limit runoff discharge of pollutants from exposed areas.

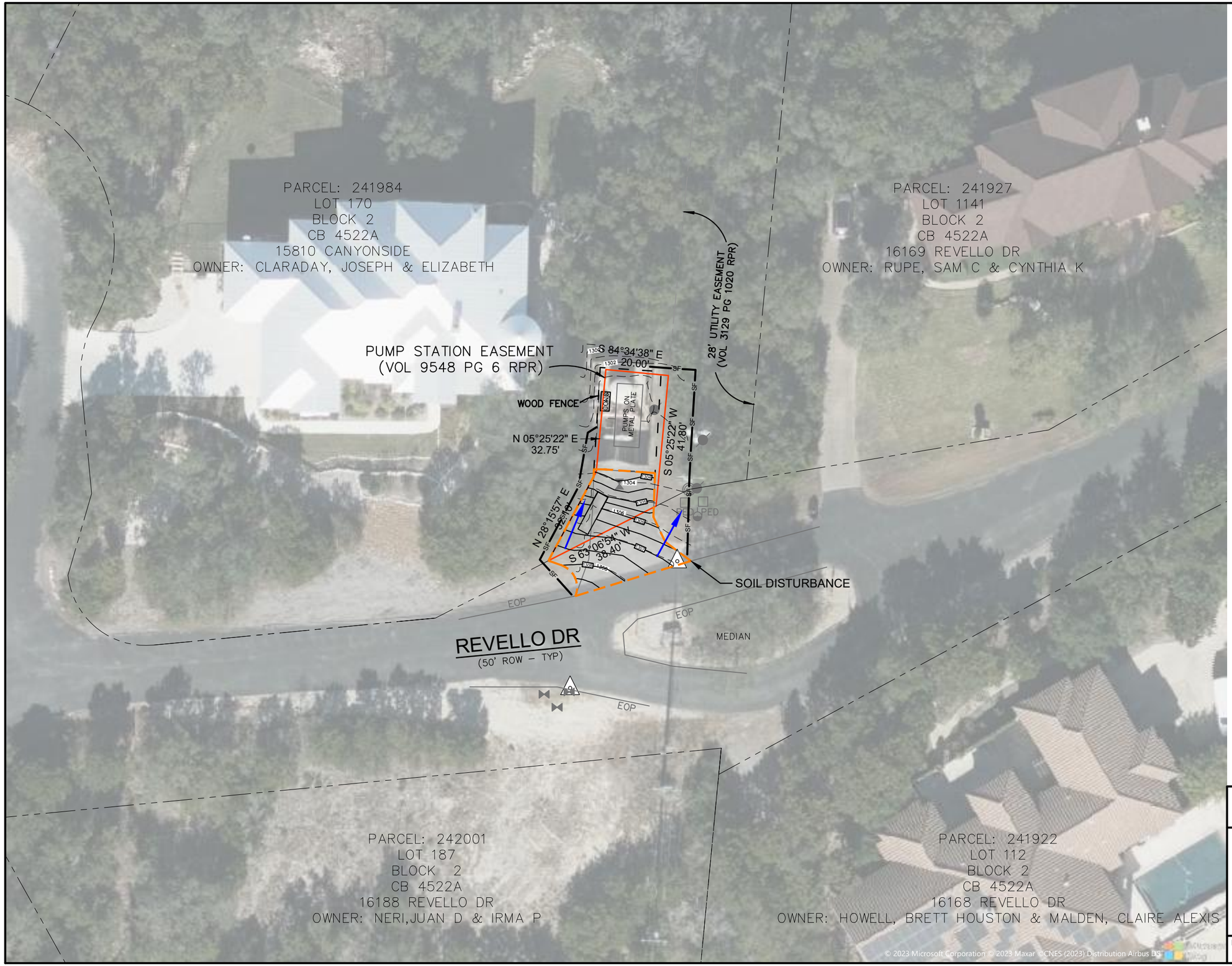
ATTACHMENT G

DRAINAGE AREA MAP

DRAINAGE AREA MAP

There are no areas greater than 10 acres within a common drainage area that will be disturbed at one time. Erosion and sediment controls other than sediment basins or sediment traps within each disturbed drainage area will be used. These other methods include:

1. Material Storage
2. Stockpipe Management
3. Solid Waste Management
4. Silt Fence
5. Dust Control, Water Application



LEGEND

- PROPERTY BOUNDARY
- SOIL DISTURBANCE
- SF — SILT FENCE
- DRAINAGE PATTERN

N

0 15 30

SCALE IN FEET

WESTON

DRAINAGE AREA MAP

15810 CANYONSIDE
CITY OF SAN ANTONIO

DATE	PROJECT NO.	SCALE
NOV 2023	10412.031.001.0005	AS SHOWN

ATTACHMENT H

TEMPORARY SEDIMENT POND PLANS AND CALCULATIONS (NOT APPLICABLE)

ATTACHMENT I

INSPECTION AND MAINTENANCE FOR BEST MANAGEMENT PRACTICES

Project Name:

BEST MANAGEMENT PRACTICE INSPECTION AND MAINTENANCE REPORT FORM

SILT FENCE

Name of Inspector: _____ Inspection Date: _____
Days Since Last Rainfall: _____ Amount of Last Rainfall: _____ inches

Where is the Silt Fence Located?	Is the Bottom of the Fabric Still Buried?	Is the Fabric Torn or Sagging?	Are the Posts Tipping Over?	How Deep is the Sediment?

