AMERICAN FORK CITY PLANNING COMMISSION
JULY 22, 2020
NOTICE OF ELECTRONIC MEETING
REGULAR SESSION

Notice is hereby given that the American Fork City Planning Commission will meet in regular session on July 22, 2020, commencing at 7:00 pm. Pursuant to changes in the Utah Open and Public Meetings Act and Covid-19 Guidelines, this meeting will be conducted electronically. Citizens may submit comments via email at *zoompubliccomment@afcity.net* prior to 5:00 pm the day of the meeting and access a YouTube live stream of the meeting at afcity.org.
The agenda shall be as follows:

1. Hearing, review and action on a land use map amendment from the High Density Residential to the General Commercial designation located in the area of 126 North Grant Avenue

2. Hearing, review and action on a zone map amendment from the R4-7,500 Residential zone to the CC-1 Central Commercial zone, located in the area of 126 North Grant Avenue

3. Hearing, review and action on the preliminary plan and final plat for Stonecreek Plat E Conservation PUD, consisting of 64 lots, located in the area of 700 South 400 West in the PR-3.0 Planned Residential zone

4. Hearing, review and action on the preliminary plan and final plat for Rockwell Ranch Block 1 Phase 1, consisting of 16 lots, located in the area of 400 South 1060 West in the Transit-Oriented Development (TOD) zone

5. Hearing, review and action on a commercial site plan for the Davies 500 East Office Warehouse, located at 450 East Auto Mall Drive in the PI-1 Planned Industrial zone

6. Other Business

7. Site Plan Committee Report

8. Review and action on the minutes of the July 8, 2020 Planning Commission Regular Session

9. Adjournment

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

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

AMERICAN FORK CITY
PLANNING COMMISSION

MEETING DATE: July 22, 2020
STAFF PRESENTATION: Adam Olsen

AGENDA TOPICS: Hearing, review and action on a land use map amendment for property located at 126 N. Grant Ave, from the high density residential to the general commercial designation.

Hearing, review and action on a zone map amendment for property located at 126 N. Grant Ave, from the R4-7,500 Residential zone to the CC-1 (Central Commercial) zone.

ACTION REQUESTED: Recommendations of approval for land use and zone map amendments.

BACKGROUND INFORMATION					
Location:		126 N. Grant Ave.			
Applicants:		Alpha Self Storage, LLC/Jeff Redford			
Existing Land Use:		Residential			
Proposed Land Use:		Commercial			
Surrounding Land Use:	North	Residential			
	South	Commercial			
	East	Commercial			
	West	Residential			
Existing Zoning:		R4-7,500			
Proposed Zoning:		CC-1			
Surrounding Zoning:	North	R4-7,500			
	South	CC-1			
	East	CC-1			
	West	R4-7,500			
Land Use Plan Designation:		High Density Residential			
Zoning within Land Use Plan Designation?		x	Yes (current zone)		No

Background

The applicant proposes to amend the land use and zone map designations at 126 N. Grant Ave, from the high-density residential designation to the general commercial designation. Commercial uses exist to the east, south, and southwest. The property has been fenced but remains vacant. Any use on the property will require site plan approval. The request simply extends the commercial land use designation and zone classification to the north of where the current designations end.

POTENTIAL MOTIONS:

LAND USE MAP AMENDMENT

APPROVAL

Mr. Chairman, I move that we recommend approval of the land use map amendment.

DENIAL

Mr. Chairman, I move that we recommend denial of the land use map amendment.

TABLE

Mr. Chairman, I move that we table action on the land use map amendment.

ZONE MAP AMENDMENT

APPROVAL

Mr. Chairman, I move that we recommend approval of the zone map amendment.

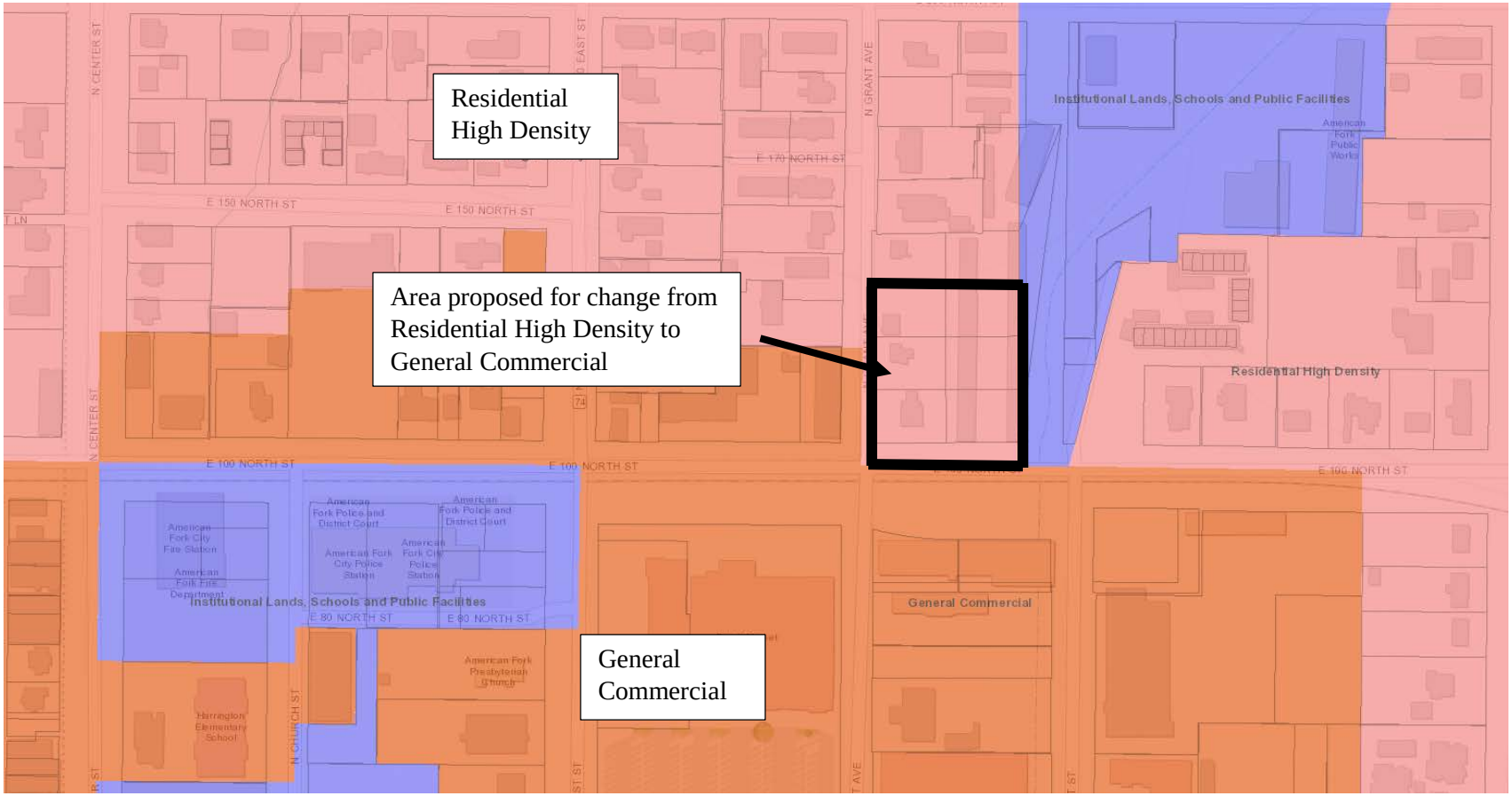
DENIAL

Mr. Chairman, I move that we recommend denial of the zone map amendment.

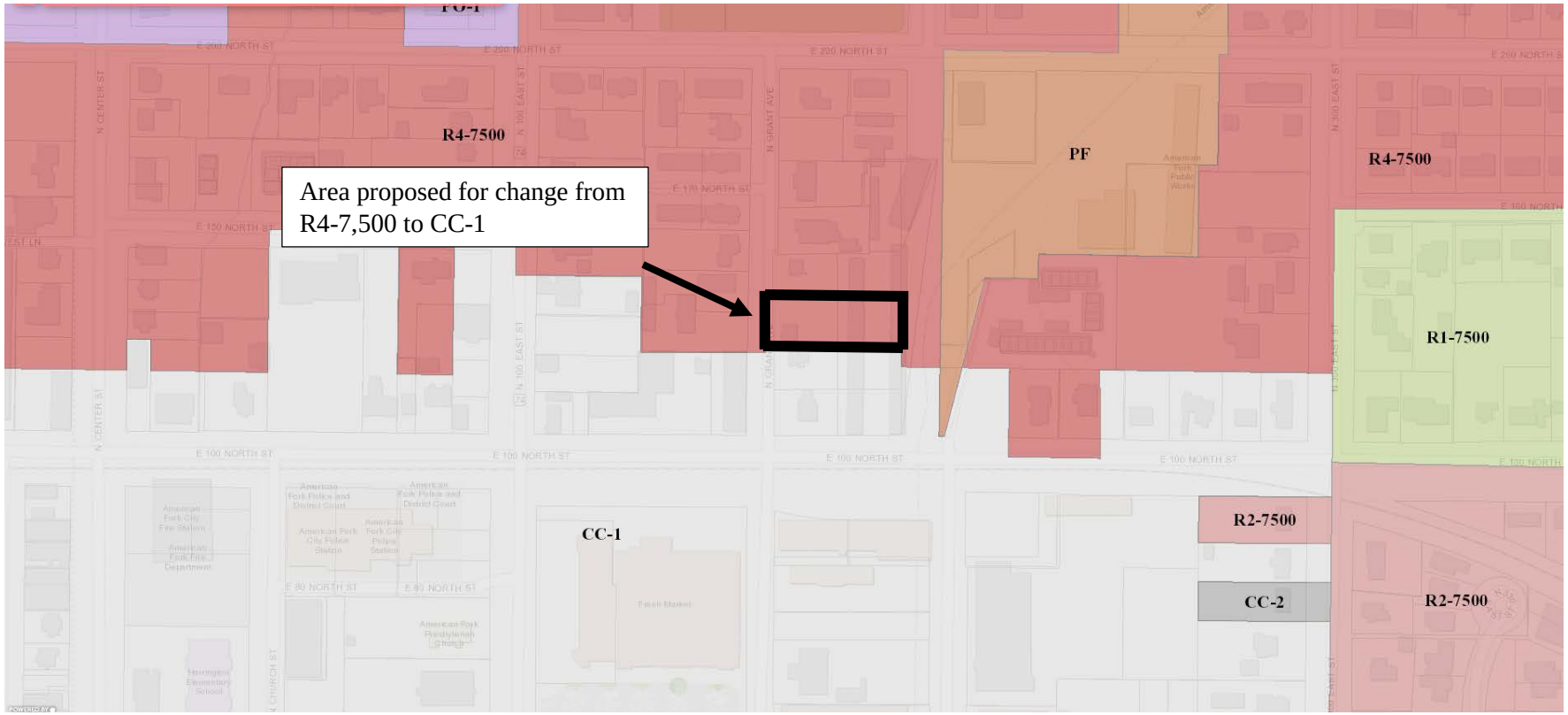
TABLE

Mr. Chairman, I move that we table action on the zone map amendment.

Land Use Map


Residential
High Density
Area proposed for change from
Residential High Density to
General Commercial
General
Commercial
Institutional Lands, Schools and Public Facilities
Residential High Density
General Commercial
Institutional Lands, Schools and Public Facilities
E 150 NORTH ST
E 100 NORTH ST
E 80 NORTH ST
N CENTER ST
N GRANT AVE
N CHURCH ST

Zone Map


Area proposed for change from R4-7,500 to CC-1
R4-7500
PF
R4-7500
R1-7500
CC-1
R2-7500
CC-2
R2-7500

AMERICAN FORK CITY
PLANNING COMMISSION

MEETING DATE: July 22, 2020
STAFF PRESENTATION: Adam Olsen

AGENDA TOPIC: Hearing, review and action on the preliminary and final plat for Stonecreek Plat E, located in the area of 700 South 400 West, in the PR-3.0 (Planned Residential) zone.

ACTIONS REQUESTED: Recommendation of approval of the final plat.

BACKGROUND INFORMATION					
Location:		700 South 400 West			
Applicants:		Trane Engineering/Woodside Homes			
Existing Land Use:		Agriculture			
Proposed Land Use:		Residential			
Surrounding Land Use:	North	City Open Space			
	South	Agriculture			
	East	Residential			
	West	Residential/Agriculture			
Existing Zoning:		PR-3.0			
Proposed Zoning:		N/A			
Surrounding Zoning:	North	PR-3.0			
	South	PR-3.0			
	East	PR-3.0			
	West	Residential Agriculture 5 (Utah County)			
Land Use Plan Designation:		Low Density Residential (3 du/ac)			
Zoning within density range?		x	Yes		No

Background

Stonecreek Plat E is a 64-lot phase of an overall 143-acre development. The preliminary plan is being processed concurrently with the final plat. The final plat is consistent with terms of a preliminary plan approval.

Plat E is located directly south of an open space area for park expansion, and west of Plat C. Access is provided off 700 South, 720 South and 800 South.

Conservation Subdivision Projects within the PR-3.0 zone must adhere to certain parameters. Subdivisions must have a minimum project area of five (5) acres, and a maximum density of 3 units per acre. Plat E is the fifth phase in a 143-acre development,

with an overall density of 3 units per acre; falling within the parameters of a Conservation Subdivision project in the PR-3.0 zone.

As with plats A, B, C and D, the applicants request Planning Commission consideration and allowance for modification of building site requirements, allowing the ability to average lot sizes in order for greater overall consistency. This modification is allowed pursuant to Sections 17.7.401, allowing the "harmonizing (of) development within a project". The Planning Commission may, but is not required, to make this finding. A finding allowing the modification is offered below.

Conservation Subdivisions within a PR-3.0 zone require 25% open space. The overall project area provides for 26% open space upon buildout. Plats A, B, C and D provided dedication of land. It is unclear whether Plat E furthers this dedication. As such, staff recommends a "condition of approval" to illustrate any park/open space area to be dedicated with Plat E; dedication occurring with plat recordation.

Consistency with the Land Use Plan:

The Land Use Plan designates this area as "Low Density Residential". The proposed subdivision is consistent with the Land Use Plan.

Section 17.7.211 of the Development Code

The Planning Commission may act to recommend approval of a final plat upon a finding that:

a. The final plat and supporting materials conform with the terms of the preliminary plan approval.

   The final plat conforms to the terms of a preliminary plan approval.

b. The final plat complies with all City requirements and standards relating to large scale developments.

   This criterion has been met.

c. The detailed engineering plans and materials comply with the City standards and policies.

   Engineering will address any concerns at the time of the Planning Commission meeting.

d. The estimates of cost of constructing the required improvements are realistic.

   Engineering will determine whether the cost estimates of constructing the required improvements are realistic.

e. The water rights conveyance documents have been provided.

   The water rights conveyance shall be satisfied prior to “Plat E” recordation.

FINDINGS OF FACT/CONDITIONS OF APPROVAL

After reviewing the applications for final plat approval, the following findings are offered for consideration:

1. The final plat is consistent with the preliminary plan.

2. The final plat is consistent with the Land Use Plan designation of “Low Density Residential”.

3. The final plat meets the criteria as found in Section 17.7.211 of the Development Code.

4. Water rights conveyance shall be satisfied prior to “Plat D” recordation.

5. The Planning Commission grants the request for modification of building site requirements, allowing for averaging of lot sizes for “harmonizing development within a project” (17.7.401); finding that such modification provides greater overall consistency.

6. Park/open space dedication area with Plat E shall be illustrated and dedication shall occur with final plat recordation.

POTENTIAL MOTIONS

APPROVAL

Mr. Chairman, I move that we approve the preliminary plan and recommend approval of the final plat of Stonecreek Plat E, with the findings and conditions listed in the staff report and subject to any findings, conditions, and modifications listed in the engineering report.

DENIAL

Mr. Chairman, I move that we recommend denial of the final plat of Stonecreek Plat E.

TABLE

Mr. Chairman, I move that we table action on the preliminary plan and final plat of Stonecreek Plat E.

AMERICAN FORK CITY ENGINEERING DIVISION
STAFF REPORT

Planning Commission Meeting Date: 7/22/2020

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: Stonecreek Plat E

Project Address: 700 South 400 West

Developer / Applicant's Name: Woodside Homes of Utah

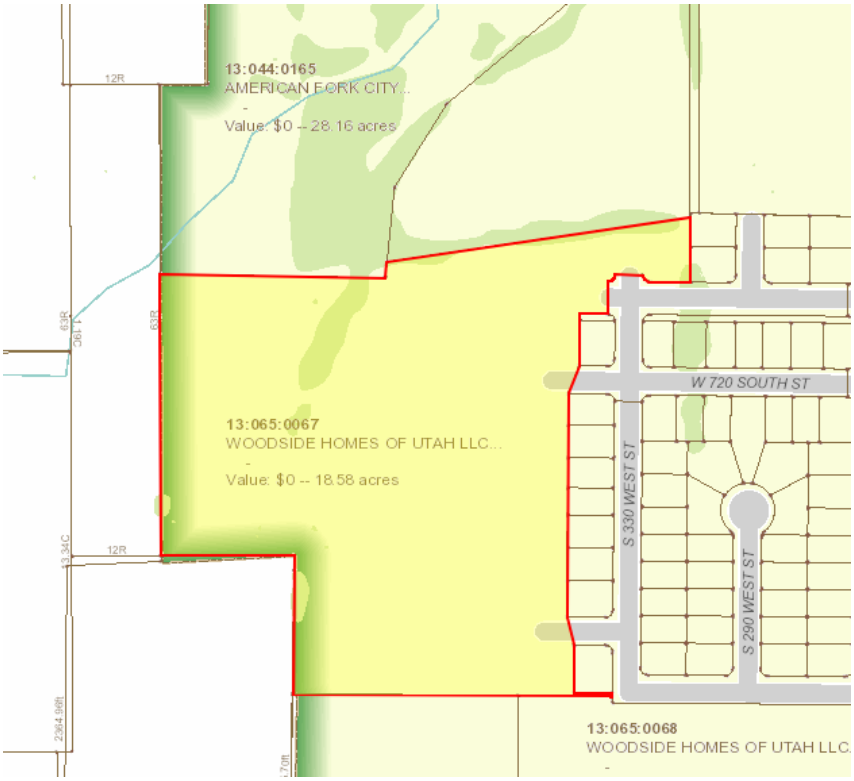
Type of Application:

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

Engineering Division Recommendation: The Engineering Division recommends APPROVAL of the proposed development subject to the following findings and conditions:

1. All Standard Conditions of Approval and items denoted as "Plan Modification(s) Required" in the 7/22/2020 Engineering Division Staff Report for the City Land Use Authority shall be addressed on all final project documents.

Project Map:



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. **Sensitive Lands:** Record all applicable documents required for compliance with the City's Sensitive Lands Ordinance.
9. **Utility Notification Form:** Submit a Subdivision Utility Notification Form.
10. **Professional Verification:** Submit final stamped construction documentation by all appropriate professionals.
11. **Fees:** Payment of all development, inspection, recording, street light, and other project related fees.
12. **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).

Plan Modifications Required:

1.

STONECREEK PLAT "E"
CONSTRUCTION PLANS

A PARCEL OF LAND LOCATED IN THE SOUTHWEST QUARTER OF SECTION 26, TOWNSHIP 5 SOUTH, RANGE 1 EAST, SALT LAKE BASE AND MERIDIAN,

AMERICAN FORK, UTAH

PROJECT LOCATION: 700 SOUTH 400 WEST

prepared for:

WOODSIDE HOMES

460 WEST 50 NORTH
SUITE #200
SALT LAKE CITY, UT 84101
PHONE: (801) 758-7086

prepared by:

TRANE ENGINEERING

27 EAST MAIN STREET
LEHI, UT 84043
PHONE: (801) 768-4544

GENERAL NOTES:

1. ALL CONSTRUCTION TO BE DONE AS PER THE AMERICAN FORK CITY DESIGN STANDARDS AND SPECIFICATIONS.
2. CONTRACTOR TO ENSURE ALL ADA ACCESSIBLE SIDEWALK RAMPS WILL BE CONSTRUCTED IN ACCORDANCE WITH THE AMERICAN FORK CITY DESIGN STANDARDS AND SPECIFICATIONS.
3. ONE COLOR ELECTRONIC COPY OF AS BUILT DRAWINGS, FORMATTED IN ACCORDANCE WITH THE AMERICAN FORK CITY DESIGN STANDARDS, SHALL BE SUBMITTED TO THE CITY UPON COMPLETION OF THE PUBLIC IMPROVEMENTS; INCLUDING, WATER, SEWER, STORM DRAIN AND PRESSURIZED IRRIGATION.
4. PRIOR TO CONSTRUCTION, AN EROSION AND SEDIMENTATION CONTROL PLAN WILL BE SUBMITTED TO THE CITY FOR APPROVAL.
5. PRIOR TO COMMENCEMENT OF ANY WORK, A PRE-CONSTRUCTION MEETING WILL BE HELD WITH THE PUBLIC WORKS DIRECTOR, CHIEF BUILDING OFFICIAL, CITY INSPECTORS, THE CONTRACTOR AND THE PROPERTY OWNER.
6. TYPE OF CONSTRUCTION IS RESIDENTIAL AND BUILDINGS WILL NOT INCLUDE FIRE SPRINKLERS.

BENCHMARK

NORTHWEST CORNER OF SECTION 26, TOWNSHIP 5S, RANGE 1E
ELEVATION = 4520.92

AMERICAN FORK CITY PUBLIC WORKS DEPARTMENT

COMPANY	CONTACT	NUMBER
AF City Culinary Water	Jay Brems	(801)763-3060
AF Pressure Irrigation	Jay Brems	(801)763-3060
AF Sanitary Sewer	Ashton Hardy	(801)763-3060
AF Storm Drain	Ashton Hardy	(801)763-3060
AF Fire Marshall	Mat Sacco	(801)763-3040
AF City Inspector	Dee Howard	(801)763-3060
AF SWPPP Inspector	Harlan Nielson	(801)404-6361
AF Fiber	Will Davis	(801)897-9826
AF Irrigation Company	Ernie John	(801)471-6576
Rocky Mountain Power	Teria Walker	(801)756-1310
Comcast	Elysin Valdez	(801)401-3017
T.S.S.D.	David Barlow	(801)756-5231
Century Link	Bill Westfall	(435)623-4252
Questar	Wendy Edwards	(801)853-8513

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UTILITIES AND SERVICES

NATURAL GAS	QUESTAR GAS
ELECTRIC	ROCKY MOUNTAIN POWER
TELEPHONE	QWEST COMMUNICATIONS
CABLE TELEVISION	COMCAST

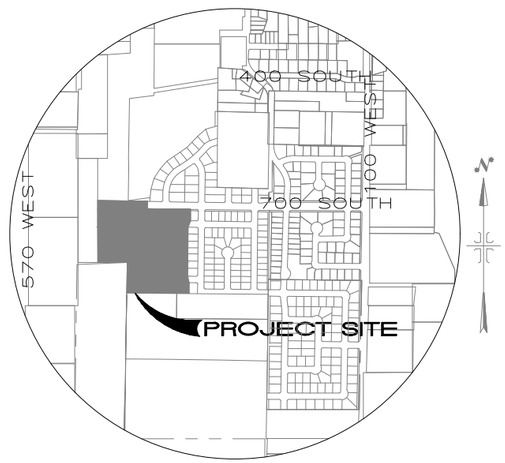


SITE MAP

LAND USE:	
PLAT 'E' AREA=	16.33 ACRES
ZONING=	PR-3.0
TOTAL LOTS=	64 LOTS
OVERALL DENSITY=	3.0 LOTS PER ACRE

NOTE: THIS PLAT IS BASED ON THE PLANNED UNIT DEVELOPMENT-CONSERVATION SUBDIVISION PROJECT LOT SIZES HAVE BEEN AVERAGED.

FLOOD ZONE DESIGNATION: X
COMMUNITY PANEL #: 49049C0306F
EFFECTIVE DATE: 6/19/2020



VICINITY MAP

SHEET INDEX

SHEET NO.	SHEET NAME
1	COVER SHEET / INDEX SHEET
2	UTILITY PLAN
3	GRADING PLAN
4	840 SOUTH & 700 SOUTH PLAN & PROFILE SHEET
5	250 WEST PLAN & PROFILE SHEET
6	330 WEST PLAN & PROFILE SHEET
7	290 WEST PLAN & PROFILE SHEET
8	OFFSITE SEWER PLAN & PROFILE SHEET
9	STORM WATER POLLUTION PREVENTION PLAN
10	DETAIL SHEET 1
11	DETAIL SHEET 2
12	STREET TREE EXHIBIT

REVISIONS					
NO.	DATE	DESCRIPTION	BY		
1				DESIGNED BY:	TGT
2				DRAWN BY:	TT
3				CHECK BY:	TGT
4				DATE:	01/02/20
				COGO FILE:	

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TRANE ENGINEERING, P.C.
CONSULTING ENGINEERS AND LAND SURVEYORS
27 EAST MAIN LEHI, UTAH 84043 (801) 768-4544

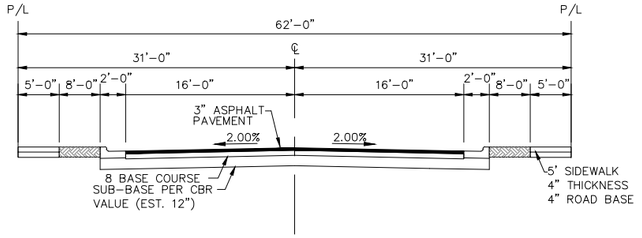
AMERICAN FORK, UTAH

STONECREEK PLAT "E"
A RESIDENTIAL SUBDIVISION

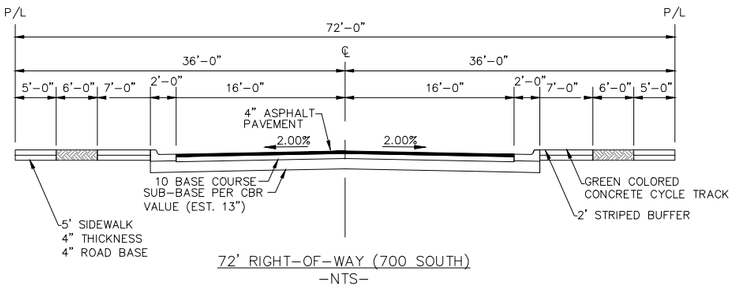
COVER

JOB WS-AF

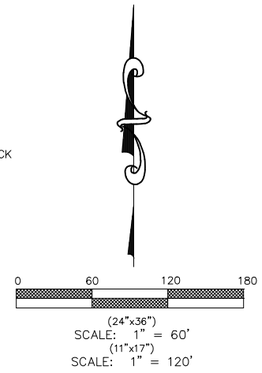
SHEET NO. 1



62' RIGHT-OF-WAY (TYPICAL STREET SECTION)
-NTS-

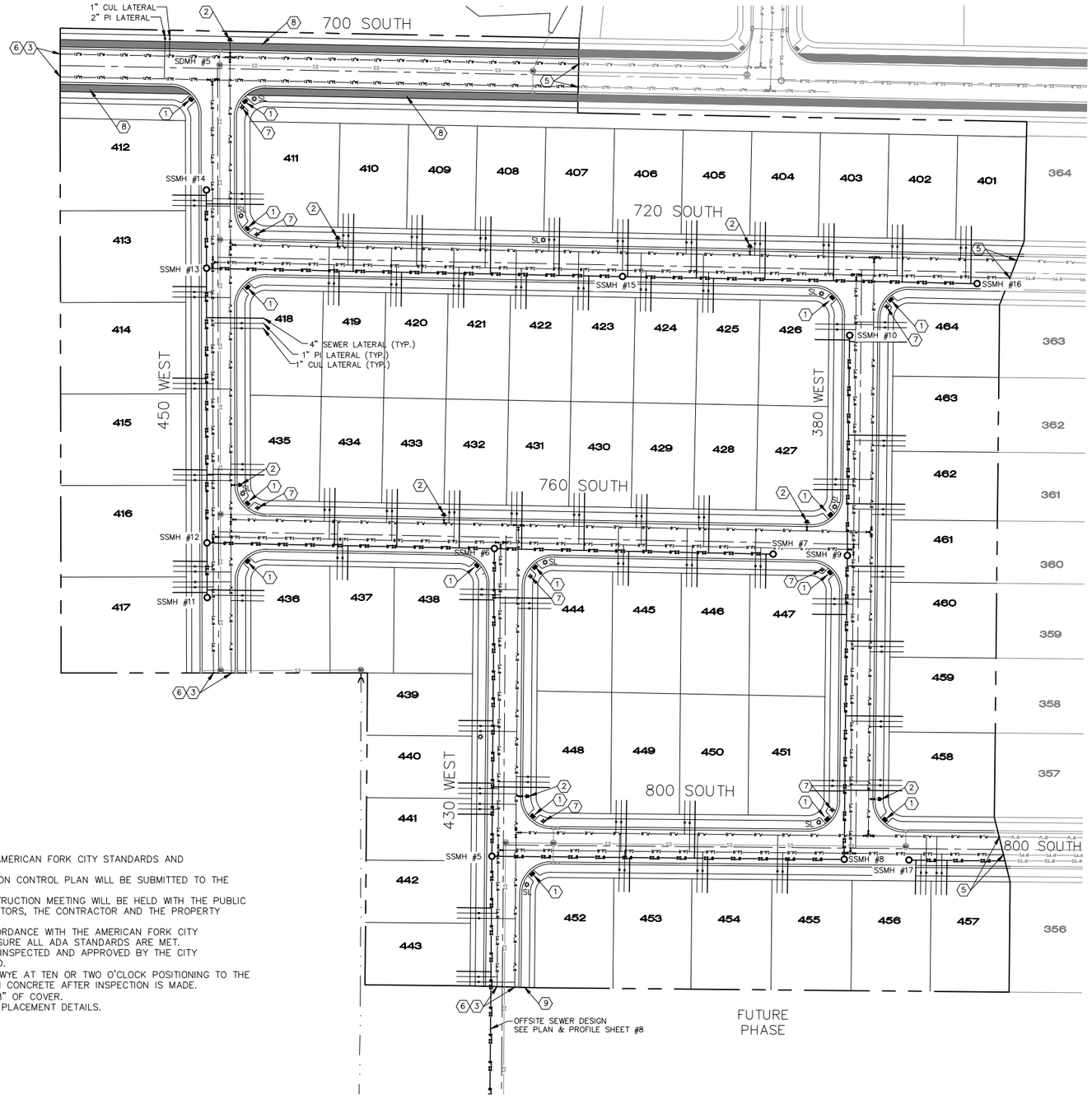


72' RIGHT-OF-WAY (700 SOUTH)
-NTS-



PROPERTY BOUNDARY LINE
EXISTING FENCE LINE
EDGE OF PAVEMENT
CENTERLINE
EASEMENT LINE
PROPOSED 8" & 12" CULINARY WATERLINE C-900 PVC PIPE
PROPOSED 8" & 12" PRESSURIZED IRRIGATION C-900 PVC PIPE
PROPOSED RCP STORM DRAIN W/ MH
PROPOSED PVC SDR-35 SEWER W/ MH
EXISTING STORM DRAIN W/ MH
EXISTING SANITARY SEWER W/ MH
EXISTING 8" C-900 PVC PIPE WATERLINE
EXISTING 8" C-900 PVC PIPE WATERLINE
FIRE HYDRANT
WATER VALVE
STREET LIGHT
STREET SIGN/STOP SIGN

1. CONST. ADA PEDESTRIAN RAMP AS PER AMERICAN FORK CITY STANDARDS (TYP)
2. CONST. FIRE HYDRANT ASSEMBLY AS PER AMERICAN FORK CITY STANDARDS
3. STUB AND CAP WATER LINES FOR FUTURE CONNECTION
4. N/A
5. CONNECT INTO EXISTING WATER LINES. CONTRACTOR TO VERIFY SIZE & LOCATION.
6. CONST. BLOW OFF AS PER AMERICAN FORK CITY STANDARDS
7. INSTALL STOP/STREET SIGN PER AMERICAN FORK CITY STANDARDS
8. GREEN CONCRETE CYCLE TRACK WITH 2' STRIPED BUFFER. TAPER TRACK AT INTERSECTION TO RAMP DOWN TO ASPHALT GRADE.
9. GROUND WATER MONITORING STATION TO BE INSTALLED. DETAIL TO BE PROVIDED TO AMERICAN FORK CITY FROM GEOTECHNICAL ENGINEER PRIOR TO INSTALLATION.



GENERAL NOTES

1. ALL CONSTRUCTION TO BE DONE ACCORDING TO THE AMERICAN FORK CITY STANDARDS AND SPECIFICATIONS.
2. PRIOR TO CONSTRUCTION, AN EROSION & SEDIMENTATION CONTROL PLAN WILL BE SUBMITTED TO THE PUBLIC WORKS DIRECTOR FOR APPROVAL.
3. PRIOR TO COMMENCEMENT OF ANY WORK, A PRECONSTRUCTION MEETING WILL BE HELD WITH THE PUBLIC WORKS DIRECTOR, CHIEF BUILDING OFFICE, CITY INSPECTORS, THE CONTRACTOR AND THE PROPERTY OWNER.
4. ALL ADA REQUIREMENTS TO BE CONSTRUCTED IN ACCORDANCE WITH THE AMERICAN FORK CITY STANDARDS AND SPECIFICATIONS, CONTRACTOR TO ENSURE ALL ADA STANDARDS ARE MET.
5. ALL SANITARY SEWER MAINS AND LATERALS MUST BE INSPECTED AND APPROVED BY THE CITY INSPECTOR BEFORE TRENCH BACKFILLING IS COMPLETED.
6. ALL LATERAL CONNECTIONS SHALL INSERT-A-TEE OR WYE AT TEN OR TWO O'CLOCK POSITIONING TO THE CENTER OF THE MAIN LINE AND SHALL BE ENCASED IN CONCRETE AFTER INSPECTION IS MADE.
7. ALL CULINARY WATER LINES MUST HAVE A MINIMUM 48" OF COVER.
8. SEE STANDARD DRAWING #15.43 FOR UTILITY LATERAL PLACEMENT DETAILS.

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REVISIONS					
NO.	DATE	DESCRIPTION	BY		
1				DESIGNED BY:	TGT
2				DRAWN BY:	TJT
3				CHECK BY:	TGT
4				DATE:	02/10/2020
				COGO FILE:	

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27 EAST MAIN LEHI, UTAH 84043 (801) 768-4544

AMERICAN FORK, UTAH

STONECREEK PLAT "E"
A RESIDENTIAL SUBDIVISION

UTILITY

JOB WS-AF

SHEET NO. 2

GENERAL NOTES

1. ALL CONSTRUCTION TO BE DONE ACCORDING TO THE AMERICAN FORK CITY STANDARDS AND SPECIFICATIONS.
2. PRIOR TO CONSTRUCTION, AN EROSION & SEDIMENTATION CONTROL PLAN WILL BE SUBMITTED TO THE PUBLIC WORKS DIRECTOR FOR APPROVAL.
3. PRIOR TO COMMENCEMENT OF ANY WORK, A PRECONSTRUCTION MEETING WILL BE HELD WITH THE PUBLIC WORKS DIRECTOR, CHIEF BUILDING OFFICE, CITY INSPECTORS, THE CONTRACTOR AND THE PROPERTY OWNER.
4. ALL ADA REQUIREMENTS TO BE CONSTRUCTED IN ACCORDANCE WITH THE AMERICAN FORK CITY STANDARDS AND SPECIFICATIONS, CONTRACTOR TO ENSURE ALL ADA STANDARDS ARE MET.
5. ALL STORM DRAIN TO BE 15" RCP UNLESS OTHERWISE NOTED.
6. ALL CURB INLET BOXES TO BE 3.5' DEEP UNLESS OTHERWISE NOTED.
7. THE STORM WATER FROM THIS AREA IS DIRECTED TO THE SOUTHWEST CORNER OF THE DEVELOPMENT AND WILL BE RETAINED ON THE PROPERTY TO THE SOUTH UNTIL FUTURE DEVELOPMENT, CONTRACTOR TO INSTALL A TEMPORARY RETENTION BASIN WITH A 4" PERFORATED PIPE WITH SOCK AND GRAVEL BED FOR 20' TO THE SOUTH OF THE BUBBLE UP BOX TO ALLOW BOX TO DRAIN AFTER STORM WATER HAS BEEN RETAINED.
8. CONTRACTOR TO COORDINATE CONNECTION TO EXISTING 12" IRRIGATION PIPE TO THE NORTH WITH ENGINEER.
9. CONTRACTOR TO COORDINATE EXPLORATION OF WATER IN THIS AREA DURING CONSTRUCTION WITH ENGINEER AND INSTALL COLLECTION SYSTEM ONCE FLOW IS DETERMINED.
10. CONNECT TO EXISTING 18" SD PIPE WITH TEMPORARY CLEAN OUT BOX. VERIFY FLOW LINE PRIOR TO CONNECTION.
11. THE EXISTING DITCH FLOWS APPROXIMATELY 2 CFS FROM FIELD MEASUREMENTS. THE DITCH GOING SOUTH FROM PLAT E IS MUCH LARGER IN SIZE AND CAPACITY THAN THE CURRENT REQUIRED FLOWS. THE DITCH COULD HANDLE UPWARDS OF 30 CFS BUT WILL ONLY HAVE A CONTRIBUTING FLOW OF APPROXIMATELY 10 CFS. THE DITCH IS SUFFICIENTLY SIZED TO HANDLE THE NEEDED FLOWS.

