**AMERICAN FORK CITY**
**PLANNING COMMISSION REGULAR SESSION**
**JUNE 8, 2022**

Notice is hereby given that the American Fork City Planning Commission will meet in regular session on June 8 at the American Fork City Hall, 31 North Church Street, commencing at 7:00 p.m. The agenda shall be as follows:

1. Pledge of Allegiance

2. Hearing, review, and action on an amended plat for Lakeshore Landing Block 4 Plat G located in the area of 900 W 480 S, in the TOD Zone.

3. Hearing, review, and action on an amended plat for Lakeshore Landing Block 4 Plat H located in the area of 900 W 480 S, in the TOD Zone.

4. Hearing, review, and action on an amended plat for Lakeshore Landing Block 5 Plat I located in the area of 900 W 480 S, in the TOD Zone.

5. Hearing, review, and action on an amended plat for Lakeshore Landing Block 6 Plat J located in the area of 900 W 480 S, in the TOD Zone.

6. Hearing, review, and action on a site plan for the Shipley Residence, located in the area of 1051 N 700 West Circle, in the R1-12000 zone.

7. Hearing, review, and action on a site plan for the Utah Valley Business Park/American Fork Industrial Flex development, located in the area of 752 East Quality Drive in the Planned Industrial (PI-1) zone

8. Hearing, review and action on an agreement for the Harbor Road Annexation, consisting of 85 acres and located at approximately 6500 W 6800 N.

9. Hearing, review, and action on a proposed land use map amendment for the American Fork Townhomes Project from Design Commercial to Planned Community, located in the area of 400 S 860 E.

10. Hearing, review, and action on a proposed zone change for the American Fork Townhomes Project from the General Commercial (GC-2) zone, to the Planned Community (PC) zone, located in the area of 400 S 860 E.

11. Other Business

12. Site Plan Committee Report

13. Review and action on the minutes of the May 18, 2022, Planning Commission Regular Session

14. Adjournment

John H. Woffinden, P.G.
Planning Commission Chairman

The order of agenda items may change to accommodate the needs of the commissioners, public and staff

**AMERICAN FORK CITY** **MEETING DATE:** 8th June, 2022
**PLANNING COMMISSION** **STAFF:** Cody Opperman

**AGENDA TOPIC:**

1. Hearing, review, and action on an amended plat for Lakeshore Landing Block 4 Plat G located in the area of 900 W 480 S, in the TOD Zone.

2. Hearing, review, and action on an amended plat for Lakeshore Landing Block 4 Plat H located in the area of 900 W 480 S, in the TOD Zone.

3. Hearing, review, and action on an amended plat for Lakeshore Landing Block 5 Plat I located in the area of 900 W 480 S, in the TOD Zone.

4. Hearing, review, and action on an amended plat for Lakeshore Landing Block 6 Plat J located in the area of 900 W 480 S, in the TOD Zone.

| BACKGROUND INFORMATION | | |
|---|---|---|
| Location: | | 900 W 480 S |
| Applicants: | | White Horse Developers, Berg Civil Engineering |
| Existing Land Use: | | Residential Low Density |
| Proposed Land Use: | | N/A |
| Surrounding Land Use: | North | Transit Oriented Development |
| | South | Residential Very-Low Density |
| | East | Residential Low Density |
| | West | Residential Low Density, Residential Very-Low Density |
| Existing Zoning: | | TOD |
| Proposed Zoning: | | N/A |
| Surrounding Zoning: | North | TOD |
| | South | Unidentified, PR-3.0 |
| | East | Unidentified |
| | West | TOD |

**BACKGROUND:**

The applicant is applying for an amended plat for Lakeshore Landing 4-6 in the TOD zone. Plat H is an amendment plat for apartments. The other 3 amended plats are for townhomes. The proposal consists of 4 plats. The entire development parcel consists of 7.83 acres.

**Sec 17.7.217 Amendments**

A large-scale development which has been approved by the city may be amended as follows:

1. Technical correction. Where the proposed amendment is incidental in character and/or is determined by the city engineer to be technical in character, and do not affect the layout or content of the approved plan or require the recording of replacement plat at the office of the county recorder, the amendment may be approved by the city staff member (city engineer, city planner, building inspector, etc.) having responsibility for review of the proposed amendment.
2. Minor correction. Where the proposed amendment involves limited changes to the layout of the project (i.e., incidental adjustments to a building footprint, minor adjustments in the landscape treatment of an open space area, a change of materials for a fence, etc.) and, in the opinion of the planning commission, do not affect the layout of the project plan or require the recording of a replacement plat at the office of the county recorder, the amendment may be approved by action of the planning commission and city council without the necessity of advertising and conducting a public hearing on the matter.
3. Major correction. Any proposed amendment not determined to be a technical or minor correction shall be a major correction and shall follow the process required for approval of a new project.
4. Final plat amendments. In addition to the above, any amendment to a large-scale development which requires amendment of a subdivision plat or record of survey map (condominium plat) which has been recorded at the office of county recorder, shall conform to the provisions of state law regarding amendment of recorded plats.

**STAFF RECOMMENDATION:**

Plat G - Approval
Plat H - Approval
Plat I - Approval
Plat J - Approval

**POTENTIAL MOTIONS**

**APPROVAL**

Mr. Chairman, I move that we recommend approval for the plat amendment of Lakeshore Landing Plat G/H/I/J located in the area of 900 W 480 S, in the TOD Zone

with the findings listed in the staff report, and subject to any findings, conditions and modifications found in the engineering report.

**DENIAL**

Mr. Chairman, I move that we deny the plat amendment of Lakeshore Landing Plat G/H/I/J located in the area of 900 W 480 S, in the TOD Zone

**TABLE**

Mr. Chairman, I move that we table action on the plat amendment of Lakeshore Landing Plat G/H/I/J located in the area of 900 W 480 S, in the TOD Zone, and instruct the developer/staff to _____.

# AMERICAN FORK CITY ENGINEERING DIVISION
# STAFF REPORT

Planning Commission Meeting Date: 6/8/2022

This report is a summary of the American Fork City Engineering Division plan review comments regarding the subject plan as submitted by the applicant for American Fork City Land Use Authority approval:

Project Name: Lakeshore Landing Block 4 Plat G, Lakeshore Landing Block 4 Plat H, Lakeshore Landing Block 5 Plat I, Lakeshore Landing Block 6 Plat J (All TOD Zone)

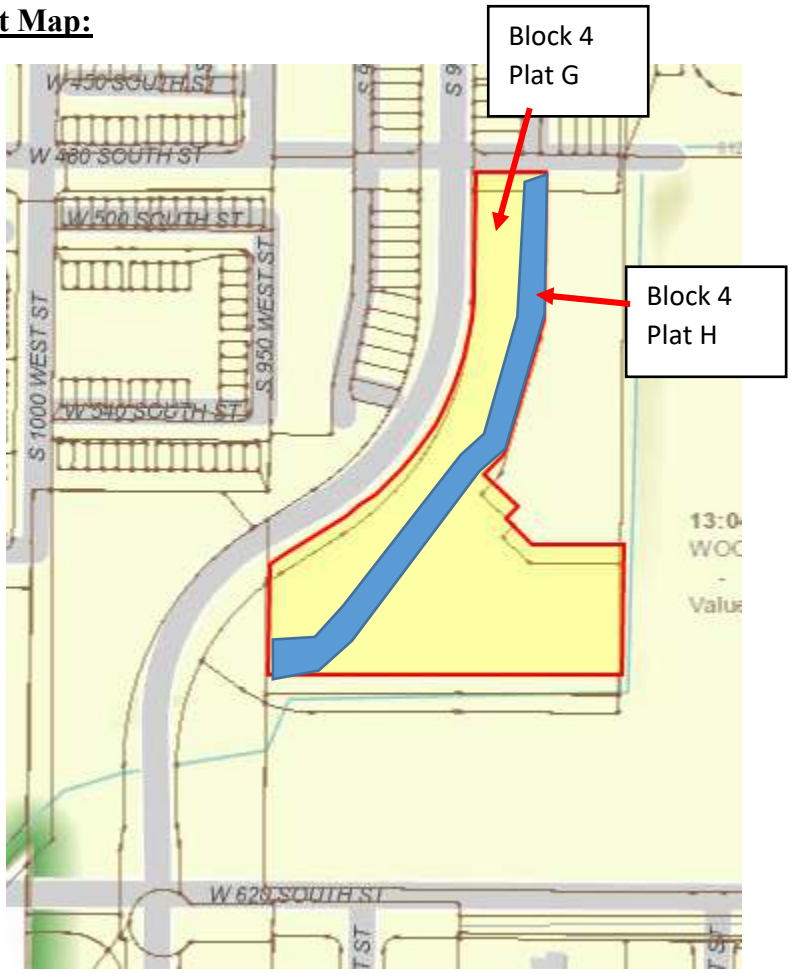
Project Address: 900 West 480 South

Developer / Applicant's Name: White Horse Developers, Berg Civil Engineering

Type of Application:

- ☒ Subdivision Final Plat
- ☐ Subdivision Preliminary Plan
- ☐ Annexation
- ☐ Code Text Amendment
- ☐ General Plan Amendment
- ☐ Zone Map Amendment
- ☐ Commercial Site Plan
- ☐ Residential Accessory Structure Site Plan

**Project Map:**






Block 5
Plat I




Block 6
Plat J

**Engineering Division Recommendation:** The Engineering Division recommends APPROVAL of the proposed development with the following conditions and standard conditions of approval:

## STANDARD CONDITIONS OF APPROVAL

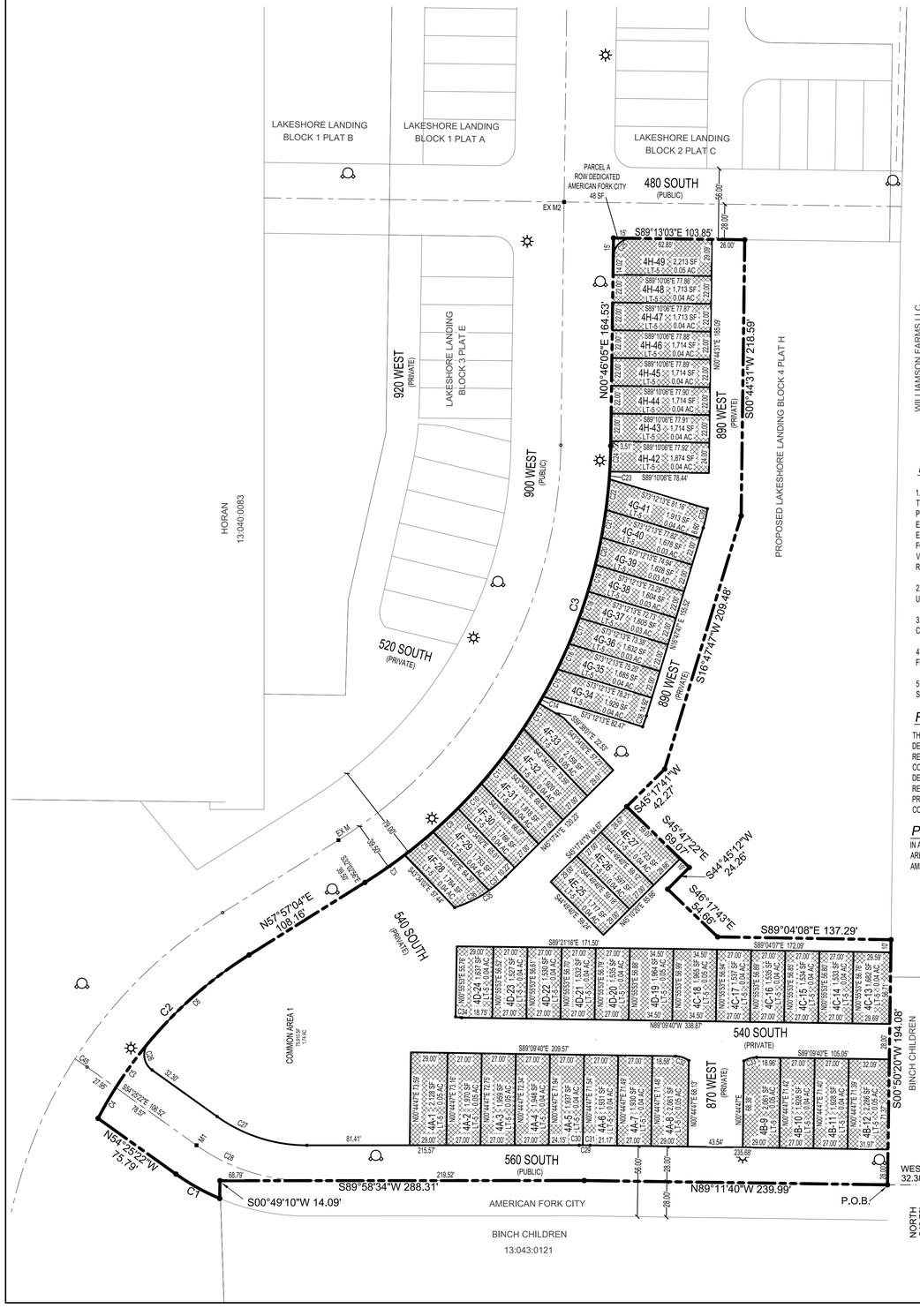
**Standard Conditions of Approval:**

APPLICANT is responsible and shall submit/post/obtain all necessary documentation and evidence to comply with these Standard Conditions of Approval prior to any platting, permitting, or any other form of authorization by the City including plat recording or other property conveyance to the City and prior to scheduling a pre-construction meeting. All recording shall take place at the Utah County Recorder's Office.

1. **Title Report:** Submit an updated Title Report not older than 30 days or other type of appropriate verification that shows all dedications to the City are free and clear of encumbrances, taxes, or other assessments.
2. **Property Taxes and Liens:** Submit evidence that all the property taxes, for the current and/or previous years, liens, and agricultural land use roll over fees have been paid in full.
3. **Water Rights:** Submit evidence that all the required water rights have been conveyed to American Fork City.
4. **Performance Guarantee:** Post a performance guarantee for all required public and essential common improvements.
5. **Easements and Agreements:** Submit/record a long-term Storm Water Pollution Prevention Maintenance Agreement signed and dated by the property owner and any required easement documentation.
6. **Land Disturbance Permit:** Obtain a Land Disturbance Permit.
7. **Compliance with the Engineering Division Plan Review Comments:** All plans and documents shall comply with all the Technical Review Committee comments and the City Engineer's final review.
8. **Commercial Structure:** Record an Owner Acknowledgment and Utility Liability Indemnification if the proposed building is a multi-unit commercial structure served by a single utility service.
9. **Sensitive Lands:** Record all applicable documents required for compliance with the City's Sensitive Lands Ordinance.
10. **Utility Notification Form:** Submit a Subdivision Utility Notification Form.
11. **Professional Verification:** Submit final stamped construction documentation by all appropriate professionals.
12. **Fees:** Payment of all development, inspection, recording, street light, and other project related fees.
13. **Mylar:** Submit a Mylar. All plats will receive final verification of all formats, notes, conveyances, and other items contained on the plat by City staff (recorder, legal, engineer, GIS, planning).

# LAKESHORE LANDING BLOCK 4 PLAT G

A TRANSIT-ORIENTED DEVELOPMENT
ALSO A PARTIAL VACATION OF LOT 1 OF THE B.K. PENROD PLAT A SUBDIVISION
LOCATED IN THE SOUTHWEST QUARTER OF SECTION 22
TOWNSHIP 5 SOUTH, RANGE 1 EAST,
SALT LAKE BASE AND MERIDIAN.
AMERICAN FORK CITY, UTAH COUNTY, UTAH




## ADDRESSES

| | |
|---|---|
| LOT 4A-1 | 898 WEST 560 SOUTH |
| LOT 4A-2 | 896 WEST 560 SOUTH |
| LOT 4A-3 | 894 WEST 560 SOUTH |
| LOT 4A-4 | 892 WEST 560 SOUTH |
| LOT 4A-5 | 888 WEST 560 SOUTH |
| LOT 4A-6 | 882 WEST 560 SOUTH |
| LOT 4A-7 | 876 WEST 560 SOUTH |
| LOT 4A-8 | 872 WEST 560 SOUTH |
| LOT 4B-9 | 868 WEST 560 SOUTH |
| LOT 4B-10 | 866 WEST 560 SOUTH |
| LOT 4B-11 | 864 WEST 560 SOUTH |
| LOT 4B-12 | 862 WEST 560 SOUTH |
| LOT 4C-13 | 862 WEST 540 SOUTH |
| LOT 4C-14 | 864 WEST 540 SOUTH |
| LOT 4C-15 | 866 WEST 540 SOUTH |
| LOT 4C-16 | 868 WEST 540 SOUTH |
| LOT 4C-17 | 872 WEST 540 SOUTH |
| LOT 4C-18 | 874 WEST 540 SOUTH |
| LOT 4D-19 | 876 WEST 540 SOUTH |
| LOT 4D-20 | 878 WEST 540 SOUTH |
| LOT 4D-21 | 882 WEST 540 SOUTH |
| LOT 4D-22 | 884 WEST 540 SOUTH |
| LOT 4D-23 | 886 WEST 540 SOUTH |
| LOT 4D-24 | 888 WEST 540 SOUTH |
| LOT 4E-25 | 539 SOUTH 890 WEST |
| LOT 4E-26 | 531 SOUTH 890 WEST |
| LOT 4E-27 | 523 SOUTH 890 WEST |
| LOT 4F-28 | 535 SOUTH 900 WEST |
| LOT 4F-29 | 531 SOUTH 900 WEST |
| LOT 4F-30 | 529 SOUTH 900 WEST |
| LOT 4F-31 | 525 SOUTH 900 WEST |
| LOT 4F-32 | 523 SOUTH 900 WEST |
| LOT 4F-33 | 521 SOUTH 900 WEST |
| LOT 4G-34 | 517 SOUTH 900 WEST |
| LOT 4G-35 | 513 SOUTH 900 WEST |
| LOT 4G-36 | 509 SOUTH 900 WEST |
| LOT 4G-37 | 505 SOUTH 900 WEST |
| LOT 4G-38 | 503 SOUTH 900 WEST |
| LOT 4G-39 | 501 SOUTH 900 WEST |
| LOT 4G-40 | 499 SOUTH 900 WEST |
| LOT 4G-41 | 497 SOUTH 900 WEST |
| LOT 4H-42 | 495 SOUTH 900 WEST |
| LOT 4H-43 | 493 SOUTH 900 WEST |
| LOT 4H-44 | 491 SOUTH 900 WEST |
| LOT 4H-45 | 489 SOUTH 900 WEST |
| LOT 4H-46 | 487 SOUTH 900 WEST |
| LOT 4H-47 | 485 SOUTH 900 WEST |
| LOT 4H-48 | 483 SOUTH 900 WEST |
| LOT 4H-49 | 481 SOUTH 900 WEST |

## NOTES

1. IT IS HEREBY STATED, UNDERSTOOD, AND DEDICATED THAT ALL UNITS HAVE A CROSS-EASEMENT WITHIN THE EXTERIOR WALLS, ATTIC SPACE, ALL COMMON/DIVISION WALLS, AND BELOW THE BOTTOM FLOOR FOR THE PLACEMENT OF NECESSARY UTILITIES TO SERVE ADJACENT UNITS WITHIN A GIVEN BUILDING SHELL. IF THE ABOVE EASEMENT IS NOT UTILIZED DURING THE INITIAL BUILDING CONSTRUCTION FOR THE FIRST OCCUPANCY, THE EASEMENT SHALL BE VACATED WHERE FURTHER USE WOULD CAUSE AN ADJACENT OWNER RECONSTRUCTION FOR PLACEMENT OF AN ADDITIONAL UTILITY NOT ALREADY CONTAINED WITHIN THE SHELL. THERE SHALL BE NO VACATION OF THIS COMMON AREA AND CROSS-EASEMENT IN THE CASE OF ANY NECESSARY STRUCTURAL REMEDIATION OR REPAIRS TO UTILITIES ALREADY IN PLACE WITHIN A GIVEN AREA DEFINED HEREIN.

2. NO SPECIFIC BUILDING PLAN IS INCLUDED WITH THE UNIT AREAS DEFINED ON THE PLAN. THESE PRIVATE UNIT AREAS CONTAIN NO OTHER ENCUMBRANCES THAN THOSE STATED WITHIN THE NOTES OR IN THE CC&RS.

3. OFFSET-PINS TO BE PLACED IN THE BACK OF THE CURB AND 5/8" BY 24" REBAR WITH NUMBERED SURVEY CAP TO BE PLACED AT ALL LOTS REAR CORNERS PRIOR TO OCCUPANCY.

4. BUILDING PERMITS WILL NOT BE ISSUED FOR ANY HOME UNTIL 1) ASPHALT PAVING IS INSTALLED AND 2) FIRE HYDRANTS ARE INSTALLED, APPROVED BY THE FIRE MARSHAL AND CHARGED WITH CULINARY WATER.

5. LOWEST FLOOR SLAB ELEVATION MUST BE A MINIMUM OF 3 FEET ABOVE WATER LEVEL MEASURED DURING SPRING SEASON.

## RESERVATION OF COMMON AREAS

THE OWNER, IN RECORDING THIS PLAT ("THE DEVELOPMENT") HAS DESIGNATED CERTAIN AREAS OF THE DEVELOPMENT AS COMMON AREAS, INTENDED FOR THE OWNERS OF LAKESHORE LANDING FOR INGRESS, EGRESS, RECREATIONAL AND OTHER RELATED USES AS SET FORTH IN THE DECLARATION OF PROTECTIVE EASEMENTS, COVENANTS, CONDITIONS, AND RESTRICTIONS ("THE DECLARATION") PERTAINING TO THE DEVELOPMENT. THE DESIGNATED AREAS ARE NOT INTENDED, NOR ARE THEY DEDICATED, FOR USE BY THE GENERAL PUBLIC, BUT ARE RESERVED FOR THE COMMON USE AND ENJOYMENT OF THE OWNERS IN THE DEVELOPMENT, AS MORE FULLY PROVIDED IN THE DECLARATION RECORDED CONCURRENTLY WITH THE PLAT IN THE OFFICIAL RECORDS OF UTAH COUNTY, UTAH.

## PUBLIC UTILITY EASEMENTS

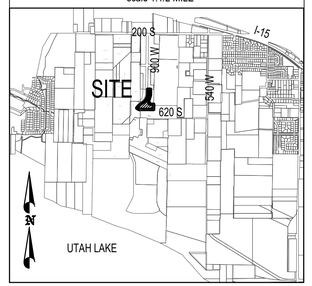
IN ADDITION TO THE PUBLIC UTILITY EASEMENTS SHOWN ON THIS PLAT, ALL COMMON AND LIMITED COMMON AREAS ARE PUBLIC UTILITY EASEMENTS, INCLUDING FULL RIGHT-OF-WAY ACCESS THERETO, IN FAVOR OF AMERICAN FORK CITY.

## LEGEND

- SECTION CORNER
- PROPERTY CORNER
- SUBDIVISION MONUMENT
- BOUNDARY LINE
- CENTER LINE
- EASEMENT LINE
- FIRE HYDRANT
- STREET LIGHT
- PRIVATE AREA
- COMMON AREA (AS SPECIFIED)

## VICINITY SKETCH

scale 1:1/2 MILE

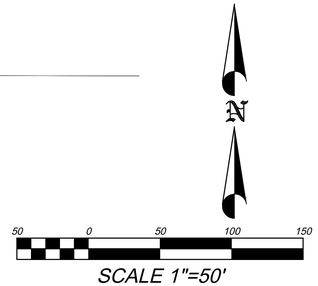



## TABULATIONS

| | |
|---|---|
| DEVELOPMENT AREA | 4.24 AC |
| EXISTING ZONING | BLOCK TYPE 4 |
| LAND USE: | TOD |
| FLOOD ZONE DESIGNATION: | X |
| FIRM MAP PANEL #: | 495517 0110 B |
| EFFECTIVE DATE: | JULY 17, 2002 |

## CURVE TABLE

| CURVE | RADIUS | LENGTH | DELTA | CHORD | BEARING |
|---|---|---|---|---|---|
| C1 | 178.00 | 66.43 | 21°23'01" | 66.05 | N65°06'52"W |
| C2 | 335.50 | 178.28 | 30°26'48" | 176.19 | N42°43'40"E |
| C3 | 414.50 | 413.68 | 57°10'58" | 396.73 | N29°21'35"E |
| C4 | 335.50 | 28.15 | 04°48'24" | 28.14 | N29°54'28"E |
| C5 | 335.50 | 44.15 | 07°32'24" | 44.12 | N36°04'52"E |
| C6 | 335.50 | 105.99 | 18°06'00" | 105.55 | N48°54'04"E |
| C7 | 414.50 | 38.19 | 05°16'42" | 38.17 | N55°18'43"E |
| C8 | 414.50 | 29.09 | 04°01'13" | 29.08 | N50°39'45"E |
| C9 | 414.50 | 27.01 | 03°43'58" | 27.00 | N46°47'09"E |
| C10 | 414.50 | 27.05 | 03°44'22" | 27.05 | N43°02'59"E |
| C11 | 414.50 | 27.22 | 03°45'43" | 27.21 | N39°17'56"E |
| C12 | 414.50 | 27.50 | 03°48'06" | 27.50 | N35°31'02"E |
| C13 | 414.50 | 23.51 | 03°15'00" | 23.51 | N31°59'29"E |
| C14 | 414.50 | 6.22 | 00°51'34" | 6.22 | N29°56'12"E |
| C15 | 414.50 | 24.45 | 03°22'49" | 24.45 | N27°49'01"E |
| C16 | 414.50 | 22.21 | 03°04'11" | 22.21 | N24°35'31"E |
| C17 | 414.50 | 22.08 | 03°03'06" | 22.08 | N21°31'52"E |
| C18 | 414.50 | 22.01 | 03°02'34" | 22.01 | N18°29'02"E |
| C19 | 414.50 | 22.01 | 03°02'32" | 22.01 | N15°26'29"E |
| C20 | 414.50 | 22.07 | 03°03'01" | 22.07 | N12°23'42"E |
| C21 | 414.50 | 22.19 | 03°04'02" | 22.19 | N09°20'10"E |
| C22 | 414.50 | 24.43 | 03°22'35" | 24.42 | N06°06'51"E |
| C23 | 414.50 | 5.96 | 00°49'27" | 5.96 | N04°00'50"E |
| C24 | 414.50 | 20.50 | 02°50'01" | 20.50 | N02°11'06"E |
| C25 | 15.00 | 23.57 | 90°00'52" | 21.22 | N45°46'31"E |
| C26 | 15.00 | 24.68 | 94°16'26" | 21.99 | S07°17'09"E |
| C27 | 122.00 | 75.81 | 35°36'04" | 74.59 | S72°13'24"E |
| C28 | 150.00 | 93.20 | 35°36'04" | 91.71 | S72°13'24"E |
| C29 | 600.00 | 8.69 | 00°49'46" | 8.69 | S89°36'33"E |
| C30 | 600.00 | 2.86 | 00°16'21" | 2.85 | N89°58'34"E |
| C31 | 600.00 | 5.83 | 00°33'25" | 5.83 | S89°24'23"E |
| C32 | 18.00 | 11.12 | 35°23'28" | 10.94 | N71°27'51"W |
| C33 | 18.00 | 10.64 | 33°52'45" | 10.51 | N73°44'54"E |
| C34 | 18.00 | 4.88 | 15°31'59" | 4.87 | N81°23'41"W |
| C35 | 100.00 | 47.33 | 27°07'01" | 46.89 | N58°51'12"E |
| C36 | 100.00 | 30.48 | 17°27'56" | 30.37 | N63°40'45"E |
| C37 | 100.00 | 16.85 | 09°39'05" | 16.83 | N50°07'14"E |
| C38 | 100.00 | 9.09 | 05°12'32" | 9.09 | N19°24'03"E |
| C39 | 100.00 | 15.46 | 08°51'29" | 15.45 | N12°22'02"E |




## REFERENCE DOCUMENTS:

NOTICE OF INTEREST, BUILDING REQUIREMENTS, AND ESTABLISHMENT OF RESTRICTIVE COVENANTS

RECORDED IN THE OFFICE OF THE UTAH COUNTY RECORDER AS ENTRY NO: _____

SURVEYOR

ENSIGN
THE STANDARD IN ENGINEERING
**SALT LAKE CITY**
45 W. 10000 S., Suite 500
Sandy, UT 84070
Phone: 801.255.0529

ENGINEER

berg
CIVIL ENGINEERING
11038 N Highland Blvd Suite 400
Highland Ut, 84003
office (801) 492-1277
cell (801) 616-1677

## SEWER & WATER AUTHORITY APPROVAL

APPROVED THIS ____DAY OF _____A.D. 20___,
BY THE WATER AUTHORITY.

SEWER & WATER AUTHORITY

## SURVEYOR'S CERTIFICATE

I, _____, DO HEREBY CERTIFY THAT I AM A PROFESSIONAL LAND SURVEYOR, AND THAT I HOLD A LICENSE IN ACCORDANCE WITH TITLE 58, CHAPTER 22, PROFESSIONAL ENGINEERS AND LAND SURVEYORS LICENSING ACT, UTAH CODE ANNOTATED, 1953 AS AMENDED, CERTIFICATE NO. _____, I FURTHER CERTIFY THAT BY AUTHORITY OF THE OWNERS, I HAVE MADE A SURVEY OF THE TRACT OF LAND SHOWN ON THIS PLAT AND DESCRIBED BELOW, HAVE SUBDIVIDED SAID TRACT OF LAND INTO LOTS, STREETS AND EASEMENTS, HAVE COMPLETED A SURVEY OF THE PROPERTY DESCRBED ON THIS PLAT IN ACCORDANCE WITH SECTION 17-23-17, UTAH CODE ANNOTATED, 1953 AS AMENDED, HAVE VERIFIED ALL MEASUREMENTS, AND HAVE PLACED MONUMENTS AS REPRESENTED ON THE PLAT. I FURTHER CERTIFY THAT EVERY EXISTING RIGHT-OF-WAY AND EASEMENT GRANT OF RECORD FOR UNDERGROUND FACILITIES, AS DEFINED IN SECTION 54-8a-2, UTAH CODE ANNOTATED, 1953 AS AMENDED, AND FOR OTHER UTILITY FACILITIES, IS ACCURATELY DESCRIBED ON THIS PLAT, AND THAT THIS PLAT IS TRUE AND CORRECT.

_____ _____
DATE (SEE SEAL BELOW)

## BOUNDARY DESCRIPTION

BEGINNING AT A POINT WHICH IS NORTH 940.78 FEET AND WEST 32.38 FEET FROM THE SOUTH QUARTER CORNER OF SECTION 22, TOWNSHIP 5 SOUTH, RANGE 1 EAST; AND RUNNING:

THENCE NORTH 89°11'40" WEST 239.99 FEET; THENCE SOUTH 89°58'34" WEST 288.31 FEET; THENCE SOUTH 00°49'10" WEST 14.09 FEET; THENCE ALONG THE ARC OF A 178.00 FOOT RADIUS CURVE TO THE RIGHT A DISTANCE OF 39.75 FEET (CURVE HAVING A CENTRAL ANGLE 12°47'38" AND A LONG CHORD BEARS N60°49'11"W 39.66 FEET); THENCE NORTH 54°25'22" WEST 75.79 FEET; THENCE ALONG THE ARC OF A 335.50 FOOT RADIUS CURVE TO THE RIGHT A DISTANCE OF 178.28 FEET (CURVE HAVING A CENTRAL ANGLE 30°26'48" AND A LONG CHORD BEARS N42°43'40"E 176.19 FEET); THENCE NORTH 57°57'04" EAST 108.16 FEET; THENCE ALONG THE ARC OF A 414.50 FOOT RADIUS CURVE TO THE LEFT A DISTANCE OF 413.68 FEET (CURVE HAVING A CENTRAL ANGLE 57°10'58" AND A LONG CHORD BEARS N29°21'35"E 396.73 FEET); THENCE NORTH 00°46'05" EAST 164.53 FEET; THENCE SOUTH 89°13'03" EAST 103.85 FEET; THENCE SOUTH 00°44'31" WEST 218.59 FEET; THENCE SOUTH 16°47'47" WEST 209.48 FEET; THENCE SOUTH 45°17'44" WEST 42.27 FEET; THENCE SOUTH 45°17'22" EAST 69.07 FEET; THENCE SOUTH 44°45'12" WEST 24.26 FEET; THENCE SOUTH 46°17'43" EAST 54.66 FEET; THENCE SOUTH 89°04'08" EAST 137.29 FEET; THENCE SOUTH 00°50'20" WEST 194.08 FEET TO THE POINT OF BEGINNING.

THE ABOVE DESCRIBED PARCEL CONTAINS 184,725 SQUARE FEET IN AREA OR 4.24 ACRES.

(NOTE: ALL BEARINGS IN THE ABOVE DESCRIPTION ARE BASED ON THE NAD 27 BEARING OF N 89°52'20" E ALONG THE SECTION LINE FROM THE SOUTH QUARTER CORNER OF SECTION 22, TOWNSHIP 5 SOUTH, RANGE 1 EAST TO THE SOUTHEAST CORNER OF SAID SECTION 22.)

NUMBER OF LOTS 49
NUMBER OF PARCELS 1

## OWNER'S DEDICATION

THE UNDERSIGNED OWNERS OF THE PROPERTY DESCRIBED ABOVE AND SHOWN ON THIS PLAT, HAVE CAUSED THE SAME TO BE SUBDIVIDED INTO LOTS, STREETS, AND EASEMENTS AND DO HEREBY DEDICATE ANY PUBLIC STREETS AND OTHER PUBLIC AREAS SHOWN THEREON FOR THE PERPETUAL USE OF THE PUBLIC. PURSUANT TO UTAH CODE 10-9A-604(1)(d) THE OWNER HEREBY CONVEYS THE COMMON AREA AS INDICATED HEREON, TO THE _____ HOME OWNER ASSOCIATION WITH A MAILING ADDRESS OF _____

IN WITNESS HEREOF WE HAVE HEREUNTO SET OUR HANDS THIS _____

DAY OF _____, A.D. _____

_____

_____

_____

## ACKNOWLEDGMENT

STATE OF UTAH }
COUNTY OF UTAH } S.S.
ON THE ___ DAY OF _____, A.D. _____ PERSONALLY APPEARED BEFORE ME _____

WHICH PERSON ACKNOWLEDGED TO ME THAT HE EXECUTED THE FOREGOING DEDICATION IN HIS RESPECTIVE CAPACITIES ON BEHALF OF _____, IN ACCORDANCE WITH THE GOVERNING DOCUMENTS OF SUCH COMPANY.

MY COMMISSION EXPIRES _____ _____
NOTARY PUBLIC

## ACCEPTANCE BY LEGISLATIVE BODY

THE CITY COUNCIL OF AMERICAN FORK CITY COUNTY OF UTAH, APPROVES THIS SUBDIVISION AND HEREBY ACCEPTS THE DEDICATION OF ALL STREETS AND EASEMENTS FOR THE PERPETUAL USE OF THE PUBLIC THIS

_____ DAY OF _____, A.D. ___.

_____ _____
MAYOR CITY COUNCIL MEMBER

_____ _____
CITY COUNCIL MEMBER CITY COUNCIL MEMBER

_____ _____
CITY COUNCIL MEMBER CITY COUNCIL MEMBER

APPROVED _____ ATTEST _____
CITY ENGINEER CLERK-RECORDER

## PLANNING COMMISSION APPROVAL

APPROVED THIS _____ DAY OF _____, A.D. _____ BY THE AMERICAN FORK CITY PLANNING COMMISSION

_____ _____
PLANNER CHAIRMAN, PLANNING COMMISSION

# LAKESHORE LANDING BLOCK 4 PLAT G

A TRANSIT-ORIENTED DEVELOPMENT
ALSO A PARTIAL VACATION OF LOT 1 OF THE B.K. PENROD PLAT A SUBDIVISION
LOCATED IN THE SOUTHWEST QUARTER OF SECTION 22
TOWNSHIP 5 SOUTH, RANGE 1 EAST,
SALT LAKE BASE AND MERIDIAN.
AMERICAN FORK CITY, UTAH COUNTY, UTAH
SCALE: 1" = 50 FEET

JUB comments

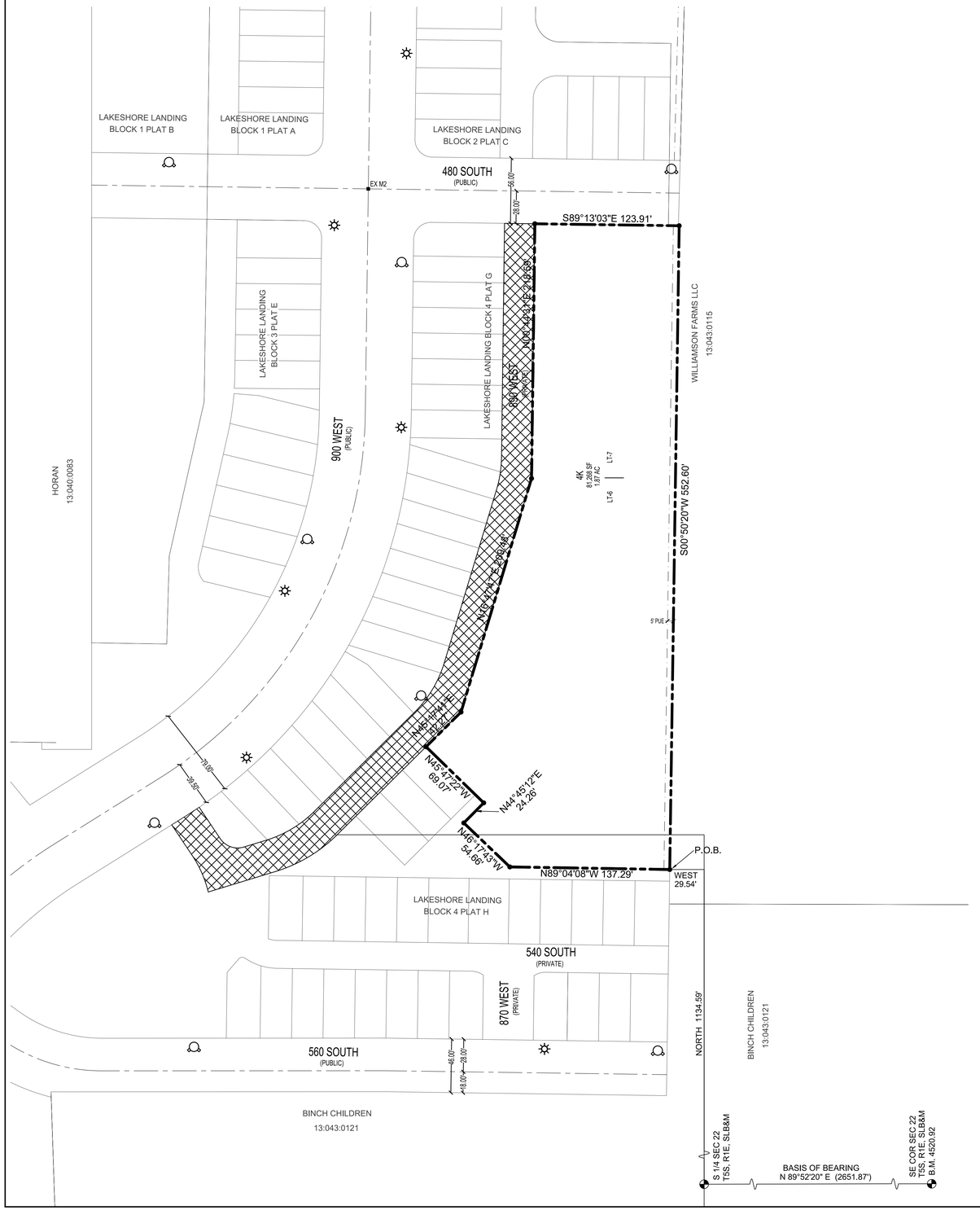
SURVEYOR'S SEAL | NOTARY PUBLIC SEAL | CLERK-RECORDER SEAL

3/20/20 I:\My Drive\Berg Civil\2021\Red Pine\LAKESHORE LANDING\Block 4\LL BLOCK 4 PLAT G.dwg

# LAKESHORE LANDING BLOCK 4 PLAT H

A TRANSIT-ORIENTED DEVELOPMENT
LOCATED IN THE SOUTHWEST QUARTER OF SECTION 22
TOWNSHIP 5 SOUTH, RANGE 1 EAST,
SALT LAKE BASE AND MERIDIAN.
AMERICAN FORK CITY, UTAH COUNTY, UTAH

| ADDRESSES | |
|---|---|
| LOT 4K | 511 SOUTH 890 WEST |

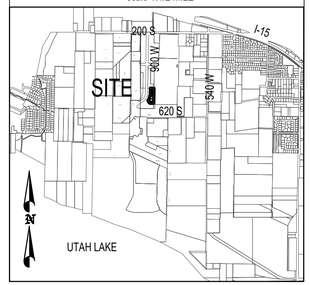



## LEGEND

- SECTION CORNER
- PROPERTY CORNER
- SUBDIVISION MONUMENT
- BOUNDARY LINE
- CENTER LINE
- EASEMENT LINE
- FIRE HYDRANT
- STREET LIGHT

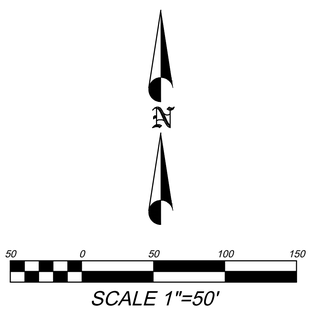
## VICINITY SKETCH

scale 1:1/2 MILE




## TABULATIONS

| | |
|---|---|
| DEVELOPMENT AREA | 1.87 AC |
| EXISTING ZONING | BLOCK TYPE 4 |
| LAND USE: | TOD |
| FLOOD ZONE DESIGNATION: | X |
| FIRM MAP PANEL #: | 495517 0110 B |
| EFFECTIVE DATE: | JULY 17, 2002 |




## REFERENCE DOCUMENTS:

NOTICE OF INTEREST, BUILDING REQUIREMENTS, AND ESTABLISHMENT OF RESTRICTIVE COVENANTS

RECORDED IN THE OFFICE OF THE UTAH COUNTY RECORDER AS ENTRY NO: _____

SURVEYOR

ENSIGN
THE STANDARD IN ENGINEERING
SALT LAKE CITY
45 W. 10000 S., Suite 500
Sandy, UT 84070
Phone: 801.255.0529

ENGINEER

berg
CIVIL ENGINEERING
11038 N Highland Blvd Suite 400
Highland Ut, 84003
office (801) 492-1277
cell (801) 616-1677

## SEWER & WATER AUTHORITY APPROVAL

APPROVED THIS _____DAY OF _____A.D. 20____,
BY THE WATER AUTHORITY.

_____
SEWER & WATER AUTHORITY

## NOTES

1. OFFSET-PINS TO BE PLACED IN THE BACK OF THE CURB AND 5/8" BY 24" REBAR WITH NUMBERED SURVEY CAP TO BE PLACED AT ALL LOTS REAR CORNERS PRIOR TO OCCUPANCY.

2. BUILDING PERMITS WILL NOT BE ISSUED FOR ANY HOME UNTIL 1) ASPHALT PAVING IS INSTALLED AND 2) FIRE HYDRANTS ARE INSTALLED, APPROVED BY THE FIRE MARSHAL AND CHARGED WITH CULINARY WATER.

3. LOWEST FLOOR SLAB ELEVATION MUST BE A MINIMUM OF 3 FEET ABOVE WATER LEVEL MEASURED DURING SPRING SEASON.

## SURVEYOR'S CERTIFICATE

I, _____, DO HEREBY CERTIFY THAT I AM A PROFESSIONAL LAND SURVEYOR, AND THAT I HOLD A LICENSE IN ACCORDANCE WITH TITLE 58, CHAPTER 22, PROFESSIONAL ENGINEERS AND LAND SURVEYORS LICENSING ACT, UTAH CODE ANNOTATED, 1953 AS AMENDED, CERTIFICATE NO. _____. I FURTHER CERTIFY THAT BY AUTHORITY OF THE OWNERS, I HAVE MADE A SURVEY OF THE TRACT OF LAND SHOWN ON THIS PLAT AND DESCRIBED BELOW, HAVE SUBDIVIDED SAID TRACT OF LAND INTO LOTS, STREETS AND EASEMENTS, HAVE COMPLETED A SURVEY OF THE PROPERTY DESCRBED ON THIS PLAT IN ACCORDANCE WITH SECTION 17-23-17, UTAH CODE ANNOTATED, 1953 AS AMENDED, HAVE VERIFIED ALL MEASUREMENTS, AND HAVE PLACED MONUMENTS AS REPRESENTED ON THE PLAT. I FURTHER CERTIFY THAT EVERY EXISTING RIGHT-OF-WAY AND EASEMENT GRANT OF RECORD FOR UNDERGROUND FACILITIES, AS DEFINED IN SECTION 54-8a-2, UTAH CODE ANNOTATED, 1953 AS AMENDED, AND FOR OTHER UTILITY FACILITIES, IS ACCURATELY DESCRIBED ON THIS PLAT, AND THAT THIS PLAT IS TRUE AND CORRECT.

_____ _____
DATE (SEE SEAL BELOW)

## BOUNDARY DESCRIPTION

BEGINNING AT A POINT WHICH IS NORTH 1134.59 FEET AND WEST 29.54 FEET FROM THE SOUTH QUARTER CORNER OF SECTION 22, TOWNSHIP 5 SOUTH, RANGE 1 EAST; AND RUNNING:

THENCE NORTH 89°04'08" WEST 137.29 FEET; THENCE NORTH 46°17'43" WEST 54.86 FEET; THENCE NORTH 44°45'12" EAST 24.26 FEET; THENCE NORTH 45°47'22" WEST 69.07 FEET; THENCE NORTH 45°17'41" EAST 42.27 FEET; THENCE NORTH 16°47'47" EAST 209.48 FEET; THENCE NORTH 00°44'31" EAST 218.59 FEET; THENCE SOUTH 89°13'03" EAST 123.91 FEET; THENCE SOUTH 00°50'20" WEST 552.60 FEET TO THE POINT OF BEGINNING.

THE ABOVE DESCRIBED PARCEL CONTAINS 81,268 SQUARE FEET IN AREA OR 1.87 ACRES.

(NOTE: ALL BEARINGS IN THE ABOVE DESCRIPTION ARE BASED ON THE NAD 27 BEARING OF N 89°52'20" E ALONG THE SECTION LINE FROM THE SOUTH QUARTER CORNER OF SECTION 22, TOWNSHIP 5 SOUTH, RANGE 1 EAST TO THE SOUTHEAST CORNER OF SAID SECTION 22.)

NUMBER OF LOTS 1

## OWNER'S DEDICATION

THE UNDERSIGNED OWNERS OF THE PROPERTY DESCRIBED ABOVE AND SHOWN ON THIS PLAT, HAVE CAUSED THE SAME TO BE SUBDIVIDED INTO LOTS, STREETS, AND EASEMENTS AND DO HEREBY DEDICATE ANY PUBLIC STREETS AND OTHER PUBLIC AREAS SHOWN THEREONFOR THE PERPETUAL USE OF THE PUBLIC.

IN WITNESS HEREOF WE HAVE HEREUNTO SET OUR HANDS THIS _____

DAY OF _____, A.D. _____

_____

_____

## ACKNOWLEDGMENT

STATE OF UTAH
COUNTY OF UTAH } S.S.

ON THE ___ DAY OF _____, A.D. _____ PERSONALLY APPEARED BEFORE ME _____

_____

WHICH PERSON ACKNOWLEDGED TO ME THAT HE EXECUTED THE FOREGOING DEDICATION IN HIS RESPECTIVE CAPACITIES ON BEHALF OF _____, IN ACCORDANCE WITH THE GOVERNING DOCUMENTS OF SUCH COMPANY.

MY COMMISSION EXPIRES _____ _____
NOTARY PUBLIC

## ACCEPTANCE BY LEGISLATIVE BODY

THE __CITY COUNCIL_____ OF ___AMERICAN FORK CITY____COUNTY OF UTAH, APPROVES THIS SUBDIVISION AND HEREBY ACCEPTS THE DEDICATION OF ALL STREETS AND EASEMENTS FOR THE PERPETUAL USE OF THE PUBLIC THIS

_____ DAY OF _____, A.D. ___.

_____ _____
MAYOR CITY COUNCIL MEMBER

_____ _____
CITY COUNCIL MEMBER CITY COUNCIL MEMBER

_____ _____
CITY COUNCIL MEMBER CITY COUNCIL MEMBER

APPROVED _____ ATTEST _____
CITY ENGINEER CLERK-RECORDER

## PLANNING COMMISSION APPROVAL

APPROVED THIS _____ DAY OF _____, A.D. _____ BY THE
_____ PLANNING COMMISSION

_____ _____
PLANNER CHAIRMAN, PLANNING COMMISSION

3/20/20 I:\My Drive\Berg Civil\2022\Blake Miller Homes\LL BLOCK 4 PLAT H\LAKESHORE LANDING BLOCK4 PLAT H.dwg

# LAKESHORE LANDING BLOCK 4 PLAT H

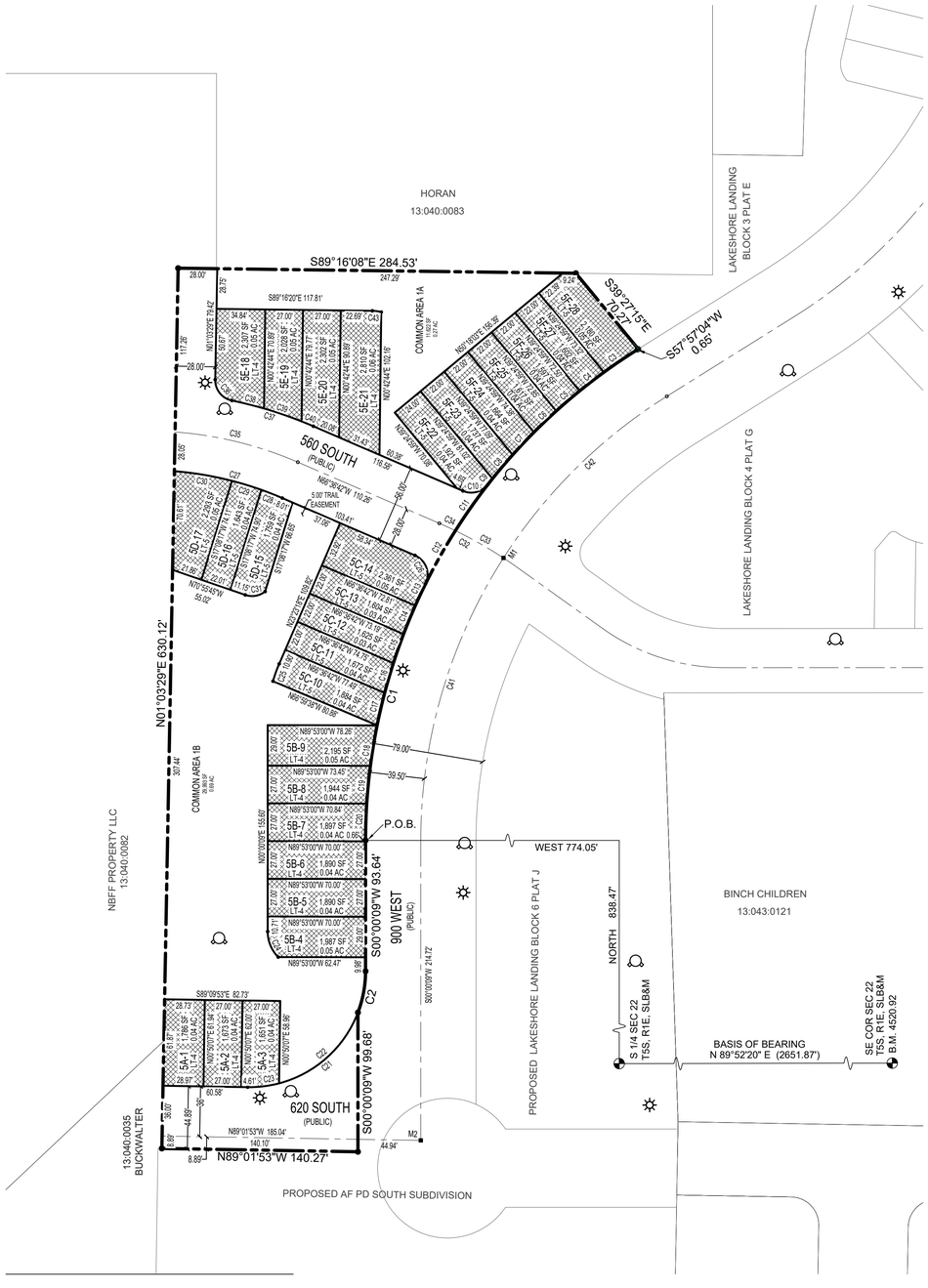
A TRANSIT-ORIENTED DEVELOPMENT
LOCATED IN THE SOUTHWEST QUARTER OF SECTION 22
TOWNSHIP 5 SOUTH, RANGE 1 EAST,
SALT LAKE BASE AND MERIDIAN.
AMERICAN FORK CITY, UTAH COUNTY, UTAH

SCALE: 1" = 50 FEET

| SURVEYOR'S SEAL | NOTARY PUBLIC SEAL | CLERK-RECORDER SEAL |
|---|---|---|
| | | |

# LAKESHORE LANDING BLOCK 5 PLAT I

A TRANSIT-ORIENTED DEVELOPMENT
ALSO A PARTIAL VACATION OF LOT 1 OF THE B.K. PENROD PLAT A SUBDIVISION
LOCATED IN THE SOUTHWEST QUARTER OF SECTION 22
TOWNSHIP 5 SOUTH, RANGE 1 EAST,
SALT LAKE BASE AND MERIDIAN.
AMERICAN FORK CITY, UTAH COUNTY, UTAH




## ADDRESSES

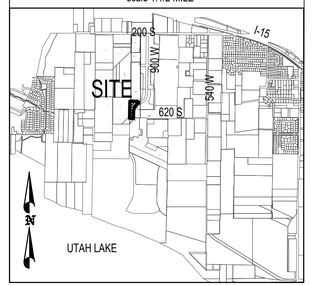
| | |
|---|---|
| LOT 5A-1 | 984 WEST 620 SOUTH |
| LOT 5A-2 | 946 WEST 620 SOUTH |
| LOT 5A-3 | 922 WEST 620 SOUTH |
| LOT 5B-4 | 618 SOUTH 900 WEST |
| LOT 5B-5 | 614 SOUTH 900 WEST |
| LOT 5B-6 | 612 SOUTH 900 WEST |
| LOT 5B-7 | 608 SOUTH 900 WEST |
| LOT 5B-8 | 602 SOUTH 900 WEST |
| LOT 5B-9 | 594 SOUTH 900 WEST |
| LOT 5C-10 | 588 SOUTH 900 WEST |
| LOT 5C-11 | 582 SOUTH 900 WEST |
| LOT 5C-12 | 574 SOUTH 900 WEST |
| LOT 5C-13 | 568 SOUTH 900 WEST |
| LOT 5C-14 | 562 SOUTH 900 WEST |
| LOT 5D-15 | 935 WEST 560 SOUTH |
| LOT 5D-16 | 959 WEST 560 SOUTH |
| LOT 5D-17 | 993 WEST 560 SOUTH |
| LOT 5E-18 | 988 WEST 560 SOUTH |
| LOT 5E-19 | 966 WEST 560 SOUTH |
| LOT 5E-20 | 944 WEST 560 SOUTH |
| LOT 5E-21 | 932 WEST 560 SOUTH |
| LOT 5F-22 | 558 SOUTH 900 WEST |
| LOT 5F-23 | 554 SOUTH 900 WEST |
| LOT 5F-24 | 548 SOUTH 900 WEST |
| LOT 5F-25 | 544 SOUTH 900 WEST |
| LOT 5F-26 | 538 SOUTH 900 WEST |
| LOT 5F-27 | 532 SOUTH 900 WEST |
| LOT 5F-28 | 526 SOUTH 900 WEST |

## LEGEND

- SECTION CORNER
- PROPERTY CORNER
- SUBDIVISION MONUMENT
- BOUNDARY LINE
- CENTER LINE
- EASEMENT LINE
- FIRE HYDRANT
- STREET LIGHT
- PRIVATE AREA
- COMMON AREA (AS SPECIFIED) — COMMON

## VICINITY SKETCH

scale 1:1/2 MILE




## TABULATIONS

| | |
|---|---|
| DEVELOPMENT AREA | 2.69 AC |
| EXISTING ZONING | BLOCK TYPE 4 |
| LAND USE: | TOD |
| FLOOD ZONE DESIGNATION: | X |
| FIRM MAP PANEL #: | 495517 0110 B |
| EFFECTIVE DATE: | JULY 17, 2002 |

## NOTES

1. IT IS HEREBY STATED, UNDERSTOOD, AND DEDICATED THAT ALL UNITS HAVE A CROSS-EASEMENT WITHIN THE EXTERIOR WALLS, ATTIC SPACE, ALL COMMON/DIVISION WALLS, AND BELOW THE BOTTOM FLOOR FOR THE PLACEMENT OF NECESSARY UTILITIES TO SERVE ADJACENT UNITS WITHIN A GIVEN BUILDING SHELL. IF THE ABOVE EASEMENT IS NOT UTILIZED DURING THE INITIAL BUILDING CONSTRUCTION FOR THE FIRST OCCUPANCY, THE EASEMENT SHALL BE VACATED WHERE FURTHER USE WOULD CAUSE AN ADJACENT OWNER RECONSTRUCTION FOR PLACEMENT OF AN ADDITIONAL UTILITY NOT ALREADY CONTAINED WITHIN THE SHELL. THERE SHALL BE NO VACATION OF THIS COMMON AREA AND CROSS-EASEMENT IN THE CASE OF ANY NECESSARY STRUCTURAL REMEDIATION OR REPAIRS TO UTILITIES ALREADY IN PLACE WITHIN A GIVEN AREA DEFINED HEREIN.

2. NO SPECIFIC BUILDING PLAN IS INCLUDED WITH THE UNIT AREAS DEFINED ON THE PLAN. THESE PRIVATE UNIT AREAS CONTAIN NO OTHER ENCUMBRANCES THAN THOSE STATED WITHIN THE NOTES OR IN THE CC&RS.

3. OFFSET-PINS TO BE PLACED IN THE BACK OF THE CURB AND 5/8" BY 24" REBAR WITH NUMBERED SURVEY CAP TO BE PLACED AT ALL LOTS REAR CORNERS PRIOR TO OCCUPANCY.

4. BUILDING PERMITS WILL NOT BE ISSUED FOR ANY HOME UNTIL 1) ASPHALT PAVING IS INSTALLED AND 2) FIRE HYDRANTS ARE INSTALLED, APPROVED BY THE FIRE MARSHAL AND CHARGED WITH CULINARY WATER.

5. LOWEST FLOOR SLAB ELEVATION MUST BE A MINIMUM OF 3 FEET ABOVE WATER LEVEL MEASURED DURING SPRING SEASON.

## RESERVATION OF COMMON AREAS

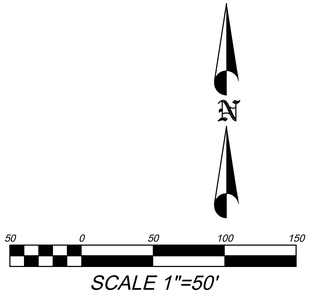
THE OWNER, IN RECORDING THIS PLAT ("THE DEVELOPMENT") HAS DESIGNATED CERTAIN AREAS OF THE DEVELOPMENT AS COMMON AREAS, INTENDED FOR THE OWNERS OF LAKESHORE LANDING FOR INGRESS, EGRESS, RECREATIONAL AND OTHER RELATED USES AS SET FORTH IN THE DECLARATION OF PROTECTIVE EASEMENTS, COVENANTS, CONDITIONS, AND RESTRICTIONS ("THE DECLARATION") PERTAINING TO THE DEVELOPMENT. THE DESIGNATED AREAS ARE NOT INTENDED, NOR ARE THEY DEDICATED, FOR USE BY THE GENERAL PUBLIC, BUT ARE RESERVED FOR THE COMMON USE AND ENJOYMENT OF THE OWNERS IN THE DEVELOPMENT, AS MORE FULLY PROVIDED IN THE DECLARATION RECORDED CONCURRENTLY WITH THE PLAT IN THE OFFICIAL RECORDS OF UTAH COUNTY, UTAH.

## PUBLIC UTILITY EASEMENTS

IN ADDITION TO THE PUBLIC UTILITY EASEMENTS SHOWN ON THIS PLAT, ALL COMMON AND LIMITED COMMON AREAS ARE PUBLIC UTILITY EASEMENTS, INCLUDING FULL RIGHT-OF-WAY ACCESS THERETO, IN FAVOR OF AMERICAN FORK CITY.

## CURVE TABLE

| CURVE | RADIUS | LENGTH | DELTA | CHORD | BEARING |
|---|---|---|---|---|---|
| C1 | 414.50 | 419.22 | 57°56'55" | 401.58 | S28°58'36"W |
| C2 | 83.00 | 30.20 | 20°50'59" | 30.04 | S10°25'38"W |
| C3 | 414.50 | 28.99 | 04°00'26" | 28.98 | S55°56'51"W |
| C4 | 414.50 | 22.01 | 03°02'35" | 22.01 | S52°25'21"W |
| C5 | 414.50 | 22.01 | 03°02'31" | 22.01 | S49°22'48"W |
| C6 | 414.50 | 22.06 | 03°02'59" | 22.06 | S46°20'02"W |
| C7 | 414.50 | 22.18 | 03°03'59" | 22.18 | S43°16'33"W |
| C8 | 414.50 | 22.37 | 03°05'31" | 22.37 | S40°11'48"W |
| C9 | 414.50 | 5.35 | 00°44'24" | 5.35 | S38°16'51"W |
| C10 | 15.00 | 19.76 | 75°28'40" | 18.36 | S75°38'58"W |
| C11 | 414.50 | 40.36 | 05°34'46" | 40.35 | S35°07'16"W |
| C12 | 414.50 | 43.75 | 06°02'49" | 43.73 | S29°18'28"W |
| C13 | 414.50 | 17.18 | 02°22'27" | 17.17 | S25°05'51"W |
| C14 | 414.50 | 22.01 | 03°02'31" | 22.00 | S22°23'22"W |
| C15 | 414.50 | 22.06 | 03°02'56" | 22.06 | S19°20'38"W |
| C16 | 414.50 | 22.17 | 03°03'54" | 22.17 | S16°17'13"W |
| C17 | 414.50 | 23.85 | 03°17'47" | 23.84 | S13°06'23"W |
| C18 | 414.50 | 29.39 | 04°03'47" | 29.39 | S09°25'37"W |
| C19 | 414.50 | 27.13 | 03°44'58" | 27.12 | S05°31'14"W |
| C20 | 414.50 | 26.36 | 03°38'36" | 26.35 | S01°49'27"W |
| C21 | 83.00 | 101.45 | 70°02'02" | 95.25 | S55°52'09"W |
| C22 | 83.00 | 78.79 | 54°23'11" | 75.86 | S48°02'44"W |
| C23 | 83.00 | 22.67 | 15°38'51" | 22.60 | S83°03'45"W |
| C24 | 26.00 | 20.31 | 44°44'50" | 19.79 | N22°22'16"W |
| C25 | 100.00 | 13.14 | 07°31'38" | 13.13 | N19°37'29"E |
| C26 | 15.00 | 24.32 | 92°53'46" | 21.74 | S20°09'49"E |
| C27 | 244.00 | 79.91 | 18°45'54" | 79.56 | N75°59'39"W |
| C28 | 244.00 | 16.09 | 03°46'39" | 16.08 | N68°30'01"W |
| C29 | 244.00 | 22.01 | 05°10'04" | 22.00 | N72°58'23"W |
| C30 | 244.00 | 41.82 | 09°49'12" | 41.77 | N80°28'00"W |
| C31 | 14.83 | 15.06 | 58°12'09" | 14.42 | N80°12'42"E |
| C32 | 300.00 | 52.22 | 09°58'25" | 52.16 | N61°37'29"W |
| C33 | 300.00 | 39.58 | 07°33'33" | 39.55 | N60°25'03"W |
| C34 | 300.00 | 12.64 | 02°24'52" | 12.64 | N65°24'16"W |
| C35 | 272.00 | 90.83 | 19°07'57" | 90.41 | N76°10'40"W |
| C36 | 15.00 | 20.78 | 79°21'28" | 19.16 | S38°37'15"E |
| C37 | 300.00 | 61.20 | 11°41'17" | 61.09 | S72°27'20"E |
| C38 | 300.00 | 23.64 | 04°30'53" | 23.63 | S76°02'32"E |
| C39 | 300.00 | 28.44 | 05°25'51" | 28.43 | S71°04'11"E |
| C40 | 300.00 | 9.13 | 01°44'34" | 9.12 | S67°28'59"E |
| C41 | 375.00 | 213.49 | 32°37'07" | 210.62 | N16°18'42"E |
| C42 | 375.00 | 165.79 | 25°19'48" | 164.44 | N45°17'09"E |
| C43 | 24.00 | 6.38 | 15°14'07" | 6.36 | S81°39'17"E |




## REFERENCE DOCUMENTS:

NOTICE OF INTEREST, BUILDING REQUIREMENTS, AND ESTABLISHMENT OF RESTRICTIVE COVENANTS

RECORDED IN THE OFFICE OF THE UTAH COUNTY RECORDER AS ENTRY NO: _____


SURVEYOR
ENSIGN
THE STANDARD IN ENGINEERING
SALT LAKE CITY
45 W. 10000 S., Suite 500
Sandy, UT 84070
Phone: 801.255.0529

ENGINEER
berg
CIVIL ENGINEERING
11038 N Highland Blvd Suite 400
Highland Ut, 84003
office (801) 492-1277
cell (801) 616-1677


## SEWER & WATER AUTHORITY APPROVAL

APPROVED THIS _____ DAY OF _____ A.D. 20___,
BY THE WATER AUTHORITY.

_____
SEWER & WATER AUTHORITY

## SURVEYOR'S CERTIFICATE

I, _____, DO HEREBY CERTIFY THAT I AM A PROFESSIONAL LAND SURVEYOR, AND THAT I HOLD A LICENSE IN ACCORDANCE WITH TITLE 58, CHAPTER 22, PROFESSIONAL ENGINEERS AND LAND SURVEYORS LICENSING ACT, UTAH CODE ANNOTATED, 1953 AS AMENDED, CERTIFICATE NO. _____. I FURTHER CERTIFY THAT BY AUTHORITY OF THE OWNERS, I HAVE MADE A SURVEY OF THE TRACT OF LAND SHOWN ON THIS PLAT AND DESCRIBED BELOW, HAVE SUBDIVIDED SAID TRACT OF LAND INTO LOTS, STREETS AND EASEMENTS, HAVE COMPLETED A SURVEY OF THE PROPERTY DESCRBED ON THIS PLAT IN ACCORDANCE WITH SECTION 17-23-17, UTAH CODE ANNOTATED, 1953 AS AMENDED, HAVE VERIFIED ALL MEASUREMENTS, AND HAVE PLACED MONUMENTS AS REPRESENTED ON THE PLAT. I FURTHER CERTIFY THAT EVERY EXISTING RIGHT-OF-WAY AND EASEMENT GRANT OF RECORD FOR UNDERGROUND FACILITIES, AS DEFINED IN SECTION 54-8a-2, UTAH CODE ANNOTATED, 1953 AS AMENDED, AND FOR OTHER UTILITY FACILITIES, IS ACCURATELY DESCRIBED ON THIS PLAT, AND THAT THIS PLAT IS TRUE AND CORRECT.

_____ _____
DATE (SEE SEAL BELOW)

## BOUNDARY DESCRIPTION

BEGINNING AT A POINT WHICH IS NORTH 838.47 FEET AND WEST 774.05 FEET FROM THE SOUTH QUARTER CORNER OF SECTION 22, TOWNSHIP 5 SOUTH, RANGE 1 EAST; AND RUNNING:

THENCE SOUTH 00°00'09" WEST 93.64 FEET; THENCE ALONG THE ARC OF A 83.00 FOOT RADIUS CURVE TO THE RIGHT A DISTANCE OF 30.20 FEET (CURVE HAVING A CENTRAL ANGLE 20°50'59" AND A LONG CHORD BEARS S10°25'38"W 30.04 FEET); THENCE SOUTH 00°00'09" WEST 99.68 FEET; THENCE NORTH 89°01'53" WEST 140.27 FEET; THENCE NORTH 01°03'29" EAST 630.12 FEET; THENCE SOUTH 89°16'08" EAST 284.53 FEET; THENCE SOUTH 39°27'15" EAST 70.27 FEET; THENCE SOUTH 57°57'04" WEST 0.65 FEET; THENCE ALONG THE ARC OF A 414.50 FOOT RADIUS CURVE TO THE LEFT A DISTANCE OF 419.22 FEET (CURVE HAVING A CENTRAL ANGLE 57°56'55" AND A LONG CHORD BEARS S28°58'36"W 401.58 FEET) TO THE POINT OF BEGINNING.

THE ABOVE DESCRIBED PARCEL CONTAINS 117,276 SQUARE FEET IN AREA OR 2.69 ACRES.

(NOTE: ALL BEARINGS IN THE ABOVE DESCRIPTION ARE BASED ON THE NAD 27 BEARING OF N 89°52'20" E ALONG THE SECTION LINE FROM THE SOUTH QUARTER CORNER OF SECTION 22, TOWNSHIP 5 SOUTH, RANGE 1 EAST TO THE SOUTHEAST CORNER OF SAID SECTION 22.)

NUMBER OF LOTS 28
NUMBER OF PARCELS 2

## OWNER'S DEDICATION

THE UNDERSIGNED OWNERS OF THE PROPERTY DESCRIBED ABOVE AND SHOWN ON THIS PLAT, HAVE CAUSED THE SAME TO BE SUBDIVIDED INTO LOTS, STREETS, AND EASEMENTS AND DO HEREBY DEDICATE ANY PUBLIC STREETS AND OTHER PUBLIC AREAS SHOWN THEREON FOR THE PERPETUAL USE OF THE PUBLIC. PURSUANT TO UTAH CODE 10-9A-604(1)(d) THE OWNER HEREBY CONVEYS THE COMMON AREA AS INDICATED HEREON, TO THE _____ HOME OWNER ASSOCIATION WITH A MAILING ADDRESS OF _____

IN WITNESS HEREOF WE HAVE HEREUNTO SET OUR HANDS THIS _____

DAY OF _____, A.D. _____

_____

_____

_____

## ACKNOWLEDGMENT

STATE OF UTAH )
COUNTY OF UTAH ) S.S.

ON THE ___ DAY OF _____, A.D. _____ PERSONALLY APPEARED BEFORE ME _____

_____
WHICH PERSON ACKNOWLEDGED TO ME THAT HE EXECUTED THE FOREGOING DEDICATION IN HIS RESPECTIVE CAPACITIES ON BEHALF OF _____, IN ACCORDANCE WITH THE GOVERNING DOCUMENTS OF SUCH COMPANY.

MY COMMISSION EXPIRES _____ _____
NOTARY PUBLIC

## ACCEPTANCE BY LEGISLATIVE BODY

THE CITY COUNCIL OF AMERICAN FORK CITY COUNTY OF UTAH, APPROVES THIS SUBDIVISION AND HEREBY ACCEPTS THE DEDICATION OF ALL STREETS AND EASEMENTS FOR THE PERPETUAL USE OF THE PUBLIC THIS

_____ DAY OF _____, A.D. ___.

_____ _____
MAYOR CITY COUNCIL MEMBER

_____ _____
CITY COUNCIL MEMBER CITY COUNCIL MEMBER

_____ _____
CITY COUNCIL MEMBER CITY COUNCIL MEMBER

APPROVED _____ ATTEST _____
CITY ENGINEER CLERK-RECORDER

## PLANNING COMMISSION APPROVAL

APPROVED THIS _____ DAY OF _____, A.D. _____ BY THE AMERICAN FORK CITY PLANNING COMMISSION

_____ _____
PLANNER CHAIRMAN, PLANNING COMMISSION

# LAKESHORE LANDING BLOCK 5 PLAT I

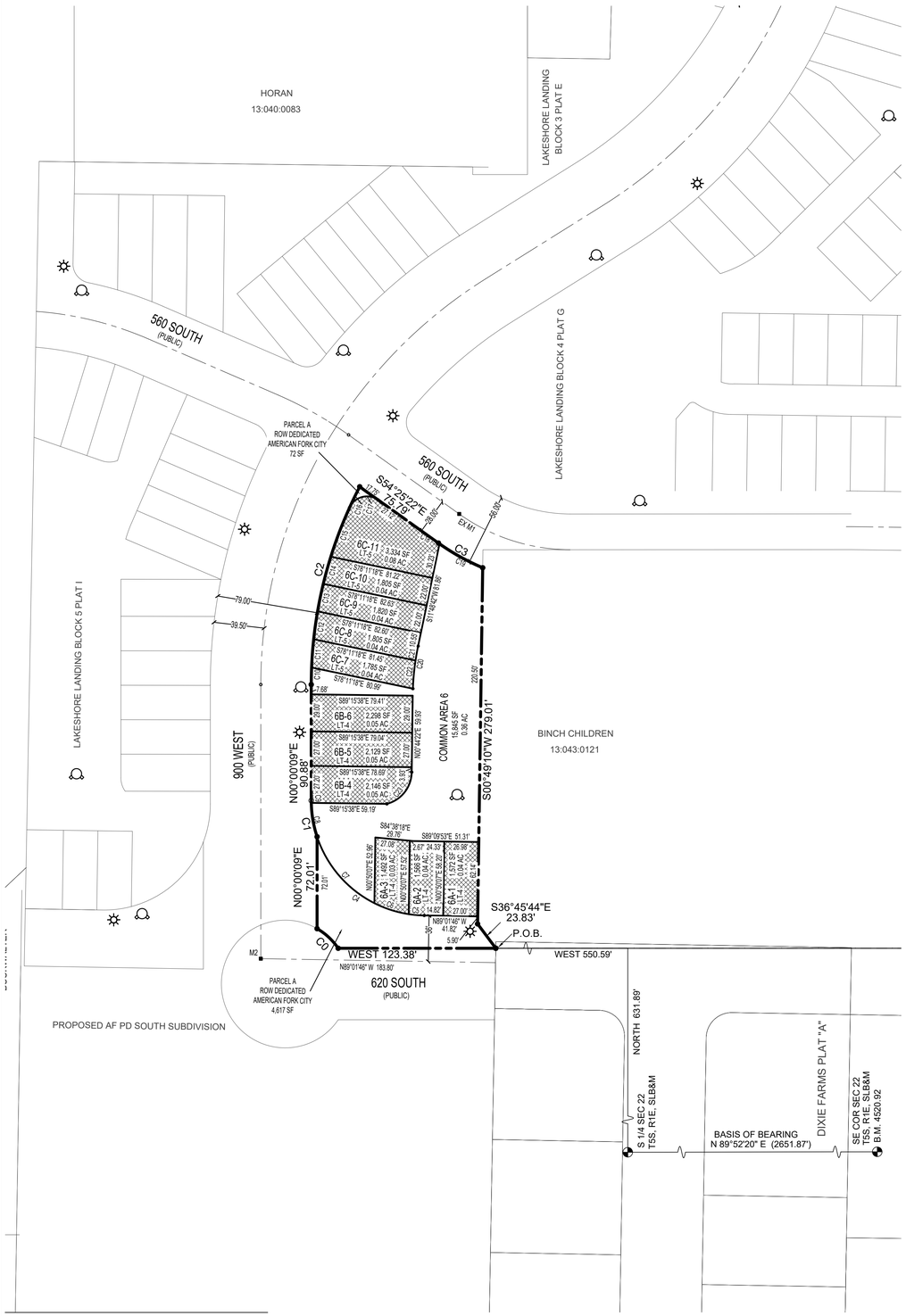
A TRANSIT-ORIENTED DEVELOPMENT
ALSO A PARTIAL VACATION OF LOT 1 OF THE B.K. PENROD PLAT A SUBDIVISION
LOCATED IN THE SOUTHWEST QUARTER OF SECTION 22
TOWNSHIP 5 SOUTH, RANGE 1 EAST,
SALT LAKE BASE AND MERIDIAN.
AMERICAN FORK CITY, UTAH COUNTY, UTAH
SCALE: 1" = 50 FEET

| SURVEYOR'S SEAL | NOTARY PUBLIC SEAL | CLERK-RECORDER SEAL |
|---|---|---|
| | | |

I:\My Drive\Berg Civil\2021\Red Pine\LAKESHORE LANDING\Block 5-6\PI\1 BLOCK 5 PLAT I 3-30-21.dwg
3/20/20

# LAKESHORE LANDING BLOCK 6 PLAT J

A TRANSIT-ORIENTED DEVELOPMENT
ALSO A PARTIAL VACATION OF LOT 1 OF THE B.K. PENROD PLAT A SUBDIVISION
LOCATED IN THE SOUTHWEST QUARTER OF SECTION 22
TOWNSHIP 5 SOUTH, RANGE 1 EAST,
SALT LAKE BASE AND MERIDIAN.
AMERICAN FORK CITY, UTAH COUNTY, UTAH




## ADDRESSES

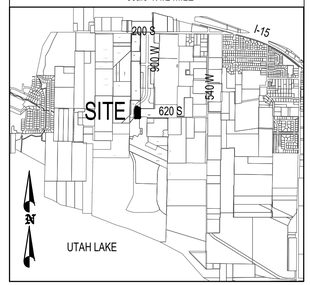
| | |
|---|---|
| LOT 6A-1 | 876 WEST 620 SOUTH |
| LOT 6A-2 | 884 WEST 620 SOUTH |
| LOT 6A-3 | 892 WEST 620 SOUTH |
| LOT 6B-4 | 613 SOUTH 900 WEST |
| LOT 6B-5 | 607 SOUTH 900 WEST |
| LOT 6B-6 | 601 SOUTH 900 WEST |
| LOT 6C-7 | 595 SOUTH 900 WEST |
| LOT 6C-8 | 589 SOUTH 900 WEST |
| LOT 6C-9 | 583 SOUTH 900 WEST |
| LOT 6C-10 | 577 SOUTH 900 WEST |
| LOT 6C-11 | 571 SOUTH 900 WEST |

## LEGEND

- SECTION CORNER
- PROPERTY CORNER
- SUBDIVISION MONUMENT
- BOUNDARY LINE
- CENTER LINE
- EASEMENT LINE
- FIRE HYDRANT
- STREET LIGHT
- PRIVATE AREA
- COMMON AREA (AS SPECIFIED) — COMMON

## VICINITY SKETCH

scale 1:1/2 MILE




## TABULATIONS

| | |
|---|---|
| DEVELOPMENT AREA | 0.97 AC |
| EXISTING ZONING | BLOCK TYPE 4 |
| LAND USE: | TOD |
| FLOOD ZONE DESIGNATION: | X |
| FIRM MAP PANEL #: | 495517 0110 B |
| EFFECTIVE DATE: | JULY 17, 2002 |

## NOTES

1. IT IS HEREBY STATED, UNDERSTOOD, AND DEDICATED THAT ALL UNITS HAVE A CROSS-EASEMENT WITHIN THE EXTERIOR WALLS, ATTIC SPACE, ALL COMMON/DIVISION WALLS, AND BELOW THE BOTTOM FLOOR FOR THE PLACEMENT OF NECESSARY UTILITIES TO SERVE ADJACENT UNITS WITHIN A GIVEN BUILDING SHELL. IF THE ABOVE EASEMENT IS NOT UTILIZED DURING THE INITIAL BUILDING CONSTRUCTION FOR THE FIRST OCCUPANCY, THE EASEMENT SHALL BE VACATED WHERE FURTHER USE WOULD CAUSE AN ADJACENT OWNER RECONSTRUCTION FOR PLACEMENT OF AN ADDITIONAL UTILITY NOT ALREADY CONTAINED WITHIN THE SHELL. THERE SHALL BE NO VACATION OF THIS COMMON AREA AND CROSS-EASEMENT IN THE CASE OF ANY NECESSARY STRUCTURAL REMEDIATION OR REPAIRS TO UTILITIES ALREADY IN PLACE WITHIN A GIVEN AREA DEFINED HEREIN.

2. NO SPECIFIC BUILDING PLAN IS INCLUDED WITH THE UNIT AREAS DEFINED ON THE PLAN. THESE PRIVATE UNIT AREAS CONTAIN NO OTHER ENCUMBRANCES THAN THOSE STATED WITHIN THE NOTES OR IN THE CC&R'S.

3. OFFSET-PINS TO BE PLACED IN THE BACK OF THE CURB AND 5/8" BY 24" REBAR WITH NUMBERED SURVEY CAP TO BE PLACED AT ALL LOTS REAR CORNERS PRIOR TO OCCUPANCY.

4. BUILDING PERMITS WILL NOT BE ISSUED FOR ANY HOME UNTIL 1) ASPHALT PAVING IS INSTALLED AND 2) FIRE HYDRANTS ARE INSTALLED, APPROVED BY THE FIRE MARSHAL AND CHARGED WITH CULINARY WATER.

5. LOWEST FLOOR SLAB ELEVATION MUST BE A MINIMUM OF 3 FEET ABOVE WATER LEVEL MEASURED DURING SPRING SEASON.

## RESERVATION OF COMMON AREAS

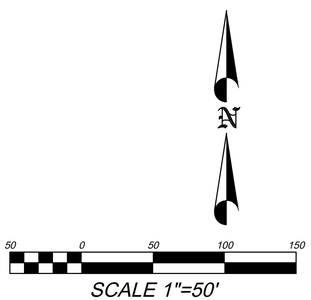
THE OWNER, IN RECORDING THIS PLAT ("THE DEVELOPMENT") HAS DESIGNATED CERTAIN AREAS OF THE DEVELOPMENT AS COMMON AREAS, INTENDED FOR THE OWNERS OF LAKESHORE LANDING FOR INGRESS, EGRESS, RECREATIONAL AND OTHER RELATED USES AS SET FORTH IN THE DECLARATION OF PROTECTIVE EASEMENTS, COVENANTS, CONDITIONS, AND RESTRICTIONS ("THE DECLARATION") PERTAINING TO THE DEVELOPMENT. THE DESIGNATED AREAS ARE NOT INTENDED, NOR ARE THEY DEDICATED, FOR USE BY THE GENERAL PUBLIC, BUT ARE RESERVED FOR THE COMMON USE AND ENJOYMENT OF THE OWNERS IN THE DEVELOPMENT, AS MORE FULLY PROVIDED IN THE DECLARATION RECORDED CONCURRENTLY WITH THE PLAT IN THE OFFICIAL RECORDS OF UTAH COUNTY, UTAH.

