



ITEM FOR ENVIRONMENTAL COMMISSION AGENDA

COMMISSION MEETING

DATE: March 6, 2024

NAME & NUMBER OF

PROJECT: Northwest Area Lift Station Improvements Great Hills Lift Station
No.53 (SP-2022-0537C)

NAME OF APPLICANT OR ORGANIZATION:

Sharon Hamilton, Civil Team Engineers LLC on behalf of the Austin
Water Utility Department

LOCATION:

9009 ½ Spicebrush Drive, Austin, TX 78759

COUNCIL DISTRICT:

District 6

ENVIRONMENTAL REVIEW STAFF:

Brad Jackson, Environmental Compliance Specialist Senior, DSD,
512-974-2128, Brad.Jackson@austintexas.gov

WATERSHED:

Bull Creek, Water Supply Suburban, Drinking Water Protection
Zone

REQUEST NO. 1:

A Land Use Commission variance is requested to allow development
in the CWQZ for a lift station per LDC 25-8-261

REQUEST NO. 2:

A Land Use Commission variance is requested to allow construction
of a building on a slope with a gradient of more than 25% per LDC
25-8-302(A)(1)

REQUEST NO. 3:

A Land Use Commission variance is requested to allow fill up to 14
feet for construction of a lift station exceeding the 4-foot limitation
per LDC 25-8-342

**STAFF
RECOMMENDATION
NO. 1:**

Staff recommends approval of the variance with a condition

**STAFF
RECOMMENDATION
NO. 2:**

Staff recommends approval of the variance with a condition

**STAFF
RECOMMENDATION
NO. 3:**

Staff recommends approval of the variance with a condition

STAFF CONDITION:

Provide structural containment of the fill with a retaining wall.



Development Services Department
Staff Recommendations Concerning Required Findings

Project Name: Northwest Area Lift Station Improvements
Ordinance Standard: Watershed Protection Ordinance
Variance Request: **To allow development in the CWQZ for a lift station per LDC 25-8-261**

Include an explanation with each applicable finding of fact.

A. Land Use Commission variance determinations from Chapter 25-8-41 of the City Code:

1. The requirement will deprive the applicant of a privilege available to owners of similarly situated property with approximately contemporaneous development subject to similar code requirements.

Yes. The variance will not be providing a special privilege to the applicant. The lift station is currently existing and in operation to provide wastewater (WW) service to the neighborhood. The variance for construction in the CWQZ will allow the replacement of the existing lift station with a new lift station to continue to provide WW service to the neighborhood. The old lift station will be decommissioned when the new lift station is complete.

2. The variance:
 - a) Is not necessitated by the scale, layout, construction method, or other design decision made by the applicant, unless the design decision provides greater overall environmental protection than is achievable without the variance;

Yes. The scale and layout of the new lift station has been designed based on the needs of the existing neighborhood for WW service.

- b) Is the minimum deviation from the code requirement necessary to allow a reasonable use of the property;

Yes. The size and design of the new lift station will be the minimum amount of disturbance in the CWQZ to continue to supply WW service to the neighborhood and protect the creek from WW overflows due to equipment failure.

- c) Does not create a significant probability of harmful environmental consequences.

Yes. The variance does not create a significant probability of harmful consequences. The existing lift station is aging and prone to failure, leading to a WW overflow into Bull Creek. The variance will allow a new lift station and protect Bull Creek from a WW overflow.

3. Development with the variance will result in water quality that is at least equal to the water quality achievable without the variance.

Yes. The project will provide for better water quality for the site and the neighborhood by preventing a failure of the existing lift station and WW overflow into Bull Creek.

B. The Land Use Commission may grant a variance from a requirement of Section 25-8-422 (*Water Supply Suburban Water Quality Transition Zone*), Section 25-8-452 (*Water Supply Rural Water Quality Transition Zone*), Section 25-8-482 (*Barton Springs Zone Water Quality Transition Zone*), Section 25-8-368 (*Restrictions on Development Impacting Lake Austin, Lady Bird Lake, and Lake Walter E. Long*), or Article 7, Division 1 (*Critical Water Quality Zone Restrictions*), after determining that::

1. The criteria for granting a variance in Subsection (A) are met;

Yes, see above.

2. The requirement for which a variance is requested prevents a reasonable, economic use of the entire property;


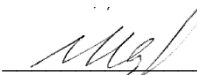

Yes. The lift station must be constructed in line with the existing WW infrastructure which is also in the CWQZ.

3. The variance is the minimum deviation from the code requirement necessary to allow a reasonable, economic use of the entire property.

Yes. The lift station is designed to provide WW service to the existing neighborhood.

Staff Determination: Staff determines that the findings of fact have been met. Staff recommends the following condition:

Provide structural containment of the fill with a retaining wall.

Environmental Reviewer (DSD)	 Brad Jackson	Date <u>02/07/24</u>
Environmental Review Manager (DSD)	 Mike McDougal	Date <u>2/8/24</u>
Deputy Environmental Officer (WPD)	 Liz Johnston	Date <u>02/22/2024</u>



Development Services Department
Staff Recommendations Concerning Required Findings

Project Name: Northwest Area Lift Station Improvements
Ordinance Standard: Watershed Protection Ordinance
Variance Request: **To allow construction of a building on a slope with a gradient of more than 25% per LDC 25-8-302(A)(1)**

Include an explanation with each applicable finding of fact.

A. Land Use Commission variance determinations from Chapter 25-8-41 of the City Code:

1. The requirement will deprive the applicant of a privilege available to owners of similarly situated property with approximately contemporaneous development subject to similar code requirements.

Yes. The variance will not be providing a special privilege to the applicant. The lift station is currently existing and in operation to provide WW service to the neighborhood. The variance for the building on slopes is required to house the equipment necessary for the lift station to operate.

2. The variance:

- a) Is not necessitated by the scale, layout, construction method, or other design decision made by the applicant, unless the design decision provides greater overall environmental protection than is achievable without the variance;

Yes. The scale and layout of the new lift station and associated equipment housed within the building has been designed based on the needs of the existing neighborhood for WW service.

- b) Is the minimum deviation from the code requirement necessary to allow a reasonable use of the property;

Yes. The building serves only to house equipment to protect it from the elements and ensure safe operation of the new lift station. The building is only 12 feet by 20 feet in size.