KEY NOTES

1. CONST. 116.2' OF 18" SD PIPE @ 0.50%
2. CONST. 11.5' OF 15" SD PIPE @ 0.50%
3. CONST. 15.5' OF 15" SD PIPE @ 3.94%
4. CONST. 40.9' OF 15" SD PIPE @ 2.08%
5. CONST. 40.9' OF 15" SD PIPE @ 2.08%
6. CONST. 10' OF 15" SD PIPE @ 8.30%
7. CONST. 40' OF 15" SD PIPE @ 1.00%
8. CONST. 17' OF 15" SD PIPE @ 4.94%
9. CONST. 15.5' OF 15" SD PIPE @ 0.5%
10. CONST. 11.5' OF 15" SD PIPE @ 9.3%
11. CONST. 11.50' OF 15" SD PIPE @ 13.4%
12. CONST. 18" FES TO CONNECT PIPING TO EXISTING DITCH. FL =4513.45, INSTALL 6" MIN. RIP RAP 12" THICK 6' LONG AT OUTLET OF FES.

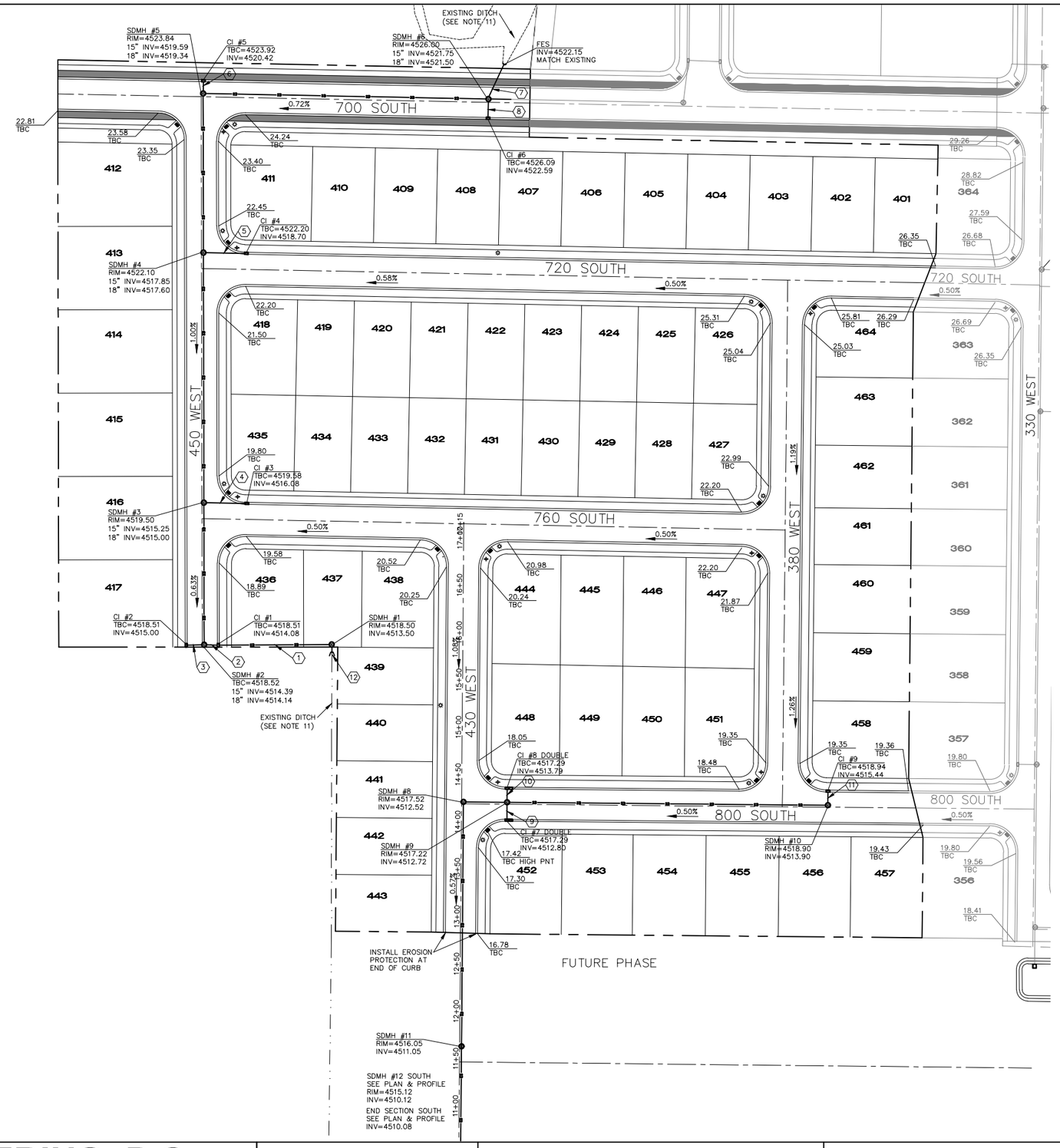
DRAINAGE NARRATIVE

The property for Stonecreek Plat 'E' of 16.33 acres located at 400 West and 700 South is proposing a development for residential use. The overall Stone Creek project is approximately 167 acres of the property and has been zoned PR-3.0. The zoning for this property is to coordinate with the city for a planned development that included a large scale park expansion of the mountain meadow park area. The intent of the open space is to create a naturally open environment with trails.

The drainage for Plat 'E' of Stonecreek is proposed to be collected in a storm drain system with inlets and piped to the southwest side of Plat 'E'. The drainage piping system will construct a temporary connection to the existing ditch along the western portion of the property. This drainage system will be extended with the construction of future phases and ultimately be directed to the permanent detention area at the southern portion of the overall development by the power line corridor.

The detention requirements for this area are included in the attached calculations. The property to the south of approximately 20 plus acres will act as the temporary retention area and allow any excess storm flow to be dispersed on the existing field. The project requirement of approximately 31,634 cf of storage would be less than 1/4 inch on the 20 acres.

The overall project detention area to the south along the future Vineyard connector will be coordinated with the UDOT project and the future road designs. This area is shown on the overall conceptual plan for the 167 acres.



0 60 120 180

(24"x36")
SCALE: 1" = 60'
(11"x17")
SCALE: 1" = 120'

811 Know what's below. Call before you dig.

REGISTERED PROFESSIONAL ENGINEER
362346
TONY G. TRANE
STATE OF UTAH

REVISIONS					
NO.	DATE	DESCRIPTION	BY		
1				DESIGNED BY:	TGT
2				DRAWN BY:	TJT
3				CHECK BY:	TGT
4				DATE:	2/10/2020
				COGO FILE:	

J:\GARRETT\AMERICAN FORK\dwg\GRADING.dwg

TRANE ENGINEERING, P.C.
CONSULTING ENGINEERS AND LAND SURVEYORS
27 EAST MAIN LEHI, UTAH 84043 (801) 768-4544

AMERICAN FORK, UTAH

STONECREEK PLAT "E"
A RESIDENTIAL SUBDIVISION

GRADING AND DRAINAGE

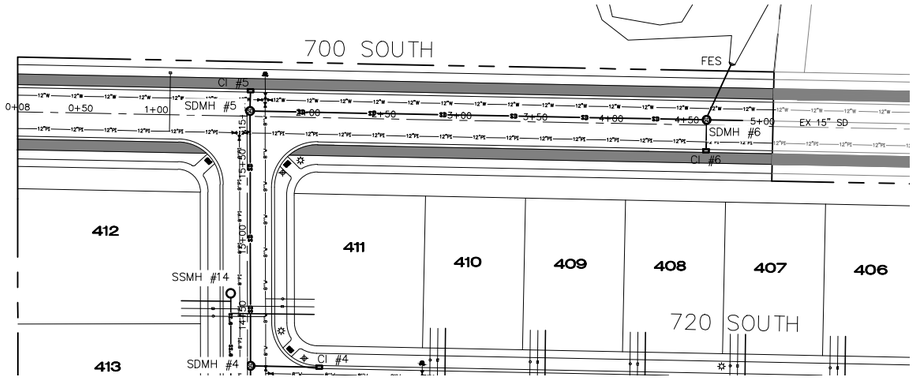
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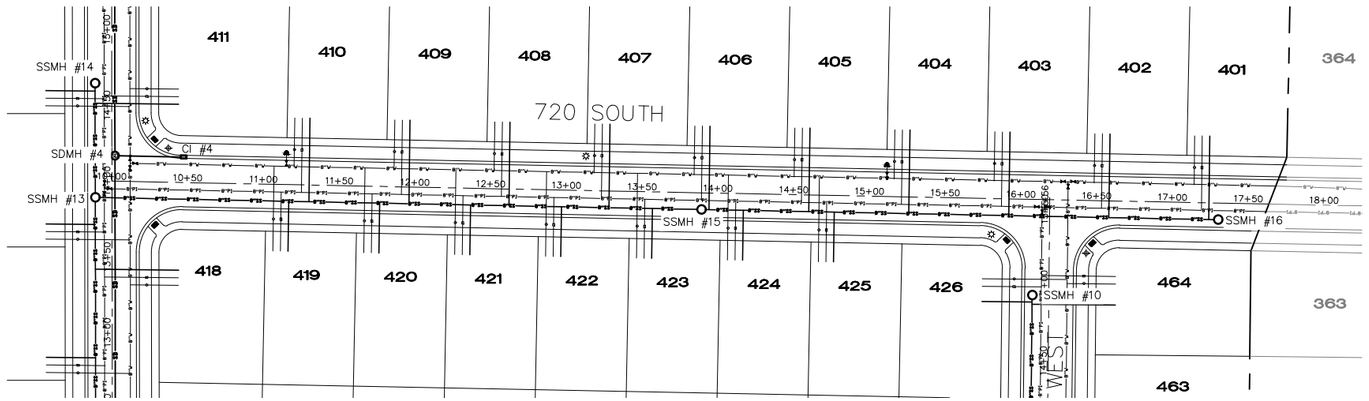
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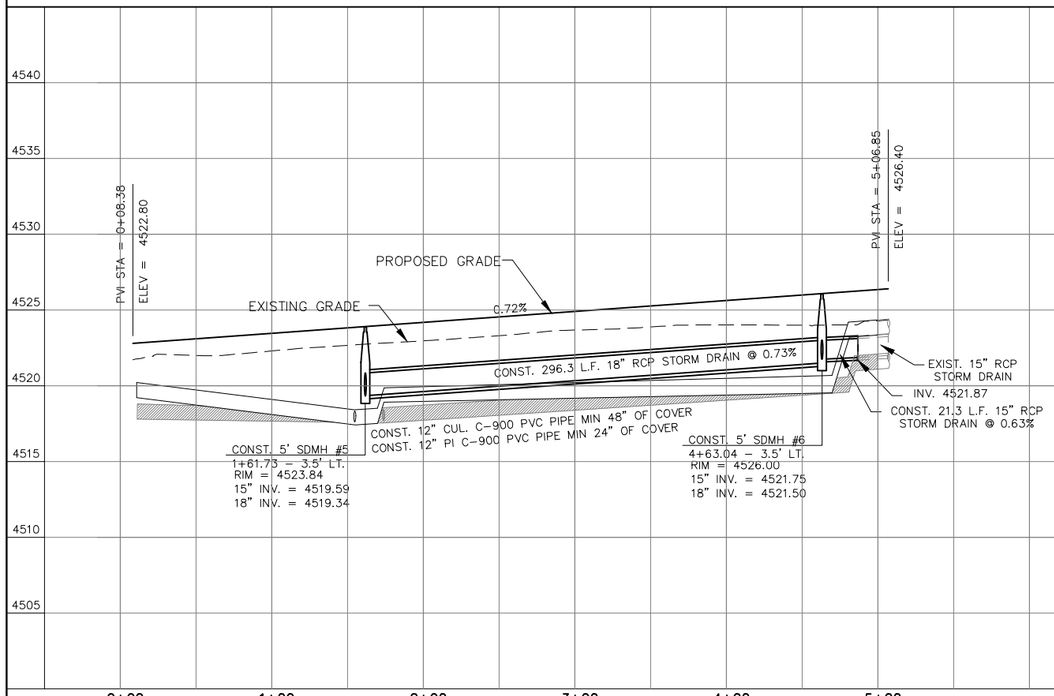
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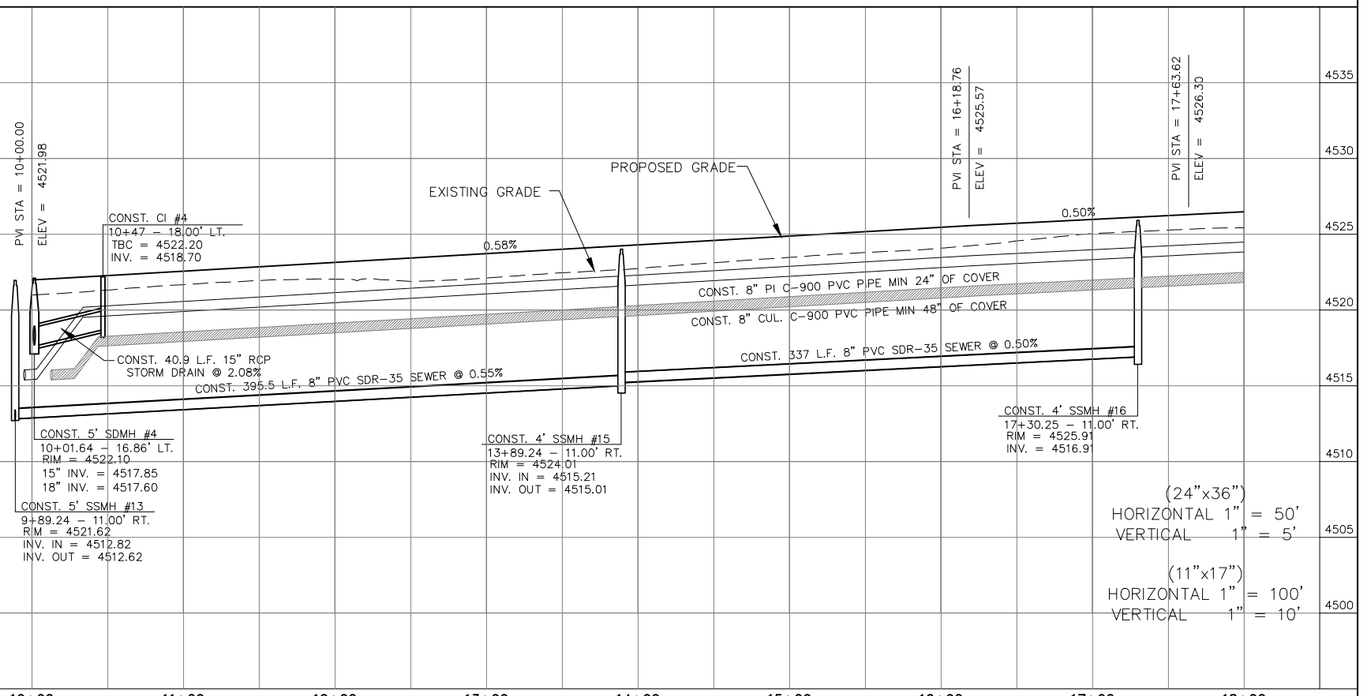
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SCALE: 1" = 50'
(11"x17")
SCALE: 1" = 100'

Know what's below. Call before you dig.









(24"x36")
HORIZONTAL 1" = 50'
VERTICAL 1" = 5'

(11"x17")
HORIZONTAL 1" = 100'
VERTICAL 1" = 10'

REVISIONS					
NO.	DATE	DESCRIPTION	BY		
1				DESIGNED BY:	TGT
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AMERICAN FORK, UTAH

STONECREEK PLAT "E"
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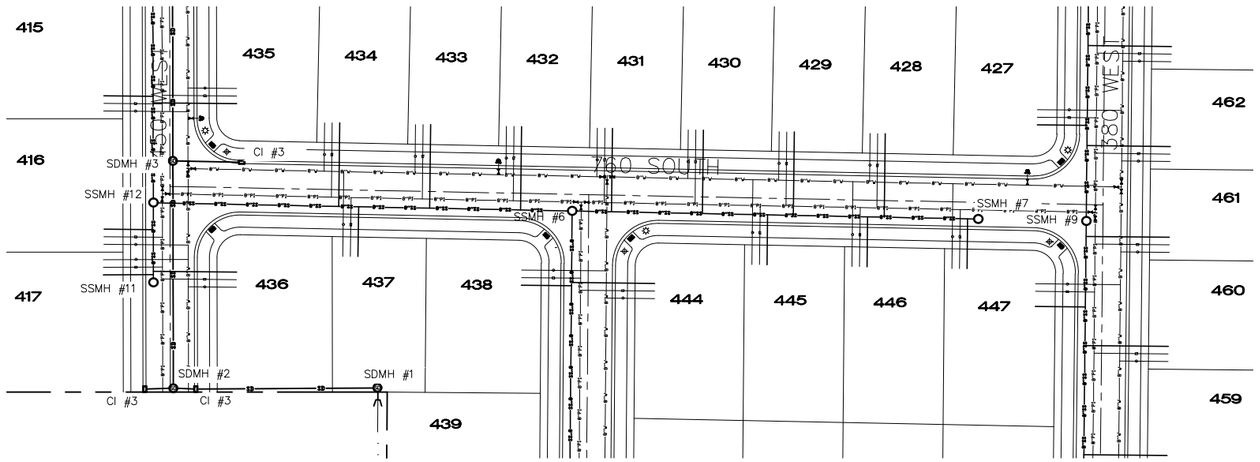
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0+00 - 5+07

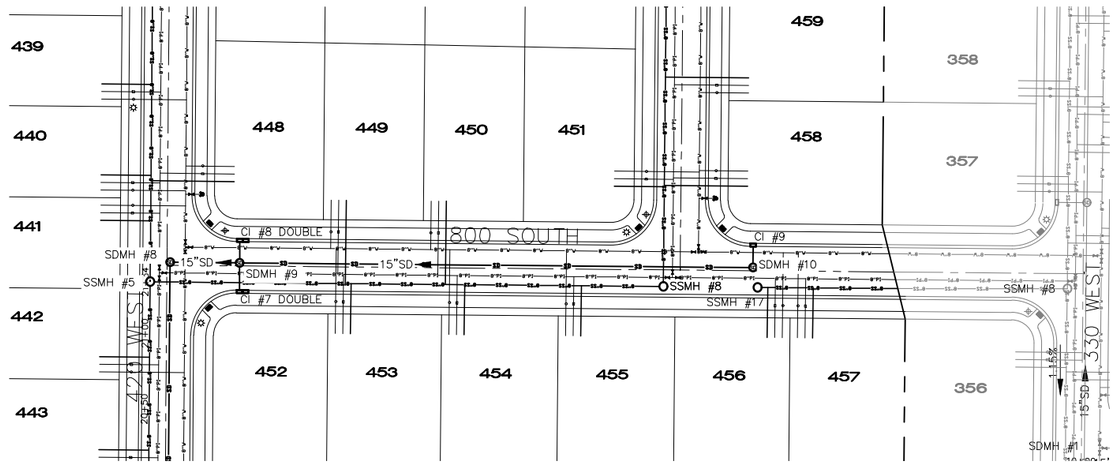
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10+00 - 17+63

JOB
WS-AF

SHEET NO.
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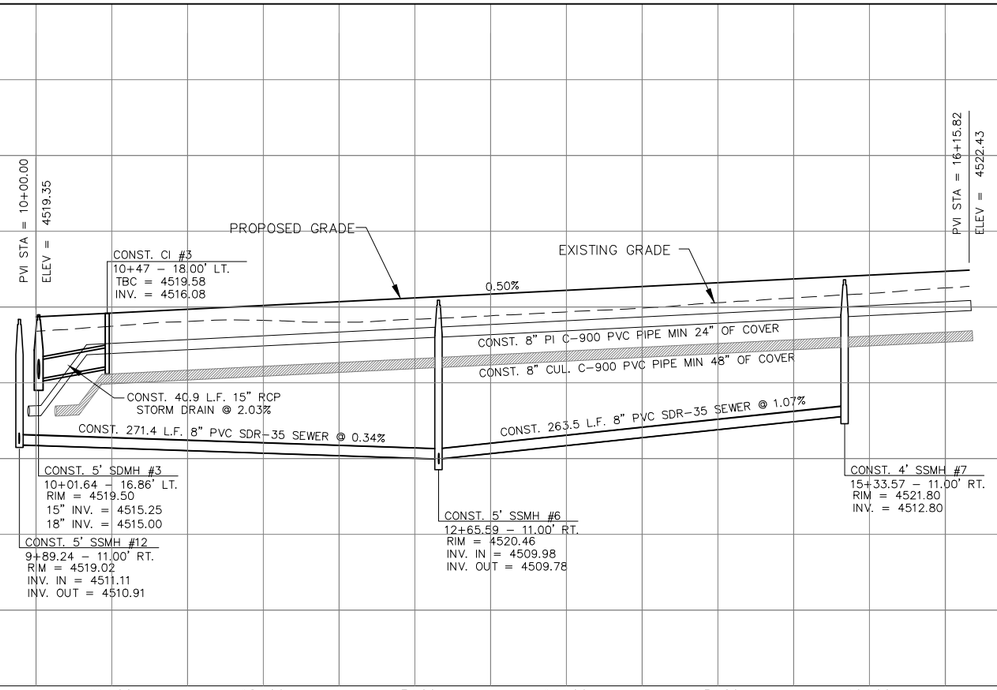
811 Know what's below. Call before you dig.

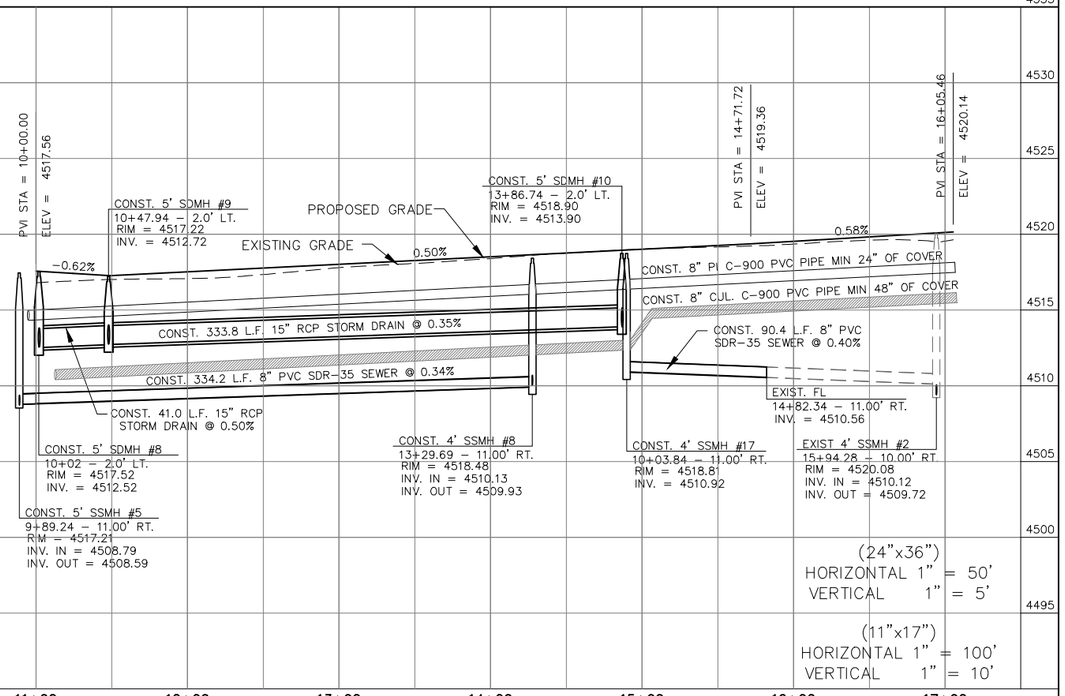




4540

4535





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AMERICAN FORK, UTAH

STONECREEK PLAT "E"
A RESIDENTIAL SUBDIVISION

760 SOUTH PLAN & PROFILE
10+00 – 16+16

800 SOUTH PLAN & PROFILE
10+00 – 16+05

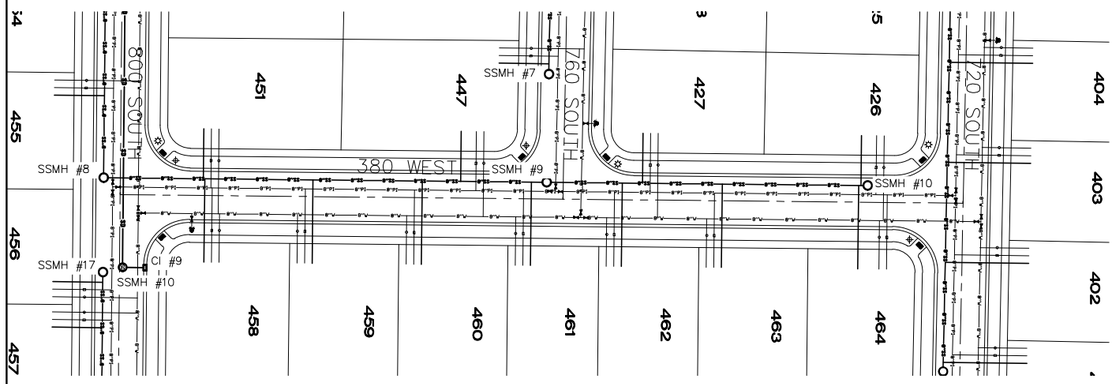
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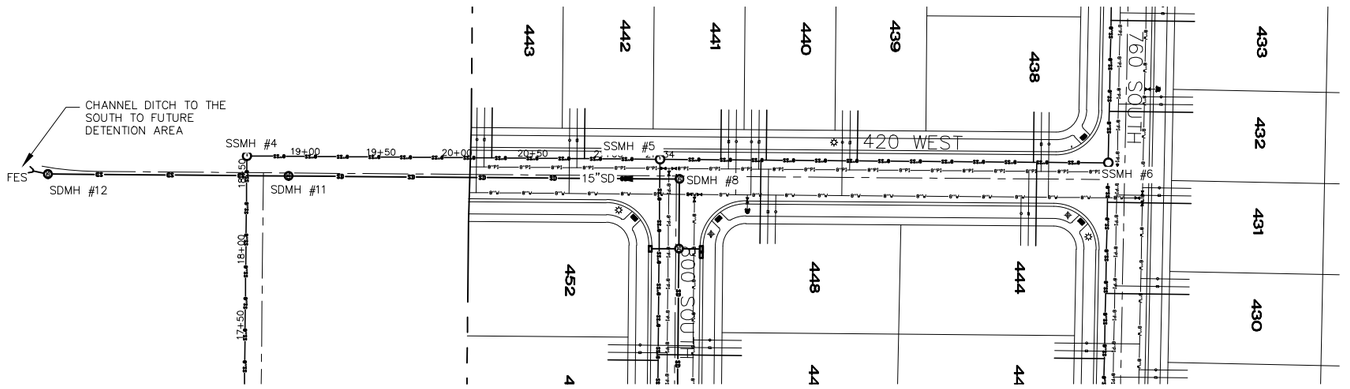
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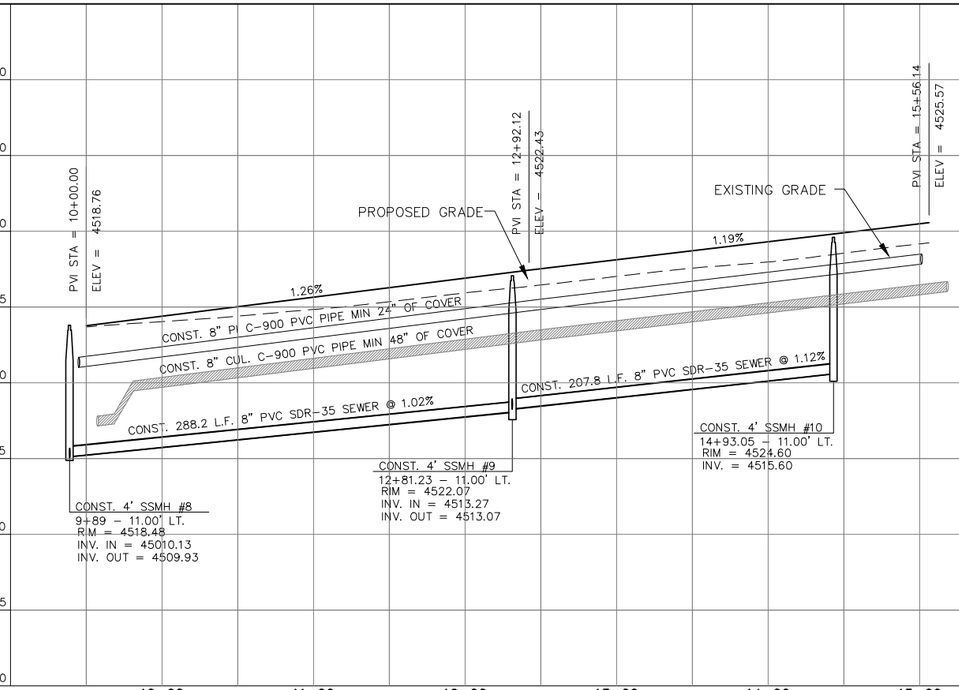
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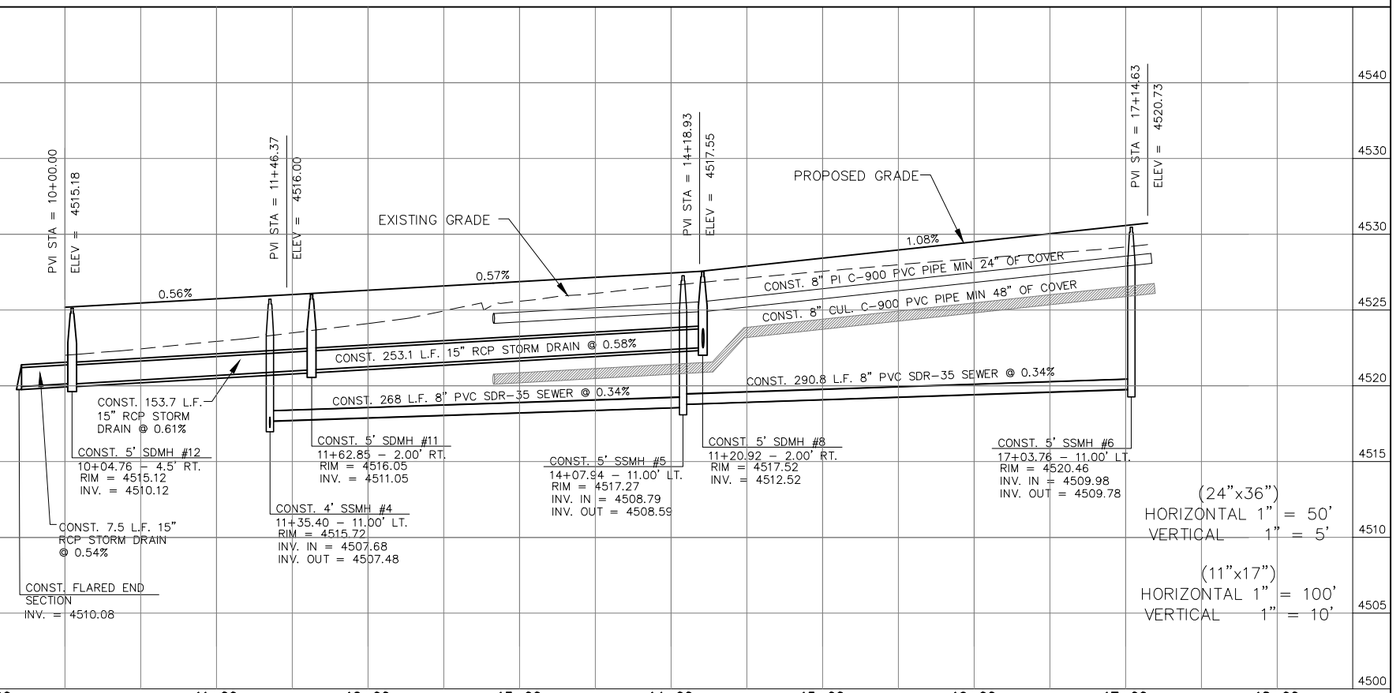
(24"x36")
SCALE: 1" = 50'
(11"x17")
SCALE: 1" = 100'

Know what's below. Call before you dig.