## PUBLIC UTILITY EASEMENTS

IN ADDITION TO THE PUBLIC UTILTY EASEMENTS SHOWN ON THIS PLAT, ALL COMMON AND LIMITED COMMON AREAS ARE PUBLIC UTILITY EASEMENTS, INCLUDING FULL RIGHT-OF-WAY ACCESS THERETO, IN FAVOR OF AMERICAN FORK CITY.

## CURVE TABLE

| CURVE | RADIUS | LENGTH | DELTA | CHORD | BEARING |
|---|---|---|---|---|---|
| C0 | 50.00 | 22.75 | 26°04'11" | 22.55 | N47°05'26"W |
| C1 | 90.00 | 28.81 | 18°20'34" | 28.69 | N09°10'08"W |
| C2 | 335.50 | 161.04 | 27°30'07" | 159.50 | N13°45'12"E |
| C3 | 178.00 | 66.43 | 21°23'01" | 66.05 | S65°06'52"E |
| C4 | 90.00 | 111.04 | 70°41'28" | 104.13 | N53°41'09"W |
| C5 | 90.00 | 12.22 | 07°46'50" | 12.21 | N85°08'28"W |
| C6 | 90.00 | 28.34 | 18°02'33" | 28.22 | N72°13'46"W |
| C7 | 90.00 | 70.48 | 44°52'05" | 68.69 | N40°46'27"W |
| C8 | 90.00 | 27.01 | 17°11'32" | 26.90 | N09°44'39"W |
| C9 | 90.00 | 1.81 | 01°09'00" | 1.81 | N00°34'22"W |
| C10 | 335.50 | 13.38 | 02°17'06" | 13.38 | N01°08'42"E |
| C11 | 335.50 | 22.20 | 03°47'29" | 22.20 | N04°11'00"E |
| C12 | 335.50 | 22.05 | 03°45'59" | 22.05 | N07°57'43"E |
| C13 | 335.50 | 22.00 | 03°45'28" | 22.00 | N11°43'27"E |
| C14 | 335.50 | 22.05 | 03°45'56" | 22.04 | N15°29'08"E |
| C15 | 335.50 | 41.19 | 07°02'02" | 41.16 | N20°53'07"E |
| C16 | 335.50 | 18.17 | 03°06'08" | 18.16 | N25°57'12"E |
| C17 | 15.00 | 26.49 | 101°10'30" | 23.18 | N74°59'23"E |
| C18 | 178.00 | 30.91 | 09°56'59" | 30.87 | S59°23'51"E |
| C19 | 178.00 | 35.52 | 11°26'02" | 35.46 | S70°05'22"E |
| C20 | 200.00 | 33.61 | 09°37'39" | 33.57 | S06°59'52"W |
| C21 | 200.00 | 11.46 | 03°16'54" | 11.45 | S10°10'15"W |
| C22 | 200.00 | 22.15 | 06°20'46" | 22.14 | S05°21'25"W |
| C23 | 26.00 | 33.87 | 74°38'07" | 31.52 | S38°03'26"W |




## REFERENCE DOCUMENTS:

NOTICE OF INTEREST, BUILDING REQUIREMENTS, AND ESTABLISHMENT OF RESTRICTIVE COVENANTS

RECORDED IN THE OFFICE OF THE UTAH COUNTY RECORDER AS ENTRY NO: _____

SURVEYOR

ENSIGN
THE STANDARD IN ENGINEERING
SALT LAKE CITY
45 W. 10000 S., Suite 500
Sandy, UT 84070
Phone: 801.255.0529

ENGINEER

berg
CIVIL ENGINEERING
11038 N Highland Blvd Suite 400
Highland Ut, 84003
office (801) 492-1277
cell (801) 616-1677

## SEWER & WATER AUTHORITY APPROVAL

APPROVED THIS _____DAY OF _____A.D. 20____,
BY THE WATER AUTHORITY.

_____
SEWER & WATER AUTHORITY

## SURVEYOR'S CERTIFICATE

I, _____, DO HEREBY CERTIFY THAT I AM A PROFESSIONAL LAND SURVEYOR, AND THAT I HOLD A LICENSE IN ACCORDANCE WITH TITLE 58, CHAPTER 22, PROFESSIONAL ENGINEERS AND LAND SURVEYORS LICENSING ACT, UTAH CODE ANNOTATED, 1953 AS AMENDED, CERTIFICATE NO. _____. I FURTHER CERTIFY THAT BY AUTHORITY OF THE OWNERS, I HAVE MADE A SURVEY OF THE TRACT OF LAND SHOWN ON THIS PLAT AND DESCRIBED BELOW, HAVE SUBDIVIDED SAID TRACT OF LAND INTO LOTS, STREETS AND EASEMENTS, HAVE COMPLETED A SURVEY OF THE PROPERTY DESCRBED ON THIS PLAT IN ACCORDANCE WITH SECTION 17-23-17, UTAH CODE ANNOTATED, 1953 AS AMENDED, HAVE VERIFIED ALL MEASUREMENTS, AND HAVE PLACED MONUMENTS AS REPRESENTED ON THE PLAT. I FURTHER CERTIFY THAT EVERY EXISTING RIGHT-OF-WAY AND EASEMENT GRANT OF RECORD FOR UNDERGROUND FACILITIES, AS DEFINED IN SECTION 54-8a-2, UTAH CODE ANNOTATED, 1953 AS AMENDED, AND FOR OTHER UTILITY FACILITIES, IS ACCURATELY DESCRIBED ON THIS PLAT, AND THAT THIS PLAT IS TRUE AND CORRECT.

_____ _____
DATE (SEE SEAL BELOW)

## BOUNDARY DESCRIPTION

BEGINNING AT A POINT WHICH IS NORTH 631.89 FEET AND WEST 550.59 FEET FROM THE SOUTH QUARTER CORNER OF SECTION 22, TOWNSHIP 5 SOUTH, RANGE 1 EAST; AND RUNNING:

THENCE WEST 123.38 FEET; THENCE ALONG THE ARC OF A 50.00 FOOT RADIUS CURVE TO THE LEFT A DISTANCE OF 22.75 FEET (CURVE HAVING A CENTRAL ANGLE 26°04'11" AND A LONG CHORD BEARS N47°05'26"W 22.55 FEET); THENCE NORTH 00°00'09" EAST 72.01 FEET; THENCE ALONG THE ARC OF A 90.00 FOOT RADIUS CURVE TO THE RIGHT A DISTANCE OF 28.81 FEET (CURVE HAVING A CENTRAL ANGLE 18°20'34" AND A LONG CHORD BEARS N09°10'08"W 28.69 FEET); THENCE NORTH 00°00'09" EAST 90.88 FEET; THENCE ALONG THE ARC OF A 335.50 FOOT RADIUS CURVE TO THE RIGHT A DISTANCE OF 161.04 FEET (CURVE HAVING A CENTRAL ANGLE 27°30'07" AND A LONG CHORD BEARS N13°45'12"E 159.50 FEET); THENCE SOUTH 54°25'22" EAST 75.79 FEET; THENCE ALONG THE ARC OF A 178.00 FOOT RADIUS CURVE TO THE LEFT A DISTANCE OF 39.75 FEET (CURVE HAVING A CENTRAL ANGLE 12°47'38" AND A LONG CHORD BEARS S60°49'11"W 39.66 FEET); THENCE SOUTH 00°49'10" WEST 279.01 FEET; THENCE SOUTH 36°45'44" EAST 23.83 FEET TO THE POINT OF BEGINNING.

THE ABOVE DESCRIBED PARCEL CONTAINS 42,264 SQUARE FEET IN AREA OR 0.97 ACRES.

(NOTE: ALL BEARINGS IN THE ABOVE DESCRIPTION ARE BASED ON THE NAD 27 BEARING OF N 89°52'20" E ALONG THE SECTION LINE FROM THE SOUTH QUARTER CORNER OF SECTION 22, TOWNSHIP 5 SOUTH, RANGE 1 EAST TO THE SOUTHEAST CORNER OF SAID SECTION 22.)

NUMBER OF LOTS 11
NUMBER OF PARCELS 1

## OWNER'S DEDICATION

THE UNDERSIGNED OWNERS OF THE PROPERTY DESCRIBED ABOVE AND SHOWN ON THIS PLAT, HAVE CAUSED THE SAME TO BE SUBDIVIDED INTO LOTS, STREETS, AND EASEMENTS AND DO HEREBY DEDICATE ANY PUBLIC STREETS AND OTHER PUBLIC AREAS SHOWN THEREON FOR THE PERPETUAL USE OF THE PUBLIC. PURSUANT TO UTAH CODE 10-9A-604(1)(d) THE OWNER HEREBY CONVEYS THE COMMON AREA AS INDICATED HEREON, TO THE _____ HOME OWNER ASSOCIATION WITH A MAILING ADDRESS OF _____

IN WITNESS HEREOF WE HAVE HEREUNTO SET OUR HANDS THIS _____

DAY OF _____, A.D. _____

_____

_____

## ACKNOWLEDGMENT

STATE OF UTAH )
COUNTY OF UTAH ) S.S.

ON THE ___ DAY OF _____, A.D. _____ PERSONALLY APPEARED BEFORE ME _____

_____
WHICH PERSON ACKNOWLEDGED TO ME THAT HE EXECUTED THE FOREGOING DEDICATION IN HIS RESPECTIVE CAPACITIES ON BEHALF OF _____, IN ACCORDANCE WITH THE GOVERNING DOCUMENTS OF SUCH COMPANY.

MY COMMISSION EXPIRES _____ _____
NOTARY PUBLIC

## ACCEPTANCE BY LEGISLATIVE BODY

THE ___CITY COUNCIL_____ OF ___AMERICAN FORK CITY___ COUNTY OF UTAH, APPROVES THIS SUBDIVISION AND HEREBY ACCEPTS THE DEDICATION OF ALL STREETS AND EASEMENTS FOR THE PERPETUAL USE OF THE PUBLIC THIS

_____ DAY OF _____, A.D. ___.

_____ _____
MAYOR CITY COUNCIL MEMBER

_____ _____
CITY COUNCIL MEMBER CITY COUNCIL MEMBER

_____ _____
CITY COUNCIL MEMBER CITY COUNCIL MEMBER

APPROVED _____ ATTEST _____
CITY ENGINEER CLERK-RECORDER

## PLANNING COMMISSION APPROVAL

APPROVED THIS _____ DAY OF _____, A.D. _____ BY THE
_____ PLANNING COMMISSION

_____ _____
PLANNER CHAIRMAN, PLANNING COMMISSION

# LAKESHORE LANDING BLOCK 6 PLAT J

A TRANSIT-ORIENTED DEVELOPMENT
ALSO A PARTIAL VACATION OF LOT 1 OF THE B.K. PENROD PLAT A SUBDIVISION
LOCATED IN THE SOUTHWEST QUARTER OF SECTION 22
TOWNSHIP 5 SOUTH, RANGE 1 EAST,
SALT LAKE BASE AND MERIDIAN.
AMERICAN FORK CITY, UTAH COUNTY, UTAH
SCALE: 1" = 50 FEET

| SURVEYOR'S SEAL | NOTARY PUBLIC SEAL | CLERK-RECORDER SEAL |
|---|---|---|
| | | |

3/20/20 I:\My Drive\Berg Civil\2021\Red Pine\LAKESHORE LANDING\Block 5-6-4\P21 BLOCK 6 PLAT J 3-30-21.dwg

**AMERICAN FORK CITY** **MEETING DATE:** 8th June, 2022
**PLANNING COMMISSION** **STAFF:** Cody Opperman

**AGENDA TOPIC:** Review and action on a Site Plan for Shipley Residence, located in the area of 1051 N. 700 West Circle, in the R1-12000 Residential Zone.

| BACKGROUND INFORMATION | | |
|---|---|---|
| Location: | | 1051 N. 700 West Circle |
| Applicants: | | Inouye Design, CMT Engineering Laboratories, Excel Engineering |
| Existing Land Use: | | Residential Low Density |
| Proposed Land Use: | | N/A |
| Surrounding Land Use: | North | Residential Low Density and Public Parks & Open Space |
| | South | Residential Low Density |
| | East | Residential Low Density |
| | West | Public Parks & Open Space |
| Existing Zoning: | | R1-12000 |
| Proposed Zoning: | | N/A |
| Surrounding Zoning: | North | R1-12000, RA-1 |
| | South | R1-12000 |
| | East | R1-12000 |
| | West | RA-1 |

**BACKGROUND:**

The applicant is applying for the Site Plan approval for Shipley Residence in the R1-12000 Residential Zone. The proposal consists of 1 lot intended for an accessory dwelling addition. The entire development parcel consists of .47 acres.

Sec 17.6.101 Administrative Site Plan Review

Wherever the terms of this code require submission and approval of a site plan, such review shall be conducted in accordance with the following provisions.

A. Planning commission to approve. The planning commission, acting in an administrative capacity, shall have the function, duty and power to approve or disapprove a project plan and to attach such modifications or conditions as may be deemed appropriate to improve the layout, to ensure that the project will not pose any detrimental effect to persons or property, or to protect the health, safety, and general welfare of the citizens of the city.

B. Application required. Application for site plan approval shall be submitted on forms provided by the city and shall be accompanied by maps and drawings showing the following:
    a. The location of all existing and proposed buildings and structures on the site, with full dimensions showing the distance between buildings and distances from buildings to adjacent property lines.
    b. The location of all parking spaces, driveways, and points of vehicular ingress and egress.
    c. A landscaping plan showing the location, types, and initial sizes of all planting materials to be used together with the location of fences, walls, hedges, and decorative materials.
    d. Preliminary elevations of main buildings showing the general appearance and types of external materials to be used.
    e. The locations of solid waste receptacles and trash pick-up areas.
C. Appeals permitted. Any person aggrieved by a determination of the planning commission may request a hearing before the city council who shall have the authority to reverse, affirm or modify any decision of said commission. Any such appeal shall be filed within ten days of the determination of the planning commission.
D. Issuance of a permit. A building permit shall not be issued for any building or structure or external alterations thereto until the provisions of this section have been complied with. Any construction not in conformance with an approved site plan shall be considered a violation of this code. Any building permit issued shall ensure that development is undertaken and completed in conformity with the plans as approved.

**STAFF RECOMMENDATION:**

The Site Plan meets the requirements of Section 17.6.101 and staff recommends approval.

**POTENTIAL MOTIONS – Site Plan**

**APPROVAL**

Mr. Chairman, I move that we recommend approval for the Site Plan for Shipley Residence, located in the area of 1051 N. 700 West Circle, in the R1-12000 Residential Zone, subject to any conditions found in the Engineering Staff Report, or recommended by the Fire Marshal.

**DENIAL**

Mr. Chairman, I move that we deny the Site Plan for Shipley Residence, located in the area of 1051 N. 700 West Circle, in the R1-12000 Residential Zone.

**TABLE**

Mr. Chairman, I move that we table action on the Site Plan for Shipley Residence, located in the area of 1051 N. 700 West Circle, in the R1-12000 Residential Zone, and instruct the developer/staff to _____.

# AMERICAN FORK CITY ENGINEERING DIVISION
# STAFF REPORT

Planning Commission Meeting Date: 6/8/2022

This report is a summary of the American Fork City Engineering Division plan review comments regarding the subject plan as submitted by the applicant for American Fork City Land Use Authority approval:

Project Name: Shipley Residence

Project Address: 1051 N 700 West Circle

Developer / Applicant's Name: Jonathon and Jessica Shipley

Type of Application:

- ☐ Subdivision Final Plat
- ☐ Subdivision Preliminary Plan
- ☐ Annexation
- ☐ Code Text Amendment
- ☐ General Plan Amendment
- ☐ Zone Map Amendment
- ☐ Commercial Site Plan
- ☒ Residential Accessory Structure Site Plan

**Project Map:**



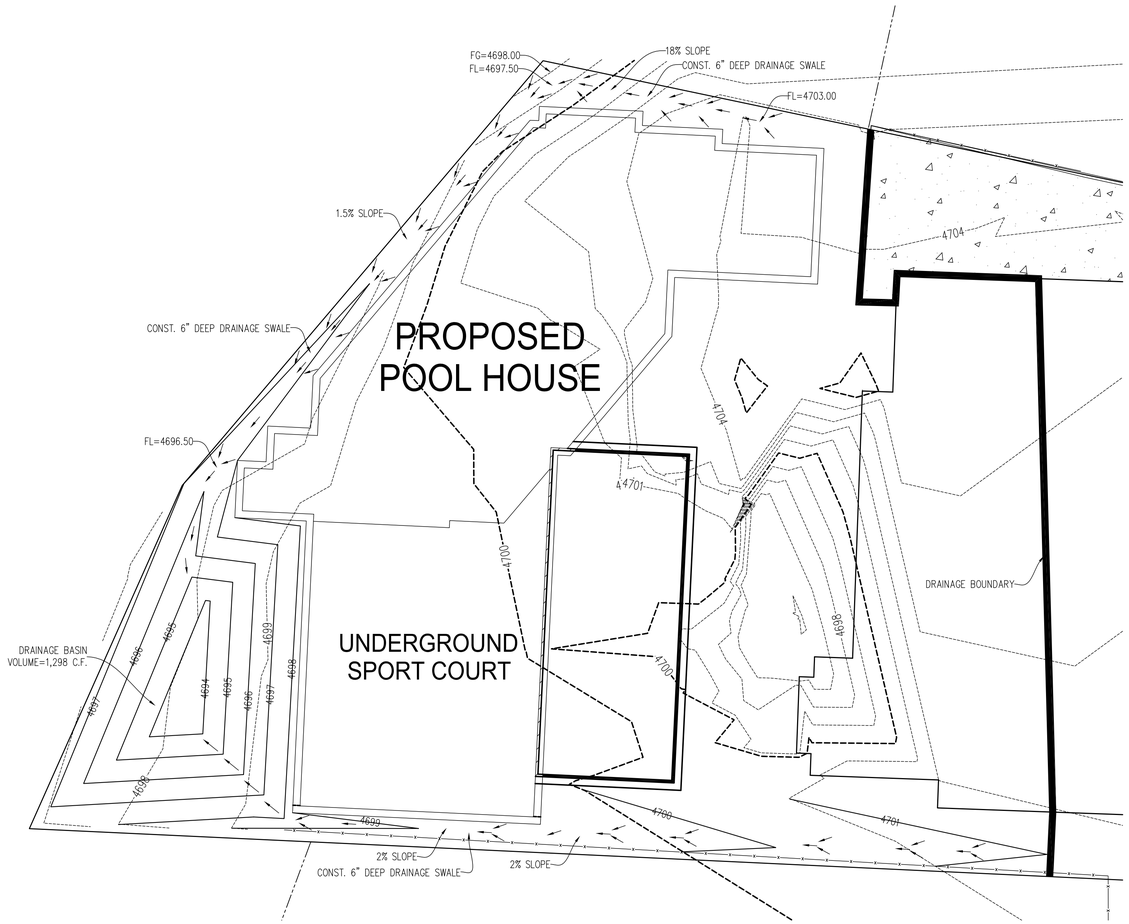

**Engineering Division Recommendation:** The Engineering Division recommends APPROVAL of the proposed development with the following conditions and standard conditions of approval:

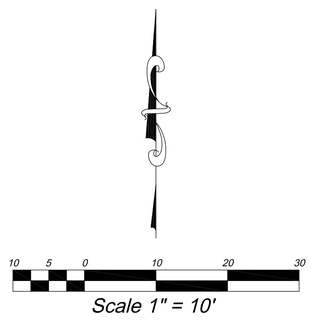
## STANDARD CONDITIONS OF APPROVAL

**Standard Conditions of Approval:**

APPLICANT is responsible and shall submit/post/obtain all necessary documentation and evidence to comply with these Standard Conditions of Approval prior to any platting, permitting, or any other form of authorization by the City including plat recording or other property conveyance to the City and prior to scheduling a pre-construction meeting. All recording shall take place at the Utah County Recorder's Office.

1. **Title Report:** Submit an updated Title Report not older than 30 days or other type of appropriate verification that shows all dedications to the City are free and clear of encumbrances, taxes, or other assessments.
2. **Property Taxes and Liens:** Submit evidence that all the property taxes, for the current and/or previous years, liens, and agricultural land use roll over fees have been paid in full.
3. **Water Rights:** Submit evidence that all the required water rights have been conveyed to American Fork City.
4. **Performance Guarantee:** Post a performance guarantee for all required public and essential common improvements.
5. **Easements and Agreements:** Submit/record a long-term Storm Water Pollution Prevention Maintenance Agreement signed and dated by the property owner and any required easement documentation.
6. **Land Disturbance Permit:** Obtain a Land Disturbance Permit.
7. **Compliance with the Engineering Division Plan Review Comments:** All plans and documents shall comply with all the Technical Review Committee comments and the City Engineer's final review.
8. **Commercial Structure:** Record an Owner Acknowledgment and Utility Liability Indemnification if the proposed building is a multi-unit commercial structure served by a single utility service.
9. **Sensitive Lands:** Record all applicable documents required for compliance with the City's Sensitive Lands Ordinance.
10. **Utility Notification Form:** Submit a Subdivision Utility Notification Form.
11. **Professional Verification:** Submit final stamped construction documentation by all appropriate professionals.
12. **Fees:** Payment of all development, inspection, recording, streetlight, and other project related fees.
13. **Mylar:** Submit a Mylar. All plats will receive final verification of all formats, notes, conveyances, and other items contained on the plat by City staff (recorder, legal, engineer, GIS, planning).




## Shipley Residence
## Storm Water Calculations - 100 year
31-Mar-21

The storm drain calculations were performed using the rational method.

**Hydrologic Calculations**

CA CALCULATION

| | C | Area (sf) | C * A |
|---|---|---|---|
| Landscape area | 0.2 | 4548 | 910 |
| Building/parking | 0.9 | 6909 | 6218 |
| Total CA | | 11457 | 7128 |

The determined percolation rate is 1 minute/inch. Use 2 min. inch
The infiltration area is the bottom of the drainage basin
The infiltration area = 76 s.f.
The infiltration rate = (76 s.f.)(1 inch/2 min.)(1 ft/12 inch)(1 min./60 sec.)= 0.05 cfs

**Retention calculations**

| Lapsed Time (min.) | Rainfall intensity (in/hr) | Total Rainfall (in) | Rainfall Volume (cu.ft.) | Release Volume (cu.ft.) | Required Storage (cu.ft.) |
|---|---|---|---|---|---|
| A | B | C | D | E | F |
| 15 | 4.50 | 1.15 | 683 | 48 | 636 |
| 30 | 3.00 | 1.50 | 891 | 95 | 796 |
| 45 | 2.25 | 1.69 | 1004 | 143 | 861 |
| 60 | 1.85 | 1.85 | 1099 | 190 | 909 |
| 90 | 1.30 | 1.95 | 1158 | 285 | 873 |
| 120 | 1.00 | 2.00 | 1188 | 380 | 808 |
| 180 | 0.70 | 2.10 | 1247 | 570 | 677 |
| 360 | 0.45 | 2.70 | 1604 | 1140 | 464 |
| 720 | 0.25 | 3.00 | 1782 | 2280 | -498 |
| 1440 | 0.15 | 3.60 | 2138 | 4560 | -2422 |

Required Retention Storage = 909 cf

Notes:
A, B, & C are based upon A.F. City Precip. Table (100-year)
D = C / (12 inches/foot) x total acreage of site x 43,560 sf/acre x run-off coefficient, where Q=CIA and V=CiA
E = infiltration rate x A x 60 sec.
F = D - E to determine storage volume

**Discussion**

1. Drainage basin volume = 1,298 c.f.
2. Provided storage volume of 1,298 c.f. exceeds the required storage volume of 909 c.f.

CMT ENGINEERING LABORATORIES

March 30, 2022

Mr. Mike Deuel
Shelby Homes
9657 North 5650 West
Highland, Utah 84003

RE: Infiltration Test Results
Lot 25 Searle Meadows
1051 North 700 West Circle
American Fork, Utah
CMT Job No. 18175

Mr. Deuel,

As you requested and authorized (per our agreement dated on March 21, 2022), CMT performed an infiltration test at the site on March 24, 2022.

At the time of the infiltration test, a test pit was excavated to a depth of about 5.5 feet at rear of the subject backyard (west side of the site). The soils observed in the test pit visually consisted of medium dense, slightly moist, brown Silty Sand with gravel (SM). The infiltration test was performed by digging a shallow hole with a shovel in the bottom of the test pit, filling the hole water and measuring the rate of water drop with time. This procedure (filling the hole with water and measuring the water drop rate) was repeated until two successive readings were the same. The infiltration rate obtained was 1 minute per inch. A factor of safety should be applied in design to account for some potential siltation.

Our professional services have been performed, our findings obtained, and our recommendations prepared in accordance with generally accepted geotechnical engineering principles and practices. This warranty is in lieu of all other warranties, either expressed or implied.

If you have any questions, please call.

Sincerely,
**CMT Engineering Laboratories**

William G. Turner, P.E.
Senior Geotechnical Engineer

REGISTERED PROFESSIONAL ENGINEER 171715 WILLIAM G. TURNER 3/30/22 STATE OF UTAH

ENGINEERING • GEOTECHNICAL • ENVIRONMENTAL (ESA I & II) • MATERIALS TESTING • SPECIAL INSPECTIONS
ORGANIC CHEMISTRY • PAVEMENT DESIGN • GEOLOGY
www.cmtlaboratories.com

REGISTERED PROFESSIONAL ENGINEER 3/31/22 No. 270393 DAVID W. PETERSON STATE OF UTAH

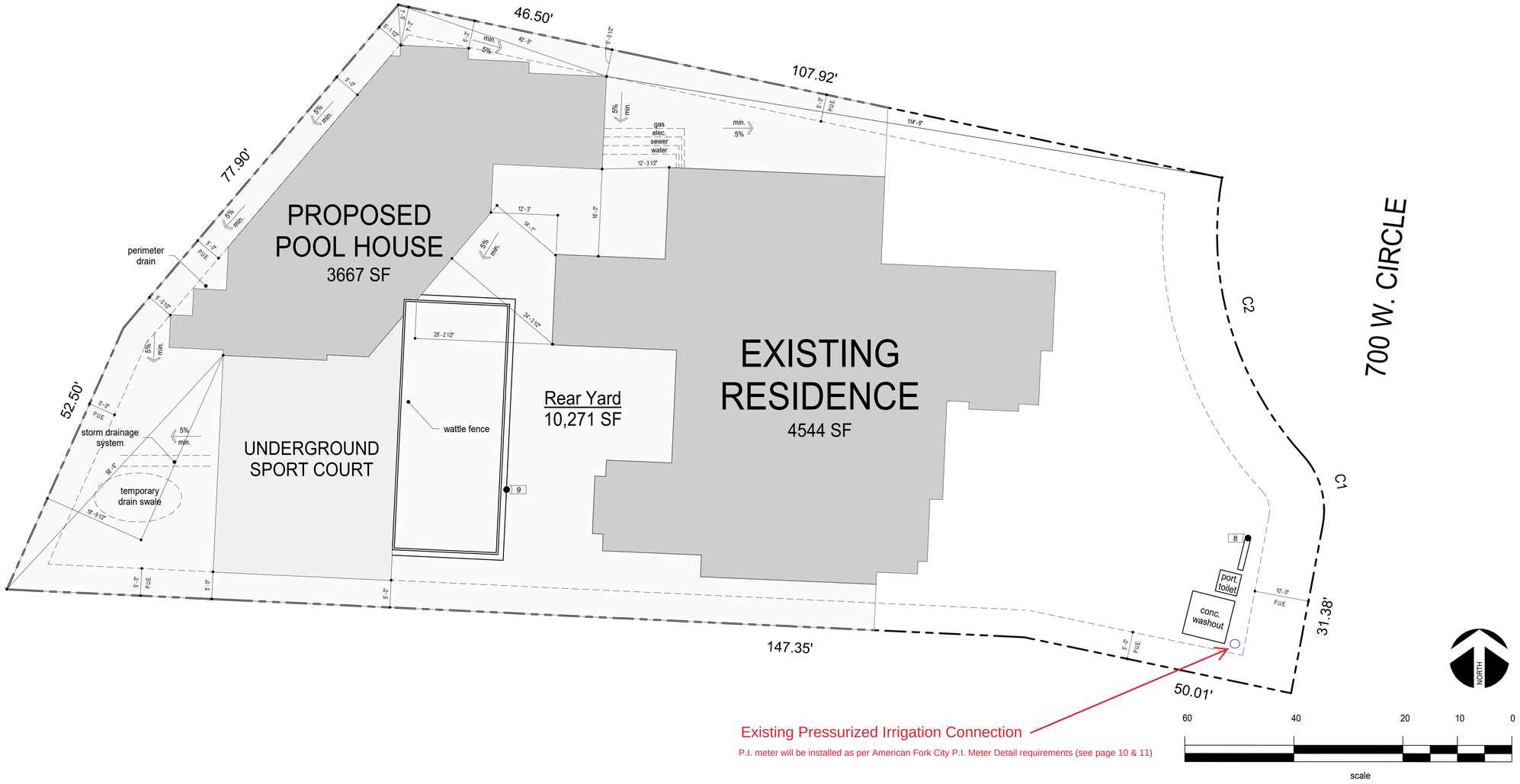
| REVISIONS | | |
|---|---|---|
| Rev. | Date | Description |
| | | |

EXCEL ENGINEERING
David W. Peterson, P.E., License #270393
12 West 100 North, Suite 201C, American Fork, UT 84003
P: (801) 756-4504; david@excelcivil.com

SHIPLEY RESIDENCE
AMERICAN FORK UTAH

| Drawn by: | Scale: |
|---|---|
| D.W.P. | 1"=10' |
| Designed by: D.W.P. | Date: 03/31/22 |
| Checked by: D.W.P. | C1 |

GRADING PLAN




Existing Pressurized Irrigation Connection

P.I. meter will be installed as per American Fork City P.I. Meter Detail requirements (see page 10 & 11)

| Building Square Footage | |
|---|---|
| Existing Building | 4544 SF |
| Proposed Building | 3667 SF |
| Rear Yard | 10,271 SF |
| Proposed building makes up 35 % of Rear Yard | |

| SUBDIVISION INFORMATION | |
|---|---|
| City | American Fork |
| State | Utah |
| Plat | A |
| Lot | Lot 25 |
| Subdivision | Searle Meadows |
| Address | 1051 N. 700 West Circle |

## GENERAL & KEYED NOTES

1. Minimum driveway slope to be 2% away from garage (12% maximum)
2. Finish grade & elevations to slope away from house @ minimum 6 in. (5%) for the first 10'
3. All drainage to slope away from residence @ all points to a public utility. Do not allow drainage to go onto any neighboring property by directing out to street.
4. Sewer Lateral to have 2% min. rise
5. Provide landscape berming for runoff water retention as req'd
6. All surface runoff to be contained on-site and does not runoff onto all adjacent properties
7. Provide stamped colored concrete or pavers for driveway as per owner
8. SWPPP sign location
9. Pool by others
10. The applicant has provided adequate assurance that neither the accessory building nor any portion therof will be used or converted for use as living or sleeping quarters as per Section 17.5.106

INOUYE DESIGN
1443 W 800 N #203 Orem, Utah 84057 Ph: 801.373.0909

# Shipley Detached Garage

1051 N. 700 W. Circle, Lot 25 American Fork, Utah

Contractor shall verify all dimensions, conditions and measurements at the job prior to construction. These plans and documents are the property of Inouye Design, and any reuse or further distribution thereof in part or in whole without the written permission of the designer is strictly prohibited. Designer is not an architect or engineer.
© Copyright 2019 Inouye Design

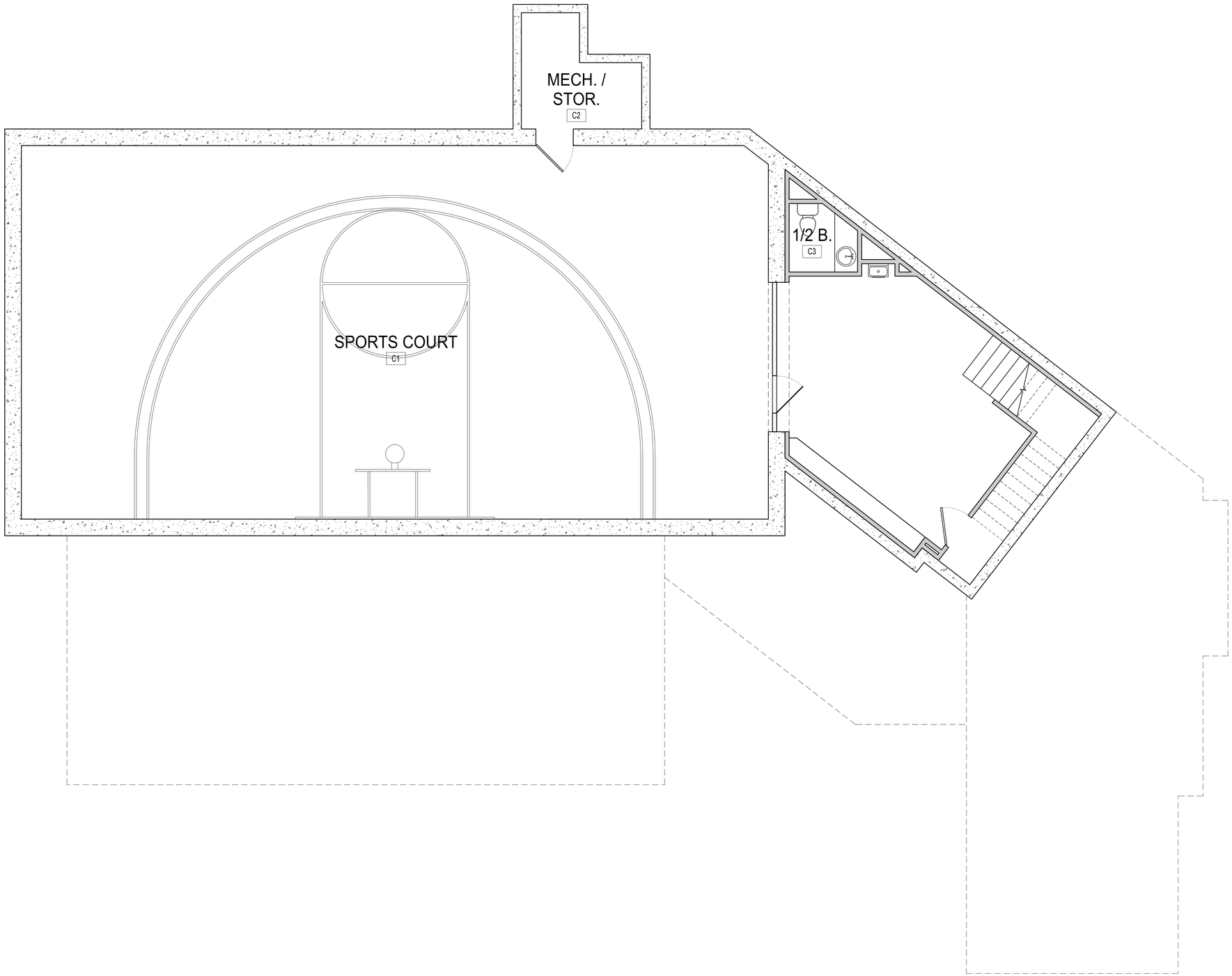
12 x 18 (sheet size): 1"=20'-0"
24 x 36 (sheet size): 1"=10'-0"

Project 20062

06 April 2022

C2.1

SITE PLAN




## GENERAL & KEYED NOTES

INOUYE DESIGN

1443 W 800 N #203 Orem, Utah 84057 Ph: 801.373.0909

# Shipley Detached Garage

1051 N. 700 W. Circle, Lot 25 American Fork, Utah

Contractor shall verify all dimensions, conditions and measurements at the job prior to construction. These plans and documents are the property of Inouye Design, and any reuse or further distribution thereof in part or in whole without the written permission of the designer is strictly prohibited. Designer is not an architect or engineer.
© Copyright 2021 Inouye Design

12 x 18 (sheet size): 1/8"=1'-0"
24 x 36 (sheet size): 1/4"=1'-0"

Project 20062

18 Febraury 2022

A1.1

SPORTS COURT LEVEL FLOOR PLAN

## LOWER LEVEL ROOM SCHEDULE

| rm. | ceiling | flr. fin. | gyp. bd. | paint | base | crown | notes |
|---|---|---|---|---|---|---|---|
| T1 | 10'-6" flat ceiling | carpet | x | x | x | | |
| T2 | 10'-6" flat ceiling | carpet | x | x | x | | |
| T3 | 10'-6" flat ceiling | sealed concrete | | | | | |
| T4 | 10'-6" flat ceiling | sealed concrete | | | | | |
| T5 | 9'-0" flat ceiling | sealed concrete | | | | | |

see sheet C1.3 for complete schedules

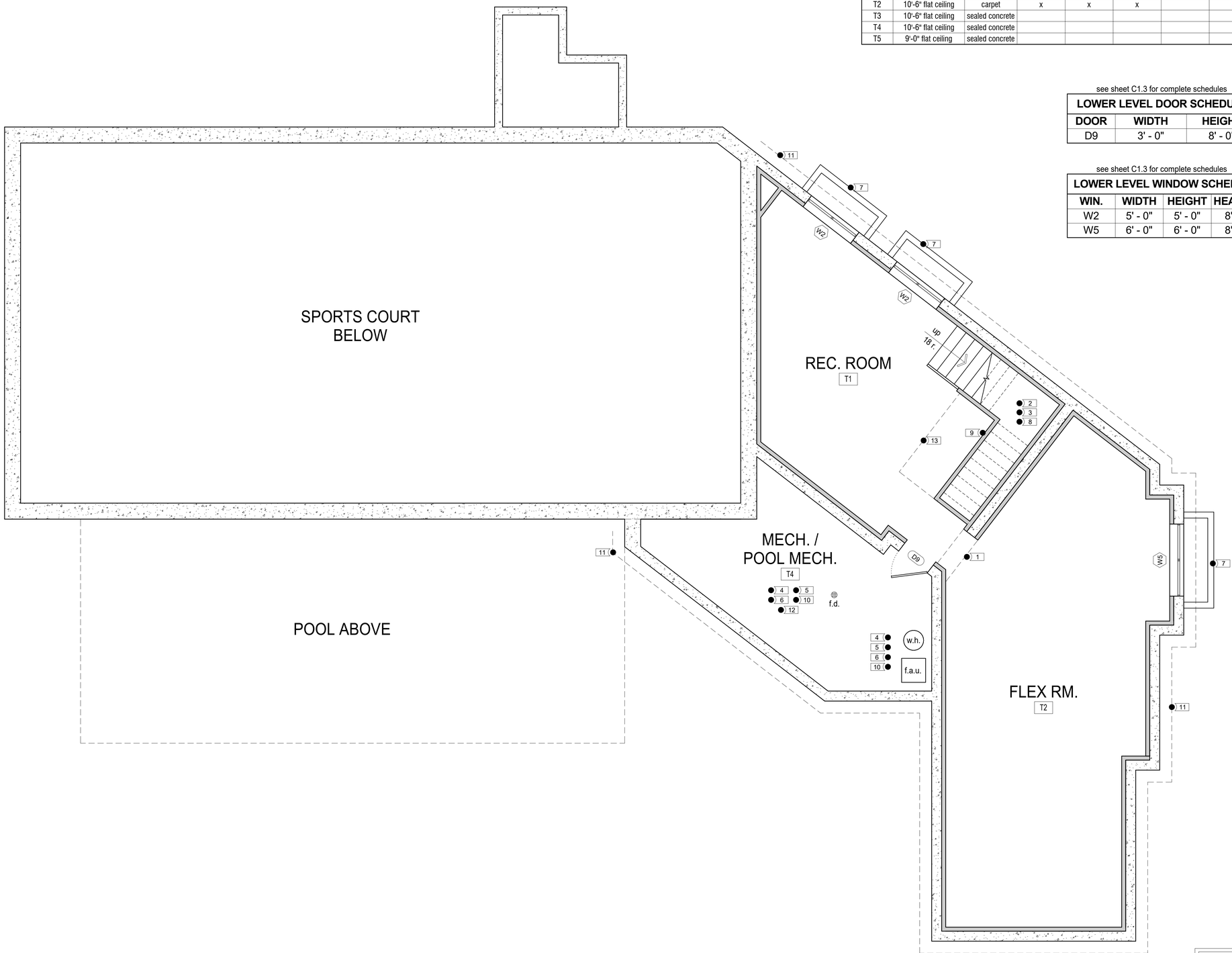
## LOWER LEVEL DOOR SCHEDULE

| DOOR | WIDTH | HEIGHT |
|---|---|---|
| D9 | 3' - 0" | 8' - 0" |

see sheet C1.3 for complete schedules

## LOWER LEVEL WINDOW SCHEDULE

| WIN. | WIDTH | HEIGHT | HEAD HT. |
|---|---|---|---|
| W2 | 5' - 0" | 5' - 0" | 8' - 0" |
| W5 | 6' - 0" | 6' - 0" | 8' - 0" |




## GENERAL & KEYED NOTES

1 Square cased opening w/ top @ 8'-0"
2 Provide handrail from nosing of top stair to nosing of bottom stair as per IRC
3 Provide 36" (min.) guardrail as per IRC & owner
4 Provide exterior combustion air as per IRC
5 Provide 2" step down into mech. rm.
6 Provide approved seismic strap for water heaters as per IRC
7 Provide concrete window wells w/ metal grate covering & ladder as per IRC
8 Provide 5/8" type 'x' gyp. bd. under stairs as per IRC
9 Climbing wall as per owner - Provide plywood backing & support as req'd
10 Provide flue as req'd
11 Provide perimeter drain as req'd
12 Provide pool mechanical as per IRC and owner
13 Line of wall above

INOUYE DESIGN
1443 W 800 N #203 Orem, Utah 84057 Ph: 801.373.0909

# Shipley Detached Garage

1051 N. 700 W. Circle, Lot 25 American Fork, Utah

Contractor shall verify all dimensions, conditions and measurements at the job prior to construction. These plans and documents are the property of Inouye Design, and any reuse or further distribution thereof in part or in whole without the written permission of the designer is strictly prohibited. Designer is not an architect or engineer.
© Copyright 2021 Inouye Design

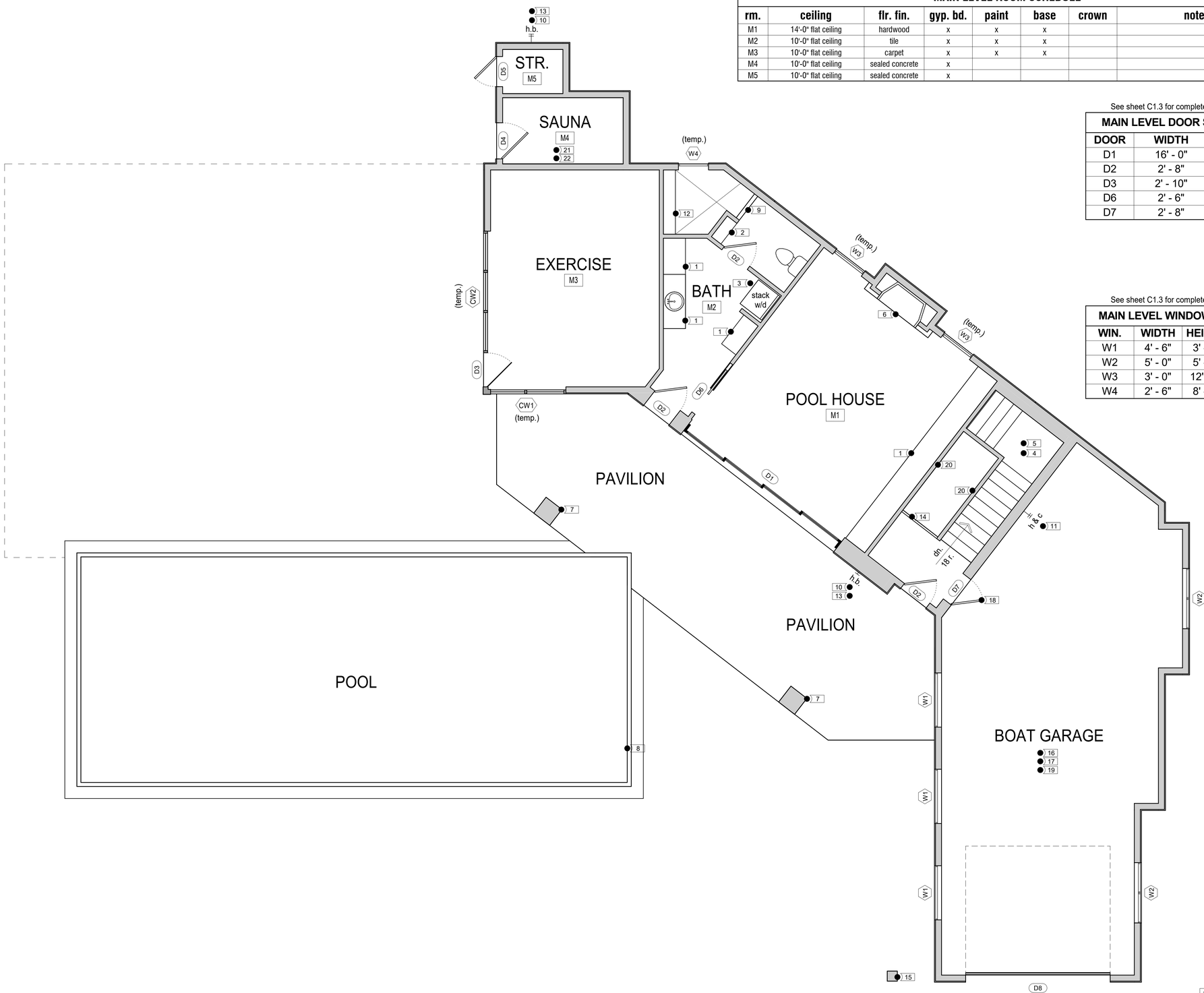
12 x 18 (sheet size): 1/8"=1'-0"
24 x 36 (sheet size): 1/4"=1'-0"

LOWER LEVEL
Living Space 1116 SF
Storage 252 SF

Project 20062
18 Febraury 2022

A1.3

LOWER LEVEL FLOOR PLAN




## MAIN LEVEL ROOM SCHEDULE

| rm. | ceiling | flr. fin. | gyp. bd. | paint | base | crown | notes |
|---|---|---|---|---|---|---|---|
| M1 | 14'-0" flat ceiling | hardwood | x | x | x | | |
| M2 | 10'-0" flat ceiling | tile | x | x | x | | |
| M3 | 10'-0" flat ceiling | carpet | x | x | x | | |
| M4 | 10'-0" flat ceiling | sealed concrete | x | | | | |
| M5 | 10'-0" flat ceiling | sealed concrete | x | | | | |

See sheet C1.3 for complete schedules

## MAIN LEVEL DOOR SCHEDULE

| DOOR | WIDTH | HEIGHT |
|---|---|---|
| D1 | 16' - 0" | 12' - 0" |
| D2 | 2' - 8" | 8' - 0" |
| D3 | 2' - 10" | 8' - 0" |
| D6 | 2' - 6" | 8' - 0" |
| D7 | 2' - 8" | 8' - 0" |

See sheet C1.3 for complete schedules

## MAIN LEVEL WINDOW SCHEDULE

| WIN. | WIDTH | HEIGHT | HEAD HT. |
|---|---|---|---|
| W1 | 4' - 6" | 3' - 0" | 8' - 0" |
| W2 | 5' - 0" | 5' - 0" | 8' - 0" |
| W3 | 3' - 0" | 12' - 0" | 12' - 0" |
| W4 | 2' - 6" | 8' - 0" | 8' - 0" |

## GENERAL & KEYED NOTES

1. Built-in cabinetry as per owner
2. Built-in shelving as per owner
3. Provide tile pan & floor drain for washer & dryer
4. Provide handrail from nosing of top stair to nosing of bottom stair as per IRC
5. Provide 36" (min.) guardrail as per IRC & owner
6. Provide 36" or 42" direct vent gas fireplace as per owner
7. 20" x 20" column w/ finish as per owner
8. Swimming pool as per owner
9. Provide tempered glass for shower door and enclosure as req'd
10. Non-freeze type hose bib w/ backflow preventers installed
11. Provide hot & cold mixing valve
12. Provide tiled bench in shower as per owner
13. Provide hose bib at front & rear of the dwelling as req'd
14. Provide gate for climbing wall as per owner.
15. 10" x 10" column w/ finish as per owner
16. All penetrations (plumbing, water, vacuum, etc.) through garage fire wall to be w/ metal piping
17. Provide (2) layers 1/2" type 'x' gyp. bd. @ clg. & (1) layer 5/8" type 'x' gyp. bd. @ house walls
18. This door to be metal, 20 min. fire-rated w/ self-closing hinge as per IRC
19. Provide 6" conc. curb
20. Climbing wall as per owner - Provide plywood backing & support as req'd
21. Provide electrical as needed for Sauna heating system
22. Provide req'd mech. & electrical for Cold Plunge, Steam, & Sauna as per owner

INOUYE DESIGN
1443 W 800 N #203 Orem, Utah 84057 Ph: 801.373.0909

# Shipley Detached Garage

1051 N. 700 W. Circle, Lot 25 American Fork, Utah

Contractor shall verify all dimensions, conditions and measurements at the job prior to construction. These plans and documents are the property of Inouye Design, and any reuse or further distribution thereof in part or in whole without the written permission of the designer is strictly prohibited. Designer is not an architect or engineer.
© Copyright 2021 Inouye Design

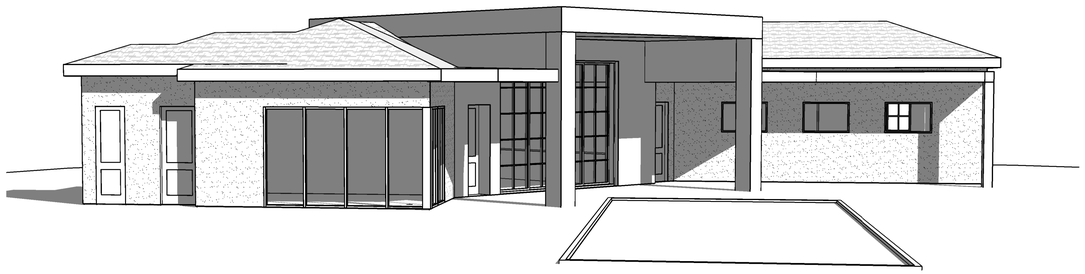
12 x 18 (sheet size): 1/8"=1'-0"
24 x 36 (sheet size): 1/4"=1'-0"

MAIN LEVEL
Garage Space 751 SF
Living Space 909 SF

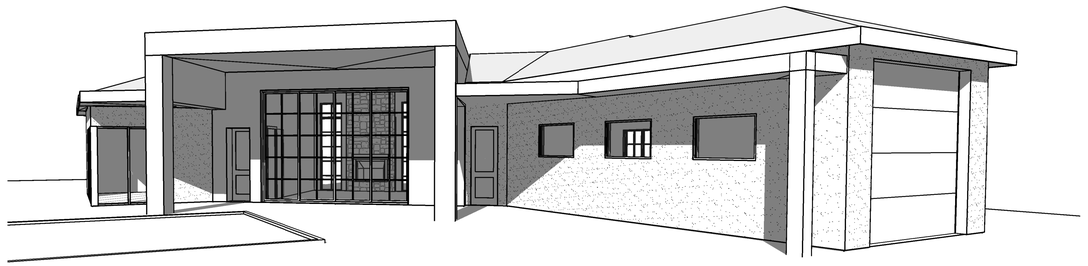
Project 20062
18 Febraury 2022

A1.5

MAIN LEVEL FLOOR PLAN



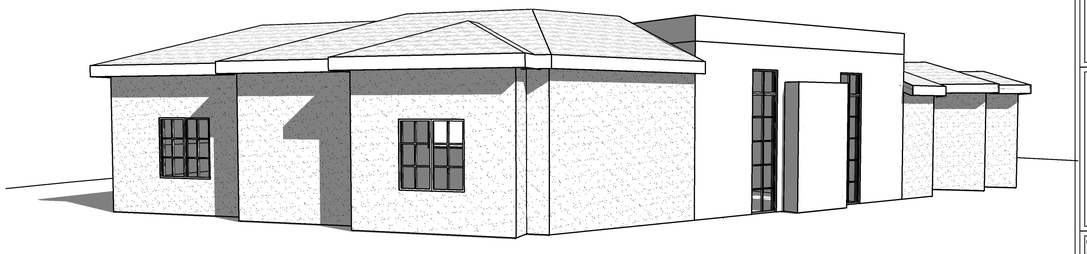
FRONT LEFT PERSPECTIVE



FRONT RIGHT PERSPECTIVE



REAR LEFT PERSPECTIVE



REAR RIGHT PERSPECTIVE

**GENERAL & KEYED NOTES**

INOUYE DESIGN
1443 W 800 N #203 Orem, Utah 84057 Ph: 801.373.0909

# Shipley Detached Garage

1051 N. 700 W. Circle, Lot 25 American Fork, Utah

Contractor shall verify all dimensions, conditions and measurements at the job prior to construction. These plans and documents are the property of Inouye Design, and any reuse or further distribution thereof in part or in whole without the written permission of the designer is strictly prohibited. Designer is not an architect or engineer.
© Copyright 2021 Inouye Design

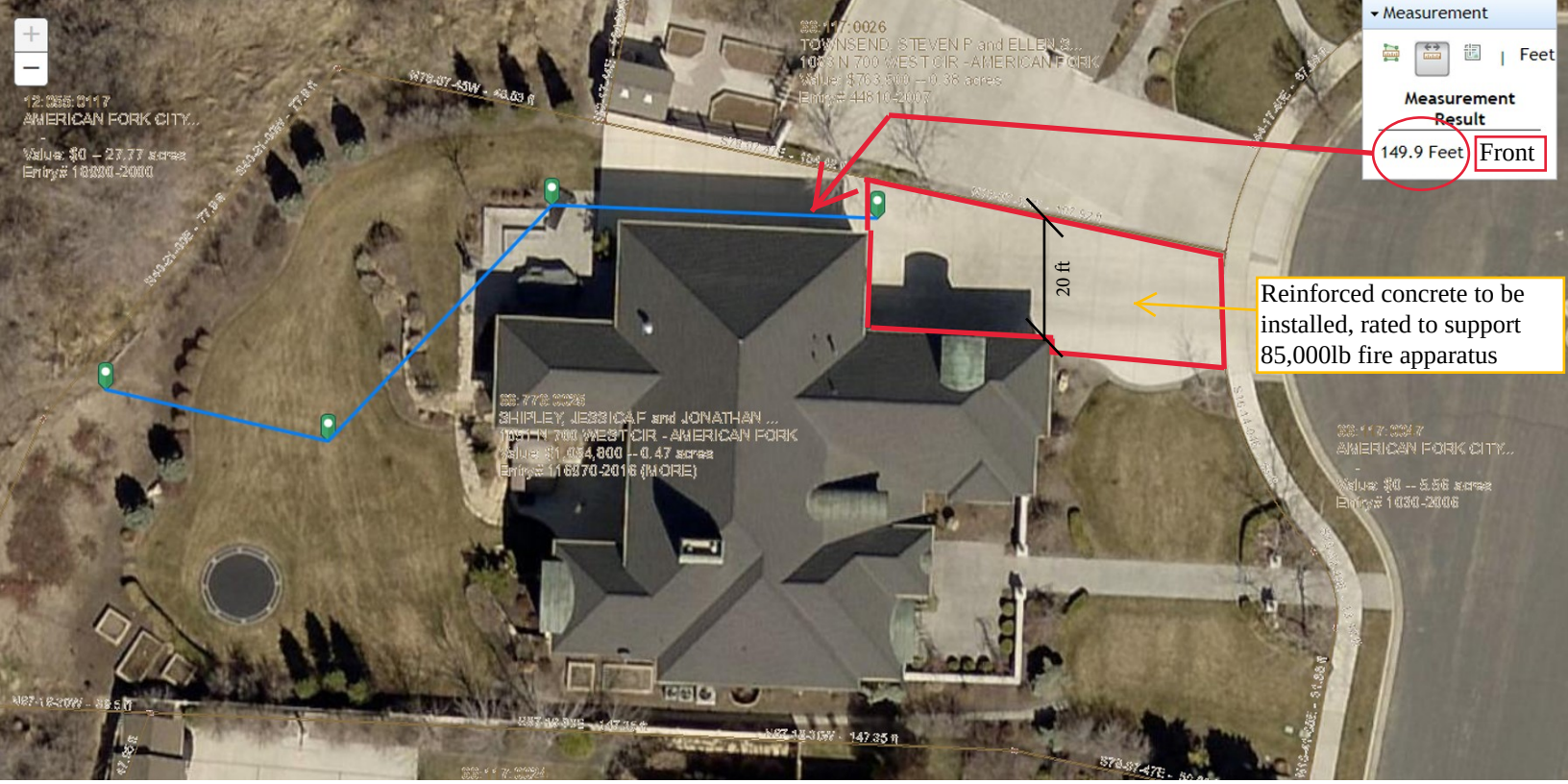
12 x 18 (sheet size): 1/8"=1'-0"
24 x 36 (sheet size): 1/4"=1'-0"

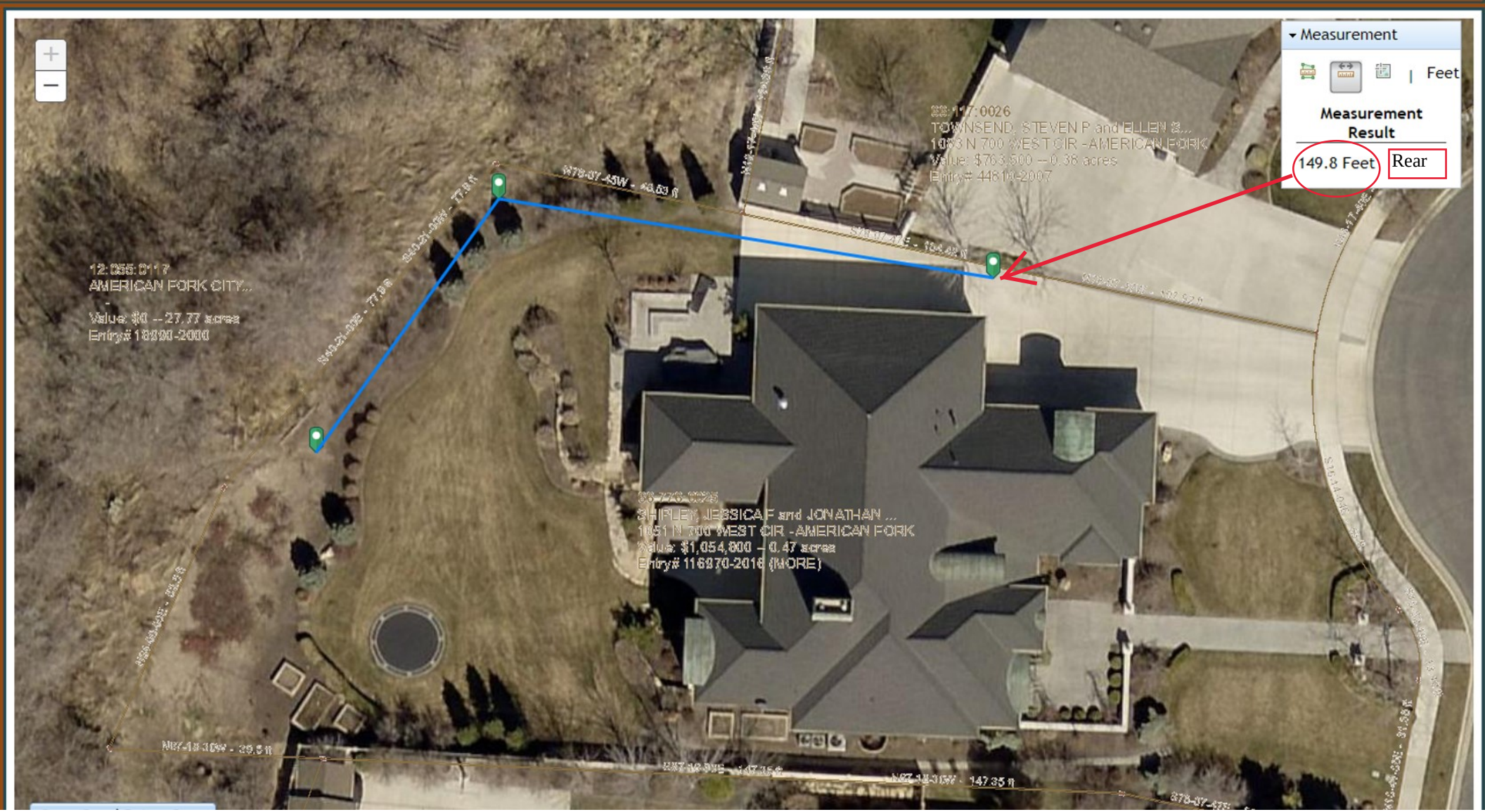
Project 20062

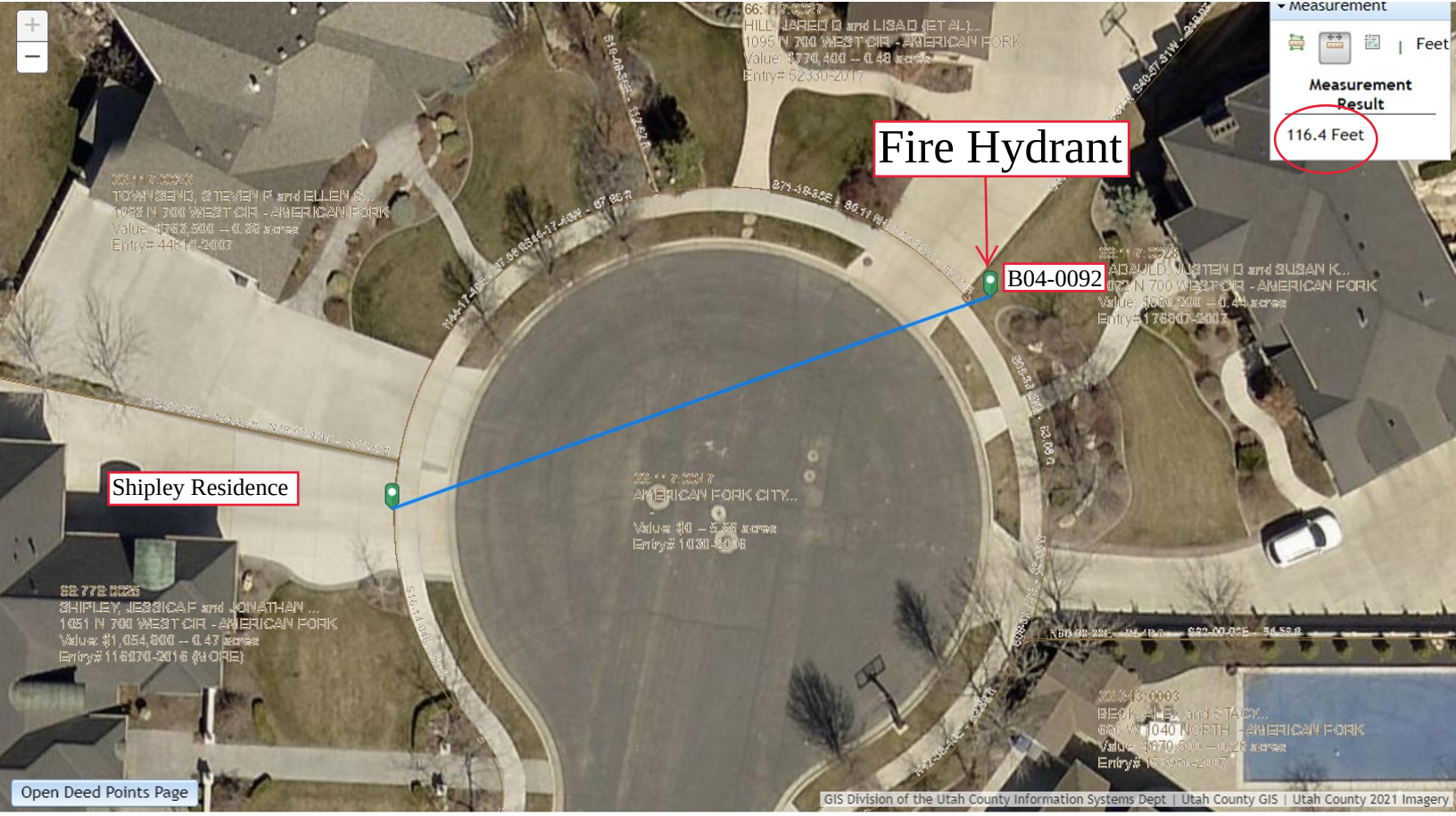
18 Febraury 2022

A3.3

PERSPECTIVE VIEWS


Measurement
Feet
Measurement Result
149.9 Feet
Front
20 ft
Reinforced concrete to be installed, rated to support 85,000lb fire apparatus


Measurement
Feet
Measurement Result
149.8 Feet
Rear
12:355:0117
AMERICAN FORK CITY...
Value: $0 -- 27.77 acres
Entry# 18300-2000
66:117:0026
TOWNSEND, STEVEN P and ELLEN S...
1063 N 700 WEST CIR -AMERICAN FORK
Value: $763,500 -- 0.36 acres
Entry# 44810-2007
SHIPLEY, JESSICA F and JONATHAN ...
1051 N 700 WEST CIR -AMERICAN FORK
Value: $1,054,800 -- 0.47 acres
Entry# 116370-2016 (MORE)


Fire Hydrant
B04-0092
Shipley Residence
Measurement
Feet
Measurement Result
116.4 Feet
Open Deed Points Page
GIS Division of the Utah County Information Systems Dept | Utah County GIS | Utah County 2021 Imagery

PUBLIC WORKS DEPARTMENT
275 East 200 North, American Fork, UT 84003
Office (801) 763-3060

June 4, 2019

To Whom It May Concern:

Re: Pressurized Irrigation (P.I.) System Meter Installation

In recent days, the City has received several inquiries and concerns regarding the new Pressurized Irrigation System Meter ordinance. We understand the concerns and are listening to you. In response, we are making the following changes to the implementation of the new ordinance, effective immediately:

1) For those lots where the developer has already installed the old meter box (often called a jumbo box), including the hardware inside, and the box has been inspected by the City to ensure compliance with the old detail, the following narrative will apply:

    a. The jumbo box and hardware will NOT need to be replaced.
    b. A PI meter will still be required. This meter will be installed by the City at the same time the culinary water meter is set. This will take place after the applicant for service has set up the utility account with the City and paid the required fees.

2) For those lots where the jumbo box has not yet been installed, the new detail sent to you in recent days will apply and must be installed prior to the City setting both meters (culinary and PI). This new detail shows the new meter can and the required hardware that must be installed.

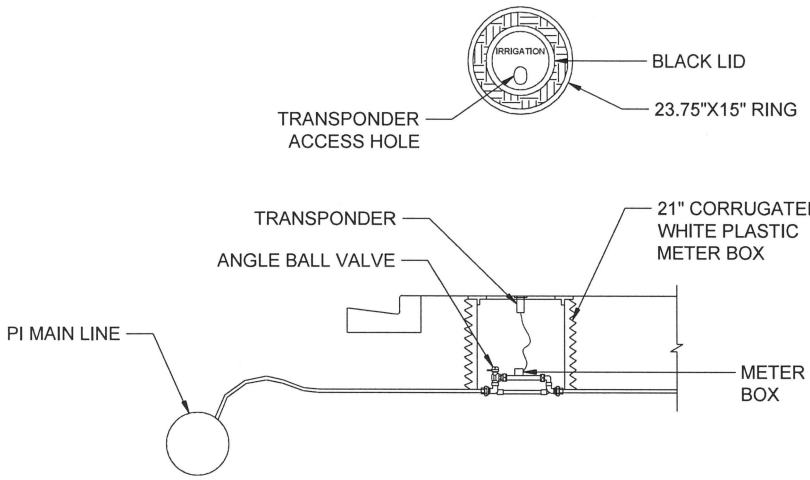
If you have any questions, please feel free to contact me.

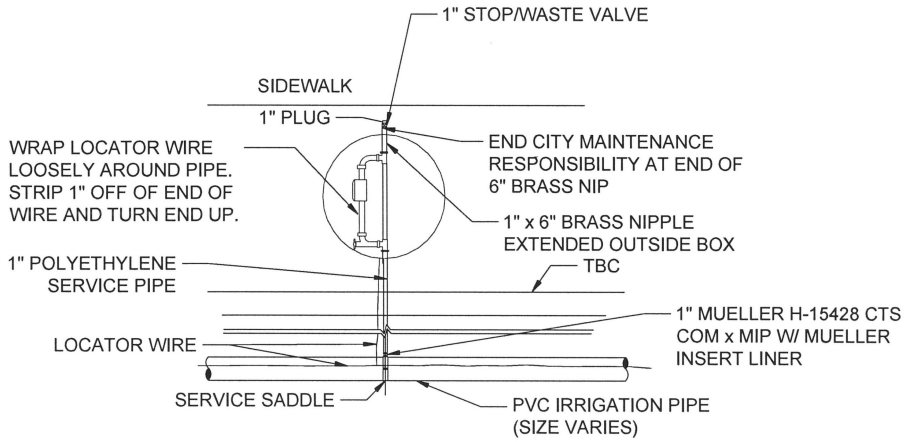
Sincerely,

Scott Sensanbaugher
Director of Public Works

Scott Sensanbaugher, Director

Phone: 801-763-3060 Email: ssensanbaugher@afcity.net




1" PLAN VIEW
NTS

| | | | | |
|---|---|---|---|---|
| DRAWN: ABW<br>REVISED:<br>DATE: APR 2019<br>SCALE: VARIES | AMERICAN FORK 1853 | AMERICAN FORK CITY<br>PUBLIC WORKS<br>275 EAST 200 NORTH<br>(801) 763-9030 | STANDARD DETAIL FOR<br>PI METER DETAIL | DRAWING NO.<br>15.5D |

**AMERICAN FORK CITY** **MEETING DATE:** 8th June, 2022
**PLANNING COMMISSION** **STAFF:** Patrick O'Brien

**AGENDA TOPIC:** Review and action on a Site Plan for AF Industrial Flex, located in the area of 752 East Quality Drive, in the PI-1 And PI-1(O) Planned Industrial Zone.

| BACKGROUND INFORMATION | | |
|---|---|---|
| Location: | | 752 East Quality Drive |
| Applicants: | | CIR Engineering LLC, The Will Group Developers, AE Urbia |
| Existing Land Use: | | Design Commercial |
| Proposed Land Use: | | N/A |
| Surrounding Land Use: | North | Design Commercial, Planned Community |
| | South | Design Commercial |
| | East | Planned Community |
| | West | Design Commercial |
| Existing Zoning: | | PI-1 |
| Proposed Zoning: | | N/A |
| Surrounding Zoning: | North | PI-1 and PC |
| | South | PI-1 |
| | East | PC |
| | West | PI-1 |

**BACKGROUND:**

The applicant is applying for the site plan approval for AF Industrial Flex in the PI-1 zone. The proposal consists of 1 lot intended for a business park. The entire development parcel consists of 4.29 acres. The proposed plans also include an existing site/demolition plan for the demolition of existing structures on site to accommodate the future development.

**STAFF RECOMMENDATION:**

The Site Plan meets the requirements of Section 17.6.101 and staff recommends approval.

**POTENTIAL MOTIONS – Site Plan**

**APPROVAL**

Mr. Chairman, I move that we recommend approval for the Site Plan for AF Industrial Flex, located in the area of 752 East Quality Drive, in the PI-1 And PI-1(O) Planned Industrial Zone, subject to any conditions found in the Engineering Staff Report, or recommended by the Fire Marshal.

**DENIAL**

Mr. Chairman, I move that we deny the Site Plan for AF Industrial Flex, located in the area of 752 East Quality Drive, in the PI-1 And PI-1(O) Planned Industrial Zone.

**TABLE**

Mr. Chairman, I move that we table action on the Site Plan for AF Industrial Flex, located in the area of 752 East Quality Drive, in the PI-1 And PI-1(O) Planned Industrial Zone, and instruct the developer/staff to _____.

# AMERICAN FORK CITY ENGINEERING DIVISION
# STAFF REPORT

Planning Commission Meeting Date: 6/8/2022

This report is a summary of the American Fork City Engineering Division plan review comments regarding the subject plan as submitted by the applicant for American Fork City Land Use Authority approval:

Project Name: AF Industrial Flex

Project Address: 752 East Quality Drive

Developer / Applicant's Name: The Will Group

Type of Application:

- ☐ Subdivision Final Plat
- ☐ Subdivision Preliminary Plan
- ☐ Annexation
- ☐ Code Text Amendment
- ☐ General Plan Amendment
- ☐ Zone Change
- ☒ Commercial Site Plan
- ☐ Residential Accessory Structure Site Plan

**Project Map:**



**Engineering Division Recommendation:** The Engineering Division recommends APPROVAL of the proposed development with the following conditions of approval and all other standard conditions of approval:

1. A modified notice of interest shall be recorded on the property and shall include all documentation provided by the applicant detailing their due diligence, documents and reports related to water rights, geotechnical reports and pond modifications.
2. The remaining TRC comments are addressed and verified prior to being schedule for an agenda for City Council consideration.

## STANDARD CONDITIONS OF APPROVAL

**Standard Conditions of Approval:**

APPLICANT is responsible and shall submit/post/obtain all necessary documentation and evidence to comply with these Standard Conditions of Approval prior to any platting, permitting, or any other form of authorization by the City including plat recording or other property conveyance to the City and prior to scheduling a pre-construction meeting. All recording shall take place at the Utah County Recorder's Office.

1. **Title Report:** Submit an updated Title Report not older than 30 days or other type of appropriate verification that shows all dedications to the City are free and clear of encumbrances, taxes, or other assessments.
2. **Property Taxes and Liens:** Submit evidence that all the property taxes, for the current and/or previous years, liens, and agricultural land use roll over fees have been paid in full.
3. **Water Rights:** Submit evidence that all the required water rights have been conveyed to American Fork City.
4. **Performance Guarantee:** Post a performance guarantee for all required public and essential common improvements.
5. **Easements and Agreements:** Submit/record a long-term Storm Water Pollution Prevention Maintenance Agreement signed and dated by the property owner and any required easement documentation.
6. **Land Disturbance Permit:** Obtain a Land Disturbance Permit.
7. **Compliance with the Engineering Division Plan Review Comments:** All plans and documents shall comply with all the Technical Review Committee comments and the City Engineer's final review.
8. **Commercial Structure:** Record an Owner Acknowledgment and Utility Liability Indemnification if the proposed building is a multi-unit commercial structure served by a single utility service.
9. **Sensitive Lands:** Record all applicable documents required for compliance with the City's Sensitive Lands Ordinance.
10. **Utility Notification Form:** Submit a Subdivision Utility Notification Form.
11. **Professional Verification:** Submit final stamped construction documentation by all appropriate professionals.
12. **Fees:** Payment of all development, inspection, recording, street light, and other project related fees.
13. **Mylar:** Submit a Mylar. All plats will receive final verification of all formats, notes, conveyances, and other items contained on the plat by City staff (recorder, legal, engineer, GIS, planning).

# EXHIBIT B

**(First IGES Report)**

Intermountain GeoEnvironmental Services, Inc.
12429 South 300 East, Suite 100, Draper, Utah 84020
T: (801) 748-4044, F: (801) 748-4045

March 1, 2022

JDH
1450 West 1850 North
Lehi, Utah 84004
Attn: Mr. John Hadfield

IGES Project No. 03023-003

RE: **Recommendations for Filling in Existing Pond**
**752 East Quality Drive – American Fork, Utah**

Mr. Hadfield:

IGES has observed the pond area for the Flex Warehouse planned for 752 East Quality Drive in American Fork, Utah. IGES originally completed a geotechnical report for the site dated August 16th, 2021, entitled *"Geotechnical Investigation (Rev. 1), Flex Warehouse, 748 Quality Drive, American Fork, Utah, IGES Project No. 03638-001"*. To support construction of the warehouse, IGES completed a site visit on October 8th 2021 to initially observe the grubbing being completed, as a significant amount of vegetation was present onsite. On October 19th, 2021 representatives from IGES visited the site to observe the pond area to assess the feasibility of filling in the pond; the current plan is to fill in the pond, maintain the flow of water downstream and accommodate the existing well and/or natural spring located within the pond. This letter summarizes our observations on October 8 and 19, and presents recommendations based on those observations.

**OBSERVATIONS**

On October 8,, 2021, IGES was asked to visit the site and evaluate the grubbing and initial fill placement ongoing at the site. At the time of our visit the Contractor (Hadco) had been importing a small amount of granular fill to provide stable areas to bring in haul trucks to remove a large stockpile of organic material consisting mostly of trees and some topsoil. IGES was asked to assess whether the areas being filled had been properly grubbed and was suitable for placement of structural fill. IGES observed that most of the site had been properly grubbed but there were a few locations that still contained substantial roots in or just below the topsoil layer. IGES recommended these areas be excavated another 6 inches or more to remove the heavy organics and pointed these areas out to the excavator operator on site. Photos of the site at the time of our October 8 visit are presented in Figure 1.



Figure 1. Photos of the Site on October 8, 2021.

A second visit was completed on October 19, 2021 with several members of the development and design team in attendance. The purpose of the site visit was to discuss and establish procedures to fill in the pond while maintaining the flow of water from the natural spring within the pond and also preserve the existing well located on site. Photos of the pond outflow and existing well are presented in Figure 2. At the time of our visit, the location of the spring with the pond could not be determined.



Figure 2. Photos of the pond outflow and existing well.

**FINDINGS, CONCLUSIONS & RECOMMENDATIONS**

Based on our observations, the pond water surface and subsequent localized groundwater elevation has been established by elevation of the outflow box installed on the neighboring property, which we understand has raised the pond elevation approximately two feet from historical levels. We further understand that the flow of water is dammed at certain times of the year by the down-stream user (when active irrigation is not required), which in the past has also raised the elevation of the water table and the elevation of the pond surface by approximately two feet. Thus, we are not sure how future damming of the water will impact the upstream sites in their current (or future) condition. Because of this uncertainty, and since the local groundwater has likely been raised due to the increased elevation of the new outflow

Copyright ©2021, IGES, Inc.

box, we recommend the water not be dammed so it will not adversely impact the upstream sites. Given the preceding recommendations, the flow of water should be maintained to the downstream properties, but the upstream properties should not be utilized to store any excess water the downstream properties do not want because the elevated groundwater would likely negatively impact currently proposed improvements. We recommend the downstream properties divert any excess or unwanted water into the City storm drain or another acceptable location.

The well is located to the south of the pond; the well did not appear to be functioning or contributing to the water in the pond. Upon further historical investigation by members of the development and design team, it was established that there is a spring feeding the pond, which is believed to be within the pond, hence the exact location of the spring is not known with certainty. Based on this understanding, IGES developed the following recommendations to properly fill in the pond and maintain the flow of water downstream to the neighboring properties:

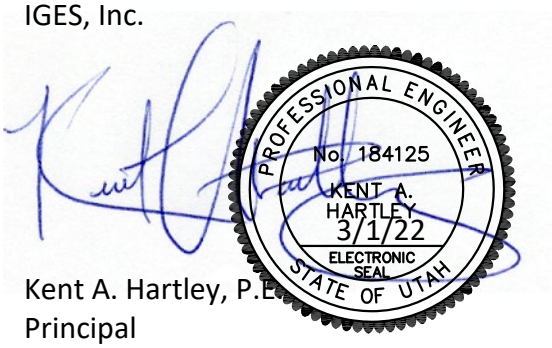
1. Pump out the water in the pond. This has been completed previously and it is known that it can be accomplished with reasonable effort.
2. Starting at the downstream end of the pond; remove all the debris, mud and heavy organics along the edges of the pond while creating benches with vertical sides no more than 3 feet in height. Extend the excavations down to the bottom of the pond exposing relatively solid native soils as the excavation proceeds. During this process IGES will be on-site to assess whether the excavation has removed enough material to allow proper stabilization and fill placement.
3. Cleaning out the pond should expose the documented spring. Therefore, the next step will be to capture the outflow from the spring with gravel and a non-woven filter fabric and tie that to the existing outflow using gravel and at least one and possibly two 12-inch diameter perforated HDPE corrugated pipes surrounded by gravel and fabric.
4. Stabilize the exposed subgrade prior to, or during the tie-in from the spring to the outflow box by placing a non-woven filter fabric over the exposed soil then pushing coarse, angular rock into the soft soil and fabric for 12- to 18-inches, thus creating a stable surface. Place another layer of non-woven filter fabric over the coarse angular rock and then place lifts of imported granular structural fill. The structural fill can be the same material that is being placed over the entire site. This structural fill should be placed in maximum 12-inch loose lifts and compacted to a minimum of 95 percent of ASTM D-1557 (Modified Proctor). The material should cover the entire pond area and the pipe(s) tying the spring to the existing outflow box.

A sketch graphically illustrating the proposed recommendations are attached for reference.

Regarding the well, it does not appear to be functioning or contributing to the water in the pond, and our current understanding is that the well is to be abandoned.

Copyright ©2021, IGES, Inc.

Respectfully Submitted,
IGES, Inc.




Kent A. Hartley, P.E.
Principal

Attachments: Sketch of Proposed Construction Recommendations

Copyright ©2021, IGES, Inc.