- c) Does not create a significant probability of harmful environmental consequences.

Yes. The variance does not create a significant probability of harmful consequences. The existing lift station is aging and prone to failure, leading to a WW overflow into Bull

Creek. The variance will allow a new lift station and protect Bull Creek from a WW overflow.

3. Development with the variance will result in water quality that is at least equal to the water quality achievable without the variance.

Yes. The project will provide for better water quality for the site and the neighborhood by preventing a failure of the existing lift station and WW overflow into Bull Creek.

- B. The Land Use Commission may grant a variance from a requirement of Section 25-8-422 (*Water Supply Suburban Water Quality Transition Zone*), Section 25-8-452 (*Water Supply Rural Water Quality Transition Zone*), Section 25-8-482 (*Barton Springs Zone Water Quality Transition Zone*), Section 25-8-368 (*Restrictions on Development Impacting Lake Austin, Lady Bird Lake, and Lake Walter E. Long*), or Article 7, Division 1 (*Critical Water Quality Zone Restrictions*), after determining that::

1. The criteria for granting a variance in Subsection (A) are met;

Not Applicable

2. The requirement for which a variance is requested prevents a reasonable, economic use of the entire property;

Not Applicable

3. The variance is the minimum deviation from the code requirement necessary to allow a reasonable, economic use of the entire property.

Not Applicable

Staff Determination: Staff determines that the findings of fact have been met. Staff recommends the following condition:

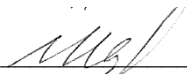
Provide structural containment of the fill with a retaining wall.

Environmental Reviewer
(DSD)

 **Brad Jackson**

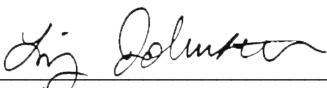
Date 02/07/24

Environmental Review
Manager (DSD)


Mike McDougal

Date 2/8/24

Deputy Environmental
Officer (WPD)


Liz Johnston

Date 02/22/2024



Development Services Department
Staff Recommendations Concerning Required Findings

Project Name: Northwest Area Lift Station Improvements
Ordinance Standard: Watershed Protection Ordinance
Variance Request: **To allow fill up to 14 feet for construction of a lift station exceeding the 4 foot limitation per LDC 25-8-342**

Include an explanation with each applicable finding of fact.

A. Land Use Commission variance determinations from Chapter 25-8-41 of the City Code:

1. The requirement will deprive the applicant of a privilege available to owners of similarly situated property with approximately contemporaneous development subject to similar code requirements.

Yes. The variance will not be providing a special privilege to the applicant. The lift station is currently existing and in operation to provide WW service to the neighborhood. The variance for fill up to 14' will allow the replacement of the existing lift station with a new lift station to continue to provide WW service to the neighborhood. The old lift station will be decommissioned when the new lift station is complete.

2. The variance:
 - a) Is not necessitated by the scale, layout, construction method, or other design decision made by the applicant, unless the design decision provides greater overall environmental protection than is achievable without the variance;

Yes. The scale and layout of the new lift station has been designed based on the needs of the existing neighborhood for WW service.

- b) Is the minimum deviation from the code requirement necessary to allow a reasonable use of the property;

Yes. The fill is the minimum deviation from the 4-foot limit to allow access to the new lift station for maintenance and emergency repairs.

- c) Does not create a significant probability of harmful environmental consequences.

Yes. The variance does not create a significant probability of harmful consequences. The existing lift station is aging and prone to failure, leading to a WW overflow into Bull

Creek. The variance will allow a new lift station and protect Bull Creek from a WW overflow.

3. Development with the variance will result in water quality that is at least equal to the water quality achievable without the variance.

Yes. The project will provide for better water quality for the site and the neighborhood by preventing a failure of the existing lift station and WW overflow into Bull Creek.

- B. The Land Use Commission may grant a variance from a requirement of Section 25-8-422 (*Water Supply Suburban Water Quality Transition Zone*), Section 25-8-452 (*Water Supply Rural Water Quality Transition Zone*), Section 25-8-482 (*Barton Springs Zone Water Quality Transition Zone*), Section 25-8-368 (*Restrictions on Development Impacting Lake Austin, Lady Bird Lake, and Lake Walter E. Long*), or Article 7, Division 1 (*Critical Water Quality Zone Restrictions*), after determining that::

1. The criteria for granting a variance in Subsection (A) are met;

Not Applicable

2. The requirement for which a variance is requested prevents a reasonable, economic use of the entire property;

Not Applicable


3. The variance is the minimum deviation from the code requirement necessary to allow a reasonable, economic use of the entire property.

Not Applicable

Staff Determination: Staff determines that the findings of fact have been met. Staff recommends the following condition:

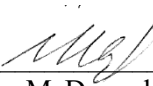
Provide structural containment of the fill with a retaining wall.

Environmental Reviewer
(DSD)

 **Brad Jackson**

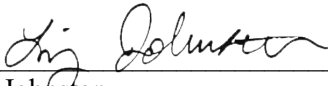
Date 02/07/24

Environmental Review
Manager (DSD)


Mike McDougal

Date 2/8/24

Deputy Environmental
Officer (WPD)


Liz Johnston

Date 02/22/2024

Northwest Lift Station Improvements, Great Hills Lift Station SP-2022-0537C

Variance Request Article 7, Division 1, Critical Water Quality Zone Restrictions, 25-8-261

Land Use Commission variance determinations from 25-8-41(A) of the City Code

1. The requirement will deprive the applicant of a privilege or the safety of property given to owners of other similarly situated properties with approximately contemporaneous development;
 - a. YES, The existing lift station was approved with the subdivision and is noted on the Subdivision plat included on sheet 7 of the plans, dated March 1993. Replacement of the lift station is required to continue provision of safe wastewater service to the subdivision. Therefore denying the variance will deprive the entire subdivision of wastewater service.
2. The variance
 - a. Is not based on a condition caused by the method chosen by the applicant to develop the property, unless the development method provides greater overall environmental protection than is achievable without the variance.
 - i. YES, The existing lift station is failing and must be upgraded; Austin Water has an existing system that collects at this lift station. In order to continue providing wastewater service to the subdivision and keep the existing lift station running during construction, a new lift station must be built immediately adjacent to the existing. Denying the variance will deprive the entire subdivision of wastewater service.
 - b. Is the minimum change necessary to avoid the deprivation of a privilege given to other property owners and to allow a reasonable use of the property
 - i. YES, The lift station must be built at the existing collection point in order to avoid rebuilding the entire wastewater infrastructure of the subdivision. Denying the variance will deprive the entire subdivision of wastewater service.
 - c. Does not create a significant probability of harmful environmental consequences, and
 - i. YES, the existing lift station is aging and failing, leaving the potential for wastewater spills into Bull Creek if it is not replaced. The new lift station will provide improved service and reliability and will allow for continued service to the subdivision.
 - d. Development with the variance will result in water quality that is at least equal to the water quality achievable without the variance
 - i. YES, the existing lift station is aging and failing, leaving the potential for wastewater spills into Bull Creek if it is not replaced. The new lift station will

provide improved service and reliability and will allow for continued service to the subdivision.