MAINTENANCE REQUIRED FOR INLET PROTECTION BARRIERS: _____

TO BE PERFORMED BY: _____ ON OR BEFORE: _____

ATTACHMENT J

SCHEDULE OF INTERIM AND PERMANENT SOIL STABILIZATION PRACTICES

SCHEDULE OF INTERIM AND PERMANENT SOIL STABILIZATION PRACTICES

Permanent soil stabilization practices will include:

1. Limitations on the steepness of finished slopes.
2. Permanent revegetation of finished areas.

No permanent soils slopes steeper than three horizontal to one vertical will be created as a result of this project.

BMP Description: Limitations on the steepness of finished slopes.

Installation Schedule:	Per sequence of construction
Maintenance and Inspection:	N/A
Responsible Staff:	TBD

BMP Description: Permanent revegetation of finished areas.

Installation Schedule:	Upon completion of grading
Maintenance and Inspection:	Watering as needed for establishment and frequent inspection to ensure appropriate progress until vegetation is fully established.
Responsible Staff:	TBD

AGENT AUTHORIZATION FORM (TCEQ 0599)

Agent Authorization Form
For Required Signature
Edwards Aquifer Protection Program
Relating to 30 TAC Chapter 213
Effective June 1, 1999

I **Dr. Saqib Shirazi, PE, PMP**,
Print Name

Manager – Operation Support Engineering,
Title - Owner/President/Other

of **San Antonio Water System**,
Corporation/Partnership/Entity Name

have authorized **Aaron Bentley, E.I.T.**
Print Name of Agent/Engineer

of **Weston Solutions, Inc.**
Print Name of Firm

to represent and act on the behalf of the above named Corporation, Partnership, or Entity for the purpose of preparing and submitting this plan application to the Texas Commission on Environmental Quality (TCEQ) for the review and approval consideration of regulated activities.

I also understand that:

1. The applicant is responsible for compliance with 30 Texas Administrative Code Chapter 213 and any condition of the TCEQ's approval letter. The TCEQ is authorized to assess administrative penalties of up to $10,000 per day per violation.

2. For those submitting an application who are not the property owner, but who have the right to control and possess the property, additional authorization is required from the owner.

3. Application fees are due and payable at the time the application is submitted. The application fee must be sent to the TCEQ cashier or to the appropriate regional office. The application will not be considered until the correct fee is received by the commission.

4. A notarized copy of the Agent Authorization Form must be provided for the person preparing the application, and this form must accompany the completed application.

5. No person shall commence any regulated activity on the Edwards Aquifer Recharge Zone, Contributing Zone or Transition Zone until the appropriate application for the activity has been filed with and approved by the Executive Director.

SIGNATURE PAGE:

Applicant's Signature

7-17-2024
Date

THE STATE OF TEXAS §

County of BEXAR §

BEFORE ME, the undersigned authority, on this day personally appeared Saqib Shirazi known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that (s)he executed same for the purpose and consideration therein expressed.

GIVEN under my hand and seal of office on this 17 day of July, 2024.

NOTARY PUBLIC

ALBESA ELIAS CALLES
Notary Public, State of Texas
Comm. Expires 12-17-2024
Notary ID 130651506

Albesa Elias Calles
Typed or Printed Name of Notary

MY COMMISSION EXPIRES: 12-17-2024

APPLICATION FEE FORM (TCEQ 0574)

Application Fee Form

Texas Commission on Environmental Quality
Name of Proposed Regulated Entity: San Antonio Water System Los Reyes
Regulated Entity Location: 15810 Canyonside, Helotes, TX 78023
Name of Customer: San Antonio Water System
Contact Person: Dr. Saqib Shirazi, P.E., PMP Phone: 210-704-7297
Customer Reference Number (if issued):CN 600529069
Regulated Entity Reference Number (if issued):RN _____

Austin Regional Office (3373)

☐ Hays ☐ Travis ☐ Williamson

San Antonio Regional Office (3362)

☒ Bexar ☐ Medina ☐ Uvalde
☐ Comal ☐ Kinney

Application fees must be paid by check, certified check, or money order, payable to the **Texas Commission on Environmental Quality**. Your canceled check will serve as your receipt. **This form must be submitted with your fee payment**. This payment is being submitted to:

☐ Austin Regional Office
☐ Mailed to: TCEQ - Cashier
Revenues Section
Mail Code 214
P.O. Box 13088
Austin, TX 78711-3088

☒ San Antonio Regional Office
☐ Overnight Delivery to: TCEQ - Cashier
12100 Park 35 Circle
Building A, 3rd Floor
Austin, TX 78753
(512)239-0357

Site Location (Check All That Apply):