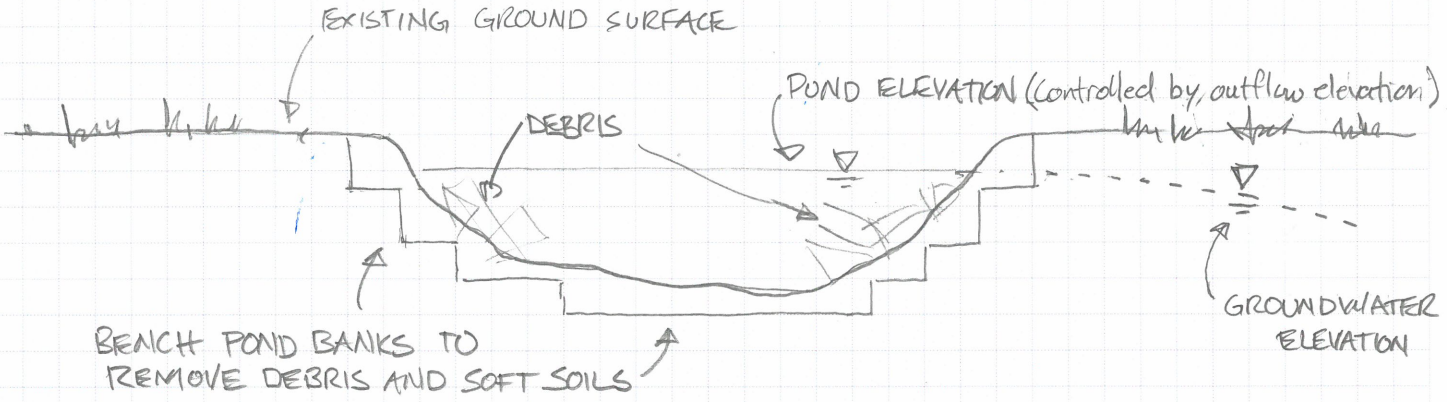
Project No. 03023-003

Date 10/25/21

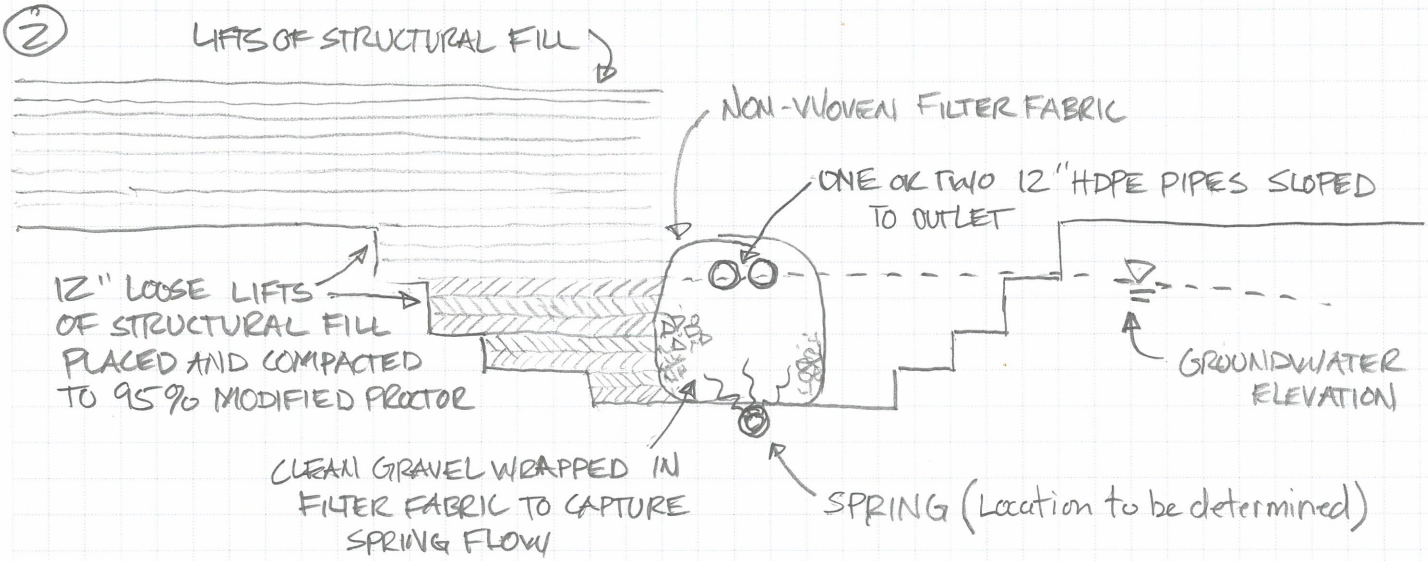
# QUALITY DRIVE WAREHOUSE

## Existing Pond Fill & Maintaining Downstream Flow

(1)




(2)




ONE SQUARE = 2 FT.

# EXHIBIT C

**(Will Group Hydrologic Evaluation Letter)**

THE WILL GROUP

04-05-2022

Attn: Ben Hunter
American Fork City

**RE: Hydrologic Evaluation**
**Sensitive Lands Ordinance 4-6-2**

Ben,

We have prepared a Hydrologic Evaluation Report, according to the City's Sensitive Lands Ordinance. In an email you sent Nate Heaps (cc'd) on 11/29/2021, you said, "I did a little more looking into things. The section of code I was thinking is found in our sensitive lands ordinance, Section 2-7-2-7 which does identify that downstream and adjacent owners will need to approve as well as Section 4-6 that talks about water rights in a few places. The sensitive lands ordinance can be found online."

We have reviewed the AF City Sensitive Lands Ordinance section 2-7-2-7 and it says the following: "No development shall be approved that interferes with adjacent or down-stream water rights, water quality, water delivery and/or water levels, without eliminating any interference or obtaining approval from all stakeholders in said water rights." This gives us the option to either prove that we won't interfere with the flow of water OR we need to obtain approvals from the water rights stakeholders. Section 4-6 involves conducting a hydrologic evaluation to prove that we won't interfere with the flow of water for the water rights stakeholders.

As part of this submittal, we have completed the hydrologic evaluation found in Section 4-6-2, to comply with Section 2-7-2-7. Along with the report, attached as item number eight, is an indemnification agreement as referenced in Section 4-6, which will satisfy the City's concerns on this issue. Please see the hydrologic evaluation for our findings.

Sensitive Lands Ordinance 4-6-2

1. Provides a map of all water rights within 0.5 miles of the boundaries of the proposed development. The map shall identify owners, types, quantities, state identification reference.
2. Provides a map of all surface flow patterns including canals, sloughs, drainages and ditches. The map shall identify owners, type of water course (natural stream, slough, drainage ditch, etc.), historic flows and downstream users shall show the downstream water course and land ownership to the point of discharge.
3. Documents historical ground water levels including season variations.
4. Identifies methods of protecting water quality including identification of potential contamination sources, permanent and construction Best Management Practices ("BMP's") and proposed mitigation measures.
5. Provides a map of all existing underground draining networks.
6. Provides a map of all Springs and artesian water sources.

7. Storm Water Management Plan ("SWMP").
8. Provide a written agreement or other document, acceptable to the City, indemnifying the City against liability from water rights claims.

We have reason to believe that the water right holder does not have a valid water right associated with the property at issue. See letters from Graham Gilbert to better understand why we believe the Vest's don't own a current water right to the Singleton Spring or either well located on our parcel. Even though we believe this is the case, we still went ahead and completed the Hydrologic Evaluation in good faith to show that we will not interfere with downstream water users.

Thanks,

Tyson Williamson | *President*
**The WILL Group**
tyson@thewillgroup.us
801-786-9809

Nate Heaps | *Development Associate*
**The WILL Group**
nate@thewillgroup.us
801-362-1496

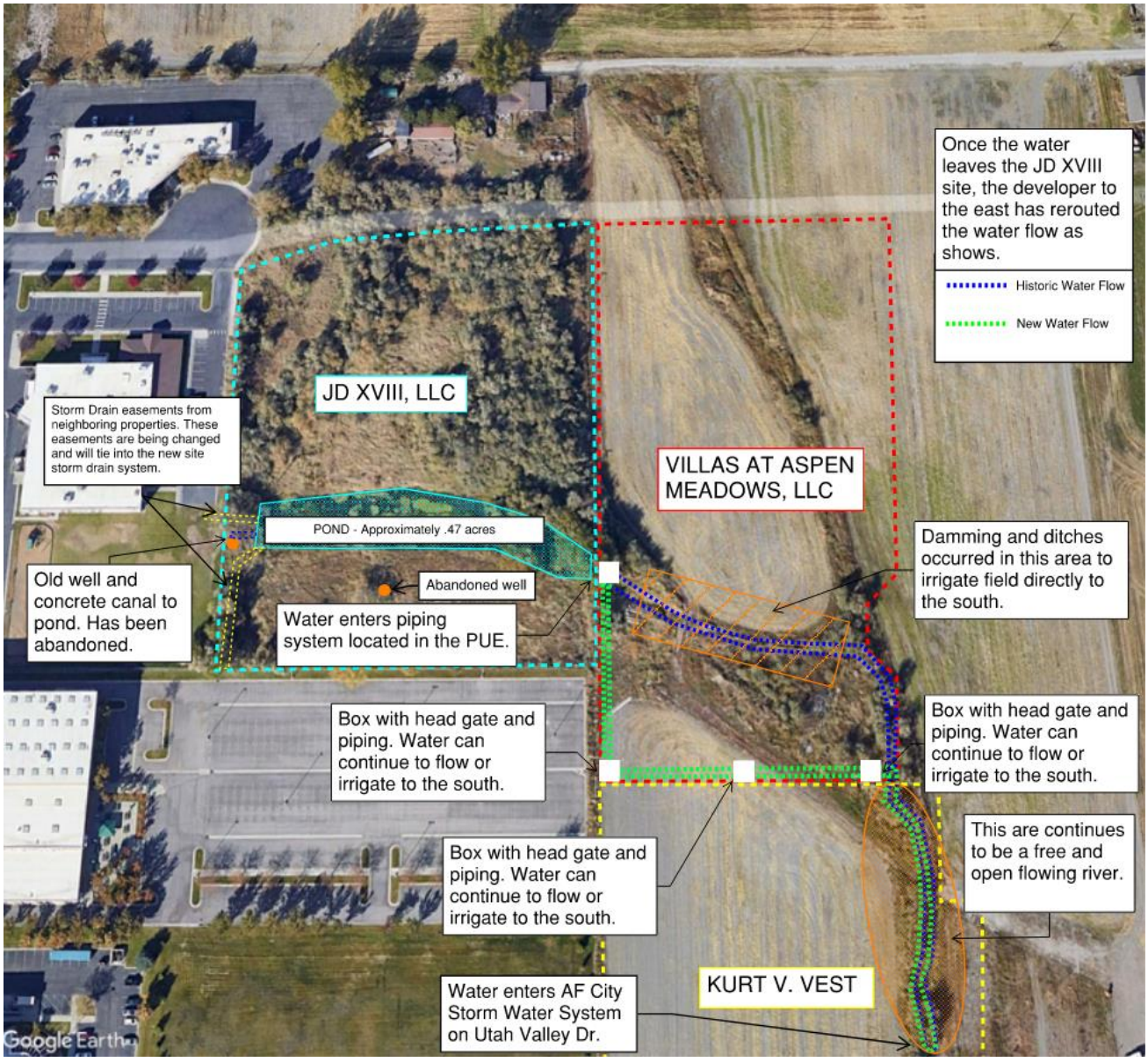
## Sensitive Lands Ordinance 4-6-2.1

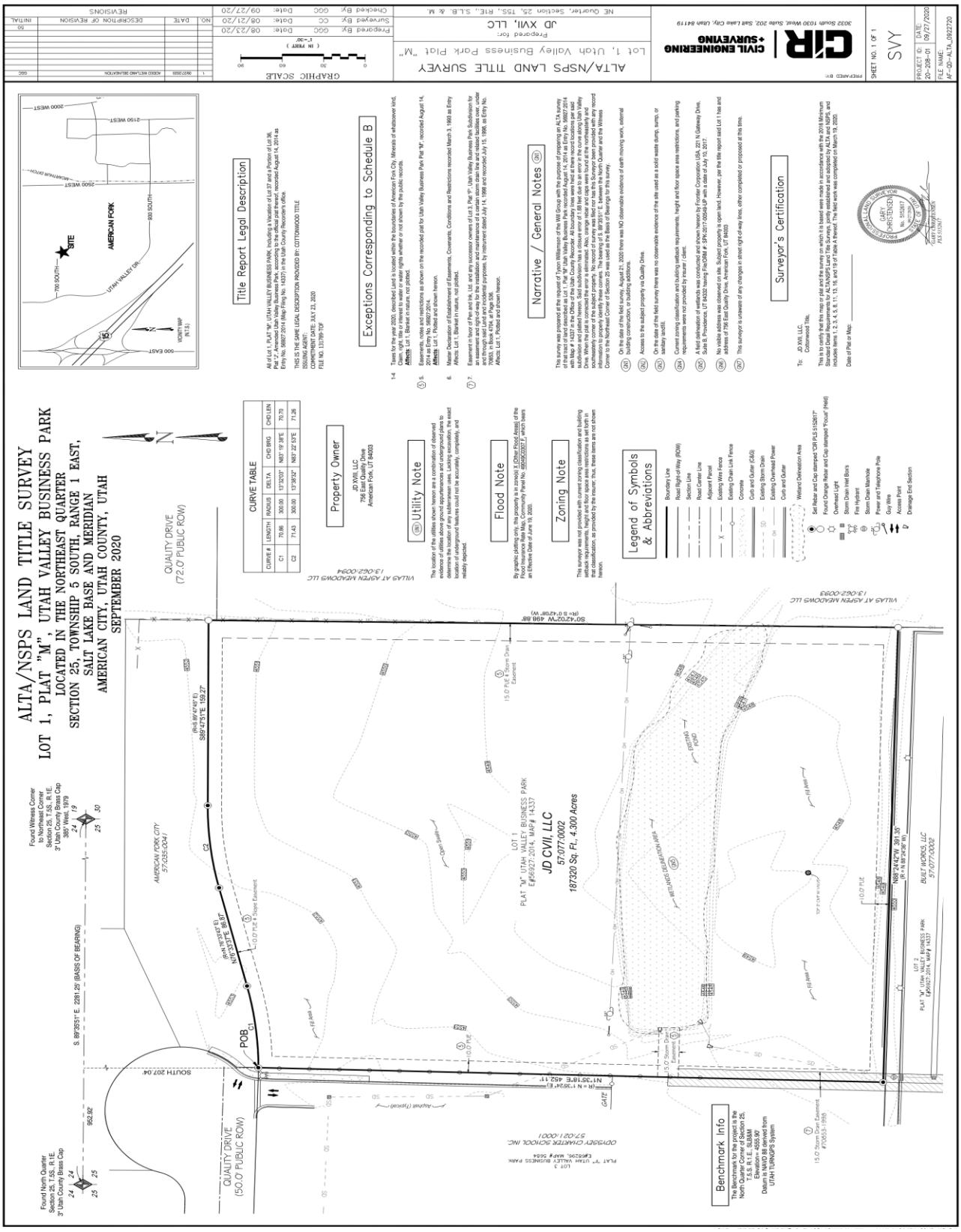
1. Provides a map of all water rights within 0.5 miles of the boundaries of the proposed development. The map shall identify owners, types, quantities, state identification reference.

**This has been included the attached report from Loughlin Water Associates.

## Sensitive Lands Ordinance 4-6-2.2

1. Provides a map of all surface flow patterns including canals, sloughs, drainages, and ditches. The map shall identify owners, type of water course (natural stream, slough, drainage ditch, etc.), historic flows and downstream users shall show the downstream water course and land ownership to the point of discharge.




ALTA/NSPS LAND TITLE SURVEY
LOT 1, PLAT "M", UTAH VALLEY BUSINESS PARK
LOCATED IN THE NORTHEAST QUARTER
SECTION 25, TOWNSHIP 5 SOUTH, RANGE 1 EAST,
SALT LAKE BASE AND MERIDIAN
AMERICAN CITY, UTAH COUNTY, UTAH
SEPTEMBER 2020
ALTA/NSPS LAND TITLE SURVEY
Lot 1, Utah Valley Business Park Plat "M"
JD XVII, LLC
NE Quarter, Section 25, T5S., R1E., S.L.B. & M.
GRAPHIC SCALE
( IN FEET )
1" = 30'
Prepared By: GCC Date: 08/23/20
Surveyed By: CC Date: 08/21/20
Checked By: GCC Date: 09/27/20
REVISIONS
NO. DATE DESCRIPTION OF REVISION INITIAL
1 09/27/2020 ADDED WETLAND DELINEATION GSC
PREPARED BY:
CIVIL ENGINEERING + SURVEYING
3302 South 1030 West, Suite 202, Salt Lake City, Utah 84119
SHEET NO. 1 OF 1
SVY
PROJECT ID: 20-208-01
DATE: 09/27/2020
FILE NAME: M:\20-208-01_ALTA_09272020
Title Report Legal Description
All of Lot 1, PLAT "M", UTAH VALLEY BUSINESS PARK, including a Vacation of Lot 37 and a Portion of Lot 36, Plat "Z", Amended Utah Valley Business Park, according to the official plat thereof, recorded August 14, 2014 as Entry No. 56827:2014 (Map Filing No. 14337) in the Utah County Recorder's office.
THIS IS THE SAME LEGAL DESCRIPTION PROVIDED BY: COTTONWOOD TITLE
ISSUING AGENT:
COMMITMENT DATE: JULY 23, 2020
FILE NO.: 131909-TOF
Exceptions Corresponding to Schedule B
1-4. Taxes for the year 2020, described Land is located within the boundaries of American Fork City, Minerals of whatsoever kind, Claim, right, title or interest to water or water rights whether or not shown by the public records.
Affects: Lot 1; Blanket in nature, not plotted.
5. Easements, notes and restrictions as shown on the recorded plat for Utah Valley Business Park Plat "M" - recorded August 14, 2014 as Entry No. 56827:2014.
Affects: Lot 1; Plotted and shown hereon.
6. Master Declaration of Establishment of Easements, Covenants, Conditions and Restrictions recorded March 3, 1999 as Entry No. 26181:1999.
Affects: Lot 1; Blanket in nature, not plotted.
7. Easement in favor of Pen and Ink, Ltd. and any successor owners of Lot 3, Plat "F", Utah Valley Business Park Subdivision for ingress, egress, utilities, drainage, and parking over and across the Northerly 24 feet of the Southerly 207.04 feet of Lot 1 and through said Land and incidental purposes, by instrument dated July 14, 1998 and recorded July 15, 1998, as Entry No. 79083, in Book 4704, at Page 536.
Affects: Lot 1; Plotted and shown hereon.
Narrative / General Notes (28)
This survey was prepared at the request of Tyson Williamson of his Will Group with the purpose of preparing an ALTA survey of that tract of land described as Lot 1, Plat "M" Utah Valley Business Park recorded August 14, 2014 as Entry No. 56827:2014 within said subdivision. The basis of bearings for this survey is the Utah County Monument line between the found monuments as noted on said subdivision and platted hereon. Said subdivision has a closure error of 1.68 feet due to an error in the curve along Utah Valley Drive. When the plat is corrected the error is eliminated. Also, orange rebar and caps were found at the northeasterly and southeasterly corners of said subdivision. Said rebar and caps were accepted as the boundary corners per record information to properly identify those corners. The bearing of S. 89°35'51" E. between the North Quarter and the Witness Corner to the Northeast Corner of Section 25 was used as the Basis of Bearings for this survey.
(28) On the date of this field survey, August 21, 2020 there was NO observable evidence of earth moving work, external building construction, or building additions.
(28) Access to the subject property via Quality Drive.
(28) On the date of the field survey there was no observable evidence of the site used as a solid waste dump, sump, or sanitary landfill.
(28) Current zoning classification and building setback requirements, height and floor space area restrictions, and parking requirements were not provided by insurer / client.
(28) A field delineation of wetlands was conducted and shown hereon by Frontier Corporation USA, 221 N Gateway Drive, Suite 8, Providence, UT 84332 having Fax/ORM # SPK-2017-00949-UP with a date of July 10, 2017.
(28) No visible address was observed on site. Subject property is open land. However, per the title report said Lot 1 has and address of 756 East Quality Drive, American Fork, UT 84003
(28) This surveyor is unaware of any changes in street right-of-way lines, either completed or proposed at this time.
Surveyor's Certification
To: JD XVII, LLC,
Cottonwood Title,
This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2016 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys, jointly established and adopted by ALTA and NSPS, and includes items 1, 2, 3, 4, 6, 7, (1), 8, 9, and 10 of Table A thereof. The field work was completed on March 10, 2020.
Date of Plat or Map: _____
GARY CHRISTENSEN
No. 163287
PROFESSIONAL LAND SURVEYOR
STATE OF UTAH
Gary Christensen
PLS 163287
Property Owner
JD XVII, LLC
756 East Quality Drive
American Fork, UT 84003
Utility Note
(28) The location of the utilities shown hereon are a combination of observed evidence of utilities above ground appurtenances and underground plans to determine the location of any subterranean uses. Lacking excavation, the exact location of underground features cannot not be accurately, completely, and reliably depicted.
Flood Note
By graphic plotting only, this property is in zone(s) X (Other Flood Areas) of the Flood Insurance Rate Map, Community Panel No. 49049C0587 F, which bears an Effective Date of June 19, 2020.
Zoning Note
This surveyor was not provided with current zoning classification and building setback requirements, height and floor space area restrictions as set forth in the classification, he provided by the insurer. Also, these items are not shown hereon.
Legend of Symbols & Abbreviations
Boundary Line
Road Right-of-Way (ROW)
Section Line
Road Center Line
Adjoining Property Line
Existing Chain Link Fence
Concrete
Curb and Gutter (C&G)
Existing Storm Drain
Existing Overhead Power
Curb and Gutter
Wetland Delineation Area
Set Rebar and Cap stamped "CIR PLS 5163817"
Found Orange Rebar and Cap stamped "Locust" (Held)
Overhead Light
Storm Drain Inlet Box
Fire Hydrant
Storm Drain Manhole
Power and Telephone Pole
Guy Wire
Access Point
Drainage End Section
CURVE TABLE
CURVE # LENGTH RADIUS DELTA CHD BRG CHD LEN
C1 70.86 300.00 13°32'03" N83° 19' 38"E 70.70
C2 71.43 300.00 13°38'32" N83° 22' 33"E 71.26
Benchmark Info
The Benchmark for the project is the North Quarter Corner of Section 25, T.5S., R.1E., SLB&M
Elevation = 4655.90'
Datum is NAD 83 derived from UTAH1170/NGS System
Found Witness Corner to Northeast Corner Section 25, T.5S., R.1E. 3" Utah County Brass Cap 385' West, 1979
Found North Quarter Section 25, T.5S., R.1E. 3" Utah County Brass Cap
S. 89°35'51" E. 2281.25' (BASIS OF BEARING)
962.92'
QUALITY DRIVE (50.0' PUBLIC ROW)
AMERICAN FORK CITY 57:035:0041
QUALITY DRIVE (72.0' PUBLIC ROW)
SOUTH 207.04'
POB
N1°35'18"E 452.11'
S89°47'51"E 159.23'
(R=S 89°47'45" E)
N76°43'57"E 86.97'
50.0' Pvt. E Sloper Easement
S0°42'02"W 498.88'
(R= S 0°42'08" W)
VILLAS AT ASPEN MEADOWS LLC
13:062:0094
VILLAS AT ASPEN MEADOWS LLC
13:062:0093
PLAT "M" UTAH VALLEY BUSINESS PARK
E#56827:2014, MAP # 14337
JD CVII, LLC
57:077:0002
187320 Sq. Ft., ± 4.300 Acres
LOT 1
WETLANDS DELINEATION AREA
EXISTING POND
Open Water
Marsh
15.0' Storm Drain Easement
15.0' Pvt. E Sloper Easement
10.0' PUE
15.0' Storm Drain Easement #13000-1995
PLAT "M" UTAH VALLEY BUSINESS PARK
E#56827:2014, MAP # 14337
LOT 2
BUILT WORKS, LLC
57:077:0002
N89°24'42"W 391.35'
(R= N 89°26'36" W)
PLAT "F" UTAH VALLEY BUSINESS PARK
E#62296, MAP # 5664
LOT 3
COYOTE CHARTER SCHOOL INC
57:021:0001
Asphalt (Typical)
GATE
Found Witness Corner to Northeast Corner Section 25, T.5S., R.1E. 3" Utah County Brass Cap 385' West, 1979
2100 WEST
2500 WEST
3000 WEST
AMERICAN FORK
700 SOUTH
900 SOUTH
500 EAST
UTAH VALLEY DR.
SITE
VICINITY MAP (N.T.S.)

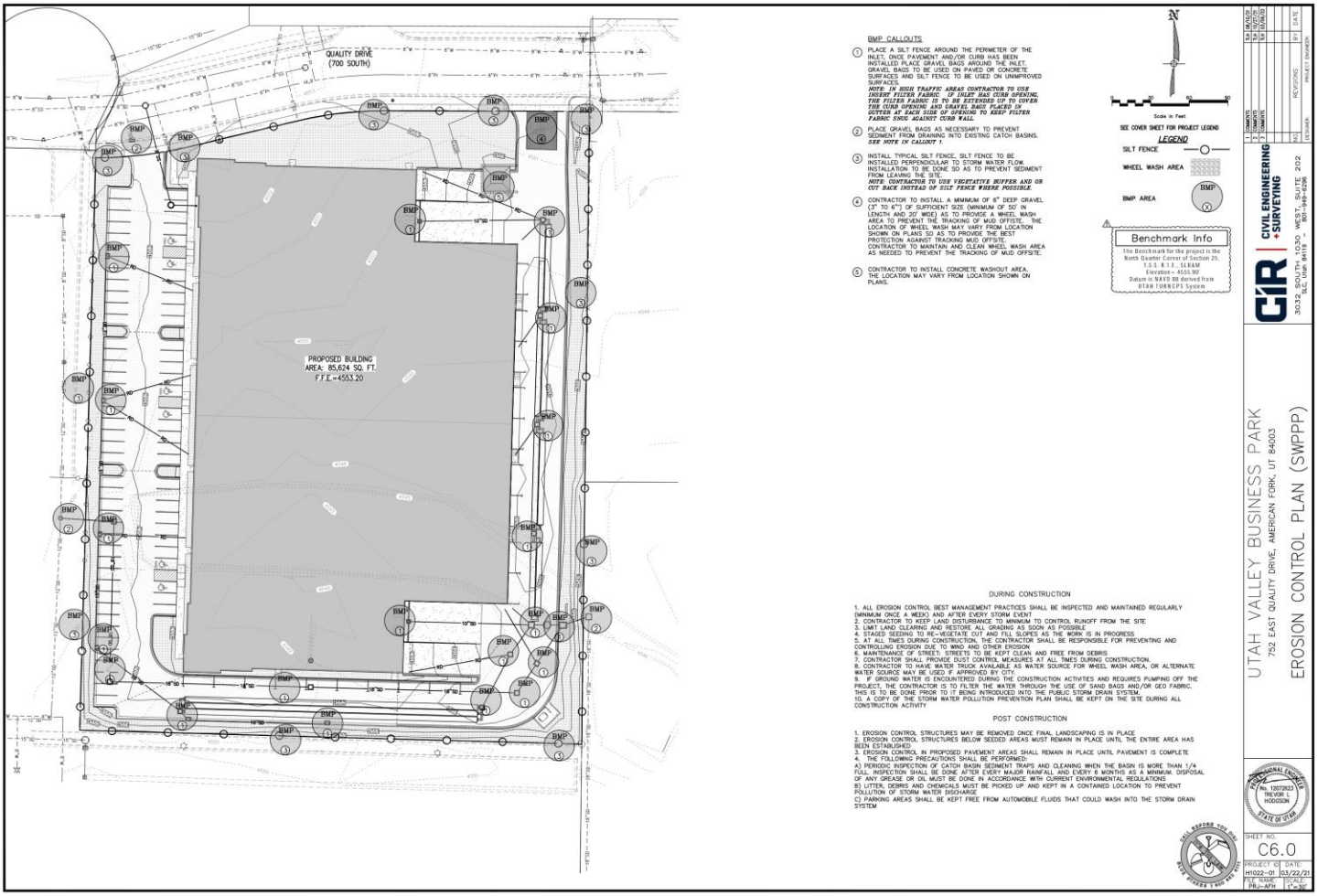
## Sensitive Lands Ordinance 4-6-2.3

1. Documents historical ground water levels including season variations.

**This has been included the attached report from Loughlin Water Associates.

## Sensitive Lands Ordinance 4-6-2.4

1. Identifies methods of protecting water quality including identification of potential contamination sources, permanent and construction Best Management Practices (“BMP’s”) and proposed mitigation measures.



## Sensitive Lands Ordinance 4-6-2.5

1. Provides a map of all existing underground draining networks.

There is no historical map of the underground drainage networks. The data we have comes from the map found in Section 4-6-2.2 of this report and the ALTA Survey.

## Sensitive Lands Ordinance 4-6-2.6

1. Provides a map of all Springs and artesian water sources.

**This has been included the attached report from Loughlin Water Associates.

## Sensitive Lands Ordinance 4-6-2.7

1. Storm Water Management Plan ("SWMP").

Attached to this report is a SWMP created by Lavanta Consulting.

## Sensitive Lands Ordinance 4-6-2.8

1. Provide a written agreement or other document, acceptable to the City, indemnifying the City against liability from water rights claims.

Attached is a signed indemnification agreement.

LOUGHLIN
WATER ASSOCIATES LLC

April 6, 2022

QDAF QOZB, LLC
***c/o Nate Heaps of the Will Group***
1450 West 1850 North
Lehi, UT 84043

Subject: **Hydrologic Evaluation**
Portions of Chapter 4-6 of the American Fork Sensitive Lands Ordinance
Utah County Parcel No. 57:077:001
752 East Quality Drive, American Fork, Utah
***for QDAF QOZB, LLC***

Dear Nate:

Loughlin Water Associates, LLC (Loughlin Water) is grateful for the opportunity to conduct a hydrologic evaluation of Parcel No. 57:077:001 (the Quality Drive Property) in in accordance with portions of Chapter 4-6 of the American Fork Sensitive Lands Ordinance. We conducted our evaluation in accordance with our proposal to QDAF QOZB, LLC (QDAF QOZB) dated March 7, 2022.

## BACKGROUND

The street address of the Quality Drive Property is 752 East Quality Drive, American Fork, Utah. QDAF QOZB has applied to American Fork City for permission to construct a warehouse on the Quality Drive Property and engaged (1) The Will Group to assist with their planned development, (2) Intermountain GeoEnvironmental Services, Inc. (IGES) to conduct geotechnical investigations, (3) Graham Gilbert of Parsons Behle Latimer to provide water right consulting and legal services, and (4) others to assist with their planned development.

Attachment A provides a copy of Chapter 4-6, *Hydrologic Evaluation* of American Fork Ordinance 07-10-47, the Sensitive Lands Ordinance. QDAF QOZB seeks assistance in complying with Items 1, 3, and 6 of Chapter 4-6-2. We understand that others will assist in complying with Items 2, 4, 5, 7, and 8.

## OBJECTIVE AND APPROACH

To help QDAF QOZB comply with Items 1, 3, and 6 of Chapter 4-6-2 of the Sensitive Lands Ordinance, we:

- Reviewed available information for the Quality Drive Property;

3100 W. Pinebrook Road, Ste. 1100 ▲ Park City, Utah 84098
Phone: 435.649.4005 ▲ Fax: 435.649.4085 ▲ Mobile: 435.659.1752 ▲ www.LoughlinWater.com

- Conducted a reconnaissance level site visit to the Quality Drive Property; and
- Prepared this letter report.

## FINDINGS

We modified he following air photo from the Utah Division of Water Rights (DWRi) website, https://maps.waterrights.utah.gov/EsriMap/map.asp?layersToAdd=wellsearch, to show the location of the Quality Drive Property (the property).




Our report addresses the following items in Chapter 4-6-2 of the Sensitive Land Ordinance:

- Item 4-6-2.1 – *Provides a map of all water rights within 0.5 miles of the boundaries of the proposed development. The map shall identify owners, types, quantities, state identification reference.*

- Item 4-6-2.3 – *Documents historical ground water levels including seasonal variations*

- Item 4-6-2.6 – *Provides a map of all springs and artesian water sources*

### ITEM 4-6-2.1 – WATER RIGHTS

Attachment B lists points of diversion (POD) and identifies owners, types, quantities, and DWRi water right numbers and provides a map of water rights that are within about 0.5 miles of the boundaries of the property. Note that there are more than 200 water rights and nearly 250 POD within about 0.5 miles of the property.

### ITEM 4-6-2.3 – GROUNDWATER LEVELS

Groundwater is found at the property in a shallow unconfined aquifer and in deeper confined (artesian) aquifers. Groundwater levels in the shallow unconfined aquifer are below the ground surface. Groundwater levels in the deeper confined aquifers have been historically above the ground surface but have declined with time.

Aquifers in the area consist of higher-permeability units (layers) of sand and gravel. Confining units consist of lower-permeability layers of clay and silt. Hunt and others (1953), Clark (1984), Clark and Appel (1985), Thiros (2006), and Cederberg and others (2009) described the groundwater resources and aquifers and confining units of northern Utah Valley, including the Quality Drive Property area.

### Shallow Unconfined Aquifer at Quality Drive Property

Geotechnical investigations conducted by IGES, (2021a, 2021b, and 2021c) show that during 2021, the depth to groundwater at the Quality Drive Property in the shallow unconfined aquifer ranged from about 3.5 to 8 feet.

IGES (2021c) excavated, logged, and measured the depth to groundwater in six test pits and drilled and logged a soil boring at the property. Five test pits were excavated to depths of 12 to 13 feet (TP-01 through TP-05) and one test pit (TP-06) was excavated to a depth of 6 feet. The soil boring (B-01) was drilled to a depth of 51.5 feet. The depth to water in five of the six test pits and the boring ranged from 3.5 to 8 feet. Groundwater was not encountered in TP-06 which was excavated to a depth of only 6 feet. The test pits were excavated in March 2021 and the boring was drilled in July 2021. Attachment C provides copies of the logs of the IGES test pits and boring.

The following is Figure A-2a from IGES (2021c) and shows the locations, excavated depths (T.D.), and depth to groundwater (G.W.) measured at the property.




**BASE MAP**
Google Earth imagery dated September 2020

**LEGEND**

APPROXIMATE BORING LOCATION

APPROXIMATE TEST PIT LOCATION

T.D. = 12' TOTAL DEPTH EXPLORED

G.W.= 9' DEPTH TO GROUNDWATER

N

0' 75' 150' 300'

SCALE: 1"=150'

IGES Project No. 03638-003

Geotechnical Investigation
Flex Warehouse
748 East Quality Drive
American Fork, Utah

GEOTECHNICAL MAP

**Figure A-2a**

## Deeper Confined Aquifer at Quality Drive Property

Table 1 lists and provides information, including water level measurements, and reported artesian flow rates for water supply wells within about 1200 feet of the property. Attachment D provides copies of the Well Driller Reports (well logs), water level measurement data, inspection reports, and abandonment logs for the wells listed in Table 1.

**TABLE 1**
**WATER SUPPLY WELLS WITHIN ABOUT 1200 FEET OF THE PROPERTY [a]**

| WIN or WRNUM | Drilled Depth (feet) | Depth (-) to or Height (+) of Static Water Level (feet)/ Date | Depth of Completed Interval(s) (feet) | Lithologic Description of Completed Interval | Reported Artesian Flow Rate (gpm)/ Date | P&A? / Date |
|---|---|---|---|---|---|---|
| 13415 | 149 | NR [b] | 143 to 149 | Gravel with clay | 75<br>6/08/1957 | No [c] |
| a4891[d]<br>(55-1555) | 376 | NR [b] | 300 to 304<br>337 to 372 | Sand, gravel<br>Sand, gravel | 400<br>9/16/1967 | No [c] |
| 429041 | 315 | NR [b] | 306 to 314 | Sand, gravel | 200<br>1/28/1961 | No |
| 13412 | 168 | NR [b]<br>-4[e]<br>3/02/2021 | 160 to 168 | Gravel | 250<br>10/14/1957 | Yes<br>3/02/2021 |
| 13416 | 220 | NR<br>-12[e]<br>1/25/2021 | 212 to 220 | Gravel, sand | 100<br>5/01/1950 | Yes<br>1/25/2021 |
| 438017 | 295 | +16.8<br>8/25/1937 | 295 to 207 | NR | 350<br>9/1931 | Yes<br>10/01/2014 |
| 13362 | 167 | NR [b] | 130 to 167 | Gravel | 200<br>9/13/1952 | NR |
| 429013 | 368 | NR [b] | 310 to 365 | Sand, gravel | 400<br>10/16/1961 | NR |
| 439155 | 308 | +24.6<br>8/25/1937<br>-20[e]<br>12/27/2015 | NR | NR | 80<br>1934 | Yes<br>12/27/2015 |
| 444032 | 320 | +30<br>9/30/1942<br>-10[e]<br>6/15/2020 | NR | NR | 110<br>9/30/1942 | Yes<br>6/15/2020 |

*WIN = Well Identification Number; WRNUM = Water Right Number; NR = Not Reported; gpm = gallons per minute; P&A = Plugged and Abandoned.*
*[a] Copies of well logs and other information were obtained from the DWRi website: https://www.waterrights.utah.gov/wellInfo/wellInfo.asp*
*[b] Water level not measured or not reported at the time well was drilled.*

[c] *Assumed that well has not been plugged and abandoned because we (1) did not find abandonment log on DWRi website and (2) observed wellhead on ground surface.*
[d] *Water Right Number, did not find WIN on DWRi website, well is also known as "the West Well".*
[e] *Water level at time well was plugged and abandoned.*

We modified the follow illustration from the DWRi website to show the locations of the wells listed in Table 1.




Note from Table 1 that and that:

- We found records of ten wells located within about 1200 feet of the property.
- Only two of the ten wells are located on the property, including WIN 13415 and WR a4891 (55-1555), also known as the West Well.
- Drilled depths ranged from 149 to 368 feet.

- Water levels were all above the ground surface and the wells had artesian flows that ranged from 75 to 400 gpm at the time they were drilled (1930s to 1967).

- We found abandonment logs for five of the ten wells.

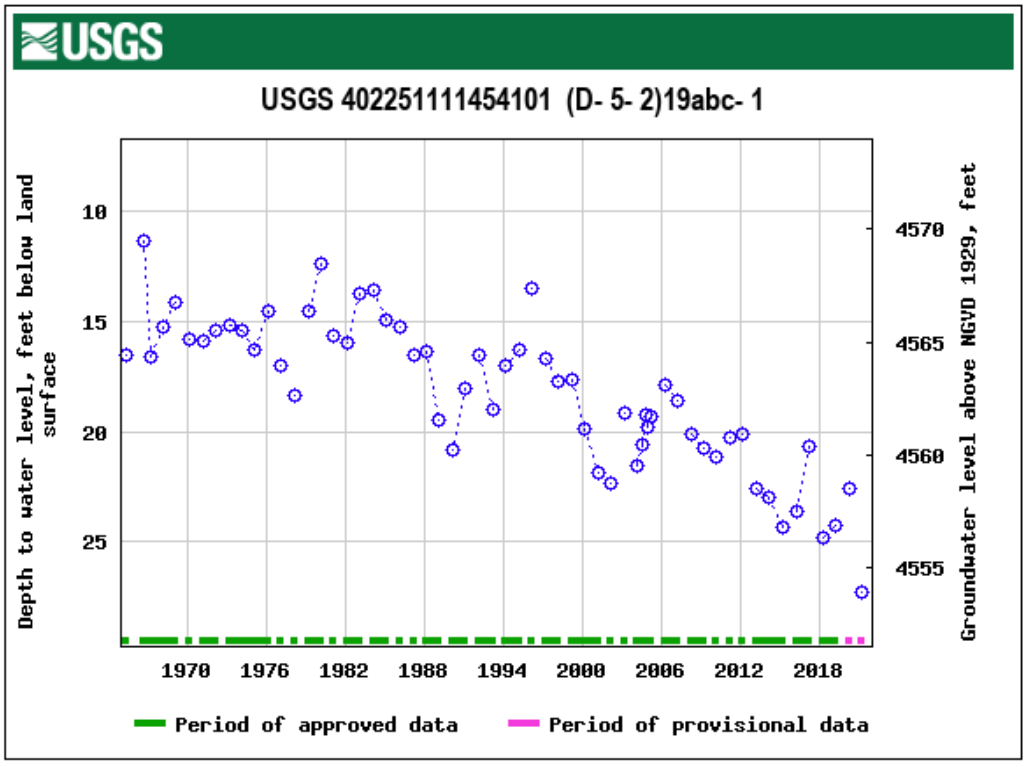
- Four of the five abandoned wells that were formerly flowing (groundwater levels above the ground surface) had water levels that were 4 to 20 feet below the ground surface at the time they were abandoned (2015 to 2021).

- One of the abandoned wells (WIN 438017) was still flowing when it was abandoned in 2014.

## Regional Decline in Groundwater Levels

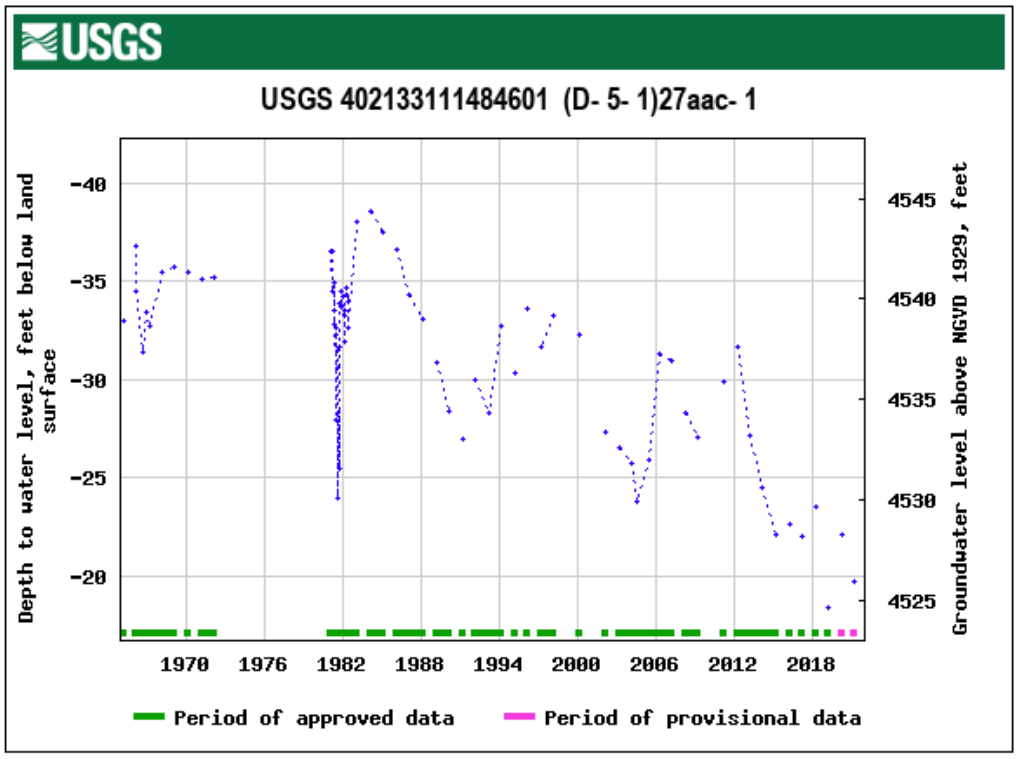
Cederberg and others (2009) report that groundwater levels declined in northern Utah Valley from the mid-1980s to the early 2000s due to reduced precipitation and increased pumping from wells. U.S. Geological Survey (USGS) observation wells in the area show the decline in the water levels in the shallow unconfined and deeper confined aquifer.

USGS 402251111454101 (D- 5- 2)19abc- 1 is completed in the shallow unconfined aquifer to a depth of 30 feet and is about 1.25 miles to the north of the property. The following graph is modified from the USGS website and shows that the water level has dropped from about 11 feet below the ground surface in March 1967 to about 27 feet below the ground surface in March 2021.



Water level and other data for this well can be found at: https://waterdata.usgs.gov/nwis/inventory?agency_code=USGS&site_no=402251111454101.

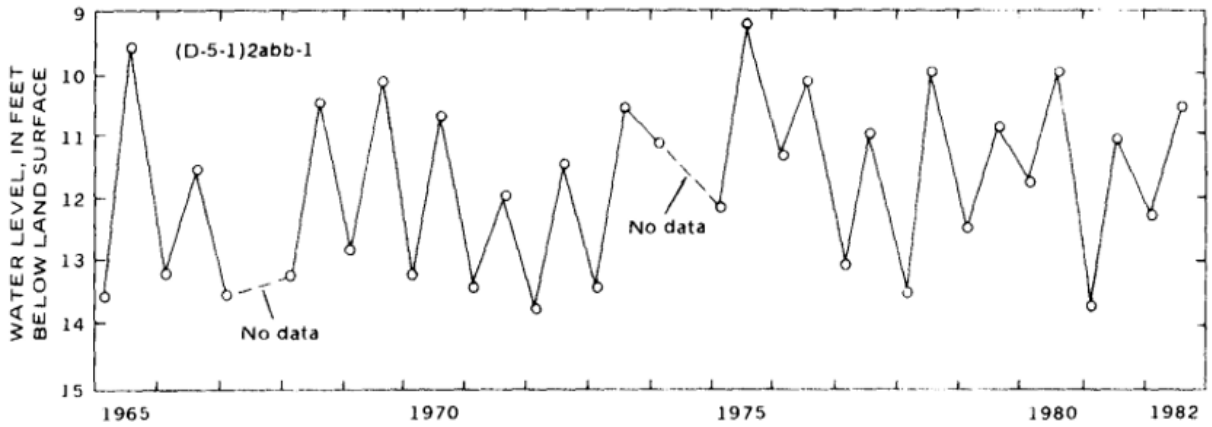
USGS 402133111484601 (D- 5- 1)27aac- 1 is completed in the deeper confined aquifer to a depth of 126 feet and is about 1.8 miles to the west of the property. The following graph is modified from the USGS website and shows that the water level has dropped from a high of about 39 feet above the ground surface in March 1984 to a low of about 18 feet above the ground surface in March 2019.




Water level and other data for this well can be found at: https://waterdata.usgs.gov/nwis/inventory?agency_code=USGS&site_no=402133111484601.

## Seasonal Variations in Groundwater Levels

The principal sources of recharge to the shallow unconfined aquifer consists of unconsumed irrigation water (irrigation return), seepage from streams and unlined canals, and direct infiltration of precipitation; see Hunt and others (1953) and Clark and Appel (1985). The following illustration is modified from Figure 30 of Clark and Appel (1985) and shows seasonal fluctuations in the depth to groundwater in the shallow unconfined aquifer in a well located about 4 miles to the north of the property. Note that for the period from 1965 to 1982, the groundwater level varied seasonally from 2 to 4 feet with the peaks generally occurring during late summer/early fall and the lows generally occurring during winter.




Clark and others (1985) report that the primary cause of variations in groundwater levels in the shallow unconfined aquifer is seepage from applied irrigation. We expect that a similar seasonal variation in the groundwater level in the shallow unconfined aquifer occurs at the property.

## ITEM 4-6-2.6 – MAP OF SPRINGS AND ARTESIAN WATER SOURCES

We modified the following illustration from the DWRi website to show the locations of the two artesian wells and spring on the property.



## Artesian Wells on Property

We did not identify any currently artesian wells (wells with water levels that are above the ground surface and flowing) on the property during our site visit on April 1, 2022. As indicated in Table 1, WIN 13415 had an artesian flow of 75 gpm in 1957 and the West Well had an artesian flow of 400 gpm in 1967. However, (1) nether well displayed evidence that they are currently artesian and (2) other nearby wells that were formerly artesian had groundwater levels that were below the ground surface when they were abandoned in recent years.

WIN 13415 is on the south side of the pond and we did not observe any water or dampness around the wellhead and valves during our site visit on April 1, 2022. The following photograph shows the wellhead of WIN 13415 on April 1, 2022:



The West Well, also known as WR a4891 (55-1555), is about 40 feet to the west of the west end of the pond. Valves, if present, are covered with debris. We did not observe any water or dampness around the wellhead during our site visit on April 1, 2022. The following photograph shows the wellhead of the West Well on April 1, 2022:




A concrete ditch on the north side of the wellhead feeds a buried 8-inch diameter galvanized pipe that passes under the road and daylights above the west end of the pond. See photo below:




It appears that the 400 gpm of artesian flow from the West Well was historically piped to the west end of the pond.

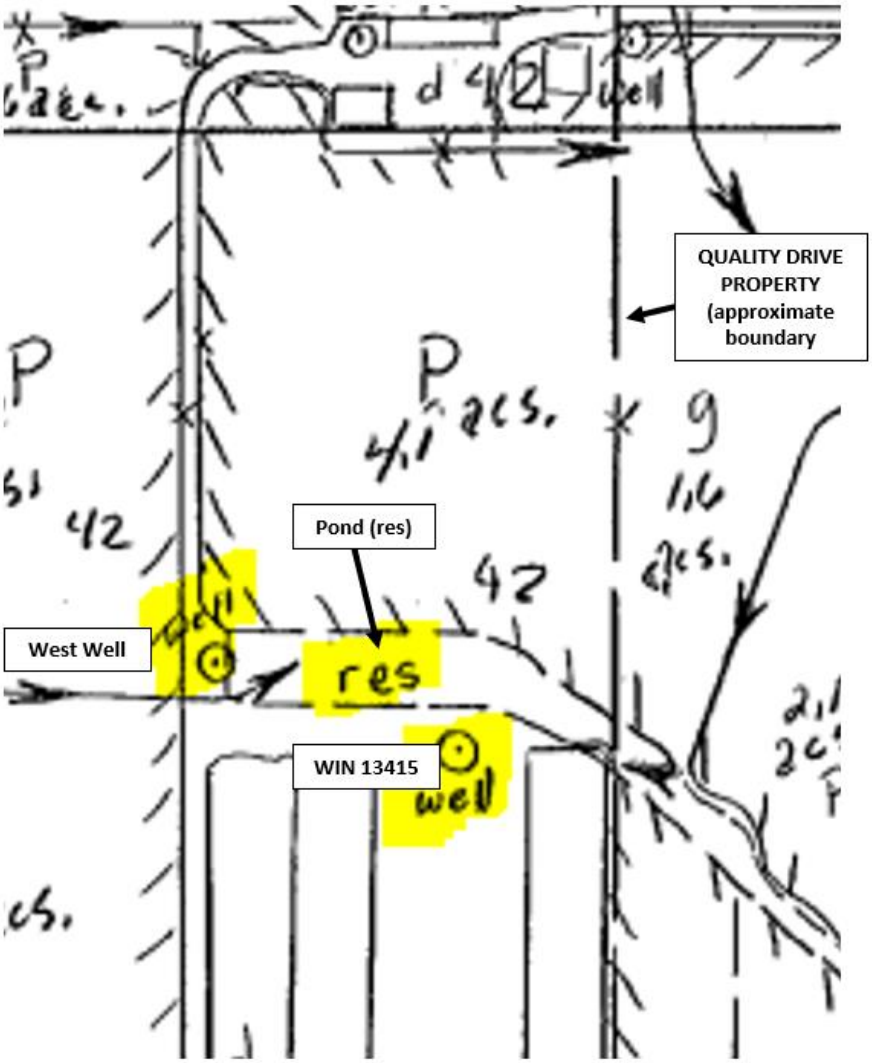
As noted previously, we did not find abandonment logs for WIN 13415 or the West Well on the DWRi website. To address the two wells, we recommend that a Utah-licensed Water Well Driller or Pump Installer be engaged to:

- Remove the debris from each wellhead.
- Open or remove the valves from each wellhead.
- Determine if each well has been plugged and abandoned.
- If a well has not been plugged and abandoned, then:
    - Measure the depth to water and total depth of the well and
    - Plug and abandon the well and file an Abandonment Report in accordance with DWRi rules and guidance.

## Spring on Property

There is reported to be a spring beneath pond located on the south end of the property. We found no evidence of a spring in the historical record. The first reference to a spring is Water Right Change Application a46279 (55-890) that was filed in 2020. The pond is manmade, was constructed between 1958 and 1965, and was fed by the nearby formerly artesian wells.

The following is a portion of Sheet 91 of the Hydrographic Survey of Utah Lake & Jordan River by the DWRi. Note that the Hydrographic Survey Map shows WIN 13415 and the West Well but it does not show Singleton Spring or any spring in or near the pond.




We did not find any reference to a spring on the property in our review of USGS publications of the area. Water Right Change Application a46279 (55-890) was filed on October 5, 2020 and is the first reference to a spring that we found.

Attachment E provides a copy of a letter from the U.S. Army Corps of Engineers (USACOE) to HADCO Construction Company dated August 18, 2021. The USACOE (2021) reviewed the property and the pond and found that "*The pond within the review area was constructed between 1958 and 1965. This pond is fed by an artesian well that was constructed prior to the pond.*" See Attachment E.

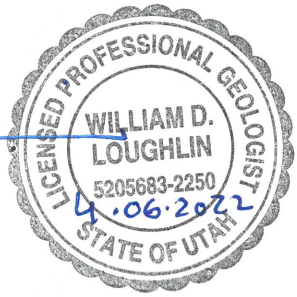
We did not observe any evidence of a spring in the pond during our site visit on April 1, 2022.The pond currently receives stormwater that is piped from surrounding properties. During our site visit on April 1, 2022, We observed about 10 to 20 gpm flowing out of the pond through a culvert on the east end.

In a letter dated October 25, 2021, IGES (2021d) provided recommendations "*...to fill in the pond, maintain the flow of water downstream and accommodate the existing well and/or natural spring located within the pond.*" Available information does not indicate that there is a spring associated with the pond. If a spring is encountered during construction, we concur that the IGES (2021d) recommendations should be followed.

If you have any questions or need more information, please do not hesitate to call me at (435) 649-4005 (office) or (435) 659-1752 (mobile).

Very truly yours,

**Loughlin Water Associates, LLC**




William D. Loughlin, P.G.
Manager, Principal Hydrogeologist

Table 1 – Water Supply Wells Within About 1200 Feet of Quality Drive Property

Attachment A – Chapter 4-6 of Sensitive Lands Ordinance of American Fork City,
Attachment B – List of Water Rights
Attachment C - IGES Test Pit and Boring Logs
Attachment D - Well Driller Reports
Attachment E - Letter from USACOE to HADCO, dated August 18, 2021

Cc: John David Hadfield – HADCO Construction
Tyson Williamson – The Will Group
Doug Farr - Buchalter
Graham Gilbert – Parsons Behle Latimer

## REFERENCES CITED

Cederberg, J.R., Gardner, P.M., and Thiros, S.A., 2009, *Hydrology of Northern Utah Valley, Utah County, 1975-2005*: U.S. Geological Survey Scientific Investigations Report 2008-5197, Version 2.0, February 2009, 128 p.

Clark, D.W., 1984, *The ground-water system and simulated effects of ground-water withdrawals in Northern Utah Valley, Utah*: U.S. Geological Survey Water-Resources Investigations Report 85-4007, 56 p.

Clark, D.W., and Appel, C.L., 1985, *Ground-water resources of Northern Utah Valley, Utah*: Utah Department of Natural Resources Technical Publication No. 80, 115 p.

Hunt, C.B., Varnes, H.D. and Thomas, H.E., 1953, *Lake Bonneville*: Geology of Northern Utah Valley, Utah: U.S. Geological Survey Professional Paper 257-A, 99 p.

Intermountain GeoEnvironmental Services, Inc. (IGES), 2021a, *Infiltration testing summary, Flex Warehouse, 748 East Quality Drive, American Fork, Utah, Project No. 03638-003:* Consultant report prepared by IGES for QDAF QOZB, LLC, dated August 9, 2021.

Intermountain GeoEnvironmental Services, Inc. (IGES), 2021b, *Response to review comments, Flex Warehouse, 748 East Quality Drive, American Fork, Utah, Project No. 03638-002:* Consultant report prepared by IGES for QDAF QOZB, LLC, dated August 13, 2021.

Intermountain GeoEnvironmental Services, Inc. (IGES), 2021c, *Geotechnical investigation (Rev. 1), Flex Warehouse, 748 East Quality Drive, American Fork, Utah, Project No. 03638-002:* Consultant report prepared by IGES for QDAF QOZB, LLC, dated August 16, 2021.

Intermountain GeoEnvironmental Services, Inc. (IGES), 2021d, *Recommendations for filling in existing pond, 752 East Quality Drive, American Fork, Utah, Project No. 03638-003:* Consultant report prepared by IGES for QDAF QOZB, LLC, dated October 25, 2021.

Thiros, S.A., 2006, *Evaluation of the ground-water flow model for Northern Utah Valley, Utah, updated to conditions through 2002*: U.S. Geological Survey Scientific Investigations Report 2006-5064.

U.S. Army Corps of Engineers (USACOE), 2021, HADCO Construction , Waters of the U.S. Survey: letter from USACOE to HADCO Construction Company, dated August 18, 2021.

## ATTACHMENT A

## CHAPTER 4-6
## SENSITIVE LANDS ORDINANCE OF AMERICAN FORK CITY

### 4-6 HYDROLOGIC EVALUATION

4-6-1 Every development shall be required to demonstrate no impact to regional water resources. Water resources include, but are not limited to:

1. Water rights
2. Historical surface flows in rivers, canals, sloughs and ditches and similar water courses
3. Subsurface water levels
4. Water Quality
5. Existing drainage networks

4-6-2 In order to demonstrate no impact, the developer shall submit a report that, at a minimum:

1. Provides a map of all water rights within 0.5 miles of the boundaries of the proposed development. The map shall identify owners, types, quantities, state identification reference.
2. Provides a map of all surface flow patterns including canals, sloughs, drainages and ditches. The map shall identify owners, type of water course (natural stream, slough, drainage ditch, etc.), historic flows and downstream users and shall show the downstream water course and land ownership to the point of discharge.
3. Documents historical ground water levels including seasonal variations.
4. Identifies methods of protecting water quality including identification of potential contamination sources, permanent and construction Best Management Practices ("BMP's") and proposed mitigation measures.
5. Provides a map of all existing underground drainage networks.
6. Provides a map of all springs and artesian water sources.
7. Storm Water Management Plan ("SWMP").
8. Provide a written agreement or other document, acceptable to the City, indemnifying the City against liability from water rights claims.

The developer's engineer shall demonstrate in the report that the development does not impact the areas water resources as identified above. In the case that impacts are identified, the developer's engineer shall develop mitigation measures that alleviate any adverse effects and receive approval from the City Engineer. In the case that mitigation measures cannot completely alleviate the adverse effects of the development to the water resources, the developer may pursue agreements with stakeholders of the potentially-affected water rights to allow development to proceed with accepted impacts. Any such agreement shall also include a written statement from the affected stakeholders indemnifiying the City from liability against water rights claims.

### 4-7 ADDITIONAL STUDIES MAY BE REQUIRED

The City Engineer may require the submission of additional detail or reports on other reports in excess of those specifically identified under Section 4, where deemed appropriate and necessary to provide a more accurate understanding of conditions

## ATTACHMENT B

## LIST OF WATER RIGHTS

| Water Right Number[b] | Type[c] | Location[d] (PLS) | Status[e] | Priority[f] | Uses[g] | CFS[h] | ACFT[h] | Owner Name |
|---|---|---|---|---|---|---|---|---|
| 53-1408 | SW | S850 W530 E4 24 5S 1E SL | P | 19540708 | I | 0.000 | 8.437 | Arlin Davis |
| 55-1041 | UG | N1440 E1324 W4 25 5S 1E SL | P | 19610215 | I | 0.100 | 57.100 | Adair W. And Margret G. Bromley |
| 55-1068 | UG | N479 W1833 S4 19 5S 2E SL | P | 19610515 | IS | 0.380 | 0.000 | Stan Norma Smith |
| 55-107 | UG | S1640 W1921 E4 24 5S 1E SL | P | 19350520 | I | 0.034 | 7.296 | American Fork City |
| 55-1088 | UG | S942 W2005 E4 24 5S 1E SL | U | 19610529 | I | 2.000 | 0.000 | Max Anita Graff |
| 55-11983 | UG | S262 E926 NW 25 5S 1E SL | P | 1878 | I | 0.000 | 130.000 | City Of American Fork |
| 55-12066 | UG | N1921 W341 E4 25 5S 1E SL | P | 19510615 | I | 0.000 | 12.920 | Lindon City |
| 55-12755 | SW | S650 W300 N4 25 5S 1E SL | P | 19340816 | I | 0.000 | 40.000 | American Fork City |
| 55-12763 | SW | N2144 W372 E4 25 5S 1E SL | P | 1892 | I | 0.000 | 0.500 | Wignall Asset Protection Trust |
| 55-12763 | SW | N1825 W368 E4 25 5S 1E SL | P | 1892 | I | 0.000 | 0.500 | Wignall Asset Protection Trust |
| 55-12763 | SW | N240 W349 E4 25 5S 1E SL | P | 1892 | I | 0.000 | 0.500 | Wignall Asset Protection Trust |
| 55-12763 | SW | N763 W342 E4 25 5S 1E SL | P | 1892 | I | 0.000 | 0.500 | Wignall Asset Protection Trust |
| 55-12827 | SW | N2144 W372 E4 25 5S 1E SL | P | 1892 | I | 0.000 | 1.000 | Cheri Clark Measom And Ronald J. Measom |
| 55-12827 | SW | N1825 W368 E4 25 5S 1E SL | P | 1892 | I | 0.000 | 1.000 | Cheri Clark Measom And Ronald J. Measom |
| 55-12827 | SW | N240 W349 E4 25 5S 1E SL | P | 1892 | I | 0.000 | 1.000 | Cheri Clark Measom And Ronald J. Measom |
| 55-12827 | SW | N763 W342 E4 25 5S 1E SL | P | 1892 | I | 0.000 | 1.000 | Cheri Clark Measom And Ronald J. Measom |
| 55-12835 | SW | N2144 W372 E4 25 5S 1E SL | P | 1892 | I | 0.000 | 6.000 | American Fork City Corporation |
| 55-12515 | UG | N994 E761 S4 24 5S 1E SL | P | 193107 | I | 0.000 | 0.000 | Trust For Floyd K. Vest |
| 55-12516 | UG | S1641 W1944 E4 24 5S 1E SL | P | 19480205 | IS | 0.000 | 1.778 | Trust For Floyd K. Vest |
| 55-12552 | UG | N700 E106 S4 24 5S 1E SL | P | 1899 | IS | 0.312 | 22.140 | American Fork City |

| Water Right Number[b] | Type[c] | Location[d] (PLS) | Status[e] | Priority[f] | Uses[g] | CFS[h] | ACFT[h] | Owner Name |
|---|---|---|---|---|---|---|---|---|
| 55-12612 | UG | N2574 E3156 SW 25 5S 1E SL | P | 193107 | I | 0.000 | 20.254 | American Fork City |
| 55-12633 | UG | N2570 W2140 SE 25 5S 1E SL | P | 19340411 | I | 0.000 | 10.400 | American Fork City |
| 55-1273 | SW | S40 W631 N4 25 5S 1E SL | P | 1898 | I | 1.000 | 0.000 | William W. Graff |
| 55-1273 | RD | N2636 E3108 SW 25 5S 1E SL | P | 1898 | I | 1.000 | 0.000 | William W. Graff |
| 55-13190 | UG | S1641 W1944 E4 24 5S 1E SL | P | 19480205 | IS | 0.000 | 18.842 | American Fork City |
| 55-13192 | UG | N39 W1300 SE 24 5S 1E SL | P | 19580515 | IS | 0.040 | 0.000 | American Fork City |
| 55-12835 | SW | N1825 W368 E4 25 5S 1E SL | P | 1892 | I | 0.000 | 6.000 | American Fork City Corporation |
| 55-12835 | SW | N240 W349 E4 25 5S 1E SL | P | 1892 | I | 0.000 | 6.000 | American Fork City Corporation |
| 55-12835 | SW | N763 W342 E4 25 5S 1E SL | P | 1892 | I | 0.000 | 6.000 | American Fork City Corporation |
| 55-12845 | SW | N2144 W372 E4 25 5S 1E SL | P | 1892 | I | 0.000 | 0.450 | Brandon Truscott |
| 55-12845 | SW | N1825 W368 E4 25 5S 1E SL | P | 1892 | I | 0.000 | 0.450 | Brandon Truscott |
| 55-12845 | SW | N240 W349 E4 25 5S 1E SL | P | 1892 | I | 0.000 | 0.450 | Brandon Truscott |
| 55-12845 | SW | N763 W342 E4 25 5S 1E SL | P | 1892 | I | 0.000 | 0.450 | Brandon Truscott |
| 55-12855 | SW | N2144 W372 E4 25 5S 1E SL | P | 1892 | I | 0.000 | 41.250 | Jay W Garlick |
| 55-12855 | SW | N1825 W368 E4 25 5S 1E SL | P | 1892 | I | 0.000 | 41.250 | Jay W Garlick |
| 55-12855 | SW | N240 W349 E4 25 5S 1E SL | P | 1892 | I | 0.000 | 41.250 | Jay W Garlick |
| 55-12855 | SW | N763 W342 E4 25 5S 1E SL | P | 1892 | I | 0.000 | 41.250 | Jay W Garlick |
| 55-12862 | SW | N2144 W372 E4 25 5S 1E SL | P | 1892 | I | 0.000 | 0.450 | Paul Korth And Lorelei Korth |
| 55-12862 | SW | N1825 W368 E4 25 5S 1E SL | P | 1892 | I | 0.000 | 0.450 | Paul Korth And Lorelei Korth |
| 55-12862 | SW | N240 W349 E4 25 5S 1E SL | P | 1892 | I | 0.000 | 0.450 | Paul Korth And Lorelei Korth |
| 55-12862 | SW | N763 W342 E4 25 5S 1E SL | P | 1892 | I | 0.000 | 0.450 | Paul Korth And Lorelei Korth |
| 55-12863 | SW | N2144 W372 E4 25 5S 1E SL | P | 1892 | I | 0.000 | 0.450 | Paul Korth And Lorelei Korth |
| 55-12863 | SW | N1825 W368 E4 25 5S 1E SL | P | 1892 | I | 0.000 | 0.450 | Paul Korth And Lorelei Korth |
| 55-12863 | SW | N240 W349 E4 25 5S 1E SL | P | 1892 | I | 0.000 | 0.450 | Paul Korth And Lorelei Korth |
| 55-12863 | SW | N763 W342 E4 25 5S 1E SL | P | 1892 | I | 0.000 | 0.450 | Paul Korth And Lorelei Korth |

| Water Right Number[b] | Type[c] | Location[d] (PLS) | Status[e] | Priority[f] | Uses[g] | CFS[h] | ACFT[h] | Owner Name |
|---|---|---|---|---|---|---|---|---|
| 55-12864 | SW | N2144 W372 E4 25 5S 1E SL | P | 1892 | I | 0.000 | 0.450 | Landes Associates Llc |
| 55-12864 | SW | N1825 W368 E4 25 5S 1E SL | P | 1892 | I | 0.000 | 0.450 | Landes Associates Llc |
| 55-12864 | SW | N240 W349 E4 25 5S 1E SL | P | 1892 | I | 0.000 | 0.450 | Landes Associates Llc |
| 55-12864 | SW | N763 W342 E4 25 5S 1E SL | P | 1892 | I | 0.000 | 0.450 | Landes Associates Llc |
| 55-12865 | SW | N2144 W372 E4 25 5S 1E SL | P | 1892 | I | 0.000 | 0.450 | Wharton Properties Llc |
| 55-12865 | SW | N1825 W368 E4 25 5S 1E SL | P | 1892 | I | 0.000 | 0.450 | Wharton Properties Llc |
| 55-12865 | SW | N240 W349 E4 25 5S 1E SL | P | 1892 | I | 0.000 | 0.450 | Wharton Properties Llc |
| 55-12865 | SW | N763 W342 E4 25 5S 1E SL | P | 1892 | I | 0.000 | 0.450 | Wharton Properties Llc |
| 55-12866 | SW | N2144 W372 E4 25 5S 1E SL | P | 1892 | I | 0.000 | 0.450 | Kirt S. Olson And Shauna L. Olson |
| 55-12866 | SW | N1825 W368 E4 25 5S 1E SL | P | 1892 | I | 0.000 | 0.450 | Kirt S. Olson And Shauna L. Olson |
| 55-12866 | SW | N240 W349 E4 25 5S 1E SL | P | 1892 | I | 0.000 | 0.450 | Kirt S. Olson And Shauna L. Olson |
| 55-12866 | SW | N763 W342 E4 25 5S 1E SL | P | 1892 | I | 0.000 | 0.450 | Kirt S. Olson And Shauna L. Olson |
| 55-12899 | SW | N1100 E540 W4 30 5S 2E SL | P | 1899 | I | 0.034 | 0.000 | Peter A Fife |
| 55-12899 | SW | N488 W1901 S4 19 5S 2E SL | P | 1899 | I | 0.034 | 0.000 | Peter A Fife |
| 55-12899 | SW | N1090 W1892 S4 19 5S 2E SL | P | 1899 | I | 0.034 | 0.000 | Peter A Fife |
| 55-12899 | SW | S720 W1650 N4 30 5S 2E SL | P | 1899 | I | 0.034 | 0.000 | Peter A Fife |
| 55-12908 | SW | N2144 W372 E4 25 5S 1E SL | P | 1892 | I | 0.000 | 1.506 | Hailstone Asset Protection Trust |
| 55-13201 | SW | N1100 E540 W4 30 5S 2E SL | P | 1899 | I | 0.001 | 0.000 | Lsc Real Estate Llc |
| 55-13201 | SW | N488 W1901 S4 19 5S 2E SL | P | 1899 | I | 0.001 | 0.000 | Lsc Real Estate Llc |
| 55-13201 | SW | N1090 W1892 S4 19 5S 2E SL | P | 1899 | I | 0.001 | 0.000 | Lsc Real Estate Llc |
| 55-13201 | SW | S720 W1650 N4 30 5S 2E SL | P | 1899 | I | 0.001 | 0.000 | Lsc Real Estate Llc |
| 55-13439 | SW | N506 W372 SE 24 5S 1E SL | P | 1871 | IS | 0.310 | 0.000 | Larry E. Vest |
| 55-13439 | SW | N103 W360 SE 24 5S 1E SL | P | 1871 | IS | 0.310 | 0.000 | Larry E. Vest |
| 55-13448 | SW | N1100 E540 W4 30 5S 2E SL | P | 1899 | I | 0.014 | 0.000 | Lsc Real Estate Llc |

| Water Right Number[b] | Type[c] | Location[d] (PLS) | Status[e] | Priority[f] | Uses[g] | CFS[h] | ACFT[h] | Owner Name |
|---|---|---|---|---|---|---|---|---|
| 55-13448 | SW | N488 W1901 S4 19 5S 2E SL | P | 1899 | I | 0.014 | 0.000 | Lsc Real Estate Llc |
| 55-13448 | SW | N1090 W1892 S4 19 5S 2E SL | P | 1899 | I | 0.014 | 0.000 | Lsc Real Estate Llc |
| 55-13448 | SW | S720 W1650 N4 30 5S 2E SL | P | 1899 | I | 0.014 | 0.000 | Lsc Real Estate Llc |
| 55-1405 | SW | S410 W222 E4 24 5S 1E SL | P | 1903 | IS | 1.000 | 0.000 | John R. Larabee |
| 55-1405 | RD | S1233 W173 E4 24 5S 1E SL | P | 1903 | IS | 1.000 | 0.000 | John R. Larabee |
| 55-1407 | SW | S1233 W222 E4 24 5S 1E SL | P | 1903 | IS | 1.000 | 0.000 | Don J. Mcfate |
| 55-1407 | RD | S1233 W173 E4 24 5S 1E SL | P | 1903 | IS | 1.000 | 0.000 | Don J. Mcfate |
| 55-1416 | SW | N2641 E447 S4 25 5S 1E SL | P | 1891 | IS | 1.500 | 45.680 | Price/Prowswood Llc |
| 55-1419 | SW | N2144 W372 E4 25 5S 1E SL | P | 1892 | IS | 0.000 | 29.950 | William Dennis Jex |
| 55-1419 | SW | N1825 W368 E4 25 5S 1E SL | P | 1892 | IS | 0.000 | 29.950 | Kelly L. Stewart Family Revocable Trust |
| 55-1419 | SW | N240 W349 E4 25 5S 1E SL | P | 1892 | IS | 0.000 | 29.950 | Charles W. Stewart Family Revocable Trust |
| 55-12908 | SW | N1825 W368 E4 25 5S 1E SL | P | 1892 | I | 0.000 | 1.506 | Hailstone Asset Protection Trust |
| 55-12908 | SW | N240 W349 E4 25 5S 1E SL | P | 1892 | I | 0.000 | 1.506 | Hailstone Asset Protection Trust |
| 55-12908 | SW | N763 W342 E4 25 5S 1E SL | P | 1892 | I | 0.000 | 1.506 | Hailstone Asset Protection Trust |
| 55-12909 | SW | N2144 W372 E4 25 5S 1E SL | P | 1892 | I | 0.000 | 1.494 | Hailstone Asset Protection Trust |
| 55-12909 | SW | N1825 W368 E4 25 5S 1E SL | P | 1892 | I | 0.000 | 1.494 | Hailstone Asset Protection Trust |
| 55-12909 | SW | N240 W349 E4 25 5S 1E SL | P | 1892 | I | 0.000 | 1.494 | Hailstone Asset Protection Trust |
| 55-12909 | SW | N763 W342 E4 25 5S 1E SL | P | 1892 | I | 0.000 | 1.494 | Hailstone Asset Protection Trust |
| 55-12926 | SW | N1100 E540 W4 30 5S 2E SL | P | 1899 | I | 0.034 | 0.000 | Daniel And Esther Brophy |
| 55-12926 | SW | N488 W1901 S4 19 5S 2E SL | P | 1899 | I | 0.034 | 0.000 | Daniel And Esther Brophy |
| 55-12926 | SW | N1090 W1892 S4 19 5S 2E SL | P | 1899 | I | 0.034 | 0.000 | Daniel And Esther Brophy |
| 55-12926 | SW | S720 W1650 N4 30 5S 2E SL | P | 1899 | I | 0.034 | 0.000 | Daniel And Esther Brophy |
| 55-12958 | SW | N1100 E540 W4 30 5S 2E SL | P | 1899 | I | 0.112 | 0.000 | R. Neal Westwood |

| Water Right Number[b] | Type[c] | Location[d] (PLS) | Status[e] | Priority[f] | Uses[g] | CFS[h] | ACFT[h] | Owner Name |
|---|---|---|---|---|---|---|---|---|
| 55-12958 | SW | N488 W1901 S4 19 5S 2E SL | P | 1899 | I | 0.112 | 0.000 | R. Neal Westwood |
| 55-12958 | SW | N1090 W1892 S4 19 5S 2E SL | P | 1899 | I | 0.112 | 0.000 | R. Neal Westwood |
| 55-12958 | SW | S720 W1650 N4 30 5S 2E SL | P | 1899 | I | 0.112 | 0.000 | R. Neal Westwood |
| 55-13003 | SW | N1100 E540 W4 30 5S 2E SL | P | 1899 | I | 0.017 | 0.000 | Ralph L. Westberg Revocable Trust |
| 55-13003 | SW | N488 W1901 S4 19 5S 2E SL | P | 1899 | I | 0.017 | 0.000 | Ralph L. Westberg Revocable Trust |
| 55-13003 | SW | N1090 W1892 S4 19 5S 2E SL | P | 1899 | I | 0.017 | 0.000 | Ralph L. Westberg Revocable Trust |
| 55-1419 | SW | N763 W342 E4 25 5S 1E SL | P | 1892 | IS | 0.000 | 29.950 | William Dennis Jex |
| 55-1423 | SW | N240 W349 E4 25 5S 1E SL | P | 1870 | IS | 0.000 | 90.900 | Scott Cooper And Julie A. Mclachlan |
| 55-1424 | SW | S2688 E486 N4 25 5S 1E SL | P | 1870 | IS | 1.500 | 0.000 | Highland City |
| 55-1425 | SW | S686 E25 N4 25 5S 1E SL | P | 1884 | I | 1.500 | 0.000 | E. Ray Gardner |
| 55-1426 | SW | N240 W349 E4 25 5S 1E SL | P | 1892 | I | 2.000 | 0.000 | Williamson Farms Llc |
| 55-1432 | SW | N2641 E447 S4 25 5S 1E SL | P | 1891 | IS | 2.500 | 0.000 | Roderick Enterprises |
| 55-1435 | SW | N1176 W355 E4 25 5S 1E SL | P | 1892 | IS | 2.000 | 0.000 | Arsena Robinson |
| 55-1438 | SW | S710 W1430 N4 25 5S 1E SL | P | 1870 | I | 3.500 | 43.780 | Jess W. - Richard G. - Michael F. Bromley |
| 55-1438 | SW | S1468 W1316 N4 25 5S 1E SL | P | 1870 | I | 3.500 | 43.780 | Carolyne B. Hill |
| 55-1445 | SW | N1100 E540 W4 30 5S 2E SL | P | 1899 | I | 3.306 | 0.000 | Arabian Park Llc |
| 55-1445 | SW | N488 W1901 S4 19 5S 2E SL | P | 1899 | I | 3.306 | 0.000 | Carl D. Smith |
| 55-1445 | SW | N1090 W1892 S4 19 5S 2E SL | P | 1899 | I | 3.306 | 0.000 | Jay W. Garlick |
| 55-1445 | SW | S720 W1650 N4 30 5S 2E SL | P | 1899 | I | 3.306 | 0.000 | Arabian Park Llc |
| 55-1446 | SW | N488 W1901 S4 19 5S 2E SL | P | 1899 | IS | 4.000 | 0.000 | Stan Norma Smith |
| 55-1446 | SW | N1090 W1892 S4 19 5S 2E SL | P | 1899 | IS | 4.000 | 0.000 | Kurt V. Vest Trust |
| 55-1446 | SW | S720 W1650 N4 30 5S 2E SL | P | 1899 | IS | 4.000 | 0.000 | Stan Norma Smith |
| 55-1448 | SW | N240 W349 E4 25 5S 1E SL | P | 1870 | IS | 0.000 | 194.040 | Scott And Julie Mclachlan |

| Water Right Number[b] | Type[c] | Location[d] (PLS) | Status[e] | Priority[f] | Uses[g] | CFS[h] | ACFT[h] | Owner Name |
|---|---|---|---|---|---|---|---|---|
| 55-1461 | SW | N2641 E447 S4 25 5S 1E SL | P | 1870 | IS | 1.500 | 0.000 | Jerry Eastman |
| 55-13003 | SW | S720 W1650 N4 30 5S 2E SL | P | 1899 | I | 0.017 | 0.000 | Ralph L. Westberg Revocable Trust |
| 55-13065 | SW | N1100 E540 W4 30 5S 2E SL | P | 1899 | I | 0.302 | 0.000 | Adam Swalberg |
| 55-13065 | SW | N488 W1901 S4 19 5S 2E SL | P | 1899 | I | 0.302 | 0.000 | Adam Swalberg |
| 55-13065 | SW | N1090 W1892 S4 19 5S 2E SL | P | 1899 | I | 0.302 | 0.000 | Adam Swalberg |
| 55-13065 | SW | S720 W1650 N4 30 5S 2E SL | P | 1899 | I | 0.302 | 0.000 | Adam Swalberg |
| 55-13078 | SW | N1100 E540 W4 30 5S 2E SL | P | 1899 | I | 0.033 | 0.000 | Scott Unice |
| 55-13078 | SW | N488 W1901 S4 19 5S 2E SL | P | 1899 | I | 0.033 | 0.000 | Scott Unice |
| 55-13078 | SW | N1090 W1892 S4 19 5S 2E SL | P | 1899 | I | 0.033 | 0.000 | Scott Unice |
| 55-13078 | SW | S720 W1650 N4 30 5S 2E SL | P | 1899 | I | 0.033 | 0.000 | Scott Unice |
| 55-13090 | SW | N1100 E540 W4 30 5S 2E SL | P | 1899 | I | 0.033 | 0.000 | Scott Unice |
| 55-13090 | SW | N488 W1901 S4 19 5S 2E SL | P | 1899 | I | 0.033 | 0.000 | Scott Unice |
| 55-13090 | SW | N1090 W1892 S4 19 5S 2E SL | P | 1899 | I | 0.033 | 0.000 | Scott Unice |
| 55-13090 | SW | S720 W1650 N4 30 5S 2E SL | P | 1899 | I | 0.033 | 0.000 | Scott Unice |
| 55-13094 | SW | N1100 E540 W4 30 5S 2E SL | P | 1899 | I | 0.038 | 0.000 | Landes Associates Llc |
| 55-13094 | SW | N488 W1901 S4 19 5S 2E SL | P | 1899 | I | 0.038 | 0.000 | Landes Associates Llc |
| 55-13094 | SW | N1090 W1892 S4 19 5S 2E SL | P | 1899 | I | 0.038 | 0.000 | Landes Associates Llc |
| 55-13094 | SW | S720 W1650 N4 30 5S 2E SL | P | 1899 | I | 0.038 | 0.000 | Landes Associates Llc |
| 55-13108 | SW | N1100 E540 W4 30 5S 2E SL | P | 1899 | I | 0.077 | 0.000 | Craig And Vickey Clark |
| 55-1469 | SW | N293 W636 S4 24 5S 1E SL | P | 1870 | IS | 0.476 | 0.000 | Dorothy Steele |
| 55-1469 | SW | S483 W300 N4 25 5S 1E SL | P | 1870 | IS | 0.476 | 0.000 | Dorothy Steele |
| 55-1469 | SW | N668 W48 S4 24 5S 1E SL | P | 1870 | IS | 0.476 | 0.000 | Dorothy Steele |

| Water Right Number[b] | Type[c] | Location[d] (PLS) | Status[e] | Priority[f] | Uses[g] | CFS[h] | ACFT[h] | Owner Name |
|---|---|---|---|---|---|---|---|---|
| 55-1541 | UG | N2570 W2140 SE 25 5S 1E SL | P | 19340411 | I | 0.743 | 52.080 | Castendyck Castendyck L.L.C. |
| 55-1542 | UG | N1144 E1329 W4 25 5S 1E SL | P | 19310720 | IS | 0.000 | 15.730 | Jess W. - Richard G. - Michael F. Bromley |
| 55-1544 | UG | N3304 E2930 SW 25 5S 1E SL | P | 19300803 | I | 0.223 | 0.000 | James T. Gardner |
| 55-1555 | UG | N38 E627 S4 24 5S 1E SL | P | 193109 | I | 0.000 | 72.700 | Keith H. Jacobs |
| 55-1559 | UG | S521 W325 NE 25 5S 1E SL | P | 193208 | IS | 0.000 | 1.520 | American Fork City |
| 55-159 | UG | N769 W327 E4 25 5S 1E SL | P | 19400925 | I | 1.000 | 0.000 | Timpanogos Special Service District |
| 55-1616 | UG | S701 E2688 NW 25 5S 1E SL | P | 19340928 | I | 0.178 | 0.000 | American Fork City |
| 55-1617 | UG | S718 E2693 NW 25 5S 1E SL | P | 193407 | I | 0.089 | 0.000 | American Fork City |
| 55-1621 | UG | N1440 E1324 W4 25 5S 1E SL | P | 19720831 | I | 0.045 | 0.000 | Utah Department Of Transportation |
| 55-1624 | UG | N1346 E3489 SW 24 5S 1E SL | P | 193402 | DIS | 0.178 | 0.000 | American Fork City |
| 55-305 | UG | N1349 W1800 SE 24 5S 1E SL | P | 19451101 | I | 0.345 | 0.000 | American Fork City |
| 55-307 | UG | S1551 W577 N4 25 5S 1E SL | P | 19451018 | DI | 0.015 | 0.000 | Martha A. Driggs |
| 55-3793 | UG | S62 W473 E4 25 5S 1E SL | P | 1900 | DIS | 0.089 | 0.000 | H. I. Sager |
| 55-3794 | UG | N383 W324 E4 25 5S 1E SL | P | 1900 | DIS | 0.000 | 10.910 | American Fork City |
| 55-382 | SW | S650 W300 N4 25 5S 1E SL | P | 19470405 | I | 0.000 | 26.344 | American Fork City |
| 55-13108 | SW | N488 W1901 S4 19 5S 2E SL | P | 1899 | I | 0.077 | 0.000 | Craig And Vickey Clark |
| 55-13108 | SW | N1090 W1892 S4 19 5S 2E SL | P | 1899 | I | 0.077 | 0.000 | Craig And Vickey Clark |
| 55-13108 | SW | S720 W1650 N4 30 5S 2E SL | P | 1899 | I | 0.077 | 0.000 | Craig And Vickey Clark |
| 55-13157 | UG | N39 W1300 SE 24 5S 1E SL | P | 19580515 | IS | 0.270 | 0.000 | American Fork City |
| 55-13158 | UG | S1641 W1944 E4 24 5S 1E SL | P | 19480205 | IS | 0.000 | 31.140 | American Fork City |
| 55-13159 | UG | S1640 W1921 E4 24 5S 1E SL | P | 19350520 | I | 0.188 | 40.064 | American Fork City |
| 55-1891 | UG | N660 E2849 SW 24 5S 1E SL | P | 19340701 | IS | 0.223 | 0.000 | Elda Corney |
| 55-2267 | UG | N1181 W901 SE 24 5S 1E SL | P | 1903 | IS | 0.125 | 0.000 | Willard B. Ennis |
| 55-2329 | UG | N52 E4000 SW 24 5S 1E SL | P | 1899 | I | 0.780 | 0.000 | J. W. Shelton |