Additional Land Use Commission variance determinations for a requirement of Article 7, Division 1
(Critical Water Quality Zone Restrictions:

- e. The criteria for granting a variance in Subsection A are met:
 - i. YES, see above for each criteria.
- f. The requirement for which a variance is requested prevents a reasonable, economic use of the entire property;
 - i. YES, the existing lift station is aging and failing. The new lift station will provide improved service and reliability and will allow for continued service to the subdivision.
- g. The variance is the minimum deviation from the code requirement necessary to allow a reasonable economic use of the entire property.
 - i. YES, the existing lift station is aging and failing. The new lift station will provide improved service and reliability and will allow for continued service to the subdivision.

Northwest Lift Station Improvements, Great Hills Lift Station SP-2022-0537C

Variance Request Article 7, Division 3, Construction of a Building or Parking Area, 25-8-302(A)(1)

Land Use Commission variance determinations from 25-8-41(A) of the City Code

1. The requirement will deprive the applicant of a privilege or the safety of property given to owners of other similarly situated properties with approximately contemporaneous development;
 - a. YES, The existing lift station was approved with the subdivision and is noted on the Subdivision plat included on sheet 7 of the plans, dated March 1993. Replacement of the lift station is required to continue provision of safe wastewater service to the subdivision. Therefore denying the variance will deprive the entire subdivision of wastewater service.

The proposed building is a simple electrical enclosure sized 12'x20' to house and protect necessary instrumentation and controls for the improved lift station. Sheets 49 and 60 provide detailed information on the enclosure/building. The building is not proposed as a habitable structure and no staff will be working daily at the structure – maintenance crews will only access the station periodically for operations and maintenance.

2. The variance
 - a. Is not based on a condition caused by the method chosen by the applicant to develop the property, unless the development method provides greater overall environmental protection than is achievable without the variance.
 - i. YES, The existing lift station is failing and must be upgraded; Austin Water has an existing system that collects at this lift station. In order to continue providing wastewater service to the subdivision and keep the existing lift station running during construction, a new lift station must be built immediately adjacent to the existing. Denying the variance will deprive the entire subdivision of wastewater service or will require the aging and deteriorated lift station to remain in service.
 - b. Is the minimum change necessary to avoid the deprivation of a privilege given to other property owners and to allow a reasonable use of the property
 - i. YES, The lift station must be built at the existing collection point in order to avoid rebuilding the entire wastewater infrastructure of the subdivision. Denying the variance will deprive the entire subdivision of wastewater service or will require the aging and deteriorated lift station to remain in service.
 - c. Does not create a significant probability of harmful environmental consequences, and
 - i. YES, the existing lift station is aging and failing, leaving the potential for wastewater spills into Bull Creek if it is not replaced. The new lift station will provide improved service and reliability and will allow for continued service to

the subdivision. Denying the variance will require the aging and deteriorated lift station to remain in service.

- d. Development with the variance will result in water quality that is at least equal to the water quality achievable without the variance
 - i. YES, the existing lift station is aging and failing, leaving the potential for wastewater spills into Bull Creek if it is not replaced. The new lift station will provide improved service and reliability and will allow for continued service to the subdivision.

Additional Land Use Commission variance determinations for a requirement of Article 7, Division 1 (Critical Water Quality Zone Restrictions:

- e. The criteria for granting a variance in Subsection A are met:
 - i. YES, see above for each criteria.
- f. The requirement for which a variance is requested prevents a reasonable, economic use of the entire property;
 - i. YES, the existing lift station is aging and failing. The new lift station will provide improved service and reliability including emergency generator and improved access for maintenance and will allow for continued service to the subdivision.
- g. The variance is the minimum deviation from the code requirement necessary to allow a reasonable economic use of the entire property.
 - i. YES, the existing lift station is aging and failing. The new lift station will provide improved service and reliability and will allow for continued service to the subdivision.

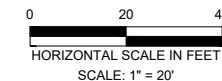
Northwest Lift Station Improvements, Great Hills Lift Station SP-2022-0537C

Variance Request Article 7, Division 5, Fill Requirements 25-8-342

Land Use Commission variance determinations from 25-8-41(A) of the City Code

1. The requirement will deprive the applicant of a privilege or the safety of property given to owners of other similarly situated properties with approximately contemporaneous development;
 - a. YES, The existing lift station was approved with the subdivision and is noted on the Subdivision plat included on sheet 7 of the plans, dated March 1993. Replacement of the lift station is required to continue provision of safe wastewater service to the subdivision. Therefore denying the variance will deprive the entire subdivision of wastewater service. The proposed lift station is immediately adjacent to the existing. In order to provide maintenance access to the new lift station, fill of 4 feet up to 13.5 feet is required, as shown on sheet 22 of the plans.
2. The variance
 - a. Is not based on a condition caused by the method chosen by the applicant to develop the property, unless the development method provides greater overall environmental protection than is achievable without the variance.
 - i. YES, The existing lift station is failing and must be upgraded; Austin Water has an existing system that collects at this lift station. In order to continue providing wastewater service to the subdivision and keep the existing lift station running during construction, a new lift station must be built immediately adjacent to the existing. Denying the variance will deprive the entire subdivision of wastewater service. The proposed design provides accessible facilities for Austin Water to perform continued maintenance and operations.
 - b. Is the minimum change necessary to avoid the deprivation of a privilege given to other property owners and to allow a reasonable use of the property
 - i. YES, The lift station must be built at the existing collection point in order to avoid rebuilding the entire wastewater infrastructure of the subdivision. Denying the variance will deprive the entire subdivision of wastewater service. Fill must be added to level up the site and make the facility accessible by vehicles in emergency situations.
 - c. Does not create a significant probability of harmful environmental consequences, and
 - i. YES, the existing lift station is aging and failing, leaving the potential for wastewater spills into Bull Creek if it is not replaced. The new lift station will provide improved service and reliable access for Austin Water, as well as allowing for continued service to the subdivision.