(24"x36")
HORIZONTAL 1" = 50'
VERTICAL 1" = 5'

(11"x17")
HORIZONTAL 1" = 100'
VERTICAL 1" = 10'

REVISIONS					
NO.	DATE	DESCRIPTION	BY		
1				DESIGNED BY:	TGT
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AMERICAN FORK, UTAH

STONECREEK PLAT "E"
A RESIDENTIAL SUBDIVISION

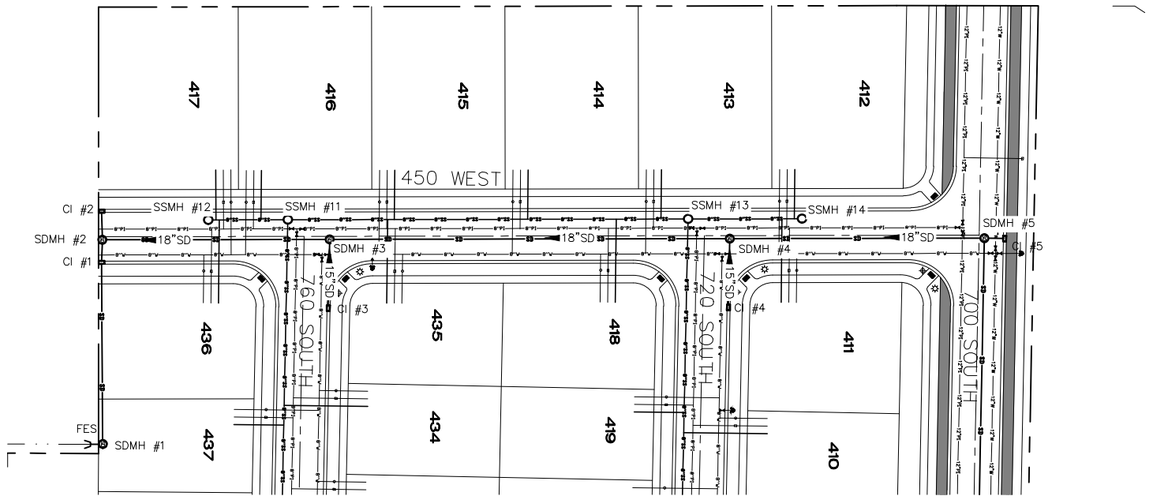
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380 WEST PLAN & PROFILE

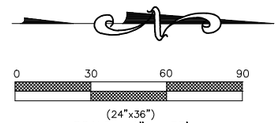
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420 WEST PLAN & PROFILE

JOB WS-AF

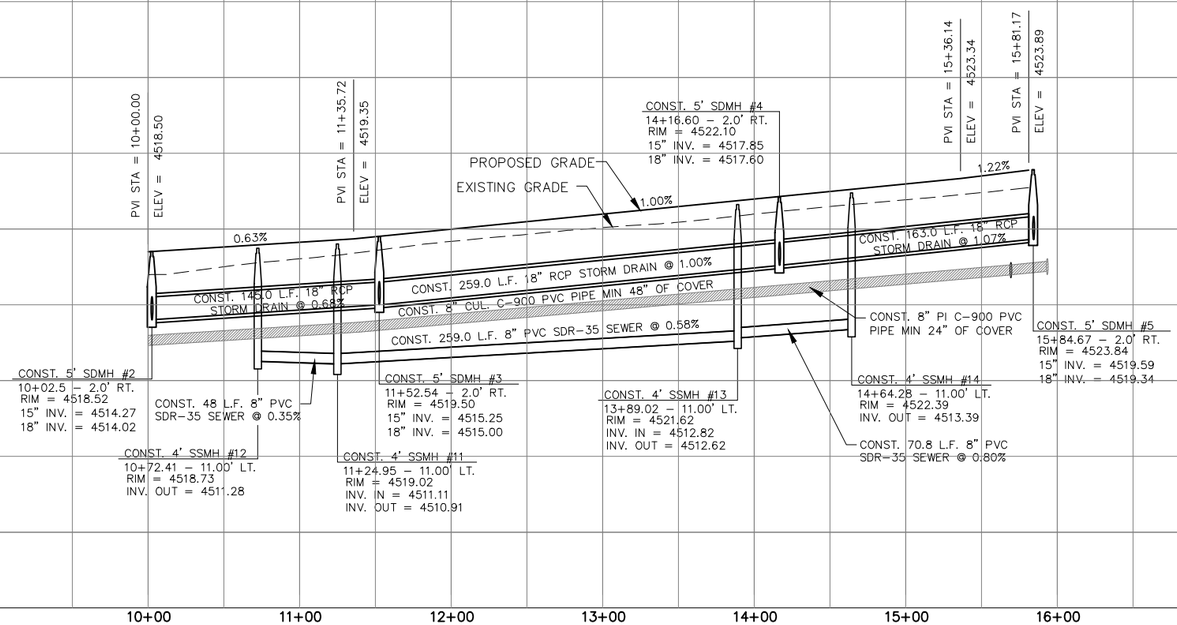
SHEET NO. 6

811 Know what's below. Call before you dig.





(24"x36")
SCALE: 1" = 30'
(11"x17")
SCALE: 1" = 60'



(24"x36")
HORIZONTAL 1" = 50'
VERTICAL 1" = 5'

(11"x17")
HORIZONTAL 1" = 100'
VERTICAL 1" = 10'

REVISIONS					
NO.	DATE	DESCRIPTION	BY		
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2				DRAWN BY:	TT
3				CHECK BY:	TGT
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AMERICAN FORK, UTAH

STONECREEK PLAT "E"
A RESIDENTIAL SUBDIVISION

450 WEST PLAN & PROFILE
10+00 – 15+81

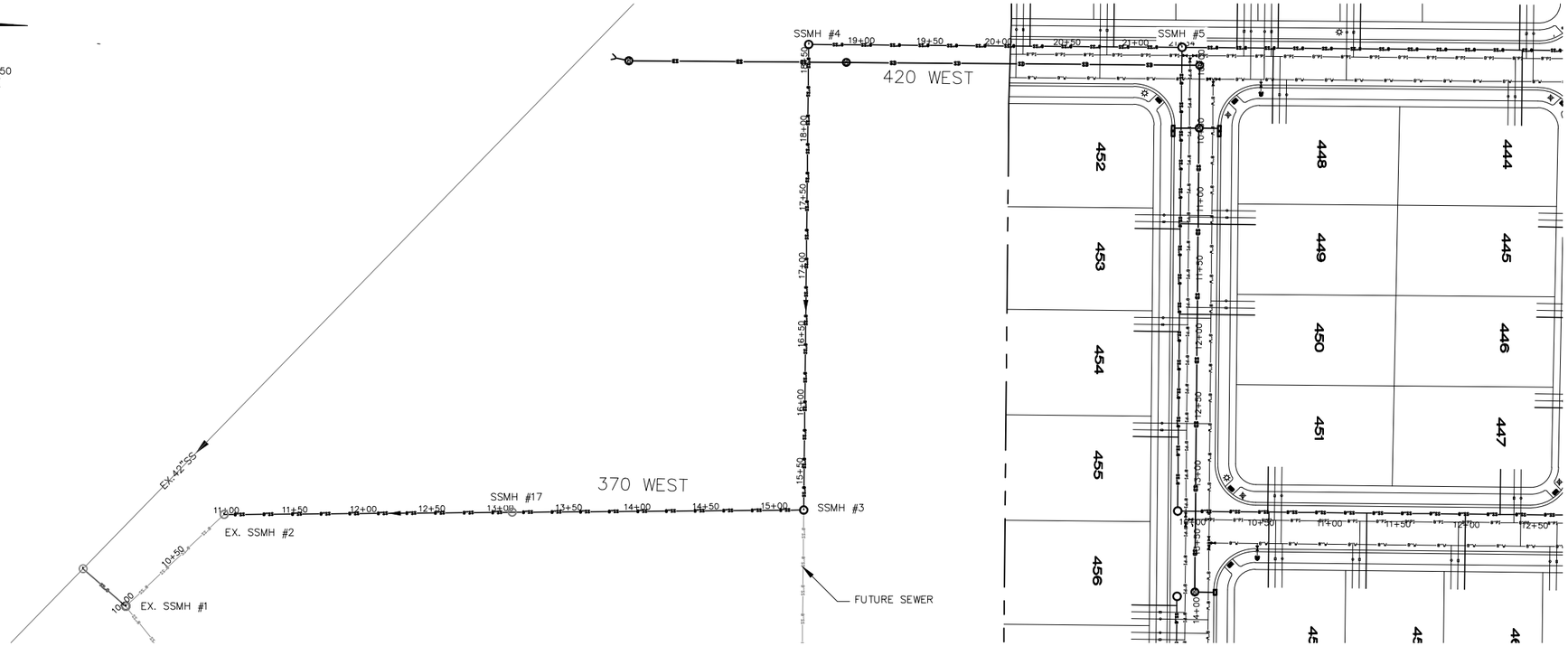
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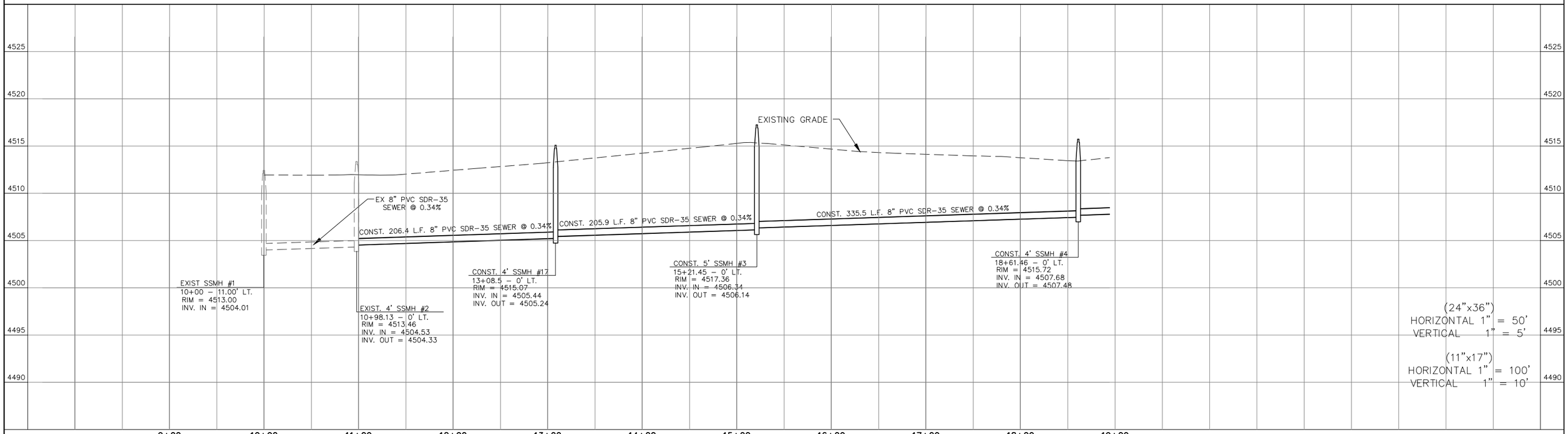
SHEET NO. 7

811 Know what's below. Call before you dig.

0 50 100 150

(24"x36")
SCALE: 1" = 50'
(11"x17")
SCALE: 1" = 100'





(24"x36")
HORIZONTAL 1" = 50'
VERTICAL 1" = 5'

(11"x17")
HORIZONTAL 1" = 100'
VERTICAL 1" = 10'

REVISIONS					
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2				DRAWN BY:	TT
3				CHECK BY:	TGT
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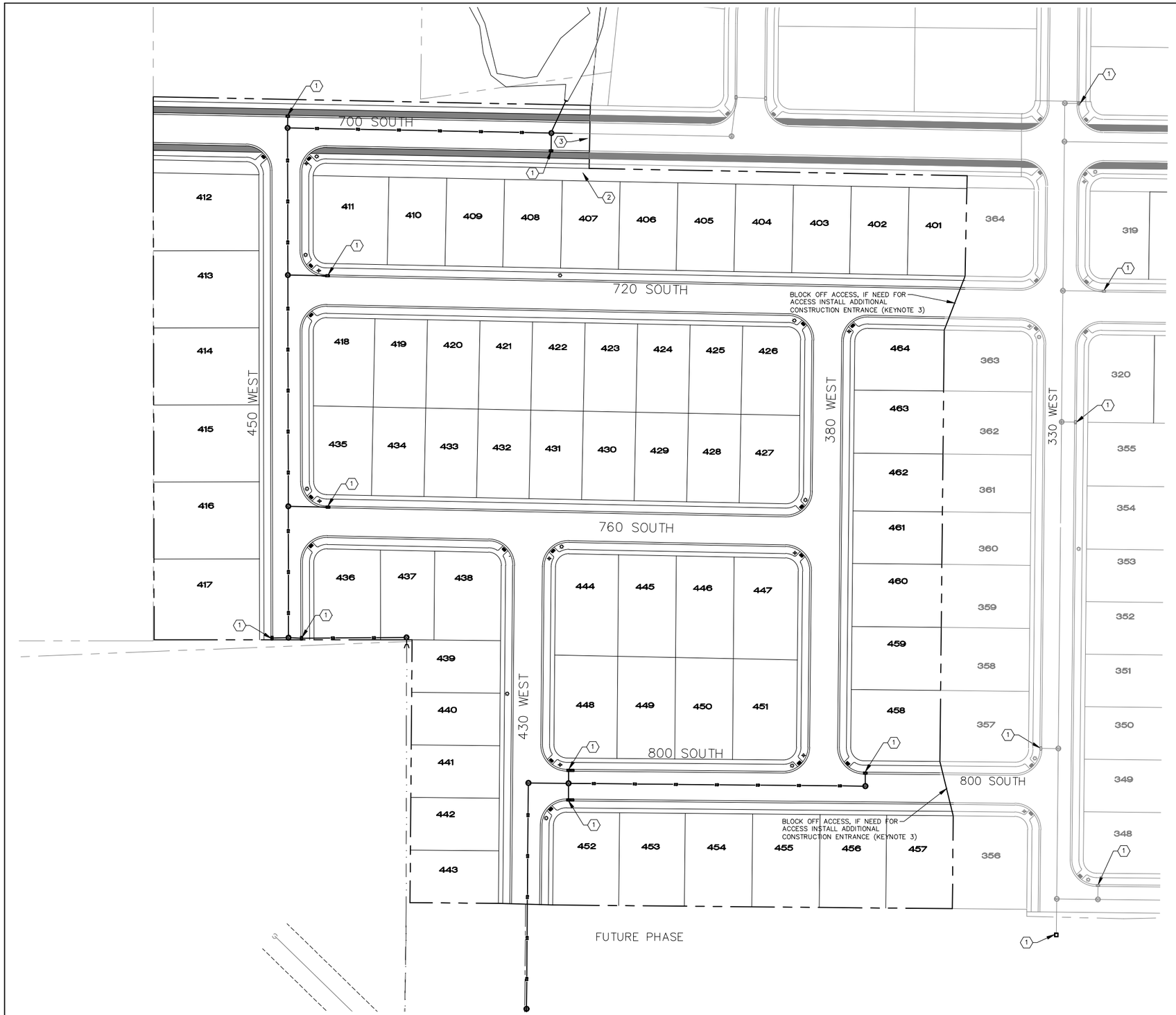
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AMERICAN FORK, UTAH

STONECREEK PLAT "E"
A RESIDENTIAL SUBDIVISION

OFFSITE SEWER PLAN & PROFILE
10+00 - 21+34

JOB WS-AF
SHEET NO. 8



Know what's below. Call before you dig.



(24"x36")
SCALE: 1" = 60'
(11"x17")
SCALE: 1" = 120'

INLET PROTECTION

1. INSTALL SILT FENCE OR STRAW BALE SEDIMENT BARRIER OR EQUIVILANT MEASURE AROUND STORM DRAIN INLETS.
2. INSPECT INLET PROTECTION AFTER STORM EVENT.
3. UPON COMPLETION OF CURB AND GUTTER, PROTECT INLETS WITH FILTER FABRIC AND COURSE GRAVEL OR EQUIVALENT MEASURE.

CONSTRUCTION ENTRANCE

1. CONSTRUCTION ENTRANCE TO BE INSTALLED WITH CRUSHED STONE AT A LOCATION WHERE TRUCKS LEAVE THE SITE TO A PAVED SURFACE.
2. PROVIDE BERMING AT WASH AREA AS NEEDED TO PREVENT SOIL LADEN WASH WATER FROM ENTERING THE STORM WATER FACILITIES.
3. GRAVEL AREA TO BE OF SUFFICIENT SIZE TO ACCOMMODATE THE TRAFFIC.

STORAGE AREA

1. CONTROL STORAGE OF ONSITE MATERIALS TO A DESIGNATED AREA WITH NO DRAINAGE OR WATERWAYS NEARBY.
2. ENSURE ALL ONSITE PERSONNEL UTILIZE DESIGNATED STORAGE AREA. DO NOT STORE EXCESSIVE AMOUNTS OF MATERIALS THAT WILL NOT BE UTILIZED ON SITE.
3. COVER MATERIALS WHEN OUTSIDE THE STORAGE AREA OR WHEN NOT IN USE AND PROTECT STORM DRAIN SYSTEM WHEN IN USE.

STORM WATER MANAGEMENT PLAN

1. ALL CONSTRUCTION TO BE DONE ACCORDING TO THE AMERICAN FORK CITY STANDARDS AND SPECIFICATIONS
2. THE CONTRACTOR IS TO FOLLOW THE BMP DETAILS AS OUTLINED AND ACCORDING TO AMERICAN FORK CITY STANDARDS.
3. CONTRACTOR SHALL TAKE REASONABLE EFFORT TO LIMIT MUD AND SEDIMENT CARRIED ONTO CITY STREETS FROM THE CONSTRUCTION SITE AND REMOVE ANY PRIOR TO THE CLOSE OF EACH WORK DAY.
4. CONTRACTOR TO COORDINATE CONSTRUCTION FENCING.

KEYED NOTES

1. INSTALL PROTECTION ACCORDING TO AMERICAN FORK CITY STANDARDS
2. INSTALL CONTRACTOR ENTRANCE SIGN ACCORDING TO AMERICAN FORK CITY STANDARDS
3. TRAP ROCK TO BE INSTALLED AS PER CITY STANDARDS TO AID IN THE REMOVAL OF MUD AND SEDIMENT FROM TIRES AT THE ENTRANCE OF THE EXCAVATION AREA

REVISIONS			
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DESIGNED BY:	TGT
DRAWN BY:	TT
CHECK BY:	TGT
DATE:	02/10/2020
CDGD FILE:	

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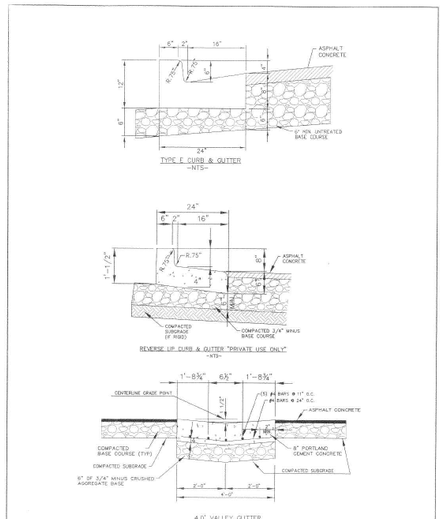
AMERICAN FORK, UTAH

STONECREEK PLAT "E"
A RESIDENTIAL SUBDIVISION

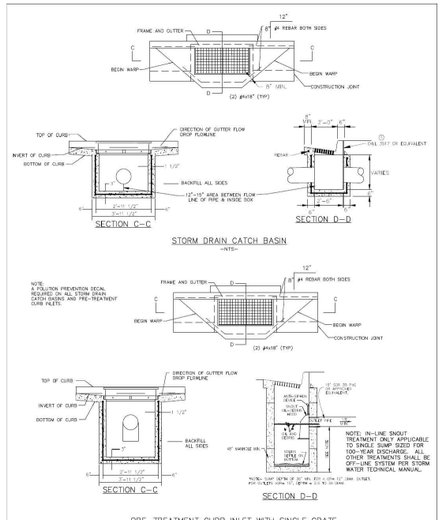
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JOB WS-AF

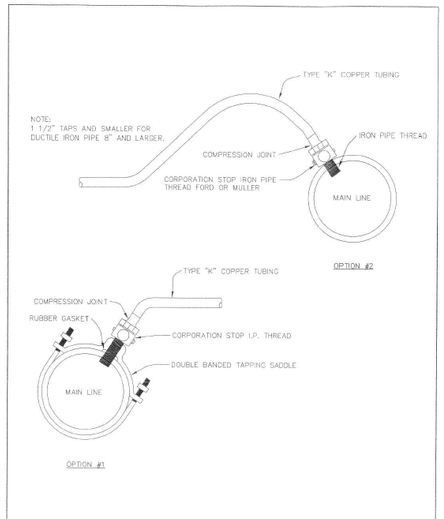
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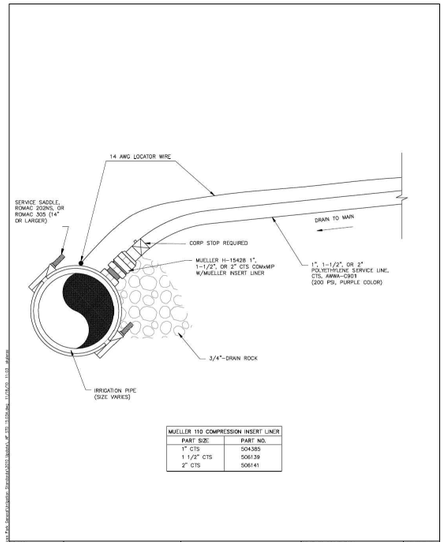
DRAWN: JRD	Northern ENGINEERING AND SURVEYING, INC.	AMERICAN FORK CITY	STANDARD DETAIL FOR: TYPE B1 C&G REVERSE LIP C&G VALLEY GUTTER	DRAWING NO. 15.1
REVISED:				
DATE: MAY 2002				
SCALE: VARIES				



DRAWN: JRD	AMERICAN FORK -1853-	AMERICAN FORK CITY	STANDARD DETAIL FOR: CATCH BASIN	DRAWING NO. 15.2
REVISED: AJS				
DATE: APRIL 2012				
SCALE: VARIES				

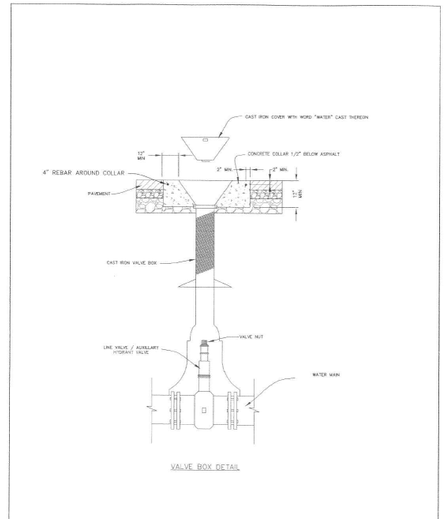


DRAWN: JRD	Northern ENGINEERING AND SURVEYING, INC.	AMERICAN FORK CITY	STANDARD DETAIL FOR: TYPICAL WATERMAN TAPS	DRAWING NO. 15.3
REVISED:				
DATE: JULY 2002				
SCALE: VARIES				



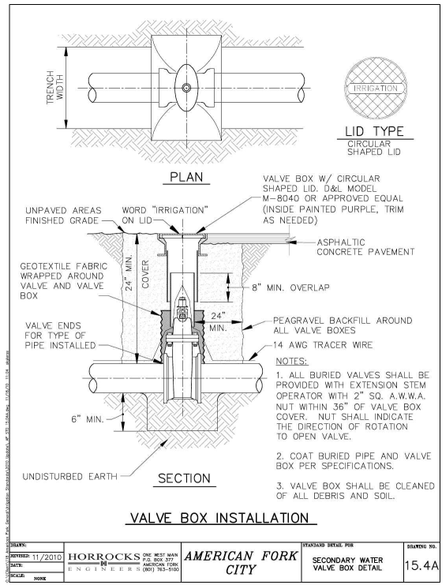
MUELLER 110 COMPRESSION INSERT LINER	
PART SIZE	PART NO.
1" CTS	504385
1 1/2" CTS	506139
2" CTS	508141

DRAWN:	HORROCKS ENGINEERS ONE WEST MAIN P.O. BOX 277 AMERICAN FORK (801) 763-5100	AMERICAN FORK CITY	STANDARD DETAIL FOR: TYPICAL SECONDARY WATER MAIN TAP	DRAWING NO. 15.3A
REVISED: 11/2010				
DATE:				
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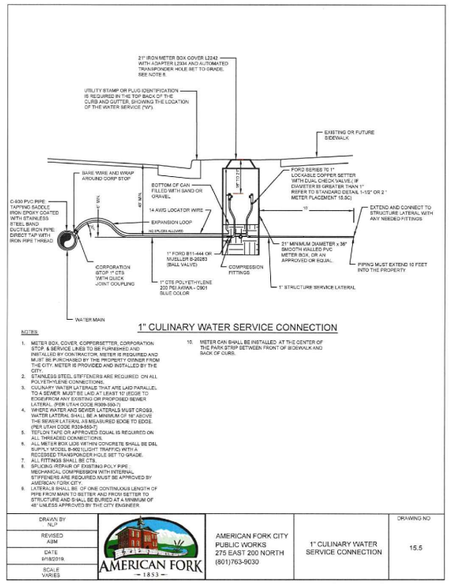


VALVE BOX DETAIL

DRAWN: JRD	Northern ENGINEERING AND SURVEYING, INC.	AMERICAN FORK CITY	STANDARD DETAIL FOR: VALVE BOX DETAIL	DRAWING NO. 15.4
REVISED:				
DATE: JULY 2002				
SCALE: VARIES				

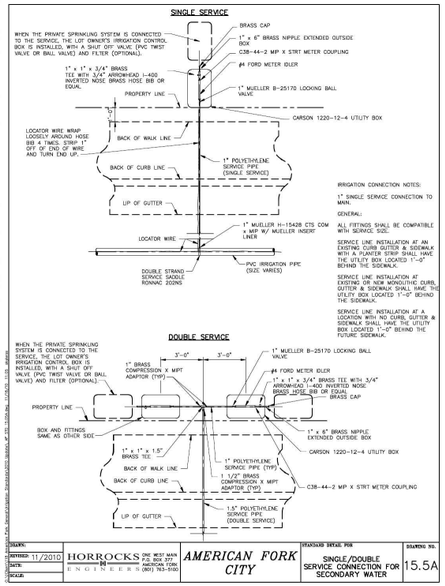


DRAWN:	HORROCKS ENGINEERS ONE WEST MAIN P.O. BOX 277 AMERICAN FORK (801) 763-5100	AMERICAN FORK CITY	STANDARD DETAIL FOR: SECONDARY WATER VALVE BOX DETAIL	DRAWING NO. 15.4A
REVISED: 11/2010				
DATE:				
SCALE: NONE				

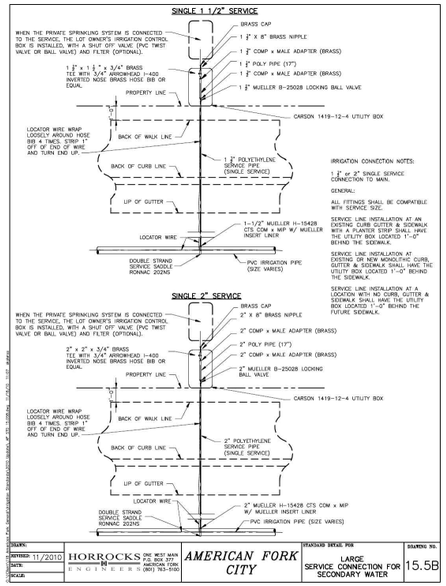


NOTES:
1. METER BOX, COVER, CORPORATION, CORPORATION STOP & SERVICE LINE TO BE FURNISHED AND INSTALLED BY CONTRACTOR. METER IS REQUIRED AND MUST BE PURCHASED BY THE PROPERTY OWNER FROM THE CITY. METER IS PROVIDED AND INSTALLED BY THE CITY.
2. STAINLESS STEEL STIFFENERS ARE REQUIRED ON ALL POLYETHYLENE CONNECTIONS.
3. CULINARY WATER LATERALS THAT ARE LAID PARALLEL TO A SEWER MUST BE LAID AT LEAST 10' (EDGE TO EDGE) HORIZONTALLY FROM THE SEWER/SEWER MANHOLE LATERAL (PER UTAH CODE R309-550-12(2)(b)).
4. WHERE WATER AND SEWER LATERALS MUST CROSS, WATER LATERAL SHALL BE A MINIMUM OF 18" ABOVE THE SEWER LATERAL AS MEASURED EDGE TO EDGE.
5. ALL PIPE SHALL BE CLEANED.
6. TEFLON TAPE OR APPROVED EQUAL IS REQUIRED ON ALL THREADED CONNECTIONS.
7. ALL METER BOX LIDS WITHIN CONCRETE SHALL BE DBL SUPPLY MODEL B-RED LIGHT TRAFFIC WITH A MACHINED RECESS FOR TRANSPONDER TO BE SET TO GRADE.
8. ALL FITTINGS SHALL BE C-900.
9. SPLICING, REPAIR OF EXISTING POLY PIPE, MECHANICAL COMPRESSION WITH INTERNAL STIFFENERS ARE REQUIRED MUST BE APPROVED BY THE CITY ENGINEER.
10. LATERAL SHALL BE OF ONE CONTINUOUS LENGTH OF PIPE FROM MAIN TO BETTER AND FROM BETTER TO STRUCTURE AND SHALL BE BURIED AT A MINIMUM OF 48" UNLESS APPROVED BY THE CITY ENGINEER
10. METER CAN SHALL BE INSTALLED AT THE CENTER OF THE PARK STRIP BETWEEN FRONT OF SIDEWALK AND BACK OF CURB.

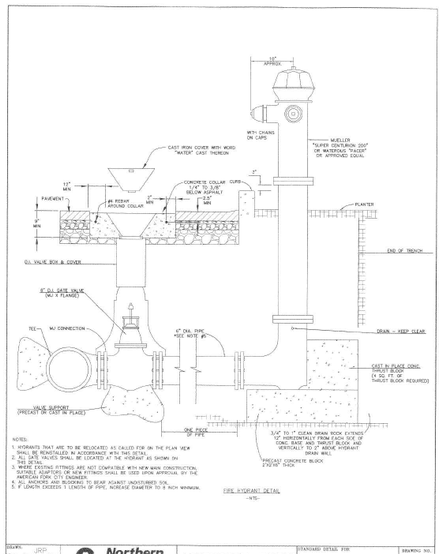
DRAWN BY: NJP	AMERICAN FORK -1853-	AMERICAN FORK CITY PUBLIC WORKS 275 EAST 200 NORTH (801)763-9030	1" CULINARY WATER SERVICE CONNECTION	DRAWING NO 15.5
REVISED: AJM				
DATE: 8/18/2016				
SCALE: VARIES				



DRAWN:	HORROCKS ENGINEERS ONE WEST MAIN P.O. BOX 277 AMERICAN FORK (801) 763-5100	AMERICAN FORK CITY	STANDARD DETAIL FOR: SINGLE/DOUBLE SERVICE CONNECTION FOR SECONDARY WATER	DRAWING NO. 15.5A
REVISED: 11/2010				
DATE:				
SCALE:				



DRAWN:	HORROCKS ENGINEERS ONE WEST MAIN P.O. BOX 277 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:				



NOTES:
1. HYDRANTS THAT ARE TO BE RELOCATED AS CALLED FOR ON THE PLAN VIEW SHALL BE RELOCATED 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, NEW FITTINGS SHALL BE INSTALLED. FITTINGS SHALL BE USED UPON APPROVAL BY THE AMERICAN FORK CITY ENGINEER.
4. ALL ANCHORS AND BLOCKING TO BEAR AGAINST UNDISTURBED SOIL.
5. IF LENGTH EXCEEDS 3 LENGTH OF PIPE, INCREASE DIAMETER TO 8 INCH MINIMUM.

DRAWN: JRD	Northern ENGINEERING AND SURVEYING, INC.	AMERICAN FORK CITY	STANDARD DETAIL FOR: FIRE HYDRANT	DRAWING NO. 15.6
REVISED:				
DATE: MAY 2002				
SCALE: VARIES				

REVISIONS					
NO.	DATE	DESCRIPTION	BY		
1				DESIGNED BY:	TGT
2				DRAWN BY:	TT
3				CHECK BY:	TGT
4				DATE:	2/10/2020
				COGO FILE:	

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TRANE ENGINEERING, P.C.
CONSULTING ENGINEERS AND LAND SURVEYORS
27 EAST MAIN LEHI, UTAH 84043 (801) 768-4544

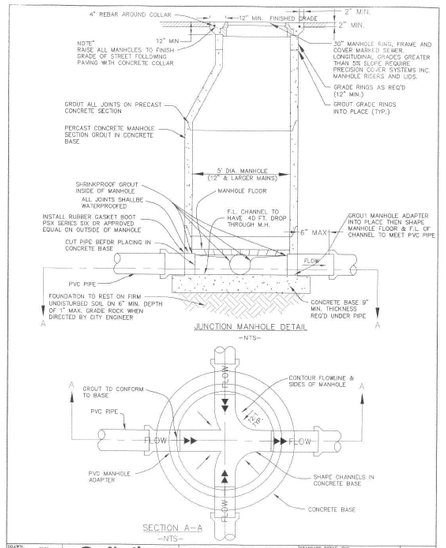
AMERICAN FORK, UTAH

STONECREEK PLAT "E"
A RESIDENTIAL SUBDIVISION

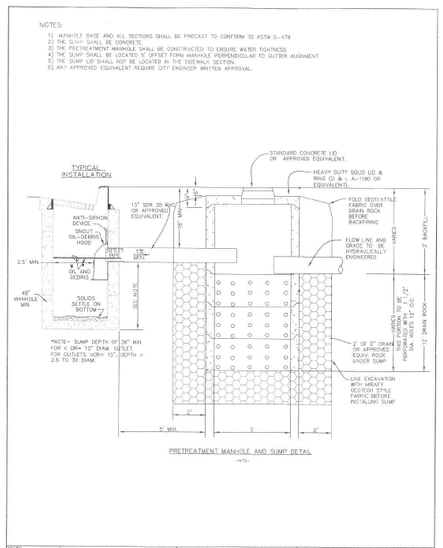
DETAIL SHEET 1

JOB WS-AF

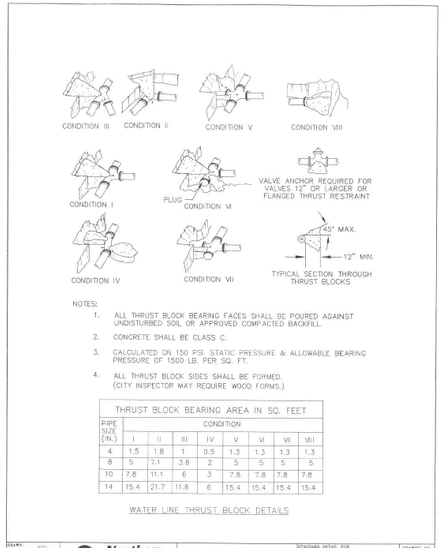
SHEET NO. 10



DRAWN: JBP	Northern ENGINEERING LAND PLANNING CONSTRUCTION MANAGEMENT 1040 E. 800 N. OREM, UTAH 84057 (801) 802-8992	AMERICAN FORK CITY	STANDARD DETAIL FOR: SANITARY SEWER JUNCTION MANHOLE DETAIL	DRAWING NO. 15.13
REVISED:				
DATE: JULY 2002				
SCALE: VARIES				



DRAWN: JBP	Northern ENGINEERING LAND PLANNING CONSTRUCTION MANAGEMENT 1040 E. 800 N. OREM, UTAH 84057 (801) 802-8992	AMERICAN FORK CITY	STANDARD DETAIL FOR: PRETREATMENT MANHOLE AND SUMP	DRAWING NO. 15.14
REVISED:				
DATE: MAY 2002				
SCALE: VARIES				

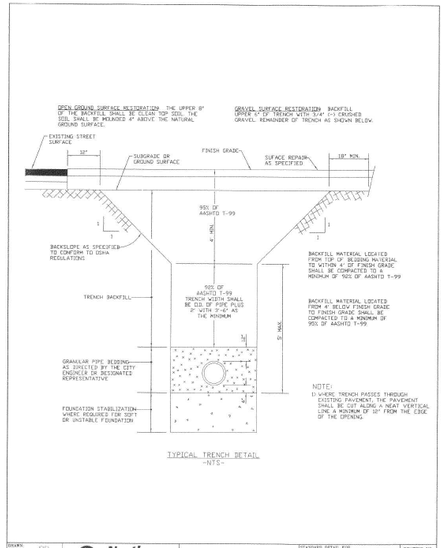


THRUST BLOCK BEARING AREA IN SQ. FEET

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	7.6	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

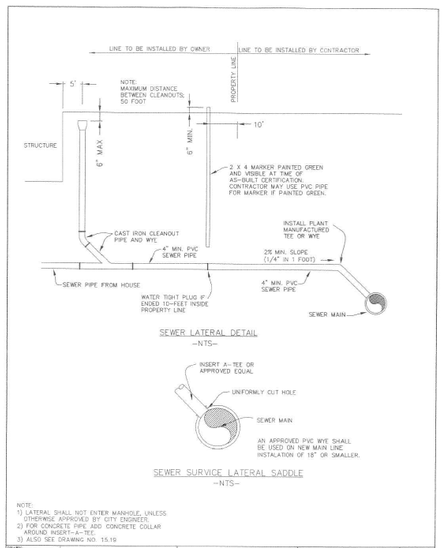
WATER LINE THRUST BLOCK DETAILS

DRAWN: JBP	Northern ENGINEERING LAND PLANNING CONSTRUCTION MANAGEMENT 1040 E. 800 N. OREM, UTAH 84057 (801) 802-8992	AMERICAN FORK CITY	STANDARD DETAIL FOR: WATERLINE THRUST BLOCKING	DRAWING NO. 15.21
REVISED:				
DATE: MAY 2002				
SCALE: VARIES				

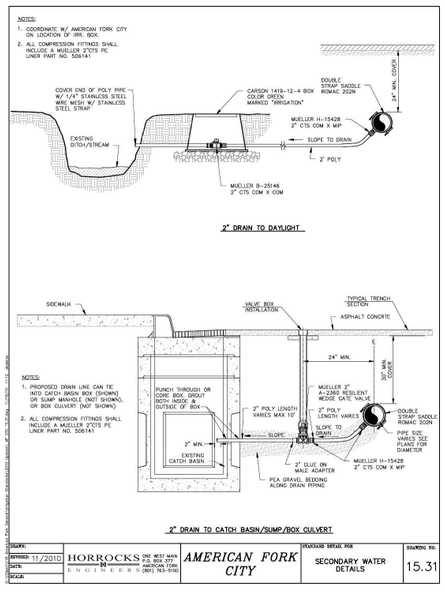


TYPICAL TRENCH DETAIL
-NTS-

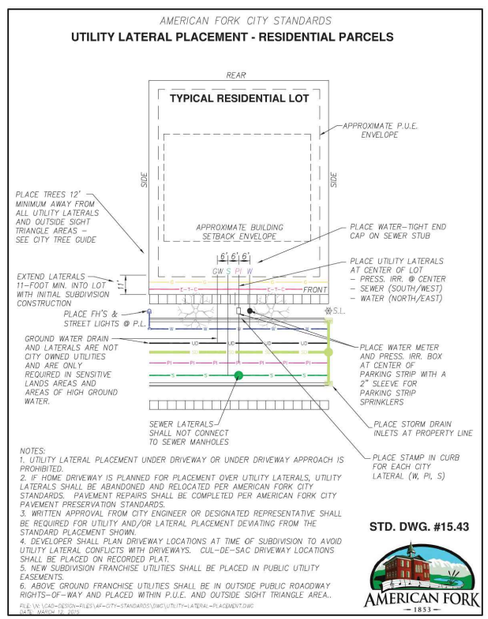
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REVISED:				
DATE: MAY 2002				
SCALE: VARIES				

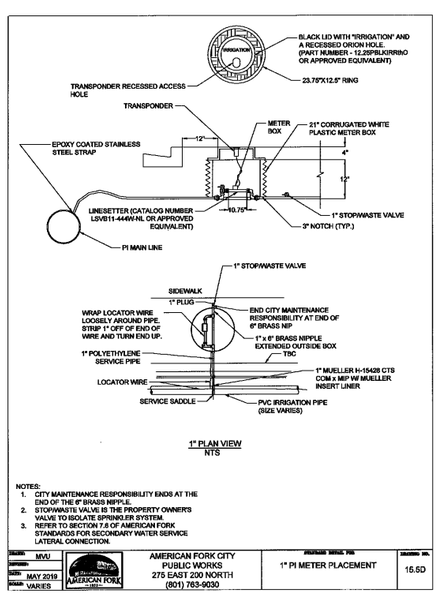


DRAWN: JBP	Northern ENGINEERING LAND PLANNING CONSTRUCTION MANAGEMENT 1040 E. 800 N. OREM, UTAH 84057 (801) 802-8992	AMERICAN FORK CITY	STANDARD DETAIL FOR: SANITARY SEWER LATERAL AND CLEAN OUT	DRAWING NO. 15.23
REVISED:				
DATE: JULY 2002				
SCALE: VARIES				



DRAWN:	HORROCKS ENGINEERS 242 WEST 300 NORTH SUITE 310 AMERICAN FORK (801) 763-5100	AMERICAN FORK CITY	STANDARD DETAIL FOR: SECONDARY WATER DETAILS	DRAWING NO. 15.31
REVISED: 11/2010				
DATE:				
SCALE:				

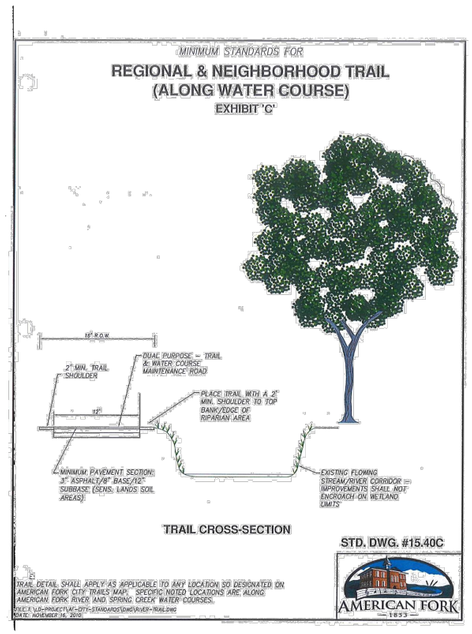




1" PLAN VIEW
NTS

NOTES:
1. CITY MAINTENANCE RESPONSIBILITY ENDS AT THE END OF THE 6" BRASS NIPPLE.
2. STOPWASTE VALVE IS THE PROPERTY OWNER'S VALVE TO ISOLATE SPRINKLER SYSTEM.
3. REFER TO SECTION 7.0 OF AMERICAN FORK STANDARDS FOR SECONDARY WATER SERVICE LATERAL CONNECTION.