| Water Right Number[b] | Type[c] | Location[d] (PLS) | Status[e] | Priority[f] | Uses[g] | CFS[h] | ACFT[h] | Owner Name |
|---|---|---|---|---|---|---|---|---|
| 55-2496 | UG | S376 E1686 NW 25 5S 1E SL | P | 19340801 | I | 0.200 | 0.000 | State Of Utah Board Of Water Resources |
| 55-2502 | SW | S650 W300 N4 25 5S 1E SL | P | 19340816 | I | 0.000 | 80.000 | Roderick Enterprises |
| 55-2514 | UG | S701 E2688 NW 25 5S 1E SL | P | 19340919 | I | 0.178 | 0.000 | E. R. Gardner |
| 55-2627 | UG | N2574 E3156 SW 25 5S 1E SL | P | 193107 | IS | 0.200 | 28.858 | American Fork City |
| 55-2658 | UG | N994 E761 S4 24 5S 1E SL | P | 193107 | I | 0.101 | 9.672 | Trust For Dorothy V. Taylor |
| 55-4564 | UG | N2562 E2147 SW 25 5S 1E SL | P | 19711029 | DS | 0.015 | 0.000 | American Fork City |
| 55-4678 | UG | S523 W957 E4 25 5S 1E SL | P | 19721027 | S | 0.015 | 0.000 | Highland City |
| 55-4735 | UG | N447 W1484 S4 19 5S 2E SL | P | 18990312 | DIS | 0.015 | 0.000 | Daniel S. Rosemary S. Thatcher |
| 55-4796 | UG | S1552 W286 E4 24 5S 1E SL | P | 19730706 | DIS | 0.015 | 0.000 | W. F. Graham |
| 55-3921 | UG | N495 W50 SE 24 5S 1E SL | P | 1900 | I | 0.100 | 0.000 | Larry E. Vest |
| 55-4012 | UG | N700 E106 S4 24 5S 1E SL | P | 1899 | IS | 1.688 | 119.372 | Elda Corney |
| 55-4024 | UG | N601 E1107 SW 24 5S 1E SL | P | 1920 | DIS | 0.060 | 0.000 | Boyde Glenn Willa Mae J. Williams |
| 55-411 | UG | S1641 W1944 E4 24 5S 1E SL | P | 19480205 | IS | 0.335 | 0.280 | Trust For Dorothy V. Taylor |
| 55-4138 | SW | N756 E526 S4 24 5S 1E SL | P | 1870 | IS | 1.034 | 0.000 | Trust For Dorothy V. Taylor |
| 55-4138 | SW | N531 E619 S4 24 5S 1E SL | P | 1870 | IS | 1.034 | 0.000 | Trust For Dorothy V. Taylor |
| 55-4138 | SW | N542 E1327 S4 24 5S 1E SL | P | 1870 | IS | 1.034 | 0.000 | Trust For Dorothy V. Taylor |
| 55-4139 | SW | N506 W372 SE 24 5S 1E SL | P | 1871 | IS | 0.920 | 0.000 | Elbert K. Vest |
| 55-4139 | SW | N103 W360 SE 24 5S 1E SL | P | 1871 | IS | 0.920 | 0.000 | Elbert K. Vest |
| 55-4184 | UG | S122 W1751 E4 25 5S 1E SL | P | 19680412 | DIS | 0.015 | 0.000 | Highland City |
| 55-685 | UG | N85 W10 E4 25 5S 1E SL | P | 19540421 | DIS | 0.015 | 0.000 | Pg Gateway Plaza Llc |
| 55-691 | SW | S850 W530 E4 24 5S 1E SL | P | 19540708 | IOS | 0.000 | 28.309 | American Fork City |
| 55-8087 | UG | N499 W246 SE 24 5S 1E SL | P | 19900302 | DIS | 0.015 | 0.450 | Larry E. Vest |
| 55-817 | UG | N324 E1909 W4 25 5S 1E SL | P | 19560731 | D | 0.015 | 0.000 | Earl Wagstaff |
| 55-849 | UG | S570 E1123 N4 25 5S 1E SL | P | 19570509 | S | 0.015 | 0.000 | American Fork City |
| 55-8760 | UG | S30 W1262 E4 24 5S 1E SL | P | 19540708 | IS | 0.000 | 10.740 | John L. Sandra S. Hansen |
| 55-8760 | SW | S850 W530 E4 24 5S 1E SL | P | 19540708 | IS | 0.000 | 10.740 | John L. Sandra S. Hansen |

| Water Right Number[b] | Type[c] | Location[d] (PLS) | Status[e] | Priority[f] | Uses[g] | CFS[h] | ACFT[h] | Owner Name |
|---|---|---|---|---|---|---|---|---|
| 55-8761 | UG | S30 W1262 E4 24 5S 1E SL | P | 19540708 | IOS | 0.000 | 9.437 | American Fork City |
| 55-4798 | UG | S485 W62 E4 24 5S 1E SL | P | 19730709 | DIS | 0.015 | 0.000 | American Fork City |
| 55-557 | UG | N1822 W340 E4 25 5S 1E SL | P | 19501005 | I | 0.000 | 0.000 | D. Lorraine Sager |
| 55-583 | UG | N1921 W341 E4 25 5S 1E SL | P | 19510615 | IS | 0.000 | 0.000 | D. Lorraine Sager |
| 55-714 | UG | N250 W40 SE 24 5S 1E SL | P | 19541006 | DIS | 0.015 | 0.000 | John R. Larrabee |
| 55-758 | UG | S498 W83 NE 25 5S 1E SL | P | 19550408 | D | 0.015 | 0.000 | Elbert Kay Vest |
| 55-769 | UG | S50 W1000 N4 25 5S 1E SL | P | 19550608 | D | 0.015 | 0.000 | George M. Moss |
| 55-7741 | UG | S47 W953 E4 25 5S 1E SL | P | 19351210 | I | 0.550 | 0.000 | Highland City |
| 55-7742 | UG | N1440 E1324 W4 25 5S 1E SL | P | 19610215 | I | 0.000 | 34.540 | Robert W. Kelshaw 1989 Trust |
| 55-7743 | SW | S710 W1430 N4 25 5S 1E SL | P | 1870 | IS | 0.000 | 47.220 | Robert W. Kelshaw 1989 Trust |
| 55-7744 | SW | S1488 W876 N4 25 5S 1E SL | P | 1870 | I | 0.000 | 22.140 | Robert W. Kelshaw 1989 Trust |
| 55-7744 | SW | S656 W876 N4 25 5S 1E SL | P | 1870 | I | 0.000 | 22.140 | Robert W. Kelshaw 1989 Trust |
| 55-7814 | UG | N2562 E2147 SW 25 5S 1E SL | P | 193107 | I | 0.200 | 10.040 | Turana D. Cameron |
| 55-890 | UG | N39 W1300 SE 24 5S 1E SL | P | 19580515 | IS | 0.090 | 0.000 | Kurt V. Vest Trust |
| 55-897 | UG | S1225 W240 E4 24 5S 1E SL | P | 19580708 | DO | 0.015 | 0.000 | E. Curtis And Charlotte J. Anderson |
| 55-9053 | SW | S850 W530 E4 24 5S 1E SL | P | 19540708 | IOS | 0.000 | 17.000 | Lehi City Corporation |
| 55-9061 | SW | S850 W530 E4 24 5S 1E SL | P | 19540708 | IOS | 0.000 | 9.427 | Autumn View Properties Limited Partnership |
| 55-9064 | UG | N1144 E1329 W4 25 5S 1E SL | P | 19310720 | DI | 0.000 | 47.130 | Alpine City |
| 55-9089 | UG | S30 W1262 E4 24 5S 1E SL | P | 19540708 | IM | 0.000 | 16.000 | Alpine City |
| 55-9089 | SW | S850 W530 E4 24 5S 1E SL | P | 19540708 | IM | 0.000 | 16.000 | Alpine City |
| 55-9090 | UG | S30 W1262 E4 24 5S 1E SL | P | 19540708 | IM | 0.000 | 16.000 | Alpine City |
| 55-9090 | SW | S850 W530 E4 24 5S 1E SL | P | 19540708 | IM | 0.000 | 16.000 | Alpine City |
| 55-9091 | UG | S30 W1262 E4 24 5S 1E SL | P | 19540708 | IM | 0.000 | 16.000 | Alpine City |
| 55-9091 | SW | S850 W530 E4 24 5S 1E SL | P | 19540708 | IM | 0.000 | 16.000 | Alpine City |
| 55-9092 | UG | S30 W1262 E4 24 5S 1E SL | P | 19540708 | IM | 0.000 | 16.000 | Alpine City |
| 55-9092 | SW | S850 W530 E4 24 5S 1E SL | P | 19540708 | IM | 0.000 | 16.000 | Alpine City |
| 55-9093 | UG | S30 W1262 E4 24 5S 1E SL | P | 19540708 | IM | 0.000 | 16.000 | Alpine City |

| Water Right Number[b] | Type[c] | Location[d] (PLS) | Status[e] | Priority[f] | Uses[g] | CFS[h] | ACFT[h] | Owner Name |
|---|---|---|---|---|---|---|---|---|
| 55-9093 | SW | S850 W530 E4 24 5S 1E SL | P | 19540708 | IM | 0.000 | 16.000 | Alpine City |
| 55-925 | UG | S948 W447 E4 24 5S 1E SL | P | 19590213 | DOS | 0.015 | 0.000 | American Fork City |
| 55-9333 | SW | N240 W349 E4 25 5S 1E SL | U | 1895 | I | 0.000 | 13.333 | Thyme Global Llc |
| 55-9451 | UG | N38 E627 S4 24 5S 1E SL | P | 193109 | I | 0.000 | 2.740 | Kl Partners American Fork I Llc |
| a26334 | SW | S1282 W17 N4 25 5S 1E SL | A | 20020212 | O | 7.270 | 0.000 | Central Utah Water Conservancy District |
| a31978 | SW | S1282 W17 N4 25 5S 1E SL | A | 20060925 | M | 2.090 | 0.000 | Central Utah Water Conservancy District |
| a42059 | SW | S1282 W17 N4 25 5S 1E SL | A | 20160927 | M | 3.245 | 739.835 | Central Utah Water Conservancy District |
| a42061 | SW | S1282 W17 N4 25 5S 1E SL | A | 20160927 | M | 3.513 | 0.000 | Central Utah Water Conservancy District |
| a44420 | SW | S1282 W17 N4 25 5S 1E SL | A | 20190205 | M | 1.990 | 0.000 | Central Utah Water Conservancy District |
| a46279 | Spring | S516 E1122 N4 25 5S 1E SL | A | 20201005 | I | 0.000 | 22.428 | Kurt V. Vest Trust |
| 55-8761 | SW | S850 W530 E4 24 5S 1E SL | P | 19540708 | IOS | 0.000 | 9.437 | American Fork City |
| 55-8792 | SW | N756 E526 S4 24 5S 1E SL | P | 1870 | I | 0.506 | 0.000 | Trust For Larry E. Vest |
| 55-8792 | SW | N531 E619 S4 24 5S 1E SL | P | 1870 | I | 0.506 | 0.000 | Trust For Larry E. Vest |
| 55-8792 | SW | N542 E1327 S4 24 5S 1E SL | P | 1870 | I | 0.506 | 0.000 | Trust For Larry E. Vest |
| 55-8796 | UG | N994 E761 S4 24 5S 1E SL | P | 193107 | I | 0.066 | 0.000 | Trust For Larry E. Vest |
| 55-8797 | UG | S1641 W1944 E4 24 5S 1E SL | P | 19480205 | I | 0.160 | 29.320 | American Fork City |
| 55-8798 | UG | S1640 W1921 E4 24 5S 1E SL | P | 19350520 | I | 0.178 | 18.040 | American Fork City |
| 55-9729 | SW | S650 W300 N4 25 5S 1E SL | P | 1870 | I | 0.000 | 44.856 | American Fork City |
| a22392 | UG | N2570 W2140 SE 25 5S 1E SL | A | 19980720 | M | 0.000 | 52.080 | Castendyck Castendyck L.L.C. |
| a22392 | UG | S523 W957 E4 25 5S 1E SL | A | 19980720 | M | 0.000 | 52.080 | Castendyck Castendyck L.L.C. |
| a22392a | UG | N2570 W2140 SE 25 5S 1E SL | A | 19980720 | M | 0.000 | 10.400 | American Fork City |
| a22392a | UG | S523 W957 E4 25 5S 1E SL | A | 19980720 | M | 0.000 | 10.400 | American Fork City |
| a27300 | UG | N1000 W700 SE 24 5S 1E SL | A | 20021205 | M | 0.000 | 30.882 | City Of Saratoga Springs |

| Water Right Number[b] | Type[c] | Location[d] (PLS) | Status[e] | Priority[f] | Uses[g] | CFS[h] | ACFT[h] | Owner Name |
|---|---|---|---|---|---|---|---|---|
| a33361 | SW | S1282 W17 N4 25 5S 1E SL | A | 20070815 | M | 0.045 | 9.400 | Central Utah Water Conservancy District |
| a46831 | UG | S415 W1675 N4 30 5S 2E SL | A | 20210302 | M | 0.000 | 47.840 | Pleasant Grove City |
| a48147 | UG | S521 W325 NE 25 5S 1E SL | U | 20211201 | DIS | 0.000 | 58.110 | Larry E. Vest |
| a48147 | UG | N315 W317 SE 24 5S 1E SL | U | 20211201 | DIS | 0.000 | 58.110 | Larry E. Vest |
| a48147 | UG | N503 W273 SE 24 5S 1E SL | U | 20211201 | DIS | 0.000 | 58.110 | Larry E. Vest |
| a46279 | UG | N39 W1300 SE 24 5S 1E SL | A | 20201005 | I | 0.000 | 22.428 | Kurt V. Vest Trust |
| a48147 | UG | N499 W246 SE 24 5S 1E SL | U | 20211201 | DIS | 0.000 | 58.110 | Larry E. Vest |
| a48176 | SW | N506 W372 SE 24 5S 1E SL | U | 20211201 | IS | 0.000 | 18.872 | Larry E. Vest |
| a48176 | SW | N343 W327 SE 24 5S 1E SL | U | 20211201 | IS | 0.000 | 18.872 | Larry E. Vest |
| a48176 | UG | S521 W325 NE 25 5S 1E SL | U | 20211201 | IS | 0.000 | 18.872 | Larry E. Vest |
| a48176 | UG | N315 W317 SE 24 5S 1E SL | U | 20211201 | IS | 0.000 | 18.872 | Larry E. Vest |

*[a] Water Right information obtained from Utah Division of Water Rights (DWRi) online Water Right Database* https://maps.waterrights.utah.gov/asp/wrplatGE.asp

*[b] Click on hyperlink to view water right.*

*[c] SW = Surface; UG = Underground; RD= Rediversion.*

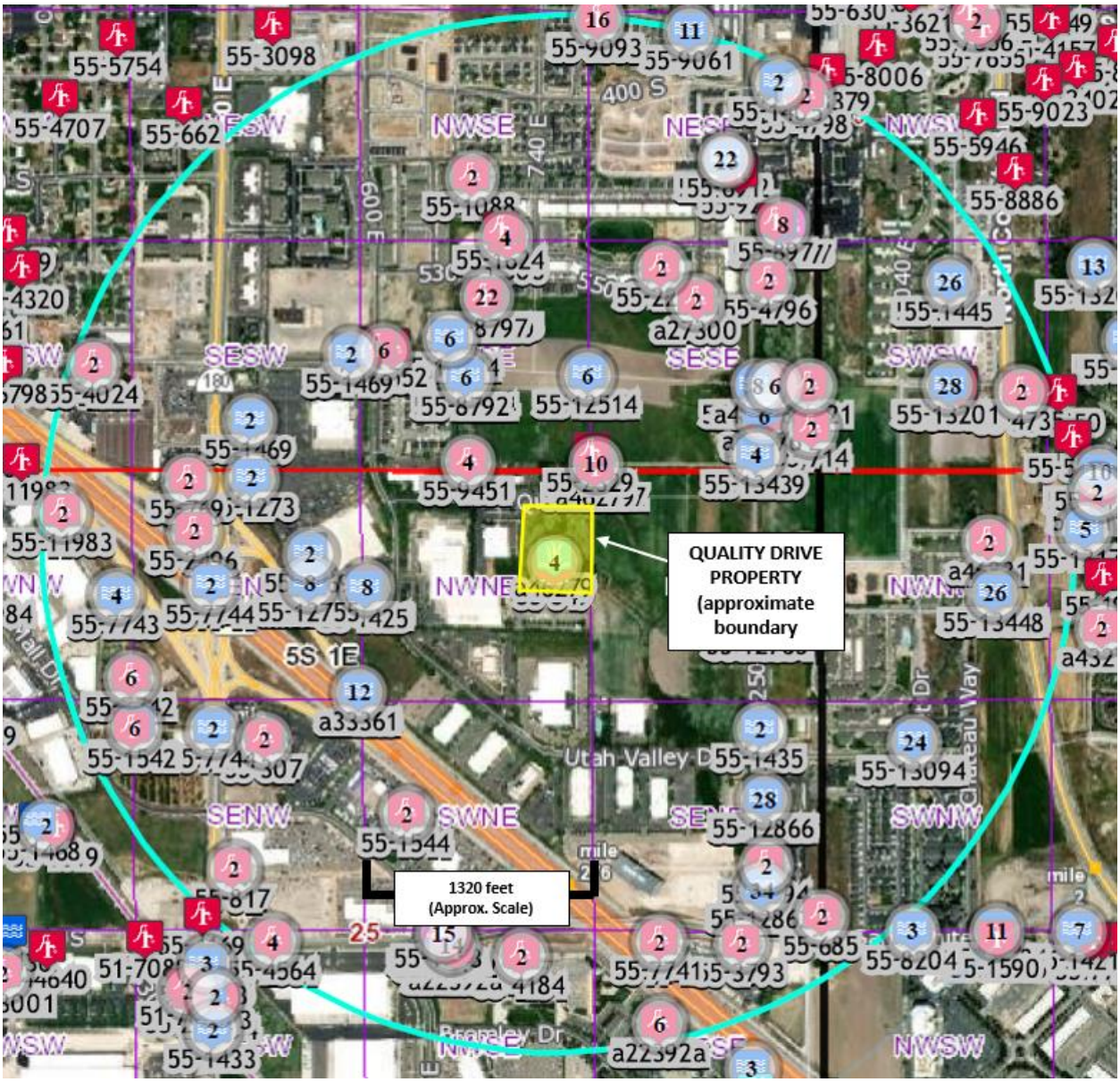
*[d] S = South; N = North; E = East; W = West; N4 = North Quarter Corner; W4 = West Quarter Corner; S4 = South Quarter Corner; E4 = East Quarter Corner; SL = Salt Lake Base & Meridian.*

*[e] Status is according to DWRi online Water Right Database on February 19, 2022; A = Approved; U = Unapproved; P = Certificated.*

*[f] Format for Priority is Year, Month, Day.*

*[g] I = Irrigation; S = Stock; D = Domestic; M = Municipal; O = Other, such as irrigation, stockwatering, municipal, recreation, power, fish & wildlife, etc.*

*[h] CFS = Cubic Feet per Second; ACFT = Acre Feet.*




Air photo map showing the locations of water rights within about one-half mile of the Quality Drive Property.

**ATTACHMENT C**

**IGES TEST PIT AND BORING LOGS**

DATE
STARTED: 7/19/21
COMPLETED: 7/19/21
BACKFILLED: 7/19/21

# Geotechnical Investigation
Flex Warehouse
748 East Quality Drive
American Fork Utah
IGES Project Number: 03638-001

IGES Rep: DJS
Rig Type: CME 75
Boring Type: HSA

BORING NO: **B-1**
Sheet 1 of 3

LOCATION
LATITUDE 40.36161 LONGITUDE -111.77855 ELEVATION (above m.s.l) 4,549 feet

| DEPTH ELEVATION | DEPTH FEET | SAMPLES | GRAPHICAL LOG | UNIFIED SOIL CLASSIFICATION | MATERIAL DESCRIPTION | N | Water Level | Dry Density(pcf) | Moisture Content (%) | Percent minus 200 | Liquid Limit | Plasticity Index |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | **Topsoil** - Lean CLAY with sand, medium stiff, moist, dark brown<br>moderate amounts of organic material | | | | | | | |
| | | | | SC | **Native** - Clayey SAND, medium dense, moist, moderate brown<br>fine grained sand | | | | | | | |
| 4545 | | | | | | | | | | | | |
| | 5 | | | | Clayey SAND with gravel, very loose, wet, moderate brown, fine grained sand | 0<br>2<br>1 | | | 19 | 28 | | |
| | | | | | with gravel, 1 to 2 inch typical diameter, sub-rounded | | | | | | | |
| | | | | | Clayey SAND, very loose, wet, moderate brown, fine grained sand | 1<br>2<br>1 | | | 24 | 35 | | |
| 4540 | | | | | | | | | | | | |
| | 10 | | | CL | Well Graded Sandy Lean CLAY, soft, saturated, moderate brown<br>fine grained sand | 1<br>1<br>2 | | | 29 | 63 | | |
| | | | | GP | Poorly Graded GRAVEL with sand, medium dense, wet, light to moderate brown<br>less than 1 inch typical diameter, sub-angular, up to 3/4 inch diameter<br>fine to medium grained sand | 6<br>8<br>10 | | | | | | |
| 4535 | | | | | | | | | | | | |
| | 15 | | | SP-SC | Poorly Graded SAND with clay and trace gravel, dense, wet, moderate brown<br>medium grained sand | 8<br>18<br>17 | | | 27 | 9 | | |
| | | | | SC | Clayey SAND, medium dense, wet, moderate brown<br>fine grained sand | 2<br>4<br>14 | | | 22 | 31 | | |
| 4530 | | | | | | | | | | | | |
| | 20 | | | SP-SC | Poorly Graded SAND with clay and gravel, dense, wet, moderate brown<br>less than 1 inch typical diameter, sub-angular, up to 3/4 inch diameter<br>medium grained sand | 12<br>23<br>18 | | | 14 | 9 | | |
| | | | | GP | Poorly Graded GRAVEL with sand, dense, wet, moderate brown<br>less than 1 inch typical diameter, sub-angular, up to 1 inch diameter<br>medium grained sand | 13<br>20<br>22 | | | | | | |

Moisture Content and Atterberg Limits
Plastic Limit — Moisture Content — Liquid Limit
10 20 30 40 50 60 70 80 90

N - OBSERVED BLOW COUNT PER 6 INCHES

Copyright (c) 2021, IGES, INC.

SAMPLE TYPE
- 2" O.D./1.38" I.D. Split Spoon Sampler
- 3.25" O.D./2.42" I.D. 'U' Sampler
- 3" O.D. Thin-Walled Shelby Sampler
- Grab Sample
- California Sampler
- Sample from Auger Cuttings

**BORING LOG**

NOTES:
Location and elevation are approximate

WATER LEVEL
▼ - MEASURED ▽ - ESTIMATED

**FIGURE**
**A - 4a**

LOG OF BORING (A) DAG V 3.01 03638-001 BORING LOGS.GPJ IGES.GDT 8/16/21

DATE
STARTED: 7/19/21
COMPLETED: 7/19/21
BACKFILLED: 7/19/21

# Geotechnical Investigation
Flex Warehouse
748 East Quality Drive
American Fork Utah
IGES Project Number: 03638-001

IGES Rep: DJS
Rig Type: CME 75
Boring Type: HSA

BORING NO: B-1
Sheet 2 of 3

LOCATION
LATITUDE 40.36161 LONGITUDE -111.77855 ELEVATION (above m.s.l) 4,549 feet

| ELEVATION | FEET | SAMPLES | GRAPHICAL LOG | UNIFIED SOIL CLASSIFICATION | MATERIAL DESCRIPTION | N | Water Level | Dry Density(pcf) | Moisture Content (%) | Percent minus 200 | Liquid Limit | Plasticity Index |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 25 | | | SP-SC | Poorly Graded SAND with clay and trace gravel, medium dense, wet, moderate brown<br>less than 1 inch typical diameter, sub-angular, up to 3/4 inch diameter<br>medium grained sand, 4 inch seam of Lean CLAY in bottom of sample | 18<br>11<br>4 | | | 13 | 8 | | |
| 4520 | | | | GP<br>GP | Poorly Graded GRAVEL with sand, dense, wet, moderate brown<br>less than 1 inch typical diameter, sub-angular, up to 1 inch diameter<br>fine to medium grained sand | 15<br>22<br>16 | | | | | | |
| | 30 | | | SP-SC | Poorly Graded SAND with clay and trace gravel, dense, wet, moderate brown<br>less than 1 inch typical diameter, sub-angular, up to 3/4 inch diameter<br>medium grained sand<br>Poorly Graded SAND with gravel, very dense, wet, moderate brown<br>less than 1 inch typical diameter, sub-angular, up to 3/4 inch diameter<br>medium grained sand<br>Poorly Graded SAND with clay and trace gravel, very dense, wet, moderate brown<br>less than 1 inch typical diameter, sub-angular, up to 3/4 inch diameter<br>medium to course grained sand | 15<br>22<br>20<br>18<br>25<br>30<br>20<br>33<br>49 | | | 11<br>13 | 10<br>7 | | |
| 4515 | | | | | Poorly Graded SAND with gravel, dense, wet, moderate brown<br>less than 1 inch typical diameter, sub-angular, up to 3/4 inch diameter<br>medium to course grained sand, 1 inch piece of gravel blocking mouth of sampler | 19<br>19<br>13 | | | | | | |
| | 35 | | | | | | | | | | | |
| 4510 | | | | | Poorly Graded SAND with clay and trace gravel grading to Silty Clayey SAND, medium dense, wet, moderate brown<br>medium to course grained sand | 6 | | | | | | |
| | 40 | | | CL-ML | Silty CLAY with trace fine sands, stiff, saturated, light brown to dark grey | 13<br>12 | | | 19<br>26 | 16<br>70 | 25 | 5 |
| 4505 | | | | | Silt Clay with fine sand, very stiff, saturated, dark grey | 5<br>9<br>11 | | | 28 | 75 | 26 | 5 |
| | 45 | | | SC | Clayey SAND with lean clay seams, medium dense, wet, dark grey<br>fine to medium grained sand | 8<br>11<br>11 | | | 25 | 38 | | |
| | | | | CL | Lean CLAY with fine sands, very stiff, saturated, dark grey | 5 | | | | | | |

Moisture Content and Atterberg Limits
Plastic Limit | Moisture Content | Liquid Limit
10 20 30 40 50 60 70 80 90

N - OBSERVED BLOW COUNT PER 6 INCHES

Copyright (c) 2021, IGES, INC.

SAMPLE TYPE
- 2" O.D./1.38" I.D. Split Spoon Sampler
- 3.25" O.D./2.42" I.D. 'U' Sampler
- 3" O.D. Thin-Walled Shelby Sampler
- Grab Sample
- California Sampler
- Sample from Auger Cuttings

**BORING LOG**

NOTES:
Location and elevation are approximate

WATER LEVEL
▼ - MEASURED ▽ - ESTIMATED

**FIGURE**
**A - 4b**

LOG OF BORING (A) DAG V 3.01 03638-001 BORING LOGS.GPJ IGES.GDT 8/16/21

DATE
STARTED: 7/19/21
COMPLETED: 7/19/21
BACKFILLED: 7/19/21

# Geotechnical Investigation
Flex Warehouse
748 East Quality Drive
American Fork Utah
IGES Project Number: 03638-001

IGES Rep: DJS
Rig Type: CME 75
Boring Type: HSA

BORING NO: B-1
Sheet 3 of 3

LOCATION
LATITUDE 40.36161 LONGITUDE -111.77855 ELEVATION (above m.s.l) 4,549 feet

| DEPTH ELEVATION | DEPTH FEET | SAMPLES | GRAPHICAL LOG | UNIFIED SOIL CLASSIFICATION | MATERIAL DESCRIPTION | N | Water Level | Dry Density(pcf) | Moisture Content (%) | Percent minus 200 | Liquid Limit | Plasticity Index | Moisture Content and Atterberg Limits (Plastic Limit / Moisture Content / Liquid Limit; 10 20 30 40 50 60 70 80 90) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4500 | 50 | X | | | Lean CLAY with trace fine sands, stiff, saturated, dark grey | 8<br>9<br>2<br>6<br>8 | | | 28<br>28 | 85<br>91 | 32<br>40 | 9<br>21 | |
| | | | | | Groundwater observed at 3.5 feet<br><br>Bottom of Boring @ 51.5 Feet | | | | | | | | |
| 4495 | 55 | | | | | | | | | | | | |
| 4490 | 60 | | | | | | | | | | | | |
| 4485 | 65 | | | | | | | | | | | | |
| 4480 | 70 | | | | | | | | | | | | |

N - OBSERVED BLOW COUNT PER 6 INCHES

Copyright (c) 2021, IGES, INC.

SAMPLE TYPE
- 2" O.D./1.38" I.D. Split Spoon Sampler
- 3.25" O.D./2.42" I.D. 'U' Sampler
- 3" O.D. Thin-Walled Shelby Sampler
- Grab Sample
- California Sampler
- Sample from Auger Cuttings

**BORING LOG**

NOTES:
Location and elevation are approximate

WATER LEVEL
▼ - MEASURED ▽ - ESTIMATED

**FIGURE**
**A - 4c**

LOG OF BORING (A) DAG V 3.01 03638-001 BORING LOGS.GPJ IGES.GDT 8/16/21

DATE
STARTED: 3/19/21
COMPLETED: 3/19/21
BACKFILLED: 3/19/21

# Geotechnical Investigation
Flex Warehouse
748 East Quality Drive
American Fork,, Utah
Project Number 03638-001

IGES Rep: BF
Rig Type: JCB-4CX

TEST PIT NO:
**TP- 1**
Sheet 1 of 1

LOCATION
LATITUDE 40.36140 LONGITUDE -111.77875 ELEVATION 4,549

| DEPTH FEET | ELEVATION | SAMPLES | WATER LEVEL | GRAPHICAL LOG | UNIFIED SOIL CLASSIFICATION | MATERIAL DESCRIPTION | Dry Density(pcf) | Moisture Content % | Percent minus 200 | Liquid Limit | Plasticity Index |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | | | | | CL | **Topsoil** - Lean CLAY with sand and occasional gravel, soft, moist, dark brown to black, very organic rich, abundant roots and organics | | | | | |
| 1 | | | | | OL | Organic Clay, soft, highly saturated, black, low dry unit weight, predomantly organic material | | | | | |
| 2 | | | | | | | | | | | |
| 3 | 4545 | | | | CL | Lean CLAY with sand and occasional gravel, soft, moist, dark brown to black, very organic rich, abundant roots and organics | | | | | |
| 4 | | | | | GC | **Alluvium (Qa)** - Clayey GRAVEL with sand, medium dense, moist, moderate brown gray, rounded, occasional root matter | | 0.3 | 18.5 | | |
| 5 | | | | | | | | | | | |
| 6 | | | | | SM | Silty SAND with gravel, medium dense, moist, moderate brown, gravel decreases in size and quantitiy with depth | 86.3 | 35.3 | | | |
| 7 | | | | | | | | | | | |
| 8 | 4540 | | | | | | | | | | |
| 9 | | | | | | | | | | | |
| 10 | | | | | GC | Clayey GRAVEL with sand, medium dense, moist, moderate brown gray, rounded | | | | | |
| 11 | | | | | | | | | | | |
| 12 | | | ▼ | | | | | | | | |
| 13 | 4535 | | | | | Groundwater observed at 12½ feet | | | | | |
| 14 | | | | | | | | | | | |

Moisture Content and Atterberg Limits
Plastic Limit | Moisture Content | Liquid Limit
10 20 30 40 50 60 70 80 90

SAMPLE TYPE
- GRAB SAMPLE
- 3" O.D. THIN-WALLED HAND SAMPLER

WATER LEVEL
▼ - MEASURED
▽ - ESTIMATED

NOTES:
Location is approximate with elevation based on the grading plan by CIR

**Figure A-5**

Copyright (c) 2021, IGES, INC.

LOG OF TEST PITS - 4 LINE HEADER W ELEV 03638-001.GPJ IGES.GDT 8/16/21

DATE
STARTED: 3/19/21
COMPLETED: 3/19/21
BACKFILLED: 3/19/21

# Geotechnical Investigation
Flex Warehouse
748 East Quality Drive
American Fork,, Utah
Project Number 03638-001

IGES Rep: BF
Rig Type: JCB-4CX

TEST PIT NO:
**TP- 2**
Sheet 1 of 1

LOCATION
LATITUDE 40.36132 LONGITUDE -111.77826 ELEVATION 4,548

| DEPTH FEET | ELEVATION | SAMPLES | WATER LEVEL | GRAPHICAL LOG | UNIFIED SOIL CLASSIFICATION | MATERIAL DESCRIPTION | Dry Density(pcf) | Moisture Content % | Percent minus 200 | Liquid Limit | Plasticity Index |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | | | | | CL | **Topsoil** - Lean CLAY with sand and occasional gravel, soft, moist, dark brown to black, very organic rich, abundant roots and organics | | | | | |
| 1 | | | | | OL | Organic Clay, soft, highly saturated, black, low dry unit weight, predomantly organic material | | | | | |
| 2 | 4545 | | | | | | 15.3 | 333.9 | | | |
| 3 | | | ▼ | | CL | Lean CLAY with sand and occasional gravel, soft, moist, dark brown to black, very organic rich, abundant roots and organics | | | | | |
| | | | | | GC | **Alluvium (Qa)** - Clayey GRAVEL with sand, medium dense, moist, moderate brown gray, rounded, occasional root matter | | | | | |
| 4 | | | | | | | 95.9 | 29.8 | 40.7 | | |
| 5 | | | | | | | | | | | |
| 6 | | | | | | | | | | | |
| 7 | 4540 | | | | SM | Silty SAND with gravel, medium dense, moist, moderate brown, gravel decreases in size and quantitiy with depth | | | | | |
| 8 | | | | | | | | | | | |
| 9 | | | | | | | | | | | |
| 10 | | | | | GC | Clayey GRAVEL with sand, medium dense, moist, moderate brown gray, rounded | | | | | |
| 11 | | | | | | | | | | | |
| 12 | 4535 | | | | | | | | | | |
| 13 | | | | | | Groundwater observed at 3½ feet | | | | | |
| 14 | | | | | | | | | | | |

Moisture Content and Atterberg Limits

Plastic Limit | Moisture Content | Liquid Limit

10 20 30 40 50 60 70 80 90

333.9

LOG OF TEST PITS - 4 LINE HEADER W ELEV 03638-001.GPJ IGES.GDT 8/16/21

Copyright (c) 2021, IGES, INC.

SAMPLE TYPE
- GRAB SAMPLE
- 3" O.D. THIN-WALLED HAND SAMPLER

WATER LEVEL
▼ - MEASURED
▽ - ESTIMATED

NOTES:
Location is approximate with elevation based on the grading plan by CIR

**Figure A-6**

DATE
STARTED: 3/19/21
COMPLETED: 3/19/21
BACKFILLED: 3/19/21

# Geotechnical Investigation
Flex Warehouse
748 East Quality Drive
American Fork,, Utah
Project Number 03638-001

IGES Rep: BF
Rig Type: JCB-4CX

TEST PIT NO:
**TP- 3**
Sheet 1 of 1

LOCATION
LATITUDE 40.36185 LONGITUDE -111.77885 ELEVATION 4,552

| DEPTH FEET | ELEVATION | SAMPLES | WATER LEVEL | GRAPHICAL LOG | UNIFIED SOIL CLASSIFICATION | MATERIAL DESCRIPTION | Dry Density(pcf) | Moisture Content % | Percent minus 200 | Liquid Limit | Plasticity Index |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | | | | | CL | **Topsoil** - Lean CLAY with sand and occasional gravel, soft, moist, dark brown to black, very organic rich, abundant roots and organics | | | | | |
| 1 | | | | | OL | Organic Clay, soft, highly saturated, black, low dry unit weight, predomantly organic material | | | | | |
| 2 | 4550 | | | | | | | | | | |
| | | | | | CL | Lean CLAY with sand and occasional gravel, soft, moist, dark brown to black, very organic rich, abundant roots and organics | 72.5 | 36.3 | | | |
| 3 | | | | | GC | **Alluvium (Qa)** - Clayey GRAVEL with sand, medium dense, moist, moderate brown gray, rounded, occasional root matter | | | | | |
| 4 | | | | | | | | | | | |
| 5 | | | | | | | | | | | |
| 6 | | | | | | | | | | | |
| 7 | 4545 | | | | SC | Clayey SAND with gravel, medium dense, moist, moderate brown, gravel decreases in size and quantitiy with depth | | | | | |
| 8 | | | | | | | | | | | |
| 9 | | | | | | | | | | | |
| 10 | | | | | | | | | | | |
| 11 | | | | | | | | | | | |
| 12 | 4540 | | | | | | | | | | |
| 13 | | | | | | Groundwater observed at 7½ feet | | | | | |
| 14 | | | | | | | | | | | |

Moisture Content and Atterberg Limits

Plastic Limit | Moisture Content | Liquid Limit

10 20 30 40 50 60 70 80 90

Copyright (c) 2021, IGES, INC.

SAMPLE TYPE
- GRAB SAMPLE
- 3" O.D. THIN-WALLED HAND SAMPLER

WATER LEVEL
- MEASURED
- ESTIMATED

NOTES:
Location is approximate with elevation based on the grading plan by CIR

**Figure A-7**

LOG OF TEST PITS - 4 LINE HEADER W ELEV 03638-001.GPJ IGES.GDT 8/16/21

DATE
STARTED: 3/19/21
COMPLETED: 3/19/21
BACKFILLED: 3/19/21

# Geotechnical Investigation
Flex Warehouse
748 East Quality Drive
American Fork,, Utah
Project Number 03638-001

IGES Rep: BF
Rig Type: JCB-4CX

TEST PIT NO: **TP-4**
Sheet 1 of 1

LOCATION
LATITUDE 40.36191 LONGITUDE -111.77829 ELEVATION 4,551

| DEPTH FEET | ELEVATION | SAMPLES | WATER LEVEL | GRAPHICAL LOG | UNIFIED SOIL CLASSIFICATION | MATERIAL DESCRIPTION | Dry Density(pcf) | Moisture Content % | Percent minus 200 | Liquid Limit | Plasticity Index |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 4550 | | | | CL | **Topsoil** - Lean CLAY with gravel, soft, moist, dark brown to black, very organic rich, abundant roots and organics | | | | | |
| 1 | | | | | OL | Organic Clay, soft, highly saturated, black, low dry unit weight, predomantly organic material | | | | | |
| 2 | | | | | GC | **Alluvium (Qa)** - Clayey GRAVEL, loose to medium dense, moist to wet, gray, rounded, occasional root matter | | | | | |
| 3 | | | | | | | | | | | |
| 4 | | | | | CL | Lean CLAY, stiff, moist to wet, gray to moderate brown, frequent roots and decaying organics | | | | | |
| 5 | | | | | | | 90.2 | 24.4 | | 45 | 23 |
| 6 | 4545 | | | | | | 85.9 | 35.4 | | | |
| 7 | | | | | | | | | | | |
| 8 | | | | | GC | Clayey GRAVEL with sand, loose to medium dense, wet, moderate brown to gray | | | | | |
| 9 | | | | | | | | | | | |
| 10 | | | | | | | | | | | |
| 11 | 4540 | | | | | | | | | | |
| 12 | | | | | SC | Clayey SAND, medium dense, wet, moderate grayish brown | | | | | |
| 13 | | | | | | Groundwater observed at 7½ feet | | | | | |
| 14 | | | | | | | | | | | |

Moisture Content and Atterberg Limits
Plastic Limit — Moisture Content — Liquid Limit
10 20 30 40 50 60 70 80 90

LOG OF TEST PITS - 4 LINE HEADER W ELEV 03638-001.GPJ IGES.GDT 8/16/21

Copyright (c) 2021, IGES, INC.

SAMPLE TYPE
- GRAB SAMPLE
- 3" O.D. THIN-WALLED HAND SAMPLER

WATER LEVEL
- MEASURED
- ESTIMATED

NOTES:
Location is approximate with elevation based on the grading plan by CIR

**Figure A-8**

DATE
STARTED: 3/19/21
COMPLETED: 3/19/21
BACKFILLED: 3/19/21

# Geotechnical Investigation
Flex Warehouse
748 East Quality Drive
American Fork,, Utah
Project Number 03638-001

IGES Rep: BF
Rig Type: JCB-4CX

TEST PIT NO:
**TP-5**
Sheet 1 of 1

LOCATION
LATITUDE 40.36100 LONGITUDE -111.77877 ELEVATION 4,549

| DEPTH FEET | ELEVATION | SAMPLES | WATER LEVEL | GRAPHICAL LOG | UNIFIED SOIL CLASSIFICATION | MATERIAL DESCRIPTION | Dry Density(pcf) | Moisture Content % | Percent minus 200 | Liquid Limit | Plasticity Index |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | | | | | GC | **Alluvium (Qa)** - Clayey GRAVEL with sand, medium dense to dense, moist, dark brown to moderate brown, 3-4 in. gravel typ., roots and organics are common | | | | | |
| 1 | | | | | | | | | | | |
| 2 | | | | | | | | | | | |
| 3 | 4545 | | | | | | 71.4 | 45.6 | | | |
| 4 | | | | | | | | | | | |
| 5 | | | | | | | | | | | |
| 6 | | | | | SC | Clayey SAND with gravel, loose to medium dense, moderate gray to moderate brown, moist to wet | 91.1 | 34.5 | | | |
| 7 | | | | | | | | | | | |
| 8 | | | ▼ | | | | | | | | |
| 9 | 4540 | | | | | | | | | | |
| 10 | | | | | | | | | | | |
| 11 | | | | | | | | | | | |
| 12 | | | | | | Groundwater observed at 8 feet below existing grade | | | | | |
| 13 | | | | | | | | | | | |
| 14 | 4535 | | | | | | | | | | |

Moisture Content and Atterberg Limits

Plastic Limit | Moisture Content | Liquid Limit

10 20 30 40 50 60 70 80 90

Copyright (c) 2021, IGES, INC.

SAMPLE TYPE
- GRAB SAMPLE
- 3" O.D. THIN-WALLED HAND SAMPLER

WATER LEVEL
▼ - MEASURED
▽ - ESTIMATED

NOTES:
Location is approximate with elevation based on the grading plan by CIR

**Figure A-9**

LOG OF TEST PITS - 4 LINE HEADER W ELEV 03638-001.GPJ IGES.GDT 8/16/21

DATE
STARTED: 3/19/21
COMPLETED: 3/19/21
BACKFILLED: 3/19/21

# Geotechnical Investigation
Flex Warehouse
748 East Quality Drive
American Fork,, Utah  Project Number 03638-001

IGES Rep: BF
Rig Type: JCB-4CX

TEST PIT NO: **TP-6**
Sheet 1 of 1

LOCATION
LATITUDE 40.36095  LONGITUDE -111.77818  ELEVATION 4,548

| DEPTH FEET | ELEVATION | SAMPLES | WATER LEVEL | GRAPHICAL LOG | UNIFIED SOIL CLASSIFICATION | MATERIAL DESCRIPTION |
|---|---|---|---|---|---|---|
| 0 | | | | | | **Undocumneted Fill** - Broken Concrete |
| 1 | | | | | CL | **Alluvium (Qa)** - Gravelly CLAY with sand, loose to medium dense, moist, moderate brown |
| 2 | | | | | | |
| 3 | 4545 | | | | | |
| 4 | | | | | SC | Clayey SAND with gravel, medium dense to dense, moist, moderate brown |
| 5 | | | | | | Well cemented, frequent iron oxidation<br>Very hard digging |
| 6 | | | | | | Groundwater not observed<br>Refusal at 6 feet |
| 7 | | | | | | |
| 8 | 4540 | | | | | |
| 9 | | | | | | |
| 10 | | | | | | |
| 11 | | | | | | |
| 12 | | | | | | |
| 13 | 4535 | | | | | |
| 14 | | | | | | |

| Dry Density(pcf) | Moisture Content % | Percent minus 200 | Liquid Limit | Plasticity Index |
|---|---|---|---|---|
| | | | | |

Moisture Content and Atterberg Limits

Plastic Limit — Moisture Content — Liquid Limit

10 20 30 40 50 60 70 80 90

Copyright (c) 2021, IGES, INC.

SAMPLE TYPE
- GRAB SAMPLE
- 3" O.D. THIN-WALLED HAND SAMPLER

WATER LEVEL
- MEASURED
- ESTIMATED

NOTES:
Location is approximate with elevation based on the grading plan by CIR

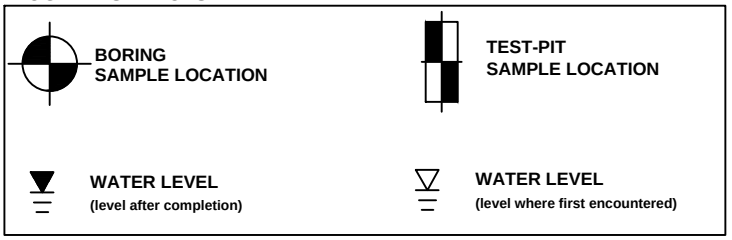
**Figure A-10**

LOG OF TEST PITS - 4 LINE HEADER W ELEV 03638-001.GPJ IGES.GDT 8/16/21

## UNIFIED SOIL CLASSIFICATION SYSTEM

| MAJOR DIVISIONS | | | USCS SYMBOL | TYPICAL DESCRIPTIONS |
|---|---|---|---|---|
| COARSE GRAINED SOILS (More than half of material is larger than the #200 sieve) | GRAVELS (More than half coarse fraction is larger than the #4 sieve) | CLEAN GRAVELS WITH LITTLE OR NO FINES | GW | WELL-GRADED GRAVELS, GRAVEL-SAND MIXTURES WITH LITTLE OR NO FINES |
| | | | GP | POORLY-GRADED GRAVELS, GRAVEL-SAND MIXTURES WITH LITTLE OR NO FINES |
| | | GRAVELS WITH OVER 12% FINES | GM | SILTY GRAVELS, GRAVEL-SILT-SAND MIXTURES |
| | | | GC | CLAYEY GRAVELS, GRAVEL-SAND-CLAY MIXTURES |
| | SANDS (More than half coarse fraction is smaller than the #4 sieve) | CLEAN SANDS WITH LITTLE OR NO FINES | SW | WELL-GRADED SANDS, SAND-GRAVEL MIXTURES WITH LITTLE OR NO FINES |
| | | | SP | POORLY-GRADED SANDS, SAND-GRAVEL MIXTURES WITH LITTLE OR NO FINES |
| | | SANDS WITH OVER 12% FINES | SM | SILTY SANDS, SAND-GRAVEL-SILT MIXTURES |
| | | | SC | CLAYEY SANDS SAND-GRAVEL-CLAY MIXTURES |
| FINE GRAINED SOILS (More than half of material is smaller than the #200 sieve) | SILTS AND CLAYS (Liquid limit less than 50) | | ML | INORGANIC SILTS & VERY FINE SANDS, SILTY OR CLAYEY FINE SANDS, CLAYEY SILTS WITH SLIGHT PLASTICITY |
| | | | CL | INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS |
| | | | OL | ORGANIC SILTS & ORGANIC SILTY CLAYS OF LOW PLASTICITY |
| | SILTS AND CLAYS (Liquid limit greater than 50) | | MH | INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SAND OR SILT |
| | | | CH | INORGANIC CLAYS OF HIGH PLASTICITY, FAT CLAYS |
| | | | OH | ORGANIC CLAYS & ORGANIC SILTS OF MEDIUM-TO-HIGH PLASTICITY |
| HIGHLY ORGANIC SOILS | | | PT | PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS |

### LOG KEY SYMBOLS




### CEMENTATION

| DESCRIPTION | DESCRIPTION |
|---|---|
| WEAKELY | CRUMBLES OR BREAKS WITH HANDLING OR SLIGHT FINGER PRESSURE |
| MODERATELY | CRUMBLES OR BREAKS WITH CONSIDERABLE FINGER PRESSURE |
| STRONGLY | WILL NOT CRUMBLE OR BREAK WITH FINGER PRESSURE |

### OTHER TESTS KEY

| | | | |
|---|---|---|---|
| C | CONSOLIDATION | SA | SIEVE ANALYSIS |
| AL | ATTERBERG LIMITS | DS | DIRECT SHEAR |
| UC | UNCONFINED COMPRESSION | T | TRIAXIAL |
| S | SOLUBILITY | R | RESISTIVITY |
| O | ORGANIC CONTENT | RV | R-VALUE |
| CBR | CALIFORNIA BEARING RATIO | SU | SOLUBLE SULFATES |
| COMP | MOISTURE/DENSITY RELATIONSHIP | PM | PERMEABILITY |
| CI | CALIFORNIA IMPACT | -200 | % FINER THAN #200 |
| COL | COLLAPSE POTENTIAL | Gs | SPECIFIC GRAVITY |
| SS | SHRINK SWELL | SL | SWELL LOAD |

### MODIFIERS

| DESCRIPTION | % |
|---|---|
| TRACE | <5 |
| SOME | 5 - 12 |
| WITH | >12 |

### MOISTURE CONTENT

| DESCRIPTION | FIELD TEST |
|---|---|
| DRY | ABSENCE OF MOISTURE, DUSTY, DRY TO THE TOUCH |
| SLIGHTLY MOIST | CONTAINING A MINIMAL AMOUNT OF MOISTURE, NOT DRY OR DAMP |
| MOIST | DAMP BUT NO VISIBLE WATER |
| WET | VISIBLE FREE WATER, USUALLY SOIL BELOW WATER TABLE |

### STRATIFICATION

| DESCRIPTION | THICKNESS |
|---|---|
| SEAM | 1/16-1/2" |
| LAYER | 1/2-12" |

| DESCRIPTION | THICKNESS |
|---|---|
| OCCASIONAL | ONE OR LESS PER FOOT OF THICKNESS |
| FREQUENT | MORE THAN ONE PER FOOT OF THICKNESS |

### GENERAL NOTES

1. Lines separating strata on the logs represent approximate boundaries only. Actual transitions may be gradual.
2. No warranty is provided as to the continuity of soil conditions between individual sample locations.
3. Logs represent general soil conditions observed at the point of exploration on the date indicated.
4. In general, Unified Soil Classification designations presented on the logs were evaluated by visual methods only. Therefore, actual designations (based on laboratory tests) may vary.

### APPARENT / RELATIVE DENSITY - COARSE-GRAINED SOIL

| APPARENT DENSITY | SPT (blows/ft) | MODIFIED CA. SAMPLER (blows/ft) | CALIFORNIA SAMPLER (blows/ft) | RELATIVE DENSITY (%) | FIELD TEST |
|---|---|---|---|---|---|
| VERY LOOSE | <4 | <4 | <5 | 0 - 15 | EASILY PENETRATED WITH 1/2-INCH REINFORCING ROD PUSHED BY HAND |
| LOOSE | 4 - 10 | 5 - 12 | 5 - 15 | 15 - 35 | DIFFICULT TO PENETRATE WITH 1/2-INCH REINFORCING ROD PUSHED BY HAND |
| MEDIUM DENSE | 10 - 30 | 12 - 35 | 15 - 40 | 35 - 65 | EASILY PENETRATED A FOOT WITH 1/2-INCH REINFORCING ROD DRIVEN WITH 5-LB HAMMER |
| DENSE | 30 - 50 | 35 - 60 | 40 - 70 | 65 - 85 | DIFFICULT TO PENETRATE 12" WITH 1/2-INCH REINFORCING ROD DRIVEN WITH 5-LB HAMMER |
| VERY DENSE | >50 | >60 | >70 | 85 - 100 | PENETRATED ONLY FEW INCHES WITH 1/2-INCH REINFORCING ROD DRIVEN WITH 5-LB HAMMER |

| CONSISTENCY - FINE-GRAINED SOIL | | TORVANE | POCKET PENETROMETER | FIELD TEST |
|---|---|---|---|---|
| CONSISTENCY | SPT (blows/ft) | UNTRAINED SHEAR STRENGTH (tsf) | UNCONFINED COMPRESSIVE STRENGTH (tsf) | |
| VERY SOFT | <2 | <0.125 | <0.25 | EASILY PENETRATED SEVERAL INCHES BY THUMB. EXUDES BETWEEN THUMB AND FINGERS WHEN SQUEEZED BY HAND. |
| SOFT | 2 - 4 | 0.125 - 0.25 | 0.25 - 0.5 | EASILY PENETRATED ONE INCH BY THUMB. MOLDED BY LIGHT FINGER PRESSURE. |
| MEDIUM STIFF | 4 - 8 | 0.25 - 0.5 | 0.5 - 1.0 | PENETRATED OVER 1/2 INCH BY THUMB WITH MODERATE EFFORT. MOLDED BY STRONG FINGER PRESSURE. |
| STIFF | 8 - 15 | 0.5 - 1.0 | 1.0 - 2.0 | INDENTED ABOUT 1/2 INCH BY THUMB BUT PENETRATED ONLY WITH GREAT EFFORT. |
| VERY STIFF | 15 - 30 | 1.0 - 2.0 | 2.0 - 4.0 | READILY INDENTED BY THUMBNAIL. |
| HARD | >30 | >2.0 | >4.0 | INDENTED WITH DIFFICULTY BY THUMBNAIL. |

**ATTACHMENT D**

**WELL DRILLER REPORTS**

FORM 111 2M 10-56

WIN 13415

PHOTOSTATED
Copied [redacted] VT 6-16-58
Exam. & Recorded JS 8-15-57
Exam. for filing mw 12-10-57
Final Copy checked
Indexed AB 3-13-58
Well No (D-5-1)25aba-1

PAGE (Leave Blank)

Report No. 19903
Filed July 6 1957
Rec. By mw
Ret'd

# Report of Well and Tunnel Driller
## STATE OF UTAH

(Separate report shall be filed for each well or tunnel)

**GENERAL INFORMATION:** S27-474

Report of well or tunnel driller is hereby made and filed with the State Engineer, in accordance with the laws of Utah. (This report shall be filed with the State Engineer within 30 days after the completion or abandonment of well or tunnel. Failure to file such reports constitutes a misdemeanor.)

1. Name and address of person, ~~company or corporation boring or~~ drilling well ~~or tunnel~~. (Strike words not needed)
Eldon Comer, Lehi, Utah TITLE CHANGE-SEE ABSTRACT

2. Name and address of owner of well ~~or tunnel~~ (Strike Words not needed) Frank S. Upright
American Fork, Utah

3. Source of supply is in American Fork, Utah County;
(Leave blank) drainage area; (Leave blank) artesian basin

4. The number of approved application to appropriate water is 29117

5. Location of well ~~or mouth of tunnel~~ is situated at a point South 570.4 feet and East 1123.20 feet from the N 1/4 Cor Sec 25, T5S, R1E, SLB&M.
(Describe by rectangular coordinates or by one course and distance with reference to U. S. Government Survey Corner — Copy description from well owner's approved application)

6. Date on which work on well ~~or tunnel~~ was begun (Strike words not needed) June 3, 1957

7. Date on which work on well ~~or tunnel~~ was completed ~~or abandoned~~ (Strike words not needed) June 8, 1957

8. Maximum quantity of water measured as flowing ~~pumped or~~ (Strike words not needed) on completion of well ~~or tunnel in sec. ft.~~; or in gals. per minute 75 Date June 8, 1957

**DETAIL OF COLLECTING WORKS:**

9. **WELL:** It is drilled, ~~dug~~, flowing ~~or pump~~ (Strike words not needed) well. Temperature of water F.

(a) Total depth of well is 149 ft. below ground surface.

(b) If flowing well, give water pressure (hydrostatic head) above ground surface ft.

(c) If pump well, give depth from ground surface to water surface before pumping ; during pumping

(d) Size and kind of casing 3 inch standard black pipe (If only partially cased, give details)

(e) Depth to water-bearing stratum 95 feet (If more than one stratum, give depth to each)

(f) If casing is perforated, give depth from ground surface to perforations 143 feet

(g) Log of well 1-3 Soil, 3-95 Clay with some Sand, 95-149 Gravel with occassional strata of Clay.

(h) Well was equipped with cap, valve, or (Strike words not needed) to control flow.

(Over)

a4891 (55-1555)

Form 113—5M—12-60

Examined 12-4-67 V.K.C.
Recorded: B. C. 12-4-67 V.K.C. T. B. K.C.C.
Inspection Sheet 12-4-67 B.M.
Copied 12/8/67 D.H.S.

# REPORT OF WELL DRILLER
## STATE OF UTAH

Application No.
Claim No. a 4891 (55-1555)
Coordinate No. (D-5-1)25 aba 2

GENERAL STATEMENT: Report of well driller is hereby made and filed with the State Engineer, in accordance with the laws of Utah. (This report shall be filed with the State Engineer within 30 days after the completion or abandonment of the well. Failure to file such reports constitutes a misdemeanor.)

## (1) WELL OWNER:
Name KEITH JACOBS
Address PLEASANT GROVE

## (2) LOCATION OF WELL:
County UTAH Ground Water Basin (leave blank)
~~North~~ South 550 feet, East ~~West~~ 1000 feet from N¼ Corner of Section 25, T 5 S, R 1 E SLBM ~~W USM~~ (strike out words not needed)

## (3) NATURE OF WORK (check):
New Well ☐ Replacement Well ☑ Deepening ☐ Repair ☐ Abandon ☐
If abandonment, describe material and procedure:

## (4) NATURE OF USE (check):
Domestic ☐ Industrial ☐ Municipal ☐ Stockwater ☐
Irrigation ☑ Mining ☐ Other ☐ Test Well ☐

## (5) TYPE OF CONSTRUCTION (check):
Rotary ☐ Dug ☐ Jetted ☐
Cable ☑ Driven ☐ Bored ☐

## (6) CASING SCHEDULE:
Threaded ☐ Welded ☑
6 " Diam. from 0 feet to 376 feet Gage STD
" Diam. from feet to feet Gage
" Diam. from feet to feet Gage
New ☑ Reject ☐ Used ☐

## (7) PERFORATIONS:
Perforated? Yes ☑ No ☐
Type of perforator used MILLS KNIFE
Size of perforations ¼ inches by 9 inches
20 perforations from 300 feet to 304 feet
175 perforations from 337 feet to 372 feet
perforations from feet to feet
perforations from feet to feet
perforations from feet to feet

## (8) SCREENS:
Well screen installed? Yes ☐ No ☑
Manufacturer's Name
Type Model No.
Diam. Slot size Set from ft. to
Diam. Slot size Set from ft. to

## (9) CONSTRUCTION:
Was well gravel packed? Yes ☐ No ☐ Size of gravel:
Gravel placed from feet to feet
Was a surface seal provided? Yes ☐ No ☐
To what depth? feet
Material used in seal:
Did any strata contain unusable water? Yes ☐ No ☐
Type of water: Depth of strata
Method of sealing strata off:
Was surface casing used? Yes ☐ No ☐
Was it cemented in place? Yes ☐ No ☐

## (10) WATER LEVELS:
Static level feet below land surface Date
Artesian pressure feet above land surface Date

LOG RECEIVED: 8 | 19

## (11) FLOWING WELL:
Controlled by (check) Valve ☑
Cap ☐ Plug ☐ No Control ☐
Does well leak around casing? Yes ☐ No ☑

## (12) WELL TESTS:
Drawdown is the distance in feet the water level is lowered below static level.
Was a pump test made? Yes ☐ No ☐ If so, by whom?
Yield: gal./min. with feet drawdown after hours
" " " " " " " "
Bailer test gal./min. with feet drawdown after hours
Artesian flow 400 g.p.m. Date SEPT 16 1967
Temperature of water Was a chemical analysis made? No ☐ Yes ☐

## (13) WELL LOG:
Diameter of well 6 inches
Depth drilled 376 feet. Depth of completed well 376 feet.

NOTE: Place an "X" in the space or combination of spaces needed to designate the material or combination of materials encountered in each depth interval. Under REMARKS make any desirable notes as to occurrence of water and the color, size, nature, etc., of material encountered in each depth interval. Use additional sheet if needed.

| DEPTH From | DEPTH To | Clay | Silt | Sand | Gravel | Cobbles | Boulders | Hardpan | Conglomerate | Bedrock | Other | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 3 | | | | | | | | | | | SOIL |
| 3 | 14 | X | | | | | | | | | | BLUE |
| 14 | 22 | | | X | X | | | | | | | |
| 22 | 31 | | | X | | | | | | | | BROWN |
| 31 | 40 | | | X | X | | | | | | | |
| 40 | 76 | | | X | X | | | | | | | GRAVEL STRATIFIED |
| 76 | 94 | X | | | | | | | | | | BLUE |
| 94 | 213 | | | X | X | | | | | | | |
| 213 | 233 | X | | X | | | | | | | | TAN |
| 233 | 236 | | | X | X | | | | | | | DIRTY |
| 236 | 241 | X | | X | X | | | | | | | BROWN |
| 241 | 267 | X | | X | X | | | | | | | BLUE |
| 267 | 300 | X | | | | | | | | | | BLUE |
| 300 | 304 | | | X | X | | | | | | | |
| 304 | 314 | X | | X | | | | | | | | TAN |
| 314 | 328 | X | | X | X | | | | | | | CLAY IN STREAKS |
| 328 | 337 | X | | X | | | | | | | | TAN |
| 337 | 372 | | | X | X | | | | | | | |
| 372 | 376 | X | | | | | | | | | | TAN |

Work started SEPT. 2, 1967 Completed SEPT 16, 1967

## (14) PUMP:
Manufacturer's Name
Type: H. P.
Depth to pump or bowles feet

### Well Driller's Statement:
This well was drilled under my supervision, and this report is true to the best of my knowledge and belief.

Name ELDON COMER (Person, firm, or corporation) (Type or print)
Address LEHI UTAH
(Signed) Eldon Comer (Well Driller)
License No. 5 Date Nov 29, 1967

RECEIVED NOV 30 1967 STATE ENGINEER

USE OTHER SIDE FOR ADDITIONAL REMARKS

a4891 (55-1555)

Form 168

WELL INSPECTION REPORT

Water Right Application No. a4891 (55-1555) Date 11/19/68

Owner's Name Keith Jacobs

Owner's Address Pleasant Grove, Utah

Well location (from application or claim) South 550 ft. and East 1000 ft. from Mt Cor. of Sec. 25, T 5 S., R 1 E., SLB&M. County Utah

New Well ____ Repair ____ Clean ____ Deepen ____ Replace X

Diameter of Casing 6" New X Used ____

If "used" casing, was it inspected before being used? Yes

Replacement Well

New well is located ____ feet east or west and ____ feet north or south from old well.

Has old well been plugged? Yes By whom? Frank Jensen

Date plugged 11/19/68 Method of plugging Mud Jack

(Water rights Div.) State Engineer Sealed off two wells #1-5" well casing #2-4" well casing

Flowing Well

Type of control: Valve ( X ) Cap ( ) Other ( )

If other than commercial valve or cap, describe the type of control ____

Is the control effective? Yes

If not, explain why: ____

Does water leak around casing when control is closed? No

If so, what is the rate of leakage? ____

Was the well in use at time of inspection? Yes

Does the well yield sand? No Are there signs of caving? No

Non-Flowing Well

Was the well equipped with pump at time of inspection? ____

Does well pump sand? ____ Are there signs of caving? ____

Comments: ____

Nature of Use

Domestic ____ Stock ____ Irrigation X Municipal ____ Mining ____ Other ____

If "other" describe use ____

Rate of Discharge

Estimated ____ Measured ____ Method of Measurement: ____

(State whether g.p.m. or c.f.s.)

Tag placed on well Yes Tag already on well ____ Tag needs to be prepared ____

Comments: None

Inspection made by Frank Jensen

Form 113—5M—12-60

Examined 2-28-61 ACT
Recorded: B. C. 2-28-61 ACT T. B. ACT
Inspection Sheet VG 3-14-61
Copied

# REPORT OF WELL DRILLER
## STATE OF UTAH
2.71-266

Application No. 29915
Claim No.
Coordinate No. (D-5-1)25 aab

GENERAL STATEMENT: Report of well driller is hereby made and filed with the State Engineer, in accordance with the laws of Utah. (This report shall be filed with the State Engineer within 30 days after the completion or abandonment of the well. Failure to file such reports constitutes a misdemeanor.)

## (1) WELL OWNER:
Name FLOYD K VEST
Address AMERICAN FORK

## (2) LOCATION OF WELL:
County UTAH Ground Water Basin (leave blank)
~~North~~ 10 feet, ~~East~~ West 1313 feet from NE Corner
of Section 25, T 5 ~~N~~ S, R 1 E SLBM (strike out words not needed)

## (3) NATURE OF WORK (check):
New Well ☑ Replacement Well ☐ Deepening ☐ Repair ☐ Abandon ☐
If abandonment, describe material and procedure:

## (4) NATURE OF USE (check):
Domestic ☐ Industrial ☐ Municipal ☐ Stockwater ☐
Irrigation ☑ Mining ☐ Other ☐ Test Well ☐

## (5) TYPE OF CONSTRUCTION (check):
Rotary ☐ Dug ☐ Jetted ☑
Cable ☐ Driven ☐ Bored ☐

## (6) CASING SCHEDULE:
Threaded ☐ Welded ☐
4" Diam. from 0 feet to 315 feet Gage STD
" Diam. from feet to feet Gage
" Diam. from feet to feet Gage
New ☐ Reject ☐ Used ☐

## (7) PERFORATIONS:
Perforated? Yes ☑ No ☐
Type of perforator used BURNT SLOT
Size of perforations 5/8 inches by 10 inches
16 perforations from 306 feet to 314 feet
perforations from feet to feet
perforations from feet to feet
perforations from feet to feet
perforations from feet to feet

## (8) SCREENS:
Well screen installed? Yes ☐ No ☑
Manufacturer's Name
Type Model No.
Diam. Slot size Set from ft. to
Diam. Slot size Set from ft. to

## (9) CONSTRUCTION:
Was well gravel packed? Yes ☐ No ☑ Size of gravel:
Gravel placed from feet to feet
Was a surface seal provided? Yes ☐ No ☐
To what depth? feet
Material used in seal:
Did any strata contain unusable water? Yes ☐ No ☐
Type of water: Depth of strata
Method of sealing strata off:
Was surface casing used? Yes ☐ No ☑
Was it cemented in place? Yes ☐ No ☑

## (10) WATER LEVELS:
Static level feet below land surface Date
Artesian pressure feet above land surface Date

LOG RECEIVED:

## (11) FLOWING WELL:
Controlled by (check) Valve ☑
Cap ☐ Plug ☐ No Control ☐
Does well leak around casing? Yes ☐ No ☑

## (12) WELL TESTS:
Drawdown is the distance in feet the water level is lowered below static level.
Was a pump test made? Yes ☐ No ☑ If so, by whom?
Yield: gal./min. with feet drawdown after hours
" " " " " "
" " " " " "
Bailer test gal./min. with feet drawdown after hours
Artesian flow 200 g.p.m. Date JAN 28 1961
Temperature of water Was a chemical analysis made? No ☑ Yes ☐

## (13) WELL LOG:
Diameter of well 4" inches
Depth drilled 315 feet. Depth of completed well 315 feet.

NOTE: Place an "X" in the space or combination of spaces needed to designate the material or combination of materials encountered in each depth interval. Under REMARKS make any desirable notes as to occurrence of water and the color, size, nature, etc., of material encountered in each depth interval. Use additional sheet if needed.

| DEPTH From | DEPTH To | Clay | Silt | Sand | Gravel | Cobbles | Boulders | Hardpan | Conglomerate | Bedrock | Other | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 4 | | | | | | | | | | | SOIL |
| 4 | 28 | X | | | | | | | | | | TAN |
| 28 | 55 | | | X | X | | | | | | | |
| 55 | 91 | X | | X | | | | | | | | BLUE |
| 91 | 140 | | | X | X | | | | | | | |
| 140 | 147 | X | | | | | | | | | | TAN |
| 147 | 168 | | | X | X | | | | | | | |
| 168 | 177 | X | | | | | | | | | | TAN |
| 177 | 217 | | | X | X | | | | | | | |
| 217 | 225 | X | | | | | | | | | | TAN |
| 225 | 244 | | | X | X | | | | | | | |
| 244 | 245 | X | | | | | | | | | | TAN |
| 245 | 257 | | | X | X | | | | | | | |
| 257 | 305 | X | | | | | | | | | | BLUE WATER. |
| 305 | 315 | | | X | X | | | | | | | |

Work started JAN 14, 1961 Completed JAN 28, 1961

## (14) PUMP:
Manufacturer's Name H. P.
Type:
Depth to pump or bowles feet

## Well Driller's Statement:
This well was drilled under my supervision, and this report is true to the best of my knowledge and belief.

Name ELDON COMER (Person, firm, or corporation) (Type or print)
Address 214 So 1ST W. LEHI UTAH
(Signed) Eldon Comer (Well Driller)
License No. 5 Date 2/25, 1961

USE OTHER SIDE FOR ADDITIONAL REMARKS

WIN 13412

[redacted] wt 6-17-58

Exam. & Recorded 6-2-58 ACT

Exam. for filing 6-2-58 ACT

Final Copy checked

Indexed 10-5-28-58

Well No. (D-5-1)25ada-3

PAGE (Leave Blank)

Report No. 13150

Filed Nov. 8, 1957

Rec. By mar

Ret'd

# Report of Well and Tunnel Driller
## STATE OF UTAH

(Separate report shall be filed for each well or tunnel)

**GENERAL INFORMATION:** D62-10

Report of well or tunnel driller is hereby made and filed with the State Engineer, in accordance with the laws of Utah. (This report shall be filed with the State Engineer within 30 days after the completion or abandonment of well or tunnel. Failure to file such reports constitutes a misdemeanor.)

1. Name and address of person, ~~company or corporation boring or~~ drilling well ~~or tunnel~~. (Strike words not needed)

Eldon Comer, Lehi, Utah

2. Name and address of owner of well ~~or tunnel~~ (Strike Words not needed) D. Moroni Shelley TITLE CHANGE-SEE ABSTRACT

Pleasant Grove, Utah

3. Source of supply is in American Fork, Utah County; (Leave blank) drainage area; (Leave blank) artesian basin

4. The number of approved application to appropriate water is 28503

5. Location of well ~~or mouth of tunnel~~ is situated at a point

N. 1318 ft. and West 417 ft. of the SE Cor. of NE¼ of Sec. 25, T5S, R1E, SLB&M.

(Describe by rectangular co-ordinates or by one course and distance with reference to U. S. Government Survey Corner — Copy description from well owner's approved application)

6. Date on which work on well ~~or tunnel~~ (Strike words not needed) was begun September 23, 1957

7. Date on which work on well ~~or tunnel~~ was completed ~~or abandoned~~ (Strike words not needed) October 14, 1957

8. Maximum quantity of water measured as flowing, pumped or (Strike words not needed) on completion of well ~~or tunnel~~ in sec. ft.; or in gals. per minute 250 Date Oct. 14, 1957

**DETAIL OF COLLECTING WORKS:**

9. WELL: It is ~~drilled, dug~~ (Strike words not needed), flowing ~~or pump~~ well. Temperature of water °F.

(a) Total depth of well is 168 ft. below ground surface.

(b) If flowing well, give water pressure (hydrostatic head) above ground surface ft.

(c) If pump well, give depth from ground surface to water surface before pumping ; during pumping

(d) Size and kind of casing 4 inch standard black pipe (If only partially cased, give details)

(e) Depth to water-bearing stratum 90 feet- 145 feet- 155 feet (If more than one stratum, give depth to each)

(f) If casing is perforated, give depth from ground surface to perforations 160 feet

(g) Log of well 1-63 Clay, 63-90 Clay and Sand, 90-107 Sand & Gravel, 107-145 Clay with some Sand, 145-150 Sand & Gravel, 150-155 Clay, 155-168 Gravel

(h) Well was equipped with ~~cap~~, valve, ~~or~~ (Strike words not needed) to control flow.

(Over)

WIN 13412

# WELL ABANDONMENT REPORT
## State of Utah
## Division of Water Rights

**Well Identification**

Water Right: 55-823 WIN: 13412

**Owner** *Note any changes*

American Fork City
ATTN: Public Works Director
275 East 200 North
American Fork, UT 84003

Contact Person/Engineer: _____

**Well Location** *Note any changes*

N 1318 W 417 from the E4 corner of section 25, Township 5S, Range 1E, SL B&M

Location Description: (address, proximity to buildings, landmarks, ground elevation,local well #)

**Existing Well Details**

Is a Well Driller's Report Available? ☐ Yes ☒ No

Well Depth 168' feet Well Diameter 4" inches

Nature of Use: ☒ Dom. ☐ Irr. ☐ Stock ☐ Industrial ☐ Commercial ☐ Municipal ☐ Monitor ☐ Other _____

Casing Type: ☒ Steel ☐ Stainless Steel ☐ PVC ☐ Fiberglass ☐ ABS ☐ SR ☐ Other _____

Openings: ☐ Screen ☐ Perforations ☐ Open Pipe Screen/Perforation Interval _____

Filter Pack? ☐ Yes ☐ No Depth of Surface Seal _____ feet

Static Water Level 4' feet Flowing Well? ☐ Yes ☒ No

Other Details (if known) _____

**Abandonment Details**

Date of Abandonment 2-24-21

Reason for Abandonment Developing Property

Method of Abandonment (Include a description of the seal placement and procedures, amount of casing/screen removed, pump/piping removal, termination of casing at the surface, problems encountered, and other pertinent information).

high Pressure grout until Full going to Cut OF Below Final grade

| DEPTH (feet) | | ABANDONMENT MATERIAL DETAILS | | |
|---|---|---|---|---|
| FROM | TO | ABANDONMENT MATERIAL USED | **Quantity** of Material Used (e.g., cubic yards, lbs) | GROUT DENSITY (lbs./gal., # bag mix, gal./sack etc.) |
| +1 | 168' | Neat Cement grout | 18 Bags | 9216 bags/6gal mix |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

RECEIVED
MAR 04 2021
WATER RIGHTS
SALT LAKE
HP

Location of a new well (if present) is N/A ft north/south and N/A ft east/west from the abandoned well.

SCANNED LP

**Well Driller Statement** This well was abandoned under my supervision, according to applicable rules and regulations, and this report is complete and correct to the best of my knowledge and belief.

Name MILLER DRILLING INC (Person, Firm, or Corporation - Print or Type) License No. 292

Signature _____ (Licensed Well Driller) Date 3-2-21

Abandonment

WIN 13416

Listed on well record
Listed by counties
Copied mh 8-10-50
Exam. & Recorded M.V. 6-13-50
Exam. for filing
Final Copy checked mh 8-8-50
Platted & No. Assigned
Indexed mh 7-27-50
Engr. tied well
Engr. set BM
Well No. (D-5-1)25aaa3

Lehi Press
Aug. 4
D-42-350

PAGE (Leave Blank)

Report No. 7682
Filed June 12, 1950
Rec. By M.V.
Ret'd

# Report of Well and Tunnel Driller
## STATE OF UTAH

(Separate report shall be filed for each well or tunnel)

**GENERAL INFORMATION:**

Report of well or tunnel driller is hereby made and filed with the State Engineer, in compliance with Sec. 100-3-22, Utah Code Annotated, 1943. (This report shall be filed with the State Engineer within 30 days after the completion or abandonment of well or tunnel. Failure to file such report constitutes a misdemeanor.)

1. Name and address of person, ~~company or corporation boring or~~ drilling well ~~or tunnel.~~ (Strike words not needed)
Elden Loosen Lehi Utah

2. Name and address of owner of well ~~or tunnel~~ (Strike Words not needed) William C. Chadwick
Rt #1 American Fork Utah

3. Source of supply is in American Fork Utah County;
(Leave blank) drainage area; (Leave blank) artesian basin

4. The number of approved application to appropriate water is 21521

5. Location of well ~~or mouth of tunnel~~ is situated at a point 1-26834
S. 600.8' & W 496.9 ft from NE Cor Sec 25 T5S R1E SLM.
(Describe by rectangular co-ordinates or by one course and distance with reference to U. S. Government Survey Corner — Copy description from well owner's approved application)

6. Date on which work on well ~~or tunnel~~ was begun April 15 - 1950
(Strike words not needed)

7. Date on which work on well ~~or tunnel~~ was completed ~~or abandoned~~ May 1 - 1950
(Strike words not needed)

8. Maximum quantity of water measured as flowing, ~~pumped or~~ (Strike words not needed) on completion of well ~~or tunnel in sec. ft.~~; or in gals. per minute 100. Date May 1-50

**DETAIL OF COLLECTING WORKS:**

9. WELL: It is drilled, ~~dug,~~ flowing ~~or pump~~ well. Temperature of water °F.
(Strike words not needed)

(a) Total depth of well is 220' ft. below ground surface.

(b) If flowing well, give water pressure (hydrostatic head) above ground surface ft.

(c) If pump well, give depth from ground surface to water surface before pumping
; during pumping

(d) Size and kind of casing 4" standard block pipe.
(If only partially cased, give details)

(e) Depth to water-bearing stratum 190'
(If more than one stratum, give depth to each)

(f) If casing is perforated, give depth from ground surface to perforations 212'

(g) Log of well 1-3 soil and gravel, 3-12 clay 12-22-30' gravel and clay, 30-40-50-60-70-80-90 94 clay, 94-104-114-124-134-143 stratified gravel, 143-153-163-173-183-190 clay and sand, 190-200-210-220 gravel and sand,

(h) Well was equipped with cap, valve, or (Strike words not needed) to control flow.

RECEIVED JUN 19 1950

(Over)

10. **TUNNEL:** It is timbered, tiled, piped, open, bulkheaded, covered or.....
(Strike words not needed)

(a) Dimensions.....; total length.....; temperature of water.....°F.

(b) Position of water bearing stratum or strata with reference to mouth of tunnel.....

.....

.....

(c) Log of tunnel.....

.....

.....

.....

11. **GENERAL REMARKS:** (Note any general or detailed information not covered above).

STATE OF UTAH,
COUNTY OF Salt Lake } ss.

I, Eldon Comer, being first duly sworn, do hereby certify that I am the driller of the aforesaid well or tunnel who furnished the foregoing statement of facts; that I have read said statement and each and all of the items therein contained are true to the best of my knowledge and belief.

Eldon Comer
Driller

Subscribed and sworn to before me this 12 day of June, 19 50.

(SEAL)

Laurence C. Monson
Notary Public

My Commission Expires:
July 18, 1952

WIN 13416

# WELL ABANDONMENT REPORT
## State of Utah
## Division of Water Rights

**Well Identification**

Water Right: 55-757 WIN: 13416

**Owner** *Note any changes*

Elbert Kay Vest
RFD #1 Box 38
American Fork UT 84003

Contact Person/Engineer: _____

**Well Location** *Note any changes*

S 601 W 497 from the NE corner of section 25, Township 5S, Range 1E, SL B&M

Location Description: (address, proximity to buildings, landmarks, ground elevation,local well #)

**Existing Well Details**

Is a Well Driller's Report Available? ☐ Yes ☒ No

Well Depth 160' feet Well Diameter 4" inches

Nature of Use: ☒ Dom. ☒ Irr. ☒ Stock ☐ Industrial ☐ Commercial ☐ Municipal ☐ Monitor ☐ Other _____

Casing Type: ☒ Steel ☐ Stainless Steel ☐ PVC ☐ Fiberglass ☐ ABS ☐ SR ☐ Other _____

Openings: ☐ Screen ☐ Perforations ☒ Open Pipe Screen/Perforation Interval _____

Filter Pack? ☐ Yes ☐ No Depth of Surface Seal _____ feet

Static Water Level 12' feet Flowing Well? ☐ Yes ☒ No

Other Details (if known) _____

**Abandonment Details**

Date of Abandonment 1-15-21

Reason for Abandonment It's in The way For new Development

Method of Abandonment (Include a description of the seal placement and procedures, amount of casing/screen removed, pump/piping removal, termination of casing at the surface, problems encountered, and other pertinent information).

High pressure grout until Full.

| DEPTH (feet) | | ABANDONMENT MATERIAL DETAILS | | |
|---|---|---|---|---|
| FROM | TO | ABANDONMENT MATERIAL USED | **Quantity** of Material Used (e.g., cubic yards, lbs) | GROUT DENSITY (lbs./gal., # bag mix, gal./sack etc.) |
| 0 | 160 | neat Cement grout | 12/92lb Bags | 6gal/sack |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

RECEIVED
JAN 27 2021 LI
WATER RIGHTS
SALT LAKE

Location of a new well (if present) is N/A ft north/south and N/A ft east/west from the abandoned well.

**Well Driller Statement** This well was abandoned under my supervision, according to applicable rules and regulations, and this report is complete and correct to the best of my knowledge and belief.

Name MILLER DRILLING INC (Person, Firm, or Corporation - Print or Type) License No. 292

Signature _____ (Licensed Well Driller) Date 1-25-21

Listed on well record
Listed by counties
Copied 4-15-36 (12-2-35) Hill
Exam. & returned
Exam. for filing 6-11-36 Hall 12-11-36 C.H.B.
Final Copy checked 2-15-37 V.B.F. T.C.
Platted & No. Assigned 2-11-37 E.E.D.
Indexed 2-11-37 E.E.D. M.G.
Engr. tied well
Engr. set BM
Well No.