- d. Development with the variance will result in water quality that is at least equal to the water quality achievable without the variance
 - i. YES, the existing lift station is aging and failing, leaving the potential for wastewater spills into Bull Creek if it is not replaced. The new lift station will provide improved service and reliability and will allow for continued service to the subdivision.



LEGEND

 CRITICAL WATER QUALITY ZONE

WATER QUALITY TRANSITION ZONE

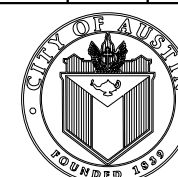


CERTIFY THAT THESE DRAWINGS ARE COMPLETE, ACCURATE AND ADEQUATE FOR THEIR INTENDED PURPOSES, INCLUDING CONSTRUCTION, BUT ARE NOT AUTHORIZED FOR CONSTRUCTION UNTIL FORMAL CITY APPROVAL.

CITY OF AUSTIN, TEXAS
AUSTIN WATER
ENGINEERING SERVICES DIVISION

**NORTHWEST AREA LIFT STATION IMPROVEMENTS
GREAT HILLS LIFT STATION NO. 53**

ENVIRONMENTAL FEATURES



NOTES	NAME	DATE
SURVEY BY		
DRAWN BY	JRW	02/22
DESIGNED BY	TJK	02/22
CHECKED BY	CML	02/22
REVIEWED BY		



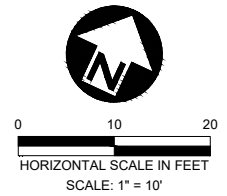
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SHEET 10 OF 63

X:\PROJECTS\0760 COA GREAT HILLS LS DESIGN\MDGN\SHEETS\0760-ENVR.DWG, ---, COA_ESD.STB

JUDY WILLIG

Northwest Area Lift Station Improvements Great Hills Lift Station No. 53 (SP-2022-0537C)







LEGEND

x SPOT ELEVATIONS

NATIVE GRASS SHALL BE INSTALLED
PER SPEC SS02800

NOTE:

1. SEE STRUCTURAL SITE PLAN S1 SHEET FOR FINISH LIFT STATION ELEVATIONS AND TOP OF WALL SPOT ELEVATIONS.
2. PROPOSED CONCRETE PAVING TO MATCH PRE-EXISTING CONDITIONS.

Slopes Table			
Number	Minimum Slope	Maximum Slope	Color
1	0%	15%	
2	15%	25%	
3	25%	35%	
4	35% AND GREATER		



THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY CHRISTOPHER M. LEAL LIC. # 97373

CERTIFY THAT THESE DRAWINGS ARE COMPLETE, ACCURATE AND ADEQUATE FOR THEIR INTENDED PURPOSES, INCLUDING CONSTRUCTION, BUT ARE NOT AUTHORIZED FOR CONSTRUCTION UNTIL FORMAL CITY APPROVAL..

AUSTIN WATER
ENGINEERING SERVICES DIVISION
NORTHWEST AREA LIFT STATION IMPROVEMENTS:
GREAT HILLS LIFT STATION NO. 53

LIFT STATION GRADING PLAN



NOTES	NAME	DATE
SURVEY BY		
DRAWN BY	JRW	02/22
DESIGNED BY	TJK	02/22
CHECKED BY	CML	02/22
REVIEWED BY		



13

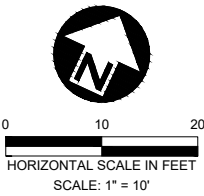
HEET 21 OF 63

9009 1/2 SPICEBRUSH DRIVE
AUSTIN, TX 78759

CASE NUMBER: SP-2022-0537C



Northwest Area Lift Station Improvements Great Hills Lift Station No. 53 (SP-2022-0537C)



CUT/FILL TABLE			
NO.	MIN. ELEVATION	MAX. ELEVATION	QTY
1	0.00	4.00	
2	4.00	8.00	
3	8.00	12.00	
4	12.00	13.50	



THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY CHRISTOPHER M. LEAL, L.C. # 97373

I CERTIFY THAT THESE DRAWINGS ARE COMPLETE, ACCURATE AND ADEQUATE FOR THEIR INTENDED PURPOSES, INCLUDING CONSTRUCTION, BUT ARE NOT AUTHORIZED FOR CONSTRUCTION UNTIL FORMAL CITY APPROVAL.

CITY OF AUSTIN, TEXAS
AUSTIN WATER
ENGINEERING SERVICES DIVISION

NORTHWEST AREA LIFT STATION IMPROVEMENTS:
GREAT HILLS LIFT STATION NO. 53

LIFT STATION CUT AND FILL PLAN



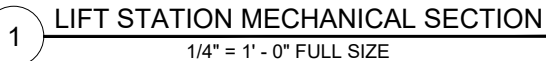
NOTES	NAME	DATE
SURVEY BY		
DRAWN BY	JRW	02/22
DESIGNED BY	TJK	02/22
CHECKED BY	CML	02/22
REVIEWED BY		



K-FRIESE + ASSOCIATES
PUBLIC PROJECTS & ENGINEERING

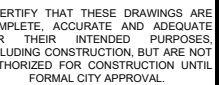
1120 S. Capital of Texas Highway
CityView 2, Suite 100
Austin, Texas 78746
P - 512.338.1704 F - 512.338.1784
TBPE Firm #6535
www.kfriese.com

0 4 8 12
GRAPHIC SCALE: 1/4" = 1'-0"



NOTE:

1. ALL HATCHES TO BE INSTALLED WITH SAFETY GRATES.
2. ACCESS LADDER TO BE INSTALLED WITH HALLIDAY MODEL L1E LADDER EXTENSION OR SIMILAR.