DRAWN: MVJ	AMERICAN FORK CITY PUBLIC WORKS 275 EAST 200 NORTH (801) 763-9030	AMERICAN FORK CITY	STANDARD DETAIL FOR: 1" PI METER PLACEMENT	DRAWING NO. 15.5D
APPROVED:				
DATE: MAY 2019				
SCALE: VARIES				



TRAIL DETAIL SHALL APPLY AS APPLICABLE TO ANY LOCATION SO DESIGNATED ON AMERICAN FORK CITY TRAILS MAP. SPECIFIC NOTED LOCATIONS ARE ALONG AMERICAN FORK RIVER AND SPRING CREEK WATER COURSES.
PATH: I:\S-PROJECTS\C-CITY-STANDARDS\DWG\RIVER-TRAIL.DWG
DATE: NOVEMBER 16, 2010

REVISIONS						
NO.	DATE	DESCRIPTION	BY			
1				DESIGNED BY:	TGT	
2				DRAWN BY:	TT	
3				CHECK BY:	TGT	
4				DATE:	2/10/2020	
				COGO FILE:		

J:\GARRETT\AmericanFork\dwg\PLAT E\11 DETAIL.dwg

TRANE ENGINEERING, P.C.
CONSULTING ENGINEERS AND LAND SURVEYORS
27 EAST MAIN LEHI, UTAH 84043 (801) 768-4544

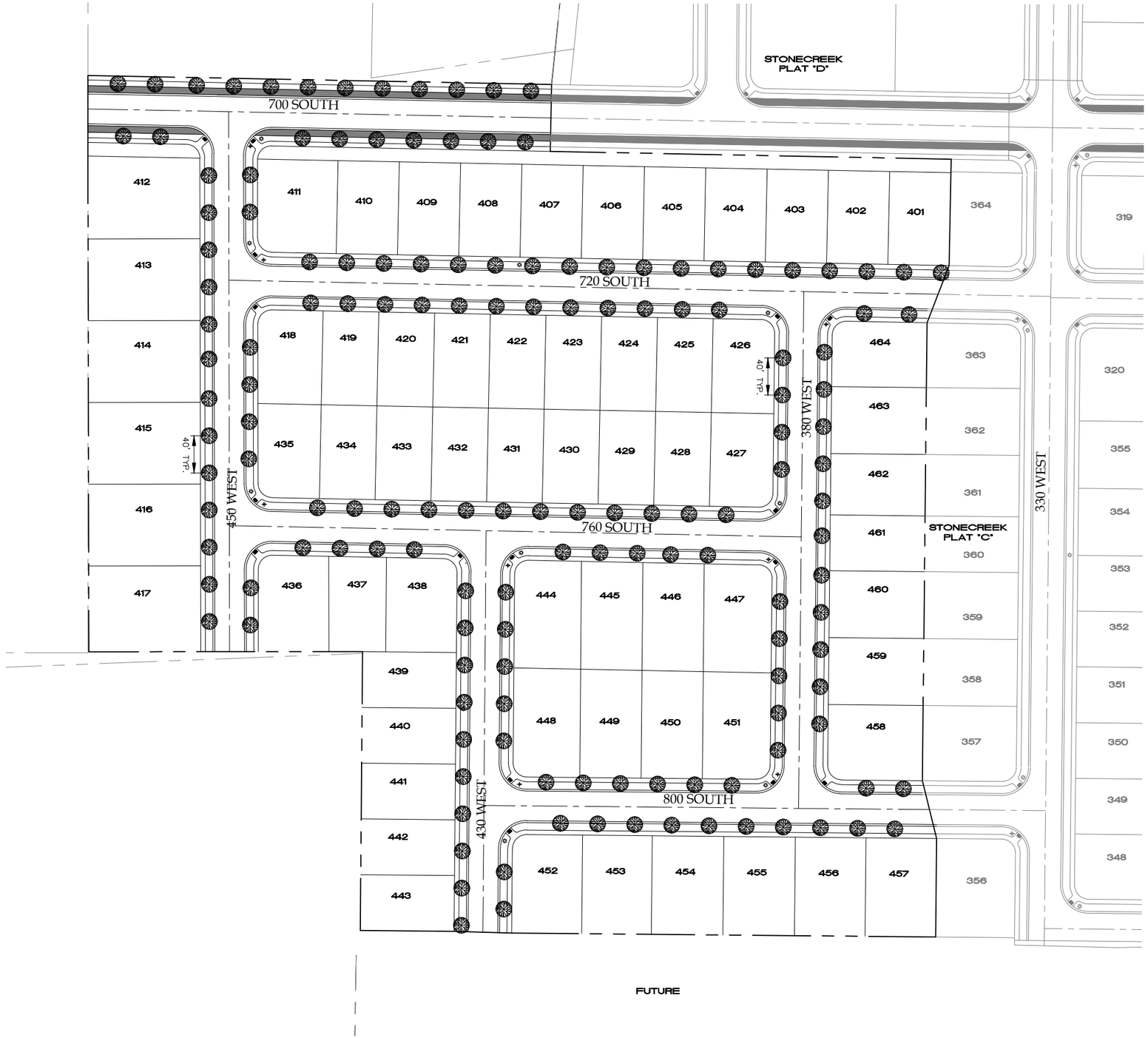
AMERICAN FORK, UTAH

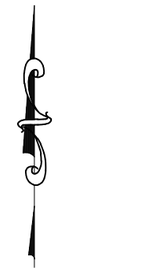
STONECREEK PLAT "E"
A RESIDENTIAL SUBDIVISION

DETAIL SHEET 2

JOB WS-AF

SHEET NO. 11





LEGEND

PROPERTY BOUNDARY LINE

DECIDUOUS TREE – 2" CAL.

GENERAL NOTES

1. ALL CONSTRUCTION TO BE DONE ACCORDING TO THE AMERICAN FORK CITY STANDARDS AND SPECIFICATIONS.
2. CONTRACTOR TO INSTALL STREET TREES ALONG STREET AT A SPACING OF 40' APART. COORDINATE WITH CITY ARBORIST TO DETERMINE TYPE OF TREES.

REVISIONS				
NO.	DATE	DESCRIPTION	BY	
1				DESIGNED BY: TGT
2				DRAWN BY: TT
3				CHECK BY: TGT
4				DATE: 01/02/20
				COGO FILE:

J:\GARRETT\AmericanFork\dwg\PLAT F\12 TREE EXHIBIT.dwg

TRANE ENGINEERING, P.C.
CONSULTING ENGINEERS AND LAND SURVEYORS
27 EAST MAIN LEHI, UTAH 84043 (801) 768-4544

AMERICAN FORK, UTAH

STONECREEK PLAT "E"
A RESIDENTIAL SUBDIVISION

TREE EXHIBIT

JOB WS–AF

SHEET NO. 12

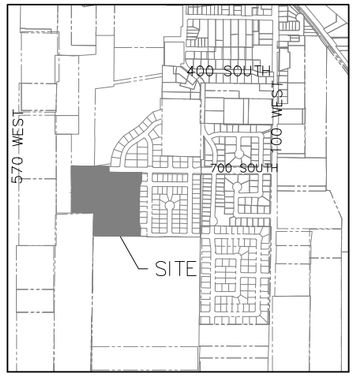
STONECREEK PLAT 'E'

LOCATED IN THE NORTHWEST QUARTER OF
SECTION 26, TOWNSHIP 5 SOUTH, RANGE 1 EAST,
SALT LAKE BASE AND MERIDIAN
AMERICAN FORK CITY, UTAH COUNTY.

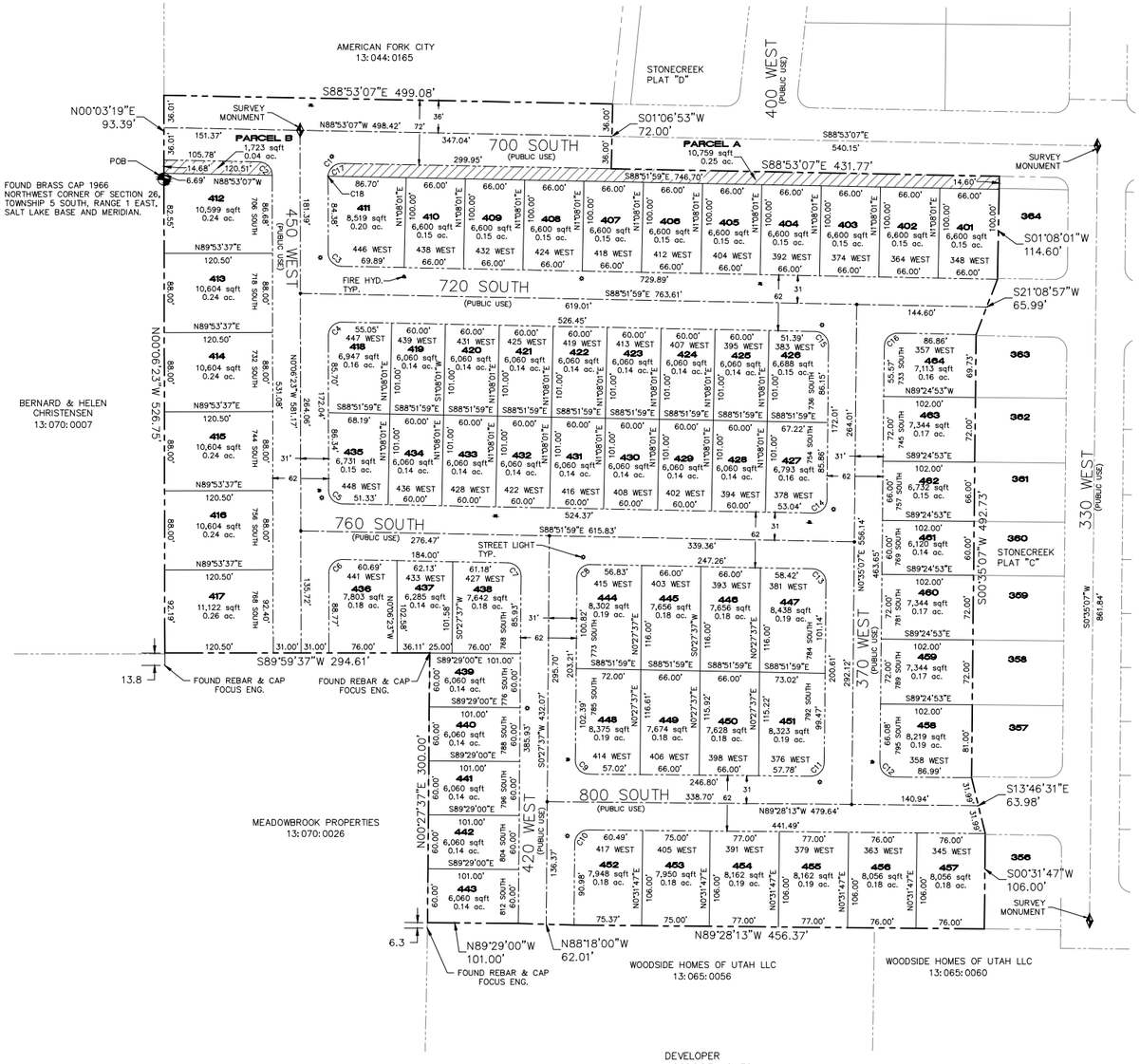
Curve Table					
Curve #	Length	Radius	Delta	Chord	Chord Bearing
C1	23.88	15.00	91°13'16"	21.44	S45°30'15"W
C2	23.24	15.00	88°46'44"	20.99	N44°29'45"W
C3	23.24	15.00	88°45'36"	20.98	S44°29'11"E
C4	23.89	15.00	91°14'24"	21.44	S45°30'49"W
C5	23.24	15.00	88°45'36"	20.98	S44°29'11"E
C6	23.89	15.00	91°14'24"	21.44	S45°30'49"W
C7	23.39	15.00	89°19'36"	21.09	N44°12'11"W
C8	23.74	15.00	90°40'24"	21.34	S45°47'49"W
C9	23.54	15.00	89°55'50"	21.20	S44°30'18"E
C10	23.58	15.00	90°04'10"	21.23	S45°29'42"W
C11	23.55	15.00	89°56'40"	21.20	N45°33'27"E
C12	23.58	15.00	90°03'20"	21.22	S44°26'33"E
C13	23.42	15.00	89°27'06"	21.11	N44°08'26"W
C14	23.71	15.00	90°32'54"	21.31	N45°51'34"E
C15	23.42	15.00	89°27'06"	21.11	N44°08'26"W
C16	23.71	15.00	90°32'54"	21.31	S45°51'34"W
C17	22.92	15.00	87°31'46"	20.75	S47°21'00"W
C18	0.97	15.00	3°41'30"	0.97	S01°44'22"W

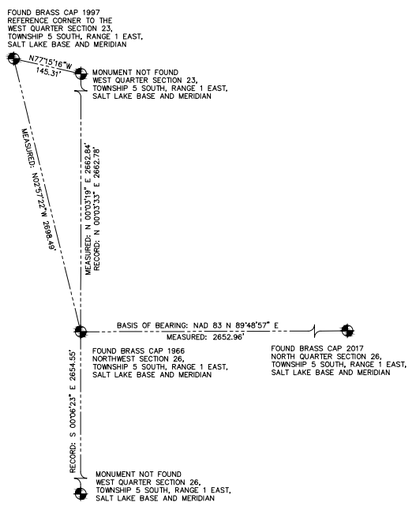
FLOOD ZONE DESIGNATION: X
COMMUNITY PANEL #: 4955170120B
EFFECTIVE DATE: JULY 17, 2002

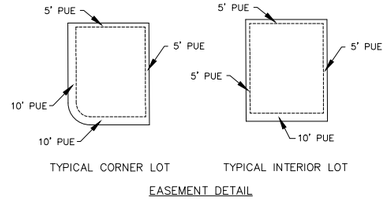
NOTES:
1. OFFSET NAILS TO BE PLACED IN THE CURB AND 5/8" BY 24" REBAR WITH SURVEY CAP TO BE PLACED AT ALL REAR LOT CORNERS PRIOR TO OCCUPANCY.
2. BUILDING PERMITS WILL NOT BE ISSUED FOR ANY HOME UNTIL ALL ASPHALT PAVING IS INSTALLED AND THE FIRE HYDRANTS ARE INSTALLED, APPROVED BY THE FIRE MARSHALL AND CHARGE WITH CULINARY WATER.
3. ALL PUBLIC STREETS TO BE DEDICATED TO AMERICAN FORK CITY.
4. LOWEST FLOOR SLAB ELEVATION MUST BE A MINIMUM OF 3 FEET ABOVE WATER LEVEL MEASURED DURING SPRING SEASON. NO BASEMENTS TO BE CONSTRUCTED WITHIN THIS PLAT.



VICINITY MAP







EASEMENT DETAIL
-NTS-



SCALE: 1" = 80'

LEGEND

- FOUND SECTION CORNER
- SUBDIVISION MONUMENT
- COMMON AREA (PUE)
- BOUNDARY
- SECTION LINE
- ROAD CENTER LINE
- EASEMENT LINE
- FIRE HYDRANT
- STREET LIGHT

LAND USE:	
PLAT "E" =	16.33 ACRES
ZONING=	PR-3.0
TOTAL LOTS=	64 LOTS
DENSITY OVERALL =	3.0 LOTS/ACRE
OPEN SPACE =	0.27 ACRE

NOTE: THIS PLAT IS BASED ON THE PLANNED UNIT DEVELOPMENT-CONSERVATION SUBDIVISION PROJECT

DEVELOPER
WOODSIDE HOMES
460 WEST 50 NORTH
SUITE #200 SLC, UT 84101
PHONE (801) 372-2077

TRANE ENGINEERING, P.C.
CONSULTING ENGINEERS AND LAND SURVEYORS
27 EAST MAIN LEHI, UTAH 84043 (801) 768-4544

SEWER/WATER AUTHORITY APPROVAL

APPROVED BY THE SEWER AUTHORITY
ON THIS DAY OF_____, A.D., 20_____

SEWER/WATER AUTHORITY

SURVEYOR'S CERTIFICATE

I, TRAVIS TRANE, DO HEREBY CERTIFY THAT I AM A PROFESSIONAL LAND SURVEYOR AND THAT I HOLD LICENSE NO. 5152741, IN ACCORDANCE WITH TITLE 58, CHAPTER 22 OF THE PROFESSIONAL ENGINEERS AND LAND SURVEYORS LICENSING ACT. I FURTHER CERTIFY THAT BY AUTHORITY OF THE OWNERS, A SURVEY WAS COMPLETED IN ACCORDANCE WITH SECTION 17-23-17. I FURTHER CERTIFY THAT I HAVE VERIFIED ALL MEASUREMENTS AND THAT MONUMENTS HAVE BEEN PLACED AS SHOWN ON THIS PLAT, I HEREBY STATE THAT THIS PLAT IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE, INFORMATION, BELIEF AND IN MY PROFESSIONAL OPINION.

_____ _____
(SURVEYOR), P.L.S. DATE

BOUNDARY DESCRIPTION

Commencing the Northwest Corner of Section 26, Township 5 South, Range 1 East, Salt Lake Base and Meridian: thence North 00°03'19" East 93.39 feet along the section line; thence South 88°53'07" East 499.08 feet; thence South 01°06'53" West 72.00 feet; thence South 88°53'07" East 431.77 feet; thence South 01°08'01" West 114.60 feet; thence South 21°08'57" West 65.99 feet; thence South 00°35'07" West 492.73 feet; thence South 13°46'31" East 63.98 feet; thence South 00°31'47" West 106.00 feet; thence North 89°28'13" West 456.37 feet; thence North 88°18'00" West 62.01 feet; thence North 89°29'00" West 101.00 feet; thence North 00°27'37" East 300.00 feet; thence South 89°59'37" West 294.61 feet; thence North 00°06'23" West 526.75 feet along the section line to the point of beginning.

Parcel contains: 16.33 acres more or less.
Number of lots = 64

Basis of bearing: The line between the Northwest Corner and the North Quarter Corner of Section 26, Township 5 South, Range 1 East, Salt Lake Base and meridian which bears North 89°48'57" East.

OWNER'S DEDICATION

Known all men by these present that we, all of the undersigned owners of all of the property described in the surveyor's certificate herein and shown on this map, have caused the same to be subdivided into lots, blocks, streets and easements and do hereby dedicate the streets and other public areas as indicated hereon for 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 STONECREEK ESTATES HOMEOWNERS ASSOCIATION, INC. 1080 North Amberly Dr PO Box 540265 North Salt Lake, Ut 84054

IN WITNESS HEREOF WE HAVE HEREUNTO SET OUR HANDS THIS_____ DAY OF_____, 20___

ACKNOWLEDGEMENT

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

ON THE_____DAY OF_____, 20___ PERSONALLY APPEARED BEFORE ME THE SIGNERS OF THE FOREGOING DEDICATION WHO DULY ACKNOWLEDGE TO ME THAT THEY DID EXECUTE THE SAME.

NOTARY _____ _____
NOTARY PUBLIC SIGNATURE
COMMISSION # _____
A NOTARY PUBLIC COMMISSIONED IN UTAH
MY COMMISSION EXPIRES _____

ACCEPTANCE BY LEGISLATIVE BODY

THE_____ OF_____
COUNTY OF UTAH, APPROVES THIS SUBDIVISION AND HEREBY ACCEPTS THE DEDICATION OF ALL STREETS; EASEMENTS, AND OTHER PARCELS OF LAND INTENDED FOR PUBLIC PURPOSES FOR THE PERPETUAL USE OF THE PUBLIC THIS_____DAY OF _____, 20

MAYOR
CITY COUNCIL MEMBER
CITY COUNCIL MEMBER
CITY COUNCIL MEMBER
CITY COUNCIL MEMBER
CITY COUNCIL MEMBER
CITY COUNCIL MEMBER
APPROVED: _____ CITY ENGINEER
ATTEST: _____ CLERK-RECORDER (See Seal Below)

PLANNING COMMISSION APPROVAL

APPROVED THIS _____ DAY OF _____, A.D. 20___
BY THE AMERICAN FORK CITY PLANNING COMMISSION.

PLANNER
PLANNING COMMISSION CHAIRMAN

PLAT 'E'

STONECREEK

A CONSERVATION PUD

AMERICAN FORK CITY, UTAH COUNTY, UTAH
SCALE: 1"= 80 FEET

SURVEYOR SEAL	CLERK-RECORDED SEAL	RECORDING INFORMATION

AMERICAN FORK CITY
PLANNING COMMISSION

MEETING DATE: July 22, 2020
STAFF PRESENTATION: Adam Olsen

AGENDA TOPIC: Hearing, review and action on a preliminary and final plat for Rockwell Ranch Phase I, consisting of 16 lots, in the area of 400 South 1060 West, in the TOD (Transit Oriented Development) zone.

ACTIONS REQUESTED: Approval of the preliminary plan and recommendation of approval of the final plat.

BACKGROUND INFORMATION					
Location:		400 South 1060 West			
Applicants:		Ensign Engineering			
Existing Land Use:		Agriculture			
Proposed Land Use:		Residential			
Surrounding Land Use:	North	Residential/Agriculture			
	South	Agriculture			
	East	Residential/Agriculture			
	West	Residential/Agriculture			
Existing Zoning:		TOD (Transit Oriented Development)			
Proposed Zoning:		N/A			
Surrounding Zoning:	North	RA-5			
	South	TOD			
	East	TOD & Residential Agriculture 5 (Utah County)			
	West	RA-5, Residential Agriculture 5 (Utah County)			
Land Use Plan Designation:		TOD (Transit Oriented Development)			
Zoning compliant with Land Use Plan Designation?		x	Yes		No

Background

The area of Phase I, Rockwell Ranch was annexed in 2015. It received approval of a district framework plan in 2019 (Olive Tree District Framework Plan), followed by block plan approval (staff level review). As part of the lot plan submittal and review, subdivision plats are necessary. Further lot plan review (staff level review) will ensure placement of structures, setbacks, height, landscaping, number of multi-family units, parking, etc. be compliant with the TOD Code. The subdivision plat acts as a formal instrument in proceeding toward development of the site.

This plat anticipates townhome development.

Consistency with the Land Use Plan:

The Land Use Plan designates this area as “TOD”. The proposed subdivision is consistent with the Land Use Plan designation.

Section 17.7.211 of the Development Code

The Planning Commission may act to recommend approval of a final plat upon a finding that:

a. The final plat and supporting materials conform with the terms of the preliminary plan approval.

   The final plat conforms to the terms of a preliminary plan approval.

b. The final plat complies with all City requirements and standards relating to large scale developments.

   This criterion has been met.

c. The detailed engineering plans and materials comply with the City standards and policies.

   Engineering will address any concerns at the time of the Planning Commission meeting.

d. The estimates of cost of constructing the required improvements are realistic.

   Engineering will determine whether the cost estimates of constructing the required improvements are realistic.

e. The water rights conveyance documents have been provided.

   The water rights conveyance shall be satisfied prior to plat recordation.

FINDINGS OF FACT/CONDITION OF APPROVAL

After reviewing the applications for final plat approval, the following findings are offered for consideration:

1. The final plats are consistent with the Land Use Plan designation of “Transit Oriented Development”.

2. The final plats meet the criteria as found in Section 17.7.211 of the Development Code.

3. Water rights conveyance shall be satisfied prior to plat recordation.

POTENTIAL MOTIONS

APPROVAL

Mr. Chairman, I move that we approve the preliminary plan and recommend approval of the final plat of Rockwell Ranch Phase I, with the findings and condition listed in the staff report and subject to any findings, conditions, and modifications listed in the engineering report.

DENIAL

Mr. Chairman, I move that we recommend denial of the final plat of Rockwell Ranch Phase I.

TABLE

Mr. Chairman, I move that we table action on the preliminary plan and final plat of Rockwell Ranch Phase I.

AMERICAN FORK CITY ENGINEERING DIVISION
STAFF REPORT

Planning Commission Meeting Date: 7/22/2020

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: Rockwell Ranch Block 1 Phase 1

Project Address: 1060 West 400 South

Developer / Applicant's Name: White Horse Developers

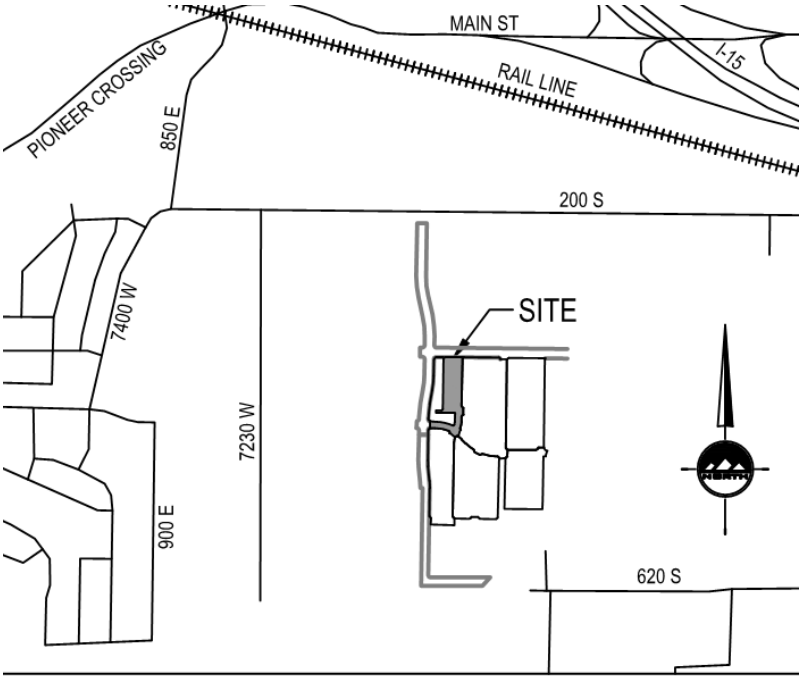
Type of Application:

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

Engineering Division Recommendation: The Engineering Division recommends APPROVAL of the proposed development subject to the following findings and conditions:

1. All Standard Conditions of Approval and items denoted as "Plan Modification(s) Required" in the Click here to enter a date. Engineering Division Staff Report for the City Land Use Authority shall be addressed on all final project documents.

Project Map:



VICINITY MAP
NO SCALE

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. **Sensitive Lands:** Record all applicable documents required for compliance with the City's Sensitive Lands Ordinance.
9. **Utility Notification Form:** Submit a Subdivision Utility Notification Form.
10. **Professional Verification:** Submit final stamped construction documentation by all appropriate professionals.
11. **Fees:** Payment of all development, inspection, recording, street light, and other project related fees.
12. **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).

Plan Modifications Required:

1.

811 Know what's below. Call before you dig.

CALL BLUESTAKES @ 811 AT LEAST 48 HOURS PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION.

BENCHMARK

NW CORNER OF SECTION 22, TOWNSHIP 5 SOUTH, RANGE 1 EAST SALT LAKE BASE AND MERIDIAN

ELEV = 4524.26'

THE VILLAS AT ROCKWELL RANCH BLOCK 1 - PHASE 1

AMERICAN FORK, UTAH

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DATE PRINTED July 13, 2020

NOTICE TO CONTRACTOR

ALL CONTRACTORS AND SUBCONTRACTORS PERFORMING WORK SHOWN ON OR RELATED TO THESE PLANS SHALL CONDUCT THEIR OPERATIONS SO THAT ALL EMPLOYEES ARE PROVIDED A SAFE PLACE TO WORK AND THE PUBLIC IS PROTECTED. ALL CONTRACTORS AND SUBCONTRACTORS SHALL COMPLY WITH THE "OCCUPATIONAL SAFETY AND HEALTH REGULATIONS OF THE U.S. DEPARTMENT OF LABOR AND THE STATE OF UTAH DEPARTMENT OF INDUSTRIAL RELATIONS CONSTRUCTION SAFETY ORDERS." THE CIVIL ENGINEER SHALL NOT BE RESPONSIBLE IN ANY WAY FOR THE CONTRACTORS AND SUBCONTRACTORS COMPLIANCE WITH SAID REGULATIONS AND ORDERS.

CONTRACTOR FURTHER AGREES TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB-SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY, THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE CIVIL ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR ENGINEER.

CONTACT INFORMATION

COMPANY	CONTACT	NUMBER
American Fork City Public Works		
- Culinary Water / Pressurized	Jay Brems	(801) 763-3060
- Sewer / Storm Water	Ashton Hardy	(801) 763-3060
- City Inspector	Dee Howard	(801) 763-3060
- SWPPP Inspector	Harlan Nielson	(801) 763-3060
America Fork Fire Marshall	Mat Sacco	(801) 763-3045
At Fiber	Will Davis	(801) 897-9826
American Fork Irrigation Company	Ernie John	(801) 471-6576
Century Link	Bill Westfall	(435) 623-4252
Comcast	Elysia Valdez	(801) 401-3017
Dominion Energy	Trent Johnson	(801) 853-6548
Rocky Mountain Power	Teria Walker	(801) 756-1310
Timpanogos Special Service District	David Barlow	(801) 756-5231

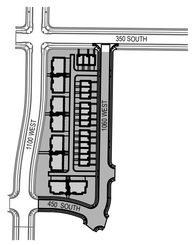
NOTICE TO DEVELOPER/CONTRACTOR

UNAPPROVED DRAWINGS REPRESENT WORK IN PROGRESS, ARE SUBJECT TO CHANGE, AND DO NOT CONSTITUTE A FINISHED ENGINEERING PRODUCT. ANY WORK UNDERTAKEN BY DEVELOPER OR CONTRACTOR BEFORE PLANS ARE APPROVED IS UNDERTAKEN AT THE SOLE RISK OF THE DEVELOPER, INCLUDING BUT NOT LIMITED TO BIDS, ESTIMATION, FINANCING, BONDING, SITE CLEARING, GRADING, INFRASTRUCTURE CONSTRUCTION, ETC.

UTILITY DISCLAIMER

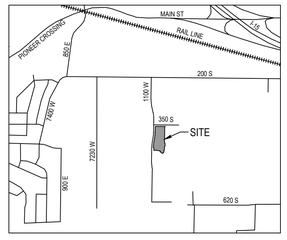
THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND / OR ELEVATIONS OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE LOCAL UTILITY LOCATION CENTER AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATIONS OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.

KEY MAP



NO SCALE

VICINITY MAP



NO SCALE

GENERAL NOTES

1. ALL WORK SHALL CONFORM TO AMERICAN FORK CITY STANDARDS & SPECIFICATIONS.
2. CALL BLUE STAKES AT LEAST 48 HOURS PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES.
3. BENCHMARK ELEVATION = NORTHWEST CORNER SECTION 22, T5S, R1E SALT LAKE BASE & MERIDIAN ELEV. = 4524.26'.
4. FEMA COMMUNITY PANEL NUMBER 49049C0302F, EFFECTIVE DATE JUNE 19 2019, AREA DETERMINED TO BE OUTSIDE THE 500-YEAR FLOODPLAIN.

ENSIGN
THE STANDARD IN ENGINEERING

SALT LAKE CITY
45 W. 10000 S., Suite 500
Sandy, UT 84070
Phone: 801.255.0529

LAYTON
Phone: 801.547.1100

TOOELE
Phone: 435.843.3590

CEDAR CITY
Phone: 435.865.1453

RICHFIELD
Phone: 435.896.2983

WWW.ENSIGNENG.COM

FOR:
WHITE HORSE DEVELOPERS
520 SOUTH 850 EAST, SUITE A4
LEHI, UTAH 84043
CONTACT:
JAKE HORAN
PHONE: 801-362-8420

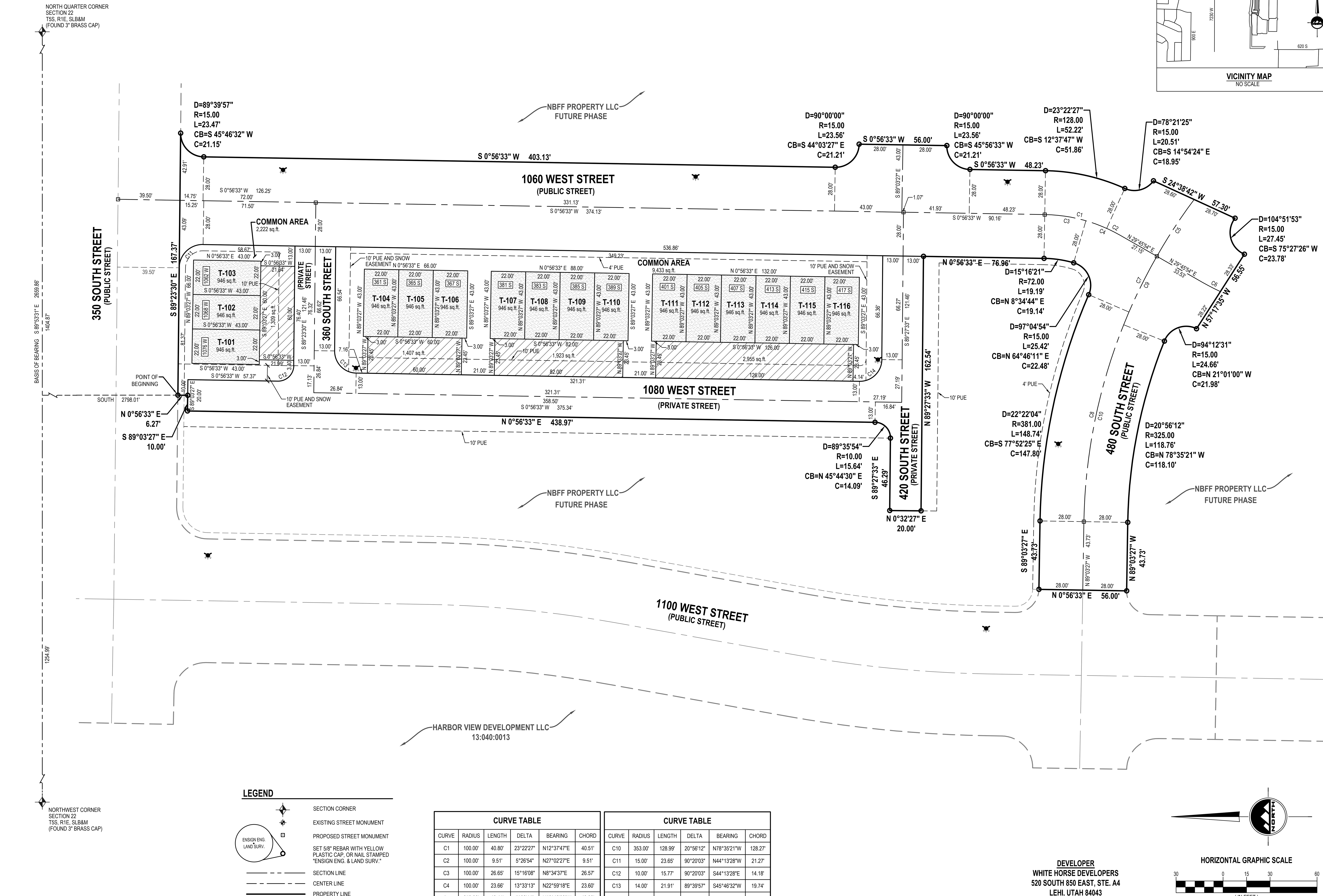
THE VILLAS AT ROCKWELL RANCH
BLOCK 1 - PHASE 1
1060 WEST 420 SOUTH
AMERICAN FORK, UTAH 84003

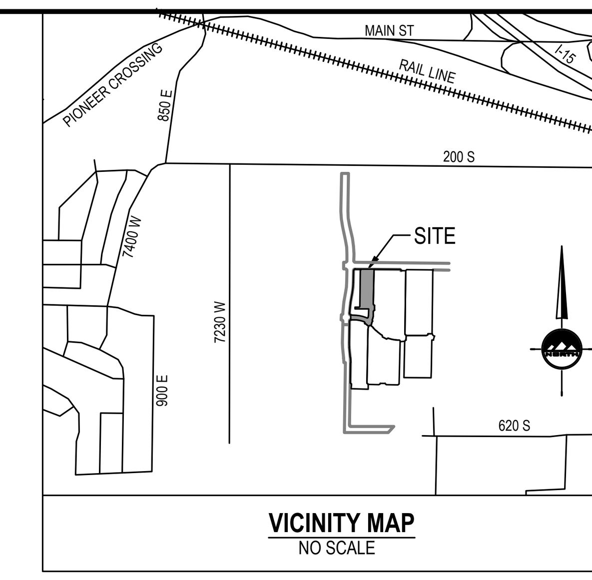
COVER

PROJECT NUMBER 8799F.1
PRINT DATE 7/13/20
DRAWN BY BCA
CHECKED BY J.FORD
PROJECT MANAGER J.FORD

ROCKWELL RANCH BLOCK 1 PHASE 1 PLAT

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
ZONING TOD





VICINITY MAP
NO SCALE

SURVEYOR'S CERTIFICATE

I, PATRICK M. HARRIS, 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 NUMBER 286882. 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 DESCRIBED 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.