WIN 438017

PAGE
(Leave Blank)

# Underground Water Claim
## STATE OF UTAH

(Separate Claim shall be filed for each well, tunnel or drain)

Claim No. 4522
Filed Feb 25, 1936
Rec. By Mail
Rec. $2.50 Fee Rec't
55-2118

**GENERAL INFORMATION:**

Claim to underground water by right of use, prior to March 22, 1935, is hereby made and filed with the State Engineer, together with a filing fee of $2.50, and submitted in accordance with sections 100-5-12 and 100-2-14, Revised Statutes of Utah, 1933, as amended by Session Laws of 1935.

1. Name of claimant David F. Smiley, Silver Oak Limited Partnership
2. Post Office address of claimant American Fork, Utah.
3. Amount of water claimed and used each year for irrigation is 350.0 ~~sec. ft. or~~ g. p. m. (Strike words not needed)
   from April 1st (Month) (Day) to October 31st (Month) (Day) both incl.
   and 1.0 ~~sec. ft. or~~ g. p. m. (Strike words not needed) from January 1st (Month) (Day) to December 31st (Month) (Day) both incl.
   for ~~municipal~~, stockwatering, ~~domestic~~ or purposes (Strike words not needed) in Utah county.
   U.L. & J.K. (Leave Blank) Drainage Area; (Leave Blank) Artesian Basin
4. Water is supplied from ~~flowing~~ well, ~~pump well, tunnel, drain~~ (Strike words not needed) and is diverted at a point North 4017.0' and East 3755.3' from the Sec. corner common to Secs. 25, 26, 35 and 36, Township 5 South, Range 1 East, Salt Lake Base and Meridian.
   (Describe by course and distance or by rectangular co-ordinates with reference to a U. S. Gov't Survey Corner)

**DETAILS OF COLLECTING WORKS:**

5. **WELL:** It is a drilled, ~~dug~~, flowing, ~~or pump~~ (Strike words not needed) well. Temperature of water 54 °F
   (a) Elev. ground surface at well 4539.58' (Ft. above sea level); total depth 205 feet (Ft. below ground surface); size 5"
   (b) Hydrostatic head in feet at ground surface if flowing well Not Known (When first drilled); (At this date)
   (c) Depth from ground surface to upper and lower limits of each water bearing stratum 205 to 207. (If more than one stratum, give each)
   (d) Depth to water from ground surface if pump well — (When first drilled); — (At this date)
   (e) Well, if flowing, is controlled by ~~cap~~, valve ~~or by~~ (Strike words not needed)
   (f) If pump well, give depth from ground surface to water surface before pumping —; during pumping —; h. p. of engine or motor — (Strike words not needed) pump is reciprocal, turbine, centrifugal, air lift, or —; size: intake — disch. —.
   (g) Well is ~~curbed~~, cased, ~~lined~~, with steel (If only partially cased, give details), inside diameter 5" inches.
   (h) If casing is perforated, give depth from ground surface to upper and lower limits of each set of perforations No information.
   (i) Log of well is: No information.
6. **TUNNEL:** It is timbered, tiled, piped, open, bulkheaded, caved or (Strike words not needed)
   (a) Dimensions; total length. Temperature of water °F.
   (b) Position of water bearing stratum or strata with reference to mouth of tunnel
   (c) Log of tunnel
7. **DRAIN:** It is open, covered, tiled or (Strike words not needed)
   (a) Size; total length of drain above point of diversion
   Character of sub-soil

NOTE—g. p. m. refers to gallons per minute.

(Over)

TITLE CHANGE

WIN 438017

**HISTORY OF DEVELOPMENT:**

8. Give date when development work was first begun August, 1931; when work was completed Sept. 1931; when water was first used Sept. 1931. (Give month and year)

9. Maximum quantity of water diverted in ~~sec. ft.~~ or g. p. m. 350. Date Sept., 1931. (Strike words not needed)

10. Minimum quantity of water diverted in ~~sec. ft.~~ or g. p. m. 130.5 Date Nov. 1935. (Strike words not needed)

11. Quantity of water diverted as of this date in ~~sec. ft.~~ ~~or~~ g. p. m. 130.5 (Strike words not needed)

**USE OF WATER:**

12. Water is used for irrigation on { ¼ NE ¼ Sec. 25; T5S; R1 E; SL M. / ¼ ¼ Sec. ; T ; R ; M.

13. Acres of land irrigated first year 18; acres irrigated each year thereafter with dates 18 each year thereafter until present; acres irrigated as of this date 18

14. If used for stock watering, give number and kind of stock watered 6 horses, 12 head of cattle.

15. Water is used for ~~Domestic~~ Stockwatering Purposes on Lot Blk. Plat. Survey in NW ¼ NE ¼; Sec. 25 Tp. 5 S.; Rge. 1 E.; SL M.

~~Number of persons supplied ; acres of gardens, laws, etc. irrigated~~ (Not included in paragraph 13)

16. ~~If for municipal use give name of city or town~~ ; (Population Served)

17. ~~If for mining purposes, name mining district ; name of mine ;~~ ~~kind of ore or mineral mined ; particular purpose for which water is used~~

18. Bench mark on well having elevation of 4541.04 feet above sea level is described as follows Highest point on bead of elbow.

19. GENERAL REMARKS: (Describe below in detail, the nature and extent of any use not listed, or give other explanatory information not heretofore covered. Use additional sheets if necessary).

Detail description of Bench Mark on Well:
Highest point on bead of elbow.
Sea level elevation of Bench Mark: 4541.04'
Well tie, BM and elevation taken by Frank S. Allen.

STATE OF UTAH,
COUNTY OF Utah } ss.

I, D. Moroni Shelley being first duly sworn, do hereby certify that I am the person, or the agent of David E. Shelley, who, ~~or which~~, claims a right to the use of underground water as set forth in the foregoing statement of facts; that I have read said statement and each and all of the items therein contained are true to the best of my knowledge and belief.

D Moroni Shelley
Signature of Claimant

Subscribed and sworn to before me this 24th day of February, A. D. 1936.

(SEAL)

My Commission Expires:
January 29, 1940.

J D Parker
Notary Public

:WIN 438017

# WELL RECORD SHEET

Claim No. 4522

Owner. David E. Shelley

Claim Application No. 4522 (D-5-1). Use Claimed Irrigation, Stockwatering

Well No. 25 abd-2. B.M. Elev. 4541.04. B.M. Description Highest point on head of elbow.

Note: **Elevations are mean sea level in feet; Hydrostatic water level from B.M. unless otherwise stated. *Plus indicates above B.M.; Minus indicates below B.M.

RECORD

| Date & Time | Yield G.P.M. | *Hydrostatic water level | *Piezometric elev. | Tem. °F | Use | Remarks | Observer |
|---|---|---|---|---|---|---|---|
| 8-25-37 | 100 | + 16.8 | 4557.84 | 52 | Irrigation Stockwatering | | W. H. Roberts |
| 12-9-37 | | | | | Valve leaking | Valve control | " " |
| 6/23/38 | 109.2 | | | | I. | 29.1 Ac.ft. | " " |
| 8/12/38 | 109.2 | | | | W. | 3.1 " | " " |
| 9/8/38 | 109.2 | | | | | | " " |
| 1/10/39 | | | | | | Controlled by valve Head on 5" Ell | Roberts " " |
| 3/11/39 | | +18.0 | 4559.04 | | I #9.2 acft | 5" outlet | Roberts |
| 4-20-39 | 104. | | | | | | " |
| 6-14-39 | 111. | | | | | | " |
| 8-23-39 | 76. | | | | | Controlled by valve | J.M. Jr. |
| 11/30/39 | | | | | | | |
| 8-5-40 | 78. | 10.8 | 4537.84 | | I 32. acft since | Found flowing Closed could not mea | I. M Jr. " " |
| 10-2-40 | 96. | | | | Well water only supply for irrigation. | no 5" plug. Valve control | |
| 4-4-40 | 93.6 | 16.4 | 4557.44 | | | Found closed | I M Jr. |
| 5-15-40 | 88.2 | 15.2 | 4556.24 | | | " " | " " |
| 9-6-40 | 91.8 | 14.8 | 4555.84 | | | " " | " " |
| 4-4-41 | 102.9 | 14.7 | 4555.74 | | | " " | H W N |

-Over-

# WELL ABANDONMENT REPORT
## State of Utah
## Division of Water Rights

WIN 438017

**Well Identification**

Water Right: 55-2118 WIN: 438017

**Owner** *Note any changes*

American Fork City
31 North Church Street
American Fork UT 84003

Contact Person/Engineer: _____

**Well Location** *Note any changes*

N 4017 E 3755 from the SW corner of section 25, Township 5S, Range 1E, SL B&M

Location Description: (address, proximity to buildings, landmarks, ground elevation,local well #)

**Existing Well Details**

Is a Well Driller's Report Available? ☐Yes ☐No

Well Depth 207 feet Well Diameter 5 inches

Nature of Use: ☐Dom. ☐Irr. ☒Stock ☐Industrial ☐Commercial ☐Municipal ☐Monitor ☐Other _____

Casing Type: ☐Steel ☐Stainless Steel ☐PVC ☐Fiberglass ☐ABS ☐SR ☐Other _____

Openings: ☐Screen ☐Perforations ☐Open Pipe Screen/Perforation Interval _____

Filter Pack? ☐Yes ☐No Depth of Surface Seal ? feet

Static Water Level Flowing feet Flowing Well? ☒Yes ☐No

Other Details (if known) _____

**Abandonment Details**

Date of Abandonment 10-1-14

Reason for Abandonment Client Request

Method of Abandonment (Include a description of the seal placement and procedures, amount of casing/screen removed, pump/piping removal, termination of casing at the surface, problems encountered, and other pertinent information).

No pump in well - Trimmed from 207' to surface with grout.
Cut casing off 3' from surface

| DEPTH (feet) | | ABANDONMENT MATERIAL DETAILS | | |
|---|---|---|---|---|
| FROM | TO | ABANDONMENT MATERIAL USED | **Quantity** of Material Used (e.g., cubic yards, lbs) | GROUT DENSITY (lbs./gal., # bag mix, gal./sack etc.) |
| 207 | 30 | Pure Gold Grout | 1,150 LBS | 18.4 Gal water |
| 30 | 0 | Portland II | 80 LBS | 6.5 Gal water |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

RECEIVED
OCT 06 2014
WATER RIGHTS
SALT LAKE

Location of a new well (if present) is _____ ft north/south and _____ ft east/west from the abandoned well.

**Well Driller Statement** This well was abandoned under my supervision, according to applicable rules and regulations, and this report is complete and correct to the best of my knowledge and belief.

Name EARTHCORE DRILLING INC (Person, Firm, or Corporation - Print or Type) License No. 575

Signature Daniel Thibault (Licensed Well Driller) Date 10-1-14

[redacted] *Abandonment* [redacted]

5M - STEVENS & WALLIS - 2-50

WIN 13362

Copied DM 11-17-52
Exam. & Recorded M.V. 11-7-52
Exam. for filing M.V. 11-7-52
Final Copy checked
Indexed DM 11-17-52
Well No (D-5-1) 24dcd-2

PAGE (Leave Blank)

Report No. 9605
Filed Oct 15, 1952
Rec. By DM
Ret'd

# Report of Well and Tunnel Driller
## STATE OF UTAH

(Separate report shall be filed for each well or tunnel)

**GENERAL INFORMATION:**

Report of well or tunnel driller is hereby made and filed with the State Engineer, in compliance with Sec. 100-3-22, Utah Code Annotated, 1943. (This report shall be filed with the State Engineer within 30 days after the completion or abandonment of well or tunnel. Failure to file such report constitutes a misdemeanor.) 9-57 90 Apvd: June 4, 52

1. Name and address of person, ~~company or corporation boring or~~ drilling well ~~or tunnel~~ (Strike words not needed)
Elbon Corner, Lehi, Utah

2. Name and address of owner of well ~~or tunnel~~ (Strike Words not needed) J. B. Evans,
~~845 So. State, Provo~~ Rt 2, Box 111, Prov TITLE CHANGE - SEE ABSTRAC

3. Source of supply is in ~~American Fork~~ Utah County;
(Leave blank) drainage area; (Leave blank) artesian basin

4. The number of approved application to appropriate water is 23209

5. Location of well ~~or mouth of tunnel~~ is situated at a point N 45 ft. & W 1891.2 ft. from SE Cor. Sec. 24, T5S, R1E, SLB&M.

(Describe by rectangular co-ordinates or by one course and distance with reference to U. S. Government Survey Corner — Copy description from well owner's approved application)

6. Date on which work on well ~~or tunnel~~ was begun Sept 3-1952 (Strike words not needed)

7. Date on which work on well ~~or tunnel~~ was completed ~~or abandoned~~ Sept 13-1952 (Strike words not needed)

8. Maximum quantity of water measured as flowing, ~~pumped or~~ (Strike words not needed) on completion of well ~~or tunnel in sec. ft.~~; or in gals. per minute 200 Date Sept 13

**DETAIL OF COLLECTING WORKS:**

9. **WELL:** It is drilled, ~~dug~~, flowing ~~or pump~~ well. Temperature of water °F. (Strike words not needed)

(a) Total depth of well is 167 ft. below ground surface.

(b) If flowing well, give water pressure (hydrostatic head) above ground surface ft.

(c) If pump well, give depth from ground surface to water surface before pumping ; during pumping

(d) Size and kind of casing 4" Standard black pipe (If only partially cased, give details)

(e) Depth to water-bearing stratum 95' (If more than one stratum, give depth to each)

(f) If casing is perforated, give depth from ground surface to perforations 130'

(g) Log of well 1-3 soil 3-13-23-33-43-53-63
73-83-93-95 clay with some sand
95-105-115-125-135-145-155-165-167
gravel with occasional narrow
strata of clay.

(h) Well was equipped with cap, valve, or to control flow. (Strike words not needed)

(Over)

10. **TUNNEL:** It is timbered, tiled, piped, open, bulkheaded, covered or.....
(Strike words not needed)

(a) Dimensions.....; total length.....; temperature of water.....°F.

(b) Position of water bearing stratum or strata with reference to mouth of tunnel.....

.....

.....

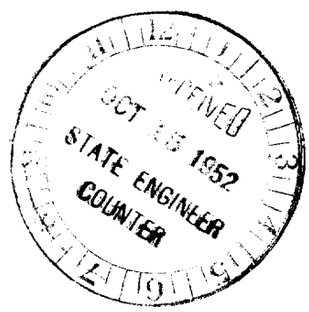
(c) Log of tunnel.....

.....

.....

.....

11. **GENERAL REMARKS:** (Note any general or detailed information not covered above).




STATE OF UTAH,
COUNTY OF Salt Lake } ss.

I, Eldon Comer, being first duly sworn, do hereby certify that I am the driller of the aforesaid well or tunnel who furnished the foregoing statement of facts; that I have read said statement and each and all of the items therein contained are true to the best of my knowledge and belief.

Eldon Comer
Driller

Subscribed and sworn to before me this 15 day of October, 1952

(SEAL)

Lila Monson
Notary Public

My Commission Expires:
July 18 1956

WIN 429013

Form 113—5M—12-60

Examined Nov. 15-1961 H.C.T.
Recorded: B. C. Nov 15-1961 H.C.T. T. B. H.C.T.
Inspection Sheet rg 11-20-61
Copied

# REPORT OF WELL DRILLER
## STATE OF UTAH

orig. & 1 cy

Application No.
Claim No. 744
Coordinate No. (D-5-1)25 aaa

GENERAL STATEMENT: Report of well driller is hereby made and filed with the State Engineer, in accordance with the laws of Utah. (This report shall be filed with the State Engineer within 30 days after the completion or abandonment of the well. Failure to file such reports constitutes a misdemeanor.)

## (1) WELL OWNER:
Name A CARROLL SAGER
Address AMERICAN FORK

## (2) LOCATION OF WELL:
County UTAH Ground Water Basin (leave blank)
~~North~~ South 32°00' feet, ~~East~~ West 614 feet from NE Corner of Section 25, T. 5 ~~N~~ S, R. 1 E SLBM (strike out words not needed)

## (3) NATURE OF WORK (check):
New Well ☐ Replacement Well ☑ Deepening ☐ Repair ☐ Abandon ☐
If abandonment, describe material and procedure:

## (4) NATURE OF USE (check):
Domestic ☐ Industrial ☐ Municipal ☐ Stockwater ☐
Irrigation ☑ Mining ☐ Other ☐ Test Well ☐

## (5) TYPE OF CONSTRUCTION (check):
Rotary ☐ Dug ☐ Jetted ☐
Cable ☑ Driven ☐ Bored ☐

## (6) CASING SCHEDULE:
Threaded ☐ Welded ☑
8 " Diam. from 0 feet to 368 feet Gage STD
" Diam. from feet to feet Gage
" Diam. from feet to feet Gage
New ☑ Reject ☐ Used ☐

## (7) PERFORATIONS:
Perforated? Yes ☑ No ☐
Type of perforator used MILLS KNIFE
Size of perforations 3/8 inches by 2 inches
600 perforations from 310 feet to 365 feet
perforations from feet to feet
perforations from feet to feet
perforations from feet to feet
perforations from feet to feet

## (8) SCREENS:
Well screen installed? Yes ☐ No ☑
Manufacturer's Name
Type Model No.
Diam. Slot size Set from ft. to
Diam. Slot size Set from ft. to

## (9) CONSTRUCTION:
Was well gravel packed? Yes ☐ No ☑ Size of gravel:
Gravel placed from feet to feet
Was a surface seal provided? Yes ☐ No ☐
To what depth? feet
Material used in seal:
Did any strata contain unusable water? Yes ☐ No ☐
Type of water: Depth of strata
Method of sealing strata off:

Was surface casing used? Yes ☐ No ☑
Was it cemented in place? Yes ☐ No ☐

## (10) WATER LEVELS:
Static level feet below land surface Date
Artesian pressure feet above land surface Date

LOG RECEIVED:

## (11) FLOWING WELL:
Controlled by (check) Valve ☑
Cap ☐ Plug ☐ No Control ☐
Does well leak around casing? Yes ☐ No ☑

RECEIVED NOV 13 1961 STATE ENGINEER'S OFFICE

## (12) WELL TESTS:
Drawdown is the distance in feet the water level is lowered below static level.
Was a pump test made? Yes ☐ No ☑ If so, by whom?
Yield: gal./min. with feet drawdown after hours
" " " " " "
" " " " " "
Bailer test gal./min. with feet drawdown after hours
Artesian flow 400 g.p.m. Date OCT 16-61
Temperature of water Was a chemical analysis made? No ☐ Yes ☐

## (13) WELL LOG:
Diameter of well 8" inches
Depth drilled feet. Depth of completed well 368 feet.

NOTE: Place an "X" in the space or combination of spaces needed to designate the material or combination of materials encountered in each depth interval. Under REMARKS make any desirable notes as to occurrence of water and the color, size, nature, etc., of material encountered in each depth interval. Use additional sheet if needed.

| DEPTH From | DEPTH To | Clay | Silt | Sand | Gravel | Cobbles | Boulders | Hardpan | Conglomerate | Bedrock | Other | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 4 | | | | | | | | | | | TOP SOIL |
| 4 | 21 | X | | | | | | | | | | TAN |
| 21 | 52 | | | X | X | | | | | | | TAN |
| 52 | 82 | X | | | | | | | | | | BLUE |
| 82 | 133 | | | X | X | | | | | | | |
| 133 | 140 | X | | | | | | | | | | TAN |
| 140 | 157 | | | | X | | | | | | | |
| 157 | 169 | X | | | | | | | | | | TAN |
| 169 | 213 | | | | X | | | | | | | |
| 213 | 239 | X | | | | | | | | | | TAN |
| 239 | 253 | | | X | X | | | | | | | |
| 253 | 310 | X | | X | | | | | | | | BLUE |
| 310 | 368 | | | X | X | | | | | | | |

Work started SEPT 14, 1961 Completed OCT 16, 1961

## (14) PUMP:
Manufacturer's Name
Type: H. P.
Depth to pump or bowles feet

### Well Driller's Statement:
This well was drilled under my supervision, and this report is true to the best of my knowledge and belief.
Name ELDON COMER (Person, firm, or corporation) (Type or print)
Address LEHI UTAH
(Signed) Eldon Comer (Well Driller)
License No. 5 Date NOV 11, 1961

USE OTHER SIDE FOR ADDITIONAL REMARKS

Listed on well record
Listed
Copied 8-19-36 LL
1-28-38 MP
9-15-38 WB
12-26-39 MP
Assigned 2-19-37 EED
2-19-37 EED, MA
Engr. on well
Engr. set BM
Well No.

PAGE ........ (Leave Blank)

WIN 439155

Claim No. 8303
Filed Mar. 19, 1936
Rec. By Counter
Rec. $2.50 Fee R.W.

55-2505

# Underground Water Claim

## STATE OF UTAH

Assigned to the State of Utah 2/3/38

(Separate claim shall be filed for each well, tunnel or drain)

Same as C# 2962

**GENERAL INFORMATION:** Page 233 Book 24

Claim to underground water by right of use, prior to March 22, 1935, is hereby made and filed with the State Engineer, together with a filing fee of $2.50, and submitted in accordance with Sections 100-5-12 and 100-2-14, Revised Statutes of Utah, 1933, as amended by Session Laws of 1935.

1. Name and address of claimant State of Utah ~~UTAH EMERGENCY RELIEF~~ ADMINISTRATION, Capitol Bldg.
2. Name, ~~if any~~, of well, ~~tunnel, drain, etc.~~ from which water is claimed Proj. #174 Well #13 (Strike words not needed)
3. Amount of water claimed in ~~sec. ft.~~ ~~or~~ g. p. m. 80 ; ~~or ac. ft.~~ (Strike words not needed)
4. Water is used each year from April 1 (Month) (Day) to Oct. 31 (Month) (Day)
5. Source of supply is in Utah County; U L & J R (Leave Blank) Drainage Area; ........ (Leave Blank) Artesian Basin
6. Water is supplied from flowing well, ~~pump well, tunnel, drain or~~ (Strike words not needed) and is diverted at a point ~~12 ch. N. & 36 ch. W. of S.E. cor. sec. 24, T5S., R1E., S. L. B. & M.~~ N. ~~659~~ 660 ft. and E. ~~2948~~ 2949 ft. from sec. cor. cont. to Sec's 23-24-25-26- T.5S. R.1E. S.L.B.&M. (Describe by course and distance with reference to a U. S. Govt. Survey Corner)

**DETAILS OF COLLECTING WORKS:**

7. **WELL:** It is drilled, ~~dug~~, flowing, ~~or pump well~~. Temperature of water ........ ° F. (Strike words not needed)
   - (a) Elev. ground surface at well 4558.40 (Ft. above sea level); total depth 302 (Ft. below ground surface); size 4"
   - (b) Pressure lbs. per sq. inch at ground surface if flowing well ........ (When first drilled); ........ (At this date)
   - (c) Depth to water bearing stratum Omitted on log (If more than one stratum, give depth to each)
   - (d) Depth to water from ground surface if pump well ~~--------~~ (When first drilled); ~~--------~~ (At this date)
   - (e) Well, if flowing, is controlled by ~~cap~~, valve, ~~or by~~ (Strike words not needed)
   - (f) If pump well, give depth from ground surface to water surface before pumping ~~--------~~; during pumping ~~--------~~; h. p. of engine or motor ~~--------~~ (Strike words not needed); size and kind of pump ~~--------~~
   - (g) Size and kind of casing 265' of 4" threaded steel casing (If only partially cased, give details)
   - (h) If casing is perforated, give depth from ground surface to perforations Not perforated
   - (i) Log of well Sheet attached

8. **TUNNEL:** It is timbered, tiled, piped, open, bulkheaded, caved or ........ (Strike words not needed)
   - (a) Dimensions ........; total length ........ Temperature of water ........ ° F.
   - (b) Position of water bearing stratum or strata with reference to mouth of tunnel ........
   - (c) Log of tunnel ........

9. **DRAIN:** It is open, covered, tiled or ........ (Strike words not needed)
   - (a) Size ........; total length of drain above point of diversion ........
   - Character of sub-soil ........

NOTE—g. p. m. refers to gallons per minute.

(Over)

WIN 439155

**HISTORY OF DEVELOPMENT:**

10. Give date when development work was first begun June 1, 1934; when work was completed June 14, 1934 when water was first used June 1934 (Give month and year)

11. Maximum quantity of water diverted in ~~sec. ft.~~ or g. p. m. 80 Date 1934 (Strike words not needed)

12. Minimum quantity of water diverted in sec. ft. ..... or g. p. m. ..... Date ..... (Strike words not needed)

13. Quantity of water diverted as of this date in ~~sec. ft.~~ or g. p. m. 80 (Strike words not needed)

**USE OF WATER:**

14. Water is used for irrigation, ~~stock watering, domestic, municipal, mining or~~ (Strike words not needed)

15. Place of use Russel Thompson property (If for irrigation, give legal subdivisions)

16. Acres of land irrigated first year ..... ; acres irrigated each year thereafter with dates

..... ; acres irrigated as of this date .....

17. If used during non-irrigation season, give amount in ~~sec. ft.~~ or ~~g. p. m.~~ (Strike words not needed)

and nature of use .....

18. If used for stock watering, give number and kind of stock watered .....

19. If used for domestic purposes, give place of use ..... ; number of persons supplied ..... ; acres of gardens, lawns, etc. irrigated .....

20. If for municipal use, give name of city or town ..... ; (Population Served)

21. If for mining purposes, name mining district ..... ; name of mine ..... ; kind of ore or mineral mined ..... ; particular purpose for which water is used .....

22. **GENERAL REMARKS:** (Describe below in detail, the nature and extent of any use not listed, or give other explanatory information not heretofore covered. Use additional sheets if necessary.)

Detail Description of Bench Mark on Well Uppermost point of bead on Ell

Sea level elevation of bench mark 4558.49

**#13 of 27 wells drilled under Lower American Fork Artesian Project.**

STATE OF UTAH,
COUNTY OF Salt Lake } ss.

I, H. C. Jessen being first duly sworn, do hereby certify that I am the ~~person, or the~~ Chief Engineer of Utah Emergency Relief Administration, ~~who, or which~~, claims a right to the use of underground water as set forth in the foregoing statement of facts, that I have read said statement and each and all of the items therein contained are true to the best of my knowledge and belief.

H. C. Jessen
Signature of Claimant

Subscribed and sworn to before me this 18th day of March, A. D. 193 6.

(SEAL)

My Commission Expires:
27th June, 1939

M. M. Best
Notary Public

WIN 439155

FORM NO. 35

STATE OF UTAH
OFFICE OF STATE ENGINEER
WELL RECORD SHEET

Claim ~~xx~~ 2962
~~Application~~ No. 8303
Assigned to the State of Utah

Owner Utah Emergency Relief Administratio

Use Claimed Irrigation

Well No. (D-5-1)24dcc-1 B.M. Elev. 4558.49 B.M. Description Uppermost point of bead on ell.

Note***Elevations are mean sea level in feet; Hydrostatic water level from B.M. unless otherwise stated. *Plus (+) indicates above BM.;Minus(-) indicates below B.M.

RECORD

| Date & Time | Yield G.P.M. | *Hydro-static water level | *Piezo-metric elev. | TEM. °F | Use | Remarks | Observer |
|---|---|---|---|---|---|---|---|
| 8/25/37 | 100 | +24.6 | 4583.09 | 52 | Irrigation Stockwatering | | William H. Roberts |
| 6-15-38 | | +31.0 | 4589.49 | | | Bead on 4" ell on vert. casing | L. Manger |
| 7-22-38 | 94.6 | | | | I 27.8 ac. ft | Waste 57.8 ac. ft | |
| 8-12-38 | 103.2 | | | | | controlled by wooden plug | " " |
| 9-15-38 | 107.2 | | | | | | " " |
| | | | | | | | " " |
| 1-10-39 | | | | | | controlled by valve | Roberts |
| 3-11-39 | | +30.0 | 4588.49 | | | Bead on 4" ell | " |
| 4-24-39 | 86. | | | | I 69. ac ft | controlled by valve | " |
| 6-13-39 | 92 | | | | | | " |
| 9-14-39 | 87.5 | | | | | | " |
| 12-19-39 | | | | | | controlled by valve | J. M. Jr. |
| 3-7-40 | 62. | 26.6 | 4585.09 | | | Found closed. | J M Jr |
| 5-14-40 | 62.4 | 23.9 | 4582.39 | | | " " | " " |
| 8-12-40 | 76. | | | | | Found flowing well water supp by Stream | " " |
| 9-6-40 | 78.8 | 22.0 | 4558.49 | | | Valve control | " " |
| 10-1-40 | 76. | | | | I 40. ac ft Rec | Found flowing | " " |
| 3-19-41 | 66. | 25.2 | 4583.69 | | flow from 1¼" spring | Found closed. | " " |

-Over-

# WELL ABANDONMENT REPORT
## State of Utah
## Division of Water Rights

WIN 439155

**Well Identification**

Water Right: 55-2505 WIN: 439155

**Owner** *Note any changes*

State of Utah Board of Water Resources
1594 West North Temple, Ste 310
Salt Lake City UT 84114-6201

Contact Person/Engineer: Field stone homes / Andy Hamm

**Well Location** *Note any changes*

N 660 E 2849 from the SW corner of section 24, Township 5S, Range 1E, SL B&M

Location Description: (address, proximity to buildings, landmarks, ground elevation,local well #)

**Existing Well Details**

Is a Well Driller's Report Available? ☒ Yes ☐ No

Well Depth 302' feet Well Diameter 4" inches

Nature of Use: ☒ Dom. ☐ Irr. ☐ Stock ☐ Industrial ☐ Commercial ☐ Municipal ☐ Monitor ☐ Other

Casing Type: ☑ Steel ☐ Stainless Steel ☐ PVC ☐ Fiberglass ☐ ABS ☐ SR ☐ Other

Openings: ☐ Screen ☐ Perforations ☐ Open Pipe Screen/Perforation Interval

Filter Pack? ☐ Yes ☐ No Depth of Surface Seal feet

Static Water Level 20' feet Flowing Well? ☐ Yes ☒ No

Other Details (if known)

**Abandonment Details**

Date of Abandonment 11/25/15

Reason for Abandonment Development

Method of Abandonment (Include a description of the seal placement and procedures, amount of casing/screen removed, pump/piping removal, termination of casing at the surface, problems encountered, and other pertinent information).

ran 1" tremie 200' pressure pumped well, full of neat cement

| DEPTH (feet) | | ABANDONMENT MATERIAL DETAILS | | |
|---|---|---|---|---|
| FROM | TO | ABANDONMENT MATERIAL USED | **Quantity** of Material Used (e.g., cubic yards, lbs) | GROUT DENSITY (lbs./gal., # bag mix, gal./sack etc.) |
| 0 | 200 | neat cement | 66 Bags | 70 lbs 4 gals water |

RECEIVED
JAN 04 2016 JH
WATER RIGHTS
SALT LAKE

Location of a new well (if present) is — ft north/south and — ft east/west from the abandoned well.

**Well Driller Statement** This well was abandoned under my supervision, according to applicable rules and regulations, and this report is complete and correct to the best of my knowledge and belief.

Name ZIMMERMAN, MIKE WELL SERVICE (Person, Firm, or Corporation - Print or Type) License No. 527

Signature Mike Zimmerman (Licensed Well Driller) Date 12-27-15

**Abandonment**

sted on well record
sted by counties
opied P.C. 12-19-42
xam. & Recorded M.S.Y. 11-25-42
xam. for filing JAW 1-8-43
inal Copy checked M.V. 1-11-43
latted & No. Assigned
ndexed M.V. 1-11-43
Engr. tied well
Engr. set BM
Well No.

PAGE (Leave Blank)

Report No. 2782 WUN 444032
Filed 11/27/42, 193
Rec. By Conrad Maag
Rec. $1.00 Fee

# Report of Well and Tunnel Driller
## STATE OF UTAH

(Separate report shall be filed for each well or tunnel)

**GENERAL INFORMATION:**

Report of well or tunnel driller is hereby made and filed with the State Engineer, together with a filing fee of $1.00, submitted in accordance with Sections 100-3-22 and 100-2-14, Revised Statutes of Utah 1933, as amended by Session Laws of 1935. (This report shall be filed with the State Engineer within 30 days after the completion or abandonment of well or tunnel. Failure to file such report constitutes a misdemeanor.)

1. Name and address of person, ~~company or corporation~~ (Strike words not needed) boring or drilling well ~~or tunnel~~

Conrad Maag, Provo, Utah

2. Name and address of owner of well ~~or tunnel~~ (Strike words not needed) Elbert K. Vest, American Fork, Utah

3. Source of supply is in Utah County; (Leave blank) drainage area; (Leave blank) artesian basin

4. The number of approved application to appropriate water is 14716

5. Location of well ~~or mouth of tunnel~~ is situated at a point N. 508 ft. & E. 4720 ft. from Sec. Cor. common to Secs. 23, 24, 25 & 26, T. 5 S., R. 1 E. (SW Cor. sec. 24) S.L.B.&M. (Describe by course and distance with reference to U. S. Government Survey Corner — copy description from well owners' approved application)

6. Date on which work on well ~~or tunnel~~ (Strike words not needed) was begun May 28, 1942

7. Date on which work on well ~~or tunnel~~ (Strike words not needed) was completed ~~or abandoned~~ September 30, 1942

8. Maximum quantity of water flowing, ~~pumped or dipped~~ (Strike words not needed) on completion of well ~~or tunnel~~ in sec. ft.; or in gals. per minute 110; Date September 30, 1942

**DETAIL OF COLLECTING WORKS:**

9. **WELL:** It is a ~~drilled, dug~~, flowing ~~or pump~~ (Strike words not needed) well. Temperature of water 57 ° F.

(a) Total depth of well is 320 ft. below ground surface.

(b) Pressure in ~~lbs. per sq. inch~~ (hydrostatic head) at ground surface if flowing well 30 ft.

(c) If pump well, give depth from ground surface to water surface before pumping ; during pumping

(d) Size and kind of casing 3-in. to 220 ft. & 2-in. to 320 ft. (If only partially cased, give details)

(e) Depth to water bearing stratum 220 ft. (If more than one stratum, give depth to each)

(f) If casing is perforated, give depth from ground surface to perforations

(g) Log of well 0 to 10 soil, 10 to 40 blue clay, 40 to 60 blue sand, 60 to 80 clay, 80 to 100 pea gravel, 100 to 220 gravel and water, 220 to 275 gravel, 275 to 300 clay, 300 to 320 gravel and water 320 is final depth of well.

(h) Well was equipped with ~~cap~~, valve, ~~or~~ (Strike words not needed) to control flow.

(Over) (See General Remarks)

10. **TUNNEL:** It is timbered, tibed, piped, open, bulkheaded, covered or.....
(Strike words not needed)

(a) Dimensions.....; total length.....; temperature of water.....° F.

(b) Position of water bearing stratum or strata with reference to mouth of tunnel.....

.....

.....

(c) Log of tunnel .....

.....

.....

.....

11. **GENERAL REMARKS:** (Note any general or detail information not covered above)

The well was drilled to a depth of 220 ft. with 3-in. casing. At this depth a hard pan was encountered and was not able to go further with 3-in. casing. The well was then telescoped with 2-in. casing and reached the final depth of 320 ft. At a depth of 220 ft., I obtained a flow of 50 g.p.m. From a depth of 320 ft. I got a flow of 50 g.p.m. The flow coming from the 220 ft. depth has a 12 foot static head and the flow from 320 has a static head of 30 ft.

STATE OF UTAH,
COUNTY OF Utah } ss.

I, Conrad Maag, being first duly sworn, do hereby certify that I am the driller of the aforesaid well or tunnel who furnished the foregoing statement of facts; that I have read said statement and each and all of the items therein contained are true to the best of my knowledge and belief.

Conrad Maag
Driller

Subscribed and sworn to before me this 22nd day of November, 1942.

George H. Soderborg
Notary Public

(SEAL)

My Commission Expires:
November 8, 1946

WIN 444032

# WELL ABANDONMENT REPORT
## State of Utah
## Division of Water Rights

**Well Identification**

Water Right: 55-180 WIN: 444032

**Owner** *Note any changes*

DLF Vest, LLC
7277 North 4850 West
American Fork, UT 84003

Contact Person/Engineer: Steve Young / Millenial Development

**Well Location** *Note any changes*

N 508 E 4720 from the SW corner of section 24, Township 5S, Range 1E, SL B&M

Location Description: (address, proximity to buildings, landmarks, ground elevation,local well #)

**Existing Well Details**

Is a Well Driller's Report Available? ☑ Yes ☐ No
Well Depth 320 feet Well Diameter 3" & 2" inches
Nature of Use: ☐ Dom. ☒ Irr. ☒ Stock ☐ Industrial ☐ Commercial ☐ Municipal ☐ Monitor ☐ Other
Casing Type: ☐ Steel ☐ Stainless Steel ☐ PVC ☐ Fiberglass ☐ ABS ☐ SR ☐ Other
Openings: ☐ Screen ☐ Perforations ☒ Open Pipe Screen/Perforation Interval
Filter Pack? ☐ Yes ☒ No Depth of Surface Seal feet
Static Water Level 10 feet Flowing Well? ☐ Yes ☑ No
Other Details (if known) Well was cased TO 220' with 3" 320' with 2"

**Abandonment Details**

Date of Abandonment 6 - 10 - 2020
Reason for Abandonment New development construction

Method of Abandonment (Include a description of the seal placement and procedures, amount of casing/screen removed, pump/piping removal, termination of casing at the surface, problems encountered, and other pertinent information).

Pressure grouted Thru 2" pull A plug ON 3" Tee Pumped until cement return OUT of 3" Replug and Repressured 2" until Refusal 350 psi

| DEPTH (feet) | | ABANDONMENT MATERIAL DETAILS | | |
|---|---|---|---|---|
| FROM | TO | ABANDONMENT MATERIAL USED | **Quantity** of Material Used (e.g., cubic yards, lbs) | GROUT DENSITY (lbs./gal., # bag mix, gal./sack etc.) |
| 0 | 320 | portland cement Neat | 19 - 47lb Bags of portland Cement | 1 - 10 Bag mix<br>1 - 9 Bag mix<br>3 gallons of water per Bag of cement |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

RECEIVED
JUN 19 2020 TL
WATER RIGHTS SALT LAKE

Location of a new well (if present) is _____ ft north/south and _____ ft east/west from the abandoned well.

**Well Driller Statement** This well was abandoned under my supervision, according to applicable rules and regulations, and this report is complete and correct to the best of my knowledge and belief.

Name ZIMMERMAN, MIKE WELL SERVICE (Person, Firm, or Corporation - Print or Type) License No. 727 SCANNED LP

Signature John M. Z (Licensed Well Driller) Date 6 - 15 - 2020

Abandonment

**ATTACHMENT E**

**LETTER FROM USACOE TO HADCO DATED AUGUST 21, 2021**

**DEPARTMENT OF THE ARMY**
**U.S. ARMY CORPS OF ENGINEERS, SACRAMENTO DISTRICT**
**1325 J STREET**
**SACRAMENTO CA 95814-2922**

August 18, 2021

Regulatory Division (SPK-2017-00549)

HADCO Construction Company
Attn: Mr. Tyson Williamson
1450 West 1850 North
Lehi, Utah 84043
tyson@thewillgroup.us

Dear Mr. Williamson:

We are responding to your request for an approved jurisdictional determination for the HADCO Quality Drive site. The approximately 4.3-acre project site is located at approximately 738 East 700 South, Latitude 40.3612°, Longitude -111.7784°, American Fork, Utah County, Utah (enclosure 1).

Based on available information, we concur with your aquatic resources delineation for the site as depicted on the enclosed "HADCO Construction, Waters of the U.S. Survey" drawing, dated May 31, 2021, prepared by Focus Engineering and Surveying, LLC (enclosure 2). Approximately 0.47-acre of pond are present within the survey area. This letter verifies that the location and boundaries of aquatic resources were delineated consistent with the wetland definition at 33 CFR §328.3(c)(16), the 1987 Corps of Engineers Wetlands Delineation Manual (Wetlands Research Program Technical Report Y-87-1) and the applicable regional supplements; the location and boundaries of non-tidal waters conform with the ordinary high water mark definition at 33 CFR §328.3(c)(7), Regulatory Guidance Letter 05-05, and any applicable regional guide.

Of these aquatic resources, we have determined that the feature labeled as "Pond" totaling 0.47-acres is not a water of the United States regulated under Section 404 of the Clean Water Act or under Section 10 of the Rivers and Harbors Act.

We are enclosing a copy of the "Approved Jurisdictional Determination Form" for your site (enclosure 3).

This approved jurisdictional determination is valid for five years from the date of this letter unless new information warrants revision of the determination before the expiration date. If you object to this determination, you may request an administrative appeal under Corps regulations at 33 Code of Federal Regulations (CFR) Part 331. A "Notification of Appeal Process (NAP) and Request for Appeal (RFA) Form" is enclosed (enclosure 4).

If you request to appeal this determination, you must submit a completed RFA form to the South Pacific Division Office at the following address: Administrative Appeal Review Officer, Army Corps of Engineers, South Pacific Division, CESPD-PDO, 1455 Market Street, 2052B, San Francisco, California 94103-1399, Telephone: 415-503-6574, FAX: 415-503-6646.

In order for an RFA to be accepted by the Corps, we must determine that the form is complete, that it meets the criteria for appeal under 33 CFR Part 331.5, and that the form was received by the Division Office within 60 days of the date of the NAP. It is not necessary to submit an RFA form to the Division Office unless you object to the determination in this letter.

We recommend that you provide a copy of this letter and notice to all other affected parties, including any individual who has an identifiable and substantial legal interest in the property.

The delineation included herein has been conducted to identify the location and extent of the aquatic resource boundaries and/or the jurisdictional status of aquatic resources for purposes of the Clean Water Act for the particular site identified in this request. This delineation and/or jurisdictional determination may not be valid for the Wetland Conservation Provisions of the Food Security Act of 1985, as amended. If you or your tenant are USDA program participants, or anticipate participation in USDA programs, you should discuss the applicability of a certified wetland determination with the local USDA service center, prior to starting work.

We appreciate feedback, especially about interaction with our staff and our processes.

Please refer to identification number SPK-2017-00549-UO in any correspondence concerning this project. If you have any questions, please contact Hollis Jencks at the Bountiful Regulatory Office, 533 West 2600 South, Suite 150, Bountiful, Utah 84010, by email at Hollis.G.Jencks@usace.army.mil, or telephone at (801) 295-8380 ext. 8318. For program information or to complete our Customer Survey, visit our website at www.spk.usace.army.mil/Missions/Regulatory.aspx.

Sincerely,

Nicole Fresard
Senior Project Manager
NV/UT Section

Enclosures

cc: Dennis Wenger, Frontier Corporation USA, dwenger@frontiercorp.net

U.S. ARMY CORPS OF ENGINEERS
REGULATORY PROGRAM
APPROVED JURISDICTIONAL DETERMINATION FORM (INTERIM)
NAVIGABLE WATERS PROTECTION RULE

## I. ADMINISTRATIVE INFORMATION

Completion Date of Approved Jurisdictional Determination (AJD): August 18, 2021
ORM Number: SPK-2017-00549
Associated JDs: SPK-2017-00549 Preliminary JD issued for same water on July 12, 2020.
Review Area Location[1]:
State/Territory: UT City: American Fork County/Parish/Borough: Utah County
Center Coordinates of Review Area: Latitude 40.3612° Longitude -111.7784°

## II. FINDINGS

**A. Summary:** Check all that apply. At least one box from the following list MUST be selected. Complete the corresponding sections/tables and summarize data sources.

- ☐ The review area is comprised entirely of dry land (i.e., there are no waters or water features, including wetlands, of any kind in the entire review area). Rationale: N/A or describe rationale.
- ☐ There are "navigable waters of the United States" within Rivers and Harbors Act jurisdiction within the review area (complete table in section II.B).
- ☐ There are "waters of the United States" within Clean Water Act jurisdiction within the review area (complete appropriate tables in section II.C).
- ☒ There are waters or water features excluded from Clean Water Act jurisdiction within the review area (complete table in section II.D).

### B. Rivers and Harbors Act of 1899 Section 10 (§ 10)[2]

| § 10 Name | § 10 Size | § 10 Criteria | Rationale for § 10 Determination |
|---|---|---|---|
| N/A | N/A | N/A | N/A |

### C. Clean Water Act Section 404

Territorial Seas and Traditional Navigable Waters ((a)(1) waters)[3]

| (a)(1) Name | (a)(1) Size | (a)(1) Criteria | Rationale for (a)(1) Determination |
|---|---|---|---|
| N/A | N/A | N/A | N/A |

Tributaries ((a)(2) waters):

| (a)(2) Name | (a)(2) Size | (a)(2) Criteria | Rationale for (a)(2) Determination |
|---|---|---|---|
| N/A | N/A | N/A | N/A |

Lakes and ponds, and impoundments of jurisdictional waters ((a)(3) waters):

| (a)(3) Name | (a)(3) Size | (a)(3) Criteria | Rationale for (a)(3) Determination |
|---|---|---|---|
| N/A | N/A | N/A | N/A |

Adjacent wetlands ((a)(4) waters):

| (a)(4) Name | (a)(4) Size | (a)(4) Criteria | Rationale for (a)(4) Determination |
|---|---|---|---|
| N/A | N/A | N/A | N/A |

[1] Map(s)/Figure(s) are attached to the AJD provided to the requestor.
[2] If the navigable water is not subject to the ebb and flow of the tide or included on the District's list of Rivers and Harbors Act Section 10 navigable waters list, do NOT use this document to make the determination. The District must continue to follow the procedure outlined in 33 CFR part 329.14 to make a Rivers and Harbors Act Section 10 navigability determination.
[3] A stand-alone TNW determination is completed independently of a request for an AJD. A stand-alone TNW determination is conducted for a specific segment of river or stream or other type of waterbody, such as a lake, where independent upstream or downstream limits or lake borders are established. A stand-alone TNW determination should be completed following applicable guidance and should NOT be documented on the AJD form.
[4] Some excluded waters, such as (b)(2) and (b)(4), may not be specifically identified on the AJD form unless a requestor specifically asks a Corps district to do so. Corps Districts may, in case-by-case instances, choose to identify some or all of these waters within the review area.
[5] Because of the broad nature of the (b)(1) exclusion and in an effort to collect data on specific types of waters that would be covered by the (b)(1) exclusion, four sub-categories of (b)(1) exclusions were administratively created for the purposes of the AJD Form. These four sub-categories are not new exclusions but are simply administrative distinctions and remain (b)(1) exclusions as defined by the NWPR.

## D. Excluded Waters or Features

Excluded waters ((b)(1) – (b)(12))[4]:

| Exclusion Name | Exclusion Size | Exclusion[5] | Rationale for Exclusion Determination |
|---|---|---|---|
| 201700549-Pond | 0.47 acres | (b)(8) Artificial lake/pond constructed or excavated in upland or a non-jurisdictional water, so long as the artificial lake or pond is not an impoundment of a jurisdictional water that meets (c)(6) | The pond within the review area was constructed between 1958 and 1965. This pond is fed by an artesian well that was constructed prior to the pond. The pond was not constructed within a wetland or is an impounded tributary. The pond flows to the east and south from the site and terminates at East Utah Valley Drive. This was confirmed in a jurisdictional determination for North Valley Investment Group (SPK-2006-50195) for a 3.2-acre site located directly north of East Valley Drive. No culvert was identified under this road which would connect these waters with a downstream tributary. Therefore, this pond is a (b)(8) water that is excluded from Section 404 of the Clean Water Act. |

## III. SUPPORTING INFORMATION

**A. Select/enter all resources** that were used to aid in this determination and attach data/maps to this document and/or references/citations in the administrative record, as appropriate.

_X_ Information submitted by, or on behalf of, the applicant/consultant: HADCO Quality Drive Property, Wetland Delineation Technical Report, June 2017.
This information is sufficient for purposes of this AJD.
Rationale: N/A.

___ Data sheets prepared by the Corps:

_X_ Photographs: Aerial: GoogleEarth 7.3.3.7692. (1993 August 13, 1997 September 11, 2005 July 11, 2010 June 17, 2011 October 20, 2013 June 4, 2015 June 16, 2017 June 17, 2019 July 18, 2020 May 31). American Fork, Utah. 40.3612° latitude, -111.7784° longitude, eye alt 4543 ft. Retrieved November 3, 2020, from *http://www.earth.google.com;* Historic Aerials by NETRonline. Aerials. 1958, 1965, 1972, 1983, 1993, 1997, 2011, and 2016. Retrieved November 3, 2020 from *https://www.historicaerials.com/viewer.*

___ Corps Site visit(s) conducted on:

_X_ Previous Jurisdictional Determinations (AJDs or PJDs): SPK-2017-00549 Preliminary JD issued for same water on July 12, 2020.

___ Antecedent Precipitation Tool: N/A.

___ USDA NRCS Soil Survey: N/A.

___ USFWS NWI maps: N/A.

___ USGS topographic maps: N/A.

### Other data sources used to aid in this determination:

| Data Source (select) | Name and/or date and other relevant information |
|---|---|

[1] Map(s)/Figure(s) are attached to the AJD provided to the requestor.
[2] If the navigable water is not subject to the ebb and flow of the tide or included on the District's list of Rivers and Harbors Act Section 10 navigable waters list, do NOT use this document to make the determination. The District must continue to follow the procedure outlined in 33 CFR part 329.14 to make a Rivers and Harbors Act Section 10 navigability determination.
[3] A stand-alone TNW determination is completed independently of a request for an AJD. A stand-alone TNW determination is conducted for a specific segment of river or stream or other type of waterbody, such as a lake, where independent upstream or downstream limits or lake borders are established. A stand-alone TNW determination should be completed following applicable guidance and should NOT be documented on the AJD form.
[4] Some excluded waters, such as (b)(2) and (b)(4), may not be specifically identified on the AJD form unless a requestor specifically asks a Corps district to do so. Corps Districts may, in case-by-case instances, choose to identify some or all of these waters within the review area.
[5] Because of the broad nature of the (b)(1) exclusion and in an effort to collect data on specific types of waters that would be covered by the (b)(1) exclusion, four sub-categories of (b)(1) exclusions were administratively created for the purposes of the AJD Form. These four sub-categories are not new exclusions but are simply administrative distinctions and remain (b)(1) exclusions as defined by the NWPR.

| | |
|---|---|
| USGS Sources | N/A. |
| USDA Sources | N/A. |
| NOAA Sources | N/A. |
| USACE Sources | N/A. |
| State/Local/Tribal Sources | N/A. |
| Other Sources | N/A. |

**B. Typical year assessment(s):** N/A.

**C. Additional comments to support AJD:** N/A.

[1] Map(s)/Figure(s) are attached to the AJD provided to the requestor.
[2] If the navigable water is not subject to the ebb and flow of the tide or included on the District's list of Rivers and Harbors Act Section 10 navigable waters list, do NOT use this document to make the determination. The District must continue to follow the procedure outlined in 33 CFR part 329.14 to make a Rivers and Harbors Act Section 10 navigability determination.
[3] A stand-alone TNW determination is completed independently of a request for an AJD. A stand-alone TNW determination is conducted for a specific segment of river or stream or other type of waterbody, such as a lake, where independent upstream or downstream limits or lake borders are established. A stand-alone TNW determination should be completed following applicable guidance and should NOT be documented on the AJD form.
[4] Some excluded waters, such as (b)(2) and (b)(4), may not be specifically identified on the AJD form unless a requestor specifically asks a Corps district to do so. Corps Districts may, in case-by-case instances, choose to identify some or all of these waters within the review area.
[5] Because of the broad nature of the (b)(1) exclusion and in an effort to collect data on specific types of waters that would be covered by the (b)(1) exclusion, four sub-categories of (b)(1) exclusions were administratively created for the purposes of the AJD Form. These four sub-categories are not new exclusions but are simply administrative distinctions and remain (b)(1) exclusions as defined by the NWPR.

**NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL**

| Applicant: HADCO Construction Company, Attn: Mr. Tyson Williamson | File No.: SPK-2017-00549 | Date: August 18, 2021 |
|---|---|---|

| Attached is: | | See Section below |
|---|---|---|
| | INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission) | A |
| | PROFFERED PERMIT (Standard Permit or Letter of permission) | B |
| | PERMIT DENIAL | C |
| → | APPROVED JURISDICTIONAL DETERMINATION | D |
| | PRELIMINARY JURISDICTIONAL DETERMINATION | E |

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at *http://www.usace.army.mil/cecw/pages/reg_materials.aspx* or Corps regulations at 33 CFR Part 331.

A: INITIAL PROFFERED PERMIT: You may accept or object to the permit.

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- OBJECT: If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

B: PROFFERED PERMIT: You may accept or appeal the permit.

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- APPEAL: If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer (address on reverse). This form must be received by the division engineer within 60 days of the date of this notice.

C: PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer (address on reverse). This form must be received by the division engineer within 60 days of the date of this notice.

D: APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information.

- ACCEPT: You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.
- APPEAL: If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer (address on reverse). This form must be received by the division engineer within 60 days of the date of this notice.

E: PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also, you may provide new information for further consideration by the Corps to reevaluate the JD.

SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT

REASONS FOR APPEAL OR OBJECTIONS: (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

ADDITIONAL INFORMATION: The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

POINT OF CONTACT FOR QUESTIONS OR INFORMATION:

If you have questions regarding this decision and/or the appeal process you may contact:

Hollis Jencks
Project Manager, Utah-Nevada Branch
Regulatory Division
U.S. Army Corps of Engineers
Phone: (801) 295-8380 ext. 8318
Email: Hollis.G.Jencks@usace.army.mil

If you only have questions regarding the appeal process you may also contact:

Thomas J. Cavanaugh
Administrative Appeal Review Officer
U.S. Army Corps of Engineers
South Pacific Division
1455 Market Street, 2052B
San Francisco, California 94103-1399
Phone: 415-503-6574, FAX: 415-503-6646
Email: Thomas.J.Cavanaugh@usace.army.mil

RIGHT OF ENTRY: Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15-day notice of any site investigation and will have the opportunity to participate in all site investigations.

| | Date: | Telephone number: |
|---|---|---|
| _____ Signature of appellant or agent. | | |

SPD version revised December 17, 2010

Enclosure 4

# EXHIBIT G

**(Second IGES Report)**

Intermountain GeoEnvironmental Services, Inc.
12429 South 300 East, Ste 100, Draper, Utah 84020
~ T: (801) 748-4044 ~ F: (801) 748-4045

March 1, 2022

JDH Development, LLC
1450 East 1850 North
Lehi, Utah 84004
Attn: Mr. John Hadfield

IGES Project No. 03023-003

Subject: Response to Review Comment – Pond and Spring Plan
Flex Warehouse
752 East Quality Drive
American Fork, Utah

Submittal: IGES, Inc., 2021, Recommendations for Filling in Existing Pond, 752 East Quality Drive, American Fork, Utah, Project No. 03023-003, dated October 25, 2021.

Mr. Hadfield,

As requested, IGES has prepared the following letter addressing review comments pertaining to the submittal prepared by IGES for the proposed Flex Warehouse to be constructed in American Fork, Utah, referenced above. The referenced submittal pertains to recommendations for filling in the existing pond on the Flex Warehouse property on Quality Drive in American Fork. The review comments were prepared by American Fork City, presented as blue-text mark-ups in a pdf, undated. For ease of review, the review comments are presented first, followed by our response.

**Comment No. 1**

Regarding the last paragraph of the letter (pp. 3-4): "*Typos. If the well is to be preserved, what if maintenance needs to be done on the well, or a deeper well dug. With it being placed within the structure wouldn't that inhibit the ability for maintenance?*"

**Response to Comment No. 1**

We understand that the well will be abandoned; hence, maintenance is not an issue for this project.

**Comment No. 2**

Regarding the attached Figure: "*With the pipes at the higher elevation in order to meet inverts to the outfall, will this be sufficient to actually get the water to the pipes? Will it infiltrate into the sides and into the structural fill distributing the flows instead of it being directed to the pipes?*"

**Response to Comment No. 2**

We understand that the invert of the pipes are approximately two feet higher than previously established, which was necessitated by the recent development on the neighboring property to the east raising the grade of the outflow box. Ultimately, the increase in the elevation of the outflow will not impact the site once the spring is captured and the flow is directed into the outflow box (water currently flows at the current pipe elevation and is expected to continue to flow). Regarding the structural fill, the structural fill will be coarse, granular soils and will be well-drained; therefore, capillary effects drawing water up into the fill placed above the groundwater level (piezometric surface) will not impact the site. Fill placed into the pond will become saturated almost immediately, at which point there will be no impact to the surrounding soils and the main flow of water will follow the path of least resistance into the outflow box to the east.

**Closure**

We appreciate the opportunity to be of service on this project. Should you have any questions regarding this report or wish to discuss additional services, please contact us at your convenience (801) 748-4044.

Respectfully submitted,
**IGES, Inc.**




Kent A. Hartley, P.E.
Principal

Attachments: References (history of past IGES submittals)

Copyright ©2022, IGES, Inc.

## References

IGES, Inc., 2021a, Geotechnical Investigation (Rev. 1), Flex Warehouse, 748 East Quality Drive, American Fork, Utah, Project No. 03638-001, dated August 16, 2021 (update of original report dated April 7, 2021).

IGES, Inc., 2021b, Addendum No. 1 – Seismic Criteria, Geotechnical Investigation, Flex Warehouse, American Fork, Utah, Project No. 03638-001, dated April 27, 2021.

IGES, Inc., 2021c, Response to Review Comments, Flex Warehouse, 748 East Quality Drive, American Fork, Utah, Project No. 03638-002, dated August 13, 2021 (primarily a liquefaction hazard assessment).

IGES, Inc., 2021d, Response to Additional Review Comments, Flex Warehouse, 748 East Quality Drive, American Fork, Utah, Project No. 03638-001, dated October 11, 2021 (update of original report dated April 7, 2021).

Copyright ©2022, IGES, Inc.

# EXHIBIT H

**(SWMP)**

# EXHIBIT A

## Utah County Parcel # 57:077:0001

**Quality Drive Project (AF Industrial Flex) – Exhibit A Legal Description of Property**

All of Lot 1, PLAT "M", UTAH VALLEY BUSINESS PARK, Including a Vacation of Lot 37 and a Portion of Lot 36,
Plat "J", Amended Utah Valley Business Park, according to the official plat thereof, recorded August 14, 2014 as
Entry No. 56927:2014 (Map Filing No. 14337) in the Utah County Recorder's office.

# EXHIBIT B

# Long-Term Stormwater Management Plan

for:

756 E Quality Drive,
American Fork UT 84003

## PURPOSE AND RESPONSIBILTY

As required by the Clean Water Act and resultant local regulations, including the City of American Fork Municipal Separate Storm Sewer Systems (MS4) Permit, those who develop land are required to build and maintain systems to minimize litter and contaminants in stormwater runoff that pollute waters of the State.

This Long-Term Stormwater Management Plan (LTSWMP) describes the systems, operations and the minimum standard operating procedures (SOPs) necessary to manage pollutants originating from or generated on this property. Any activities or site operations at this property that contaminate water entering the City's stormwater system and generate loose litter must be prohibited, unless SOPs are written to manage those activities or operations, and amended into this LTSWMP.

Utah Lake is impaired but do not have a TMDL. The LTSWMP is aimed at addressing these impairments in addition to all other pollutants that can be generated by this property.

### CONTENTS

SECTION 1: SITE DESCRIPTION, USE AND IMPACT
SECTION 2: TRAINING
SECTION 3: RECORDKEEPING
SECTION 4 APPENDICES

# SECTION 1: SITE DESCRIPTION, USE AND IMPACT

The site infrastructure at our site is limited at controlling and containing pollutants and our operations if managed improperly can contaminate the environment. This LTSWMP includes standard operations procedures (SOP)s that are intended to compensate for the pollution containment limitations of our site infrastructure and direct our maintenance operations to responsibly manage our grounds.

American Fork is an automatic truck dealership specializing in Trucks. Accordingly, the site is almost entirely asphalt or concrete. The trucks may occasionally leak oils that can find there way into the storm water system of the city. These leaks are cleaned up using a oil spill kit kept on site.

## Parking, Sidewalk and flatwork

Any sediment, leaves, debris, spilt fluids or other waste that collects on our parking lots and sidewalks will be carried by runoff to our storm drain inlets. This waste material will settle in our storm drain system increasing maintenance cost and solid and dissolved waste in our runoff can pass through our system ultimately polluting Utah lake. Maintenance involves regular sweeping, the clean up of any oil spills via a Spill kit containing dry oil absorbing powder. It can also involve pavement washing to remove stains, slick spots and improve appearance when necessary. Use our Pavement Maintenance and the Pavement Washing SOPs to manage pollutants that collect on our pavements.

## Landscaping

American Fork has minimal landscaping but efforts are made to keep any organic material from entering the storm drain system. Our landscape operations can result in some grass clippings, sticks, branches, dirt, mulch, fertilizers, pesticides and other pollutants to fall or be left on our paved areas. This waste material will settle in our storm drain system increasing maintenance cost and solid and dissolved waste in our runoff can pass through our storm drain system ultimately polluting Utah Lake . The primary pollutant impairing Utah Lake is organic material so it is vital that our paved areas with direct connection to the City storm drain systems remain clean of landscape debris.

Use our Landscape Maintenance SOP to prevent this potential pollution source from affecting Utah Lake.

## Storm Drain System

The storm drain inlets direct all runoff to a detention pond and though a stormwater treatment manhole with oil water separator that is designed to capture floating material and heavier sediment particles, but does not trap suspended or dissolved pollutants. This device is susceptible to bypass and scour during large storm events and the dissolved pollutants will pass through and harm Utah Lake . Also our stormwater treatment system holds water that can breed mosquitoes. It is important to regularly maintain this system

to protect Utah Lake and prevent mosquito breeding. Use our Storm Drain Maintenance SOP manage our storm drain system responsibly.

## Waste Management

Our 6-yard dumpster and trash receptacles with lids are intended to prevent precipitation exposure minimizing liquids that can leak to pavements and from haul trucks. Lids will also prevent the light weight trash carried off by wind. Good waste management systems, if managed improperly, can become the source of the very pollution that they were intended to control. Use our Waste Management SOP to control and manage the solid waste we generate.

## Utility System

Our roof top utility system is exposed to our roof drains which drain to our pavements. This heating and air conditioner unit contains oils and other chemicals that can harm Utah Lake if allowed to drain off our property. Liquids and other waste generated by maintenance of this system can be appropriately managed by our Spill Containment and Cleanup SOP.

## Snow and Ice Removal Management

Salt is a necessary pollutant and is vital to ensuring a safe parking and pedestrian walkways. However, the snow removal operations if improperly managed will increase our salt impact to our own vegetation and local water resources. Use our Snow and Ice Removal SOP to minimize our salt impact.

## SECTION 2: TRAINING

Ensure that all employees and maintenance contractors know and understand the SOPs specifically written to manage and maintain the property. Maintenance contractors must use the stronger of their Company and the LTSWMP SOPs. File all training records in Appendix C.

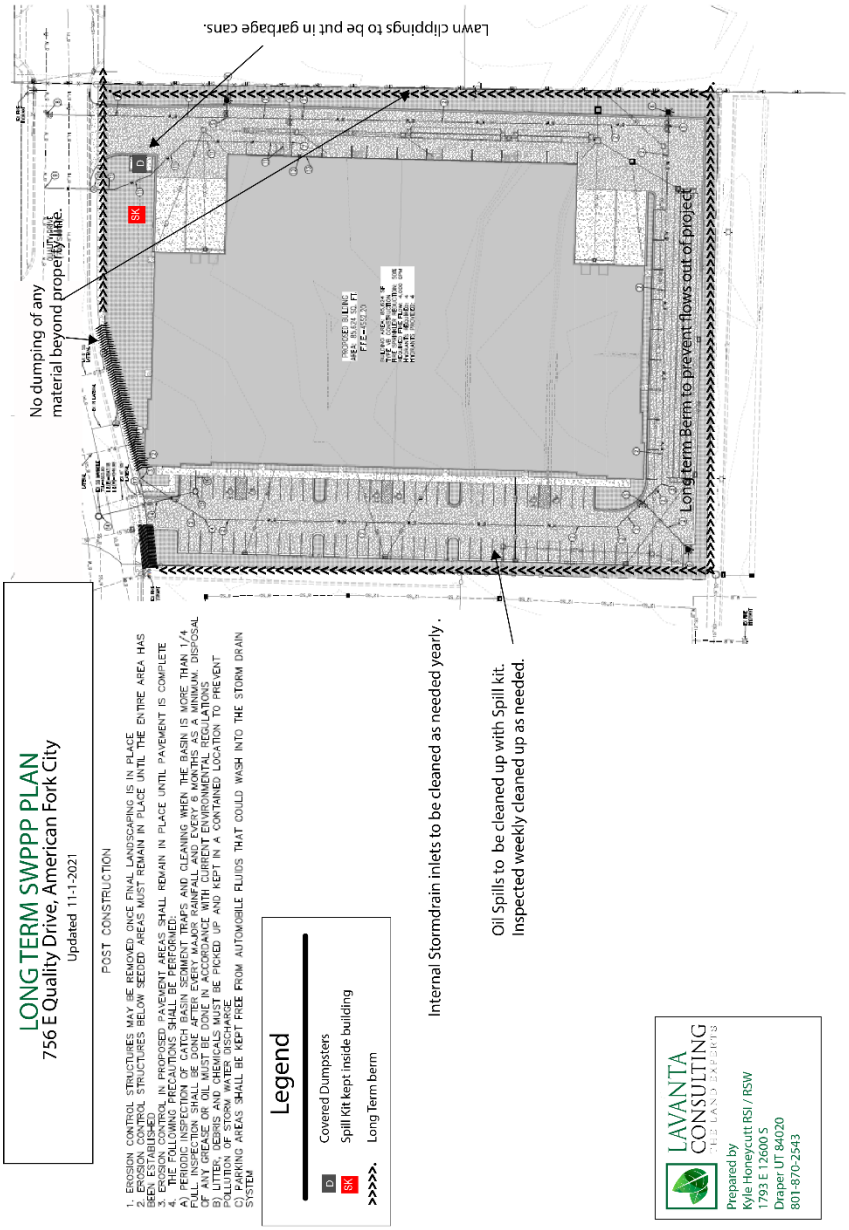
## SECTION 3: RECORDKEEPING

Maintain records of operation and maintenance activities in accordance with SOPs. Mail a copy of the record to AMERICAN FORK CITY Stormwater Division annually.

## SECTION 4: APPENDICES

Appendix A- Site Drawings and Details
Appendix B- SOPs
Appendix C- Recordkeeping Documents

# APPENDIX A – SITE DRAWINGS AND DETAILS




USWAC Long-Term Stormwater Management Plan for 756 E Quality Drive, American Fork UT 84003

# APPENDIX B – SOPs

## Pavement Maintenance Operations

General:
These SOPs are not expected to cover all necessary procedure actions. Operators are allowed to adapt SOPs to unique site conditions in good judgment when it is necessary for safety, and the proper, and effective containment of pollutants. However, any changes of routine operations must be amended in these SOPs.

**1. Purpose and Selection:**

a) Reduce stormwater pollution by sweeping and removing pollutants that will be carried to City stormwater systems during stormwater runoff or by non stormwater runoff.
b) The sweeper is intended for removing material that collect on pavements by use and the natural degradation of pavements, ie. material that collect, drop from vehicles and the natural erosion and breaking up of pavements.

**2. Regular Procedure:**

a) Remain aware of debris and sweep minor debris is needed by hand.
b) Generally sweeping machinery should be used during autumn when leaf fall is heavy and early spring after winter thaw. Sometimes sweeping machinery will be necessary when accumulations are spread over a large area of the pavement.
c) Manage outside activities that leave waste or drain pollutants to our pavements. This involves outside functions including but not limited to: Yard sales, yard storage, fund raisers, etc. Do not allow car wash fund raiser or other activities that allow detergents or other pollutants to be wash into storm drain systems.

**4. Disposal Procedure:**

a) Service contractor dispose at licensed facilities
b) Dispose of hand collected material in dumpster

**5. Training:**

a) Annually and at hire

# Landscape Maintenance Operations

General:
This SOP is not expected to cover all necessary procedure actions. Operators are allowed to adapt SOPs to unique site conditions in good judgment when it is necessary for safety, and the proper, and effective containment of pollutants. However, any changes of routine operations must be amended in this SOP.

**Rule: Prevent any solids, liquids or any light weight material from being carried away from the construction or maintenance envelop by wind or water.**

**1. Application:**

a) This SOP should provide sufficient direction for many of the general landscaping operations, e.g., fertilizer and pesticide applications, mowing, weeding, tree trimming, digging, sprinkler repairs, varying landscape cover management, etc.

**2. Maintenance Procedure:**

a) Grooming
- Lawn Mowing If Any– Immediately following operation sweep or blow clippings onto vegetated ground.
- Fertilizer Operation – Prevent overspray. Sweep or blow fertilizer onto vegetated ground immediately following operation.
- Pesticide Operations – Prevent overspray, use spot treatment, sweep or blow dry pesticide onto vegetated ground immediately following operation.

b) Remove or contain all erodible or loose material prior forecast wind and precipitation events, before any non-stormwater will pass through and over the project site and at end of work period. Light weight debris and landscape materials can require immediately attention when wind expected.

c) Landscape project materials and waste can usually be contained or controlled by operational best management practices.
- Operational; including but not limited to:
  - Strategic staging of materials eliminating exposure, such as not staging on pavement
  - Avoiding multiple day staging of landscaping backfill and spoil on pavements
  - Haul off spoil as generated or daily
  - Scheduling work when weather forecast are clear.

d) Cleanup:
- Use dry cleanup methods, e.g. square nose shovel and broom and it is usually sufficient when no more material can be swept onto the square nosed shovel.
- Power blowing tools

**3. Waste Disposal:**

a) Dispose of waste according to General Waste Management SOP, unless superseded by specific SOPs for the operation.

**4. Equipment:**

a) Tools sufficient for proper containment of pollutants and cleanup.
b) Push broom and square blade shovel should be a minimum.

**5. Training:**

a) Annually and at hire
b) Landscape Service Contractors must have equal or better SOPs.

## Waste Management Operations

General:
This SOP is not expected to cover all necessary procedure actions. Operators are allowed to adapt SOPs to unique site conditions in good judgment when it is necessary for safety, and the proper, and effective containment of pollutants. However, any changes of routine operations must be amended in this SOP.

**1. Application:**

a) This SOP is intended for all Staff, intended for the proper disposal of common everyday waste.

**2. Waste Collection Devices (Exposed units):**

a) The site contains 2 types of waste management containers.
   - 6yd dumpster with lid
   - Receptacles with lids

**3. Waste Disposal Restrictions for all waste Scheduled for the Trans-Jordan Landfill:**

a) Generally most waste generated at this property, and waste from spill and clean up operations can be disposed in our dumpsters under the conditions listed in this SOP. Unless other disposal requirements are specifically identified by the product SDS or otherwise specified in other SOPs.
b) Know the facility disposal requirements and restrictions. It should not be assumed that all waste disposed in collection devices will be disposed at the Utah County Landfill.
c) Review UTAH COUNTY Landfill regulations for additional restrictions and understand what waste is prohibited in the NAME OF LANDFILL. Ensure the SDS and UTAH COUNTY LANDFILL regulations are not contradictory.

Generally the waste prohibited by the UTAH COUNTY LANDFILL is:

- Liquid:
  - paint
  - pesticides/fertilizers
  - oil (all types)
  - antifreeze
  - batteries
  - liquid chemicals
  - etc.

    (Generally, *all the above hazardous waste when involved in minor spill cleanup operations can be disposed in covered dumpsters and our waste bays, if the liquid is contained in absorbent material, e.g. sand, dirt, loose absorbent, pads, booms etc., and transformed or dried such that it will not drip. This is not intended for whole sale disposal of out dated or spent liquid hazardous waste. When disposal of out dated or spent liquid is needed or for questions of how to dispose of other waste, contact the NAME OF HEALTH DEPARTMENT Health Department (ABRIVIATION) for instructions and locations, PHONE NUMBER).*

**4. Waste Disposal Required for UTAH COUNTY LANDFILL or other:**

a) Generally for waste not accepted by the LANDFILL.

b) Follow SDS for disposal requirements. Review UTAH COUNTY LANDFILL regulations for additional restrictions and understand what waste is prohibited in the NAME OF LANDFILL. Ensure the SDS and UTAH COUNTY LANDFILL regulations are not contradictory

General rules are:

- Get approval prior to delivery.
- Transport waste in secure leak proof containers that are clearly labeled.

c) Lookup and follow disposal procedures for disposal of waste at other EPA approved sites, the UTAH COUNTY LANDFILL# is a good resource, 5. General Staff Maintenance Practices:

a) Prevent dumpsters and receptacles from becoming a pollution source by:

1. Closing lids
2. Reposition tipped receptacles upright.
3. Report full or leaking and unsecured dumpsters and receptacles to the company provider or repair it in house. Determine source liquids and prevent it.
4. Report any eminent pollutant hazard related to dumpsters and receptacles to the owner.

**6. Training:**

a) Annually and at hire

## Storm Drain Maintenance Operations

General:
These SOPs are not expected to cover all necessary procedure actions. Operators are allowed to adapt SOPs to unique site conditions in good judgment when it is necessary for safety, and the proper, and effective containment of pollutants. However, any changes of routine operations must be amended in these SOPs.

**1. Procedure:**

a) Inspect for need:
   1. Schedule cleaning for boxes and pipe that contain 2" or more of sediment and debris.
   2. Remove debris by vacuum UTAH COUNTY LANDFILL operated machinery.
   3. When accumulations are mostly floating debris this material can be removed with a net.
   4. Inspect standing water for mosquito larvae and contact the NAME OF MOSQUITO ABATEMENT DISTRICT when necessary.

**2. Disposal Procedure:**

a) Dispose of waste collected by machinery at regulated facilities.
b) Floating materials and floating absorbent materials may be disposed in dumpster when dried out. Dry dirt and slurry may also be disposed in the dumpster.
c) Disposal of hazardous waste
   1. Dispose of hazardous waste at regulated disposal facilities, see Waste Management and Spill Control SOP
d) Disposal of waste collected from sanitary sewer device at regulated facilities.

**3. Training:**

a) Annually and at hire

# Pavement Washing Operations

General:
These SOPs are not expected to cover all necessary procedure actions. Operators are allowed to adapt SOPs to unique site conditions in good judgment when it is necessary for safety, and the proper, and effective containment of pollutants. However, any changes of routine operations must be amended in these SOPs.

**1. Procedure:**

a) Prevent waste fluids and any detergents if used from entering storm drain system. The following methods are acceptable for this operation.
   - Dam the inlet using a boom material that seals itself to the pavement and pick up the wastewater with shop-vacuum or absorbent materials.
   - Collect wastewater with shop-vacuum simultaneous with the washing operation.
   - Collect wastewater with vacuum truck or trailer simultaneous with the washing operation.

b) This procedure must not used to clean the initial spills. First apply the Spill Containment and cleanup SOP.

**2. Disposal Procedure:**

a) Small volumes can usually be drained to the local sanitary sewer.
b) Large volumes must be disposed at regulated facilities.

**2. Pavement Cleaning Frequency:**

a) There is no regular pavement washing regimen. Pavement washing is determined by conditions that warrant it, including but not limited to: prevention of slick or other hazardous conditions or restore acceptable appearance of pavements.

**3. Training:**

a) Annually and at hire

# Snow and Ice Removal Management

General:
This SOP is not expected to cover all necessary procedure actions. Operators are allowed to adapt SOPs to unique site conditions in good judgment when it is necessary for safety, and the proper, and effective containment of pollutants. However, any changes of routine operations must be amended in this SOP.

**1. Application:**

a) Parking and sidewalk winter management operations.

**2. De-Icing Procedure:**

a) Do not store or allow salt or equivalent to be stored on outside paved surfaces.
b) Minimize salt use by varying salt amounts relative to hazard potential.
c) Sweep excessive piles left by the spreader.
d) Watch forecast and adjust salt amounts when warm ups are expected the same day.

**3. Training:**

a) Annually and at hire.
b) Require snow and ice service contractors to follow the stronger this SOP and their company SOPs.

# General Construction Maintenance

General:
This SOP is not expected to cover all necessary procedure actions. Operators are allowed to adapt SOPs to unique site conditions in good judgment when it is necessary for safety, and the proper, and effective containment of pollutants. However, any changes of routine operations must be amended in this SOP.

**Rule: Prevent any solids, *liquids or any light weight material from being carried away from the construction or maintenance envelop by wind or water.**

***liquids - including culinary water and irrigation water that are polluted with material that will damage the environment.**

**1. Application:**

a) This SOP should provide sufficient direction for many of the general operations, e.g., building maintenance, curb/sidewalk/flatwork, overlay/patching, landscape renovations, misc. maintenance/repairs, etc.

**2. Construction Procedure:**

a) Remove or contain all erodible or loose material prior forecast wind and precipitation events or before non-stormwater will pass through the project site. For light weight debris maintenance can require immediately attention for wind events and many times daily maintenance or as needed for precipitation or non-stormwater events.

b) Project materials and waste can be contained or controlled by operational or structural best management practices.

- Operational; including but not limited to:
  - Strategic staging of materials eliminating exposure, such as not staging on pavement
  - Avoiding multiple day staging of backfill and spoil
  - Haul off spoil as generated or daily
  - Schedule work during clear forecast
- Structural; including but not limited to:
  - Inlet protection, e.g. wattles, filter fabric, drop inlet bags, boards, planks
  - Gutter dams, e.g. wattles, sandbags, dirt dams
  - Boundary containment, e.g. wattles, silt fence
  - Dust control, e.g. water hose,
  - Waste control, e.g. construction solid or liquid waste containment, dumpster, receptacles

c) Inspection often to insure the structural best management practices are in good operating condition and at least prior to the workday end. Promptly repair damaged best management practices achieving effective containment.
d) Cleanup:
   - Use dry cleanup methods, e.g. square nose shove and broom.
   - Wet methods are allowed if wastewater is prevented from entering the stormwater system, e.g. wet/dry vacuum, disposal to our landscaped areas.
e) Cleanup Standard:
   - When a broom and a square nosed shovel cannot pick any appreciable amount of material.

**3. Waste Disposal:**

a) Dispose of waste according to General Waste Management SOP, unless superseded by specific SOPs for the operation.
b) Never discharge waste material to storm drains

**4. Equipment:**

a) Tools sufficient for proper containment of pollutants and cleanup.
b) Push broom and square blade shovel should be a minimum.

**5. Training:**

b) Annually and at hire.

# Spill Control

General:

This SOP is not expected to cover all necessary procedure actions. Operators are allowed to adapt SOPs to unique site conditions in good judgment when it is necessary for safety, and the proper, and effective containment of pollutants. However, any changes of routine operations must be amended in this SOP.

**1. Rational:**

a) All properties are susceptible to spills whether it is a result of operations or by customers. Insufficient response, inadequate containment materials and improper spill cleanup methods will result in pollutants in our waterways. Once the pollutants reach our storm drain system, or even the detention pond, they are difficult and expensive to remove.

**2. Containment Procedure:**

a) Priority is to dam and contain flowing spills.
b) Use spill kits booms if available or use any material available; including but not limited to, nearby sand, dirt, landscaping materials, etc.
c) Hazardous or unknown waste material spills
    1. Critical Emergency constitutes large quantities of flowing uncontained liquid that will affect areas with people or reach storm drain systems. Generally burst or tipped tanks. Call HAZMAT, DWQ, NAME OF HEALTH DEPARTMENT, City.
    2. Minor Emergency constitutes a spill that has reached a storm drain but is no longer flowing. Call NAME OF HEALTH DEPARTMENT, City
    3. Spills that are contained on the surface and do not meet the criteria for Critical and minor emergencies may be managed by the responsible implementation of this SOP.
    4. Contact Numbers:
    HAZMAT - 911
    DWQ – 801-231-1769, 801-536-4123
    Utah County HEALTH DEPARTMENT – 801-851-7331
    City – 801-768-7120

**3. Cleanup Procedure:**

a) NEVER WASH SPILLS TO THE STORM DRAIN SYSTEMS.
b) Clean per SDS requirements but generally most spills can be cleaned up according to the following:
    - Absorb liquid spills with spill kit absorbent material, sand or dirt until liquid is sufficiently converted to solid material.

- Remove immediately using dry cleanup methods, e.g. broom and shovel, or vacuum operations.
- Cleanup with water and detergents may also be necessary depending on the spilled material. However, the waste from this operation must be vacuumed or effectively picked up by dry methods. See Pavement Washing SOP.
- Repeat process when residue material remains.

**4. DISPOSAL:**

a) Follow SDS requirements but usually most spills can be disposed per the following b. & c.
b) Generally most spills absorbed into solid forms can be disposed to the dumpster and receptacles. Follow Waste Management SOP.
c) Generally Liquid waste from surface cleansing processes may be disposed to the sanitary sewer system after the following conditions have been met:
   - Dry cleanup methods have been used to remove the bulk of the spill and disposed per the Waste Management SOP.
   - The liquid waste amounts are small and diluted with water. This is intended for spill cleanup waste only and never for the disposal of unused or spent liquids.

**5. Documentation:**

a) Document all spills in Appendix C.

**6. SDS sheets:**

a) SDS Manual is filed in break room.

**7. Materials:**

a) Generally sand or dirt will work for most clean up operations and for containment. However, it is the responsibility of the owner to select the absorbent materials and cleanup methods that are required by the SDS Manuals for chemicals used by the company.

**8. Training:**

a) Annually and at hire.

# APPENDIX C – PLAN RECORDKEEPING DOCUMENTS

## MAINTENANCE/INSPECTION SCHEDULE

| Frequency | Site Infrastructure. |
|---|---|
| As Needed | Clean up all oils spills from vehicles via a dry absorbent power and place in dumpster. |
| As Needed | Sweep up all other droppings from vehicles and place in dumpster. |
| As Needed | Clean up / Sweep up all organic materials from landscaping and place in dumpster and do not allow to flow down the storm drain. |
| Annually | Inspect storm drain system and remove any debris |
| Annually | Inspect and remove any debris from detention basin. |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |

## RECORD INSPECTIONS IN THE MAINTENANCE LOG

Inspection Means: Either; Traditional walk through, Awareness/Observation, and during regular maintenance operations while noting efficiencies/inefficiencies/concerns found, etc.

# MAINTENANCE LOG

| Date | Maintenance Performed/Spill Events. Perform Maintenance per SOPs | Observation Notes, including but not limited to; Inspection results, Observations, System Performance (effectiveness/inefficiencies), SOP Usefulness, Concerns, Necessary Changes… | Initials |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

| Annual Summary of LTSWMP effectiveness, inefficiencies, problems, necessary changes etc. |
|---|
| |

*You may create your own form that provides this same information or request a word copy of this document.