AUSTIN WATER
ENGINEERING SERVICES DIVISION

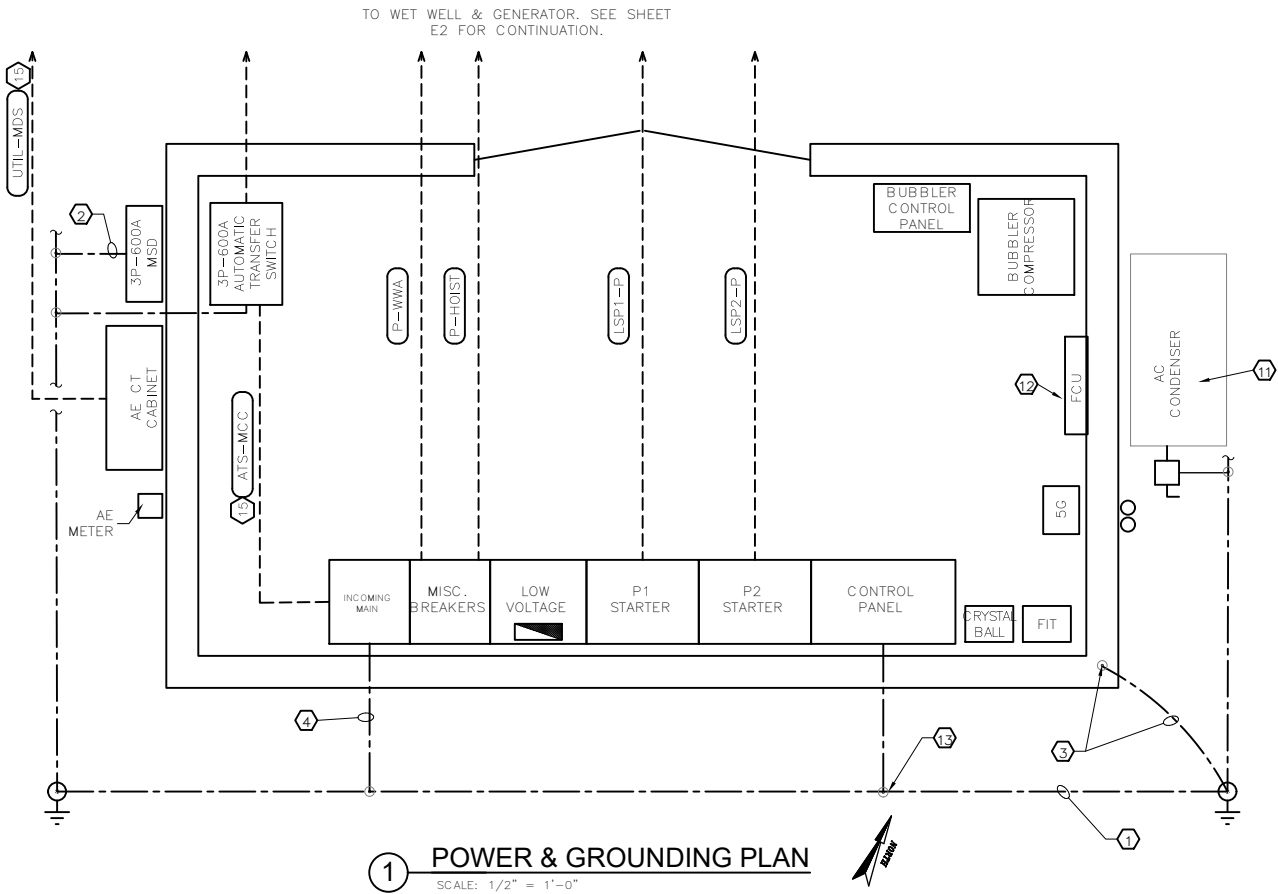
NORTHWEST AREA LIFT STATION IMPROVEMENTS
GREAT HILLS LIFT STATION NO. 53

LIFT STATION MECHANICAL SECTION



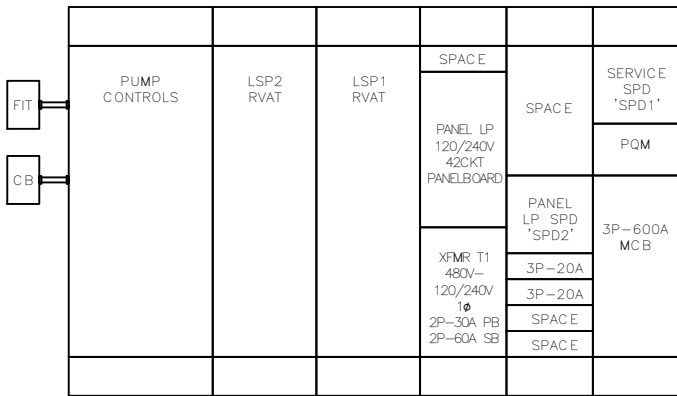
K•FRIESE
+ ASSOCIATES
PUBLIC PROJECT ENGINEERING
S. Capital of Texas Highway
Box 2, Suite 100
Ft. Worth, Texas 78746
512.338.1704 F - 512.338.1784
Firm #6535
kfriese.com