BOUNDARY DESCRIPTION

Beginning at a point being South 89°53'31" East 1,254.99 feet along section line and South 2,798.01 feet from the Northwest Corner of Section 22, Township 5 South, Range 1 East, Salt Lake Base and Meridian; and running

thence South 89°23'30" East 167.37 feet;
thence Southwesterly 23.47 feet along the arc of a 15.00 foot radius curve to the left (center bears South 00°36'30" West and the chord bears South 45°46'32" West 21.15 feet with a central angle of 89°39'57");
thence South 00°56'33" West 403.13 feet;
thence Southeasterly 23.56 feet along the arc of a 15.00 foot radius curve to the left (center bears South 89°03'27" East and the chord bears South 44°03'27" East 21.21 feet with a central angle of 90°00'00");
thence South 00°56'33" West 56.00 feet;
thence Southwesterly 23.56 feet along the arc of a 15.00 foot radius curve to the left (center bears South 00°56'33" West and the chord bears South 45°56'33" West 21.21 feet with a central angle of 90°00'00");
thence South 00°56'33" West 48.23 feet;
thence Southerly 52.22 feet along the arc of a 128.00 foot radius curve to the right (center bears North 89°03'27" West and the chord bears South 12°37'47" West 51.86 feet with a central angle of 23°22'27");
thence Southerly 20.51 feet along the arc of a 15.00 foot radius curve to the left (center bears South 65°43'41" East and the chord bears South 14°54'24" East 18.95 feet with a central angle of 78°21'25");
thence South 24°38'42" West 57.30 feet;
thence Westerly 27.45 feet along the arc of a 15.00 foot radius curve to the left (center bears South 37°53'22" West and the chord bears South 75°27'26" West 23.78 feet with a central angle of 104°51'53");
thence North 57°17'35" West 56.55 feet;
thence Northerly 24.66 feet along the arc of a 15.00 foot radius curve to the left (center bears North 63°54'44" West and the chord bears North 21°01'00" West 21.98 feet with a central angle of 94°12'31");
thence Westerly 118.76 feet along the arc of a 325.00 foot radius curve to the left (center bears South 21°52'45" West and the chord bears North 78°35'21" West 118.10 feet with a central angle of 20°56'12");
thence North 89°03'27" West 43.73 feet;
thence North 00°56'33" East 56.00 feet;
thence South 89°03'27" East 43.73 feet;
thence Southeasterly 148.74 feet along the arc of a 381.00 foot radius curve to the right (center bears South 00°56'33" West and the chord bears South 77°52'25" East 147.80 feet with a central angle of 22°22'04");
thence Northeasterly 25.42 feet along the arc of a 15.00 foot radius curve to the left (center bears North 23°18'37" East and the chord bears North 64°46'11" East 22.48 feet with a central angle of 97°04'54");
thence Northeasterly 19.19 feet along the arc of a 72.00 foot radius curve to the left (center bears North 73°47'18" West and the chord bears North 08°34'44" East 19.14 feet with a central angle of 15°16'21");
thence North 00°56'33" East 76.96 feet;
thence North 89°27'33" West 162.54 feet;
thence North 00°32'27" East 20.00 feet;
thence South 89°27'33" East 46.29 feet;
thence Northeasterly 15.64 feet along the arc of a 10.00 foot radius curve to the left (center bears North 00°32'27" East and the chord bears North 45°44'30" East 14.09 feet with a central angle of 89°35'54");
thence North 00°56'33" East 438.97 feet;
thence South 89°03'27" East 10.00 feet;
thence North 00°56'33" East 6.27 feet to the point of beginning.

Contains 102,401 Square Feet or 2.351 Acres and 16 Townhomes

OWNER'S DEDICATION

KNOWN ALL MEN BY THESE PRESENT THAT WE, ALL OF THE UNDERSIGNED OWNERS OF ALL OF THE PROPERTY DESCRIBED IN THE SURVEYOR'S CERTIFICATE HEREIN AND SHOWN ON THIS MAP, HAVE CAUSED THE SAME TO BE SUBDIVIDED INTO STREETS AND EASEMENTS AND DO HEREBY DEDICATE THE STREETS AND OTHER PUBLIC AREAS AS INDICATED HEREON FOR PERPETUAL USE OF THE PUBLIC.
PURSUANT TO CODE 10-9A-604D THE OWNER HEREBY CONVEYS THE COMMON AREA AND PRIVATE STREETS AS INDICATED HEREON TO THE ROCKWELL RANCH MASTER OWNERS ASSOCIATION, INC., 520 SOUTH 850 EAST, SUITE A300, LEHI, UTAH 84043.

IN WITNESS HEREOF WE HAVE HEREUNTO SET OUR HANDS THIS ________ DAY OF __________________, A.D. 20_____.

NAME
COMPANY

NAME
COMPANY

LIMITED LIABILITY COMPANY ACKNOWLEDGMENT

STATE OF UTAH
COUNTY OF__________________ } S.S.

ON THE ______ DAY OF ________________ A.D. 20 ___, ____________________________ PERSONALLY APPEARED BEFORE ME, THE UNDERSIGNED NOTARY PUBLIC, IN AND FOR SAID COUNTY OF____________, IN SAID STATE OF UTAH, WHO AFTER BEING DULY SWORN, ACKNOWLEDGED TO ME THAT HE/SHE IS THE ________________ , OF ____________________________ , A LIMITED LIABILITY COMPANY AND THAT HE/SHE SIGNED THE OWNER'S DEDICATION FREELY AND VOLUNTARILY FOR AND IN BEHALF OF SAID LIMITED LIABILITY COMPANY FOR THE PURPOSES THEREIN MENTIONED AND ACKNOWLEDGED TO ME THAT SAID LIMITED LIABILITY COMPANY EXECUTED THE SAME.

MY COMMISSION EXPIRES: ____________________
NAME: ____________________
NO: ____________________
A NOTARY PUBLIC COMMISSION IN UTAH

NOTARY PUBLIC
RESIDING IN ________________ COUNTY

APPROVAL BY LEGISLATIVE BODY

THE ______________________ OF ______________________________ COUNTY OF UTAH, APPROVES THIS SUBDIVISION AND HEREBY ACCEPTS THE DEDICATION OF ALL THE STREETS, EASEMENTS, AND OTHER PARCELS OF LAND INTENDED FOR PUBLIC PURPOSES FOR THE PERPETUAL USE OF THE PUBLIC THIS ________ DAY OF _____________, A.D. 20____

MAYOR — CITY COUNCIL MEMBER
CITY COUNCIL MEMBER — CITY COUNCIL MEMBER
CITY COUNCIL MEMBER — CITY COUNCIL MEMBER
CITY ENGINEER — ATTEST: CLERK - RECORDER (SEE SEAL BELOW)

PLANNING COMMISSION APPROVAL

APPROVED THIS _______ DAY OF _____________ A.D. 20_____. BY THE AMERICAN FORK CITY PLANNING COMMISSION.

PLANNER — PLANNING COMMISSION CHAIRMAN

LEGEND

- SECTION CORNER
- EXISTING STREET MONUMENT
- PROPOSED STREET MONUMENT
- SET 5/8" REBAR WITH YELLOW PLASTIC CAP, OR NAIL STAMPED "ENSIGN ENG. & LAND SURV." (ENSIGN ENG. LAND SURV.)
- SECTION LINE
- CENTER LINE
- PROPERTY LINE
- ADJACENT PROPERTY LINE
- ADJACENT RIGHT OF WAY LINE
- PRIVATE AREA
- LIMITED COMMON AREA
- COMMON AREA
- FIRE HYDRANT

NOTES
1. OFFSET PINS TO BE PLACED AT THE TOP BACK OF CURB AT EACH PROJECTED PROPERTY LINE AND 5/8" BY 24" REBAR WITH NUMBERED SURVEY CAP TO BE PLACED AT ALL REAR LOT CORNERS PRIOR TO OCCUPANCY.
2. LOWEST FLOOR SLAB ELEVATION MUST BE A MINIMUM OF 3 FEET ABOVE WATER LEVEL MEASURED DURING SPRING SEASON.
3. 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 MARSHALL AND CHARGED WITH CULINARY WATER.
4. COMMON SPACE AREAS AND PRIVATE STREETS TO BE MAINTAINED BY THE HOME OWNERS ASSOCIATION.

CURVE TABLE

CURVE	RADIUS	LENGTH	DELTA	BEARING	CHORD
C1	100.00'	40.80'	23°22'27"	N12°37'47"E	40.51'
C2	100.00'	9.51'	5°26'54"	N27°02'27"E	9.51'
C3	100.00'	26.65'	15°16'08"	N8°34'37"E	26.57'
C4	100.00'	23.66'	13°33'13"	N22°59'18"E	23.60'
C5	353.00'	43.41'	7°02'44"	N56°42'03"W	43.38'
C6	150.00'	12.88'	4°55'13"	S27°18'18"W	12.88'
C7	353.00'	39.84'	6°27'58"	N63°27'24"W	39.82'
C8	353.00'	137.81'	22°22'04"	N77°52'25"W	136.94'
C9	353.00'	48.66'	7°53'50"	N64°10'20"W	48.62'

CURVE TABLE

CURVE	RADIUS	LENGTH	DELTA	BEARING	CHORD
C10	353.00'	128.99'	20°56'12"	N78°35'21"W	128.27'
C11	15.00'	23.65'	90°20'03"	N44°13'28"W	21.27'
C12	10.00'	15.77'	90°20'03"	S44°13'28"E	14.18'
C13	14.00'	21.91'	89°39'57"	S45°46'32"W	19.74'
C14	14.00'	22.09'	90°24'06"	S44°15'30"E	19.87'

DEVELOPER
WHITE HORSE DEVELOPERS
520 SOUTH 850 EAST, STE. A4
LEHI, UTAH 84043

WATER AND SEWER AUTHORITY APPROVAL

APPROVED THIS ________ DAY OF ______________________, 20_______, BY THE WATER AND SEWER AUTORITY.

PUBLIC WORKS DEPARTMENT DIRECTOR

ENSIGN
SALT LAKE CITY
45 W. 10000 S., Suite 500
Sandy, UT. 84070
Phone: 801.255.0529
Fax: 801.255.4449
WWW.ENSIGNENG.COM
LAYTON Phone:801.547.1100
TOOELE Phone: 435.843.3590
CEDAR CITY Phone: 435.865.1453
RICHFIELD Phone: 435.896.2983

SHEET 1 OF 1
PROJECT NUMBER : 8799F.1
MANAGER : JKF
DRAWN BY : JWJ
CHECKED BY : KFW
DATE : 7/13/20

BASIS OF BEARING

THE BASIS OF BEARING IS BETWEEN THE NORTHWEST CORNER AND THE NORTH QUARTER CORNER OF SECTION 22, TOWNSHIP 5 SOUTH, RANGE 1 EAST, SALT LAKE BASE AND MERIDIAN, WITH A BEARING OF SOUTH 89°53'31" EAST.

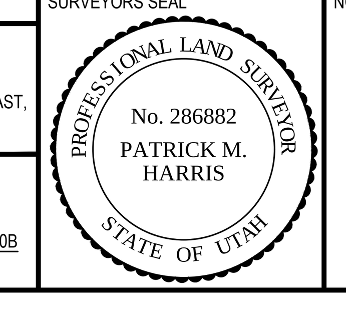
FLOOD ZONE DESIGNATION

SUBJECT PROPERTY FALLS WITHIN FLOOD ZONE X AS DELINEATED BY F.E.M.A. FLOOD INSURANCE RATE MAP, COMMUNITY PANEL MAP 4955170120B EFFECTIVE JULY 17, 2002 .

ROCKWELL RANCH BLOCK 1 PHASE 1 PLAT

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

SURVEYORS SEAL



NOTARY PUBLIC SEAL

CLERK-RECORDER SEAL

GENERAL NOTES

1. ALL CONSTRUCTION MUST STRICTLY FOLLOW THE STANDARDS AND SPECIFICATIONS SET FORTH BY: THE DESIGN ENGINEER, LOCAL AGENCY JURISDICTION, APWA (CURRENT EDITION), AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.). THE ORDER LISTED ABOVE IS ARRANGED BY SENIORITY. THE LATEST EDITION OF ALL STANDARDS AND SPECIFICATIONS MUST BE ADHERED TO. IF A CONSTRUCTION PRACTICE IS NOT SPECIFIED BY ANY OF THE LISTED SOURCES, CONTRACTOR MUST CONTACT DESIGN ENGINEER FOR DIRECTION.

2. CONTRACTOR TO STRICTLY FOLLOW THE MOST CURRENT COPY OF THE SOILS REPORT FOR THIS PROJECT. ALL GRADING INCLUDING BUT NOT LIMITED TO CUT, FILL, COMPACTION, ASPHALT SECTION, SUBBASE, TRENCH EXCAVATION/BACKFILL, SITE GRUBBING, AND FOOTINGS MUST BE COORDINATED DIRECTLY WITH SOILS REPORT.

3. CONTRACTOR MUST VERIFY ALL EXISTING CONDITIONS BEFORE BIDDING, AND BRING UP ANY QUESTIONS BEFORE SUBMITTING BID.

4. CONTRACTOR SHALL PROVIDE A CONSTRUCTION SCHEDULE IN ACCORDANCE WITH THE CITY, STATE, OR COUNTY REGULATIONS FOR WORKING IN THE PUBLIC WAY.

5. CONTRACTOR SHALL BE RESPONSIBLE FOR DUST CONTROL ACCORDING TO GOVERNING AGENCY STANDARDS. WET DOWN DRY MATERIALS AND RUBBISH TO PREVENT BLOWING.

6. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO ADJACENT SURFACE IMPROVEMENTS.

7. CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECTING ANY SETTLEMENT OF OR DAMAGE TO EXISTING UTILITIES.

8. THE CONTRACTOR IS RESPONSIBLE TO FURNISH ALL MATERIALS TO COMPLETE THE PROJECT.

9. ALL EXPOSED SURFACES WILL HAVE A TEXTURED FINISH, RUBBED, OR BROOMED. ANY "PLASTERING" OF NEW CONCRETE WILL BE DONE WHILE IT IS STILL "GREEN".

10. PRIOR TO STARTING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED AND THOROUGHLY REVIEWED ALL PLANS AND OTHER DOCUMENTS APPROVED BY ALL OF THE PERMITTING AUTHORITIES.

11. THE LOCATIONS OF UNDERGROUND FACILITIES SHOWN ON THESE PLANS ARE BASED ON FIELD SURVEYS AND LOCAL UTILITY COMPANY RECORDS. IT SHALL BE THE CONTRACTOR'S FULL RESPONSIBILITY TO CONTACT THE VARIOUS UTILITY COMPANIES TO LOCATE THEIR FACILITIES PRIOR TO PROCEEDING WITH CONSTRUCTION. NO ADDITIONAL COMPENSATION SHALL BE PAID TO THE CONTRACTOR FOR DAMAGE AND REPAIR TO THESE FACILITIES CAUSED BY HIS WORK FORCE. CONTRACTOR SHALL START INSTALLATION AT LOW POINT OF ALL NEW GRAVITY UTILITY LINES.

12. ALL DIMENSIONS, GRADES, AND UTILITY DESIGN SHOWN ON THE PLANS SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE ENGINEER IF ANY DISCREPANCIES EXIST, PRIOR TO PROCEEDING WITH CONSTRUCTION FOR NECESSARY PLAN OR GRADE CHANGES. NO EXTRA COMPENSATION SHALL BE PAID TO THE CONTRACTOR FOR WORK HAVING TO BE REDONE DUE TO THE DIMENSIONS OR GRADES SHOWN INCORRECTLY ON THESE PLANS, IF SUCH NOTIFICATION HAS NOT BEEN GIVEN.

13. NO CHANGE IN DESIGN LOCATION OR GRADE WILL BE MADE BY THE CONTRACTOR WITHOUT THE WRITTEN APPROVAL OF THE PROJECT ENGINEER.

14. NATURAL VEGETATION AND SOIL COVER SHALL NOT BE DISTURBED PRIOR TO ACTUAL CONSTRUCTION OF A REQUIRED FACILITY OR IMPROVEMENT. MASS CLEARING OF THE SITE IN ANTICIPATION OF CONSTRUCTION SHALL BE AVOIDED.

15. CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING, MAINTAINING, OR RESTORING ALL MONUMENTS AND MONUMENT REFERENCE MARKS WITHIN THE PROJECT SITE. CONTACT THE CITY OR COUNTY SURVEYOR FOR MONUMENT LOCATIONS AND CONSTRUCTION DETAILS.

16. EXISTING UTILITY INFORMATION SHOWN IS FOR INFORMATIONAL PURPOSES ONLY. IT IS DERIVED FROM ON-SITE SURVEY AND/OR UTILITY MAPPING PROVIDED TO THE ENGINEER, AND THEREFORE UTILITIES MAY NOT BE LOCATED CORRECTLY, EITHER HORIZONTALLY OR VERTICALLY, AND MAY NOT BE ALL INCLUSIVE. CONTRACTOR IS REQUIRED TO FOLLOW THE PROCEDURE OUTLINED BELOW:
    - 16.1. CONTRACTOR IS REQUIRED TO LOCATE AND POTHOLE ALL EXISTING UTILITY LINES (BOTH HORIZONTALLY AND VERTICALLY) THAT AFFECT THE PROJECT CONSTRUCTION, EITHER ON-SITE OR OFF-SITE, AND DETERMINE IF THERE ARE ANY CONFLICTS WITH THE DESIGN OF THE SITE AS SHOWN ON THE APPROVED PLANS PRIOR TO ANY CONSTRUCTION. IF IT IS DETERMINED THAT CONFLICTS EXIST BETWEEN EXISTING UTILITIES AND DESIGN UTILITIES (OR ANOTHER ASPECT OF PROPOSED CONSTRUCTION) THE ENGINEER MUST BE NOTIFIED IMMEDIATELY TO CORRECT THE CONFLICTS BEFORE ANY WORK CAN BEGIN. IF THE CONTRACTOR FAILS TO FOLLOW THIS ABSOLUTE REQUIREMENT AND CONFLICTS ARISE DURING CONSTRUCTION THE CONTRACTOR WILL BEAR THE SOLE RESPONSIBILITY TO FIX THE CONFLICTS.
    - 16.2. CONTRACTOR IS REQUIRED TO VERIFY THAT PROPER COVER AND PROTECTION OF EXISTING UTILITY LINES IS MAINTAINED OR ATTAINED WITHIN THE DESIGN ONCE VERIFICATION OF THE EXISTING UTILITIES IS COMPLETED AS OUTLINED IN 16.1 ABOVE.
    - 16.3. IN ADDITION TO 16.1 AND 16.2 ABOVE THE CONTRACTOR WILL VERIFY DEPTHS OF UTILITIES IN THE FIELD BY "POTHOLING" A MINIMUM OF 300 FEET AHEAD OF PROPOSED PIPELINE CONSTRUCTION TO AVOID POTENTIAL CONFLICTS WITH DESIGNED PIPELINE ALIGNMENT AND GRADE AND EXISTING UTILITIES.
    - 16.4. IF A CONFLICT ARISES BETWEEN EXISTING UTILITIES AND DESIGN UTILITIES (OR ANOTHER ASPECT OF PROPOSED CONSTRUCTION) AS DETERMINED UNDER 16.1, 16.2 OR 16.3 THE CONTRACTOR WILL NOTIFY THE ENGINEER IMMEDIATELY TO RESOLVE THE CONFLICT.
    - 16.5. IF A CONFLICT ARISES BETWEEN EXISTING UTILITIES AND DESIGN UTILITIES (OR ANOTHER ASPECT OF PROPOSED CONSTRUCTION) RESULTING FROM THE CONTRACTOR'S NEGLIGENCE TO IDENTIFY AND/OR “POTHOLE” EXISTING UTILITIES AS REQUIRED IN 16.1, 16.2 AND 16.3 ABOVE, THE CONTRACTOR WILL BE REQUIRED TO RESOLVE THE CONFLICT WITHOUT ADDITIONAL COST OR CLAIM TO THE OWNER OR ENGINEER.

17. ANY AREA OUTSIDE THE LIMIT OF WORK THAT IS DISTURBED SHALL BE RESTORED TO ITS ORIGINAL CONDITION AT NO COST TO OWNER.

18. CONSULT ALL OF THE DRAWINGS AND SPECIFICATIONS FOR COORDINATION REQUIREMENTS BEFORE COMMENCING CONSTRUCTION.

19. AT ALL LOCATIONS WHERE EXISTING PAVEMENT ABUTS NEW CONSTRUCTION, THE EDGE OF THE EXISTING PAVEMENT SHALL BE SAWCUT TO A CLEAN, SMOOTH EDGE.

20. ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE MOST RECENT, ADOPTED EDITION OF ADA ACCESSIBILITY GUIDELINES.

21. CONTRACTOR SHALL, AT THE TIME OF BIDDING AND THROUGHOUT THE PERIOD OF THE CONTRACT, BE LICENSED IN THE STATE OF UTAH AND SHALL BE BONDABLE FOR AN AMOUNT REQUIRED BY THE OWNER.

22. CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE ALL WATER, POWER, SANITARY FACILITIES AND TELEPHONE SERVICES AS REQUIRED FOR THE CONTRACTOR'S USE DURING CONSTRUCTION.

23. CONTRACTOR SHALL BE RESPONSIBLE FOR ADEQUATELY SCHEDULING INSPECTION AND TESTING OF ALL FACILITIES CONSTRUCTED UNDER THIS CONTRACT. ALL TESTING SHALL CONFORM TO THE REGULATORY AGENCY'S STANDARD SPECIFICATIONS. ALL RE-TESTING AND/OR RE-INSPECTION SHALL BE PAID FOR BY THE CONTRACTOR.

24. IF EXISTING IMPROVEMENTS NEED TO BE DISTURBED AND/OR REMOVED FOR THE PROPER PLACEMENT OF IMPROVEMENTS TO BE CONSTRUCTED BY THESE PLANS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING EXISTING IMPROVEMENTS FROM DAMAGE. COST OF REPLACING OR REPAIRING EXISTING IMPROVEMENTS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEMS REQUIRING REMOVAL AND/OR REPLACEMENT. THERE WILL BE NO EXTRA COST DUE TO THE CONTRACTOR FOR REPLACING OR REPAIRING EXISTING IMPROVEMENTS.

25. WHENEVER EXISTING FACILITIES ARE REMOVED, DAMAGED, BROKEN, OR CUT IN THE INSTALLATION OF THE WORK COVERED BY THESE PLANS OR SPECIFICATIONS, SAID FACILITIES SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE WITH MATERIALS EQUAL TO OR BETTER THAN THE MATERIALS USED IN THE ORIGINAL EXISTING FACILITIES. THE FINISHED PRODUCT SHALL BE SUBJECT TO THE APPROVAL OF THE OWNER, THE ENGINEER, AND THE RESPECTIVE REGULATORY AGENCY.

26. CONTRACTOR SHALL MAINTAIN A NEATLY MARKED SET OF FULL-SIZE RECORD DRAWINGS SHOWING THE FINAL LOCATION AND LAYOUT OF ALL STRUCTURES AND OTHER FACILITIES. RECORD DRAWINGS SHALL REFLECT CHANGE ORDERS, ACCOMMODATIONS, AND ADJUSTMENTS TO ALL IMPROVEMENTS CONSTRUCTED. WHERE NECESSARY, SUPPLEMENTAL DRAWINGS SHALL BE PREPARED AND SUBMITTED BY THE CONTRACTOR. PRIOR TO ACCEPTANCE OF THE PROJECT, THE CONTRACTOR SHALL DELIVER TO THE ENGINEER ONE SET OF NEATLY MARKED RECORD DRAWINGS SHOWING THE INFORMATION REQUIRED ABOVE. RECORD DRAWINGS SHALL BE REVIEWED AND THE COMPLETE RECORD DRAWING SET SHALL BE CURRENT WITH ALL CHANGES AND DEVIATIONS REDLINED AS A PRECONDITION TO THE FINAL PROGRESS PAYMENT APPROVAL AND/OR FINAL ACCEPTANCE.

27. WHERE THE PLANS OR SPECIFICATIONS DESCRIBE PORTIONS OF THE WORK IN GENERAL TERMS BUT NOT IN COMPLETE DETAIL, IT IS UNDERSTOOD THAT ONLY THE BEST GENERAL PRACTICE IS TO PREVAIL AND THAT ONLY MATERIALS AND WORKMANSHIP OF THE FIRST QUALITY ARE TO BE USED.

28. ALL EXISTING GATES AND FENCES TO REMAIN UNLESS OTHERWISE NOTED ON PLANS. PROTECT ALL GATES AND FENCES FROM DAMAGE.

29. ALL EXISTING TREES ARE TO REMAIN UNLESS OTHERWISE NOTED ON PLANS. PROTECT ALL TREES FROM DAMAGE.

30. ASPHALT MIX DESIGN MUST BE SUBMITTED AND APPROVED BY THE GOVERNING AGENCY PRIOR TO THE PLACEMENT.

31. CONTRACTORS ARE RESPONSIBLE FOR ALL OSHA REQUIREMENTS ON THE PROJECT SITE.

32. A UPDES (UTAH POLLUTANT DISCHARGE ELIMINATION SYSTEM) PERMIT IS REQUIRED FOR ALL CONSTRUCTION ACTIVITIES 1 ACRE OR MORE AS WELL AS A STORM WATER POLLUTION PREVENTION PLAN.

UTILITY NOTES

1. ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THESE CONTRACT DOCUMENTS, CITY AND STATE REQUIREMENTS AND THE MOST RECENT EDITIONS OF THE FOLLOWING: THE INTERNATIONAL PLUMBING CODE, UTAH DRINKING WATER REGULATIONS, APWA MANUAL OF STANDARD PLANS AND SPECIFICATIONS. THE CONTRACTOR IS REQUIRED TO ADHERE TO ALL OF THE ABOVE-MENTIONED DOCUMENTS UNLESS OTHERWISE NOTED AND APPROVED BY THE ENGINEER.

2. CONTRACTOR SHALL COORDINATE LOCATION OF NEW "DRY UTILITIES" WITH THE APPROPRIATE UTILITY COMPANY, INCLUDING BUT NOT LIMITED TO: TELEPHONE & INTERNET SERVICE, GAS SERVICE, CABLE, AND POWER.

3. EXISTING UTILITIES HAVE BEEN SHOWN ON THE PLANS BASED ON ON-SITE SURVEY. PRIOR TO COMMENCING ANY WORK, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO HAVE EACH UTILITY COMPANY LOCATE, IN THE FIELD, THEIR MAIN AND SERVICE LINES. THE CONTRACTOR SHALL NOTIFY BLUE STAKES AT 1-800-662-4111 48 HOURS IN ADVANCE OF PERFORMING ANY EXCAVATION WORK. THE CONTRACTOR SHALL RECORD THE BLUE STAKES ORDER NUMBER AND FURNISH ORDER NUMBER TO OWNER AND ENGINEER PRIOR TO ANY EXCAVATION. IT WILL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO DIRECTLY CONTACT ANY OTHER UTILITY COMPANIES THAT ARE NOT MEMBERS OF BLUE STAKES. IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO PROTECT ALL EXISTING UTILITIES SO THAT NO DAMAGE RESULTS TO THEM DURING THE PERFORMANCE OF THIS CONTRACT. ANY REPAIRS NECESSARY TO DAMAGED UTILITIES SHALL BE PAID FOR BY THE CONTRACTOR. THE CONTRACTOR SHALL BE REQUIRED TO COOPERATE WITH OTHER CONTRACTORS AND UTILITY COMPANIES INSTALLING NEW STRUCTURES, UTILITIES AND SERVICE TO THE PROJECT.

4. CARE SHOULD BE TAKEN IN ALL EXCAVATIONS DUE TO POSSIBLE EXISTENCE OF UNRECORDED UTILITY LINES. EXCAVATION REQUIRED WITHIN PROXIMITY OF EXISTING UTILITY LINES SHALL BE DONE BY HAND. CONTRACTOR SHALL REPAIR ANY DAMAGE TO EXISTING UTILITY LINES OR STRUCTURES INCURRED DURING CONSTRUCTION OPERATIONS AT CONTRACTOR'S EXPENSE.

5. TRENCH BACKFILL MATERIAL AND COMPACTION TESTS ARE TO BE TAKEN PER APWA STANDARD SPECIFICATIONS (CURRENT EDITION), SECTION 02320 - BACKFILLING TRENCHES, OR AS REQUIRED BY THE GEOTECHNICAL REPORT IF NATIVE MATERIALS ARE USED. NO NATIVE MATERIALS ARE ALLOWED IN THE PIPE ZONE. THE MAXIMUM LIFT FOR BACKFILLING EXCAVATIONS IS DETERMINED BY THE GEOTECHNICAL RECOMMENDATIONS.

6. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR CONFORMING TO LOCAL AND FEDERAL CODES GOVERNING SHORING AND BRACING OF EXCAVATIONS AND TRENCHES AND FOR THE PROTECTION OF WORKERS.

7. THE CONTRACTOR IS REQUIRED TO KEEP ALL CONSTRUCTION ACTIVITIES WITHIN THE APPROVED PROJECT LIMITS. THIS INCLUDES, BUT IS NOT LIMITED TO VEHICLE AND EQUIPMENT STAGING, MATERIAL STORAGE AND LIMITS OF TRENCH EXCAVATION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN PERMISSION AND/OR EASEMENTS FROM THE APPROPRIATE GOVERNING ENTITY AND/OR INDIVIDUAL PROPERTY OWNER(S) FOR WORK OR STAGING OUTSIDE OF THE PROJECT LIMITS.

8. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE, CAUSED BY ANY CONDITION INCLUDING SETTLEMENT, TO EXISTING UTILITIES FROM WORK PERFORMED AT OR NEAR EXISTING UTILITIES. THE CONTRACTOR SHALL TAKE ALL MEASURES NECESSARY TO PROTECT ALL EXISTING PUBLIC AND PRIVATE ROADWAY AND UTILITY FACILITIES. DAMAGE TO EXISTING FACILITIES CAUSED BY THE CONTRACTOR MUST BE REPAIRED BY THE CONTRACTOR AT HIS/HER EXPENSE TO THE SATISFACTION OF THE OWNER OF SAID FACILITIES.

9. ALL WATER LINE AND SEWER LINE INSTALLATION AND TESTING TO BE IN ACCORDANCE WITH LOCAL GOVERNING AGENCY'S STANDARDS AND SPECIFICATIONS.

10. ALL MANHOLES, HYDRANTS, VALVES, CLEANOUT BOXES, CATCH BASINS, METERS, ETC. MUST BE RAISED OR LOWERED TO FINAL GRADE PER APWA (CURRENT EDITION) STANDARDS AND INSPECTOR REQUIREMENTS. CONCRETE COLLARS MUST BE CONSTRUCTED ON ALL MANHOLES, CLEANOUT BOXES, CATCH BASINS, AND VALVES PER APWA STANDARDS. ALL MANHOLE, CATCH BASIN, OR CLEANOUT BOX CONNECTIONS MUST BE MADE WITH THE PIPE CUT FLUSH WITH THE INSIDE OF THE BOX AND GROUTED OR SEALED.

11. CONTRACTOR SHALL NOT ALLOW ANY GROUNDWATER OR DEBRIS TO ENTER THE NEW OR EXISTING PIPE DURING CONSTRUCTION.

12. SILT AND DEBRIS ARE TO BE CLEANED OUT OF ALL STORM DRAIN BOXES. CATCH BASINS ARE TO BE MAINTAINED IN A CLEANED CONDITION AS NEEDED UNTIL AFTER THE FINAL BOND RELEASE INSPECTION.

13. CONTRACTOR SHALL CLEAN ASPHALT, TAR OR OTHER ADHESIVES OFF OF ALL MANHOLE LIDS AND INLET GRATES TO ALLOW ACCESS.

14. EACH TRENCH SHALL BE EXCAVATED SO THAT THE PIPE CAN BE LAID TO THE ALIGNMENT AND GRADE AS REQUIRED. THE TRENCH WALL SHALL BE SO BRACED THAT THE WORKMEN MAY WORK SAFELY AND EFFICIENTLY. ALL TRENCHES SHALL BE DRAINED SO THE PIPE LAYING MAY TAKE PLACE IN DEWATERED CONDITIONS.

15. CONTRACTOR SHALL PROVIDE AND MAINTAIN AT ALL TIMES AMPLE MEANS AND DEVICES WITH WHICH TO REMOVE PROMPTLY AND TO PROPERLY DISPOSE OF ALL WATER ENTERING THE TRENCH EXCAVATION.

16. ALL SEWER LINES AND SEWER SERVICES SHALL HAVE A MINIMUM SEPARATION OF 10 FEET, EDGE TO EDGE, FROM THE WATER LINES. IF A 10 FOOT SEPARATION CAN NOT BE MAINTAINED, CONSTRUCT PER GOVERNING AGENCY'S MINIMUM SEPARATION STANDARDS.

17. CONTRACTOR SHALL INSTALL THRUST BLOCKING AT ALL WATERLINE ANGLE POINTS AND TEES.

18. ALL UNDERGROUND UTILITIES SHALL BE IN PLACE PRIOR TO INSTALLATION OF CURB, GUTTER, SIDEWALK AND STREET PAVING.

19. CONTRACTOR SHALL INSTALL MAGNETIC LOCATING TAPE CONTINUOUSLY OVER ALL NONMETALLIC PIPE.

TRAFFIC CONTROL AND SAFETY NOTES

1. TRAFFIC CONTROL AND STRIPING TO CONFORM TO THE CURRENT MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.).

2. BARRICADING AND DETOURING SHALL BE IN CONFORMANCE WITH THE REQUIREMENTS OF THE CURRENT M.U.T.C.D.

3. NO STREET SHALL BE CLOSED TO TRAFFIC WITHOUT WRITTEN PERMISSION FROM THE APPROPRIATE AGENCY, EXCEPT WHEN DIRECTED BY LAW ENFORCEMENT OR FIRE OFFICIALS.

4. THE CONTRACTOR SHALL MAKE EVERY EFFORT TO PROVIDE FOR SMOOTH TRAFFIC FLOW AND SAFETY. ACCESS SHALL BE MAINTAINED FOR ALL PROPERTIES ADJACENT TO THE WORK.

5. DETOURING OPERATIONS FOR A PERIOD OF SIX CONSECUTIVE CALENDAR DAYS, OR MORE, REQUIRE THE INSTALLATION OF TEMPORARY STREET STRIPING AND REMOVAL OF INTERFERING STRIPING BY SANDBLASTING. THE DETOURING STRIPING PLAN OR CONSTRUCTION TRAFFIC CONTROL PLAN MUST BE SUBMITTED TO THE GOVERNING AGENCY FOR REVIEW AND APPROVAL.

6. ALL TRAFFIC CONTROL DEVICES SHALL BE RESTORED TO THEIR ORIGINAL CONDITION AT THE END OF THE WORK TO THE SATISFACTION OF THE GOVERNING AGENCY.