# Annual SOP Training Log per Section 2

| SOP | Trainer | Employee Name / Maintenance Contractor Co | Date |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

*You may create your own form that provides this same information or request a word copy of this document.

# UTAH VALLEY BUSINESS PARK

## ⚠752 EAST QUALITY DRIVE
## AMERICAN FORK, UTAH 84003

**MARCH 22, 2021**
**REVISED AUGUST 10, 2021**
**REVISED OCTOBER 27, 2021**
**REVISED MARCH 9, 2022**

### LEGEND

| | | | |
|---|---|---|---|
| PROPERTY LINE | | EXISTING FIRE HYDRANT | |
| EASEMENT LINE | | PROPOSED FIRE HYDRANT | |
| 4240.0 PROPOSED GRADE CONTOURS | | EXISTING STREET LIGHT | |
| 4240.0 EXISTING GRADE CONTOURS | | PROPOSED STREET LIGHT | |
| EXISTING CURB | | PROPOSED PARKING LOT LIGHT | |
| PROPOSED CURB AND GUTTER | | | |
| PROPOSED CURB WALL | WM | EXISTING WATER METER | |
| REVERSE PAN CURB & GUTTER | WV | EXISTING WATER VALVE | |
| SS EXISTING SEWER | GV | EXISTING GATE VALVE | |
| SS PROPOSED SEWER | | EXISTING OVERHEAD POWER POLE | |
| W EXISTING WATER | TBC | TOP BACK CONCRETE | |
| W PROPOSED WATER | FF | FINISHED FLOOR | |
| F EXISTING FIRE LINE | HW | HIGH WATER | |
| F PROPOSED FIRE LINE | TOG | TOP OF GRATE | |
| SD EXSITING STORM DRAIN | TOL | TOP OF LID | |
| SD PROPOSED STORM DRAIN | IE | INVERT ELEVATION | |
| RD PROPOSED ROOF DRAIN | EX | EXISTING | |
| G EXISTING GAS | NG | NATURAL GROUND | |
| G PROPOSED GAS | TA | TOP OF ASPHALT | |
| OHP EXISTING OVERHEAD POWER | TC | TOP OF CONCRETE | |
| UGP EXISTING UNDERGROUND POWER | EC | EDGE OF CONCRETE | |
| UGP PROPOSED UNDERGROUND POWER | EA | EDGE OF ASPHALT | |
| T EXISTING TELEPHONE LINE | TOW | TOP OF WALL | |
| T PROPOSED TELEPHONE LINE | TG | TOP OF GRAVEL | |
| FO EXISTING FIBER OPTIC LINE | TL | TOP OF LANDSCAPING | |
| FO PROPOSED FIBER OPTIC LINE | TS | TOP OF SIDEWALK | |
| | PROP | PROPOSED | |
| PROPOSED CONCRETE | 39.0 | TBC CALLOUT UNLESS OTHERWISE DESIGNATED | |
| PROPOSED ASPHALT | | | |
| PROPOSED LANDSCAPING | | | |

⚠1

PROJECT CONTACT INFORMATION:

| | | |
|---|---|---|
| AF CITY CULINARY WATER | JAY BREMS | (801) 763 3060 |
| AF PRESSURIZED IRRIGATION | JAY BREMS | (801) 763 3060 |
| AF SANITARY SEWER | ASHTON HARDY | (801) 763 3060 |
| AF STORM DRAIN SEWER | ASHTON HARDY | (801) 763 3060 |
| AF FIRE MARSHALL | MAT SACCO | (801) 763 3040 |
| AF CITY INSPECTOR | DEE HOWARD | (801) 763 3060 |
| AF FIBER | KYLE PETERSEN | (801) 400 2933 |
| AF FLOOD IRRIGATION COMPANY | ERNIE JOHN | (801) 471 6576 |
| TIMPANOGOS SSD | DAVID BARLOW | (801) 756 5231 |
| ROCKY MOUNTAIN POWER | TERIA WALKER | (801) 756 1310 |
| COMCAST | ELYSIA VALDEZ | (801) 401 3017 |
| CENTURY LINK | RYAN ALLRED | (385) 223 0084 |
| DOMINION ENERGY | TRENT JOHNSON | (801) 853 6548 |




VICINITY MAP
NOT TO SCALE

### SHEET INDEX


| | |
|---|---|
| CV | COVER SHEET |
| GN | GENERAL NOTES |
| C0.1 | EXISTING SITE/DEMOLITION PLAN |
| C1.0 | SITE PLAN |
| C2.0 | GRADING PLAN |
| C2.1 | DRAINAGE PLAN |
| C2.2 | STORM DRAIN PROFILE |
| C2.3 | STORM DRAIN PROFILE |
| C3.0 | UTILITY PLAN |
| C3.1 | SEWER PROFILE |
| C4.0 | DETAIL SHEET |
| C4.1 | DETAIL SHEET |
| ⚠C4.2 | DETAIL SHEET |
| C5.0 | DETAIL SHEET |
| C5.1 | DETAIL SHEET |
| C6.0 | EROSION CONTROL PLAN (SWPPP) |
| C6.1 | EROSION CONTROL DETAIL SHEET |


⚠1

PROJECT CONSTRUCTION NOTES:

1. CONTRACTOR TO NOTIFY BLUE STAKES PRIOR TO CONSTRUCTION, 1-800-662-4111.
2. CONTRACTOR TO VERIFY LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
3. SEE SOILS REPORT FOR PAVEMENT SECTION DETAILS, INSTALLATION SPECIFICATIONS AND ALL SITE EARTHWORK REQUIREMENTS.
4. IF SOFT SOILS ARE ENCOUNTERED DURING CONSTRUCTION ACTIVITIES, CONTRACTOR TO FOLLOW THE RECOMMENDATIONS OF THE GEOTECHNICAL REPORT TO MITIGATE.
5. ALL CONSTRUCTION SHALL CONFORM TO CITY STANDARDS AND SPECIFICATIONS. IF A CONFLICT BETWEEN THESE PLANS AND THE CITY STANDARDS AND SPECIFICATIONS OCCURS, THE CITY STANDARDS AND SPECIFICATIONS SHALL GOVERN.
6. ALL HANDICAP PARKING STALLS TO BE INSTALLED PER ADA STANDARDS. SLOPE ON ANY ADA STALL IS TO BE LESS THAN 2% IN ALL DIRECTIONS.
7. CONTRACTOR TO VERIFY PRIOR TO ANY CONSTRUCTION THAT THE BUILDING AND BUILDING LOCATION SHOWN ON CIVIL DRAWINGS MATCHES THE ARCHITECTURAL PLANS.
8. CONTRACTOR TO VERIFY, WITH ARCHITECT, THAT F.F. ELEVATION SHOWN ON CIVIL PLANS EQUALS THE ARCHITECTS 100.0' ELEVATION.
9. CONTRACTOR TO REPLACE IN KIND ANY AREAS THAT ARE DAMAGED DURING CONSTRUCTION.
10. INSTALL ALL SIDEWALKS PER CITY STANDARDS OR APWA PLAN NO. 231, 235, AND 236 WHERE APPLICABLE.
11. INSTALL ALL CONCRETE PAVEMENT JOINTS PER CITY STANDARDS OR APWA PLAN NO. 261.
12. ALL SEWER, WATER AND STORM DRAIN PIPES SHALL BE BACKFILLED WITH SELECT GRANULAR FILL PER AMERICAN FORK CITY STANDARDS AND SPECIFICATIONS. SEE AMERICAN FORK CITY STANDARD PLAN NO. 15.22
13. ALL CATCH BASINS AND MANHOLES TO BE INSTALLED PER CITY STANDARDS.
14. ALL STORM DRAIN PIPING TO BE CUT OFF FLUSH WITH INSIDE WALL OF DRAINAGE BOX. INSIDE WALL TO BE GROUTED SMOOTH WITH A NON-SHRINK GROUT.
15. FOR STORM DRAIN INLET BOXES AND MANHOLES THE I.E. IN AND I.E. OUT ELEVATIONS ARE THE SAME UNLESS OTHERWISE CALLED OUT ON THE PLANS
16. ALL WATER LINES TO HAVE A MINIMUM 4' OF COVER WITH A MINIMUM VERTICAL CLEARANCE OF 1' OF COVER BETWEEN OTHER UTILITY LINES (1.5' VERTICAL SEPARATION WITH SEWER).
17. THRUST BLOCKS TO BE INSTALLED PER AMERICAN FORK CITY PLAN NO 15.21
18. CONTRACTOR SHALL COORDINATE CONSTRUCTION AND INSTALLATION OF ELECTRICAL, TELEPHONE, NATURAL GAS AND CABLE TV SERVICES WITH THE RESPECTIVE UTILITY COMPANY.
19. THE EXISTENCE AND LOCATION OF ALL UNDERGROUND UTILITY PIPES, LINES OR STRUCTURES SHOWN ON THESE PLANS WERE OBTAINED AND SHOWN FROM SURVEYED INFORMATION AND EXISTING UTILITY LOCATIONS PROVIDED BY OTHERS. THERE IS NO GUARANTEE THAT ALL EXISTING UTILITY INFORMATION IS SHOWN ON THESE PLANS. CONTRACTOR IS RESPONSIBLE FOR CONTACTING BLUE STAKES AND FIELD VERIFYING THE LOCATION AND ELEVATION OF ALL EXISTING UTILITY PIPES, LINES AND STRUCTURES, PRIOR TO CONSTRUCTION.
20. ANY OFF SITE DAMAGE TO EXISTING ASPHALT, CURB & GUTTER, LANDSCAPING AND ALL UTILITIES TO BE REPLACED IN KIND.
21. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL SITE DEMOLITION REQUIRED TO COMPLETE THIS PROJECT.

*General Notes:*

CONTRACTOR SHALL COORDINATE CONSTRUCTION AND INSTALLATION OF ELECTRICAL, TELEPHONE, NATURAL GAS AND CABLE TV SERVICES WITH THE RESPECTIVE UTILITY COMPANY.

ALL CONSTRUCTION SHALL CONFORM TO CITY STANDARDS AND SPECIFICATIONS. IF A CONFLICT BETWEEN THESE PLANS AND THE CITY STANDARDS AND SPECIFICATIONS OCCURS, THE CITY STANDARDS AND SPECIFICATIONS SHALL GOVERN.

THE EXISTENCE AND LOCATION OF ALL UNDERGROUND UTILITY PIPES, LINES OR STRUCTURES SHOWN ON THESE PLANS WERE OBTAINED AND SHOWN FROM SURVEYED INFORMATION AND EXISTING UTILITY LOCATIONS PROVIDED BY OTHERS. THERE IS NO GUARANTEE THAT ALL EXISTING UTILITY INFORMATION IS SHOWN ON THESE PLANS. CONTRACTOR IS RESPONSIBLE FOR CONTACTING BLUE STAKES AND FIELD VERIFYING THE LOCATION AND ELEVATION OF ALL EXISTING UTILITY PIPES, LINES AND STRUCTURES, PRIOR TO CONSTRUCTION.

FEMA NOTE:
THIS PROJECT LIES IN A FEMA DESIGNATED FLOOD ZONE X WHICH IS DEFINED AS AREAS OF 0.2% ANNUAL CHANCE FLOOD; AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE; AND AREAS PROTECTED BY LEVEES FROM 1% ANNUAL CHANCE FLOOD.
PER MAP NO. 49049C0307F EFFECTIVE DATE: JULY 19, 2020 PANEL 307 OF 1450.

DEMOLITION NOTE:
CONTRACTOR TO VISIT SITE AND DETERMINE ALL NECESSARY DEMOLITION REQUIRED TO INSTALL PROPOSED IMPROVEMENTS AND TO FIELD VERIFY ALL NECESSARY DEMOLITION HAS BEEN COMPLETED PRIOR TO CONSTRUCTION.

⚠1

**Benchmark Info**

The Benchmark for the project is the North Quarter Corner of Section 25, T.5.S. R.1.E., SLB&M
Elevation= 4555.90'
Datum is NAVD 88 derived from UTAH TURNGPS System


CIVIL ENGINEER:

CIR
ENGINEERING, L.L.C.
3032 SOUTH 1030 WEST, SUITE 202
SLC, Utah 84119 - PH: 801-949-6296

DEVELOPER

THE WILL GROUP
1780 NORTH 700 WEST SUITE 40
LINDON, UT 84042
CONTACT PERSON: TYSON WILLIAMSON
PH: (801) 210-0370

ARCHITECT:

AE URBIA
909 WEST SOUTH JORDAN PARKWAY
SOUTH JORDAN, UTAH 84095
CONTACT PERSON: SHAWN EATON
PH: (801) 746-0456


| NO. | REVISIONS | BY | DATE |
|---|---|---|---|
| 1 | COMMENTS | TLH | 08/10/21 |
| 2 | COMMENTS | TLH | 10/27/21 |
| 3 | COMMENTS | TLH | 03/09/22 |

DESIGNER: TLH PROJECT ENGINEER: TLH


CIR CIVIL ENGINEERING + SURVEYING
3032 SOUTH 1030 WEST, SUITE 202
SLC, Utah 84119 - 801-949-6296


UTAH VALLEY BUSINESS PARK
752 EAST QUALITY DRIVE, AMERICAN FORK, UT 84003
COVER SHEET

PROFESSIONAL ENGINEER
No. 12072623
TREVOR L HODGSON
STATE OF UTAH

SHEET NO.
CV

| PROJECT ID | DATE: |
|---|---|
| H1022-01 | 03/22/21 |
| FILE NAME: PRJ-AFH | SCALE: 1"=30' |

CALL BEFORE YOU DIG! IT'S THE LAW! BLUE STAKES 1-800-662-4111

## GENERAL NOTES

1. City of American Fork, A.P.W.A. Utah Chapter and Utah Department of Transportation Construction and Material Specifications, current editions, and any supplements thereto (hereafter referred to as Standard Specifications), shall govern all construction items unless otherwise noted. If a conflict between specifications is found, the more strict specification will apply as decided by the City Engineer. Item Numbers listed refer to City of American Fork Item Numbers unless otherwise noted.
2. The City Engineer will not be responsible for means, methods, procedures, techniques, or sequences of construction that are not specified herein. The City Engineer will not be responsible for safety on the work site, or for failure by the Contractor to perform work according to contract documents.
3. The Developer or Contractor shall be responsible to obtain all necessary permits including but not limited to Road Cut Permits and Notices of Intent (NOI), Building Permits, etc.
4. The Contractor shall notify the City of American Fork, Public Works Department in writing at least 7 working days prior to beginning construction and request a pre–construction meeting. Bond for public improvements and inspection fees must be paid in full prior to requesting a pre–construction meeting.
5. The Contractor shall be solely responsible for complying with all federal, state and local safety requirements including the Occupational Safety and Health Act of 1970. The Contractor shall exercise precaution always for the protection of persons (including employees) and property. It shall also be the sole responsibility of the Contractor to initiate, maintain and supervise all safety requirements, precautions and programs in connection with the work, including the requirements for confined spaces per 29 CFR 1910.146.
6. Following completion of construction of the site improvements and before requesting occupancy, a proof survey shall be provided to the City of American Fork, Public Works Department, that documents "as _ built" elevations, dimensions, slopes and alignments of all elements of this project. The proof survey shall be prepared, signed and submitted by the Professional Engineer who sealed the constructions drawings.
7. The Contractor shall restrict construction activity to public right_of_way and areas defined as permanent and/or temporary construction easements, unless otherwise authorized by the City Engineer.
8. The Contractor shall carefully preserve benchmarks, property corners, reference points, stakes and other survey reference monuments or markers. In cases of willful or careless destruction, the Contractor shall be responsible for restorations. Resetting of markers shall be performed by a License Utah Professional Surveyor as approved by the City Engineer.
9. Non_rubber tired vehicles shall not be moved on or across public streets or highways without the written permission of the City Engineer.
10. The Contractor shall restore all disturbed areas to equal or better condition than existed before construction. Drainage ditches or watercourses that are disturbed by construction shall be restored to the grades and cross_sections that existed before construction.
11. Tracking or spilling mud, dirt or debris upon streets, residential or commercial drives, sidewalks or bike paths is prohibited. Any such occurrence shall be cleaned up immediately by the Contractor at no cost to the City. If the Contractor fails to remove said mud, dirt, debris, or spillage, the City reserves the right to remove these materials and clean affected areas, the cost of which shall be the responsibility of the Contractor.
12. Disposal of excess excavation within Special Flood Hazard Areas (100–year floodplain) must be approved by the City Engineer.
13. All signs, landscaping, structures or other appurtenances within right–of–way disturbed or damaged during construction shall be replaced or repaired to the satisfaction of the City Engineer. The cost of this work shall be the responsibility of the Contractor.
14. All field tile broken or encountered during excavation shall be replaced or repaired and connected to the public storm sewer system as directed by the City Engineer. The cost of this work shall be the responsibility of the Contractor.
15. All precast concrete products shall be inspected at the location of manufacture. Approved precast concrete products will be stamped or have such identification noting that inspection has been conducted by the City of American Fork. Precast concrete products without proof of inspection shall not be approved for installation.
16. All trenches within public right–of–way shall be backfilled according to the approved construction drawings or securely plated during nonworking hours.
17. Trenches outside these areas shall be backfilled or shall be protected by approved temporary fencing or barricades during nonworking hours. Clean up shall follow closely behind the trenching operation.
18. All trees within the construction area not specifically designated for removal shall be preserved, whether shown or not shown on the approved construction drawings. Trees to be preserved shall be protected with high visibility fencing placed a minimum 15 feet from the tree trunk. Trees 6 – inches or greater at DBH (Diameter Breast Height) must be protected with fencing placed at the critical root zone or 15 feet, whichever is greater.
19. Trees not indicated on the approved construction drawings for removal may not be removed without prior approval of the Division of Engineering.
20. Permits to construct in the right–of–way of existing streets must be obtained from the City of American Fork, Public Works Department before commencing construction.
21. The Contractor shall be responsible for the condition of trenches within the right–of–way and public easements for a period of one year from the final acceptance of the work, and shall make any necessary repairs at no cost to the City.
22. Pavements shall be cut in neat, straight lines the full depth of the existing pavement, or as required by the City Engineer.
23. The replacement of driveways, handicapped ramps, sidewalks, bike paths, parking lot pavement, etc. shall be provided according to the approved construction drawings and the City of American Fork standard construction drawings.
24. Any modification to the work shown on drawings must have prior written approval by the City Engineer.
25. Traffic control and other regulatory signs shall comply with the Utah Department of Transportation Traffic Control guidelines and MUTCD Manual, current edition
26. Public street signs shall meet all City of American Fork specifications with lettering colored in white displayed over a green background.
27. Private street signs shall meet all City of American Fork specifications with lettering colored in white displayed over a blue background

## ⚠ UTILITIES

1. The following utilities are known to be located within the limits of this project:

| COMPANY | CONTACT | PHONE |
|---|---|---|
| AF CITY CULINARY WATER | JAY BREMS | (801) 763 3060 |
| AF PRESSURIZED IRRIGATION | JAY BREMS | (801) 763 3060 |
| AF SANITARY SEWER | ASHTON HARDY | (801) 763 3060 |
| AF STORM DRAIN SEWER | ASHTON HARDY | (801) 763 3060 |
| AF FIRE MARSHALL | MAT SACCO | (801) 763 3040 |
| AF CITY INSPECTOR | DEE HOWARD | (801) 763 3060 |
| AF FIBER | KYLE PETERSEN | (801) 400 2933 |
| AF FLOOD IRRIGATION COMPANY | ERNIE JOHN | (801) 471 6576 |
| TIMPANOGOS SSD | DAVID BARLOW | (801) 756 5231 |
| ROCKY MOUNTAIN POWER | TERIA WALKER | (801) 756 1310 |
| COMCAST | ELYSIA VALDEZ | (801) 401 3017 |
| CENTURY LINK | RYAN ALLRED | (385) 223 0084 |
| DOMINION ENERGY | TRENT JOHNSON | (801) 853 6548 |

2. The Contractor shall give notice of intent to construct to Blue Stake (telephone number 800_662–4111) at least 2 working days before start of construction.
3. The identity and locations of existing underground utilities in the construction area have been shown on the approved construction drawings as accurately as provided by the owner of the underground utility. The City of American Fork and the City Engineer assumes no responsibility for the accuracy or depths of underground facilities shown on the approved construction drawings. If damage is caused, the Contractor shall be responsible for repair of the same and for any resulting contingent damage.
4. Location, support, protection and restoration of all existing utilities and appurtenances, whether shown or not shown on the approved construction drawings, shall be the responsibility of the Contractor.
5. When unknown or incorrectly located underground utilities are encountered during construction, the Contractor shall immediately notify the owner and the City Engineer.

## TRAFFIC CONTROL

1. Traffic control shall be furnished, erected, maintained, and removed by the Contractor according to Utah Department Of Transportation, Traffic Control guidelines or Manual of Uniform Traffic Control Devices, current edition.
2. All traffic lanes of public roadways shall be fully open to traffic from 7:00 AM to 9:00 AM and from 4:00 PM to 6:00 PM unless authorized differently by the City Engineer.
3. At all other hours the Contractor shall maintain minimum one _ lane two _ way traffic. Traffic circulation must be supervised by a Certified Flagger.
4. Steady _ burning, Type "C" lights shall be required on all barricades, drums, and similar traffic control devices in use at night.
5. Access from public roadways to all adjoining properties for existing residents or businesses shall be maintained throughout the duration of the project for mail, public water and sanitary sewer service, and emergency vehicles.
6. The Contractor shall provide a traffic control plan detailing the proposed maintenance of traffic procedures. The traffic control plan must incorporate any traffic control details contained herein.
7. The traffic control plan proposed by the Contractor must be approved by the City Engineer prior to construction.
8. Traffic Control requiring road closures and/ or detouring must be approved by the City Council.

## EROSION AND SEDIMENT CONTROL

1. The Contractor or Developer is responsible for submitting a Notice of Intent (NOI) to be reviewed and approved by the Utah DWQ.
2. The NOI must be submitted to DWQ 45 days prior to the start of construction and may entitle coverage under the Utah DWQ General Permit for Storm Water Discharges associated with construction activity. A project location map must be submitted with the NOI.
3. A sediment and erosion control plan must be submitted to the City Engineer for approval if a sediment and erosion control plan has not already been included with the approved construction drawings. This plan must be made available at the project site at all times.
4. A UPDES Storm water Discharge Permit may be required. The Contractor shall be considered the Permittee.
5. The Contractor shall provide sediment control at all points where storm water runoff leaves the site, including waterways, overland sheet flow, and storm sewers.
6. Accepted methods of providing erosion/sediment control include but are not limited to: sediment basins, silt filter fence, aggregate check dams, and temporary ground cover. Hay or straw bales are not permitted.
7. The Contractor shall provide adequate drainage of the work area at all times consistent with erosion control practices.
8. Disturbed areas that will remain un–worked for 30 days or more shall be seeded or protected within seven calendar days of the disturbance.
9. Other sediment controls that are installed shall be maintained until vegetative growth has been established. The Contractor shall be responsible for the removal of all temporary sediment devices at the conclusion of construction but not before growth of permanent ground cover.

## WATER LINE

1. All water line materials shall be provided and installed according to current specifications of the City of American Fork, Water Department.
2. All public water pipe with a diameter 3 inches to 8 inches shall be Ductile Iron, Class 53. Public water pipe 12 inches in diameter or larger shall be Ductile Iron, Class 54.
3. Only fire hydrants conforming to City of American Fork standards will be approved for use.
4. Public water lines shall be disinfected by the City of American Fork, Water Department. Requests for water line chlorination shall be made through the City of American Fork, Water Department. The cost for chlorination shall be paid for by the Contractor.
5. All water lines shall be disinfected according to City of American Fork Standard specifications. Special attention is directed to applicable sections of American Water Works Association specification C_651, particularly for flushing (Section 5) and for chlorinating valves and fire hydrants (Section 7).
6. Pressure testing shall be performed in accordance with the City of American Fork, Construction and Material Specifications. When water lines are ready for disinfection, the Contractor shall submit two (2) sets of "as–built" plans, and a letter stating that the water lines have been pressure tested and need to be disinfected, to the City of American Fork, Water Department.
7. The Contractor shall be responsible for all costs associated with the disinfection of all water lines construction per this plan. Pressure testing shall be performed in accordance with the City of American Fork, Construction and Material Specifications.
8. The Contractor shall paint all fire hydrants according to City of American Fork standards. The cost of painting fire hydrants shall be included in the contract unit price for fire hydrants.
9. No water taps or service connections (e.g., to curb stops or meter pits) may be issued until adjacent public water lines serving the construction site have been disinfected by the City of American Fork, Water Department and have been accepted by the Public Works Department.
10. The Contractor shall notify the City of American Fork, Water Department at (801) 763 3060 at least 24 hours before tapping into existing water lines.
11. All water main stationing shall be based on street centerline stationing.
12. All bends, joint deflections and fittings shall be backed with concrete per City of American Fork standards.
13. The Contractor shall give written notice to all affected property owners at least 1 working day but not more than 3 working days prior to any temporary interruption of water service. Interruption of water service shall be minimized and must be approved by the City Engineer.
14. All water lines shall be placed at a minimum depth of 4 feet measured from top of finished grade to top of water line. Water lines shall be set deeper at all points where necessary to clear existing or proposed utility lines or other underground restrictions by a minimum of 18 inches.

## SANITARY SEWER

1. Sanitary sewage collection systems shall be constructed in accordance with the rules, regulations, standards and specifications of the City of American Fork, Public Works Department and the Utah Department of Health Code and Regulations.
2. The minimum requirements for sanitary sewer pipe with diameters 15 inches and smaller shall be reinforced concrete pipe ASTM C76 Class 3, or PVC sewer pipe ASTM D3034, SDR 35.
3. Pipe for 6–inch diameter house service lines shall be PVC pipe ASTM D3034, SDR 35. PVC pipe shall not be used at depths greater than 28 feet. Pipe materials and related structures shall be shop tested in accordance with City of American Fork Construction Inspection Division quality control requirements.
4. All manhole lids shall be provided with continuous self_sealing gaskets.
5. The approved construction drawings shall show where bolt_down lids are required.
6. Sanitary sewer manholes shall be precast concrete or as approved by the City Engineer and conform to the City of American Fork sanitary manhole standard drawing. Manhole lids shall include the word SEWER.
7. All PVC sewer pipes shall be deflection tested no less than 60 days after completion of backfilling operations.
7. At the determination of the City Engineer, the Contractor may be required to perform a TV inspection of the sanitary sewer system prior to final acceptance by the City. This work shall be completed by the Contractor at his expense.
8. Visible leaks or other defects observed or discovered during TV inspection shall be repaired to the satisfaction of the Engineer.
9. Roof drains, foundation drains, field tile or other clean water connections to the sanitary sewer system are strictly prohibited according to the American Fork Code of Ordinances.
10. All water lines shall be located at least 10 feet horizontally and 18 inches vertically, from sanitary sewers and storm sewers, to the greatest extent practicable.
11. Where sanitary sewers cross water mains or other sewers or other utilities, trench backfill shall be placed between the pipes crossing and shall be compacted granular material according to the city Standard Specifications. In the event that a water line must cross within 18 inches of a sanitary sewer, the sanitary sewer shall be concrete encased or consist of ductile iron pipe material.
12. Existing sanitary sewer flows shall be maintained at all times. Costs for pumping and bypassing shall be included in the Contractor's unit price bid for the related items.
13. The Contractor shall furnish all material, equipment, and labor to make connections to existing manholes.
14. All sewer lines shall be placed at a minimum depth of 4 feet measured from top of finished grade to top of sewer line.

## STORM SEWER

1. All storm water detention and retention areas and major flood routing swales shall be constructed to finish grade and hydro _ seeded and hydro _ mulched according to the City of American Fork Standard Specifications.
2. Where private storm sewers connect to public storm sewers, the last run of private storm sewer connecting to the public storm sewer shall be Reinforced Concrete Pipe conforming to ASTM Designation C76, Wall B, Class IV for pipe diameters 12 inches to 15 inches, Class III for 18 inches to 24 inch pipes, and 27 inches and larger pipe shall be Class II, unless otherwise shown on the approved construction drawings.
3. Granular backfill shall be compacted granular material according to American Fork City Standard Specifications.
4. All public storm sewers shall be Reinforced Concrete Pipe conforming to ASTM Designation C76, Wall B, Class IV for pipe diameters 12 inches to 15 inches, Class III for 18 inches to 24 inch pipes, and 27 inches and larger pipe shall be Class II, unless otherwise shown on the approved construction drawings.
5. Headwalls and end walls shall be required at all storm sewer inlets or outlets to and from storm water management facilities. Natural stone and/or brick approved by the City Engineer shall be provided on all visible headwalls and/or end walls surfaces.
6. Storm inlets or catch basins shall be channelized and have bicycle safe grates. Manhole lids shall include the word STORM.
7. Storm sewer outlets greater than 18 inches in diameter accessible from storm water management facilities or watercourses shall be provided with safety grates, as approved by the City Engineer.

## STRIPING AND SIGNING

1. All striping must be done following Utah Department of Transportation guidelines and MUTCD Manual recommendations, current edition.
2. All signing must be done following MUTCD Manual recommendations, current edition.
3. Only sand–blasting is allowed for removal of existing striping.
4. Contractor is responsible for removal of conflicting existing striping.
5. Materials used for striping must comply with the Utah Department of Transportation standard specifications.

## MAIL DELIVERY

1. The Contractor shall be responsible to ensure that US Mail delivery within the project limits is not disrupted by construction operations.
2. This responsibility is limited to relocation of mailboxes to a temporary location that will allow the completion of the work and shall also include the restoration of mailboxes to their original location or approved new location.
3. Any relocation of mailbox services must be first coordinated with the US Postal Service and the homeowner.
4. Before relocating any mailboxes, the Contractor shall contact the U.S. Postal Service and relocate mailboxes according to the requirements of the Postal Service.

## USE OF FIRE HYDRANTS

1. The Contractor shall make proper arrangements with the American Fork City, Water Department for the use of fire hydrants when used for work performed under this project's approval.


CIVIL ENGINEERING + SURVEYING
3032 SOUTH 1030 WEST, SUITE 202
SLC, Utah 84119 – 801–949–6296


| NO. | REVISIONS | BY | DATE |
|---|---|---|---|
| 1 | COMMENTS | TLH | 08/10/21 |
| 2 | COMMENTS | TLH | 10/27/21 |
| 3 | COMMENTS | TLH | 03/09/22 |

DESIGNER: TLH PROJECT ENGINEER: TLH

# UTAH VALLEY BUSINESS PARK

752 EAST QUALITY DRIVE, AMERICAN FORK, UT 84003

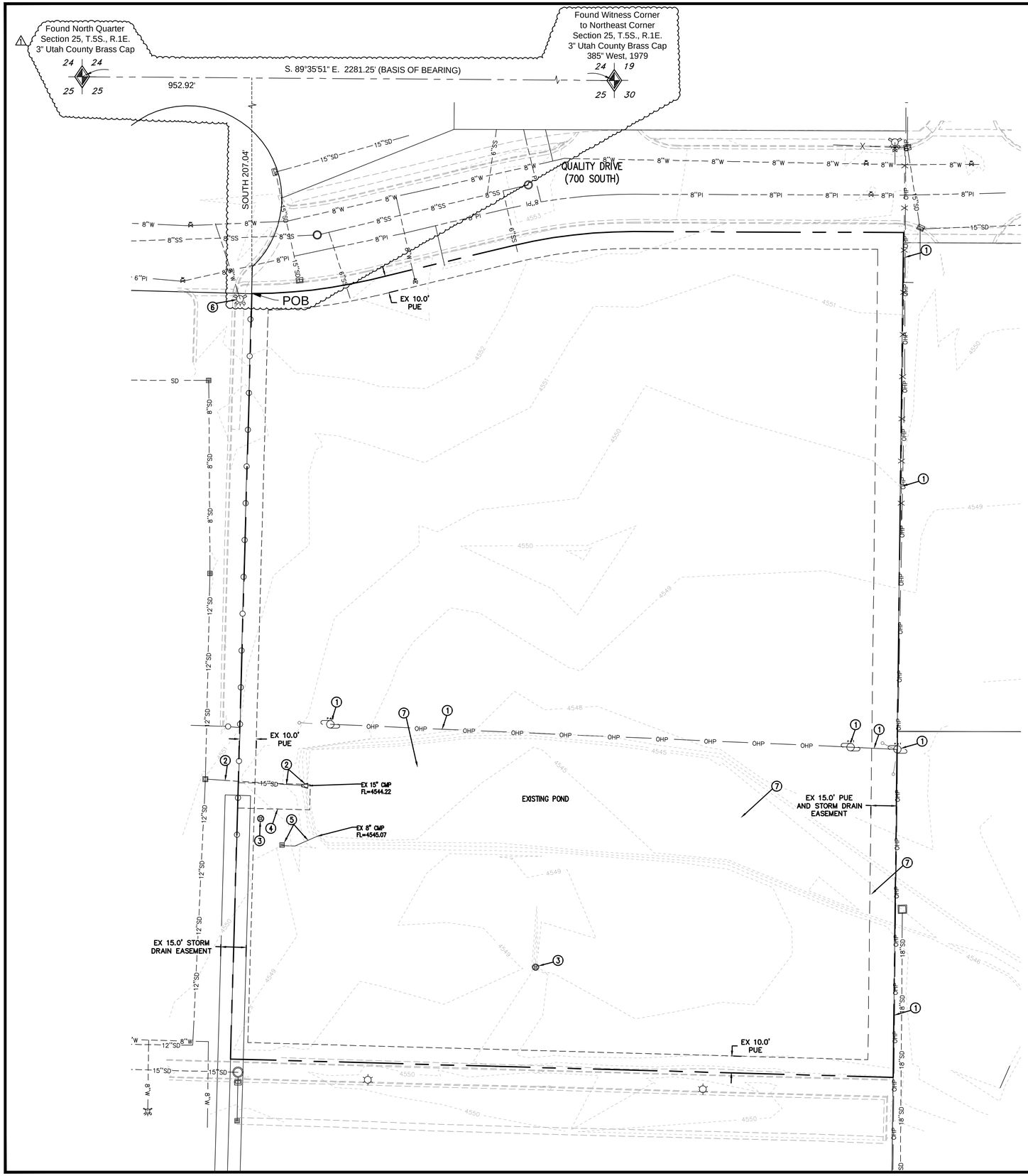
## GENERAL NOTES

PROFESSIONAL ENGINEER
No. 12072623
TREVOR L HODGSON
STATE OF UTAH

CALL BEFORE YOU DIG!
BLUE STAKES 1 800 662 4111

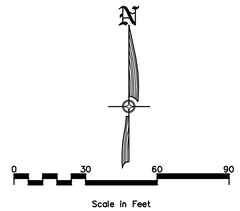
SHEET NO.
GN

| PROJECT ID | DATE: |
|---|---|
| H1022–01 | 03/22/21 |
| FILE NAME: PRJ–AFH | SCALE: |




**SHEET NOTES:**

1. EXISTING POWER POLE AND POWER LINE TO BE REMOVED. CONTRACTOR TO COORDINATION WITH ROCKY MOUNTAIN POWER FOR REMOVAL/RELOCATION/BURIAL.
2. EXISTING STORM DRAIN PIPE AND STRUCTURE TO BE REMOVED. SEE SHEET C2.1 FOR NEW CONNECTION.
3. EXISTING WELL TO BE CAPPED BY DEVELOPER. CONTRACTOR TO FIELD VERIFY EXACT LOCATION PRIOR TO CONSTRUCTION.
4. EXISTING STORM DRAIN EASEMENT TO BE REMOVED. SEE SHEET C1.0 AND C2.1 FOR PROPOSED STORM DRAIN ALIGNMENT AND NEW STORM DRAIN EASEMENT.
5. EXISTING IRRIGATION PIPE AND IRRIGATION STRUCTURE TO BE REMOVED.
6. EXISTING FIRE HYDRANT TO BE RELOCATED. SEE SHEET C3.0 FOR NEW LOCATION.
7. REFER TO THE RECOMMENDATIONS FOR FILLING IN EXISTING POND REPORT BY IGES DATED MARCH 1, 2022 (PROJECT NO 03023-003) FOR ALL MODIFICATIONS TO THE EXISTING POND.




SEE COVER SHEET FOR PROJECT LEGEND

**Benchmark Info**

The Benchmark for the project is the North Quarter Corner of Section 25, T.5.S. R.1.E., SLB&M
Elevation = 4555.90'
Datum is NAVD 88 derived from UTAH TURNGPS System

| NO. | REVISIONS | BY | DATE |
|---|---|---|---|
| 1 | COMMENTS | TLH | 08/10/21 |
| 2 | COMMENTS | TLH | 10/27/21 |
| 3 | COMMENTS | TLH | 03/09/22 |
| 4 | WELL UPDATE | TLH | 04/11/22 |

DESIGNER: TLH PROJECT ENGINEER: TLH

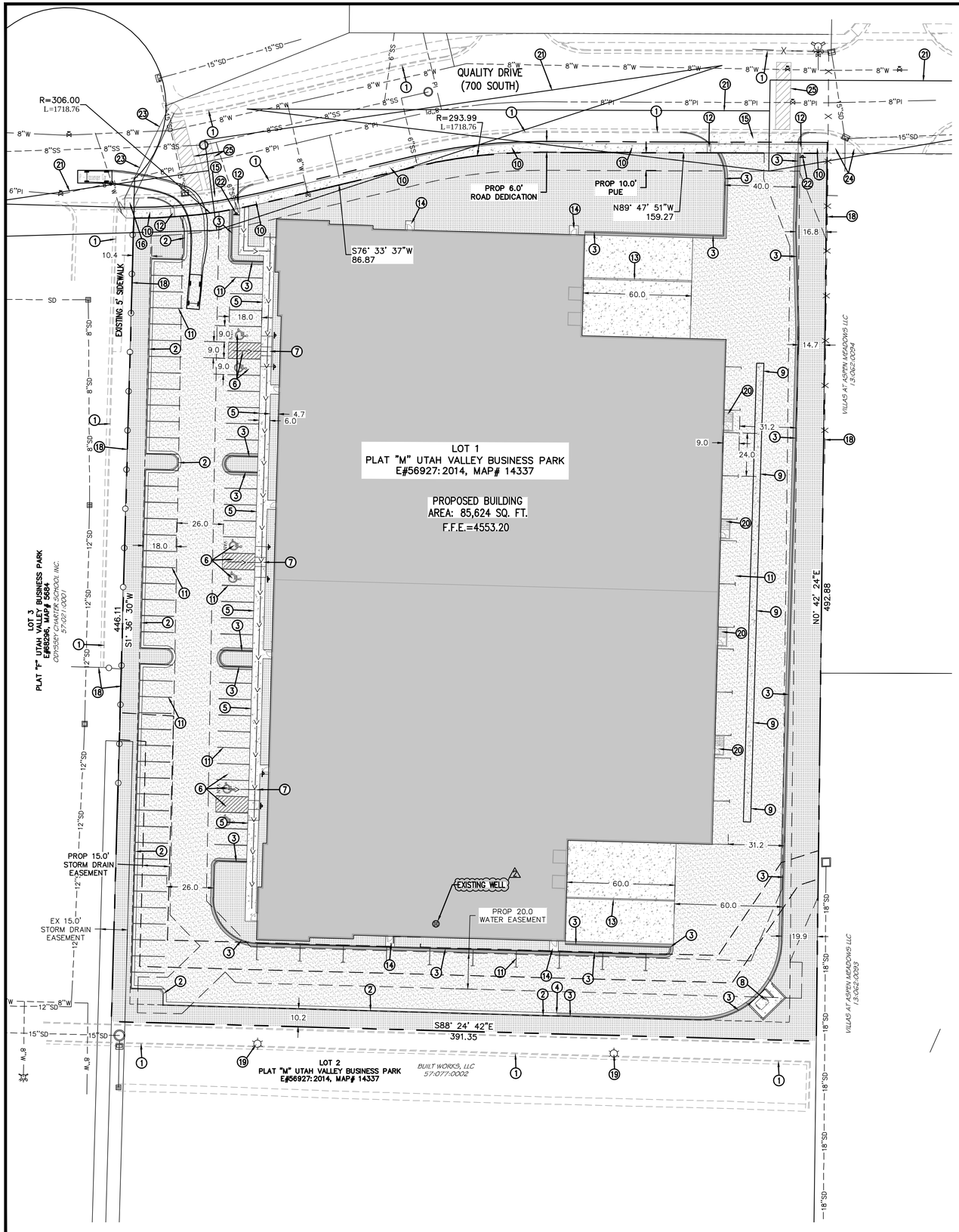
CIR CIVIL ENGINEERING + SURVEYING
3032 SOUTH 1030 WEST, SUITE 202
SLC, Utah 84119 - 801-949-6296

# UTAH VALLEY BUSINESS PARK
752 EAST QUALITY DRIVE, AMERICAN FORK, UT 84003
# EXISTING SITE/DEMOLITION PLAN

PROFESSIONAL ENGINEER
No. 12072623
TREVOR L HODGSON
STATE OF UTAH

CALL BEFORE YOU DIG!
BLUE STAKES 1 800 662 4111

| SHEET NO. | |
|---|---|
| C0.1 | |
| PROJECT ID | DATE: |
| H1022-01 | 03/22/21 |
| FILE NAME: | SCALE: |
| PRJ-AFH | 1"=30' |




## LOT AREAS:

| | | SQ. FT. / ACRES |
|---|---|---|
| LOT | | 184,984 SQ. FT. / 4.25 ACRES |
| | BUILDING FOOTPRINT | 88,712 SQ. FT. / 2.04 ACRES |
| | ASPHALT | 52,403 SQ. FT. / 1.20 ACRES |
| | LANDSCAPING | 30,317 SQ. FT. / 0.70 ACRES |
| | CONCRETE | 13,552 SQ. FT. / 0.31 ACRES |

NOTE:
1. ALL AREA CALCULATIONS ARE APPROXIMATE AND CAN CHANGE DUE TO CONSTRUCTION TOLERANCES.

## LOT PARKING REQUIREMENTS:

| | SQ. FT. | CITY REQM'T | |
|---|---|---|---|
| OFFICE | 1,430 SQ. FT. | 6 | (4/1000) |
| WAREHOUSE | 87,282 SQ. FT. | 87 | (1/1000) |
| TOTAL REQUIRED: | | 93 | |
| TOTAL PROVIDED: | | 93 | |
| ACCESSIBLE SPACES | | 6 (4 REQ'D 76 TO 100) | |

REFERENCED CODED:
- OFF-STREET PARKING STANDARDS OF THE AMERICAN FORK CITY, UTAH CODE (FOR CITY REQUIREMENTS)

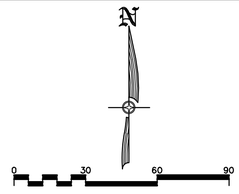
NOTES:
1. ALL AREA CALCULATIONS ARE APPROXIMATE AND CAN CHANGE DUE TO CONSTRUCTION TOLERANCES.
2. ALL TYPICAL CONSTRUCTION TO COMPLY WITH AMERICAN FORK CITY STANDARDS. SEE AMERICAN FORK STANDARD DRAWINGS.

## SITE PLAN NOTES:

1. EXISTING CURB & GUTTER
2. PROPOSED 24" CURB & GUTTER. SEE DETAIL 1/C4.0.
3. PROPOSED 24" REV PAN CURB & GUTTER. SEE DETAIL 3/C4.0.
4. PROVIDE A SMOOTH TRANSITION FROM CURB & GUTTER TO REV PAN CURB & GUTTER.
5. PROPOSED OPEN FACE SIDEWALK. SEE DETAIL 6/C4.0.
6. ALL HANDICAP STALLS SHALL HAVE SLOPES OF LESS THAN 2% IN ALL DIRECTIONS. SEE DETAIL 12/C4.0 AND 13/C4.0 FOR ADA SIGN DETAILS AND PLACEMENT
7. ADA RAMPS ARE TO BE INSTALLED PER CITY AND ADA STANDARDS AND SPECIFICATIONS. SEE DETAIL 4/C4.0.
8. PROPOSED TRASH ENCLOSURE. SEE DETAIL SHEET C5.1 FOR DETAILS.
9. PROPOSED 4' WIDE ROLL GUTTER. SEE DETAIL 5/C4.0.
10. PROPOSED 5' SIDEWALK PER APWA STD. 231. SEE DETAIL SHEET C4.0.
11. ALL PARKING LOT STRIPING TO BE REFLECTIVE WHITE (TYP.) PER M.U.T.C.D. STANDARDS.
12. INSTALL DETECTABLE WARNING SURFACE PER APWA STANDARD PLAN NO. 238. SEE DETAIL SHEET C4.0.
13. PROPOSED DOCK WALL. SEE STRUCTURAL PLANS FOR DETAILS.
14. PROPOSED DOOR LANDING TO BE A MAX 2% SLOPE FOR A MINIMUM OF 5'x5' OUTSIDE OF DOOR. SEE SHEET C2.0 FOR GRADING.
15. INSTALL RADIUS DRIVE APPROACH PER APWA STANDARD PLAN 255. SEE DETAIL SHEET C5.1. SIDEWALK ACROSS DRIVE APPROACHES TO BE 6" (TYP.)
16. ADA RAMPS ARE TO BE INSTALLED PER CITY AND ADA STANDARDS AND SPECIFICATIONS. SEE DETAIL 11/C4.0.
17. NOT USED.
18. EXISTING FENCE.
19. EXISTING LIGHT POLE.
20. PROPOSED STAIRS. SEE ARCHITECTURAL PLANS FOR DETAILS.
21. SIGHT TRIANGLE.
22. INSTALL STOP SIGN PER MUTCD STANDARD R1-1.




23. INSTALL CROSS WALK PER AMERICAN FORK STANDARDS.
24. EXTEND 5' SIDEWALK TO EXISTING DRIVE APPROACH AND INSTALL ADA RAMP PER AMERICAN FORK STANDARD 15.18 IF NOT ALREADY INSTALLED BY NEIGHBORING PROPERTY. SEE DETAIL SHEET C4.2.
25. SAW CUT EXISTING ASPHALT TO INSTALL LATERAL. WORK TO BE DONE PER AMERICAN FORM STANDARD 15.22. REPLACE ALL ASPHALT IN KIND PER AMERICAN FORK CITY CODE 12.08.040 E.




Scale in Feet

SEE COVER SHEET FOR PROJECT LEGEND

SHEET LEGEND

ADA ROUTE

### Benchmark Info

The Benchmark for the project is the North Quarter Corner of Section 25, T.5.S. R.1.E., SLB&M
Elevation= 4555.90'
Datum is NAVD 88 derived from UTAH TURNGPS System

| NO. | REVISIONS | BY | DATE |
|---|---|---|---|
| 1 | COMMENTS | TLH | 08/10/21 |
| 2 | COMMENTS | TLH | 10/27/21 |
| 3 | COMMENTS | TLH | 03/09/22 |

DESIGNER: TLH PROJECT ENGINEER: TLH

CIR CIVIL ENGINEERING + SURVEYING
3032 SOUTH 1030 WEST, SUITE 202
SLC, Utah 84119 - 801-949-6296

# UTAH VALLEY BUSINESS PARK

752 EAST QUALITY DRIVE, AMERICAN FORK, UT 84003

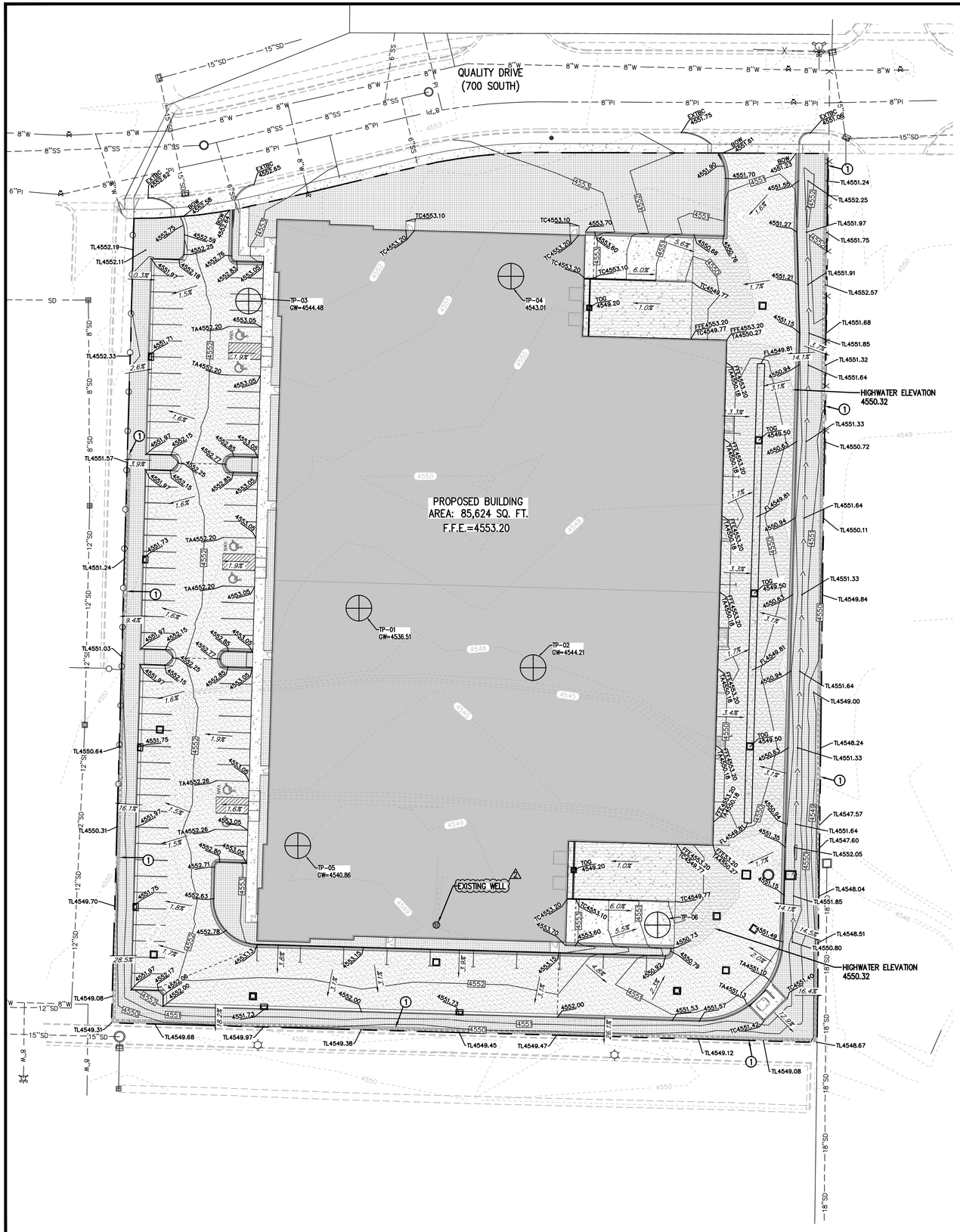
## SITE PLAN

PROFESSIONAL ENGINEER
No. 12072623
TREVOR L HODGSON
STATE OF UTAH

CALL BEFORE YOU DIG! IT'S THE LAW
BLUE STAKES 1 800 662 4111

SHEET NO.
C1.0

| PROJECT ID | DATE: |
|---|---|
| H1022-01 | 03/22/21 |
| FILE NAME: PRJ-AFH | SCALE: 1"=30' |




**SHEET NOTES:**

1. INSTALL 3' DEEP BY 2' WIDE GRAVEL TRENCH TO INTERCEPT AND PREVENT STORM WATER FROM FLOWING OFF SITE. GRAVEL TRENCH TO BE WRAPPED WITH MIRAFI DRAINAGE FABRIC TO WITHIN 6" OF FINISH GRADE. GRAVEL TO HAVE A MINIMUM POROSITY OF 0.40.

N

0 30 60 90

Scale in Feet

SEE COVER SHEET FOR PROJECT LEGEND

## SHEET LEGEND

DETENTION AREA

### Benchmark Info

The Benchmark for the project is the North Quarter Corner of Section 25, T.5.S. R.1.E., SLB&M
Elevation = 4555.90'
Datum is NAVD 88 derived from UTAH TURNGPS System

| NO. | REVISIONS | BY | DATE |
|---|---|---|---|
| 1 | COMMENTS | TLH | 08/10/21 |
| 2 | COMMENTS | TLH | 10/27/21 |
| 3 | COMMENTS | TLH | 03/09/22 |

DESIGNER: TLH PROJECT ENGINEER: TLH

CIVIL ENGINEERING + SURVEYING
3032 SOUTH 1030 WEST, SUITE 202
SLC, Utah 84119 - 801-949-6296

# UTAH VALLEY BUSINESS PARK

752 EAST QUALITY DRIVE, AMERICAN FORK, UT 84003

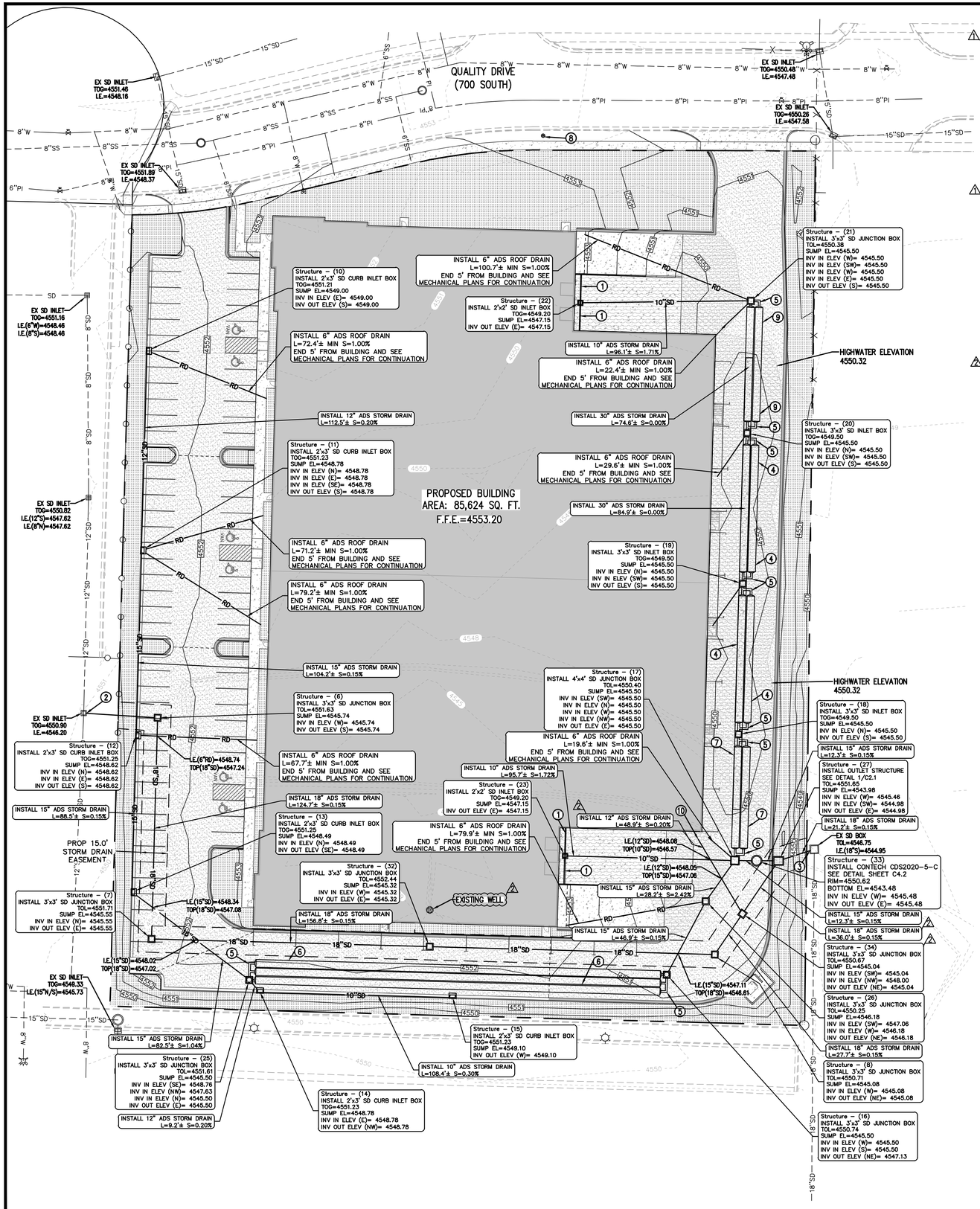
## GRADING PLAN

PROFESSIONAL ENGINEER
No. 12072623
TREVOR L HODGSON
STATE OF UTAH

CALL BEFORE YOU DIG! BLUE STAKES 1 800 662 4111

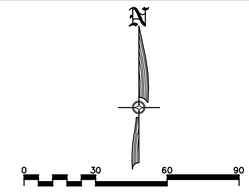
SHEET NO.
C2.0

| PROJECT ID | DATE: |
|---|---|
| H1022-01 | 03/22/21 |
| FILE NAME: PRJ-AFH | SCALE: 1"=30' |




SHEET NOTES:

1. INSTALL ZURN Z886 TRENCH DRAIN WITH P6-DGE HEAVY DUTY GRATE. TOG=4549.20. SEE DETAIL 14/C4.0
2. CONNECT PROPOSED 15" STORM DRAIN PIPE TO EXISTING STORM DRAIN BOX AT I.E.=4546.20.
3. CONNECT PROPOSED 15" STORM DRAIN PIPE TO EXISTING 15" STORM DRAIN BOX AT I.E.=4544.95.
4. INSTALL STORMTECH SC-740 SUBSURFACE STORMWATER MANAGEMENT SYSTEM. INSTALLATION TO BE DONE PER MANUFACTURER SPECIFICATIONS. BOTTOM OF CHANGERS TO GE SET AT ELEVATION 4545.50. CONTRACTOR TO INSTALL 2 LEGS OF 10 CHAMBERS. TOTAL CHAMBERS TO BE 20. SEE DETAIL SHEET C4.1.
5. INSTALL 15" TEES (TYP.)
6. INSTALL STORMTECH SC-740 SUBSURFACE STORMWATER MANAGEMENT SYSTEM. INSTALLATION TO BE DONE PER MANUFACTURER SPECIFICATIONS. BOTTOM OF CHANGERS TO GE SET AT ELEVATION 4545.50. CONTRACTOR TO INSTALL 3 LEGS OF 32 CHAMBERS. TOTAL CHAMBERS TO BE 128. SEE DETAIL SHEET C4.1.
7. INSTALL STORMTECH SC-740 SUBSURFACE STORMWATER MANAGEMENT SYSTEM. INSTALLATION TO BE DONE PER MANUFACTURER SPECIFICATIONS. BOTTOM OF CHANGERS TO GE SET AT ELEVATION 4545.50. CONTRACTOR TO INSTALL 2 LEGS OF 8 CHAMBERS. TOTAL CHAMBERS TO BE 16. SEE DETAIL SHEET C4.1.
8. INSTALL GROUNDWATER MONITORING WELL (W/PIEZOMETER). SEE DETAIL SHEET C4.1.
9. INSTALL STORMTECH SC-740 SUBSURFACE STORMWATER MANAGEMENT SYSTEM. INSTALLATION TO BE DONE PER MANUFACTURER SPECIFICATIONS. BOTTOM OF CHANGERS TO GE SET AT ELEVATION 4545.50. CONTRACTOR TO INSTALL 2 LEGS OF 9 CHAMBERS. TOTAL CHAMBERS TO BE 18. SEE DETAIL SHEET C4.1.
10. END 12" STORM DRAIN PIPE 5' FROM BUILDING, I.E.=4548.10. SEE ARCHITECTURAL PLANS RECOMMENDATIONS FOR FILLING IN EXISTING POND LETTER BY IGES (PROJECT NO. 03023-003) FOR CONTINUATION TO EXISTING SPRING.



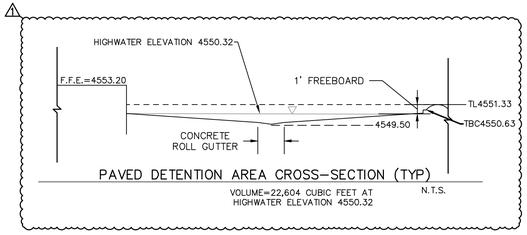

SEE COVER SHEET FOR PROJECT LEGEND

SHEET LEGEND

DETENTION AREA

**Benchmark Info**

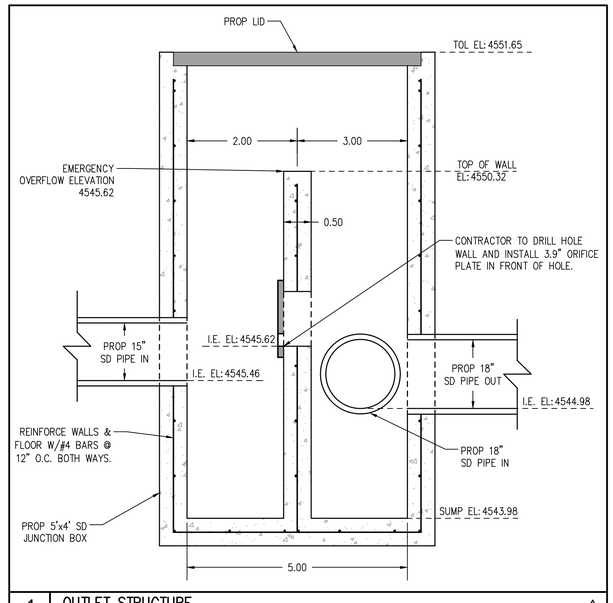
The Benchmark for the project is the North Quarter Corner of Section 25, T.5.S. R.1.E., SLB&M
Elevation= 4555.90'
Datum is NAVD 88 derived from UTAH TURNGPS System




PAVED DETENTION AREA CROSS-SECTION (TYP)

VOLUME=22,604 CUBIC FEET AT HIGHWATER ELEVATION 4550.32

N.T.S.




1 OUTLET STRUCTURE
N.T.S.

| NO. | REVISIONS | BY | DATE |
|---|---|---|---|
| 1 | COMMENTS | TLH | 08/10/21 |
| 2 | COMMENTS | TLH | 10/27/21 |
| 3 | COMMENTS | TLH | 03/09/22 |

DESIGNER: TLH PROJECT ENGINEER: TLH


CIR CIVIL ENGINEERING + SURVEYING
3032 SOUTH 1030 WEST, SUITE 202
SLC, Utah 84119 - 801-949-6296


# UTAH VALLEY BUSINESS PARK

752 EAST QUALITY DRIVE, AMERICAN FORK, UT 84003

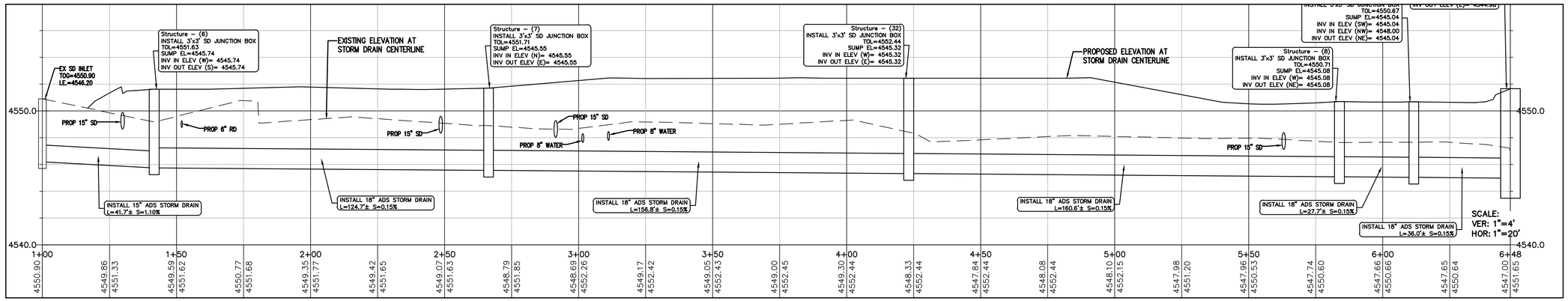
## DRAINAGE PLAN

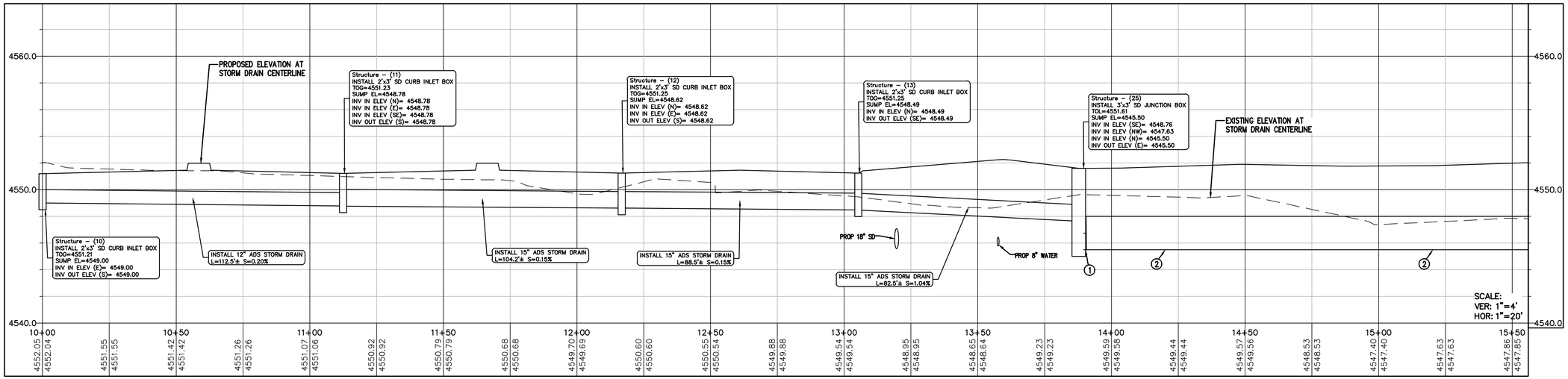
PROFESSIONAL ENGINEER
No. 12072623
TREVOR L HODGSON
STATE OF UTAH

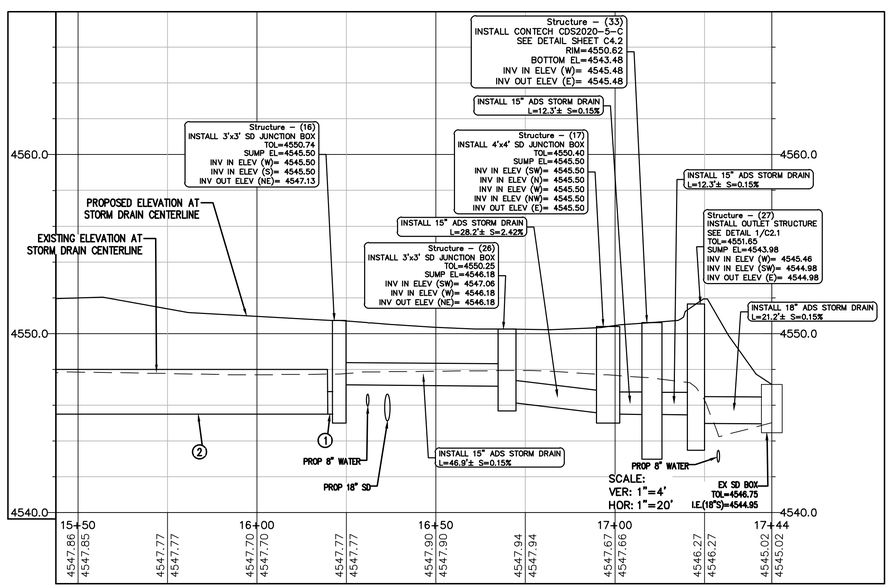
CALL BEFORE YOU DIG
BLUE STAKES 1 800 662 4111

SHEET NO.
C2.1

| PROJECT ID | DATE: |
|---|---|
| H1022-01 | 03/22/21 |
| FILE NAME: PRJ-AFH | SCALE: 1"=30' |




**SHEET NOTES:**

① INSTALL 15" TEES (TYP.)

⚠2 INSTALL STORMTECH SC-740 SUBSURFACE STORMWATER MANAGEMENT SYSTEM. INSTALLATION TO BE DONE PER MANUFACTURER SPECIFICATIONS. BOTTOM OF CHANGERS TO GE SET AT ELEVATION 4545.50. CONTRACTOR TO INSTALL 3 LEGS OF 32 CHAMBERS. TOTAL CHAMBERS TO BE 128. SEE DETAIL SHEET C4.1.

0 20 40 60

Scale in Feet

SEE COVER SHEET FOR PROJECT LEGEND

⚠1

**Benchmark Info**

The Benchmark for the project is the North Quarter Corner of Section 25, T.5.S. R.1.E., SLB&M
Elevation= 4555.90'
Datum is NAVD 88 derived from UTAH TURNGPS System

| NO. | REVISIONS | BY | DATE |
|---|---|---|---|
| 1 | COMMENTS | TLH | 08/10/21 |
| 2 | COMMENTS | TLH | 10/27/21 |
| 3 | COMMENTS | TLH | 03/09/22 |

DESIGNER: TLH PROJECT ENGINEER: TLH

CIVIL ENGINEERING + SURVEYING
3032 SOUTH 1030 WEST, SUITE 202
SLC, Utah 84119 - 801-949-6296

# UTAH VALLEY BUSINESS PARK

752 EAST QUALITY DRIVE, AMERICAN FORK, UT 84003

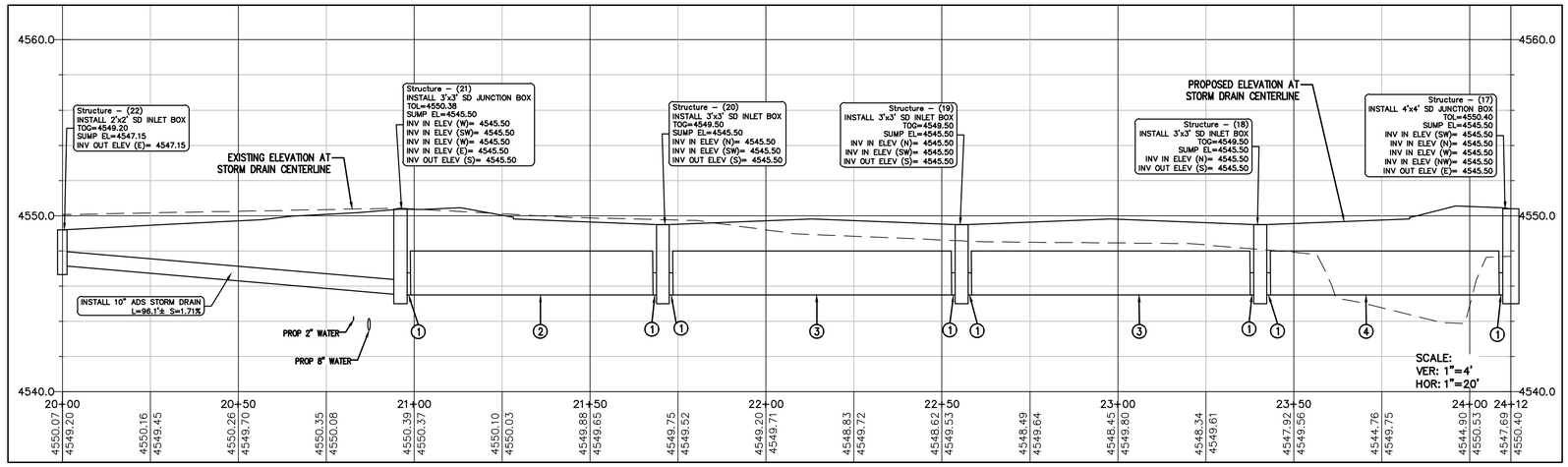
## STORM DRAIN PROFILE

PROFESSIONAL ENGINEER
No. 12072623
TREVOR L HODGSON
STATE OF UTAH

CALL BEFORE YOU DIG! BLUE STAKES 1 800 662 4111

SHEET NO. C2.2

PROJECT ID: H1022-01 | DATE: 03/22/21
FILE NAME: PRJ-AFH | SCALE: 1"=20'




0 20 40 60

Scale In Feet

SEE COVER SHEET FOR PROJECT LEGEND

**Benchmark Info**

The Benchmark for the project is the North Quarter Corner of Section 25, T.5.S. R.1.E., SLB&M
Elevation= 4555.90'
Datum is NAVD 88 derived from UTAH TURNGPS System

**SHEET NOTES:**

1. INSTALL 15" TEES (TYP.)
2. INSTALL STORMTECH SC-740 SUBSURFACE STORMWATER MANAGEMENT SYSTEM. INSTALLATION TO BE DONE PER MANUFACTURER SPECIFICATIONS. BOTTOM OF CHANGERS TO GE SET AT ELEVATION 4545.50. CONTRACTOR TO INSTALL 2 LEGS OF 9 CHAMBERS. TOTAL CHAMBERS TO BE 18. SEE DETAIL SHEET C4.1.
3. INSTALL STORMTECH SC-740 SUBSURFACE STORMWATER MANAGEMENT SYSTEM. INSTALLATION TO BE DONE PER MANUFACTURER SPECIFICATIONS. BOTTOM OF CHANGERS TO GE SET AT ELEVATION 4545.50. CONTRACTOR TO INSTALL 2 LEGS OF 10 CHAMBERS. TOTAL CHAMBERS TO BE 20. SEE DETAIL SHEET C4.1.
4. INSTALL STORMTECH SC-740 SUBSURFACE STORMWATER MANAGEMENT SYSTEM. INSTALLATION TO BE DONE PER MANUFACTURER SPECIFICATIONS. BOTTOM OF CHANGERS TO GE SET AT ELEVATION 4545.50. CONTRACTOR TO INSTALL 2 LEGS OF 8 CHAMBERS. TOTAL CHAMBERS TO BE 16. SEE DETAIL SHEET C4.1.

| NO. | REVISIONS | BY | DATE |
|---|---|---|---|
| 1 | COMMENTS | TLH | 08/10/21 |
| 2 | COMMENTS | TLH | 10/27/21 |
| 3 | COMMENTS | TLH | 03/09/22 |

DESIGNER: TLH PROJECT ENGINEER: TLH

CIR CIVIL ENGINEERING + SURVEYING
3032 SOUTH 1030 WEST, SUITE 202
SLC, Utah 84119 - 801-949-6296

# UTAH VALLEY BUSINESS PARK

752 EAST QUALITY DRIVE, AMERICAN FORK, UT 84003

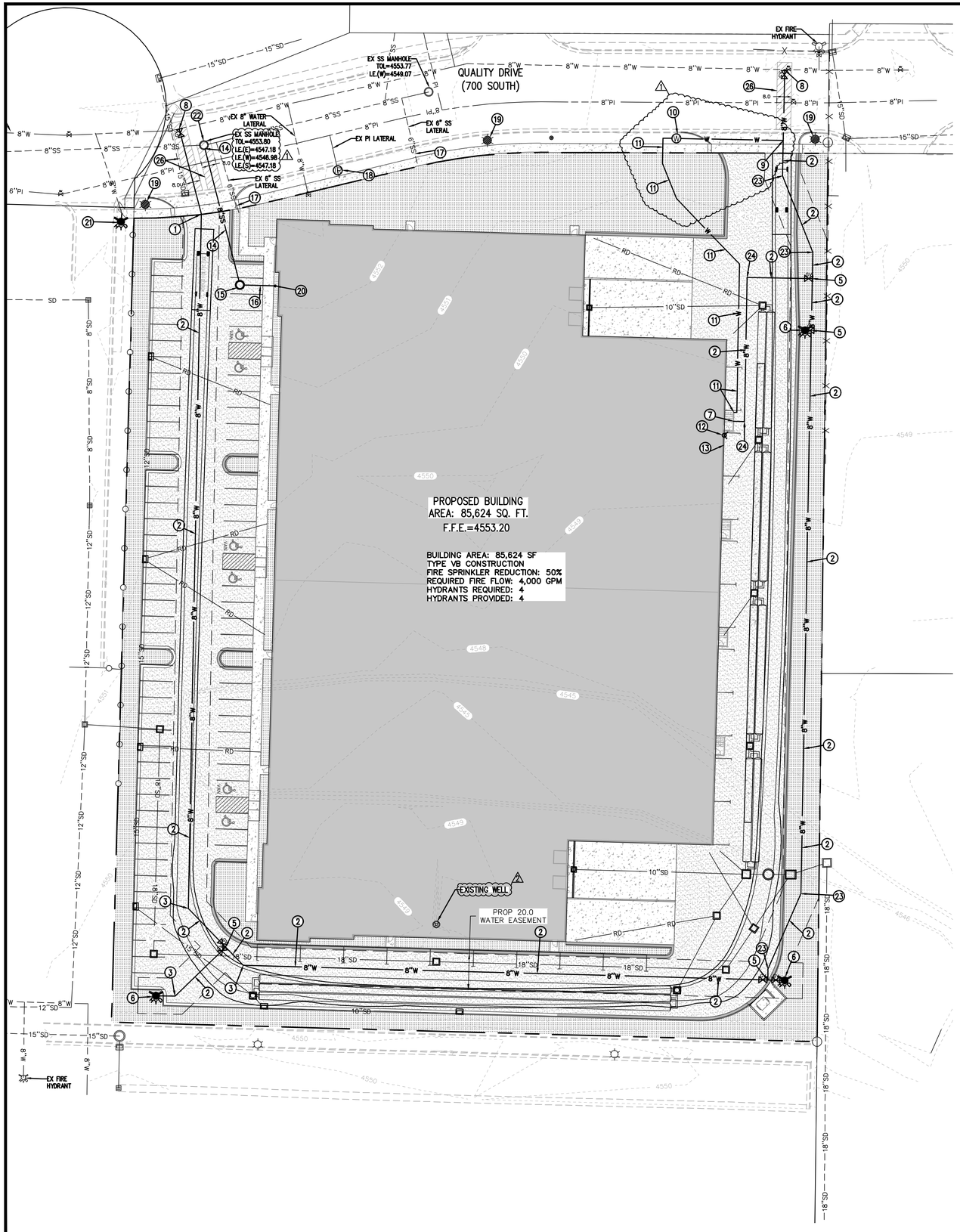
## STORM DRAIN PROFILE

CALL BEFORE YOU DIG! BLUE STAKES 1 800 662 4111

PROFESSIONAL ENGINEER
No. 12072623
TREVOR L HODGSON
STATE OF UTAH

SHEET NO.
C2.3

| PROJECT ID | DATE: |
|---|---|
| H1022-01 | 03/22/21 |
| FILE NAME: PRJ-AFH | SCALE: 1"=20' |




**CITY SANITARY SEWER NOTE:**
ALL SEWER MAINS AND LATERALS MUST BE INSPECTED AND APPROVED BY THE CITY OF AMERICAN FORK PUBLIC WORKS DEPARTMENT BEFORE BACKFILLING IS ACCOMPLISHED

**SEWER/WATER CROSSING NOTE:**
IN LOCATIONS WHERE THE WATER LINE AND SEWER LINE CROSS AND THE WATER LINE MUST BE INSTALLED BELOW THE SEWER LINE, REFER TO DETAIL 1/C3.1 FOR INSTALLATION GUIDELINES.

**LATERAL NOTE:**
ALL LATERAL CONNECTIONS SHALL INSERT-A-TEE OR WYE AT TEN O'CLOCK OR TWO O'CLOCK POSITIONING TO THE CENTER OF THE MAIN LINE AND SHALL BE ENCASED IN CONCRETE AFTER INSPECTION IS MADE.

**ROADCUT NOTE:**
ANY ROADWAY CUTS IN THE NEWLY CONSTRUCTED PORTIONS OF QUALITY DRIVE AS ALLOWED BY THE CITY ENGINEER SHALL FOLLOW THE ADDITIONAL REQUIREMENTS FOR NEW PAVEMENT AS OUTLINED IN SECTION 12.08.040 PAVEMENT PRESERVATION OF THE AMERICAN FORK CITY MUNICIPAL CODE.

**WATER NOTE:**
AREAS WHERE GROUNDWATER IS ENCOUNTERED, MECHANICAL RESTRAINTS ARE TO BE USED INSTEAD OF THRUST BLOCKS. SEE DETAIL SHEET C5.0.

N

0 30 60 90
Scale in Feet

SEE COVER SHEET FOR PROJECT LEGEND

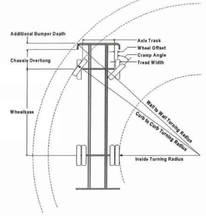
**Benchmark Info**

The Benchmark for the project is the North Quarter Corner of Section 25, T.5.S. R.1.E., SLB&M
Elevation = 4555.90'
Datum is NAVD 88 derived from UTAH TURNGPS System

1. (1) INSTALL 8" 11.25° BEND W/THRUST BLOCKS.
2. (2) INSTALL 8" PVC C-900 WATER LINE.
3. (3) INSTALL 8" 45° BEND W/THRUST BLOCKS.
4. (4) INSTALL 8" 33.75° BEND W/THRUST BLOCKS.
5. (5) INSTALL 8" TEE W/THRUST BLOCKS AND GATE VALVES.
6. (6) INSTALL FIRE HYDRANT PER AMERICAN FORK STD. 15.6. SEE DETAIL SHEET C5.0.
7. (7) END 8" PVC C-900 WATER LINE 5' FROM BUILDING AND SEE FIRE SPRINKLER PLANS FOR CONTINUATION TO FIRE RISER.
8. (8) CONNECT PROPOSED 8" PVC C-900 WATER LINE LATERAL TO EXISTING 8" WATER MAIN. ALL WORK TO BE DONE PER AMERICAN FORK STANDARDS AND SPECIFICATIONS. (HOT TAP)
9. (9) INSTALL 2" POLY PIPE WATER LATERAL PER AMERICAN FORK CITY STANDARD PLAN NO. 15.3 AND 15.5. SEE DETAIL SHEET C5.0 AND C5.1.
10. (10) INSTALL 2" WATER METER PER AMERICAN FORK CITY STANDARD PLAN NO. 15.5C. SEE DETAIL SHEET C5.1.
11. (11) INSTALL 2" POLY PIPE WATER W/BENDS. END 5' FROM BUILDING AND SEE MECHANICAL PLANS FOR CONTINUATION TO BUILDING.
12. (12) INSTALL WALL MOUNTED FDC.
13. (13) INSTALL KNOX BOX 1650 OR 3200 SERIES KEY BOX FOR FIRE DEPARTMENT ACCESS.
14. (14) CONNECT TO EXISTING SEWER MANHOLE AT I.E.=4547.18 AND INSTALL 76'± OF 8" PVC SEWER PIPE, S=0.4%.
15. (15) INSTALL 4' DIA. SEWER MANHOLE PER AMERICAN FORK STD. 15.12. TOL=4552.3±, I.E.(IN)=4547.70, I.E.(OUT)=4547.50. SEE DETAIL SHEET C5.1.
16. (16) INSTALL 20'± OF 8" PVC SDR-35 SEWER PIPE, S=0.4%
17. (17) EXISTING 6" SEWER LATERAL TO BE REMOVED AND KILLED AT THE MAIN.
18. (18) CONNECT TO EXISTING PI LATERAL AND INSTALL 2" POLY PIPE PRESSURIZED IRRITAION LATERAL PER AMERICAN FORK STD. PLAN NO. 15.5B AND NO-RISE SECONDARY METER COPPERSETTER W/27" FRAME & COVER (MANHOLE TYPE) PER 15.5E. SEE DETAIL SHEET C5.1 AND LANDSCAPE PLANS FOR CONTINUATION.
19. (19) INSTALL STREET LIGHT PER AMERICAN FORK STANDARDS.
20. (20) INSTALL 8" CLEANOUT WYE 5' FROM BUILDING, I.E.=4547.78 AND SEE MECHANICAL PLANS FOR CONTINUATION TO BUILDING.
21. (21) EXISTING FIRE HYDRANT TO BE RELOCATED SUCH THAT THE 5' SIDEWALK CAN CONTINUE WEST.
22. (22) EXISTING SEWER MANHOLE TO BE UPSIZED TO 5' DIAMETER PER AMERICAN FORK STANDARDS. RECONNECT TO EXISTING 8" SEWER MAIN AT I.E.(E)=4547.18, I.E.(W)=4546.98, I.E.(S)=4547.18
23. (23) INSTALL 8" 22.5° BEND W/THRUST BLOCKS.
24. (24) INSTALL 8" 90° BEND W/THRUST BLOCKS.
25. (25) FIRE TRUCK TURNING RADII PER TOWER 51 TURNING SPEC. SEE DETAIL THIS SHEET.
26. (26) SAW CUT EXISTING ASPHALT TO INSTALL LATERAL. WORK TO BE DONE PER AMERICAN FORM STANDARD 15.22. REPLACE ALL ASPHALT IN KIND PER AMERICAN FORK CITY CODE 12.08.040 E.