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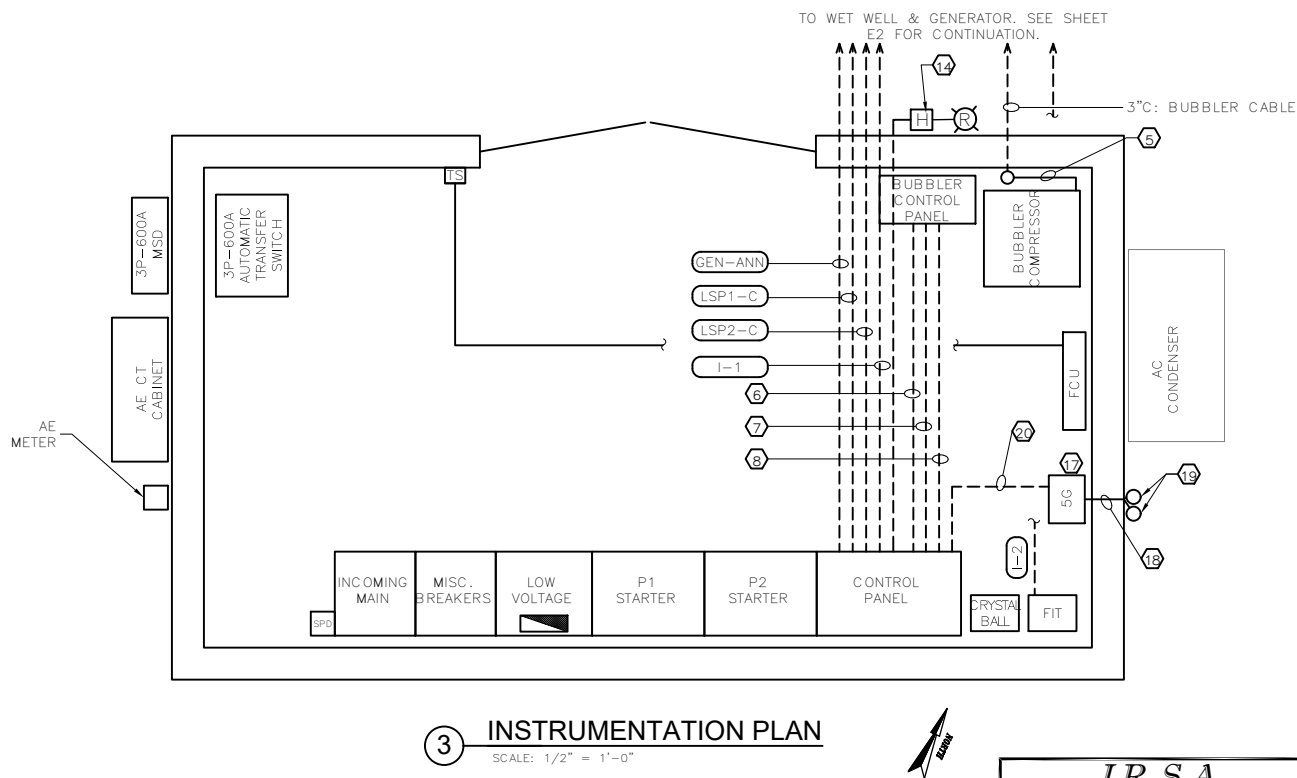
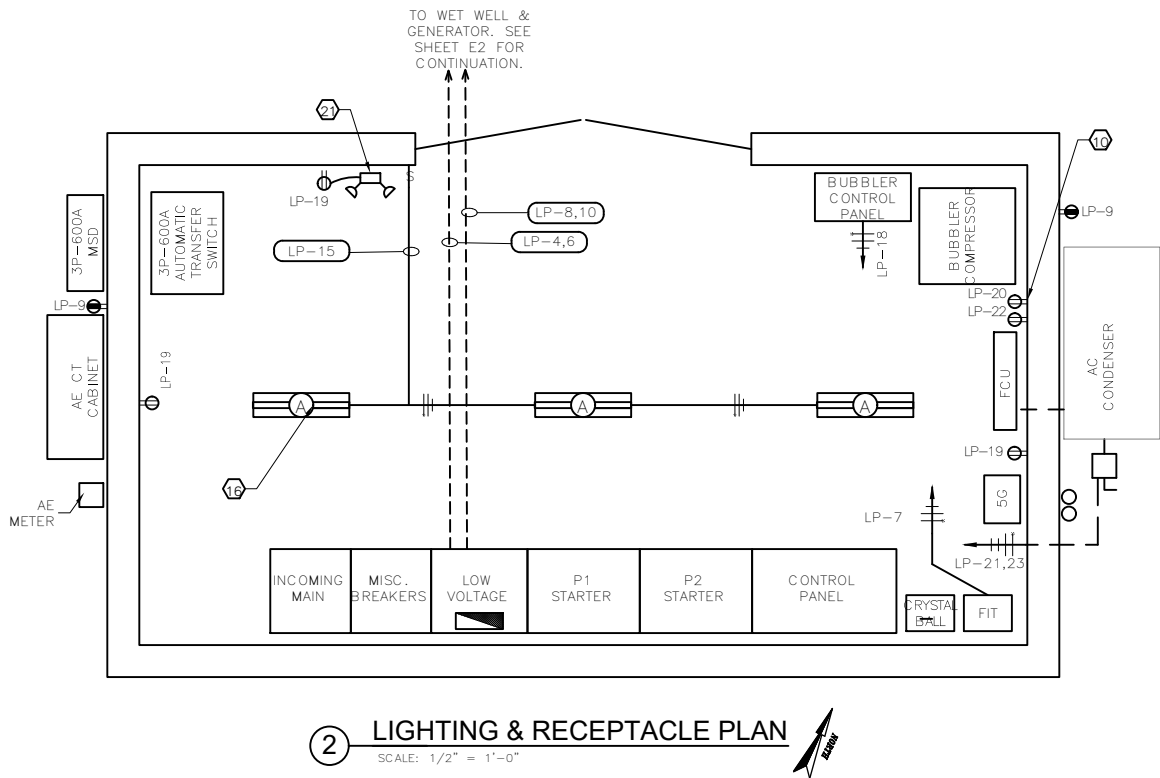
GENERAL NOTES:

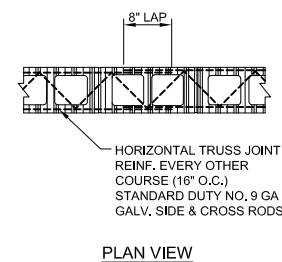
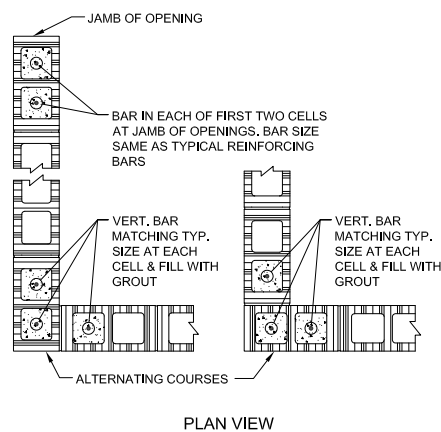
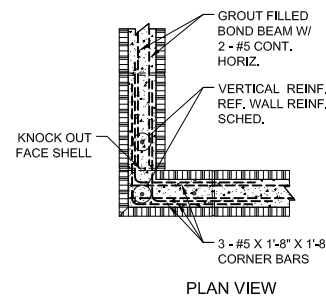
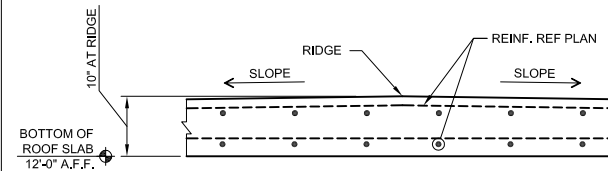
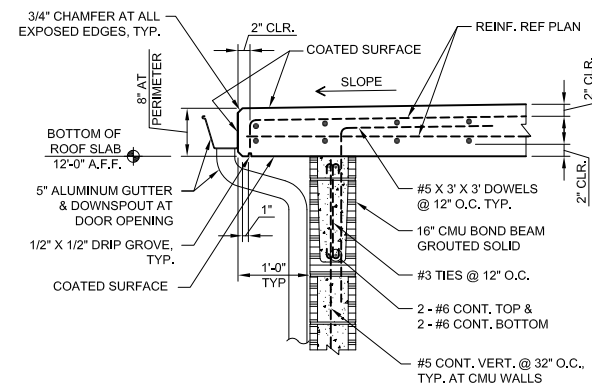
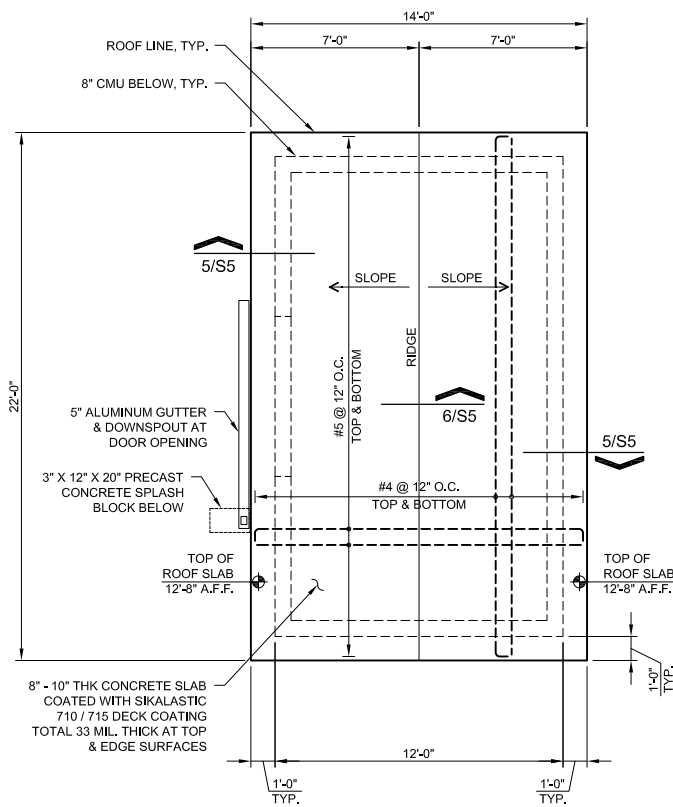
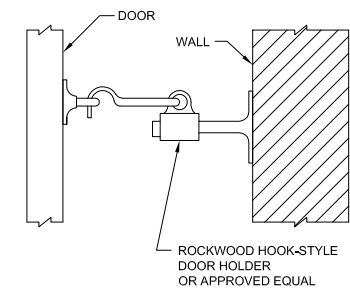
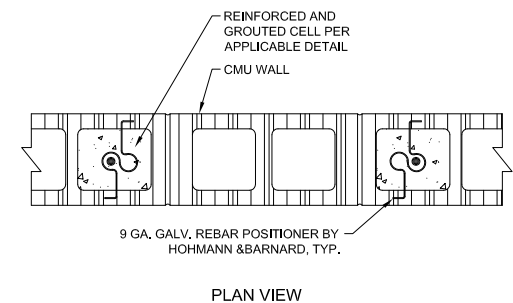
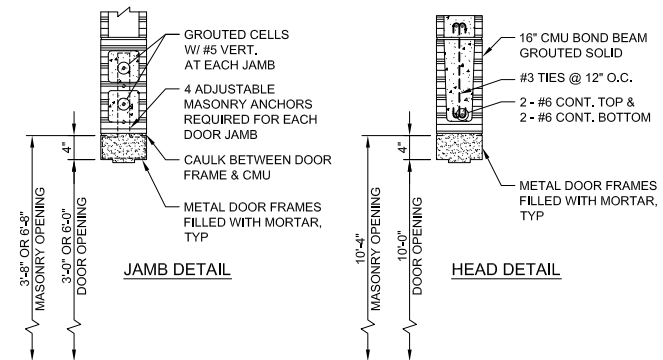
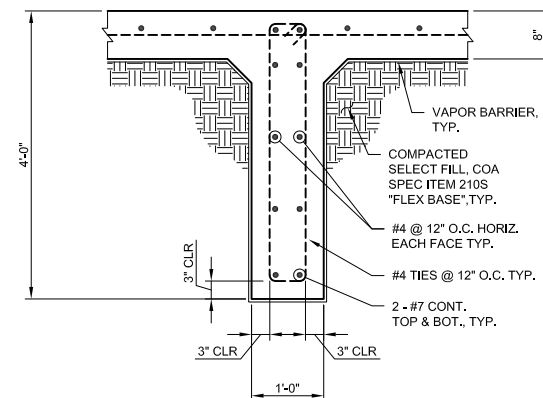
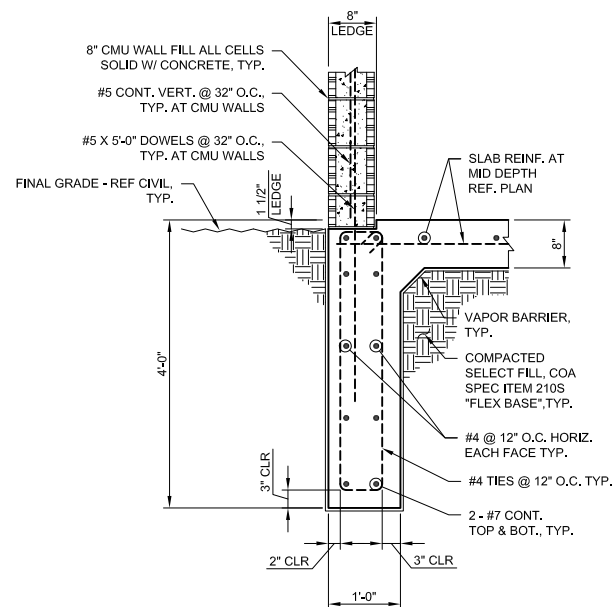
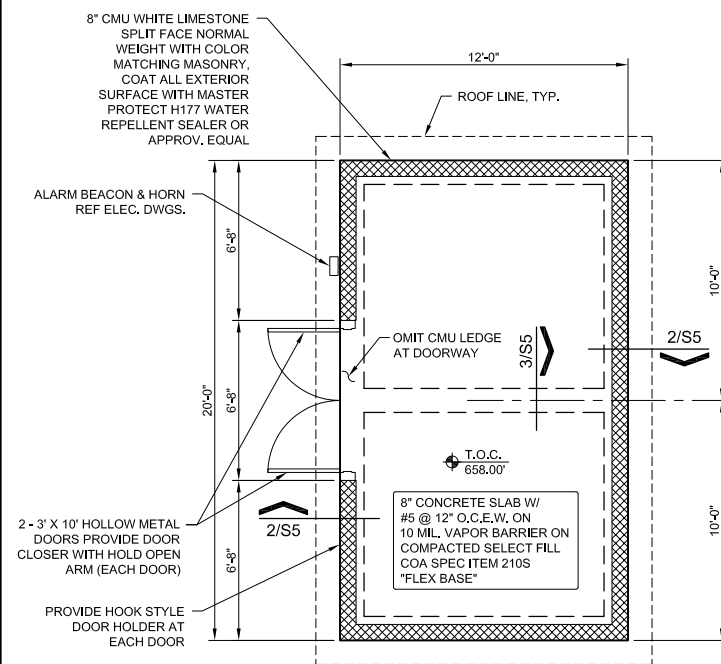
1. ALL STUB-UP TRANSITIONS FROM DUCTBANKS TO ABOVE GRADE SHALL BE PVC COATED RIGID STEEL PLASTI-BOND, PERMA-COTE, REDH20T, AS MANUFACTURED BY ROBROY OR REINFORCED THERMOSETTING RESIN CONDUIT AS LISTED IN AWU SPECIFICATIONS
2. MINIMUM DUCTBANK CONDUIT SHALL BE 1".
3. PROVIDE CAPPED WALL PENETRATION ABOVE CRYSTAL BALL FOR FUTURE ANTENNA ROUTING.
4. DUCTBANKS SHALL BE RUN UNDER THE SLAB FROM FIELD DEVICES TO DESIGNATED EQUIPMENT LOCATIONS IN THE ELECTRICAL EQUIPMENT ENCLOSURE.
5. CONDUIT ROUTING SHOWN IS USED FOR CLARIFICATION PURPOSES ONLY. MAINTAIN 3-90 DEGREE BENDS FOR ALL CONDUIT RUNS. EXCEEDING THIS NUMBER OF BENDS SHALL REQUIRE INSTALLING HANDHOLES.
6. REFER TO CITY OF AUSTIN LIFT STATION SPECIFICATIONS, FOR ADDITIONAL INFORMATION ON EQUIPMENT & INSTALLATION REQUIREMENTS.
7. ALL CONDUIT ROUTED WITHIN BUILDING SHALL BE EXPOSED.
8. ALL CONDUIT STUB-UPS IN MCC AND CONTROL PANEL SECTION SHALL BE FILLED WITH POLYWATER FST-250.
9. ALL ELECTRICAL DUCTBANK STEEL SHALL BE TIED INTO STRUCTURAL STEEL.