7. TRAFFIC CONTROL DEVICES (TCDs) SHALL REMAIN VISIBLE AND OPERATIONAL AT ALL TIMES.

8. ALL PERMANENT TRAFFIC CONTROL DEVICES CALLED FOR HEREON SHALL BE IN PLACE AND IN FINAL POSITION PRIOR TO ALLOWING ANY PUBLIC TRAFFIC ONTO THE PORTIONS OF THE ROAD(S) BEING IMPROVED HEREUNDER, REGARDLESS OF THE STATUS OF COMPLETION OF PAVING OR OTHER OFF-SITE IMPROVEMENTS CALLED FOR BY THESE PLANS.

9. THE CONTRACTOR SHALL PROVIDE BARRICADES, SIGNS, FLASHERS, OTHER EQUIPMENT AND FLAG PERSONS NECESSARY TO INSURE THE SAFETY OF WORKERS AND VISITORS.

10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING UTAH TRANSIT AUTHORITY (UTA) IF THE CONSTRUCTION INTERRUPTS OR RELOCATES A BUS STOP OR HAS AN ADVERSE EFFECT ON BUS SERVICE ON THAT STREET TO ARRANGE FOR TEMPORARY RELOCATION OF STOP.

DEMOLITION NOTES

1. EXISTING UTILITY INFORMATION SHOWN IS FOR INFORMATIONAL PURPOSES ONLY. IT IS DERIVED FROM ON-SITE SURVEY AND MAY NOT BE LOCATED CORRECTLY AND IS NOT ALL INCLUSIVE. CONTRACTOR SHALL FIELD LOCATE ALL UTILITIES WITHIN THE PROJECT LIMITS BEFORE BEGINNING DEMOLITION/CONSTRUCTION.

2. THERE MAY BE BURIED UTILITIES WITHIN THE LIMITS OF DISTURBANCE THAT ARE NOT SHOWN ON THE PLANS DUE TO LACK OF MAPPING OR RECORD INFORMATION. CONTRACTOR SHALL NOTIFY THE ENGINEER WHEN UNEXPECTED UTILITIES ARE DISCOVERED.

3. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR LOCATING AND PROTECTING FROM DAMAGE ALL EXISTING UTILITIES AND IMPROVEMENTS WHETHER OR NOT SHOWN ON THESE PLANS. THE FACILITIES AND IMPROVEMENTS ARE BELIEVED TO BE CORRECTLY SHOWN BUT THE CONTRACTOR IS REQUIRED TO SATISFY HIMSELF AS TO THE COMPLETENESS AND ACCURACY OF THE LOCATIONS. ANY CONTRACTOR PERFORMING WORK ON THIS PROJECT SHALL FAMILIARIZE HIMSELF WITH THE SITE AND SHALL BE HELD SOLELY RESPONSIBLE FOR ANY DAMAGE TO EXISTING FACILITIES RESULTING DIRECTLY, OR INDIRECTLY, FROM HIS OPERATIONS, WHETHER OR NOT SAID FACILITIES ARE SHOWN ON THESE PLANS.

GRADING AND DRAINAGE NOTES

1. SITE GRADING SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE RECOMMENDATIONS SET FORTH IN THE GEOTECHNICAL REPORT AND ALL RELATED ADDENDUMS.

2. THE CONTRACTOR SHALL STRIP AND CLEAR THE TOPSOIL, MAJOR ROOTS AND ORGANIC MATERIAL FROM ALL PROPOSED BUILDING AND PAVEMENT AREAS PRIOR TO SITE GRADING. (THE TOPSOIL MAY BE STOCKPILED FOR LATER USE IN LANDSCAPED AREAS.)

3. THE CONTRACTOR SHALL REMOVE ALL ORGANIC MATERIAL AND OTHER DELETERIOUS MATERIALS PRIOR TO PLACING GRADING FILL OR BASE COURSE. THE AREA SHOULD BE PROOF-ROLLED TO IDENTIFY ANY SOFT AREAS. WHERE SOFT AREAS ARE ENCOUNTERED, THE CONTRACTOR SHALL REMOVE THE SOIL AND REPLACE WITH COMPACTED FILL.

4. ALL DEBRIS PILES AND BERMS SHOULD BE REMOVED AND HAULED AWAY FROM SITE OR USED AS GENERAL FILL IN LANDSCAPED AREAS.

5. THE CONTRACTOR SHALL GRADE THE PROJECT SITE TO PROVIDE A SMOOTH TRANSITION BETWEEN NEW AND EXISTING ASPHALT, CURB AND GUTTER, AND ADJOINING SITE IMPROVEMENTS.

6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE AND DEBRIS ON ADJACENT STREETS WHEN EQUIPMENT IS TRAVELING THOSE STREETS.

7. THE CONTRACTOR SHALL BE FAMILIAR WITH ALL CONDITIONS AND RECOMMENDATIONS OUTLINED IN THE GEOTECHNICAL REPORT AND TAKE ALL NECESSARY PRECAUTIONS AND RECOMMENDED PROCEDURES TO ASSURE SOUND GRADING PRACTICES.

8. THE CONTRACTOR SHALL TAKE APPROPRIATE GRADING MEASURES TO DIRECT STORM SURFACE RUNOFF TOWARDS CATCH BASINS.

9. THE LOCATIONS OF UNDERGROUND FACILITIES SHOWN ON THESE PLANS ARE BASED ON ON-SITE SURVEY. IT SHALL BE THE CONTRACTORS' FULL RESPONSIBILITY TO CONTACT THE VARIOUS UTILITY COMPANIES TO LOCATE THEIR FACILITIES PRIOR TO PROCEEDING WITH CONSTRUCTION. NO ADDITIONAL COMPENSATION SHALL BE PAID TO THE CONTRACTOR FOR DAMAGE AND REPAIR TO THESE FACILITIES CAUSED BY HIS WORK FORCE.

10. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PERFORM ALL NECESSARY CUTS AND FILLS WITHIN THE LIMITS OF THIS PROJECT AND THE RELATED OFF-SITE WORK, SO AS TO GENERATE THE DESIRED SUBGRADE, FINISH GRADES, AND SLOPES SHOWN.

11. THE CONTRACTOR IS WARNED THAT AN EARTHWORK BALANCE WAS NOT NECESSARILY THE INTENT OF THIS PROJECT. ANY ADDITIONAL MATERIAL REQUIRED OR LEFTOVER MATERIAL FOLLOWING EARTHWORK OPERATIONS BECOMES THE RESPONSIBILITY OF THE CONTRACTOR.

12. THE GRADING CONTRACTOR IS RESPONSIBLE TO COORDINATE WITH THE OWNER TO PROVIDE FOR THE REQUIREMENTS OF THE PROJECT STORM WATER POLLUTION PREVENTION PLAN (SWPPP) AND ASSOCIATED PERMIT. ALL CONTRACTOR ACTIVITIES 1 ACRE OR MORE IN SIZE ARE REQUIRED TO PROVIDE A STORM WATER POLLUTION PREVENTION PLAN.

13. ALL CUT AND FILL SLOPES SHALL BE PROTECTED UNTIL EFFECTIVE EROSION CONTROL HAS BEEN ESTABLISHED.

14. THE USE OF POTABLE WATER WITHOUT A SPECIAL PERMIT FOR BUILDING OR CONSTRUCTION PURPOSES INCLUDING CONSOLIDATION OF BACKFILL OR DUST CONTROL IS PROHIBITED. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS FOR CONSTRUCTION WATER FROM GOVERNING AGENCY.

15. THE CONTRACTOR SHALL MAINTAIN THE STREETS, SIDEWALKS, AND ALL OTHER PUBLIC RIGHT-OF-WAYS IN A CLEAN, SAFE AND USABLE CONDITION. ALL SPILLS OF SOIL, ROCK OR CONSTRUCTION DEBRIS SHALL BE PROMPTLY REMOVED FROM THE PUBLICLY-OWNED PROPERTY DURING CONSTRUCTION AND UPON COMPLETION OF THE PROJECT. ALL ADJACENT PROPERTY, PRIVATE OR PUBLIC, SHALL BE MAINTAINED IN A CLEAN, SAFE, AND USABLE CONDITION.

ABBREVIATIONS

APWA	AMERICAN PUBLIC WORKS ASSOCIATION
AR	ACCESSIBLE ROUTE
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
AWWA	AMERICAN WATER WORKS ASSOCIATION
BOS	BOTTOM OF STEP
BVC	BEGIN VERTICAL CURVE
C	CURVE
CB	CATCH BASIN
CF	CURB FACE OR CUBIC FEET
CL	CENTER LINE
CO	CLEAN OUT
COMM	COMMUNICATION
CONC	CONCRETE
CONT	CONTINUOUS
DIA	DIAMETER
DIP	DUCTILE IRON PIPE
ELEC	ELECTRICAL
ELEV	ELEVATION
EOA	EDGE OF ASPHALT
EVC	END OF VERTICAL CURVE
EW	EACH WAY
EXIST	EXISTING
FF	FINISH FLOOR
FG	FINISH GRADE
FH	FIRE HYDRANT
FL	FLOW LINE OR FLANGE
GB	GRADE BREAK
GF	GARAGE FLOOR
GV	GATE VALVE
HC	HANDICAP
HP	HIGH POINT
IRR	IRRIGATION
K	RATE OF VERTICAL CURVATURE
LD	LAND DRAIN
LF	LINEAR FEET
LP	LOW POINT
MEX	MATCH EXISTING
MH	MANHOLE
MJ	MECHANICAL JOINT
NG	NATURAL GROUND
NIC	NOT IN CONTRACT
NO	NUMBER
OC	ON CENTER
OCEW	ON CENTER EACH WAY
OHP	OVERHEAD POWER
PC	POINT OF CURVATURE OR PRESSURE CLASS
PCC	POINT OF COMPOUND CURVATURE
PI	POINT OF INTERSECTION
PIV	POST INDICATOR VALVE
PL	PROPERTY LINE
PRC	POINT OF REVERSE CURVATURE
PRO	PROPOSED
PT	POINT OF TANGENCY
PVC	POINT OF VERTICAL CURVATURE
PVI	POINT OF VERTICAL INTERSECTION
PVT	POINT OF VERTICAL TANGENCY
R	RADIUS
RD	ROOF DRAIN
ROW	RIGHT OF WAY
S	SLOPE
SAN SWR	SANITARY SEWER
SD	STORM DRAIN
SEC	SECONDARY
SS	SANITARY SEWER
STA	STATION
SW	SECONDARY WATER LINE
TBC	TOP BACK OF CURB
TOG	TOP OF GRATE
TOA	TOP OF ASPHALT
TOC	TOP OF CONCRETE
TOF	TOP OF FOUNDATION
TOW	TOP OF WALL
TOS	TOP OF STEP
TYP	TYPICAL
VC	VERTICAL CURVE
WIV	WALL INDICATOR VALVE
W	WATER LINE

NOTE: MAY CONTAIN ABBREVIATIONS THAT ARE NOT USED IN THIS PLAN SET.

LEGEND

SECTION CORNER	EXISTING EDGE OF ASPHALT
EXISTING MONUMENT	PROPOSED EDGE OF ASPHALT
PROPOSED MONUMENT	EXISTING STRIPING
EXISTING REBAR AND CAP	PROPOSED STRIPING
SET ENSIGN REBAR AND CAP	EXISTING FENCE
EXISTING WATER METER	PROPOSED FENCE
PROPOSED WATER METER	EXISTING FLOW LINE
EXISTING WATER MANHOLE	PROPOSED FLOW LINE
PROPOSED WATER MANHOLE	GRADE BREAK
EXISTING WATER BOX	EXISTING STORM DRAIN LINE
EXISTING WATER VALVE	PROPOSED STORM DRAIN LINE
PROPOSED WATER VALVE	ROOF DRAIN LINE
EXISTING FIRE HYDRANT	CATCHMENTS
PROPOSED FIRE HYDRANT	HIGHWATER LINE
PROPOSED FIRE DEPARTMENT CONNECTION	EXISTING SANITARY SEWER
EXISTING SECONDARY WATER VALVE	PROPOSED SANITARY SEWER LINE
PROPOSED SECONDARY WATER VALVE	PROPOSED SAN. SWR. SERVICE LINE
EXISTING IRRIGATION BOX	EXISTING LAND DRAIN LINE
EXISTING IRRIGATION VALVE	PROPOSED LAND DRAIN LINE
PROPOSED IRRIGATION VALVE	PROPOSED LAND DRAIN SERVICE LINE
EXISTING SANITARY SEWER MANHOLE	EXISTING CULINARY WATER LINE
PROPOSED SANITARY SEWER MANHOLE	PROPOSED CULINARY WATER LINE
EXISTING SANITARY CLEAN OUT	PROPOSED CULINARY WATER SERVICE LINE
EXISTING STORM DRAIN CLEAN OUT BOX	EXISTING SECONDARY WATER LINE
PROPOSED STORM DRAIN CLEAN OUT BOX	PROPOSED SECONDARY WATER LINE
EXISTING STORM DRAIN INLET BOX	PROPOSED SEC. WATER SERVICE LINE
EXISTING STORM DRAIN CATCH BASIN	EXISTING IRRIGATION LINE
PROPOSED STORM DRAIN CATCH BASIN	PROPOSED IRRIGATION LINE
EXISTING STORM DRAIN COMBO BOX	EXISTING OVERHEAD POWER LINE
PROPOSED STORM DRAIN COMBO BOX	EXISTING ELECTRICAL LINE
EXISTING STORM DRAIN CLEAN OUT	EXISTING GAS LINE
EXISTING STORM DRAIN CULVERT	EXISTING TELEPHONE LINE
PROPOSED STORM DRAIN CULVERT	ACCESSIBLE ROUTE
TEMPORARY SAG INLET PROTECTION	SAW CUT LINE
TEMPORARY IN-LINE INLET PROTECTION	STRAW WATTLE
ROOF DRAIN	TEMPORARY BERM
EXISTING ELECTRICAL MANHOLE	TEMPORARY SILT FENCE
EXISTING ELECTRICAL BOX	LIMITS OF DISTURBANCE
EXISTING TRANSFORMER	EXISTING WALL
EXISTING UTILITY POLE	PROPOSED WALL
EXISTING LIGHT	EXISTING CONTOURS
PROPOSED LIGHT	PROPOSED CONTOURS
EXISTING GAS METER	BUILDABLE AREA WITHIN SETBACKS
EXISTING GAS MANHOLE	PUBLIC DRAINAGE EASEMENT
EXISTING GAS VALVE	EXISTING ASPHALT TO BE REMOVED
EXISTING TELEPHONE MANHOLE	PROPOSED ASPHALT
EXISTING TELEPHONE BOX	EXISTING CURB AND GUTTER
EXISTING TRAFFIC SIGNAL BOX	PROPOSED CURB AND GUTTER
EXISTING CABLE BOX	PROPOSED REVERSE PAN CURB AND GUTTER
EXISTING BOLLARD	TRANSITION TO REVERSE PAN CURB
PROPOSED BOLLARD	CONCRETE TO BE REMOVED
EXISTING SIGN	EXISTING CONCRETE
PROPOSED SIGN	PROPOSED CONCRETE
EXISTING SPOT ELEVATION	BUILDING TO BE REMOVED
PROPOSED SPOT ELEVATION	EXISTING BUILDING
EXISTING FLOW DIRECTION	PROPOSED BUILDING
EXISTING TREE	
DENSE VEGETATION	

NOTE: MAY CONTAIN SYMBOLS THAT ARE NOT USED IN THIS PLAN SET.

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THE VILLAS AT ROCKWELL RANCH
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AMERICAN FORK, UTAH 84003

LICENSED PROFESSIONAL ENGINEER
No. 7675714-2202
JARED K. FORD
7-13-2020
STATE OF UTAH

GENERAL NOTES

PROJECT NUMBER 8799F.1
PRINT DATE 7/10/20
DRAWN BY BCA
CHECKED BY J.FORD
PROJECT MANAGER J.FORD

C-001

811 Know what's below. Call before you dig.

CALL BLUESTAKES @ 811 AT LEAST 48 HOURS PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION.

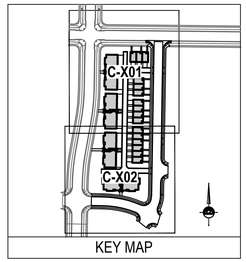
BENCHMARK

NW CORNER OF SECTION 22, TOWNSHIP 5 SOUTH, RANGE 1 EAST SALT LAKE BASE AND MERIDIAN

ELEV = 4524.26'

GENERAL NOTES

1. ALL WORK TO COMPLY WITH THE GOVERNING AGENCY'S STANDARDS AND SPECIFICATIONS.
2. ALL IMPROVEMENTS MUST COMPLY WITH ADA STANDARDS AND RECOMMENDATIONS.
3. SEE LANDSCAPE/ARCHITECTURAL PLANS FOR CONCRETE MATERIAL, COLOR, FINISH, AND SCORE PATTERNS THROUGHOUT SITE.
4. ALL PAVEMENT MARKINGS SHALL CONFORM TO THE LATEST EDITION OF THE M.U.T.C.D. (MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES).
5. ALL SURFACE IMPROVEMENTS DISTURBED BY CONSTRUCTION SHALL BE RESTORED OR REPLACED, INCLUDING TREES AND DECORATIVE SHRUBS, SOD, FENCES, WALLS AND STRUCTURES, WHETHER OR NOT THEY ARE SPECIFICALLY SHOWN ON THE CONTRACT DOCUMENTS.
6. NOTIFY ENGINEER OF ANY DISCREPANCIES IN DESIGN OR STAKING BEFORE PLACING CONCRETE OR ASPHALT.
7. THE CONTRACTOR IS TO PROTECT AND PRESERVE ALL EXISTING IMPROVEMENTS, UTILITIES, AND SIGNS, ETC. UNLESS OTHERWISE NOTED ON THESE PLANS.



KEY MAP

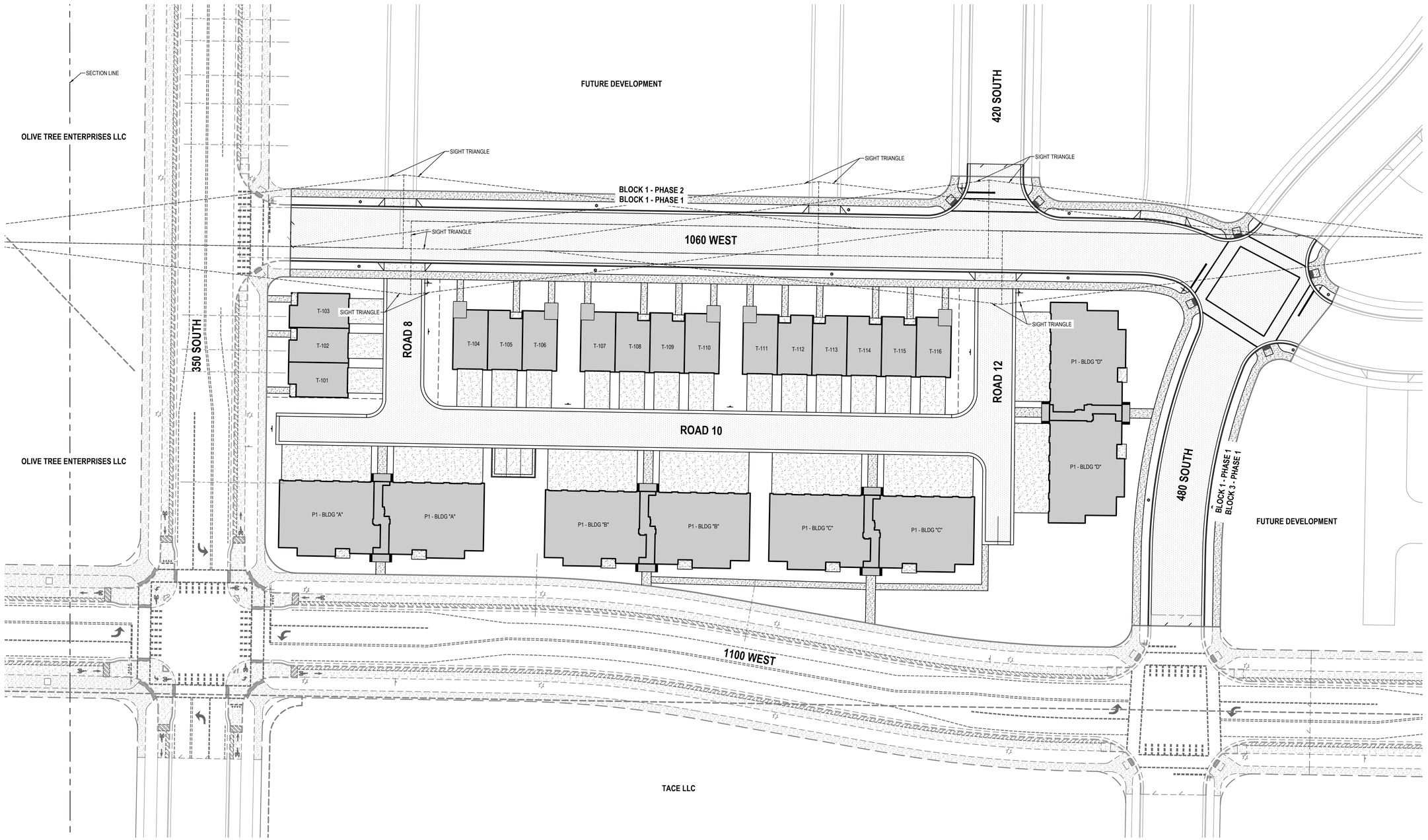
NORTH

HORIZONTAL GRAPHIC SCALE

30 0 15 30 60

(IN FEET)

HORZ: 1 inch = 30 ft.



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No. 7675714-2202
JARED K. FORD
7-13-2020
STATE OF UTAH

OVERALL SITE PLAN

PROJECT NUMBER	PRINT DATE
8799F.1	7/10/20
DRAWN BY	CHECKED BY
BCA	J.FORD
PROJECT MANAGER	
J.FORD	

C-100

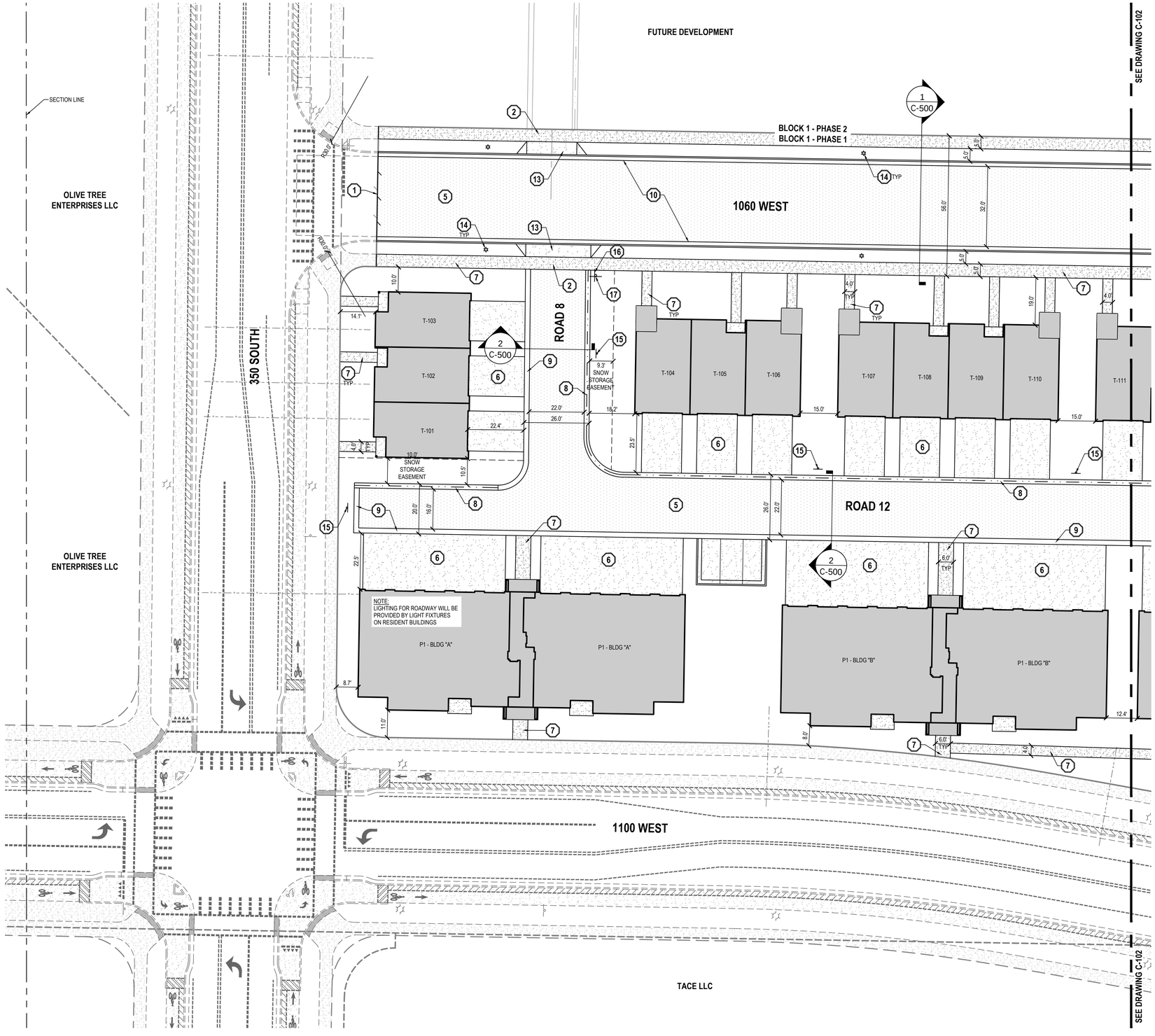
811 Know what's below. Call before you dig.

CALL BLUESTAKES @ 811 AT LEAST 48 HOURS PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION.

BENCHMARK

NW CORNER OF SECTION 22, TOWNSHIP 5 SOUTH, RANGE 1 EAST SALT LAKE BASE AND MERIDIAN

ELEV = 4524.26'



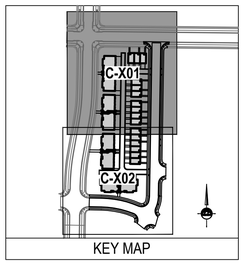
GENERAL NOTES

1. ALL WORK TO COMPLY WITH THE GOVERNING AGENCY'S STANDARDS AND SPECIFICATIONS.
2. ALL IMPROVEMENTS MUST COMPLY WITH ADA STANDARDS AND RECOMMENDATIONS.
3. SEE LANDSCAPE/ARCHITECTURAL PLANS FOR CONCRETE MATERIAL, COLOR, FINISH, AND SCORE PATTERNS THROUGHOUT SITE.
4. ALL PAVEMENT MARKINGS SHALL CONFORM TO THE LATEST EDITION OF THE M.U.T.C.D. (MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES).
5. ALL SURFACE IMPROVEMENTS DISTURBED BY CONSTRUCTION SHALL BE RESTORED OR REPLACED, INCLUDING TREES AND DECORATIVE SHRUBS, SOD, FENCES, WALLS AND STRUCTURES, WHETHER OR NOT THEY ARE SPECIFICALLY SHOWN ON THE CONTRACT DOCUMENTS.
6. NOTIFY ENGINEER OF ANY DISCREPANCIES IN DESIGN OR STAKING BEFORE PLACING CONCRETE OR ASPHALT.
7. THE CONTRACTOR IS TO PROTECT AND PRESERVE ALL EXISTING IMPROVEMENTS, UTILITIES, AND SIGNS, ETC. UNLESS OTHERWISE NOTED ON THESE PLANS.

SCOPE OF WORK:

PROVIDE, INSTALL AND/OR CONSTRUCT THE FOLLOWING PER THE SPECIFICATIONS GIVEN OR REFERENCED, THE DETAILS NOTED, AND/OR AS SHOWN ON THE CONSTRUCTION DRAWINGS:

1. SAWCUT EXISTING ASPHALT PAVEMENT TO PROVIDE A CLEAN EDGE FOR THE TRANSITION BETWEEN EXISTING AND PROPOSED ASPHALT PAVEMENT.
2. 6" THICK CONCRETE SIDEWALK AT DRIVE APPROACH.
3. END OF ROADWAY OM4-3 SIGN PER M.U.T.C.D. STANDARDS.
4. SAWCUT, REMOVE, AND PROPERLY DISPOSE OF EXISTING CONCRETE SIDEWALK.
5. ASPHALT PAVEMENT PER GEOTECHNICAL REPORT AND DETAIL 5/C-500.
6. CONCRETE DRIVE WAY PER DETAIL 5/C-500.
7. CONCRETE SIDEWALK PER AMERICAN FORK CITY STANDARDS.
8. 24" TYPE "G" CURB AND GUTTER PER APWA STANDARD PLAN NO. 205.2.
9. 2' CONCRETE RIBBON CURB PER DETAIL 6/C-500.
10. 24" TYPE "E" CURB AND GUTTER PER AMERICAN FORK CITY STANDARD DRAWING NO. 15.1.
11. 4' WATERWAY PER AMERICAN FORK CITY STANDARD DRAWING NO. 15.1.
12. ACCESSIBLE RAMP PER AMERICAN FORK CITY STANDARD DRAWING NO. 15.18.
13. FLARED DRIVE APPROACH WITH PLANTER PER AMERICAN FORK CITY STANDARD DRAWING NO. 15.9.
14. STREET LIGHT PER AMERICAN FORK TOD CODE, SECTION 7, TABLE 7H.
15. "NO PARKING" SIGN PER M.U.T.C.D. STANDARDS.
16. STREET SIGN PER AMERICAN FORK CITY STANDARDS.
17. "STOP" SIGN PER M.U.T.C.D. AND AMERICAN FORK CITY STANDARDS.
18. 12" WIDE SOLID WHITE STOP BAR PER M.U.T.C.D. STANDARD PLANS.
19. SOLID WHITE CROSSWALK MARKING PER M.U.T.C.D. STANDARDS.
20. 4" SOLID WHITE LINE PER M.U.T.C.D. STANDARDS.



KEY MAP

NORTH

HORIZONTAL GRAPHIC SCALE

20 0 10 20 40

(IN FEET)

HORZ: 1 inch = 20 ft.

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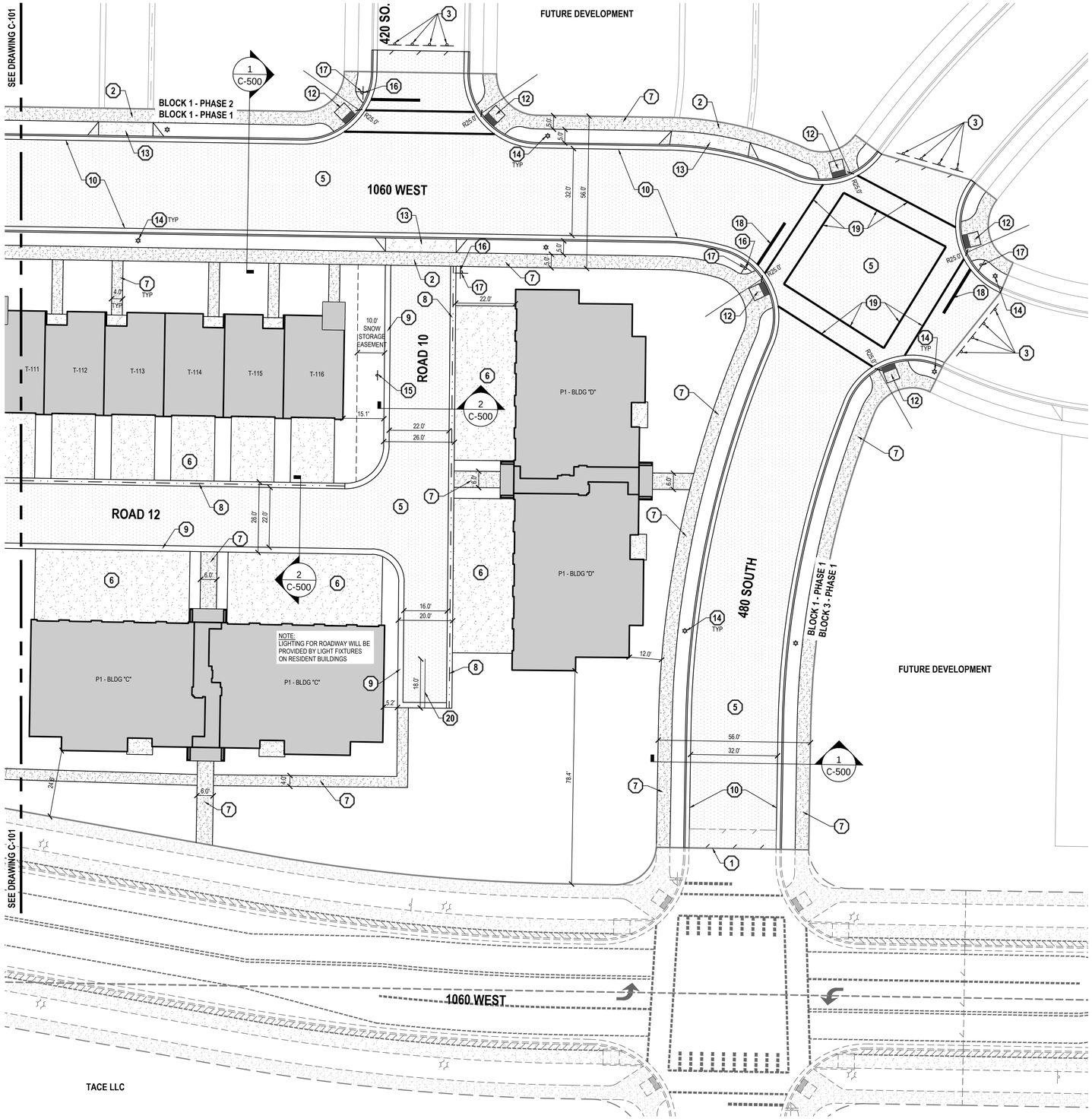
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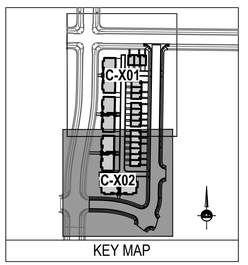
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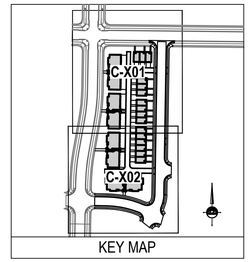
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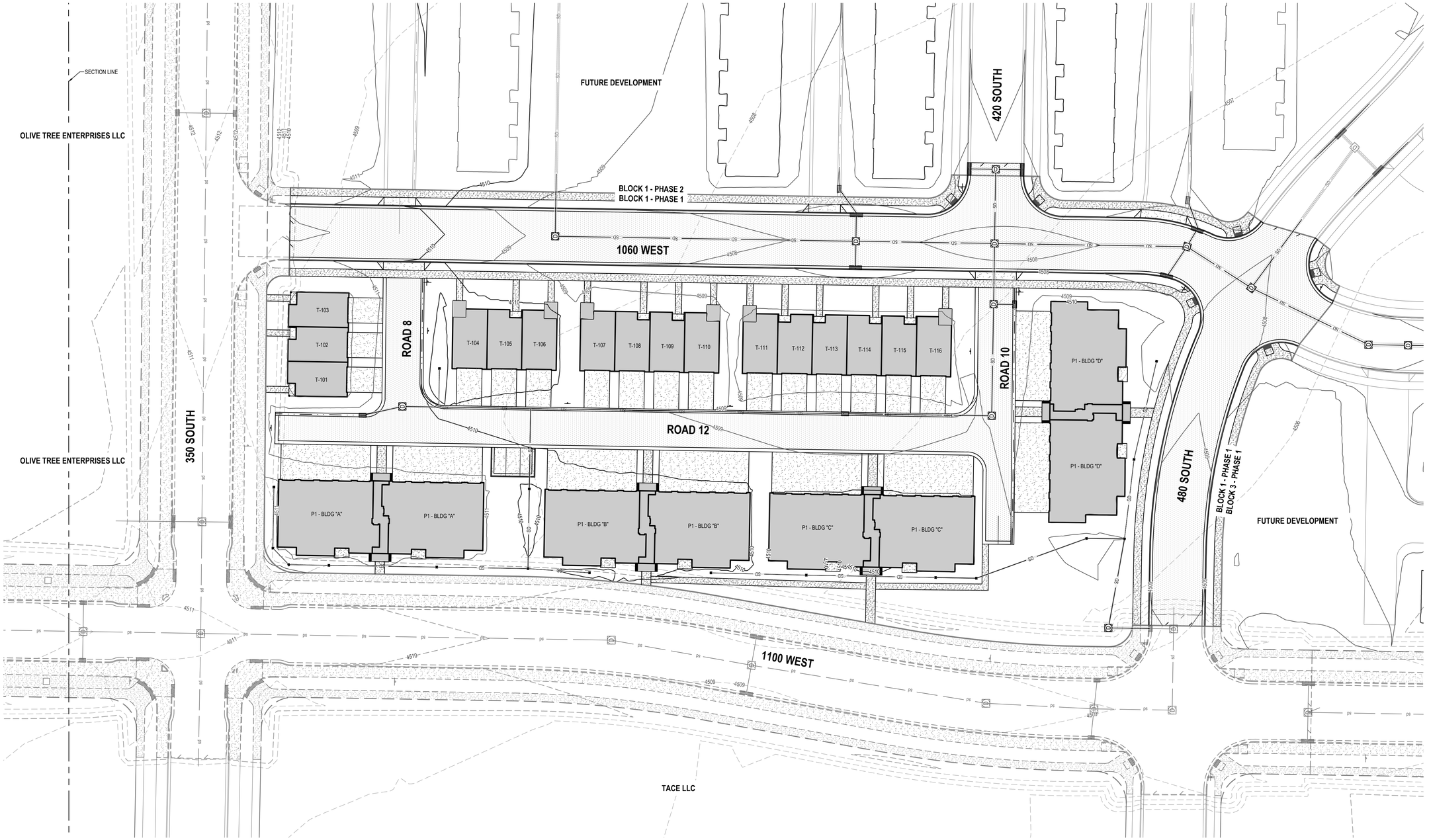
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HORIZONTAL GRAPHIC SCALE

30 0 15 30 60

(IN FEET)

HOR2: 1 inch = 30 ft.