☒ Recharge Zone ☐ Contributing Zone ☐ Transition Zone

Type of Plan	***Size***	***Fee Due***
Water Pollution Abatement Plan, Contributing Zone Plan: One Single Family Residential Dwelling	Acres	$
Water Pollution Abatement Plan, Contributing Zone Plan: Multiple Single Family Residential and Parks	Acres	$
Water Pollution Abatement Plan, Contributing Zone Plan: Non-residential	Acres	$
Sewage Collection System	L.F.	$
Lift Stations without sewer lines	Acres	$
Underground or Aboveground Storage Tank Facility	1 Tanks	$ 650
Piping System(s)(only)	Each	$
Exception	Each	$
Extension of Time	Each	$

Signature: Aaron Bentley Digitally signed by Aaron Bentley DN: C=US, E=aaron.bentley@westonsolutions.com, OU="Weston Solutions, Inc.", CN=Aaron Bentley Date: 2024.09.11 10:26:22-05'00' Date: 9/10/2024

Application Fee Schedule

Texas Commission on Environmental Quality
Edwards Aquifer Protection Program 30 TAC Chapter 213 (effective 05/01/2008)

Water Pollution Abatement Plans and Modifications

Contributing Zone Plans and Modifications

Project	*Project Area in Acres*	*Fee*
One Single Family Residential Dwelling	< 5	$650
Multiple Single Family Residential and Parks	< 5 5 < 10 10 < 40 40 < 100 100 < 500 ≥ 500	$1,500 $3,000 $4,000 $6,500 $8,000 $10,000
Non-residential (Commercial, industrial, institutional, multi-family residential, schools, and other sites where regulated activities will occur)	< 1 1 < 5 5 < 10 10 < 40 40 < 100 ≥ 100	$3,000 $4,000 $5,000 $6,500 $8,000 $10,000

Organized Sewage Collection Systems and Modifications

Project	*Cost per Linear Foot*	*Minimum Fee-Maximum Fee*
Sewage Collection Systems	$0.50	$650 - $6,500

Underground and Aboveground Storage Tank System Facility Plans and Modifications

Project	*Cost per Tank or Piping System*	*Minimum Fee-Maximum Fee*
Underground and Aboveground Storage Tank Facility	$650	$650 - $6,500

Exception Requests

Project	*Fee*
Exception Request	$500

Extension of Time Requests

Project	*Fee*
Extension of Time Request	$150

CORE DATA FORM (TCEQ 10400)

TCEQ Use Only

TCEQ Core Data Form

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

SECTION I: General Information

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

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

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

2. Customer Reference Number *(if issued)*	Follow this link to search for CN or RN numbers in Central Registry**	**3. Regulated Entity Reference Number** *(if issued)*
CN 600529069		**RN**

SECTION II: Customer Information

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

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

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

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

San Antonio Water System	

7. TX SOS/CPA Filing Number	**8. TX State Tax ID** (11 digits)	**9. Federal Tax ID** (9 digits)	**10. DUNS Number** *(if applicable)*
	32046998749		057582603

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

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

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

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

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

15. Mailing Address:	2800 US Highway 281 N						
	City	San Antonio	**State**	TX	**ZIP**	78212	**ZIP + 4**

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

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

(210) 704-7297		( ) -

SECTION III: Regulated Entity Information

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

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

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

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

San Antonio Water System Los Reyes

23. Street Address of the Regulated Entity: ***(No PO Boxes)***	15810 Canyonside							
	City	Helotes	**State**	TX	**ZIP**	78023	**ZIP + 4**	
24. County	Bexar							

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

25. Description to Physical Location:					
26. Nearest City			**State**		**Nearest ZIP Code**
San Antonio			TX		78023

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

27. Latitude (N) In Decimal:	29.590515 N		**28. Longitude (W) In Decimal:**	-98.710946 W	
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds

29. Primary SIC Code (4 digits)	**30. Secondary SIC Code** (4 digits)	**31. Primary NAICS Code** (5 or 6 digits)	**32. Secondary NAICS Code** (5 or 6 digits)
4941		21310	

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

Distribution of water to nearby property

34. Mailing Address:	**2800 US Highway 281 N**							
	City	**San Antonio**	**State**	**TX**	**ZIP**	**78212**	**ZIP + 4**	
35. E-Mail Address:								

36. Telephone Number	**37. Extension or Code**	**38. Fax Number** *(if applicable)*
(210) 704-7297		( ) -

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

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

SECTION IV: Preparer Information

40. Name:	Aaron Bentley, E.I.T.	**41. Title:**	Project Engineer

42. Telephone Number	**43. Ext./Code**	**44. Fax Number**	**45. E-Mail Address**
(210 **)** 308-4311		**( ) -**	aaron.bentley@westonsolutions.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:	San Antonio Water System	**Job Title:**	Professional Engineer		
Name *(In Print):*	Dr. Saqib Shirazi, P.E., PMP			**Phone:**	**(** 210 **)** 704- **7297**
Signature:	Aaron Bentley Digitally signed by Aaron Bentley DN: C=US, E=aaron.bentley@westonsolutions.com, OU="Weston Solutions, Inc.", CN=Aaron Bentley Date: 2024.09.11 10:27:00-05'00'			**Date:**	9/10/2024