KEYNOTES:

1. INSTALL #250 MCM GROUND LOOP 2'-6" BELOW GRADE AND 2'-0" AWAY FROM BLDG. FOUNDATION.
2. #3/0 BARE CU. BOND TO GROUND LUG IN SERVICE DISCONNECT.
3. #2/0 BARE COPPER GROUND. BOND TO FOUNDATION AND BUILDING STEEL. TYPICAL 4 PLACES.
4. #3/0 BARE CU. GROUND. BOND TO MCC GROUND BUS AT EACH END.
5. INSTALL BUBBLER TUBING EXPOSED ON WALL INSIDE BLDG. PROVIDE SCH. 80 PVC STUB-UP THROUGH FLOOR FOR SLEEVE.
6. 1PR. #16T/S, 3/4"C FOR WETWELL LEVEL.
7. 2#14, 3/4"C. BUBBLER SOLENOID VALVE.
8. 2#14, 3/4"C. BUBBLER LOW PRESSURE
9. 3PRM OUTDOOR TELEPHONE CABLE, 1"C.
10. DEDICATED CIRCUIT FOR AIR COMPRESSOR AND AUTOMATIC DRAIN VALVE..
11. 3 TON HEAT PUMP.
12. FAN COIL UNIT.
13. CADWELD CONNECTION. SEE DETAIL, SHEET E12.
14. ALARM BEACON AND HORN. INSTALL 8'-0" ABOVE GRADE.
15. ALL CONDUITS ENTERING MCC, SERVICE DISCONNECT AND ATS FROM BELOW GRADE SHALL BE FILLED W/POLYWATER FST-250.
16. SURFACE MOUNT LED FIXTURE. LIGHONIA FEM L24 SERIES, 4000LM M.D 120 40k 80CRI, OR APPROVED EQUAL.
17. 4G/5G COMMUNICATION CONTROL PANEL. MOUNT ON WALL.
18. PROVIDE SINGLE WALL PENETRATION FOR 2 SETS OF COAX CABLE.
19. MOUNT 5G ANTENNAS TO BUILDING ROOF USING UNISTRUT SUPPORT. PROVIDE COAX CABLE SUPPORT, FROM WALL PENETRATION TO ANTENNAS, EVERY 5'-0".
20. 3/4"C: 2#14(P), #12(G)
21. LED EMERGENCY EGRESS FIXTURE. LITHONIA ECRG RDM6.





NOTES	NAME	DATE
SURVEY BY		
DRAWN BY	BG	
DESIGNED BY	FL	
CHECKED BY	FL	
REVIEWED BY		

**Northwest Area Lift Station Improvements Great Hills Lift
Station No. 53 (SP-2022-0537C)**