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PROJECT MANAGER	
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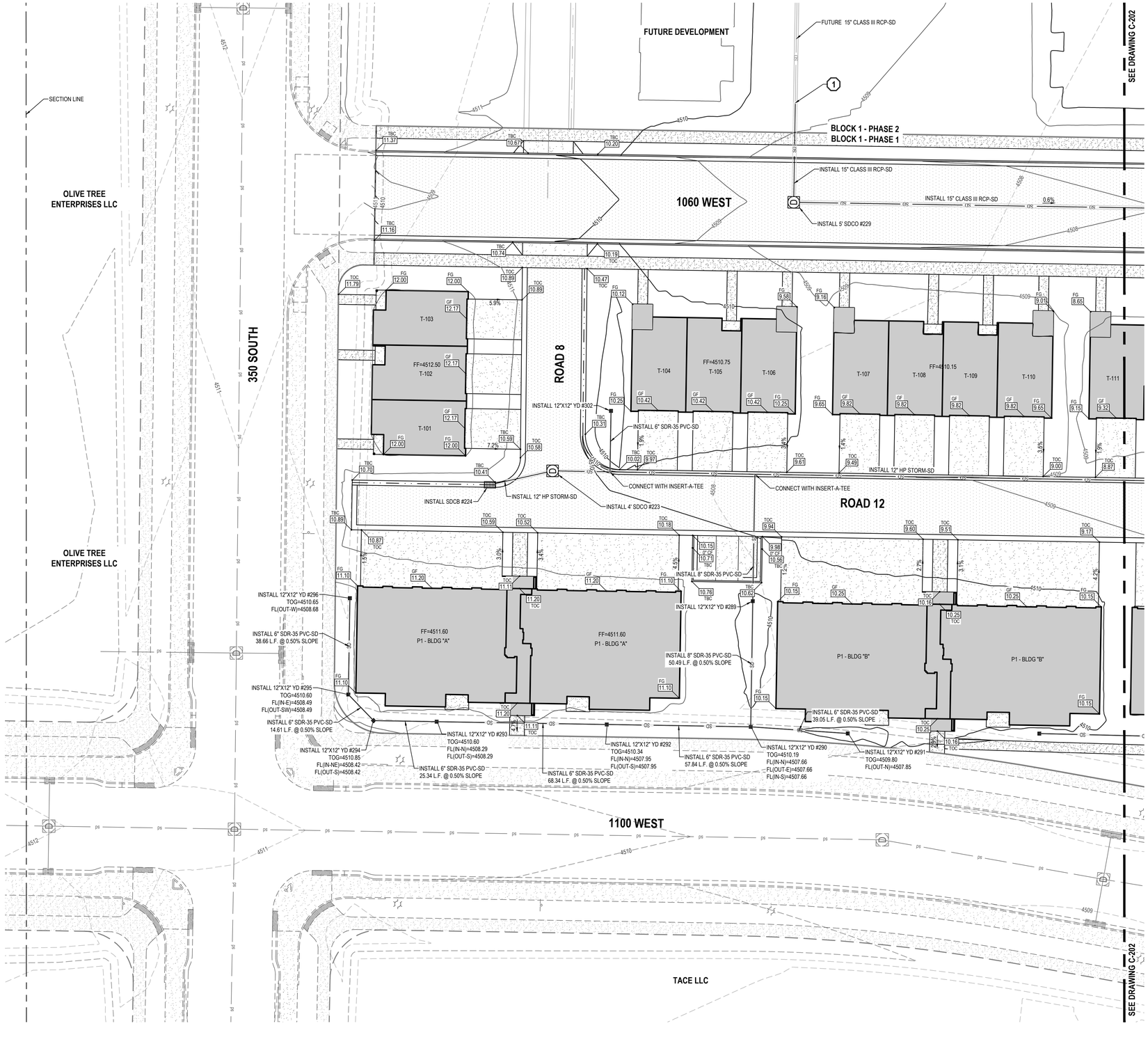
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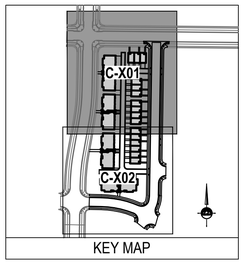
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(1) STUB, PLUG AND MARK FOR FUTURE CONNECTION.



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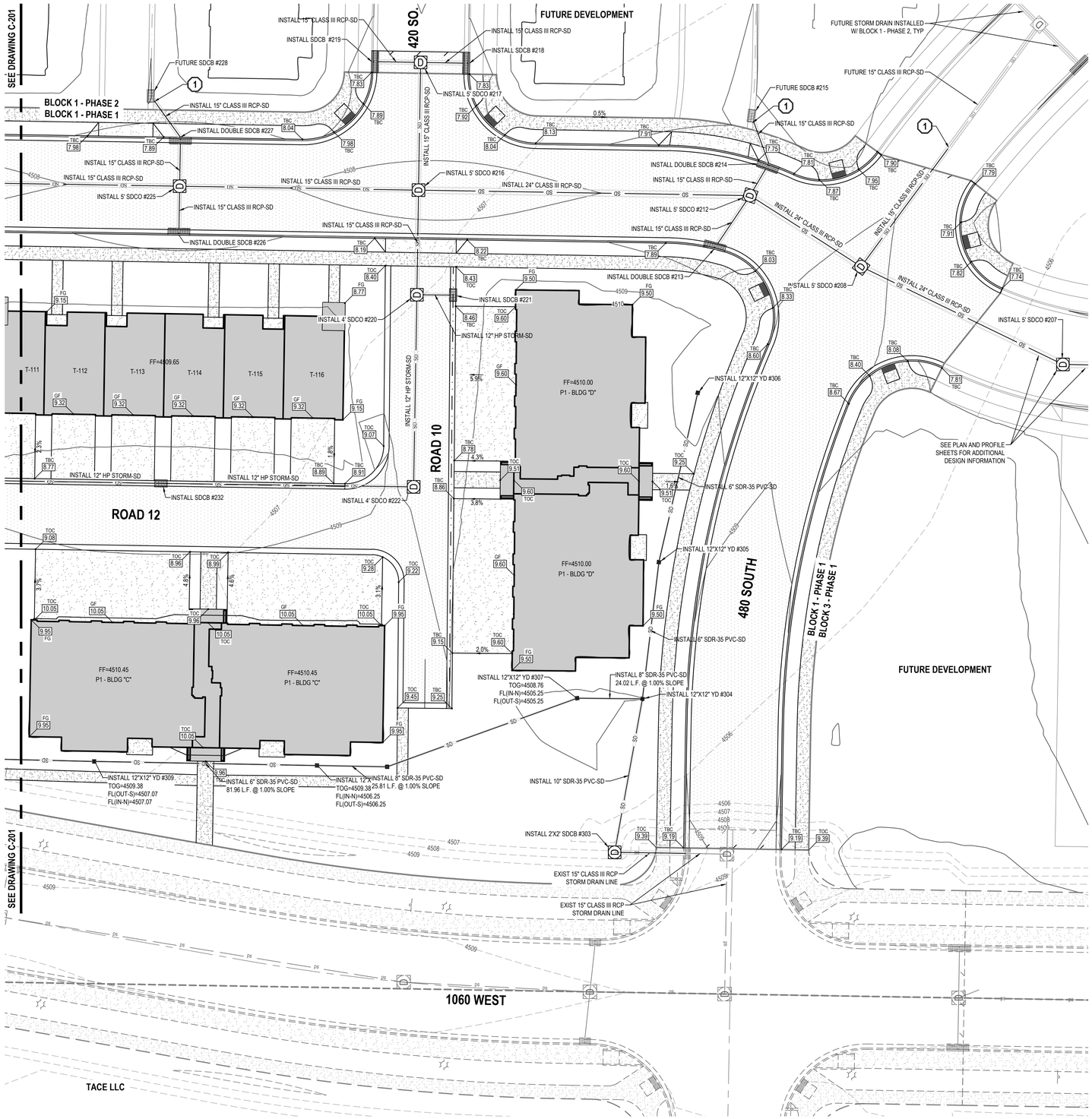
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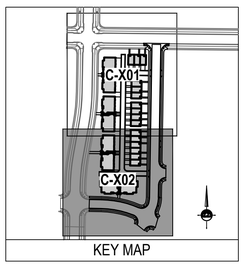
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10. ENSURE MINIMUM COVER OVER ALL STORM DRAIN PIPES PER MANUFACTURER'S RECOMMENDATIONS. NOTIFY ENGINEER IF MINIMUM COVER CANNOT BE ATTAINED.
11. ALL FACILITIES WITH DOWNSPOUTS/ROOF DRAINS SHALL BE CONNECTED TO THE STORM DRAIN SYSTEM. SEE PLUMBING PLANS FOR DOWNSPOUT/ROOF DRAIN LOCATIONS AND SIZES. ALL ROOF DRAINS TO HAVE MINIMUM 1% SLOPE.
12. THE CONTRACTOR SHALL ADJUST TO GRADE ALL EXISTING UTILITIES AS NEEDED PER LOCAL GOVERNING AGENCY'S STANDARDS AND SPECIFICATIONS.
13. NOTIFY ENGINEER OF ANY DISCREPANCIES IN DESIGN OR STAKING BEFORE PLACING CONCRETE, ASPHALT, OR STORM DRAIN STRUCTURES OR PIPES.
14. THE CONTRACTOR IS TO PROTECT AND PRESERVE ALL EXISTING IMPROVEMENTS, UTILITIES, AND SIGNS, ETC. UNLESS OTHERWISE NOTED ON THESE PLANS.

SCOPE OF WORK:

PROVIDE, INSTALL AND/OR CONSTRUCT THE FOLLOWING PER THE SPECIFICATIONS GIVEN OR REFERENCED, THE DETAILS NOTED, AND/OR AS SHOWN ON THE CONSTRUCTION DRAWINGS:

(1) STUB, PLUG AND MARK FOR FUTURE CONNECTION.



KEY MAP

NORTH

HORIZONTAL GRAPHIC SCALE

20 0 10 20 40

(IN FEET)

HORZ: 1 inch = 20 ft.

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1060 WEST 420 SOUTH
AMERICAN FORK, UTAH 84003

LICENSED PROFESSIONAL ENGINEER
No. 7675714-2202
JARED K. FORD
7-13-2020
STATE OF UTAH

GRADING AND DRAINAGE PLAN

PROJECT NUMBER	PRINT DATE
8799F.1	7/10/20
DRAWN BY	CHECKED BY
BCA	J.FORD
PROJECT MANAGER	
J.FORD	

C-202

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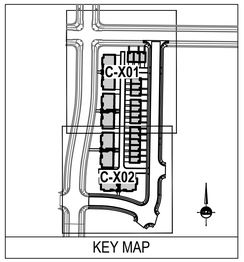
BENCHMARK

NW CORNER OF SECTION 22, TOWNSHIP 5 SOUTH, RANGE 1 EAST SALT LAKE BASE AND MERIDIAN

ELEV = 4524.26'

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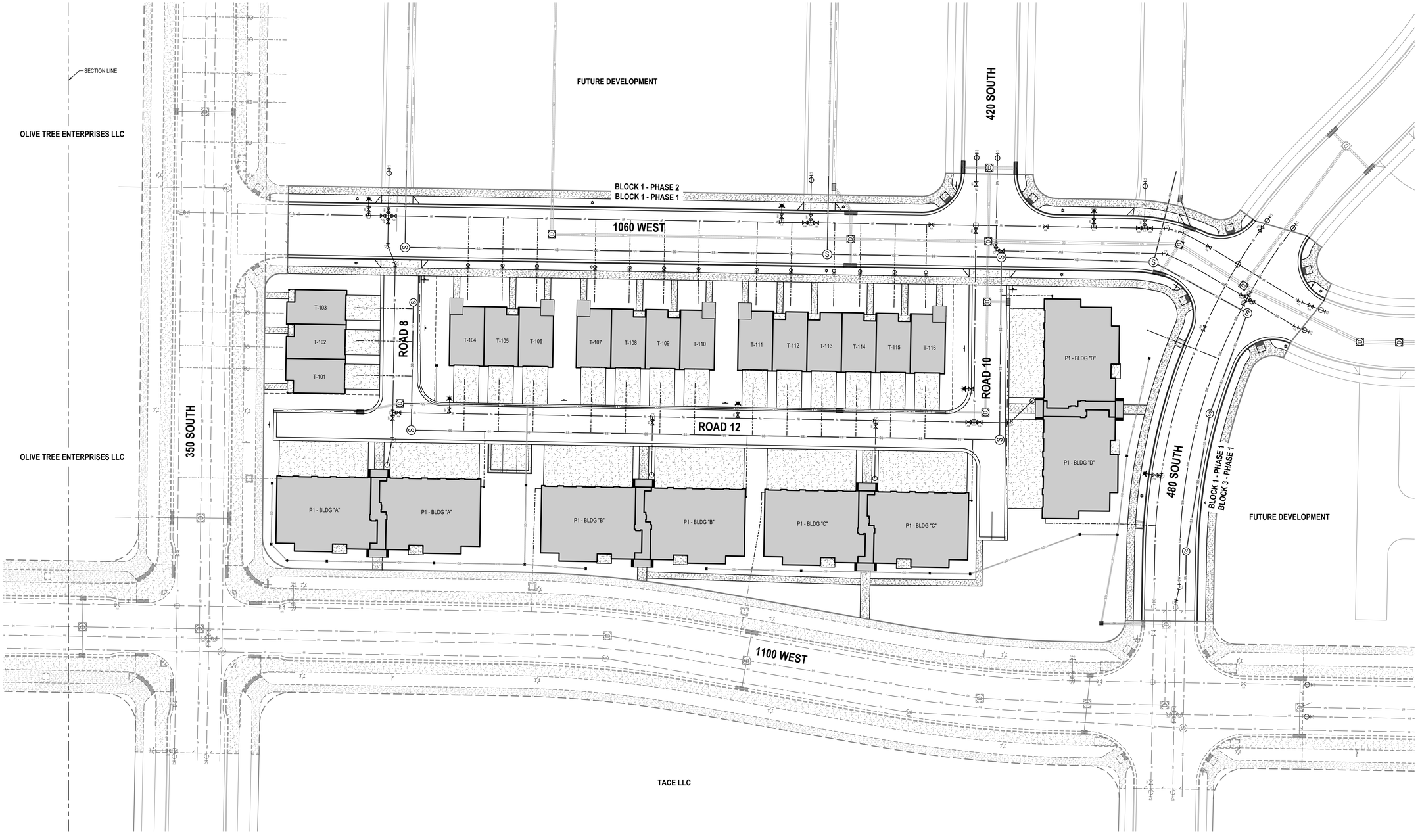
NORTH

HORIZONTAL GRAPHIC SCALE

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LICENSED PROFESSIONAL ENGINEER
No. 7675714-2202
JARED K. FORD
7-13-2020
STATE OF UTAH

OVERALL UTILITY PLAN

PROJECT NUMBER	PRINT DATE
8799F.1	7/10/20
DRAWN BY	CHECKED BY
BCA	J.FORD
PROJECT MANAGER	
J.FORD	

C-300

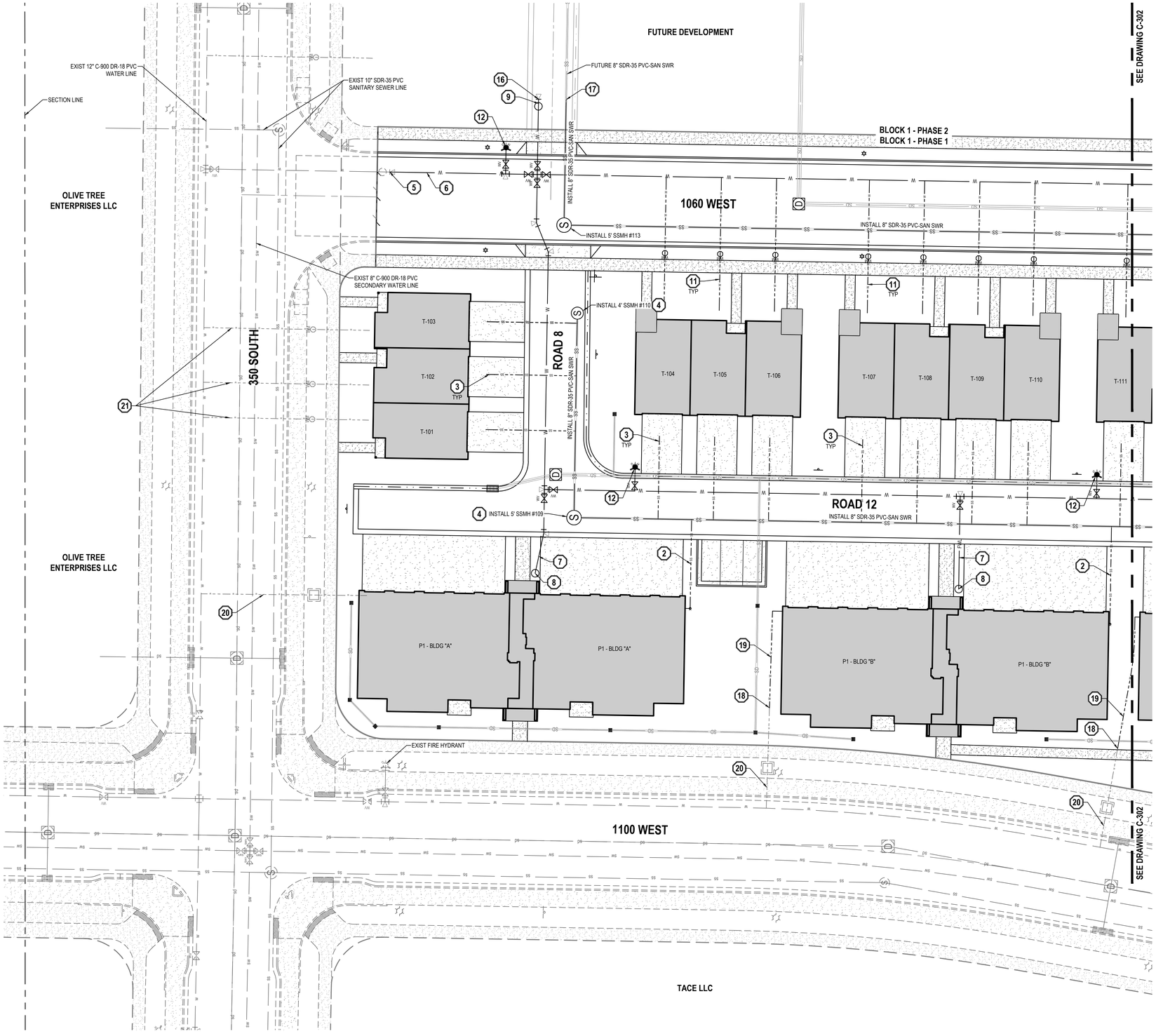
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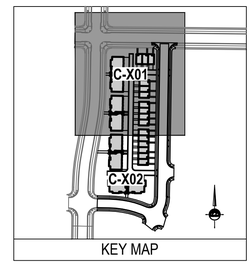
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1. CONNECT TO EXISTING SANITARY SEWER LINE PER GOVERNING AGENCY'S STANDARDS.
2. 6" PVC SANITARY SEWER SERVICE LATERAL @ 2.00% MINIMUM SLOPE PER AMERICAN FORK CITY STANDARDS.
3. 4" PVC SANITARY SEWER SERVICE LATERAL @ 2.00% MINIMUM SLOPE PER AMERICAN FORK CITY STANDARDS.
4. ROTATE MANHOLE LID TO FURTHERMOST POSITION AWAY FROM ROADWAY LIP OF GUTTER.
5. CONNECT TO EXISTING CULINARY WATER LINE PER GOVERNING AGENCY'S STANDARDS.
6. 8" C-900 DR-18 PVC WATER LINE, INSTALLATION AND TRENCHING PER GOVERNING AGENCY'S STANDARDS. SEE PLAN AND PROFILE SHEETS FOR DETAILED INFORMATION.
7. 4" C-900 DR-18 PVC FIRE SERVICE WATER LINE PER AMERICAN FORK CITY STANDARDS WITH 8"x4" TEE, 4" GATE VALVE FLANGED TO TEE, AND TEMPORARY 2" BLOW OFF VALVE TO END LINE.
8. 4" PERMANENT BLOW OFF VALVE PER AMERICAN FORK CITY STANDARDS.
9. 2" TEMPORARY BLOW OFF VALVE PER AMERICAN FORK CITY STANDARDS.
10. 1-1/2" IPS POLY CULINARY WATER SERVICE FROM MAIN TO 1-1/2" METER AND 2" POLY SERVICE FROM METER TO BUILDING.
11. 1" IPS POLY CULINARY WATER SERVICE LATERAL AND 3/4" METER PER AMERICAN FORK CITY STANDARD DRAWING NO. 15.5.
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(IN FEET)
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AMERICAN FORK, UTAH 84003

LICENSED PROFESSIONAL ENGINEER
No. 7675714-2202
JARED K. FORD
7-13-2020
STATE OF UTAH

UTILITY PLAN

PROJECT NUMBER 8799F.1
PRINT DATE 7/10/20
DRAWN BY BCA
CHECKED BY J.FORD
PROJECT MANAGER J.FORD

C-301

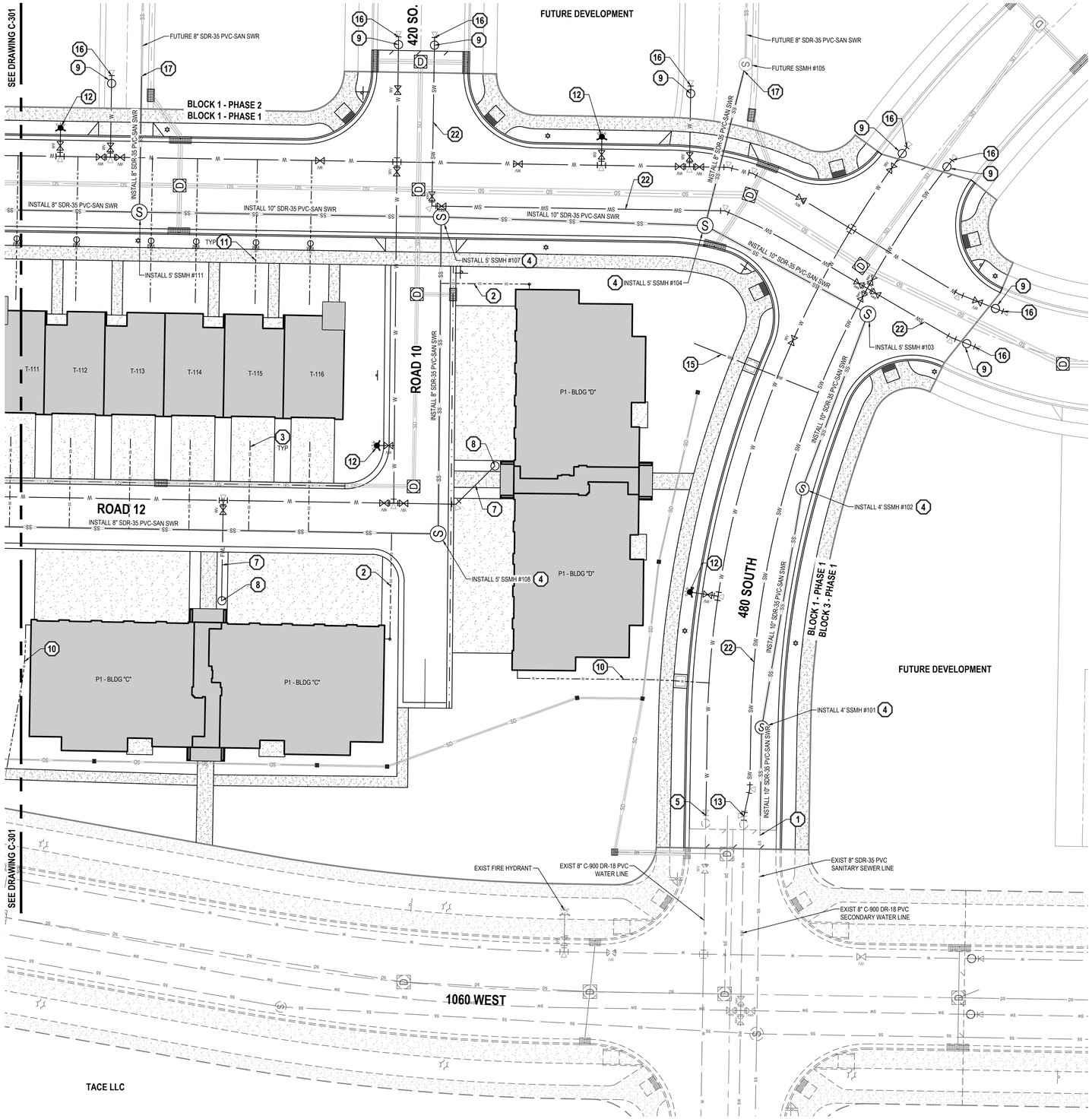
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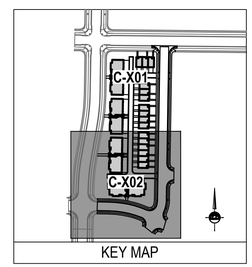
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(IN FEET)

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STATE OF UTAH

UTILITY PLAN

PROJECT NUMBER	PRINT DATE
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PROJECT MANAGER	
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C-302

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BENCHMARK

NW CORNER OF SECTION 22, TOWNSHIP 5 SOUTH, RANGE 1 EAST SALT LAKE BASE AND MERIDIAN

ELEV = 4524.26'

GENERAL NOTES

1. THIS PLAN IS DESIGNED AS A FIRST APPRAISAL OF NECESSARY MEANS TO PROTECT THE WATERS OF THE STATE FROM POTENTIAL POLLUTION. IT IS THE RESPONSIBILITY OF THE OWNER/OPERATOR TO ADD WARRANTED BEST MANAGEMENT PRACTICES (BMP'S) AS NECESSARY, MODIFY THOSE SHOWN AS APPROPRIATE, AND DELETE FROM THE PROJECT THOSE FOUND TO BE UNNECESSARY. FEDERAL AND STATE LAW ALLOWS THESE UPDATES TO BE MADE BY THE OWNER/OPERATOR ONSITE AND RECORDED BY THE OWNER/OPERATOR ON THE COPY OF THE SWPPP KEPT ONSITE.
2. DISTURBED LAND SHALL BE KEPT TO A MINIMUM. STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED. HOWEVER, WHERE CONSTRUCTION ACTIVITY ON A PORTION OF THE SITE IS TEMPORARILY CEASED, AND EARTH DISTURBING ACTIVITIES WILL BE RESUMED WITHIN 21 DAYS, TEMPORARY STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF THE SITE.
3. RESEED DISTURBED LAND WITH NATIVE GRASS MIXTURE WITHIN 14 CALENDAR DAYS OF ACHIEVEMENT OF FINISH GRADE TO STABILIZE SOILS IF LAND IS NOT TO BE RE-WORKED WITHIN 14 CALENDAR DAYS OF THE CESSATION OF CONSTRUCTION ACTIVITIES AT THAT LOCATION.
4. DETAILS SHOWN ARE TO BE EMPLOYED TO PROTECT RUNOFF AS APPROPRIATE DURING CONSTRUCTION. NOT ALL DETAILS ARE NECESSARY AT ALL PHASES OF THE PROJECT. IT SHALL BE THE RESPONSIBILITY OF THE OWNER/OPERATOR TO USE APPROPRIATE BEST MANAGEMENT PRACTICES AT THE APPROPRIATE PHASE OF CONSTRUCTION. SEE SWPPP FOR BMP IMPLEMENTATION SCHEDULE.
5. VARIOUS BEST MANAGEMENT PRACTICES HAVE BEEN SHOWN ON THE PLANS AT SUGGESTED LOCATIONS. THE CONTRACTOR MAY MOVE AND RECONFIGURE THESE BMP'S TO OTHER LOCATIONS IF PREFERRED, PROVIDED THE INTENT OF THE DESIGN IS PRESERVED.
6. NOT ALL POSSIBLE BMP'S HAVE BEEN SHOWN. THE CONTRACTOR IS RESPONSIBLE TO APPLY CORRECT MEASURES TO PREVENT THE POLLUTION OF STORM WATER PER PROJECT SWPPP.
7. A UPDES (UTAH POLLUTANT DISCHARGE ELIMINATION SYSTEM) PERMIT IS REQUIRED FOR ALL CONSTRUCTION ACTIVITIES 1 ACRE OR MORE.

SCOPE OF WORK:

PROVIDE, INSTALL AND/OR CONSTRUCT THE FOLLOWING PER THE SPECIFICATIONS GIVEN OR REFERENCED, THE DETAILS NOTED, AND/OR AS SHOWN ON THE CONSTRUCTION DRAWINGS:

1. INLET PROTECTION PER DETAIL 7/C-500.
2. SILT FENCE PER DETAIL 8/C-500.
3. PORTABLE TOILET PER DETAIL 9/C-500.
4. VEHICLE WASHDOWN AND STABILIZED CONSTRUCTION ENTRANCE PER DETAIL 10/C-500.
5. SUGGESTED TEMPORARY CONSTRUCTION SITE PARKING, STAGING, DUMPSTER, AND MATERIAL STORAGE AREA.
6. SUGGESTED STOCKPILE AREA.

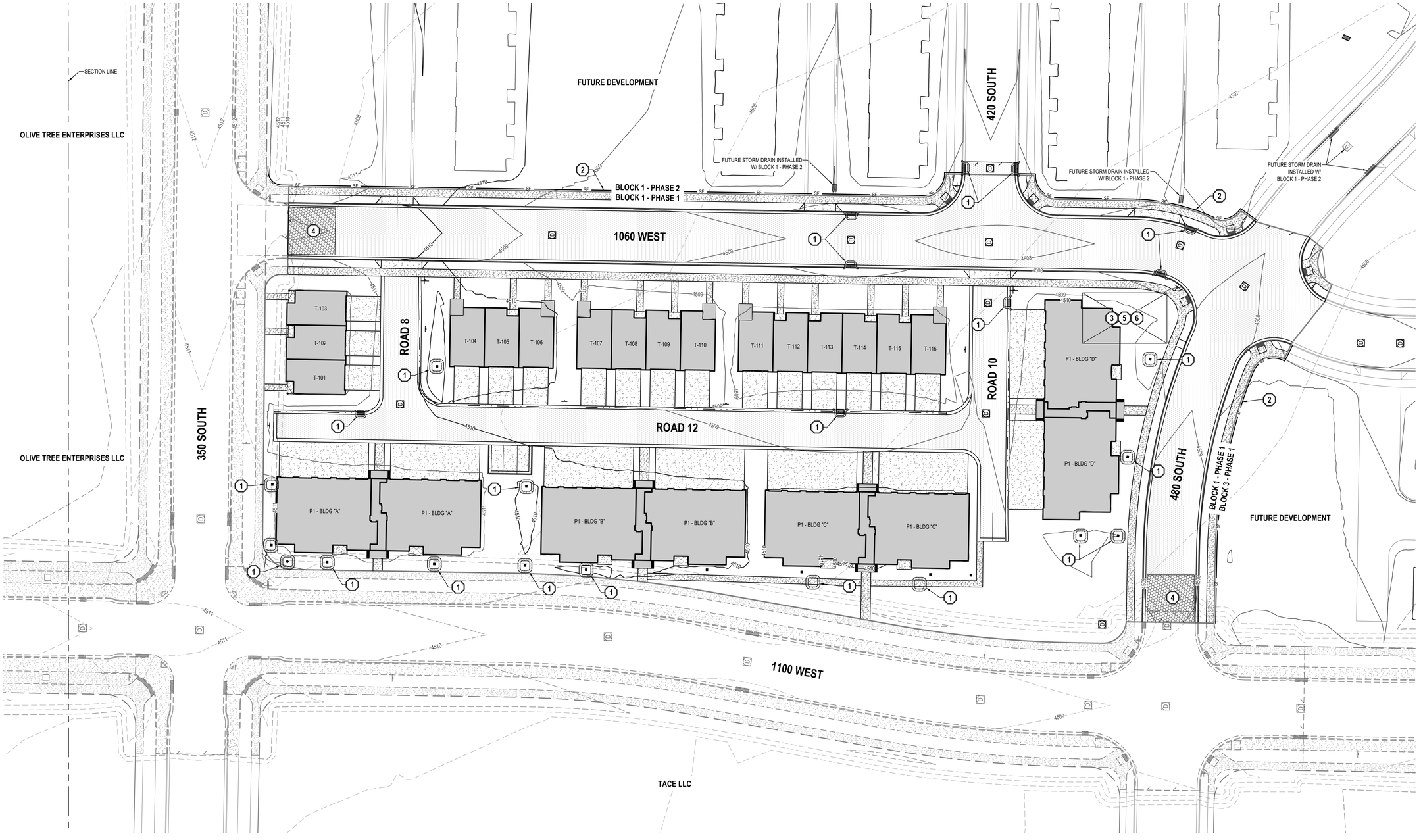
NORTH

HORIZONTAL GRAPHIC SCALE

30 0 15 30 60

(IN FEET)

HORZ: 1 inch = 30 ft.



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LEHI, UTAH 84043

CONTACT:
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PHONE: 801-362-8420

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BLOCK 1 - PHASE 1
1060 WEST 420 SOUTH
AMERICAN FORK, UTAH 84003

LICENSED PROFESSIONAL ENGINEER
No. 7675714-2202
JARED K. FORD
7-13-2020
STATE OF UTAH

EROSION CONTROL PLAN

PROJECT NUMBER	PRINT DATE
8799F.1	7/10/20
DRAWN BY	CHECKED BY
BCA	J.FORD
PROJECT MANAGER	
J.FORD	

C-400

CALL BLUESTAKES @ 811 AT LEAST 48 HOURS PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION.

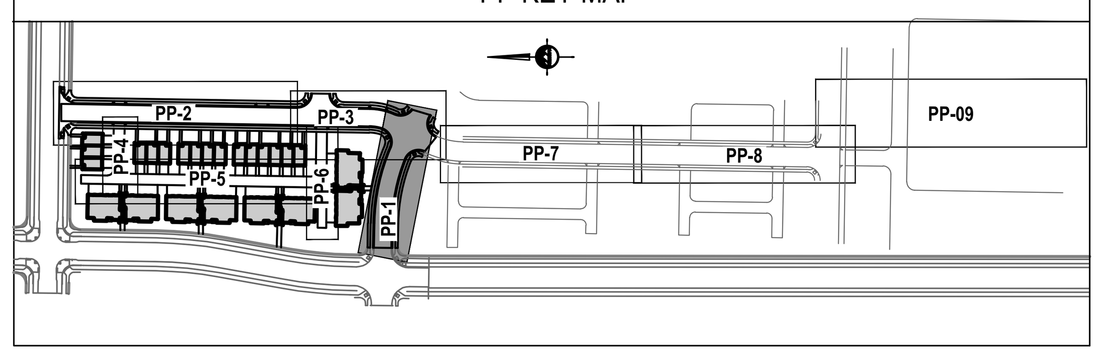
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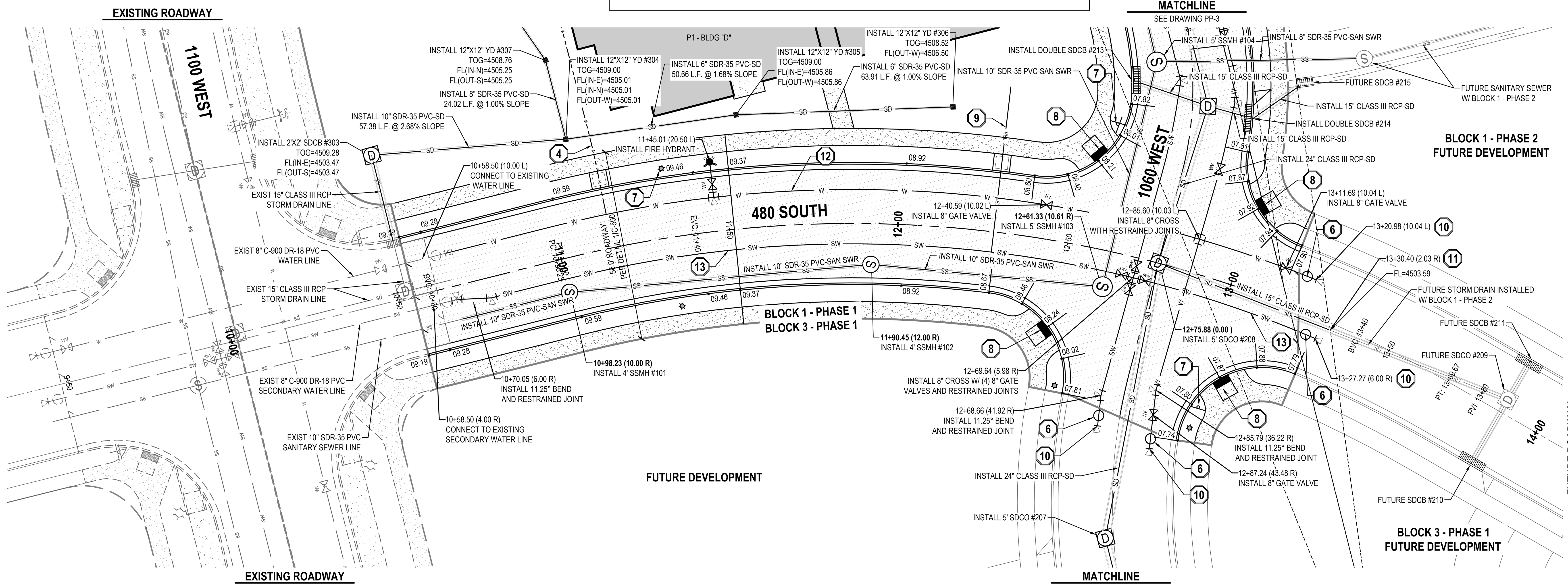
BENCHMARK

NW CORNER OF SECTION 22, TOWNSHIP 5 SOUTH, RANGE 1 EAST SALT LAKE BASE AND MERIDIAN

ELEV = 4524.26'

PP KEY MAP





GENERAL NOTES

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(7) STREET LIGHT PER AMERICAN FORK TOD CODE, SECTION 7, TABLE 7H.