**Turning Performance Analysis** — Pierce — 10/21/2020

**Bid Number:** 947
**Department:** American Fork
**Chassis:** Velocity Chassis, 100AAT
**Body:** Aerial, 100AAT, Alum Body




**Parameters:**

| | |
|---|---|
| *Inside Cramp Angle: | 40° |
| Axle Track: | 82.92 in. |
| Wheel Offset: | 4.68 in. |
| Tread Width: | 16.3 in. |
| Chassis Overhang: | 78 in. |
| Additional Bumper Depth: | 27 in. |
| Front Overhang: | 105 in. |
| Wheelbase: | 271 in. |

**Calculated Turning Radii:**

| | |
|---|---|
| Inside Turn: | 25 ft. 10 in. |
| Curb to curb: | 41 ft. 9 in. |
| Wall to wall: | 46 ft. 11 in. |

| Category | Option | Description |
|---|---|---|
| Axle, Front, Custom | 0508846 | Axle, Front, Oshkosh TAK-4, Non Drive, 24,000 lb, Velocity |
| Wheels, Front | 0052887 | Wheels, Front, Alcoa, 22.50" x 12.25", Aluminum, Dura-Bright, Hub Pilot |
| Tires, Front | 0677592 | Tires, Front, Goodyear, G296 MSA, 425/65R22.50, 20 ply, Fire Service Load Rating |
| Bumpers | 0745902 | Bumper, 27" Total (16" Extension), Steel, Painted,100AAT,VEL |
| Aerial Devices | 0771866 | Aerial, Ascendant 100' Aerial Tower |

**Notes:**

*Actual Inside cramp angle may be less than shown.

Curb to Curb turning radius calculated for 9.00 inch curb.

| NO. | REVISIONS | BY | DATE |
|---|---|---|---|
| 1 | COMMENTS | TLH | 08/10/21 |
| 2 | COMMENTS | TLH | 10/27/21 |
| 3 | COMMENTS | TLH | 03/09/22 |

DESIGNER: TLH
PROJECT ENGINEER: TLH

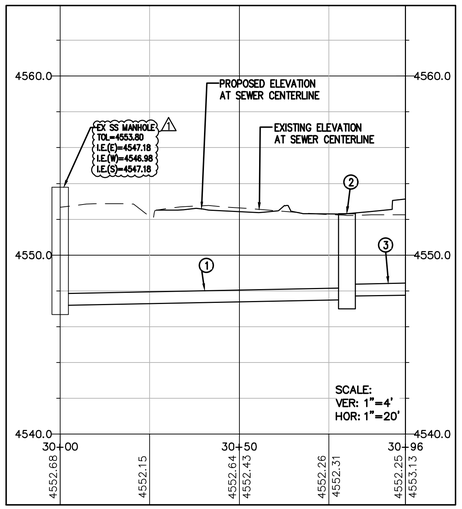

CIR CIVIL ENGINEERING + SURVEYING
3032 SOUTH 1030 WEST, SUITE 202
SLC, Utah 84119 - 801-949-6296


# UTAH VALLEY BUSINESS PARK
752 EAST QUALITY DRIVE, AMERICAN FORK, UT 84003
## UTILITY PLAN

PROFESSIONAL ENGINEER — No. 12072623 — TREVOR L HODGSON — STATE OF UTAH

CALL BEFORE YOU DIG! 811 — BLUE STAKES 1 800 662 4111

SHEET NO. C3.0
PROJECT ID: H1022-01 | DATE: 03/22/21
FILE NAME: PRJ-AFH | SCALE: 1" = 30'




**SEWER/WATER CROSSING NOTE:**
IN LOCATIONS WHERE THE WATER LINE AND SEWER LINE CROSS AND THE WATER LINE MUST BE INSTALLED BELOW THE SEWER LINE, REFER TO DETAIL 1 THIS SHEET FOR INSTALLATION GUIDELINES.

## Benchmark Info

The Benchmark for the project is the North Quarter Corner of Section 25, T.5.S. R.1.E., SLB&M
Elevation= 4555.90'
Datum is NAVD 88 derived from UTAH TURNGPS System

0 20 40 60
Scale In Feet

SEE COVER SHEET FOR PROJECT LEGEND

**SHEET NOTES:**

1. CONNECT TO EXISTING SEWER MANHOLE AT I.E.=4547.18 AND INSTALL 76'± OF 8" PVC SEWER PIPE, S=0.4%
2. INSTALL 4' DIA. SEWER MANHOLE PER AMERICAN FORK STD. 15.12. TOL=4552.3±, I.E.(IN)=4547.70, I.E.(OUT)=4547.50. SEE DETAIL SHEET C5.1.
3. INSTALL 15'± OF 8" PVC SEWER PIPE, S=0.4% END 5' FROM BUILDING, I.E.=4547.76 AND SEE MECHANICAL PLANS FOR CONTINUATION TO BUILDING.

| NO. | REVISIONS | BY | DATE |
|---|---|---|---|
| 1 | COMMENTS | TLH | 08/10/21 |
| 2 | COMMENTS | TLH | 10/27/21 |
| 3 | COMMENTS | TLH | 03/09/22 |

DESIGNER: TLH PROJECT ENGINEER: TLH

CIVIL ENGINEERING + SURVEYING
3032 SOUTH 1030 WEST, SUITE 202
SLC, Utah 84119 - 801-949-6296

# UTAH VALLEY BUSINESS PARK

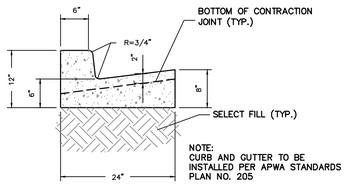
752 EAST QUALITY DRIVE, AMERICAN FORK, UT 84003

## SEWER PROFILE

PROFESSIONAL ENGINEER
No. 12072623
TREVOR L HODGSON
STATE OF UTAH

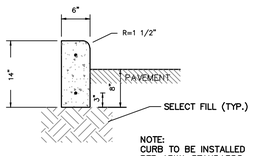
CALL BEFORE YOU DIG!
BLUE STAKES 1 800 662 4111

| SHEET NO. | |
|---|---|
| C3.1 | |
| PROJECT ID: H1022-01 | DATE: 03/22/21 |
| FILE NAME: PRJ-AFH | SCALE: 1"=20' |



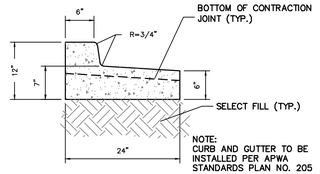

NOTE:
CURB AND GUTTER TO BE INSTALLED PER APWA STANDARDS PLAN NO. 205

1 | 24" CURB & GUTTER
N.T.S.



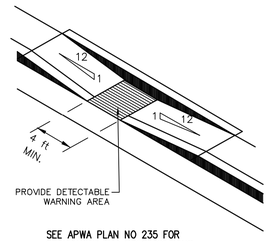

NOTE:
CURB TO BE INSTALLED PER APWA STANDARDS PLAN NO. 209

2 | 6" CURB WALL
N.T.S.



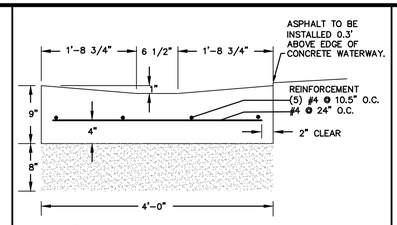

NOTE:
CURB AND GUTTER TO BE INSTALLED PER APWA STANDARDS PLAN NO. 205

3 | 24" REVERSE PAN CURB & GUTTER
N.T.S.



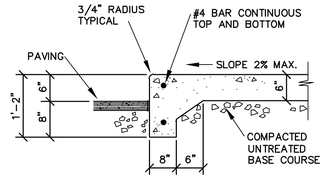

SEE APWA PLAN NO 235 FOR STANDARDS AND SPECIFICATIONS

4 | ADA RAMP
N.T.S.



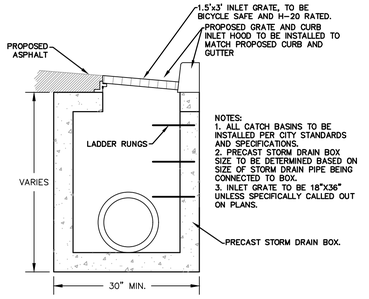

NOTE:
1. PER APWA PLAN NO. 211
2. ASPHALT PAVEMENT SECTION TO BE INSTALLED AT 0.03' HIGHER THAT THE TOP EDGE OF THE CONCRETE ROLL GUTTER, BOTH SIDES.

5 | 4'-0" ROLL GUTTER
N.T.S.



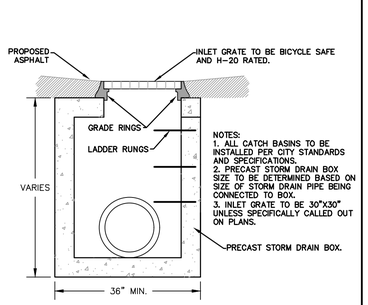

NOTE:
ALL INSTALLATION OF SIDEWALK, INCLUDING EXPANSION AND CONTRACTION JOINTS, TO BE DONE PER APWA PLAN NO. 231.

6 | OPEN FACE SIDEWALK
N.T.S.



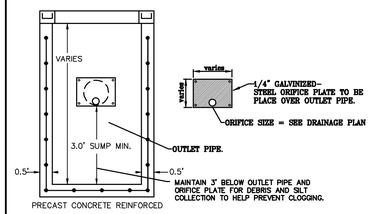

NOTES:
1. ALL CATCH BASINS TO BE INSTALLED PER CITY STANDARDS AND SPECIFICATIONS.
2. PRECAST STORM DRAIN BOX SIZE TO BE DETERMINED BASED ON SIZE OF STORM DRAIN PIPE BEING CONNECTED TO BOX.
3. INLET GRATE TO BE 18"X36" UNLESS SPECIFICALLY CALLED OUT ON PLANS.

7 | STANDARD STORM DRAIN CURB INLET BOX
N.T.S.

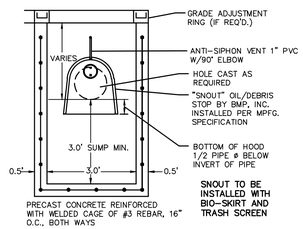



NOTES:
1. ALL CATCH BASINS TO BE INSTALLED PER CITY STANDARDS AND SPECIFICATIONS.
2. PRECAST STORM DRAIN BOX SIZE TO BE DETERMINED BASED ON SIZE OF STORM DRAIN PIPE BEING CONNECTED TO BOX.
3. INLET GRATE TO BE 30"X30" UNLESS SPECIFICALLY CALLED OUT ON PLANS.

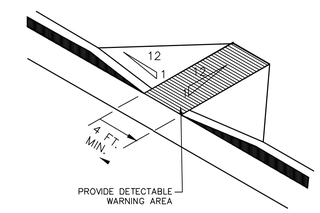
8 | STANDARD STORM DRAIN INLET BOX
N.T.S.




9 | ORIFICE PLATE
N.T.S.

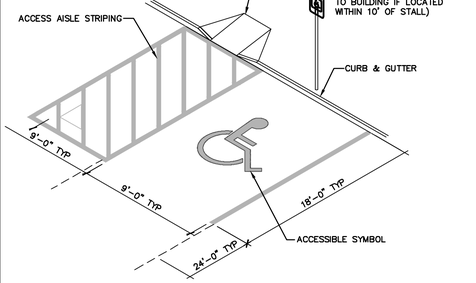



10 | SNOUT OIL & DEBRIS STOP
N.T.S.

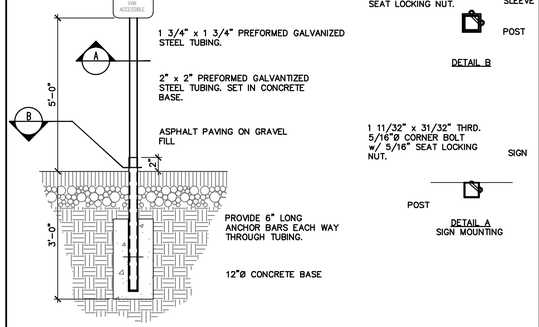



SEE APWA PLAN NO 235 FOR STANDARDS AND SPECIFICATIONS

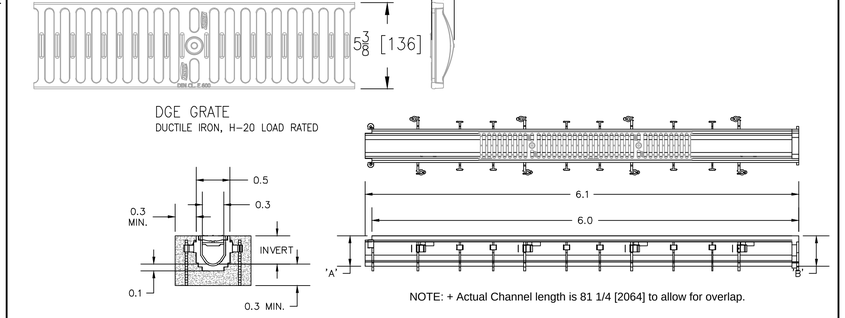
11 | ADA RAMP
N.T.S.




12 | ACCESSIBLE PARKING STALL
N.T.S.

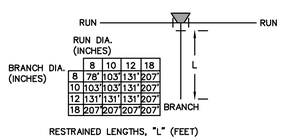



13 | HANDICAPPED PARKING SIGN
N.T.S.




NOTE: + Actual Channel length is 81 1/4 [2064] to allow for overlap.

14 | ZURN Z886 TRENCH DRAIN SYSTEM
N.T.S.

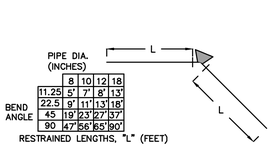



| BRANCH DIA. (INCHES) | RUN DIA. (INCHES) 8 | 10 | 12 | 18 |
|---|---|---|---|---|
| 8 | 78' | 103' | 131' | 207' |
| 10 | 103' | 103' | 131' | 207' |
| 12 | 131' | 131' | 131' | 207' |
| 18 | 207' | 207' | 207' | 207' |

RESTRAINED LENGTHS, "L" (FEET)

NOTES:
1. RESTRAIN BOTH MECHANICAL JOINTS ON THE RUN SIDES OF THE TEE. PIPES ON ALL SIDES OF TEE SHOULD BE FULL LENGTHS OF PIPE.
2. ALL JOINTS WITHIN THE LENGTH MUST BE RESTRAINED PER CITY SPECIFICATIONS.

HORIZONTAL TEES – LENGTH OF RESTRAINED JOINTS

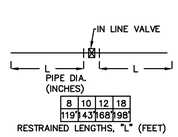



| BEND ANGLE | PIPE DIA. (INCHES) 8 | 10 | 12 | 18 |
|---|---|---|---|---|
| 11.25 | 5' | 7' | 8' | 13' |
| 22.5 | 9' | 11' | 13' | 18' |
| 45 | 19' | 23' | 27' | 37' |
| 90 | 47' | 56' | 65' | 90' |

RESTRAINED LENGTHS, "L" (FEET)

NOTES:
1. ALL JOINTS WITHIN THE LENGTH MUST BE RESTRAINED PER CITY SPECIFICATIONS. PIPES ON EITHER SIDE OF BEND SHOULD BE FULL LENGTHS OF PIPE.

HORIZONTAL BENDS – LENGTH OF RESTRAINED JOINTS



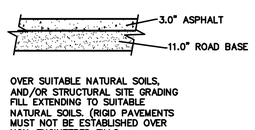

| PIPE DIA. (INCHES) 8 | 10 | 12 | 18 |
|---|---|---|---|
| 119' | 143' | 168' | 198' |

RESTRAINED LENGTHS, "L" (FEET)

NOTES:
1. ALL JOINTS WITHIN THE LENGTH MUST BE RESTRAINED PER CITY SPECIFICATIONS. PIPES ON EITHER SIDE OF BEND SHOULD BE FULL LENGTHS OF PIPE.

IN LINE VALVE – LENGTH OF RESTRAINED JOINTS

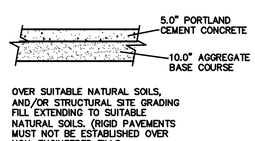
15 | RESTRAINED JOINT LENGTHS
N.T.S.




OVER SUITABLE NATURAL SOILS, AND/OR STRUCTURAL SITE GRADING FILL EXTENDING TO SUITABLE NATURAL SOILS. (RIGID PAVEMENTS MUST NOT BE ESTABLISHED OVER NON-ENGINEERED FILLS.

PAVEMENT SECTIONS ARE PER THE APRIL 7, 2021 GEOTECHNICAL STUDY BY IGES (PROJECT NO. 03638-001). CONTRACTOR TO INSTALL ALL PAVEMENT PER THE GEOTECH REPORT.

16 | ASPHALT PAVEMENT SECTION
N.T.S.




OVER SUITABLE NATURAL SOILS, AND/OR STRUCTURAL SITE GRADING FILL EXTENDING TO SUITABLE NATURAL SOILS. (RIGID PAVEMENTS MUST NOT BE ESTABLISHED OVER NON-ENGINEERED FILLS.

PAVEMENT SECTIONS ARE PER THE APRIL 7, 2021 GEOTECHNICAL STUDY BY IGES (PROJECT NO. 03638-001). CONTRACTOR TO INSTALL ALL PAVEMENT PER THE GEOTECH REPORT.

17 | CONCRETE PAVEMENT SECTION
N.T.S.

| NO. | REVISIONS | BY | DATE |
|---|---|---|---|
| 1 | COMMENTS | TLH | 08/10/21 |
| 2 | COMMENTS | TLH | 10/27/21 |
| 3 | COMMENTS | TLH | 03/09/22 |

DESIGNER: TLH PROJECT ENGINEER: TLH

CIR CIVIL ENGINEERING + SURVEYING
3032 SOUTH 1030 WEST, SUITE 202
SLC, Utah 84119 - 801-949-6296

UTAH VALLEY BUSINESS PARK
752 EAST QUALITY DRIVE, AMERICAN FORK, UT 84003

DETAIL SHEET

PROFESSIONAL ENGINEER
No. 12072623
TREVOR L HODGSON
STATE OF UTAH

CALL BEFORE YOU DIG!
BLUE STAKES 1 800 662 4111

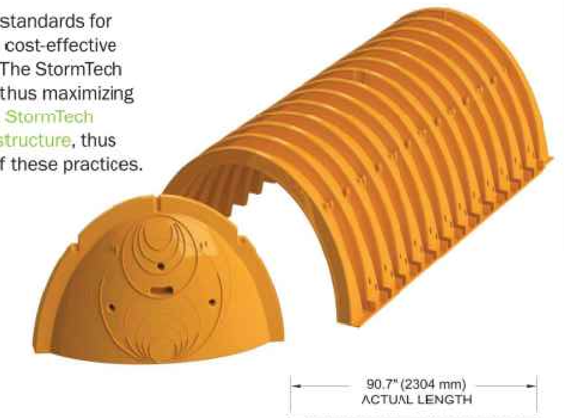
SHEET NO.
C4.0

| PROJECT ID | DATE: |
|---|---|
| H1022-01 | 03/22/21 |
| FILE NAME: PRJ-AFH | SCALE: |

StormTech ADS

## STORMTECH SC-740 CHAMBER

Designed to meet the most stringent industry performance standards for superior structural integrity while providing designers with a cost-effective method to save valuable land and protect water resources. The StormTech system is designed primarily to be used under parking lots, thus maximizing land usage for private (commercial) and public applications. StormTech chambers can also be used in conjunction with Green Infrastructure, thus enhancing the performance and extending the service life of these practices.



**STORMTECH SC-740 CHAMBER**
(not to scale)

**Nominal Chamber Specifications**

**Size (L x W x H)**
85.4" x 51" x 30"
2,170 mm x 1,295 mm x 762 mm

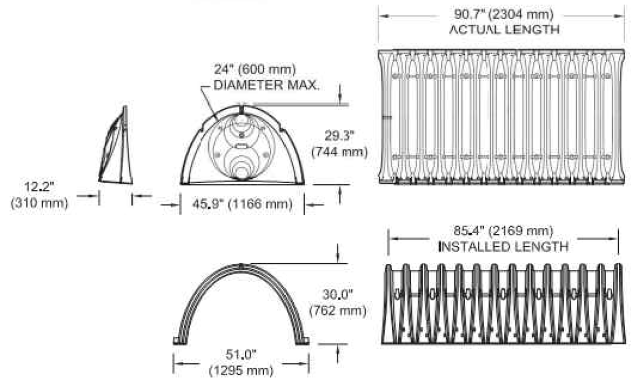
**Chamber Storage**
45.9 ft³ (1.30 m³)

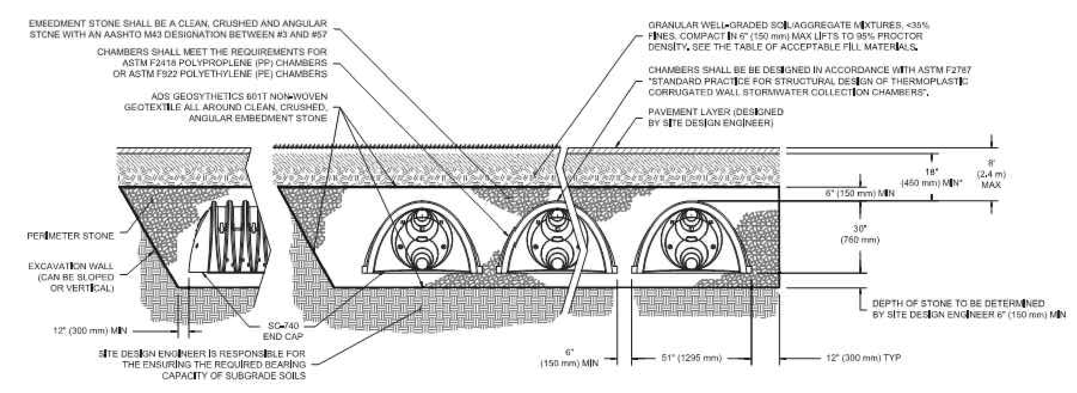
**Min. Installed Storage***
74.9 ft³ (2.12 m³)

**Weight**
74.0 lbs (33.6 kg)

**Shipping**
30 chambers/pallet
60 end caps/pallet
12 pallets/truck

*Assumes 6" (150 mm) stone above, below and between chambers and 40% stone porosity.




*MINIMUM COVER TO BOTTOM OF FLEXIBLE PAVEMENT. FOR UNPAVED INSTALLATIONS WHERE RUTTING FROM VEHICLES MAY OCCUR, INCREASE COVER TO 24" (600 mm).

StormTech ADS

### SC-740 CUMULATIVE STORAGE VOLUMES PER CHAMBER

Assumes 40% Stone Porosity. Calculations are Based Upon a 6" (150 mm) Stone Base Under Chambers.

| Depth of Water in System Inches (mm) | | Cumulative Chamber Storage ft³ (m³) | Total System Cumulative Storage ft³ (m³) |
|---|---|---|---|
| 42 (1067) | ↑ | 45.90 (1.300) | 74.90 (2.121) |
| 41 (1041) | | 45.90 (1.300) | 73.77 (2.089) |
| 40 (1016) | Stone | 45.90 (1.300) | 72.64 (2.057) |
| 39 (991) | Cover | 45.90 (1.300) | 71.52 (2.025) |
| 38 (965) | | 45.90 (1.300) | 70.39 (1.993) |
| 37 (940) | ↓ | 45.90 (1.300) | 69.26 (1.961) |
| 36 (914) | | 45.90 (1.300) | 68.14 (1.929) |
| 35 (889) | | 45.85 (1.298) | 66.98 (1.897) |
| 34 (864) | | 45.69 (1.294) | 65.75 (1.862) |
| 33 (838) | | 45.41 (1.286) | 64.46 (1.825) |
| 32 (813) | | 44.81 (1.269) | 62.97 (1.783) |
| 31 (787) | | 44.01 (1.246) | 61.36 (1.737) |
| 30 (762) | | 43.06 (1.219) | 59.66 (1.689) |
| 29 (737) | | 41.98 (1.189) | 57.89 (1.639) |
| 28 (711) | | 40.80 (1.155) | 56.05 (1.587) |
| 27 (686) | | 39.54 (1.120) | 54.17 (1.534) |
| 26 (660) | | 38.18 (1.081) | 52.23 (1.479) |
| 25 (635) | | 36.74 (1.040) | 50.23 (1.422) |
| 24 (610) | | 35.22 (0.977) | 48.19 (1.365) |
| 23 (584) | | 33.64 (0.953) | 46.11 (1.306) |
| 22 (559) | | 31.99 (0.906) | 44.00 (1.246) |
| 21 (533) | | 30.29 (0.858) | 1.85 (1.185) |
| 20 (508) | | 28.54 (0.808) | 39.67 (1.123) |
| 19 (483) | | 26.74 (0.757) | 37.47 (1.061) |
| 18 (457) | | 24.89 (0.705) | 35.23 (0.997) |
| 17 (432) | | 23.00 (0.651) | 32.96 (0.939) |
| 16 (406) | | 21.06 (0.596) | 30.68 (0.869) |
| 15 (381) | | 19.09 (0.541) | 28.36 (0.803) |
| 14 (356) | | 17.08 (0.484) | 26.03 (0.737) |
| 13 (330) | | 15.04 (0.426) | 23.68 (0.670) |
| 12 (305) | | 12.97 (0.367) | 21.31 (0.608) |
| 11 (279) | | 10.87 (0.309) | 18.92 (0.535) |
| 10 (254) | | 8.74 (0.247) | 16.51 (0.468) |
| 9 (229) | | 6.58 (0.186) | 14.09 (0.399) |
| 8 (203) | | 4.41 (0.125) | 11.66 (0.330) |
| 7 (178) | | 2.21 (0.063) | 9.21 (0.264) |
| 6 (152) | ↑ | 0 (0) | 6.76 (0.191) |
| 5 (127) | | 0 (0) | 5.63 (0.160) |
| 4 (102) | Stone | 0 (0) | 4.51 (0.128) |
| 3 (76) | Foundation | 0 (0) | 3.38 (0.096) |
| 2 (51) | | 0 (0) | 2.25 (0.064) |
| 1 (25) | ↓ | 0 (0) | 1.13 (0.032) |

Note: Add 1.13 ft³ (0.032 m³) of storage for each additional inch (25 mm) of stone foundation.

#### STORAGE VOLUME PER CHAMBER FT³ (M³)

| | Bare Chamber Storage ft³ (m³) | Chamber and Stone Foundation Depth in. (mm) | | |
|---|---|---|---|---|
| | | 6 (150) | 12 (300) | 18 (450) |
| SC-740 Chamber | 45.9 (1.3) | 74.9 (2.1) | 81.7 (2.3) | 88.4 (2.5) |

Note: Assumes 6" (150 mm) stone above chambers, 6" (150 mm) row spacing and 40% stone porosity.

#### AMOUNT OF STONE PER CHAMBER

| ENGLISH TONS (yds³) | Stone Foundation Depth | | |
|---|---|---|---|
| | 6" | 12" | 16" |
| SC-740 | 3.8 (2.8) | 4.6 (3.3) | 5.5 (3.9) |
| METRIC KILOGRAMS (m³) | 150 mm | 300 mm | 450 mm |
| SC-740 | 3,450 (2.1) | 4,170 (2.5) | 4,490 (3.0) |

Note: Assumes 6" (150 mm) of stone above and between chambers.

#### VOLUME EXCAVATION PER CHAMBER YD³ (M³)

| | Stone Foundation Depth | | |
|---|---|---|---|
| | 6 (150) | 12 (300) | 18 (450) |
| SC-740 | 5.5 (4.2) | 6.2 (4.7) | 6.8 (5.2) |

Note: Assumes 6" (150 mm) of row separation and 18" (450 mm) of cover. The volume of excavation will vary as depth of cover increases.



**Working on a project?**
**Visit us at www.stormtech.com**
**and utilize the StormTech Design Tool**

For more information on the StormTech SC-740 Chamber and other ADS products, please contact our Customer Service Representatives at 1-800-821-6710

*THE MOST ADVANCED NAME IN WATER MANAGEMENT SOLUTIONS™*


**Advanced Drainage Systems, Inc.**
**4640 Trueman Blvd., Hilliard, OH 43026**
**1-800-821-6710 www.ads-pipe.com**

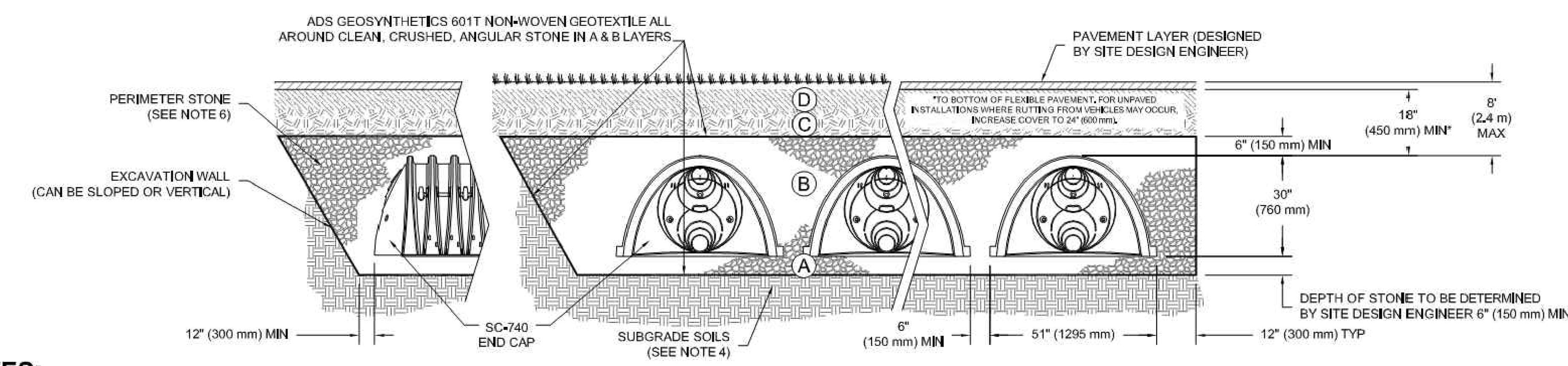


ADS "Terms and Conditions of Sale" are available on the ADS website, www.ads-pipe.com
The ADS logo and the Green Stripe are registered trademarks of Advanced Drainage Systems, Inc.
StormTech® is a registered trademark of StormTech, Inc.
© 2017 Advanced Drainage Systems, Inc. # S16 090508 09/17 CS


### ACCEPTABLE FILL MATERIALS: STORMTECH SC-740 CHAMBER SYSTEMS

| | MATERIAL LOCATION | DESCRIPTION | AASHTO MATERIAL CLASSIFICATIONS | COMPACTION / DENSITY REQUIREMENT |
|---|---|---|---|---|
| D | **FINAL FILL:** FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER | ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS. | N/A | PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS. |
| C | **INITIAL FILL:** FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 18" (450 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER. | GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER. | AASHTO M145[1] A-1, A-2-4, A-3 OR AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10 | BEGIN COMPACTIONS AFTER 12" (300 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 6" (150 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 lbs (53 kN). DYNAMIC FORCE NOT TO EXCEED 20,000 lbs (89 kN). |
| B | **EMBEDMENT STONE:** FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE. | CLEAN, CRUSHED, ANGULAR STONE | AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57 | NO COMPACTION REQUIRED. |
| A | **FOUNDATION STONE:** FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER. | CLEAN, CRUSHED, ANGULAR STONE | AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57 | PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE.[2,3] |

PLEASE NOTE:
1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 6" (150 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
3. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.




### NOTES:

1. SC-740 CHAMBERS SHALL CONFORM TO THE REQUIREMENTS OF ASTM F2418 "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS", OR ASTM F2922 "STANDARD SPECIFICATION FOR POLYETHYLENE (PE) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
2. SC-740 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
3. "ACCEPTABLE FILL MATERIALS" TABLE ABOVE PROVIDES MATERIAL LOCATIONS, DESCRIPTIONS, GRADATIONS, AND COMPACTION REQUIREMENTS FOR FOUNDATION, EMBEDMENT, AND FILL MATERIALS.
4. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
5. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
6. ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.

SC-740 STANDARD CROSS SECTION — DATE: 11/18/14 — DRAWN: JLM — PROJECT #: — CHECKED: JLM

| REV | DRW | CHK | DESCRIPTION |
|---|---|---|---|
| 01/19/16 | JLM | JLM | UPDATE |

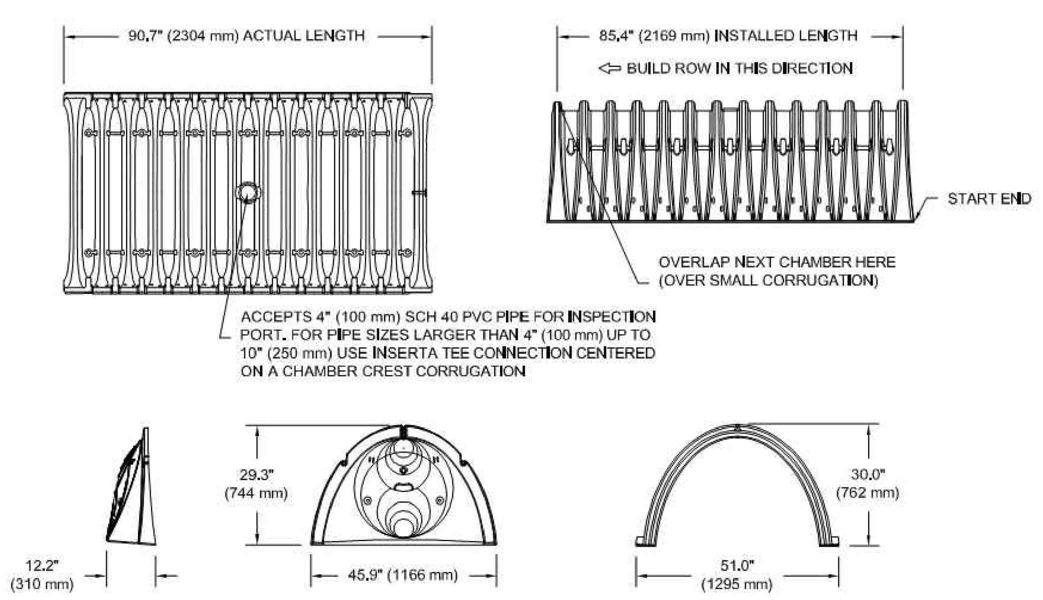
StormTech — 70 INWOOD ROAD, SUITE 3 | ROCKY HILL | CT | 06067 — 860-529-8188 | 888-892-2694 | WWW.STORMTECH.COM

ADS — 4640 TRUEMAN BLVD HILLIARD, OH 43026 1-800-733-7473


THIS DRAWING HAS BEEN PREPARED BASED ON INFORMATION PROVIDED TO ADS UNDER THE DIRECTION OF THE SITE DESIGN ENGINEER OR OTHER PROJECT REPRESENTATIVE. THE SITE DESIGN ENGINEER SHALL REVIEW THIS DRAWING PRIOR TO CONSTRUCTION. IT IS THE ULTIMATE RESPONSIBILITY OF THE SITE DESIGN ENGINEER TO ENSURE THAT THE PRODUCT(S) DEPICTED AND ALL ASSOCIATED DETAILS MEET ALL APPLICABLE LAWS, REGULATIONS, AND PROJECT REQUIREMENTS.


SHEET 1 OF 1

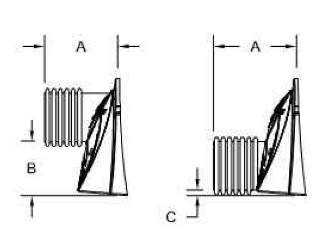
### SC-740 TECHNICAL SPECIFICATION
NTS




**NOMINAL CHAMBER SPECIFICATIONS**

| | | |
|---|---|---|
| SIZE (W X H X INSTALLED LENGTH) | 51.0" X 30.0" X 85.4" | (1295 mm X 762 mm X 2169 mm) |
| CHAMBER STORAGE | 45.9 CUBIC FEET | (1.30 m³) |
| MINIMUM INSTALLED STORAGE* | 74.9 CUBIC FEET | (2.12 m³) |
| WEIGHT | 75.0 lbs. | (33.6 kg) |

*ASSUMES 6" (152 mm) STONE ABOVE, BELOW, AND BETWEEN CHAMBERS



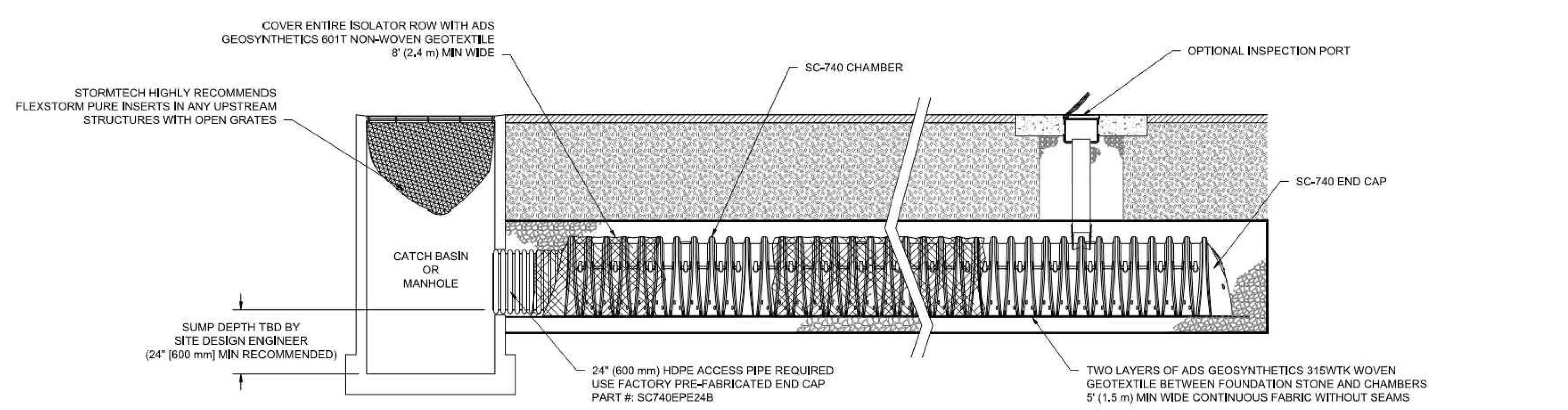

STUBS AT BOTTOM OF END CAP FOR PART NUMBERS ENDING WITH "B"
STUBS AT TOP OF END CAP FOR PART NUMBERS ENDING WITH "T"

| PART # | STUB | A | B | C |
|---|---|---|---|---|
| SC740EPE06T / SC740EPE06TPC | 6" (150 mm) | 10.9" (277 mm) | 18.5" (470 mm) | — |
| SC740EPE06B / SC740EPE06BPC | | | — | 0.5" (13 mm) |
| SC740EPE08T /SC740EPE08TPC | 8" (200 mm) | 12.2" (310 mm) | 16.5" (419 mm) | — |
| SC740EPE08B / SC740EPE08BPC | | | — | 0.6" (15 mm) |
| SC740EPE10T / SC740EPE10TPC | 10" (250 mm) | 13.4" (340 mm) | 14.5" (368 mm) | — |
| SC740EPE10B / SC740EPE10BPC | | | — | 0.7" (18 mm) |
| SC740EPE12T / SC740EPE12TPC | 12" (300 mm) | 14.7" (373 mm) | 12.5" (318 mm) | — |
| SC740EPE12B / SC740EPE12BPC | | | — | 1.2" (30 mm) |
| SC740EPE15T / SC740EPE15TPC | 15" (375 mm) | 18.4" (467 mm) | 9.0" (229 mm) | — |
| SC740EPE15B / SC740EPE15BPC | | | — | 1.3" (33 mm) |
| SC740EPE18T / SC740EPE18TPC | 18" (450 mm) | 19.7" (500 mm) | 5.0" (127 mm) | — |
| SC740EPE18B / SC740EPE18BPC | | | — | 1.6" (41 mm) |
| SC740EPE24B* | 24" (600 mm) | 18.5" (470 mm) | — | 0.1" (3 mm) |

ALL STUBS, EXCEPT FOR THE SC740EPE24B ARE PLACED AT BOTTOM OF END CAP SUCH THAT THE OUTSIDE DIAMETER OF THE STUB IS FLUSH WITH THE BOTTOM OF THE END CAP. FOR ADDITIONAL INFORMATION CONTACT STORMTECH AT 1-888-892-2694.

* FOR THE SC740EPE24B THE 24" (600 mm) STUB LIES BELOW THE BOTTOM OF THE END CAP APPROXIMATELY 1.75" (44 mm). BACKFILL MATERIAL SHOULD BE REMOVED FROM BELOW THE N-12 STUB SO THAT THE FITTING SITS LEVEL.

NOTE: ALL DIMENSIONS ARE NOMINAL




### SC-740 ISOLATOR ROW DETAIL
NTS

### INSPECTION & MAINTENANCE

STEP 1) INSPECT ISOLATOR ROW FOR SEDIMENT
- A. INSPECTION PORTS (IF PRESENT)
  - A.1. REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN
  - A.2. REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
  - A.3. USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
  - A.4. LOWER A CAMERA INTO ISOLATOR ROW FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
  - A.5. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- B. ALL ISOLATOR ROWS
  - B.1. REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW
  - B.2. USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW THROUGH OUTLET PIPE
    - i) MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
    - ii) FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
  - B.3. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.

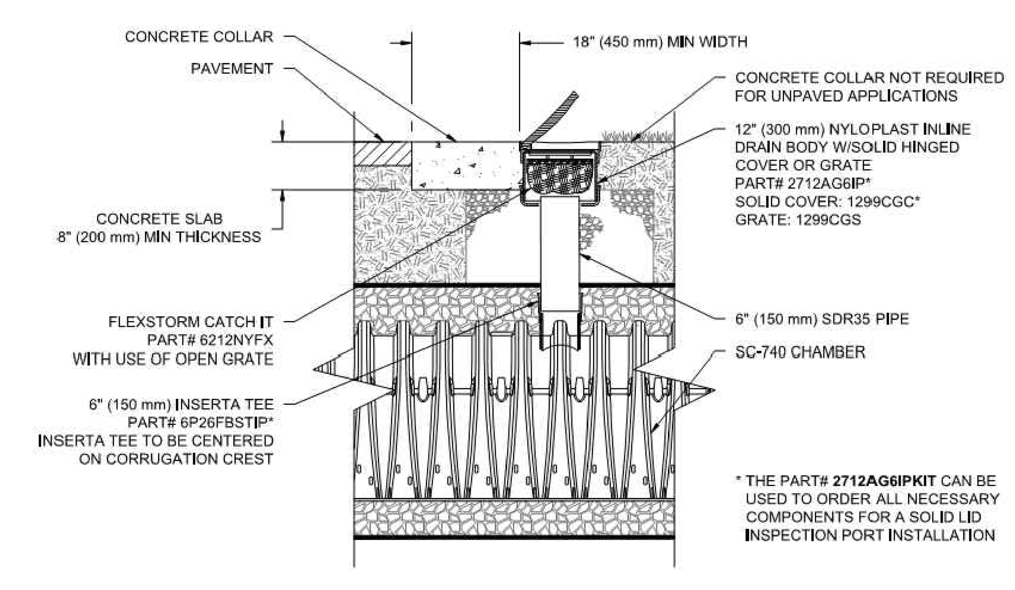
STEP 2) CLEAN OUT ISOLATOR ROW USING THE JETVAC PROCESS
- A. A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45" (1.1 m) OR MORE IS PREFERRED
- B. APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
- C. VACUUM STRUCTURE SUMP AS REQUIRED

STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.

STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

### NOTES

1. INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
2. CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.




### SC-740 6" INSPECTION PORT DETAIL
NTS

ISOLATOR ROW DETAILS SC-740 — DATE: 03/08/17 — DRAWN: JLM — PROJECT #: — CHECKED:

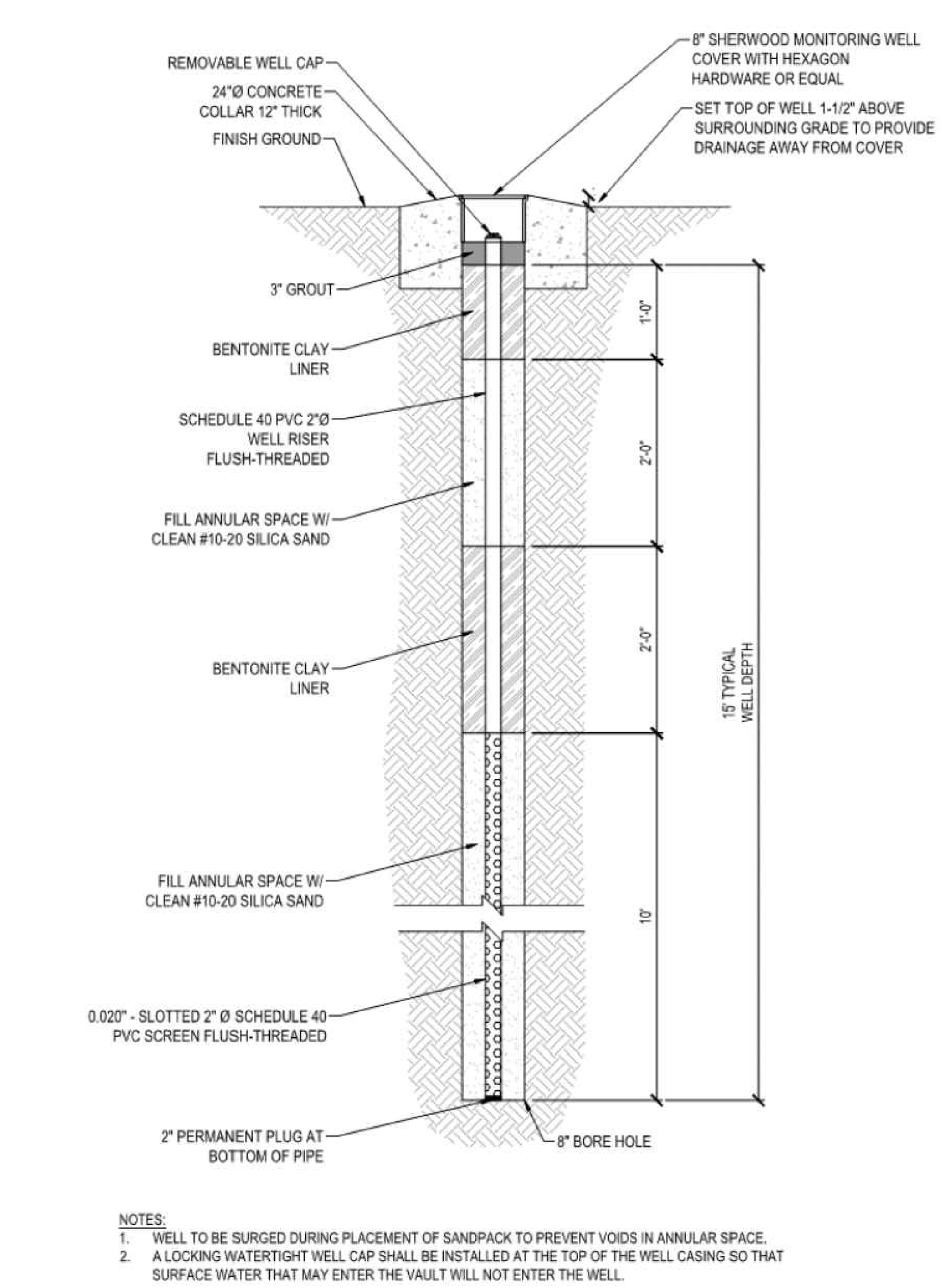
| REV | DRW | CHK | DESCRIPTION |
|---|---|---|---|

StormTech — 70 INWOOD ROAD, SUITE 3 | ROCKY HILL | CT | 06067 — 860-529-8188 | 888-892-2694 | WWW.STORMTECH.COM

ADS — 4640 TRUEMAN BLVD HILLIARD, OH 43026 1-800-733-7473


THIS DRAWING HAS BEEN PREPARED BASED ON INFORMATION PROVIDED TO ADS UNDER THE DIRECTION OF THE SITE DESIGN ENGINEER OR OTHER PROJECT REPRESENTATIVE. THE SITE DESIGN ENGINEER SHALL REVIEW THIS DRAWING PRIOR TO CONSTRUCTION. IT IS THE ULTIMATE RESPONSIBILITY OF THE SITE DESIGN ENGINEER TO ENSURE THAT THE PRODUCT(S) DEPICTED AND ALL ASSOCIATED DETAILS MEET ALL APPLICABLE LAWS, REGULATIONS, AND PROJECT REQUIREMENTS.


SHEET 1 OF 1




NOTES:
1. WELL TO BE SURGED DURING PLACEMENT OF SANDPACK TO PREVENT VOIDS IN ANNULAR SPACE.
2. A LOCKING WATERTIGHT WELL CAP SHALL BE INSTALLED AT THE TOP OF THE WELL CASING SO THAT SURFACE WATER THAT MAY ENTER THE VAULT WILL NOT ENTER THE WELL.

### (1) GROUNDWATER MONITORING WELL (W/ PIEZOMETER) △1
SCALE: NONE

| NO. | REVISIONS | BY | DATE |
|---|---|---|---|
| 1 | COMMENTS | TLH | 08/10/21 |
| 2 | COMMENTS | TLH | 10/27/21 |
| 3 | COMMENTS | TLH | 03/09/22 |

DESIGNER: TLH — PROJECT ENGINEER: TLH


CIR | CIVIL ENGINEERING + SURVEYING
3032 SOUTH 1030 WEST, SUITE 202
SLC, Utah 84119 – 801-949-6296


# UTAH VALLEY BUSINESS PARK
752 EAST QUALITY DRIVE, AMERICAN FORK, UT 84003

## DETAIL SHEET

PROFESSIONAL ENGINEER No. 12072623 TREVOR L HODGSON STATE OF UTAH

CALL BEFORE YOU DIG! IT'S THE LAW — BLUE STAKES 1 800 662 4111

| SHEET NO. | |
|---|---|
| C4.1 | |
| PROJECT ID | DATE: |
| H1022-01 | 03/22/21 |
| FILE NAME: | SCALE: |
| PRJ-AFH | |

# TECHDATA

## FOAM CONTROL EPS GEOFOAM

Foam-Control EPS Geofoam is a cellular plastic material that is strong, but has very low density (1% of traditional earth materials.) It is a manufactured in block form and meets ASTM D6817, "Standard Specification for Rigid, Cellular Polystyrene Geofoam." Foam-Control EPS Geofoam is available in a range of Types to provide control of structural integrity and cost effectiveness.

The information given is deemed to be timely, accurate, and reliable for the use of Foam-Control EPS Geofoam. Each project using Foam-Control EPS Geofoam should be designed by a professional engineer. The engineer or project specifications should be consulted to determine the ASTM D6817 Type required for your project loading conditions.

### Foam-Control EPS Geofoam Properties

| Property | | ASTM D6817 | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | EPS12 | EPS15 | EPS19 | EPS22 | EPS29 | EPS39 | EPS46 |
| Density[1], min. | lb/ft³ (kg/m³) | 0.70 (11.2) | 0.90 (14.4) | 1.15 (18.4) | 1.35 (21.6) | 1.80 (28.8) | 2.40 (38.4) | 2.85 (45.7) |
| Compressive Resistance[1,2] @ 1% deformation, min. | psi<br>psf<br>(kPa) | 2.2<br>320<br>(15) | 3.6<br>520<br>(25) | 5.8<br>840<br>(40) | 7.3<br>1050<br>(50) | 10.9<br>1570<br>(75) | 15.0<br>2160<br>(103) | 18.6<br>2680<br>(128) |
| Elastic Modulus[1], min | psi<br>(kPa) | 220<br>(1500) | 360<br>(2500) | 580<br>(4000) | 730<br>(5000) | 1090<br>(7500) | 1500<br>(10300) | 1860<br>(12800) |
| Flexural Strength[1], min. | psi<br>(kPa) | 10.0<br>(69) | 25.0<br>(172) | 30.0<br>(207) | 35.0<br>(240) | 50.0<br>(345) | 60.0<br>(414) | 75.0<br>(517) |
| Water Absorption[1] by total immersion, max., | vol. % | 4.0 | 4.0 | 3.0 | 3.0 | 2.0 | 2.0 | 2.0 |
| Oxygen Index[1], min. | vol. % | 24 | 24 | 24 | 24 | 24 | 24 | 24 |
| Buoyancy Force | lb/ft³ (kg/m³) | 61.7 (990) | 61.5 (980) | 61.3 (980) | 61.1 (980) | 60.6 (970) | 60.0 (960) | 59.5 (950) |
| **Additional Properties for Compressible Applications** | | | | | | | | |
| Compressive Resistance[1] @ 5% deformation, min. | psi<br>psf<br>(kPa) | 5.1<br>730<br>(35) | 8.0<br>1150<br>(55) | 13.1<br>1890<br>(90) | 16.7<br>2400<br>(115) | 24.7<br>3560<br>(170) | 35.0<br>5040<br>(241) | 43.5<br>6260<br>(300) |
| Compressive Resistance[1] @ 10% deformation, min. | psi<br>psf<br>(kPa) | 5.8<br>840<br>(40) | 10.2<br>1470<br>(70) | 16.0<br>2300<br>(110) | 19.6<br>2820<br>(135) | 29.0<br>4180<br>(200) | 40.0<br>5760<br>(276) | 50.0<br>7200<br>(345) |

[1] See ASTM D6817 Standard for test methods and complete information

[2] Combined live and dead load stresses should not exceed the compressive resistance at 1% deformation.

WWW.GEOFOAM.COM

# TECH BULLETIN

## FOAM CONTROL EPS

## Geofoam No. 5004

**Subject:** R-Values of EPS Geofoam

**Date:** September 2007 (Revised February 2011)

Foam-Control EPS is manufactured in conformance to ASTM D6817, "Standard Specification for Rigid Cellular Polystyrene Geofoam." This standard covers the material properties most often required for EPS Geofoam.

However, Foam-Control EPS Geofoam is often used in applications which require detailed information of the insulation performance, or R-value. The following Table provides R-value information for Foam-Control EPS Geofoam. The values in the table are based on testing in accordance with ASTM C177, "Test Method for Steady-State Heat Flux Measurements and Thermal Transmission Properties by Means of the Guarded-Hot-Plate Apparatus," or ASTM C518, "Test Method for Steady-State Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus."

### Foam-Control EPS Properties

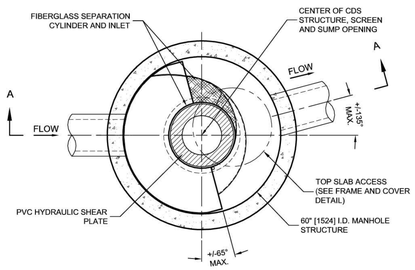
| Property | | | ASTM D6817 | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | EPS12 | EPS15 | EPS19 | EPS22 | EPS29 | EPS39 | EPS46 |
| Density[1], min. | | lb/ft³ (kg/m³) | 0.70 (12) | 0.90 (15) | 1.15 (18) | 1.35 (22) | 1.80 (29) | 2.40 (38) | 2.85 (46) |
| Thermal Resistance[1], min per 1.0 in. thickness | 25°F | °F.ft².h/Btu (°K.m²/W) | 3.45 (0.61) | 4.20 (0.74) | 4.40 (0.77) | 4.60 (0.85) | 4.80 (0.84) | 4.80 (0.84) | 4.90 (0.86) |
| | 40°F | °F.ft².h/Btu (°K.m²/W) | 3.30 (0.58) | 4.00 (0.70) | 4.20 (0.74) | 4.40 (0.77) | 4.60 (0.81) | 4.60 (0.81) | 4.70 (0.83) |
| | 75°F | °F.ft².h/Btu (°K.m²/W) | 3.10 (0.55) | 3.60 (0.63) | 3.80 (0.67) | 4.00 (0.70) | 4.20 (0.74) | 4.20 (0.74) | 4.30 (0.76) |

[1] See ASTM D6817 Standard for test methods and complete information

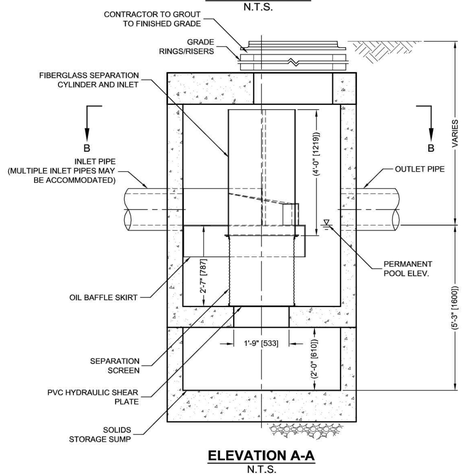
AFM FOAM CONTROL
Foam-Control EPS products are manufactured by AFM Corporation licensees.

Copyright © 2011 AFM Corporation
All rights reserved. Printed in USA.
Control, Not Compromise, and the Foam-Control are trademarks of AFM Corporation, Lakeville, MN.

FOAM CONTROL EPS www.geofoam.com CONTROL, NOT COMPROMISE.®




**PLAN VIEW B-B**
N.T.S.




**ELEVATION A-A**
N.T.S.

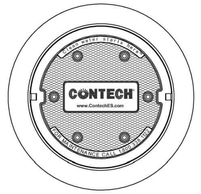
THIS PRODUCT MAY BE PROTECTED BY ONE OR MORE OF THE FOLLOWING U.S. PATENTS: 7,186,326; 7,297,272; 7,387,466; 7,425,262; 7,470,365; 7,566,394; 7,704,393; 7,857,966; AND OTHER PATENTS PENDING.

## CDS2020-5-C DESIGN NOTES

CDS2020-5-C RATED TREATMENT CAPACITY IS 1.1 CFS [31.2 L/s], OR PER LOCAL REGULATIONS. MAXIMUM HYDRAULIC INTERNAL BYPASS CAPACITY IS 14.0 CFS [396 L/s]. IF THE SITE CONDITIONS EXCEED 14.0 CFS [396 L/s], AN UPSTREAM BYPASS STRUCTURE IS REQUIRED.

THE STANDARD CDS2020-5-C CONFIGURATION IS SHOWN. ALTERNATE CONFIGURATIONS ARE AVAILABLE AND ARE LISTED BELOW. SOME CONFIGURATIONS MAY BE COMBINED TO SUIT SITE REQUIREMENTS.

| CONFIGURATION DESCRIPTION |
|---|
| GRATED INLET ONLY (NO INLET PIPE) |
| GRATED INLET WITH INLET PIPE OR PIPES |
| CURB INLET ONLY (NO INLET PIPE) |
| CURB INLET WITH INLET PIPE OR PIPES |
| SEPARATE OIL BAFFLE (SINGLE INLET PIPE REQUIRED FOR THIS CONFIGURATION) |
| SEDIMENT WEIR FOR NJDEP / NJCAT CONFORMING UNITS |




**FRAME AND COVER**
(DIAMETER VARIES)
N.T.S.

### SITE SPECIFIC DATA REQUIREMENTS

| | |
|---|---|
| STRUCTURE ID | |
| WATER QUALITY FLOW RATE (CFS OR L/s) | * |
| PEAK FLOW RATE (CFS OR L/s) | * |
| RETURN PERIOD OF PEAK FLOW (YRS) | * |
| SCREEN APERTURE (2400 OR 4700) | * |

| PIPE DATA: | I.E. | MATERIAL | DIAMETER |
|---|---|---|---|
| INLET PIPE 1 | * | * | * |
| INLET PIPE 2 | * | * | * |
| OUTLET PIPE | * | * | * |

| | |
|---|---|
| RIM ELEVATION | * |

| ANTI-FLOTATION BALLAST | WIDTH | HEIGHT |
|---|---|---|
| | * | * |

NOTES/SPECIAL REQUIREMENTS:

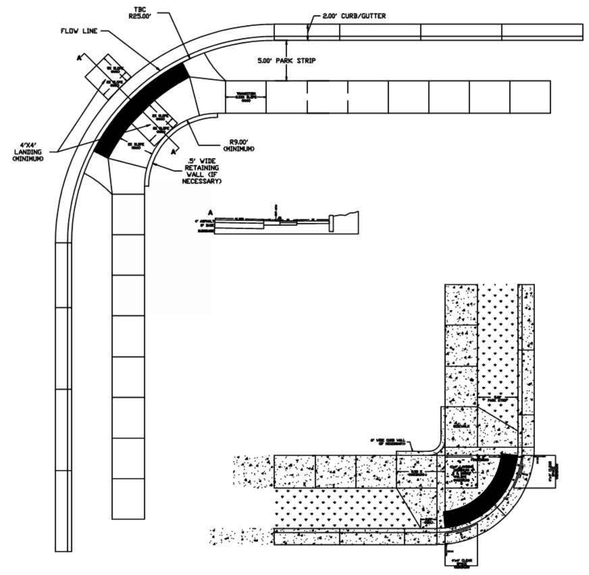
* PER ENGINEER OF RECORD

GENERAL NOTES
1. CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
2. DIMENSIONS MARKED WITH ( ) ARE REFERENCE DIMENSIONS. ACTUAL DIMENSIONS MAY VARY.
3. FOR FABRICATION DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHTS, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. www.ContechES.com
4. CDS WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING.
5. STRUCTURE SHALL MEET AASHTO HS20 AND CASTINGS SHALL MEET HS20 (AASHTO M 306) LOAD RATING, ASSUMING GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION.
6. PVC HYDRAULIC SHEAR PLATE IS PLACED ON SHELF AT BOTTOM OF SCREEN CYLINDER. REMOVE AND REPLACE AS NECESSARY DURING MAINTENANCE CLEANING.

INSTALLATION NOTES
A. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
B. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CDS MANHOLE STRUCTURE (LIFTING CLUTCHES PROVIDED).
C. CONTRACTOR TO ADD JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS, AND ASSEMBLE STRUCTURE.
D. CONTRACTOR TO PROVIDE, INSTALL, AND GROUT PIPES. MATCH PIPE INVERTS WITH ELEVATIONS SHOWN.
E. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.

CONTECH® ENGINEERED SOLUTIONS LLC
www.ContechES.com
9025 Centre Pointe Dr., Suite 400, West Chester, OH 45089
800-338-1122 513-645-7000 513-645-7993 FAX

CDS2020-5-C
INLINE CDS
STANDARD DETAIL




NOTES:

1. THE RAMP SHALL BE CONSTRUCTED USING CAST IRON TACTILE DOMES CAST TO MATCH THE RADIUS OF CURVE OR EQUAL AS APPROVE BY THE CITY ENGINEER.
2. PROVIDE DETECTABLE WARNING AREA PER APWA/ADAAG SPECIFICATIONS.
3. SEE APWA PLAN #235 FOR CONSTRUCTION DETAILS, SLOPES, ETC.

| | | | |
|---|---|---|---|
| DRAWN: R.A. | AMERICAN FORK CITY | STANDARD DETAIL FOR: SIDEWALK RAMP | DRAWING NO. 15.18 |
| REVISED: | | | |
| DATE: APR. 2012 | | | |
| SCALE: VARIES | | | |

| NO. | REVISIONS | BY | DATE |
|---|---|---|---|
| 1 | COMMENTS | TLH | 08/10/21 |
| 2 | COMMENTS | TLH | 10/27/21 |
| 3 | COMMENTS | TLH | 03/09/22 |

DESIGNER: TLH PROJECT ENGINEER: TLH

CIR CIVIL ENGINEERING + SURVEYING
3032 SOUTH 1030 WEST, SUITE 202
SLC, Utah 84119 - 801-949-6296

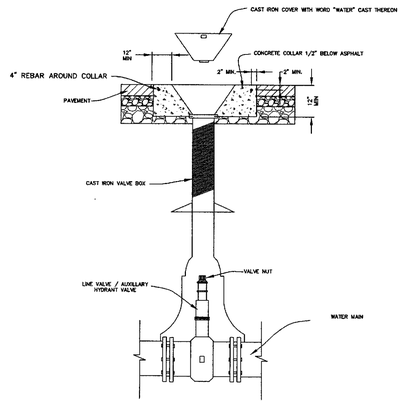
UTAH VALLEY BUSINESS PARK
752 EAST QUALITY DRIVE, AMERICAN FORK, UT 84003

DETAIL SHEET

PROFESSIONAL ENGINEER No. 12072623 TREVOR L HODGSON STATE OF UTAH

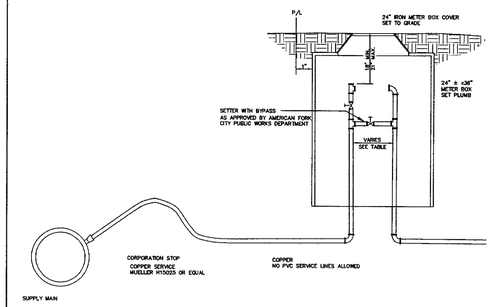
CALL BEFORE YOU DIG! 1-800-662-4111 BLUE STAKES

| SHEET NO. | |
|---|---|
| C4.2 | |
| PROJECT ID: H1022-01 | DATE: 03/22/21 |
| FILE NAME: PRJ-AFH | SCALE: |



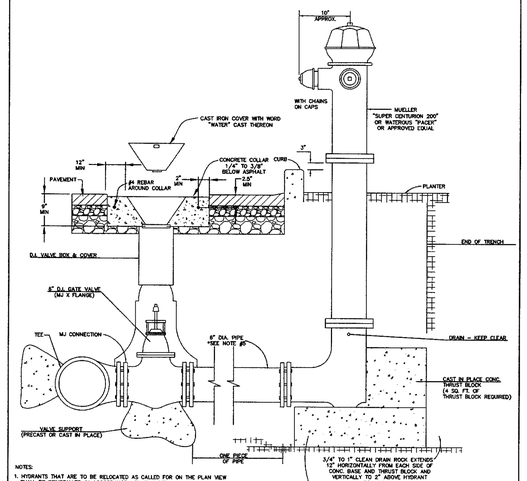

VALVE BOX DETAIL

| | | | | |
|---|---|---|---|---|
| DRAWN: JRP<br>REVISED:<br>DATE: JULY 2002<br>SCALE: VARIES | Northern ENGINEERING LAND PLANNING CONSTRUCTION MANAGEMENT<br>1040 E. 800 N.<br>OREM, UTAH 84057<br>(801) 802-8992 | AMERICAN FORK CITY | STANDARD DETAIL FOR: VALVE BOX DETAIL | DRAWING NO. 15.4 |




| SPACING TABLE | |
|---|---|
| SIZE | SPACING |
| 3/4" | 7 1/2" |
| 1" | 10 3/4" |
| 1 1/2" | 13" |
| 2" | 17" |

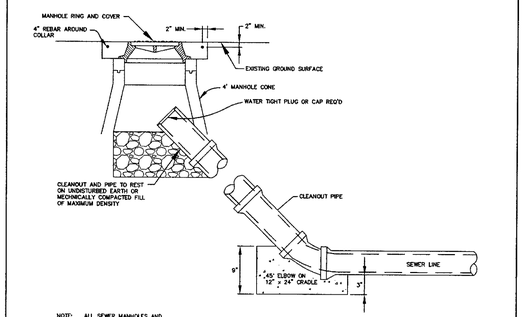
| | | | | |
|---|---|---|---|---|
| DRAWN: JRP<br>REVISED:<br>DATE: MAY 2002<br>SCALE: VARIES | Northern ENGINEERING LAND PLANNING CONSTRUCTION MANAGEMENT<br>1040 E. 800 N.<br>OREM, UTAH 84057<br>(801) 802-8992 | AMERICAN FORK CITY | STANDARD DETAIL FOR: CULINARY WATER SERVICE CONNECTION | DRAWING NO. 15.5 |




NOTES:
1. HYDRANTS THAT ARE TO BE RELOCATED AS CALLED FOR ON THE PLAN VIEW SHALL BE REINSTALLED IN ACCORDANCE WITH THIS DETAIL.
2. ALL GATE VALVES SHALL BE LOCATED AT THE HYDRANT AS SHOWN ON THIS DETAIL.
3. WHERE EXISTING FITTINGS ARE NOT COMPATIBLE WITH NEW MAIN CONSTRUCTION, SUITABLE ADAPTORS OR NEW FITTINGS SHALL BE USED UPON APPROVAL BY THE AMERICAN FORK CITY ENGINEER.
4. ALL ANCHORS AND BLOCKING TO REAR AGAINST UNDISTURBED SOIL.
5. IF LENGTH EXCEEDS 1 LENGTH OF PIPE, INCREASE DIAMETER TO 8 INCH MINIMUM.

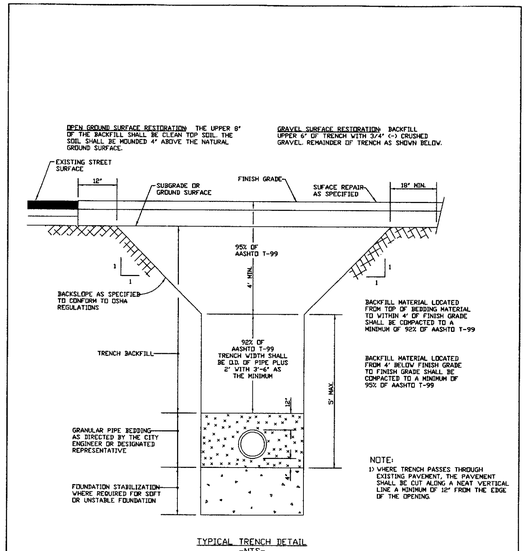
FIRE HYDRANT DETAIL
-NTS-

| | | | | |
|---|---|---|---|---|
| DRAWN: JRP<br>REVISED:<br>DATE: MAY 2002<br>SCALE: VARIES | Northern ENGINEERING LAND PLANNING CONSTRUCTION MANAGEMENT<br>1040 E. 800 N.<br>OREM, UTAH 84057<br>(801) 802-8992 | AMERICAN FORK CITY | STANDARD DETAIL FOR: FIRE HYDRANT | DRAWING NO. 15.6 |



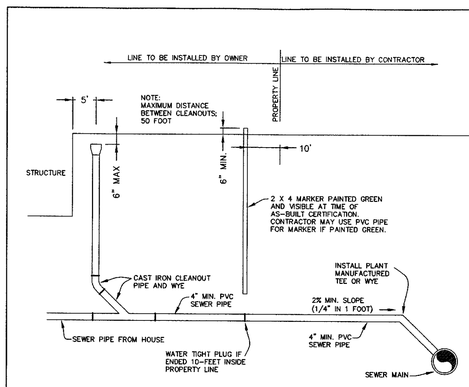

NOTE: ALL SEWER MANHOLES AND CLEANOUTS SHALL BE ACCESSIBLE BY MAINTENANCE PUMPER TRUCK.

| | | | | |
|---|---|---|---|---|
| DRAWN: JRP<br>REVISED:<br>DATE: MAY 2002<br>SCALE: VARIES | Northern ENGINEERING LAND PLANNING CONSTRUCTION MANAGEMENT<br>1040 E. 800 N.<br>OREM, UTAH 84057<br>(801) 802-8992 | AMERICAN FORK CITY | STANDARD DETAIL FOR: SEWER CLEANOUT SEWER PIPE INSTALLATION | DRAWING NO. 15.15 |

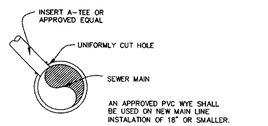



TYPICAL TRENCH DETAIL
-NTS-

| | | | | |
|---|---|---|---|---|
| DRAWN: JRP<br>REVISED:<br>DATE: MAY 2002<br>SCALE: VARIES | Northern ENGINEERING LAND PLANNING CONSTRUCTION MANAGEMENT<br>1040 E. 800 N.<br>OREM, UTAH 84057<br>(801) 802-8992 | AMERICAN FORK CITY | STANDARD DETAIL FOR: TYPICAL TRENCH DETAIL | DRAWING NO. 15.22 |




SEWER LATERAL DETAIL
-NTS-

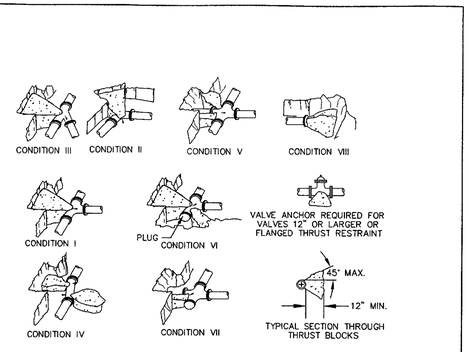



AN APPROVED PVC WYE SHALL BE USED ON NEW MAIN LINE INSTALATION OF 18" OR SMALLER.

SEWER SURVICE LATERAL SADDLE
-NTS-

NOTE:
1) LATERAL SHALL NOT ENTER MANHOLE, UNLESS OTHERWISE APPROVED BY CITY ENGINEER.
2) FOR CONCRETE PIPE ADD CONCRETE COLLAR AROUND INSERT-A-TEE.
3) ALSO SEE DRAWING NO. 15.19

| | | | | |
|---|---|---|---|---|
| DRAWN: JRP<br>REVISED:<br>DATE: JULY 2002<br>SCALE: VARIES | Northern ENGINEERING LAND PLANNING CONSTRUCTION MANAGEMENT<br>1040 E. 800 N.<br>OREM, UTAH 84057<br>(801) 802-8992 | AMERICAN FORK CITY | STANDARD DETAIL FOR: SANITARY SEWER LATERAL AND CLEAN OUT | DRAWING NO. 15.23 |

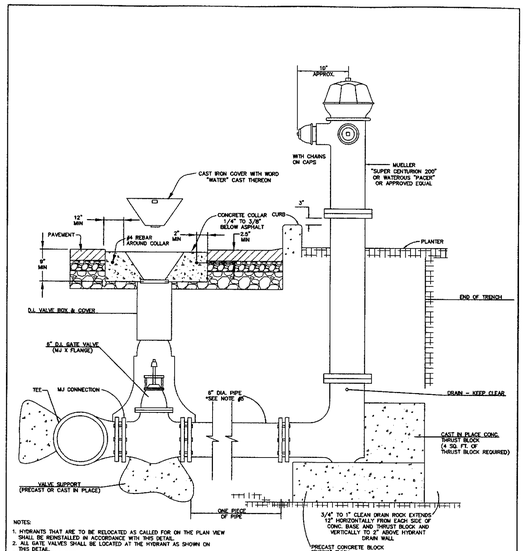



NOTES:
1. ALL THRUST BLOCK BEARING FACES SHALL BE POURED AGAINST UNDISTURBED SOIL OR APPROVED COMPACTED BACKFILL.
2. CONCRETE SHALL BE CLASS C.
3. CALCULATED ON 150 PSI. STATIC PRESSURE & ALLOWABLE BEARING PRESSURE OF 1500 LB. PER SQ. FT.
4. ALL THRUST BLOCK SIDES SHALL BE FORMED. (CITY INSPECTOR MAY REQUIRE WOOD FORMS.)

| THRUST BLOCK BEARING AREA IN SQ. FEET | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| PIPE SIZE (IN.) | CONDITION | | | | | | | |
| | I | II | III | IV | V | VI | VII | VIII |
| 4 | 1.5 | 1.8 | 1 | 0.5 | 1.3 | 1.3 | 1.3 | 1.3 |
| 8 | 5 | 7.1 | 3.8 | 2 | 5 | 5 | 5 | 5 |
| 10 | 7.8 | 11.1 | 6 | 3 | 7.8 | 7.8 | 7.8 | 7.8 |
| 14 | 15.4 | 21.7 | 11.8 | 6 | 15.4 | 15.4 | 15.4 | 15.4 |

WATER LINE THRUST BLOCK DETAILS

| | | | | |
|---|---|---|---|---|
| DRAWN: JRP<br>REVISED:<br>DATE: MAY 2002<br>SCALE: VARIES | Northern ENGINEERING LAND PLANNING CONSTRUCTION MANAGEMENT<br>1040 E. 800 N.<br>OREM, UTAH 84057<br>(801) 802-8992 | AMERICAN FORK CITY | STANDARD DETAIL FOR: WATERLINE THRUST BLOCKING | DRAWING NO. 15.21 |




NOTES:
1. HYDRANTS THAT ARE TO BE RELOCATED AS CALLED FOR ON THE PLAN VIEW SHALL BE REINSTALLED IN ACCORDANCE WITH THIS DETAIL.
2. ALL GATE VALVES SHALL BE LOCATED AT THE HYDRANT AS SHOWN ON THIS DETAIL.
3. WHERE EXISTING FITTINGS ARE NOT COMPATIBLE WITH NEW MAIN CONSTRUCTION, SUITABLE ADAPTORS OR NEW FITTINGS SHALL BE USED UPON APPROVAL BY THE AMERICAN FORK CITY ENGINEER.
4. ALL ANCHORS AND BLOCKING TO REAR AGAINST UNDISTURBED SOIL.
5. IF LENGTH EXCEEDS 1 LENGTH OF PIPE, INCREASE DIAMETER TO 8 INCH MINIMUM.

FIRE HYDRANT DETAIL
-NTS-

| | | | | |
|---|---|---|---|---|
| DRAWN: JRP<br>REVISED:<br>DATE: MAY 2002<br>SCALE: VARIES | Northern ENGINEERING LAND PLANNING CONSTRUCTION MANAGEMENT<br>1040 E. 800 N.<br>OREM, UTAH 84057<br>(801) 802-8992 | AMERICAN FORK CITY | STANDARD DETAIL FOR: FIRE HYDRANT | DRAWING NO. 15.6 |

| NO. | REVISIONS | BY | DATE |
|---|---|---|---|
| 1 | COMMENTS | TLH | 08/10/21 |
| 2 | COMMENTS | TLH | 10/27/21 |
| 3 | COMMENTS | TLH | 03/09/22 |

DESIGNER: TLH PROJECT ENGINEER: TLH

CIR CIVIL ENGINEERING + SURVEYING
3032 SOUTH 1030 WEST, SUITE 202
SLC, Utah 84119 - 801-949-6296

# UTAH VALLEY BUSINESS PARK

752 EAST QUALITY DRIVE, AMERICAN FORK, UT 84003

## DETAIL SHEET

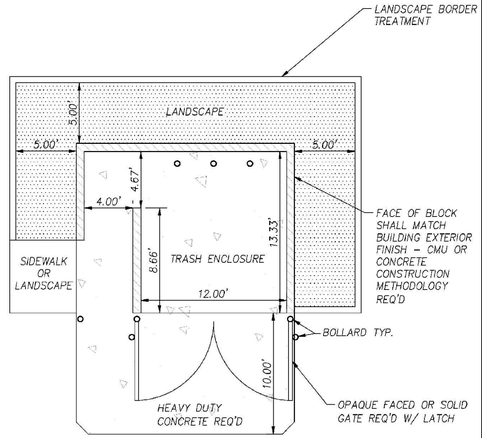
PROFESSIONAL ENGINEER No. 12072623 TREVOR L HODGSON STATE OF UTAH

CALL BEFORE YOU DIG! BLUE STAKES 1 800 662 4111

SHEET NO. C5.0

| PROJECT ID | DATE: |
|---|---|
| H1022-01 | 03/22/21 |
| FILE NAME: PRJ-AFH | SCALE: |

# CITY STANDARD - DUMPSTER/ TRASH ENCLOSURE
# STANDARD 17.5.121.B

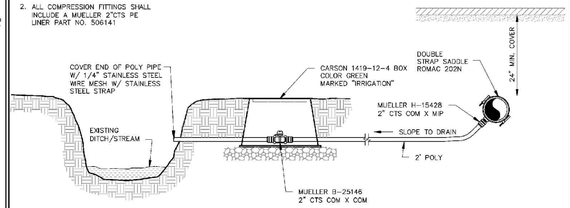



NOTES:
1. LANDSCAPE SHALL INCLUDE COMBINATION OF TREES AND SHRUBBERY TO CREATE A LANDSCAPE SCREEN FOR THE ENCLOSURE
2. ENCLOSURE SHALL BE 6' TALL MIN.
3. ENCLOSURE EXTERIOR FINISH SHALL MATCH THE EXTERIOR OF THE BUILDING FOR WHICH IT SUPPORTS.
3. LANDSCAPE DIMENSIONS SHOWN ARE MINIMUMS.
4. ENCLOSURE DIMENSIONS MAY VARY DEPENDING UPON INTENDED USE, AS SUCH, CITY ENGINEER/CITY PLANNER SHALL HAVE THE ABILITY TO REVIEW AND RECOMMEND APPROPRIATE SIZE OF A GIVEN ENCLOSURE FOR A SPECIFIC USE.
5. A VARIANCE FROM THE REQUIREMENT OF AN ENCLOSURE CAN BE GRANTED BY THE LAND USE AUTHORITY FOR A GIVEN ZONE IF IT CAN BE DEMONSTRATED THAT THE USE FOR THE SITE DOES NOT REQUIRE MORE THAN A TRADITIONAL CURB SIDE PICK UP CONTAINER. CURB SIDE CONTAINER MUST BE AVAILABLE IN THAT AREA TO QUALIFY FOR THIS EXCEPTION.

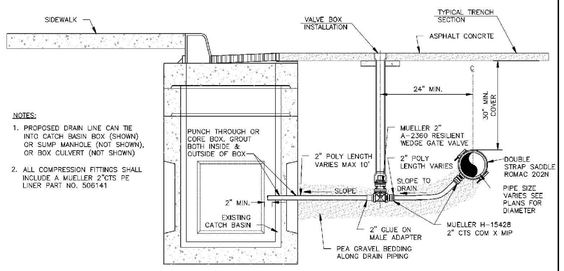
T:\LD-PROJECT-AF-CITY-STANDARDS\DUMPSTER.DWG
DATE: NOV. 16, 2010

AMERICAN FORK — 1853 —

NOTES:
1. COORDINATE W/ AMERICAN FORK CITY ON LOCATION OF IRR. BOX.
2. ALL COMPRESSION FITTINGS SHALL INCLUDE A MUELLER 2"CTS PE LINER PART NO. 506141




2" DRAIN TO DAYLIGHT

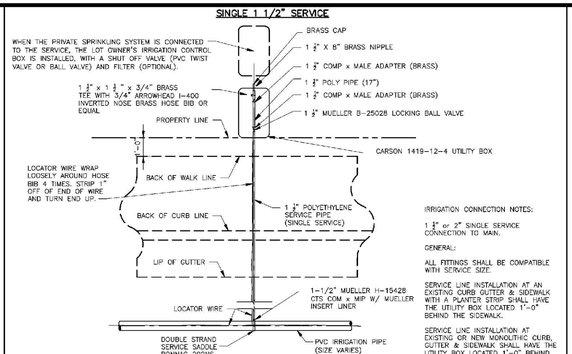



NOTES:
1. PROPOSED DRAIN LINE CAN TIE INTO CATCH BASIN BOX (SHOWN) OR SUMP MANHOLE (NOT SHOWN), OR BOX CULVERT (NOT SHOWN)
2. ALL COMPRESSION FITTINGS SHALL INCLUDE A MUELLER 2"CTS PE LINER PART NO. 506141

2" DRAIN TO CATCH BASIN/SUMP/BOX CULVERT

| | | | | | |
|---|---|---|---|---|---|
| DRAWN: | | HORROCKS ENGINEERS ONE WEST MAIN P.O. BOX 377 AMERICAN FORK (801) 763-5100 | AMERICAN FORK CITY | STANDARD DETAIL FOR: SECONDARY WATER DETAILS | DRAWING NO. 15.31 |
| REVISED: | 11/2010 | | | | |
| DATE: | | | | | |
| SCALE: | | | | | |

## SINGLE 1 1/2" SERVICE




IRRIGATION CONNECTION NOTES:

1 1/2" or 2" SINGLE SERVICE CONNECTION TO MAIN.

GENERAL:

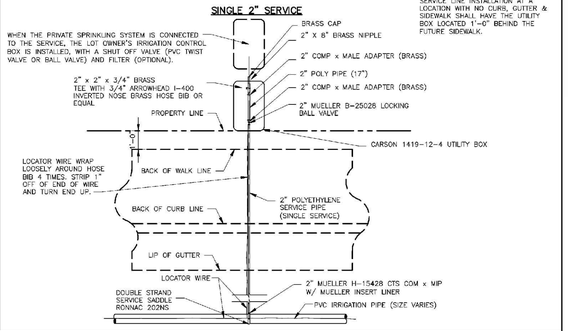
ALL FITTINGS SHALL BE COMPATIBLE WITH SERVICE SIZE.

SERVICE LINE INSTALLATION AT AN EXISTING CURB GUTTER & SIDEWALK WITH A PLANTER STRIP SHALL HAVE THE UTILITY BOX LOCATED 1'-0" BEHIND THE SIDEWALK.

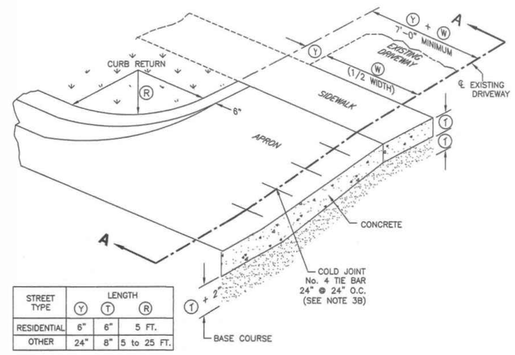
SERVICE LINE INSTALLATION AT EXISTING OR NEW MONOLITHIC CURB, GUTTER & SIDEWALK SHALL HAVE THE UTILITY BOX LOCATED 1'-0" BEHIND THE SIDEWALK.

SERVICE LINE INSTALLATION AT A LOCATION WITH NO CURB, GUTTER & SIDEWALK SHALL HAVE THE UTILITY BOX LOCATED 1'-0" BEHIND THE FUTURE SIDEWALK.

## SINGLE 2" SERVICE

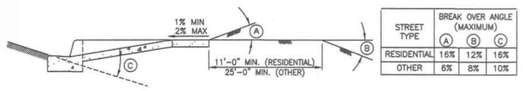



| | | | | | |
|---|---|---|---|---|---|
| DRAWN: | | HORROCKS ENGINEERS ONE WEST MAIN P.O. BOX 377 AMERICAN FORK (801) 763-5100 | AMERICAN FORK CITY | STANDARD DETAIL FOR: LARGE SERVICE CONNECTION FOR SECONDARY WATER | DRAWING NO. 15.5B |
| REVISED: | 11/2010 | | | | |
| DATE: | | | | | |
| SCALE: | | | | | |



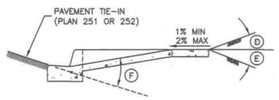

| STREET TYPE | LENGTH Y | T | R |
|---|---|---|---|
| RESIDENTIAL | 6" | 6" | 5 FT. |
| OTHER | 24" | 8" | 5 to 25 FT. |

OBLIQUE




| STREET TYPE | BREAK OVER ANGLE (MAXIMUM) A | B | C |
|---|---|---|---|
| RESIDENTIAL | 16% | 12% | 16% |
| OTHER | 6% | 8% | 10% |

SECTION A-A - APPROACH REQUIRING SERVICE TRUCK ACCESS



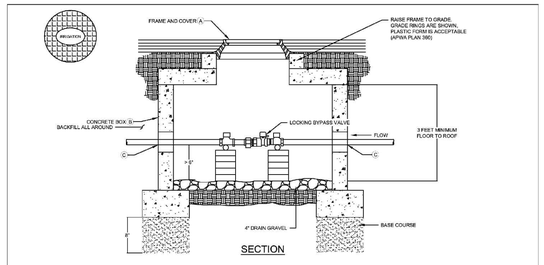

| STREET TYPE | BREAK OVER ANGLE (MAXIMUM) D | E | F |
|---|---|---|---|
| RESIDENTIAL | 16% | 12% | 16% |
| OTHER | 6% | 8% | 10% |

SECTION A-A - TYPICAL DRIVEWAY APPROACH

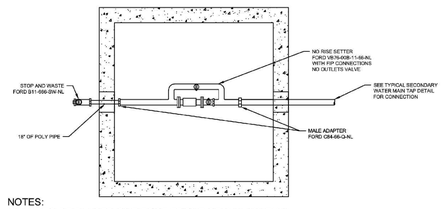
APWA Utah Chapter

Open driveway approach

Plan 225 December 2009



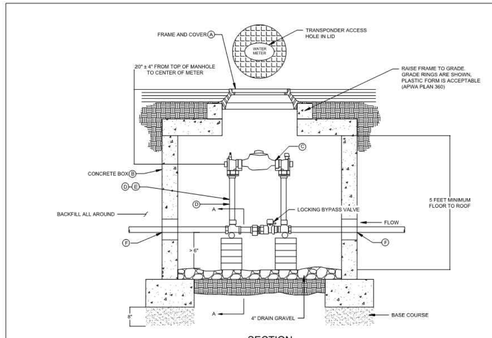

SECTION



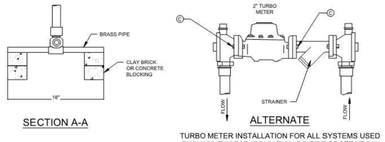

NOTES:
VAULT TO BE PLACED ONE FOOT FRONT OF WALK WITHIN AN EIGHT FOOT PARK STRIP OR WITHIN 10' FRONT PUE.

| NO. | * | ITEM | DESCRIPTION |
|---|---|---|---|
| | | LEGEND | |
| A | | 27" FRAME AND COVER | APWA PLAN 502. CAST IRON LID WITH "IRRIGATION" AND RECESSED ORION HOLE. PART NUMBER 12.25PSLIXWMIHO OR APPROVED EQUIVALENT. |
| B | | CONCRETE BOX | APWA PLAN 505. 3' MINIMUM FLOOR TO ROOF. |
| C | | CORE/KNOCKOUT THROUGH VAULT WALL | PIPES PASSING THROUGH CONCRETE VAULT, SHALL BE PROTECTED AGAINST EXTERNAL CORROSION BY SHEATHING OR WRAPPING OR ANY OTHER MEANS THAT WILL WITHSTAND ANY REACTION FROM LIME AND ACID FROM CONCRETE, CINDER OR OTHER CORROSIVE MATERIAL. SHEATHING OR WRAPPING SHALL ALLOW FOR MOVEMENT INCLUDING EXPANSION AND CONTRACTION OF PIPING (IPC 305.1). REMAINING HOLE SHALL BE SEALED. |

| | | | | |
|---|---|---|---|---|
| DRAWN: MVU | AMERICAN FORK CITY PUBLIC WORKS 275 EAST 200 NORTH (801) 763-9030 | STANDARD DETAIL FOR: 1-1/2" OR 2" PI METER PLACEMENT | DRAWING NO. 15.5E |
| REVISED: | | | |
| DATE: AUG 2019 | | | |
| SCALE: VARIES | | | |




SECTION



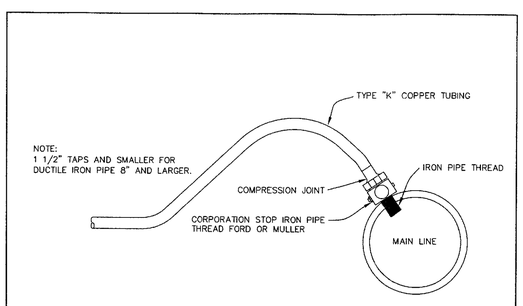

SECTION A-A

ALTERNATE

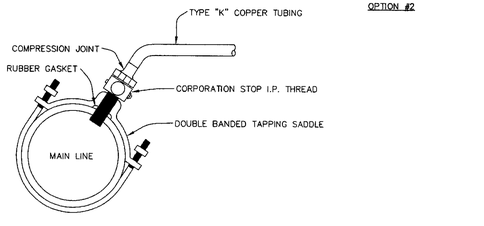
TURBO METER INSTALLATION FOR ALL SYSTEMS USED EXCLUSIVELY FOR IRRIGATION OR FIRE PROTECTION.

| NO. | * | ITEM | DESCRIPTION |
|---|---|---|---|
| | | LEGEND | |
| A | | 27" FRAME AND COVER | APWA PLAN 502 |
| B | | CONCRETE BOX | APWA PLAN 505 |
| C | | STAINLESS STEEL METER BOLT WITH NUT | 5/8" x 2 3/4" 304 SS |
| D | | 1 1/2" CUSTOM SETTER WITH LOCKING BYPASS | |
| E | | 2" CUSTOM SETTER WITH LOCKING BYPASS | |
| F | | CORE/KNOCKOUT THROUGH VAULT WALL | PIPES PASSING THROUGH CONCRETE VAULT SHALL BE PROTECTED AGAINST EXTERNAL CORROSION BY SHEATHING OR WRAPPING OR ANY OTHER MEANS THAT WILL WITHSTAND ANY REACTION FROM LIME AND ACID FROM CONCRETE. CINDER OR OTHER CORROSIVE MATERIAL. SHEATHING OR WRAPPING SHALL ALLOW FOR MOVEMENT INCLUDING EXPANSION AND CONTRACTION OF PIPING (IPC 305.1). REMAINING HOLE SHALL BE SEALED. |

| | | | | |
|---|---|---|---|---|
| DRAWN: ABW | AMERICAN FORK CITY PUBLIC WORKS 275 EAST 200 NORTH (801) 763-9030 | STANDARD DETAIL FOR: 1-1/2" OR 2" METER PLACEMENT | DRAWING NO. 15.5C |
| REVISED: | | | |
| DATE: FEB 2019 | | | |
| SCALE: VARIES | | | |

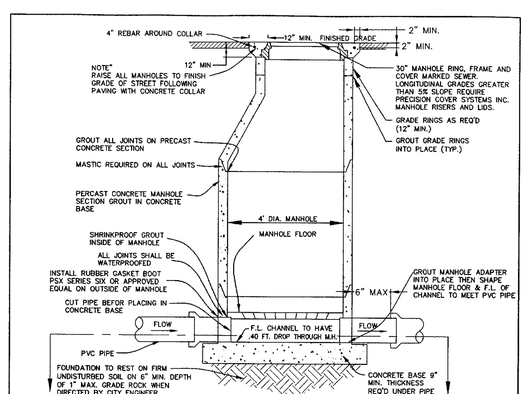



OPTION #2

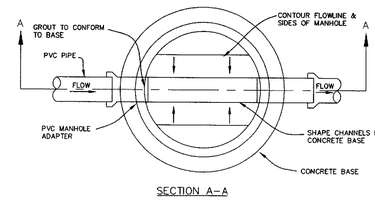



OPTION #1

| | | | | |
|---|---|---|---|---|
| DRAWN: JRP | Northern ENGINEERING LAND PLANNING CONSTRUCTION MANAGEMENT 1040 E. 800 N. OREM, UTAH 84057 (801) 802-8992 | AMERICAN FORK CITY | STANDARD DETAIL FOR: TYPICAL WATERMAN TAPS | DRAWING NO. 15.3 |
| REVISED: | | | | |
| DATE: JULY 2002 | | | | |
| SCALE: VARIES | | | | |




LINE MANHOLE DETAIL
-NTS-




SECTION A-A
-NTS-

| | | | | |
|---|---|---|---|---|
| DRAWN: JRP | Northern ENGINEERING LAND PLANNING CONSTRUCTION MANAGEMENT 1040 E. 800 N. OREM, UTAH 84057 (801) 802-8992 | AMERICAN FORK CITY | STANDARD DETAIL FOR: SANITARY SEWER LINE MANHOLE DETAIL | DRAWING NO. 15.12 |
| REVISED: | | | | |
| DATE: JULY 2002 | | | | |
| SCALE: VARIES | | | | |

| NO. | COMMENTS | BY | DATE |
|---|---|---|---|
| 1 | COMMENTS | TLH | 08/10/21 |
| 2 | COMMENTS | TLH | 10/27/21 |
| 3 | COMMENTS | TLH | 03/09/22 |

REVISIONS

DESIGNER: TLH
PROJECT ENGINEER: TLH


CIR CIVIL ENGINEERING + SURVEYING
3032 SOUTH 1030 WEST, SUITE 202
SLC, Utah 84119 – 801-949-6296


# UTAH VALLEY BUSINESS PARK

752 EAST QUALITY DRIVE, AMERICAN FORK, UT 84003

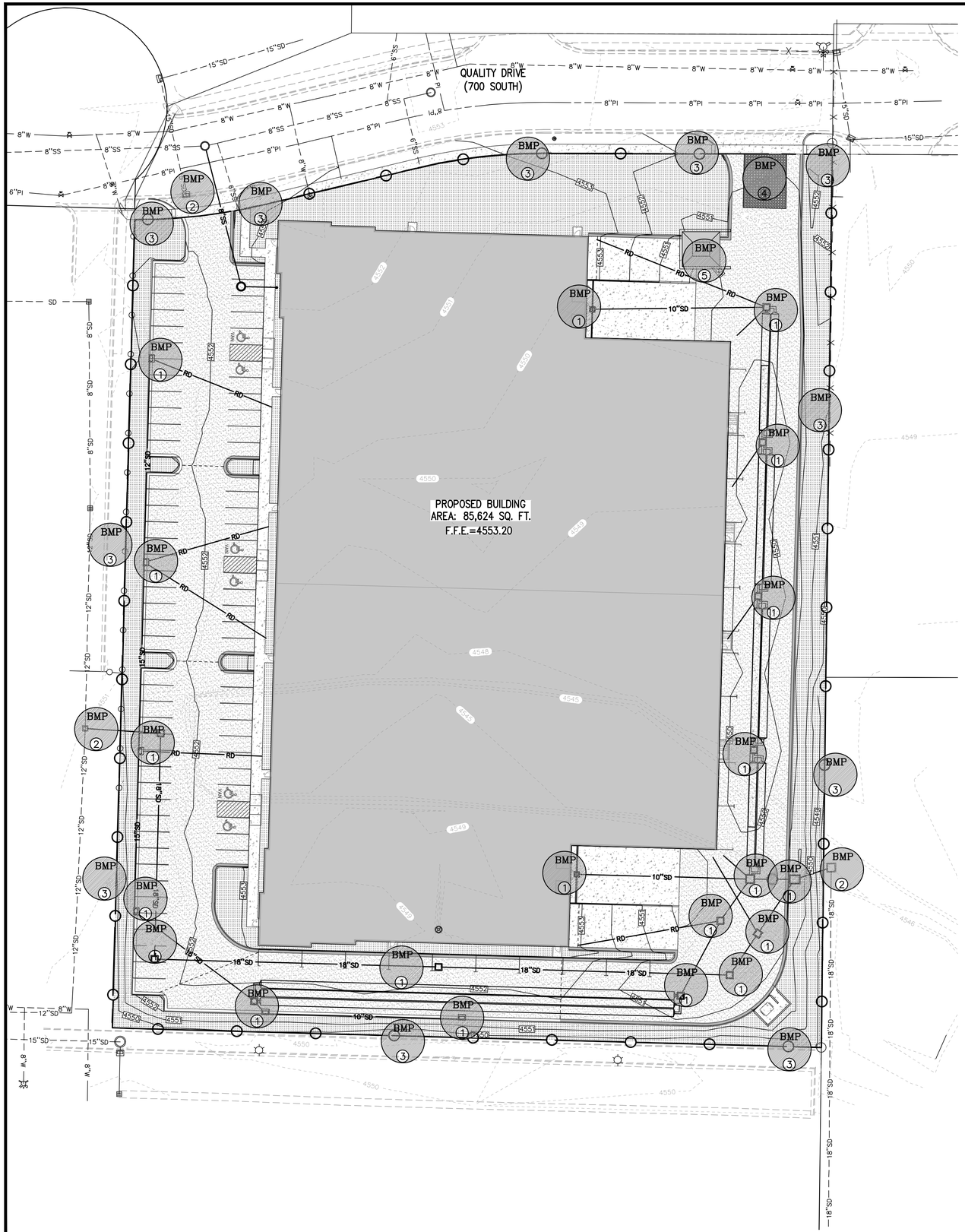
## DETAIL SHEET

PROFESSIONAL ENGINEER No. 12072623 TREVOR L HODGSON STATE OF UTAH

CALL BEFORE YOU DIG! 811 BLUE STAKES 1 800 662 4111

SHEET NO. C5.1

| PROJECT ID | DATE: |
|---|---|
| H1022-01 | 03/22/21 |
| FILE NAME: PRJ-AFH | SCALE: |




BMP CALLOUTS

1. PLACE A SILT FENCE AROUND THE PERIMETER OF THE INLET, ONCE PAVEMENT AND/OR CURB HAS BEEN INSTALLED PLACE GRAVEL BAGS AROUND THE INLET. GRAVEL BAGS TO BE USED ON PAVED OR CONCRETE SURFACES AND SILT FENCE TO BE USED ON UNIMPROVED SURFACES.
   ***NOTE: IN HIGH TRAFFIC AREAS CONTRACTOR TO USE INSERT FILTER FABRIC. IF INLET HAS CURB OPENING, THE FILTER FABRIC IS TO BE EXTENDED UP TO COVER THE CURB OPENING AND GRAVEL BAGS PLACED IN GUTTER AT EACH SIDE OF OPENING TO KEEP FILTER FABRIC SNUG AGAINST CURB WALL.***
2. PLACE GRAVEL BAGS AS NECESSARY TO PREVENT SEDIMENT FROM DRAINING INTO EXISTING CATCH BASINS. ***SEE NOTE IN CALLOUT 1.***
3. INSTALL TYPICAL SILT FENCE, SILT FENCE TO BE INSTALLED PERPENDICULAR TO STORM WATER FLOW. INSTALLATION TO BE DONE SO AS TO PREVENT SEDIMENT FROM LEAVING THE SITE.
   ***NOTE: CONTRACTOR TO USE VEGETATIVE BUFFER AND OR CUT BACK INSTEAD OF SILT FENCE WHERE POSSIBLE.***
4. CONTRACTOR TO INSTALL A MIMIMUM OF 6" DEEP GRAVEL (3" TO 6"") OF SUFFICIENT SIZE (MINIMUM OF 50' IN LENGTH AND 20' WIDE) AS TO PROVIDE A WHEEL WASH AREA TO PREVENT THE TRACKING OF MUD OFFISTE. THE LOCATION OF WHEEL WASH MAY VARY FROM LOCATION SHOWN ON PLANS SO AS TO PROVIDE THE BEST PROTECTION AGAINST TRACKING MUD OFFSITE. CONTRACTOR TO MAINTAIN AND CLEAN WHEEL WASH AREA AS NEEDED TO PREVENT THE TRACKING OF MUD OFFSITE.
5. CONTRACTOR TO INSTALL CONCRETE WASHOUT AREA. THE LOCATION MAY VARY FROM LOCATION SHOWN ON PLANS.

N

0 30 60 90

Scale in Feet

SEE COVER SHEET FOR PROJECT LEGEND

***LEGEND***

SILT FENCE

WHEEL WASH AREA

BMP AREA

BMP (X)

**Benchmark Info**

The Benchmark for the project is the North Quarter Corner of Section 25, T.5.S. R.1.E., SLB&M
Elevation= 4555.90'
Datum is NAVD 88 derived from UTAH TURNGPS System

DURING CONSTRUCTION

1. ALL EROSION CONTROL BEST MANAGEMENT PRACTICES SHALL BE INSPECTED AND MAINTAINED REGULARLY (MINIMUM ONCE A WEEK) AND AFTER EVERY STORM EVENT
2. CONTRACTOR TO KEEP LAND DISTURBANCE TO MINIMUM TO CONTROL RUNOFF FROM THE SITE
3. LIMIT LAND CLEARING AND RESTORE ALL GRADING AS SOON AS POSSIBLE
4. STAGED SEEDING TO RE-VEGETATE CUT AND FILL SLOPES AS THE WORK IS IN PROGRESS
5. AT ALL TIMES DURING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PREVENTING AND CONTROLLING EROSION DUE TO WIND AND OTHER EROSION
6. MAINTENANCE OF STREET: STREETS TO BE KEPT CLEAN AND FREE FROM DEBRIS
7. CONTRACTOR SHALL PROVIDE DUST CONTROL MEASURES AT ALL TIMES DURING CONSTRUCTION.
8. CONTRACTOR TO HAVE WATER TRUCK AVAILABLE AS WATER SOURCE FOR WHEEL WASH AREA, OR ALTERNATE WATER SOURCE MAY BE USED IF APPROVED BY CITY.
9. IF GROUND WATER IS ENCOUNTERED DURING THE CONSTRUCTION ACTIVITIES AND REQUIRES PUMPING OFF THE PROJECT, THE CONTRACTOR IS TO FILTER THE WATER THROUGH THE USE OF SAND BAGS AND/OR GEO FABRIC. THIS IS TO BE DONE PRIOR TO IT BEING INTRODUCED INTO THE PUBLIC STORM DRAIN SYSTEM.
10. A COPY OF THE STORM WATER POLLUTION PREVENTION PLAN SHALL BE KEPT ON THE SITE DURING ALL CONSTRUCTION ACTIVITY

POST CONSTRUCTION

1. EROSION CONTROL STRUCTURES MAY BE REMOVED ONCE FINAL LANDSCAPING IS IN PLACE
2. EROSION CONTROL STRUCTURES BELOW SEEDED AREAS MUST REMAIN IN PLACE UNTIL THE ENTIRE AREA HAS BEEN ESTABLISHED
3. EROSION CONTROL IN PROPOSED PAVEMENT AREAS SHALL REMAIN IN PLACE UNTIL PAVEMENT IS COMPLETE
4. THE FOLLOWING PRECAUTIONS SHALL BE PERFORMED:

A) PERIODIC INSPECTION OF CATCH BASIN SEDIMENT TRAPS AND CLEANING WHEN THE BASIN IS MORE THAN 1/4 FULL. INSPECTION SHALL BE DONE AFTER EVERY MAJOR RAINFALL AND EVERY 6 MONTHS AS A MINIMUM. DISPOSAL OF ANY GREASE OR OIL MUST BE DONE IN ACCORDANCE WITH CURRENT ENVIRONMENTAL REGULATIONS
B) LITTER, DEBRIS AND CHEMICALS MUST BE PICKED UP AND KEPT IN A CONTAINED LOCATION TO PREVENT POLLUTION OF STORM WATER DISCHARGE
C) PARKING AREAS SHALL BE KEPT FREE FROM AUTOMOBILE FLUIDS THAT COULD WASH INTO THE STORM DRAIN SYSTEM

CALL BEFORE YOU DIG! BLUE STAKES 1 800 662 4111

| NO. | COMMENTS | BY | DATE |
|---|---|---|---|
| 1 | COMMENTS | TJH | 08/10/21 |
| 2 | COMMENTS | TJH | 10/27/21 |
| 3 | COMMENTS | TJH | 03/09/22 |

REVISIONS

DESIGNER: PROJECT ENGINEER:

CIR CIVIL ENGINEERING + SURVEYING
3032 SOUTH 1030 WEST, SUITE 202
SLC, Utah 84119 - 801-949-6296

# UTAH VALLEY BUSINESS PARK
752 EAST QUALITY DRIVE, AMERICAN FORK, UT 84003

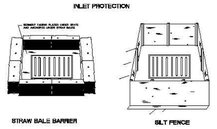
# EROSION CONTROL PLAN (SWPPP)

PROFESSIONAL ENGINEER No. 12072623 TREVOR L HODGSON STATE OF UTAH

SHEET NO. C6.0

| PROJECT ID | DATE: |
|---|---|
| H1022-01 | 03/22/21 |
| FILE NAME: PRJ-AFH | SCALE: 1"=30' |

## BMP: Inlet Protection - Silt Fence or Straw Bale — IPS




**Description:**
Sediment barrier erected around storm drain inlet.

**Application:**
Construct at storm drainage inlets located downgradient of areas to be disturbed by construction (for inlets in paved areas see other information sheets for inlet protection)

**Installation/Application Criteria:**
- Provide upgradient sediment controls, such as silt fence during construction of inlet.
- When construction of inlet is complete, erect straw bale barrier or silt fence surrounding perimeter of inlet. Follow instructions and guidelines on individual BMP information sheets for straw bale barrier and silt fence construction.

**Limitations:**
- Recommended maximum contributing drainage area of one acre.
- Limited to inlets located in open unpaved areas.
- Requires shallow slopes adjacent to inlet.

**Maintenance:**
- Inspect inlet protection following storm event and at a minimum of once monthly.
- Remove accumulated sediment when it reaches 4-inches in depth.
- Repair or realign barrier/fence as needed.
- Look for bypassing or undercutting and recompact soil around barrier/fence as required.

**Objectives**
- ☐ Housekeeping Practices
- ☐ Contain Waste
- ☐ Minimize Disturbed Areas
- ☐ Stabilize Disturbed Areas
- ☐ Protect Slopes/Channels
- ☒ Control Site Perimeter
- ☒ Control Internal Erosion

ADAPTED FROM SALT LAKE COUNTY BMP FACTSHEET

**Targeted Pollutants**
- ▪ Sediment
- ▫ Nutrients
- ▫ Toxic Materials
- ▫ Oil & Grease
- ▪ Floatable Materials
- ▫ Other Waste

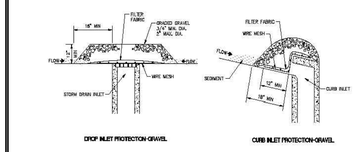
- ■ High Impact
- ☒ Medium Impact
- ☐ Low or Unknown Impact

**Implementation Requirements**
- ▪ Capital Costs
- ▫ O&M Costs
- ▪ Maintenance
- ▫ Training

■ High ☒ Medium ☐ Low



## BMP: Inlet Protection - Gravel — IPG




**Description:**
Placement of gravel filter over inlet to storm drain to filter storm water runoff.

**Application:**
Construct at inlets in paved or unpaved areas where upgradient area is to be disturbed by construction activities.

**Installation/Application Criteria:**
- Place wire mesh (with ½ inch openings) over the inlet grate extending one foot past the grate in all directions.
- Place filter fabric over the mesh. Filter fabric should be selected based on soil type.
- Place graded gravel, to a minimum depth of 12-inches, over the filter fabric and extending 18-inches past the grate in all directions.

**Limitations:**
- Recommended for maximum drainage area of one acre.
- Excess flows may bypass the inlet requiring down gradient controls.
- Ponding will occur at inlet.

**Maintenance:**
- Inspect inlet protection after every large storm event and at a minimum of once monthly.
- Remove sediment accumulated when it reaches 4-inches in depth.
- Replace filter fabric and clean or replace gravel if clogging is apparent.

**Objectives**
- ☐ Housekeeping Practices
- ☐ Contain Waste
- ☐ Minimize Disturbed Areas
- ☐ Stabilize Disturbed Areas
- ☐ Protect Slopes/Channels
- ☒ Control Site Perimeter
- ☒ Control Internal Erosion

ADAPTED FROM SALT LAKE COUNTY BMP FACTSHEET

**Targeted Pollutants**
- ▪ Sediment
- ▫ Nutrients
- ▫ Toxic Materials
- ▫ Oil & Grease
- ▪ Floatable Materials
- ▫ Other Waste

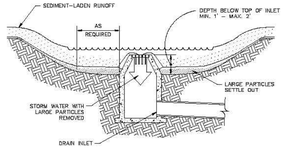
- ■ High Impact
- ☒ Medium Impact
- ☐ Low or Unknown Impact

**Implementation Requirements**
- ▪ Capital Costs
- ▫ O&M Costs
- ▪ Maintenance
- ▫ Training

■ High ☒ Medium ☐ Low



## BMP: Inlet Protection - Excavated — IPE




**Description:**
An area excavated around a storm drain inlet to impound water below the inlet.

**Application:**
Construct at storm drainage inlets located downgradient of areas to be disturbed by construction (for inlets in paved areas see other information sheets for inlet protection)

**Installation/Application Criteria:**
- Provide upgradient sediment controls, such as silt fence during construction of inlet.
- When construction of inlet is complete, excavate adjacent area 1 to 2 feet lower than the grate elevation. Size of excavated area should be based on soil type and contributing acreage.

**Limitations:**
- Recommended maximum contributing drainage area of one acre.
- Limited to inlets located in open unpaved areas.
- Requires flat area adjacent to inlet.

**Maintenance:**
- Inspect inlet protection following storm event and at a minimum of once monthly.
- Remove accumulated sediment when it reaches one half of the excavated sump below the grate.
- Repair side slopes as required.

**Objectives**
- ☐ Housekeeping Practices
- ☐ Contain Waste
- ☐ Minimize Disturbed Areas
- ☐ Stabilize Disturbed Areas
- ☐ Protect Slopes/Channels
- ☒ Control Site Perimeter
- ☒ Control Internal Erosion

ADAPTED FROM SALT LAKE COUNTY BMP FACTSHEET

**Targeted Pollutants**
- ▪ Sediment
- ▫ Nutrients
- ☒ Toxic Materials
- ▫ Oil & Grease
- ▪ Floatable Materials
- ☐ Other Waste

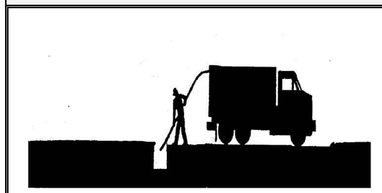
- ■ High Impact
- ☒ Medium Impact
- ☐ Low or Unknown Impact

**Implementation Requirements**
- ☐ Capital Costs
- ☐ O&M Costs
- ☒ Maintenance
- ☐ Training

■ High ☒ Medium ☐ Low



## BMP: Catch Basin Cleaning — CBC



**Description:**
Maintain catch basin and stormwater inlets on a regular basis to remove pollutants, reduce high pollutant concentrations during the first flush of storms, prevent clogging of the downstream conveyance system, and restore the catch basins' sediment trapping capacity. A catch basin is distinguished from a stormwater inlet by having at its base a sediment sump designed to catch and retain sediments below the overflow point. This information sheet focuses on the cleaning of accumulated sediments from catch basins.

**Approach:**
Regular maintenance of catch basins and inlets is necessary to ensure their proper functioning. Clogged catch basins are not only useless but may act as a source of sediments and pollutants. In general, the key to effective catch basins are:
- At least annual inspections.
- Prioritize maintenance to clean catch basins and inlets in areas with the highest pollutant loading.
- Clean catch basins in high pollutant load areas just before the wet season to remove sediments and debris accumulated during the summer.
- Keep accurate logs of the number of catch basins cleaned.
- Record the amount of waste collected.

**Limitations:**
There are no major limitations to this best management practice.

**Maintenance:**
Regular maintenance of public and private catch basins and inlets is necessary to ensure their proper functioning. Clogged catch basins are not only useless but may act as a source of sediments and pollutants. In general, the keys to effective catch basins are:
- Annual/monthly inspection of public and private facilities to ensure structural integrity, a clean sump, and a stenciling of catch basins and inlets.
- Keep logs of the number of catch basins cleaned.
- Record the amount of waste collected.

**Program Elements**
- ☐ New Development
- ☐ Residential
- ☐ Commercial Activities
- ☐ Industrial Activities
- ☒ Municipal Facilities
- ☒ Illegal Discharges

ADAPTED FROM SALT LAKE COUNTY BMP FACTSHEET

**Targeted Pollutants**
- ■ Sediment
- ☒ Nutrients
- ■ Heavy Metals
- ☐ Toxic Materials
- ☒ Oxygen Demanding Substances
- ☒ Oil & Grease
- ■ Floatable Materials
- ☐ Bacteria & Viruses

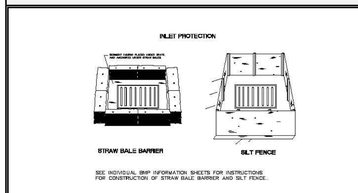
- ■ High Impact
- ☒ Medium Impact
- ☐ Low or Unknown Impact

**Implementation Requirements**
- ☒ Capital Costs
- ■ O&M Costs
- ☐ Regulatory
- ☒ Training
- ■ Staffing
- ☒ Administrative

■ High ☒ Medium ☐ Low



## BMP: Inlet Protection - Silt Fence or Straw Bale — IPS




**Description:**
Sediment barrier erected around storm drain inlet.

**Application:**
Construct at storm drainage inlets located downgradient of areas to be disturbed by construction (for inlets in paved areas see other information sheets for inlet protection)

**Installation/Application Criteria:**
- Provide upgradient sediment controls, such as silt fence during construction of inlet.
- When construction of inlet is complete, erect straw bale barrier or silt fence surrounding perimeter of inlet. Follow instructions and guidelines on individual BMP information sheets for straw bale barrier and silt fence construction.

**Limitations:**
- Recommended maximum contributing drainage area of one acre.
- Limited to inlets located in open unpaved areas.
- Requires shallow slopes adjacent to inlet.

**Maintenance:**
- Inspect inlet protection following storm event and at a minimum of once monthly.
- Remove accumulated sediment when it reaches 4-inches in depth.
- Repair or realign barrier/fence as needed.
- Look for bypassing or undercutting and recompact soil around barrier/fence as required.

**Objectives**
- ☐ Housekeeping Practices
- ☐ Contain Waste
- ☐ Minimize Disturbed Areas
- ☐ Stabilize Disturbed Areas
- ☐ Protect Slopes/Channels
- ☒ Control Site Perimeter
- ☒ Control Internal Erosion

ADAPTED FROM SALT LAKE COUNTY BMP FACTSHEET

**Targeted Pollutants**
- ▪ Sediment
- ▫ Nutrients
- ▫ Toxic Materials
- ▫ Oil & Grease
- ▪ Floatable Materials
- ▫ Other Waste

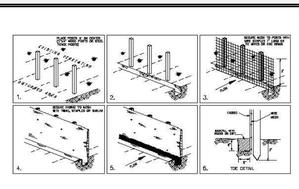
- ■ High Impact
- ☒ Medium Impact
- ☐ Low or Unknown Impact

**Implementation Requirements**
- ▪ Capital Costs
- ▫ O&M Costs
- ▪ Maintenance
- ▫ Training

■ High ☒ Medium ☐ Low



## BMP: Silt Fence — SF




**Description:**
A temporary sediment barrier consisting of entrenched filter fabric stretched across and secured to supporting posts.

**Application:**
- Perimeter control: place barrier at downgradient limits of disturbance
- Sediment barrier: place barrier at toe of slope or soil stockpile
- Protection of existing waterways: place barrier near top of stream bank
- Inlet protection: place fence surrounding catchbasins

**Installation/Application Criteria:**
- Place posts 6 feet apart on center along contour (or use preassembled unit) and drive 2 feet minimum into ground. Excavate an anchor trench immediately upgradient of posts.
- Secure wire mesh (14 gage min. With 6 inch openings) to upslope side of posts. Attach with heavy duty 1 inch long wire staples, tie wires or hog rings.
- Cut fabric to required width, unroll along length of barrier and drape over barrier. Secure fabric to mesh with twine, staples, or similar, with trailing edge extending into anchor trench.
- Backfill trench over filter fabric to anchor.

**Limitations:**
- Recommended maximum drainage area of 0.5 acre per 100 feet of fence
- Recommended maximum upgradient slope length of 150 feet
- Recommended maximum uphill grade of 2:1 (50%)
- Recommended maximum flow rate of 0.5 cfs
- Ponding should not be allowed behind fence

**Maintenance:**
- Inspect immediately after any rainfall and at least daily during prolonged rainfall.
- Look for runoff bypassing ends of barriers or undercutting barriers.
- Repair or replace damaged areas of the barrier and remove accumulated sediment.
- Reanchor fence as necessary to prevent shortcutting.
- Remove accumulated sediment when it reaches ½ the height of the fence.

**Objectives**
- ☐ Housekeeping Practices
- ☐ Contain Waste
- ☐ Minimize Disturbed Areas
- ☐ Stabilize Disturbed Areas
- ☒ Protect Slopes/Channels
- ☒ Control Site Perimeter
- ☒ Control Internal Erosion

ADAPTED FROM SALT LAKE COUNTY BMP FACTSHEET

**Targeted Pollutants**
- ▪ Sediment
- ☐ Nutrients
- ☐ Toxic Materials
- ☐ Oil & Grease
- ☐ Floatable Materials
- ☐ Other Waste

- ■ High Impact
- ☒ Medium Impact
- ☐ Low or Unknown Impact

**Implementation Requirements**
- ▪ Capital Costs
- ▫ O&M Costs
- ▪ Maintenance
- ▫ Training

■ High ☒ Medium ☐ Low



| NO. | REVISIONS | BY | DATE |
|---|---|---|---|
| 1 | COMMENTS | TLH | 08/10/21 |
| 2 | COMMENTS | TLH | 10/27/21 |
| 3 | COMMENTS | TLH | 03/09/22 |

DESIGNER: TLH PROJECT ENGINEER: TLH

CIR CIVIL ENGINEERING + SURVEYING
3032 SOUTH 1030 WEST, SUITE 202
SLC, Utah 84119 – 801-949-6296

# UTAH VALLEY BUSINESS PARK
752 EAST QUALITY DRIVE, AMERICAN FORK, UT 84003

# EROSION CONTROL DETAIL SHEET

PROFESSIONAL ENGINEER No. 12072623 TREVOR L HODGSON STATE OF UTAH

CALL BEFORE YOU DIG BLUE STAKES 1 800 662 4111

SHEET NO. C6.1

| PROJECT ID | DATE: |
|---|---|
| H1022–01 | 03/22/21 |
| FILE NAME: PRJ–AFH | SCALE: |

**AMERICAN FORK CITY** **MEETING DATE:** 8 June 2022
**PLANNING COMMISSION** **STAFF:** Patrick O'Brien

**AGENDA TOPIC:** Hearing, review, and action on an agreement for the Harbor Road Annexation, consisting of 85 acres, and located at approximately 6500 W 6800 N

| BACKGROUND INFORMATION | |
|---|---|
| Location: | 6500 W 6800 N |
| Applicants: | Ginger Romriell/Woodside Homes |

BACKGROUND

The Harbor Road Antion consists of approximately 85 acres and is located in the area of 6500 W 6800 N. Existing use of the area is agriculture, and surrounding uses include residential where property is annexed into the City of American Fork. The Land Use Element of the General Plan shows the Annexation Area classified as Residential Very-Low Density, Residential Low Density, and Shoreline Protection. Therefore, the zone classification attached to the parcel shall be PR-2.0 (Planned Residential) associated with the areas designated the Residential Very Low Density, PR-3.0 (Planned Residential) for areas designated by Residential Low Density, and Shoreline Protection, for areas designated as such under the Land Use Plan. The General Plan provides for the development of an Open Space termed the "Vineyard Connector and Linear Park," a portion of which also traverses the Annexation Area. The annexation agreement is the first step toward ultimate development of the property.

**Potential Motions:**

**APPROVAL**

Mr. Chairman, I move that we recommend approval of the Harbor Road Annexation and Annexation Agreement in a form substantially similar to the one contained in the

**DENIAL**

Mr. Chairman, I move that we recommend denial of the Annexation Agreement.

**TABLE**

Mr. Chairman, I move that we table action on the Annexation Agreement.

**AMERICAN FORK CITY** **MEETING DATE:** 8th, June 2022
**PLANNING COMMISSION** **STAFF:** Cody Opperman

**AGENDA TOPIC:**

Hearing, review, and action on a proposed land use map amendment for the American Fork Townhomes Project from Design Commercial to Planned Community, located in the area of 400 S 860 E

Hearing, review, and action on the Zoning Change for American Fork Townhomes, located in the area of 400 S 860 E, in the GC-2 Planned Commercial Zone.

| BACKGROUND INFORMATION | | |
|---|---|---|
| Location: | | 400 S 860 E |
| Applicants: | | M & M Property Holdings LLC |
| Existing Land Use: | | Design Commercial, Planned Community |
| Proposed Land Use: | | Planned Community |
| Surrounding Land Use: | North | Design Commercial |
| | South | Planned Community |
| | East | Design Commercial, Planned Community |
| | West | Planned Community |
| Existing Zoning: | | GC-2 |
| Proposed Zoning: | | PC |
| Surrounding Zoning: | North | GC-1 |
| | South | PC |
| | East | GC-1, GC-2 |
| | West | PC |

**BACKGROUND:**

The applicant is applying for a Land Use Map Amendment and Zoning Change for American Fork Townhomes in the GC-2 Planned Commercial Zone. The entire development parcel consists of 1.26 acres and the proposal consists of 29 lots intended for single-family residential development. The GC-2 zoning will be replaced by the PC zoning.

The current Land Use Map identifies the proposed lot as Planned Community mixed with Design Commercial on the northern end of the lot. The western and southern areas are already compliant with the Planned Community zoning and land use making the American Fork Townhomes acceptable to the area.

Townhomes also provide a transitional way of introducing residential homes near commercial structures. The American Fork Townhomes would be located near GC-1 and GC-2 zoning making it an acceptable fit for residential near the area, therefore planning staff recommends approval for the application of the zoning change at the time of this writing.

**STAFF RECOMMENDATION:**

Recommendation of approval for the land use map amendment and zone change for American Fork Townhomes located in the area of 400 S. 860 E.

**POTENTIAL MOTIONS – Land Use Map Amendment**

**APPROVAL**

Mr. Chairman, I move that we recommend approval of the Land Use Map Amendment for American Fork Townhomes from the Design Commercial land use designation, to the Planned Community land use designation, subject to any findings, conditions, and modifications found in the Engineering Staff Report, or recommended by the Fire Marshal.

**DENIAL**

Mr. Chairman, I move that we deny the Land Use Map Amendment for American Fork Townhomes from the Design Commercial land use designation, to the Planned Community land use designation with a finding that the proposed zone and land use are incongruent with adjacent existing development.

**TABLE**

Mr. Chairman, I move that we table action on the Land Use Map Amendment for American Fork Townhomes and instruct the developer/staff to _____.

**POTENTIAL MOTIONS – Zoning Change**

**APPROVAL**

Mr. Chairman, I move that we recommend approval of the Zone Change for American Fork Townhomes from the General Commercial (GC-2) zone to the Planned Community (PC) zone subject to any findings, conditions, and modifications found in the Engineering Staff Report, or recommended by the Fire Marshal.

**DENIAL**

Mr. Chairman, I move that we deny the Zoning Change for American Fork Townhomes from the General Commercial (GC-2) zone to the Planned Community (PC) zone, with a finding that the proposed zone and land use are incongruent with adjacent existing development.

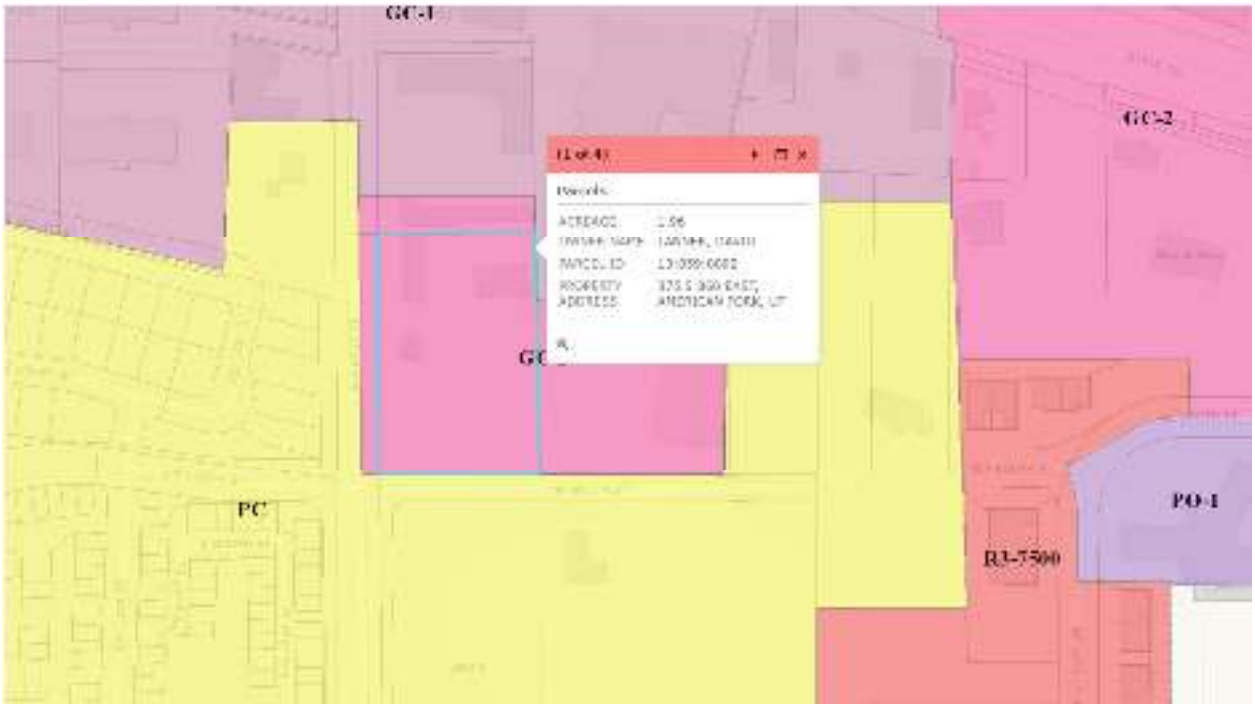
**TABLE**

Mr. Chairman, I move that we table action on the Zoning Change for American Fork Townhomes and instruct the developer/staff to _____.

**Exhibit 1: Land Use Map**



## Exhibit 2: Zoning Map



# AMERICAN FORK CITY ENGINEERING DIVISION
# STAFF REPORT

Planning Commission Meeting Date: 6/8/2022

This report is a summary of the American Fork City Engineering Division plan review comments regarding the subject plan as submitted by the applicant for American Fork City Land Use Authority approval:

Project Name: American Fork Townhomes

Project Address: 400 S 860 E

Developer / Applicant's Name: M & M Property Holdings, LLC

Type of Application:

- ☐ Subdivision Final Plat
- ☐ Subdivision Preliminary Plan
- ☐ Annexation
- ☐ Code Text Amendment
- ☐ General Plan Amendment
- ☒ Zone Map Amendment
- ☐ Commercial Site Plan
- ☐ Residential Accessory Structure Site Plan

**Engineering Division Requirements:** As a condition of this zone map amendment, additional right-of-way shall be dedicated to the City at no cost to the City. Applicant shall provide to the City legal descriptions for the various dedications to be reviewed and approved prior to recording right-of-way deeds. Right-of-way dedication shall be shown on a subdivision plat that is submitted to the city for review within 60 days of the approved zone change or shall be dedicated to the city by deed within 60 days of the approved zone change as follows:

1. The City's Master Transportation Element of the General Plan identifies 400 South and 860 East as minor collectors. The necessary right-of-way to meet American Fork City Standards and Specifications and cross sections for 400 South and 860 East plus the findings of any additional auxiliary lanes at the intersection of 860 East and 400 South as recommended by a traffic study shall be dedicated to the City. The traffic study must be submitted by the applicant to verify right-of-way needs for this intersection as part of any development of the land associated with the zone change.

# UNNAPROVED MINUTES

AMERICAN FORK CITY PLANNING COMMISSION
MAY 18, 2022
REGULAR SESSSION AMENDED AGENDA

The American Fork City Planning Commission met in a regular session on May 18, 2022, at the American Fork City Hall, 31 North Church Street, commencing at 7:00 pm.

Present:

| | |
|---|---|
| John Woffinden | Chairman |
| Rodney Martin | |
| Bruce Frandsen | |
| Chris Christiansen | |
| David Bird | |

Absent: Jenny Peay, Christine Anderson, and Harold Dudley

Staff:

| | |
|---|---|
| Patrick O'Brien | Development Services Director |
| Cody Opperman | City Planner |
| Ben Hunter | Engineer |
| Jeff Mortimer | Engineer |
| George Schade | IT Director |
| Stephanie Finau | Deputy Recorder |

Also Present: Ken Berg, Dennis Beck, Maeta Beck, Linda Beck, Shiree Kitchen, Shauna Beck, Ed Grampp, Gerald Anderson (Anderson Development), Joe Garlington (Anderson Development), and 2 associates from Anderson Development

John Woffinden: led the "Pledge of Allegiance".

Patrick O'Brien introduced the new City Planner, Cody Opperman and asked for him to introduce himself to the Planning Commission.

1. **Hearing, review, and action on a code text amendment, amending Section 15.01.100 of the American Fork City code, titled Streets**

Ben Hunter: This code text amendment is about new developments coming in that are approved by city council. It is not applicable to any existing developments that are already in the review process, it is for what is in place currently. There are a lot of the modifications and updates to this code text amendment. There is some clean ups and various areas that were not consistent with the right-of-way widths based upon the master transportation plan. It also allows for, in limited circumstances to match the road cross sections in areas where the rest of it is developed and a small stretch that isn't developed. For example: park strips that are not as wide as what

current code requires. It will allow, with limitations and certain criteria at the recommendation of the City Engineer, the City Council to be able to approve something different than the current adopted cross-section standards. Those are the majority of the changes and some of it was clarification of some sections code that weren't as clear on what the requirement was or was not. Those were all of the modifications we made to this proposed text amendment.

Rodney Martin: Section 1E talking about dead end streets, saying that they are required to be a cul-de-sac? Is that a new thing? I've seen developments where the street just ends because there is planned future development. Is that eliminating that?

Ben Hunter: It clarifies some of that section of code. Previously that was the only adopted reference was that the dead-end street could be a cul-de-sac. Which was the allowance that was permitted in the code previously that will continue to be the only allowance that's permitted.

Patrick O'Brien: This wouldn't impact anyone that is already vested in our current code.

Rodney Martin: Yeah, but it says permanent or temporary, greater then 150 feet would have to be a cul-de-sac at the end of it. Which doesn't make sense for the future plan use beyond that where it can tie in.

Ben Hunter: With some of those where you have a dead end for a future tie in, you may have instances of a development that will come in phases and a future section will be continued. They would tie into that dead end as part of the overall development. Those instances with the 150-foot spacing requirement, that is clarified to meet fire code. When it is part of a 2nd phase of the same development there's been a temporary cul-de-sac allowed for the construction of a future phase and a continuation of the road.

Rodney Martin: And that's to facilitate turning?

Ben Hunter: Correct, for fire, for maintenance, for snowplow removal, and a lot of other instances.

Rodney Martin: So, we don't have to have a cul-de-sac with homes built there, its just for the road and turning around?

Ben Hunter: Correct.

Bruce Frandsen: Is this the one that talks about half width streets? Can you explain if thisdifferent from what we've had in the past?

Ben Hunter: We've had a partial width street since before I started working here. It has had various allowances for some of those partial widths to be constructed as part of a development. It does have all of the partial width street, section 17.8.304 B2? All of that is what we had previously for items A-E. So, nothing of the patrial street is being modified on the bullet items.

Bruce Frandsen: As I understand you do half width plus ten feet is that still the standard?

Ben Hunter: There isn't anything specific in our code that clarifies a half width plus ten. There are a lot of other jurisdictions that have that in their code. Our section is just what's listed in

those five bullet items underneath the partial width streets. If you meet these criteria, you may be allowed to construct a partial width street that meets this.

Bruce Frandsen: Can we see those bullets? We do have a few good partial width streets in the city that I feel are dangerous. I don't know if we would need to have a half plus ten.

Ben Hunter: Usually in those instances you have a couple combinations within that much. There are certain boundaries requirements like the minimum width of right of way is 35 feet. Will include construction of all required street and utility improvements according to the city's standards. There is also the reduced width right of way, which that section is being modified. So, is it the partial width or the reduced width that you were questioning on that? Because the reduced width talks about meeting fire code. Which you have a minimum hard surface depending on the circumstances of either twenty-four or twenty-six feet wide, to make sure fire trucks can pass through there. That would be close to what other jurisdictions do which is a half width plus ten. In our instance a half width would be 16 feet wide for a local road plus ten feet. That verbiage is not specific in our code, this is the criteria they must meet for that.

Bruce Frandsen: They can only be a maximum of four hundred feet long?

Ben Hunter: Correct

John Woffinden: Any other questions or comments?

**Public Hearing opened.**

No comments made.

**Public Hearing closed**.

**Rodney Martin motioned to recommend approval of the <u>Hearing, review, and action on a code text amendment, amending Section 15.01.100 of the American Fork City code, titled Streets.</u> David Bird seconded the motion.**

**Voting was as follows:**

| | |
|---|---|
| **Chairman Woffinden** | **Aye** |
| **Chris Christiansen** | **Aye** |
| **Bruce Frandsen** | **Aye** |
| **Rodney Martin** | **Aye** |
| **David Bird** | **Aye** |

**The motion passed**

2. **<u>Hearing, review, and action on a code text amendment, amending Section 17.08.304 of the American Fork City Code, titled Project Streets and Sidewalks.</u>**

Ben Hunter: This item entails a bunch of housekeeping items and clarifying sections of code. As we accommodate with some of the other code texts amendments that you just recommended

approval on. There are a couple things that are added to this as far as sidewalks and what minimum improvements are required. So, it's just making this section of code consistent with the previous section we just discussed.

John Woffinden: So, it just matches up and fills in the voids. Any questions for Ben on this one?

David Bird: So, there is no variance between the two sections?

Ben Hunter: It talks about a couple of different things. In subsection B, streets to conform to the city standards, because of the previous code amendment. We had to modify this allowing for exceptions. So, we have different things that are discussed as they reference each other. We had to make sure that it clarified that there are exceptions as in the previous section we discussed. As different sections talk about different components of the street and referenced each other we just have to make it consistent and make sure it didn't have any conflicting codes.

David Bird: That what I wanted to know was if there were any conflicts with developing that.

Rodney Martin: Is a 5' wide sidewalk in EDA compliance?

Ben Hunter: Yes.

Bruce Frandsen: Does this address park strips also?

Ben Hunter: I don't think this one talked about the park strips. This one just talked more sidewalks, asphalt, and some of those components with it.

**Public Hearing opened**.

No comments made

**Public Hearing closed.**

**Chris Christiansen motioned to recommend approval of the <u>Hearing, review, and action on a code text amendment, amending Section 17.08.304 of the American Fork City Code, titled Project Streets and Sidewalks.</u> David Bird seconded the motion.**

**Voting was as follows:**

| | |
|---|---|
| **Chairman Woffinden** | **Aye** |
| **Chris Christiansen** | **Aye** |
| **Bruce Frandsen** | **Aye** |
| **Rodney Martin** | **Aye** |
| **David Bird** | **Aye** |

**The motion passed**

3. **<u>Hearing, review, and action on the preliminary and final plat for Beck Hillside Estates, located in the area of 757 North 200 East, in the RI-9000 Residential Zone.</u>**

Patrick O'Brien: This is on our agenda because the applicant requested to be on it when they submitted revised plans after the initial review by staff. We put it in the agenda but have not had the chance to review their initial comments after their request to go on the agenda. Our comments are actually included in the packet. This is the first time the Planning Commission is seeing these sets of plans as the applicant had previously submitted an application for a Planned Unit Development or a PUD. This proposal differs from that past application, as it is just a regular subdivision in the R1-9000 zone. The proposal consists of 12 lots intended for single family use. The entire development parcel consists of 5.49 acres. It also includes a proposed demolition plan for demolishing existing structures on site to accommodate that future development. Based on when we did our reviews, I did my review before engineering and fire finalized their plan, it met the planning elements of the code. I would now revise my recommended approval based on some of the outstanding comments that need to be addressed by colleagues.

Rodney Martin: You're just saying engineering is recommending denial because of the changes?

Patrick O'Brien: Correct, as we look through the code there is fire, planning, and engineering elements of the code. Each of the respective groups take a different section, its not a majority moves on it. We need to meet all three sections of code before staff can recommend an approval on it. I did not see comments come in from any of the other staff member before I finalized my review and report, so I withdraw that recommendation and follow the recommendation of the engineering team to deny the application.

Rodney Martin: So, there are still outstanding TRC comments that need to be addressed?

Patrick O'Brien: That's correct.

Ben Hunter: There are a couple of outstanding comments, it does not meet the road standards and the cul-de-sac standards that are vested as part of this subdivision approval, it does not meet that section of code. There are also a couple of utility elements to it that we are confirming and making sure the appropriate utilities are buried or not. Until they meet those sections of code, we recommend denial until we can make sure they meet code.

Bruce Frandsen: Can you be a little more specific on the concern of the cul-de-sacs and roads?

Ben Hunter: One of the outstanding comments is per road and cul-de-sac standards. The confines of this development reach the limits that you see in this project. It would require a permanent cul-de-sac turn around in order to meet it because there isn't anything to prevent future phases. They had some pieces that did not meet the minimum local road standards of right of way. Those are some components that also did not meet code.

Rodney Martin: How deep is this parcel from the beginning to where it ends? From the edge of the roadway.

Ben Hunter: They would be tying in to 200 East on the East side. The roadway along the center line you have 220 feet and then a curve and then an additional 400 feet. Which they're not showing the cul-de-sac so combined between that you're in essence 600 feet long.

Rodney Martin: So far too long, and there is not plan development North of that that would tie in?

Ben Hunter: Correct.

David Bird: So, there is only one entrance into this subdivision off 200 East? You go in and come out the same way? Does that fit within city standards?

Ben Hunter: I would have to defer to fire code. I know there is a certain number of units that once you exceed them you must have at least two access points. This one had few enough units that it is allowable, but it needs to conform to the turnaround standards which is a cul-de-sac.

John Woffinden: Is the applicant here? Would you come forward, state your name for the record, and tell us about the project please.

Gerald Anderson: I am the Principal of Anderson Development. I created Vineyard, bought Geneva Steel, and put 2100 North in between I-15 and Redwood Road. I've been a developer in Utah for a little over 40 years. In that time, I've developed over 35,000 houses, apartments, single family and multi family. This is a project we are going to both develop and build. I have recently started a company called Oakcrest Homes. Its always difficult to build on a hill you have slopes grades and all kinds of issues. In addition to that you have landowners that want things a certain way. We've been on this project over 2.5 years trying to work our way through it. In that time, we've run into a lot of issues about what your code means. One of your codes was because of us talking about dead end streets and cul-de-sacs. Your planning group came in and approved it and then your engineer said it wasn't in compliance. But if you read the document, by law they have to define why we are not in compliance. They have not defined that in the past or tonight. This is a 5$^{th}$ time I've submitted a plan and spent over 100,000 dollars to meet code. If it gets to that point, I will document the 5 previous submittals. Quite truthfully, it's hard. It's a little bit like the Old Testament you can probably prove anything out of the Old Testament. Sometimes Isaiah is a little bit hard to read and I would say your ordinances are a little bit hard to read like Isaiah. We are creating a project, that is an upgrade in the area. This is the plat and to this day I don't have comments back from engineering that defines what we are not in compliance of. It is a little difficult to get a project approved when you can't understand what you're not in compliance of. The city understands well enough to write a draft amendment that you guys passed today that says it's a plain language and that is our argument as our attorney met with your attorney. Beck Hills Estates is on a hillside, its pretty difficult. Hillsides are very hard to develop, you have to make sure you use the ground effectively. The Becks have been very understanding that we cannot utilize 100% of the land because it is a hill. We are proposing 12 units, one of which the Becks will be building, we will be building 11 of the units. (Refer to Hand Out 1). I have a legal opinion as far as what your code says. and I think your attorney agrees because you are proposing a change. Your code says if I come into a project I need to stub to the adjacent property and that is what we are proposing that we do. If we stub to the adjacent property, it's a temporary stub. The landowner to the North says, "I don't want development to occur on my property, so don't let them stub." Your administrator then changed his opinion and now we're told we can't stub there. The landowner has since passed away. As Planning

Commission members, you are responsible by charge by the state for the orderly plan of your community. What we are proposing to the North is exactly according to your code, we are stubbing into that property. We don't think it is a permanent stub, the landowner to the north does not plan on having that developed. The master plan with the trail almost always follows your roads. It shows clearly that your plan would have a trail come down through the landowner's property to the North, he happens to be a cousin to the Becks who we are buying the property from. We are following the master plan and putting in a trail through the north on their property as was envisioned on your master plan. North of the property it turns and comes back to the East. There is a road that's part of the master plan that comes back at 1120, so this does follow your master plan. It would be Merrill Beck to the North, and it would come down and we would be stubbed in. What we would propose according to international fire plan which you have adopted would accommodate a hammerhead. The hammerhead would be dedicated to the city, but it wouldn't be part of the plat, it would be separate. We show that and the way it would be striped etc. That's where we are in disagreement with some of the city staff is if a hammerhead a viable turnaround. You adopted the international fire code and didn't exempt anything on it and a hammerhead is part of the international fire code. This hammerhead meets that, and the Fire Marshall said it needs to be modified to meet code. We are doing all that we feel we can do in order to develop this property. Stubbing it and a hammerhead meets your code. Since it is a longer cul-de-sac that ordinance only comes into effect if you argue that this will never ever be extended to the North. In most cities I would not be allowed to have a protective strip between my property and the property adjoining me because that would stop development. At this point the city is saying, we want you to put a cul-de-sac, we won't be building on the end of it, but it creates a protective strip. We are arguing that we're following your code. We're trying to do everything you've asked.

Patrick O'Brien: Do you own the property to the North?

Gerald Anderson: No, we do not.

Patrick O'Brien: There is not any guarantee that you will be the developer of the property. So, you would not be able to offer any guarantees to the city that the road meets code.

Gerald Anderson: The code says you will stub it to the adjacent property. Is that correct?

John Woffinden: It doesn't comply to the code because you have 400 feet and 200 feet. The code only allows for 400 feet total, and you've got over 600 feet. So, you already don't match up to code on just the length of your street.

Gerald Anderson: I disagree.

John Woffinden: How can you say 200 and 400 is code?

Gerald Anderson: This is temporary, is it not?

John Woffinden: It's got to have a cul-de-sac on the end of that area. Right now, you have no plans for a cul-de-sac, you don't own the property to the North, your road is longer then 400 feet which is required by code. This does not meet code. Discussion is over.

Gerald Anderson: That's not correct.

John Woffinden: 400 and 200 make 600, that's more than 400, period. It doesn't match code.

Gerald Anderson: Its temporary.

John Woffinden: You have no guarantee you're going to own the property to the North to stub into that piece of property.

Gerald Anderson: Does your code require me to stub to the adjoining properties? It does, I guarantee it, if you want me to read it I can.

John Woffinden: Never mind all that what about the 400 and 200, you don't meet code there to start with.

Bruce Frandsen: Is the 600 only applicable when we have the cul-de-sac or is it applicable when we have a road that is being stubbed to the neighboring property?

Ben Hunter: The only description we have in the code allows a cul-de-sac to be 400 feet from certain measuring points as shown in our details. It doesn't differentiate whether its temporary or permanent. That's when you have that 400-foot requirement. The code text amendment that we had previously, was not specifically related because of this project. It was at the direction of City Council that was looking at modifying the code where you have existing development. It wasn't stemmed from this project. One of the other things that is challenging is you have the section of code talks about roads connecting to adjacent properties. You still have to meet all the sections codes and right now it does not meet the section regarding the cul-de-sac. Although the fire code has a hammerhead that's allowed in our city code, the only street cross sections that allows for a turnaround is a hammerhead. A hammerhead may be applicable in instances other than streets where it would be allowed for a fire turnaround. The only thing adopted in our code that related to public streets is a cul-de-sac for turnarounds.

Bruce Frandsen: I'm struggling trying to decide if this is a cul-de-sac, this does not look like it to me. In my experience cul-de-sacs are in the middle of a hundred-acre development where you cul-de-sac into your interior of your development. It doesn't look like a cul-de-sac to me it looks like a street that's stubbed in. I agree that we need to stub to the adjacent properties otherwise the property to North is landlocked. I'm struggling to see if what I'm looking at is a cul-de-sac. Does our code say that's a cul-de-sac or does it say, well that's a road? That's a partial road that is stubbed into the neighbor and someday its going to keep going North.

John Woffinden: Maybe, there is no guarantee.

Bruce Frandsen: We can't prevent people from the North, at some point, to go North.

John Woffinden: And how do you handle the problem of a fire truck, garbage truck, or snowplow getting in and coming back out?

Rodney Martin: That's where my question about the hammerhead comes in. Because if the hammerhead is allowed, I know its not specifically written in the code, but if a hammerhead is put in there and meets fire code, when the north property gets developed that hammerhead can be

taken out when the road goes in. It would seem to me that that would solve both problems for turnaround. And for future development where when that road goes through you can take out the hammerhead because its really hard to take out a cul-de-sac, when you've cut up people's property especially the lots that aren't that big to begin with.

Gerald Anderson: We were asked to stub to the South, the masterplan to the South proposes a new road. So, we are thinking what purpose does is solve to stub to the South when you're taking a sliver of road and you're not going to want this road to connect?

Rodney Martin: What Road is that? Is that where the 740 connector is going in now?

Gerald Anderson: If we stub to the South, that would be stubbed into that. We look at this as going to the North, you have trail plan that envisions that there is going to be at least a trail. That trail follows all of the roads, it goes to the North, and we envision it would connect to these two properties. I don't think anyone should have to sell or develop their property. But all a stub coming to your property does is create a parcel. I have a piece in Sandy, and I have two stubs coming in, when or if I sell that property, Sandy will be able to complete that road.

John Woffinden: I have to remind the Commission we are bound by current code as it stands right now. Our crystal ball doesn't forecast ten or even one year down the road. We have to abide what's on the books today. This has got 600 feet of road with no turnaround is that what we want to have in there?

Rodney Martin: First 200 feet isn't really considered because it has that bulb there for turnaround on the first 200 feet. I would say you've got 400 feet with those first 200 feet being kind of a half cul-de-sac with that bulb there. What would it take for them to do a hammerhead or something like that? I know we can't change code right now, but it makes sense to me to do that.

Ben Hunter: That first 200 feet, our detail whether there's a curve in the cul-de-sac or not, the initial bulb doesn't meet the cul-de-sac standard. Having the ability to make a full turnaround doesn't meet that standard. The way we understand it is from the street you are tying into, from the beginning of the curve to the back of the right of way is 400 feet. You would still have to include that first 200 feet as part of that dimension. The parcel to the North of them if they develop in the future or not it would not create a landlock because they have access onto 200 East. They would still be able to develop it conforming to code, and how they design it to conform to code. In this instance where its not part of another phase or anything like that if the cul-de-sac were to be shortened to meet cul-de-sac standards, you would probably have homes within that so it would not create a spike strip or anything like that.

Rodney Martin: Looking at the map we are not going to landlock them, you're right.

Gerald Anderson: I guess shame on us for not knowing all of your rules. There's a reason why this Planning Commission passed an ordinance to run a trail where we are putting in a road. You must have thought why would you put a trail through the middle of the property. He doesn't want it developed so why would you propose as part of your master plan, a trail? We have gone through your ordinances and tried to comply. I don't enjoy drawing and redrawing, submitting

and resubmitting because five applications is quite a bit. Every time it seems like you come up with a new reason why we can't do what we're going to do.

John Woffinden: Either you go with the code, or you don't go with the code and right now you don't go with the code. If it takes you five times to figure out you are not going with the code, we are bound by the code we don't know what's going to happen in the future.

Gerald Anderson: Tonight, you changed your code, you voted to approve and pass on to the City Council. With your previous text amendment tonight, it only affected permanent stubs temporary stubs were not limited. There's a reason why you changed it to say this does not affect things that have already stubbed. The reason they did it was because of our project. What was changed? The word temporary. Which means if this is a temporary stub the length is not calculated, same as a permanent. I will sit down any day and compare your ordinance to what we submitted. I've got thousands of dollars in legal fees from sitting down with your attorneys and you keep changing the ordinance, why?

Bruce Frandsen: Is there not a way to put a cul-de-sac at the end of that? With the trail extending through the north end of the cul-de-sac and stubbing into the neighbor to the North? I have the same question why are we running trails through the middle of people's property?

Patrick O'Brien: That was provided to us by the applicants engineer when we were going through additional concepts, to help them overcome some of the issues. In relation to the trail issue, trails don't always have to run adjacent to a road. We have a lot of them in the city that run along streams and other areas. It can continue as a dedicated trail without following a roadway North.

John Woffinden: We should be more considerate about the roadway and not the trails at this point. The trails can go anywhere the roads are much more restrictive.

Gerald Anderson: If you pull up your trails map you will see what you guys envisioned.

David Bird: When we envisioned that it is not a commitment. It's a possibility down the road master plan that can be adapted and adjusted. The trail can be moved, it's not a commitment at this point to put a trail in there. So, to justify a road because the trail is potentially there, I don't see that.

Bruce Frandsen: Did that submittal have the cul-de-sac?

Patrick O'Brien: It wasn't a formal submittal. At one point we sat down with the applicant, and it was an idea on the table in relation to other ideas out there.

Bruce Frandsen: Do you think that would meet the 400 feet?

Patrick O'Brien: I'm not aware because we didn't do a full review since it wasn't a formal submission.

John Woffinden: I still want to go over the length of the road. We've got a 200-foot section and a 400-foot section, that to me violates the code right there.

Bruce Frandsen: If you had a cul-de-sac at the end to reduce that by 200 feet does that meet the code?

John Woffinden: What I see is the 200-foot section is still the same road. It goes to a cul-de-sac or a hammerhead it's still 600 feet of roadway, no matter what's at the end of it, it only allows 400 feet.

Bruce Frandsen: But you only measure to the start of the cul-de-sac and that could be 200 feet South of that North boundary.

John Woffinden: If you did that you might be dividing half the lots.

Bruce Frandsen: We can't guarantee lots.

John Woffinden: To me it doesn't match code right now. Its got 600 feet of roadway, the code says 400 feet max.

Joe Garlington: I think planning and engineering needs to figure this out or you'll get a street with a weird bulb. A cul-de-sac to me is you end with a cul-de-sac bulb and you have contractors build around that cul-de-sac.

Patrick O'Brien: We have instances where that has occurred where both areas have been taken away even back into to property lines.

Joe Garlington: That's a hardship for the property owner.

Patrick O'Brien: I understand, but as things are planned out there is no guarantee that development will occur. We are following what our standard is or how the development will occur at that point.

Interruption about property owner to the north being present

John Woffinden: Lets have the public hearing and then we will have more information about the property to the north developing. Everything is up for sale if the price is right, right now they don't want to sell it but they may want to later who knows.

Joe Garlington: Can I just point out one thing within the city code? Because the city adopted the international fire code it allows for hammer heads. It also allows for dead end streets up to 750 feet therefore it does meet your code.

Gerald Anderson: Generally, a code says what you can and can't do it doesn't give you rights. Generally, you assume you can do whatever you want except what's limited by code. Because your code doesn't say I can because it says I can't, that makes a difference. So, If your code says you can't have a hammerhead then we wouldn't be able to have one. your code doesn't say that

John Woffinden: If we don't have a turnaround at the end of this road, whether it be 600 feet or 200 feet. Are we going to have the people that build their houses there cart their garbage cans down to 200 East all the time? The garbage trucks will not go up to the end of the road because they can't turn around.

Gerald Anderson: We have an exhibit ready to show for you.

Patrick O'Brien: What is provided in the plan set is not the approved standard that our engineering department requires per code.

John Woffinden: So, it doesn't meet code on multiple items.

Gerald Anderson: Your engineer says we recommend you deny because we have deficiencies. Quote me one ordinance, scripture verse, we have told you where we meet you show me where we haven't. I can't comply with a red line where we violated that we haven't seen.

Patrick O'Brien: Mr. Chairman part of the reason it is difficult for them to comply is this was requested to go on the agenda before staff had a chance to conduct a review and provide comments back to see if it met the code.

John Woffinden: This has been a common problem that we've had more often than not the last year or year and a half. That applicants demand they come to this commission; we are a recommendation body we recommend it goes to City Council. If we deny it you can always appeal to City Council, that's your right. But I'm getting sick and tired of applicants coming here and demanding to be on the agenda. I've talked to the mayor several times and if the applicant is not 100% ready to be here, then they better not be here. I'm getting sick and tired of coming in here and wasting everybody's time for and hour talking about stuff and rehashing it. If you're not ready to come before this commission don't accept the application. That's what I'm going to tell the mayor again tomorrow. This has been going on far too long. We had applicant that we tabled seven times before they finally figured out, we were serious. After the seventh time they finally did what were telling them to do and now their project is up and running.

Gerald Anderson: If we meet the code according to our attorney and you're wrong then we're worthy. We're ready the question are we right or are you right?

John Woffinden: As far as I'm concerned 200 feet and 400 feet violates the code right to start with. Its that issue and you shouldn't have been here to begin with.

Ben Hunter: Both this plan set and the previous one gives specific code references on them of where they do not meet the code. It has been provided to applicant.

**Public Hearing Opened.**

Linda Beck: I own the land to the North. My husband passed away two and half months ago. I would rather feed horses and sheep rather than take my money and try to reinvest it at my age. I really like the property and the land more then a lot of homes.

John Woffinden: So, you have no desire to develop at this time or any time in the near future?

Linda Beck: Not in the future I'm not sure how long I'm going to live, and I don't know what my children are going to do but my children live that land too. Some of them have expressed that they do not want to sell that land. Our concern is the fence, we live in farmland and agricultural land. The neighbors that move in are going to mow their lawns and throw their grass clippings over the fence. It's not good for horses because they spray their lawns. I would really like a

privacy fence between the development and the agricultural land. They are building next to existing farmland.

John Woffinden: So, you need a stronger fence to keep the horses on their side of the fence?

Linda Beck: And the grass and the children. It can't be a vinyl fence because they will not hold in horses. That's what I'm here for is the fence. That's our concern is a good 6' privacy fence.

David Bird: Have you talked the developer?

Linda Beck: Yes, I did I talked to them on the phone and expressed that it's the fence I'm concerned about. I didn't know about a trail, and they said they will be in compliance with what the city said. I'm here to tell you if you haven't got that you ought to consider it.

Maeta Beck: I'm Dennis Becks wife my father-in-law is her husband's brother. The reason why we are selling is because my husband's hip is going out. He was out there everyday weeding and making that land beautiful. It's been going on 2 years to try and get this project through. Honesty needs to be here I always believe in being honest and compliant. On behalf of the land, we'd like to see this go through, our financials are depleting because of this argument. I know they have complied 5 times, there was one with a cul-de-sac that was denied.

Sherie Kitchen: I am Merrill Beck's daughter; I live adjacent to their property. We would prefer not to have a cul-de-sac, someday my grandkids would like to develop. The dead end would probably be better for us then the cul-de-sac.

**Public Hearing Closed.**

John Woffinden: Commission what do we want to do? We need a motion on the preliminary and if doesn't go through the final is dead in the water.

Rodney Martin: As it sits now it doesn't comply. That is between engineering and planning and the developer to get us something we can vote on that does meet code. We cannot move forward at this point, that's my opinion.

David Bird: I agree with Rodney. I can't see leaving it as a dead-end road or stub in where there's no outstanding in the future of that road.

Rodney Martin: We're told that it doesn't comply and if they can prove that it complies and planning, and engineering agree that's fine. But we don't have the power to say yeah this is ok.

John Woffinden: That's what I said earlier we have to go by the code that is in place as of now.

**Bruce Frandsen motioned to recommend denial of the <u>Hearing, review, and action on the preliminary and final plat for Beck Hillside Estates, located in the area of 757 North 200 East, in the RI-9000 Residential Zone</u>. David seconded the motion.**

**Voting was as follows:**

| | |
|---|---|
| **Chairman Woffinden** | **Aye** |
| **Chris Christiansen** | **Aye** |

| | |
|---|---|
| **Bruce Frandsen** | **Aye** |
| **Rodney Martin** | **Aye** |
| **David Bird** | **Aye** |

**The motion passed**

John Woffinden: Do we still need to go with the final plat?

Patrick O'Brien: No, we cannot pass the final until the preliminary is passed

John Woffinden: The preliminary has been denied if you folks feel like you were unjustly treated, you have the legal right and obligation to take it to city council as an appeal. They will make the final decision we are just a recommendation body. We are more or less handcuffed by the present code as it is written. City council will be in 3 or 4 weeks.

Patrick O'Brien: The next meeting will be on June 14th, and they will have to request that with the city recorder.

4. **Hearing, review, and action on an ordinance creating an Annexation Policy for American Fork City**

Patrick O'Brien: This is a staff-initiated change that will create a more straightforward annexation process for the city and the applicants' benefits. It complies with state code and instances where there is a conflict, state code would supersede the city ordinance. The policy ensures that annexations are consistent with our general plan which is what we're seeing. The policy specifies the annexation requirements, general plan and zoning designations, application requirements and procedures. Staff would recommend a motion for approval.

**Public Hearing opened.**

No comments made

**Public Hearing closed.**

**Chris Christiansen motioned to recommend approval of the Hearing, review, and action on an ordinance creating an Annexation Policy for American Fork City. Bruce Frandsen seconded the motion.**

**Voting was as follows:**

| | |
|---|---|
| **Chairman Woffinden** | **Aye** |
| **Chris Christiansen** | **Aye** |
| **Bruce Frandsen** | **Aye** |
| **Rodney Martin** | **Aye** |
| **David Bird** | **Aye** |

**The motion passed**

5. **Review and action on a final plat for Autumn Crest Plat F, located in the area of 950 East Circle 1060 North, in the RI-9000 zone.**

Patrick O'Brien: The applicant is applying for final plat for Autumn Crest plat F in the R1-9000 zone. It will be for 11 lots for single family residential purposes, it is just under 4 acres. Our average lot size the applicant provided in their details will be 12,200 sq foot per lot will be accessed from 1100 North. There were no planning issues that came up in the staff review of this and we recommend the motion of approval.

Ben Hunter: All of the public infrastructure shown on the plans comply with code and specifications. We recommend approval.

David Bird: Do you have a plat map for that?

**David Bird motioned to recommend approval of the Review and action on a final plat for Autumn Crest Plat F, located in the area of 950 East Circle 1060 North, in the RI-9000 zone. Bruce seconded the motion.**

**Voting was as follows:**

| | |
|---|---|
| **Chairman Woffinden** | **Aye** |
| **Chris Christiansen** | **Aye** |
| **Bruce Frandsen** | **Aye** |
| **Rodney Martin** | **Aye** |
| **David Bird** | **Aye** |

**The motion passed**

6. **Other Business**

John Woffinden: There will be no meeting on Wednesday the First. The next one will be the 8th of June.

Patrick O'Brien: Generally, we send out the email the night after planning commission. Where we have a gap, we have the ability to wait and still meet our noticing requirements. We have pother applicants that are really close to the end of the process, and we can try and get them on to the next agenda.

John Woffinden: This happens a few times a year when the first day of the month falls on a Wednesday. But if we hold it that first Wednesday it messes up city councils schedule too. We usually fall back one week so it doesn't mess up their schedule.

7. **Review and action on the minutes of the May 4, 2022, Planning Commission Regular Session.**

**Chris Christiansen motioned to recommend approval of the Review and action on the minutes of the May 4, 2022, Planning Commission Regular Session. David Bird seconded the motion.**

**Voting was as follows:**

| | |
|---|---|
| **Chairman Woffinden** | **Aye** |
| **Chris Christiansen** | **Aye** |
| **Bruce Frandsen** | **Aye** |
| **Rodney Martin** | **Aye** |
| **David Bird** | **Aye** |

**The motion passed**

**David Bird motioned to Adjourn the meeting. Rodney Martin seconded the motion.**

**Voting was as follows:**

| | |
|---|---|
| **Chairman Woffinden** | **Aye** |
| **Chris Christiansen** | **Aye** |
| **Bruce Frandsen** | **Aye** |
| **Rodney Martin** | **Aye** |
| **David Bird** | **Aye** |

**The motion passed**

## 8. Adjournment

Meeting adjourned at 8:15 pm