(8) ADA ACCESSIBLE RAMPS W/ TRUNCATED DOMES.

(9) IRRIGATION (P.O.C.) FOR LANDSCAPING. SEE UTILITY AND IRRIGATION PLANS.

(10) PLUG, CAP AND MARK FOR FUTURE CONNECTION.

(11) STUB, PLUG AND MARK FOR FUTURE CONNECTION.

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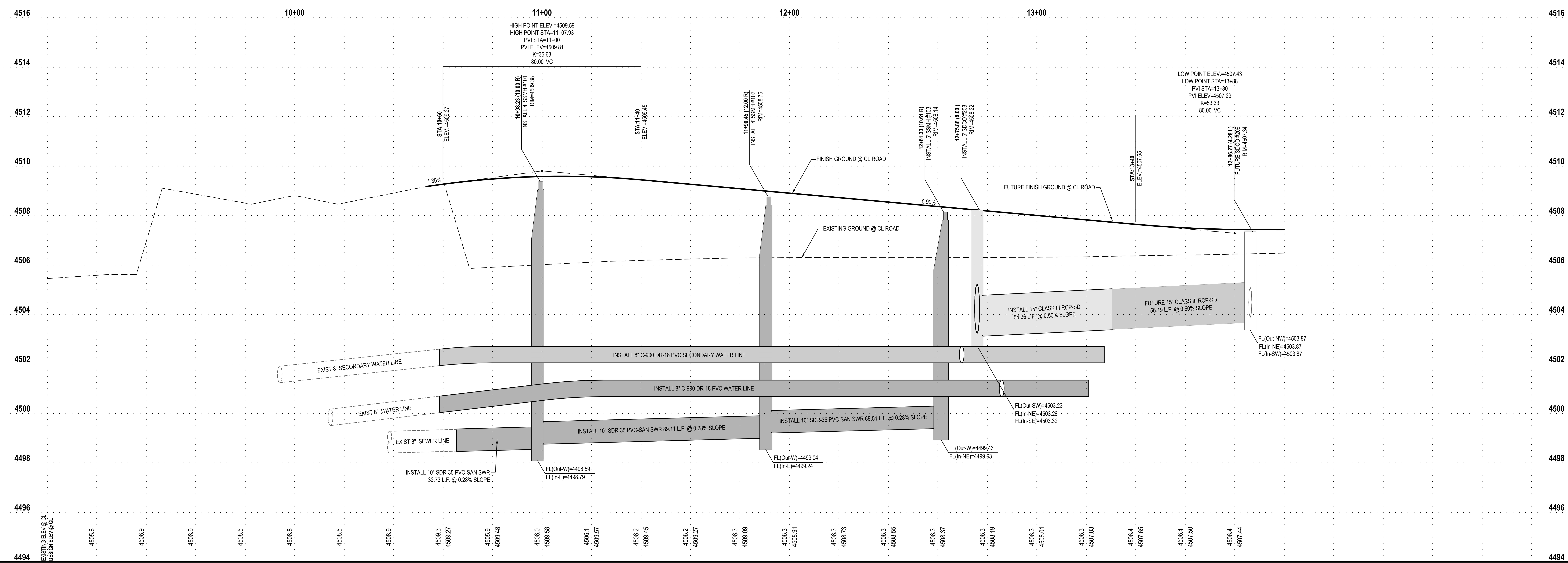
(13) 8" C-900 DR-18 PVC SECONDARY WATER LINE, INSTALLATION AND TRENCHING PER GOVERNING AGENCY'S STANDARDS.

HORIZONTAL GRAPHIC SCALE

20 0 10 20 40

(IN FEET)
HORZ: 1 inch = 20 ft.
VERT: 1 inch = 2 ft.

480 SOUTH



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LICENSED PROFESSIONAL ENGINEER
No. 7675714-2202
JARED K. FORD
7-13-2020
STATE OF UTAH

PLAN AND PROFILE
480 SOUTH

PROJECT NUMBER	PRINT DATE
8799F.1	7/10/20
DRAWN BY	CHECKED BY
BCA	J.FORD
PROJECT MANAGER	
J.FORD	

PP-1

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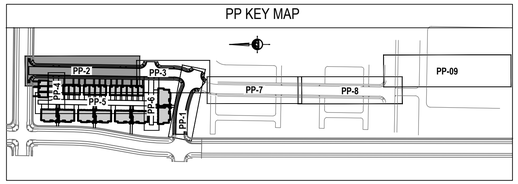
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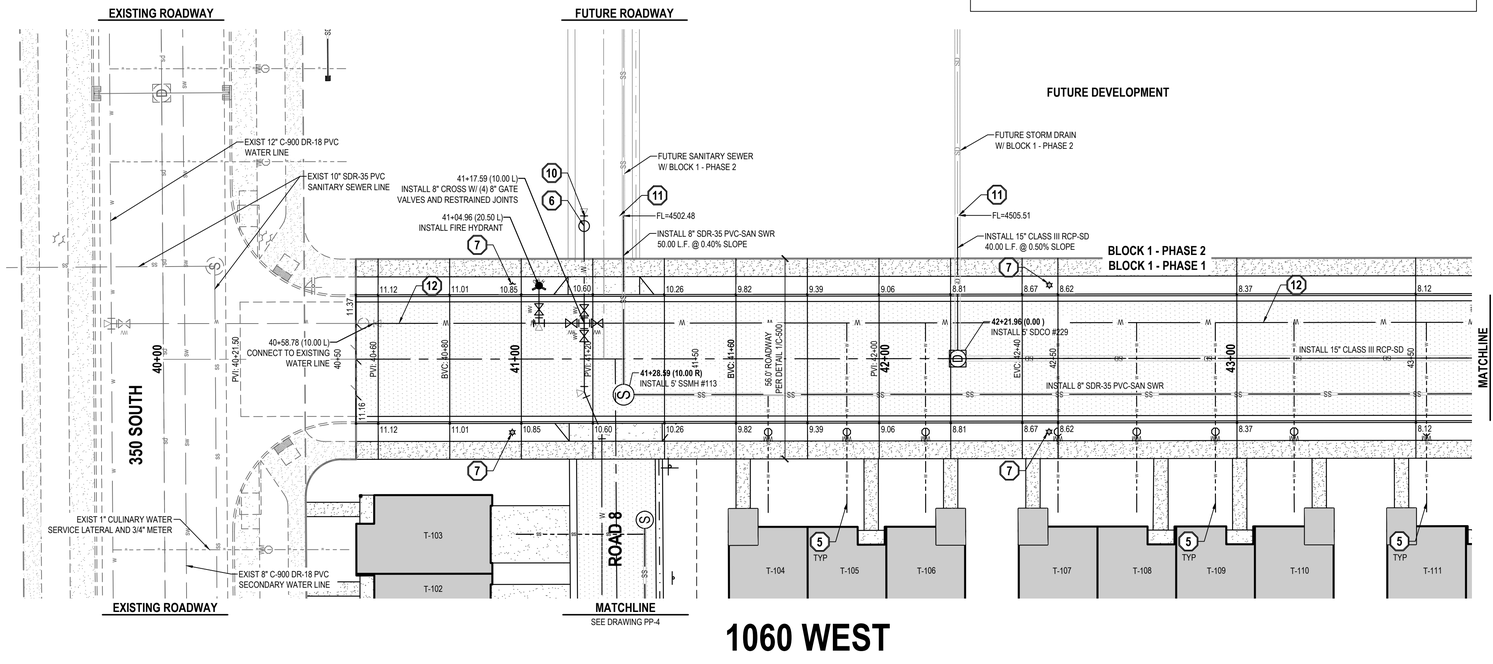
BENCHMARK

NW CORNER OF SECTION 22, TOWNSHIP 5 SOUTH, RANGE 1 EAST SALT LAKE BASE AND MERIDIAN

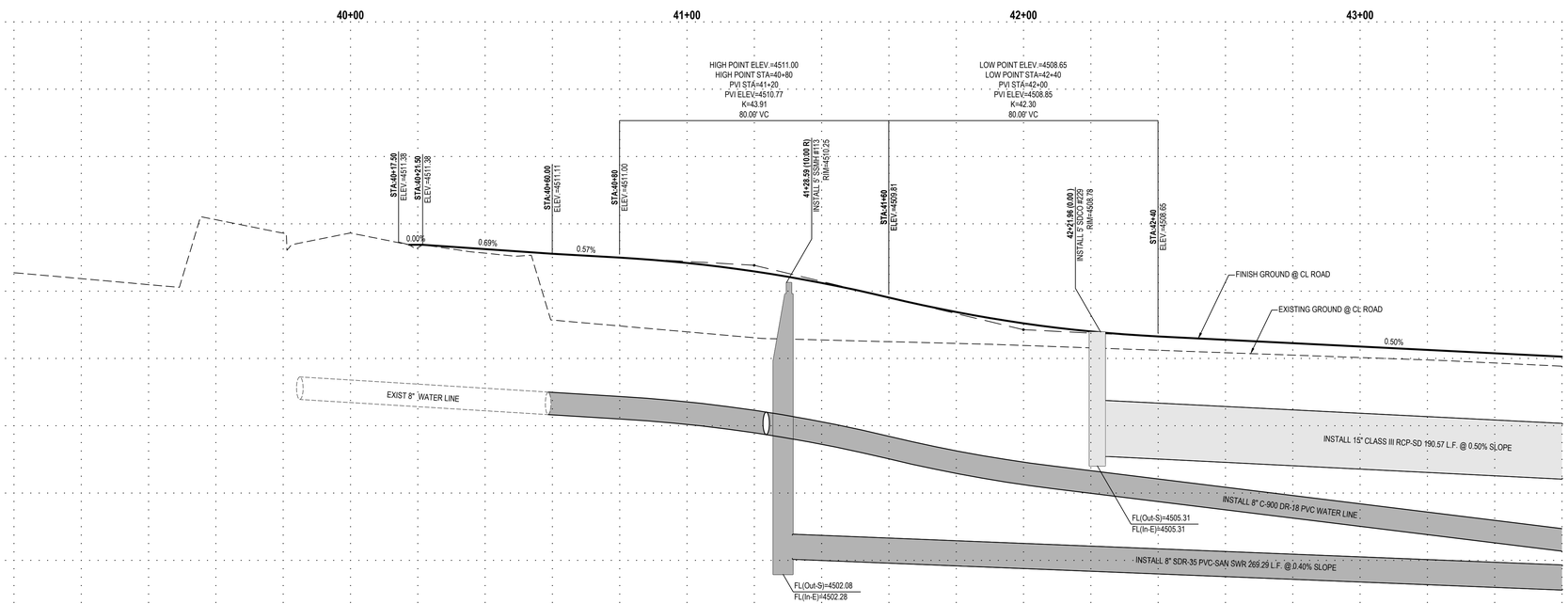
ELEV = 4524.26'

PP KEY MAP





1060 WEST



GENERAL NOTES

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SCOPE OF WORK:

PROVIDE, INSTALL AND/OR CONSTRUCT THE FOLLOWING PER THE SPECIFICATIONS GIVEN OR REFERENCED, THE DETAILS NOTED, AND/OR AS SHOWN ON THE CONSTRUCTION DRAWINGS:

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NORTH

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20 0 10 20 40

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LICENSED PROFESSIONAL ENGINEER
No. 767571-2202
JARED K. FORD
7-13-2020
STATE OF UTAH

PLAN AND PROFILE
1060 WEST

PROJECT NUMBER	PRINT DATE
8799F.1	7/10/20
DRAWN BY	CHECKED BY
BCA	J.FORD
PROJECT MANAGER	
J.FORD	

PP-2

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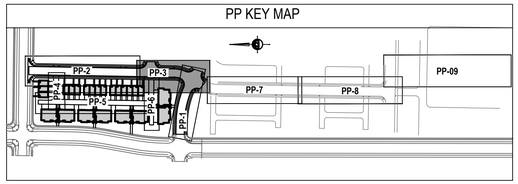
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BENCHMARK

NW CORNER OF SECTION 22,
TOWNSHIP 5 SOUTH, RANGE 1 EAST
SALT LAKE BASE AND MERIDIAN

ELEV = 4524.26'

PP KEY MAP



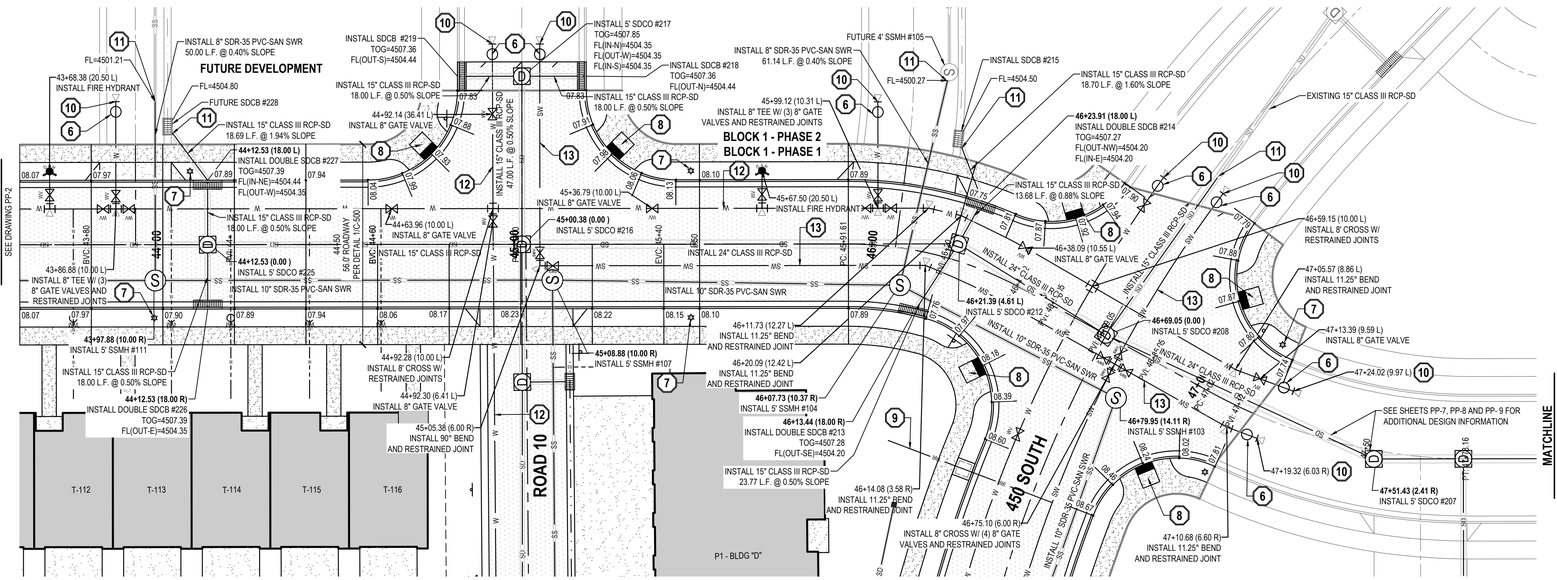
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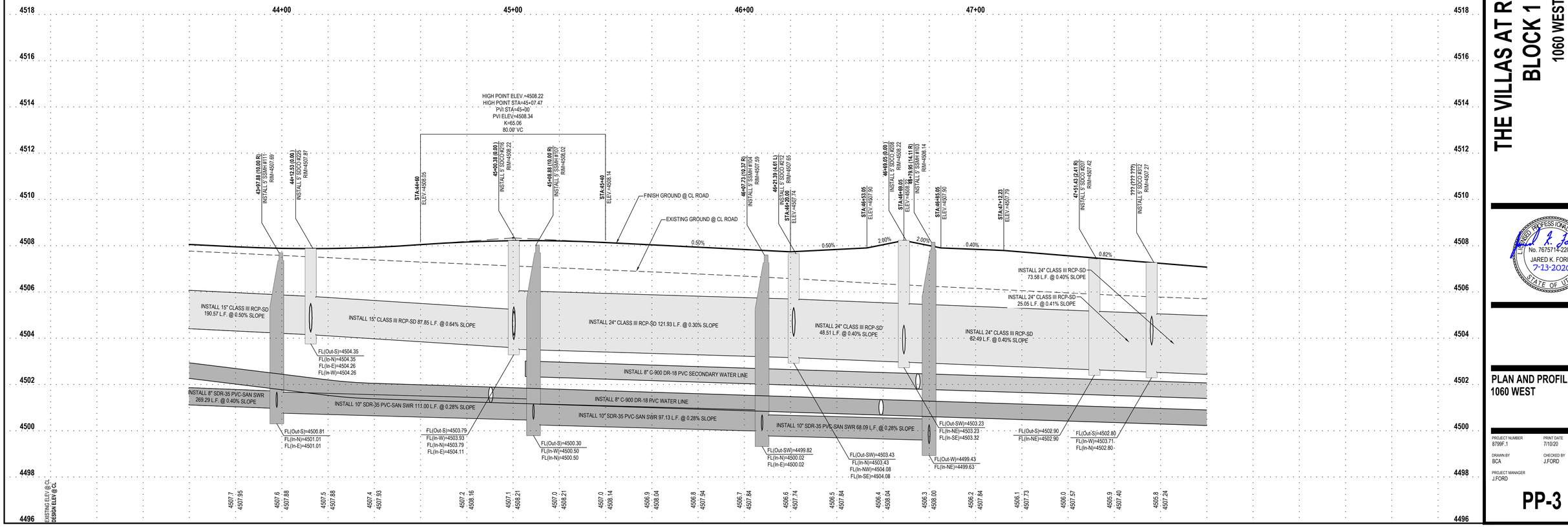
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1060 WEST



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PHONE: 801-362-8420

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AMERICAN FORK, UTAH 84003

LICENSED PROFESSIONAL ENGINEER
No. 7675714-2202
JARED K. FORD
7-13-2020
STATE OF UTAH

PLAN AND PROFILE
1060 WEST

PROJECT NUMBER	PRINT DATE
8799F.1	7/10/20
DRAWN BY	CHECKED BY
BCA	J.FORD
PROJECT MANAGER	
J.FORD	

PP-3

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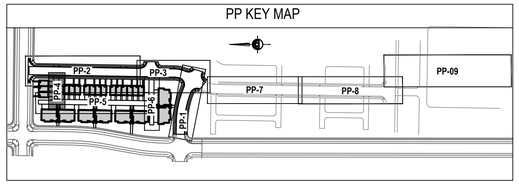
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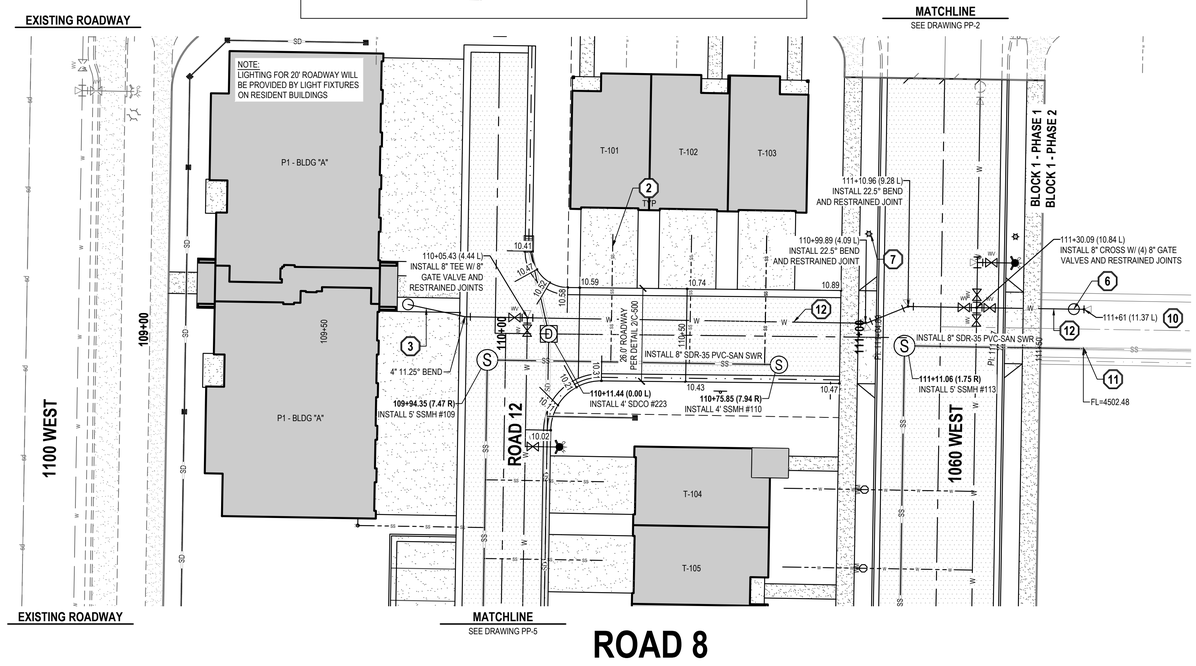
BENCHMARK

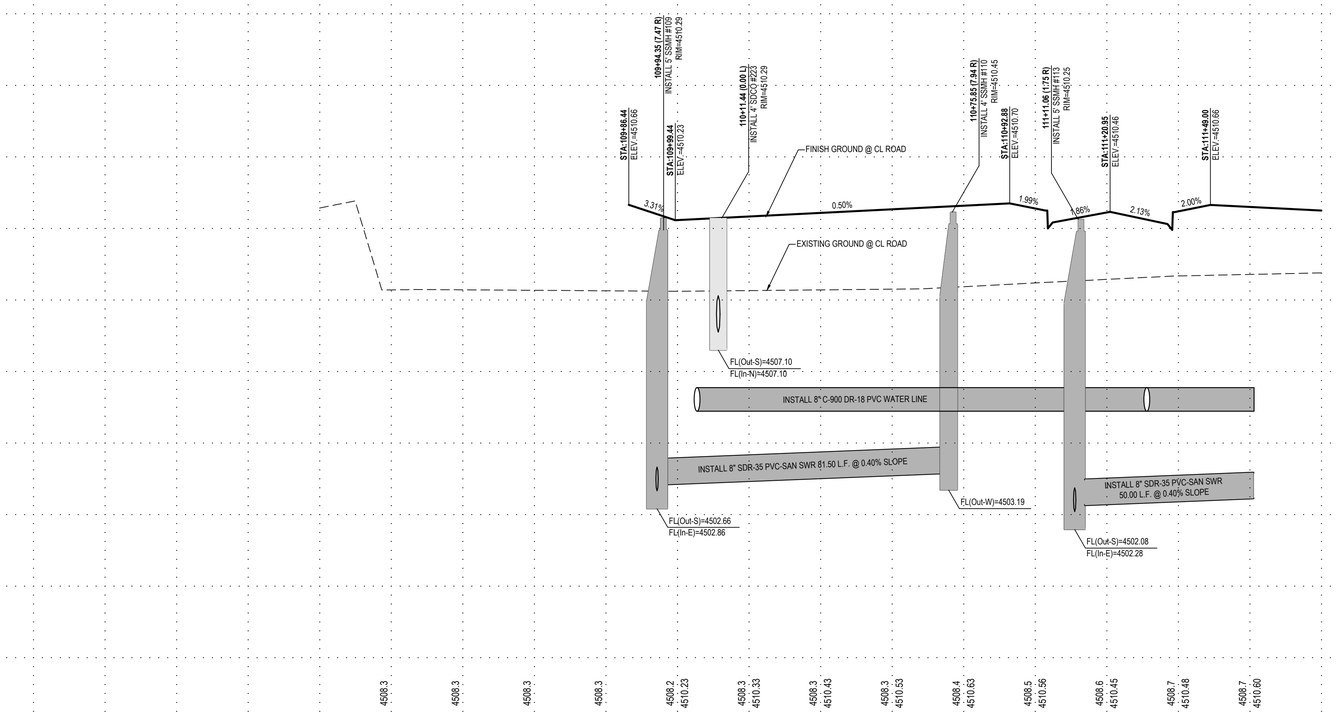
NW CORNER OF SECTION 22, TOWNSHIP 5 SOUTH, RANGE 1 EAST SALT LAKE BASE AND MERIDIAN

ELEV = 4524.26'

PP KEY MAP







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NORTH

HORIZONTAL GRAPHIC SCALE

20 0 10 20 40

(IN FEET)
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VERT: 1 inch = 2 ft.

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LICENSED PROFESSIONAL ENGINEER
No. 7675714-2202
JARED K. FORD
7-13-2020
STATE OF UTAH

PLAN AND PROFILE
ROAD 8

PROJECT NUMBER	PRINT DATE
8799F.1	7/10/20
DRAWN BY	CHECKED BY
BCA	J.FORD
PROJECT MANAGER	
J.FORD	

PP-4

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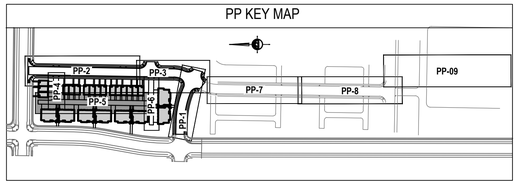
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BENCHMARK

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ELEV = 4524.26'

PP KEY MAP



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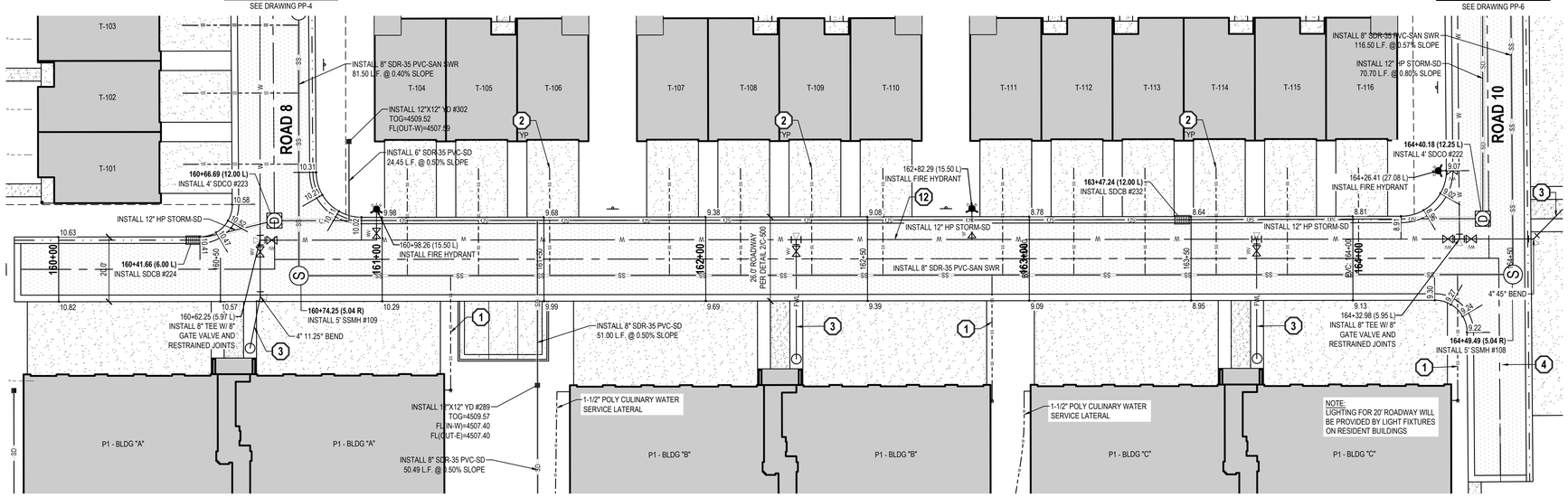
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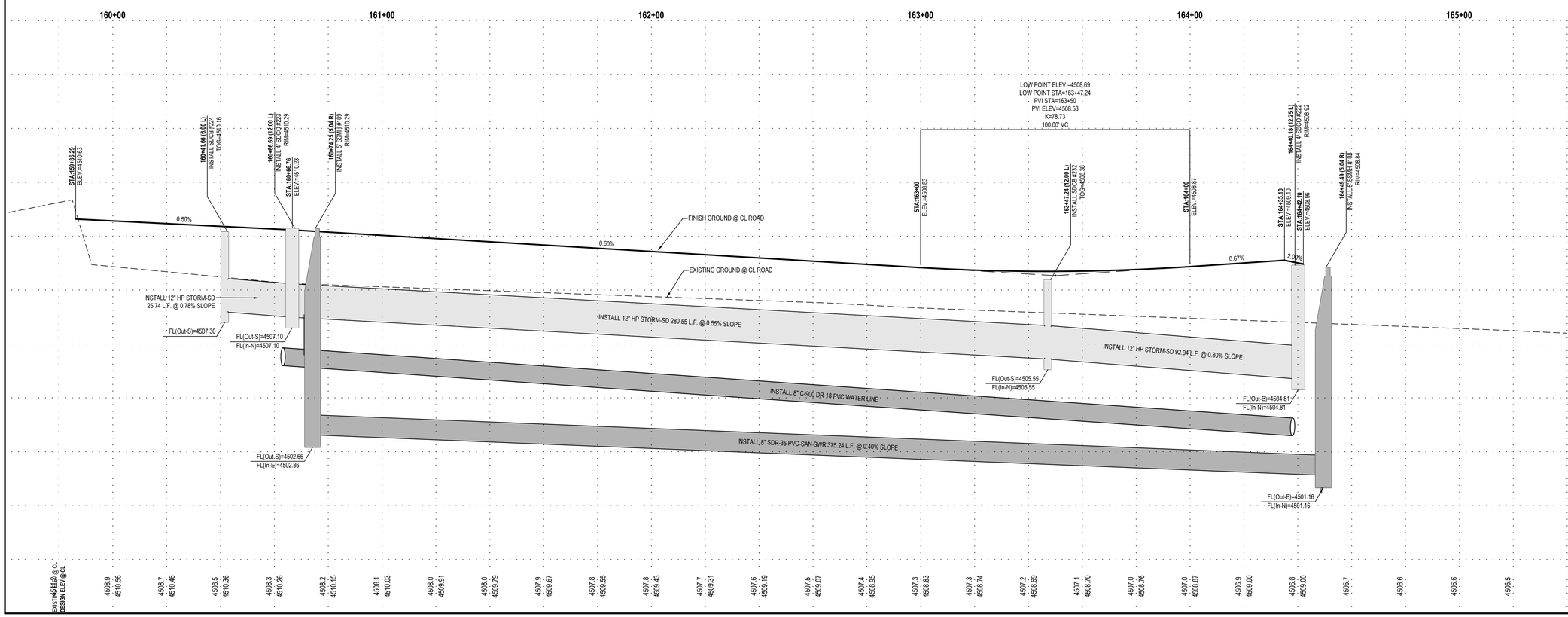
RICHFIELD
Phone: 435.896.2983

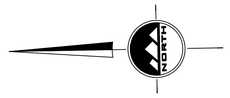
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CONTACT:
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ROAD 12





HORIZONTAL GRAPHIC SCALE

20 0 10 20 40

(IN FEET)
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VERT: 1 inch = 2 ft.

LICENSED PROFESSIONAL ENGINEER
No. 7675714-2202
JARED K. FORD
7-13-2020
STATE OF UTAH

PLAN AND PROFILE ROAD 12

PROJECT NUMBER	PRINT DATE
8799F.1	7/10/20
DRAWN BY	CHECKED BY
BCA	J.FORD
PROJECT MANAGER	
J.FORD	

PP-5

THE VILLAS AT ROCKWELL RANCH
BLOCK 1 - PHASE 1
1060 WEST 420 SOUTH
AMERICAN FORK, UTAH 84003

811 Know what's below. Call before you dig.

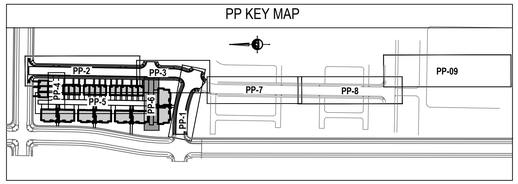
CALL BLUESTAKES @ 811 AT LEAST 48 HOURS PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION.

BENCHMARK

NW CORNER OF SECTION 22, TOWNSHIP 5 SOUTH, RANGE 1 EAST SALT LAKE BASE AND MERIDIAN

ELEV = 4524.26'

PP KEY MAP



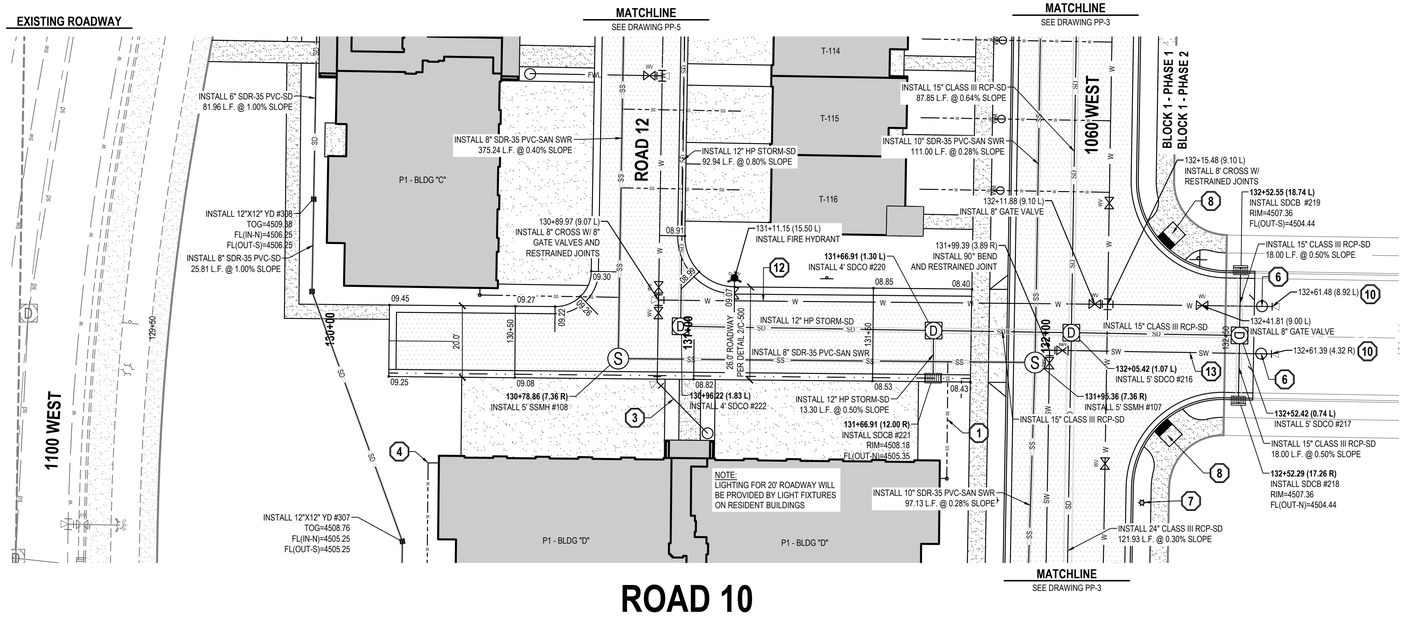
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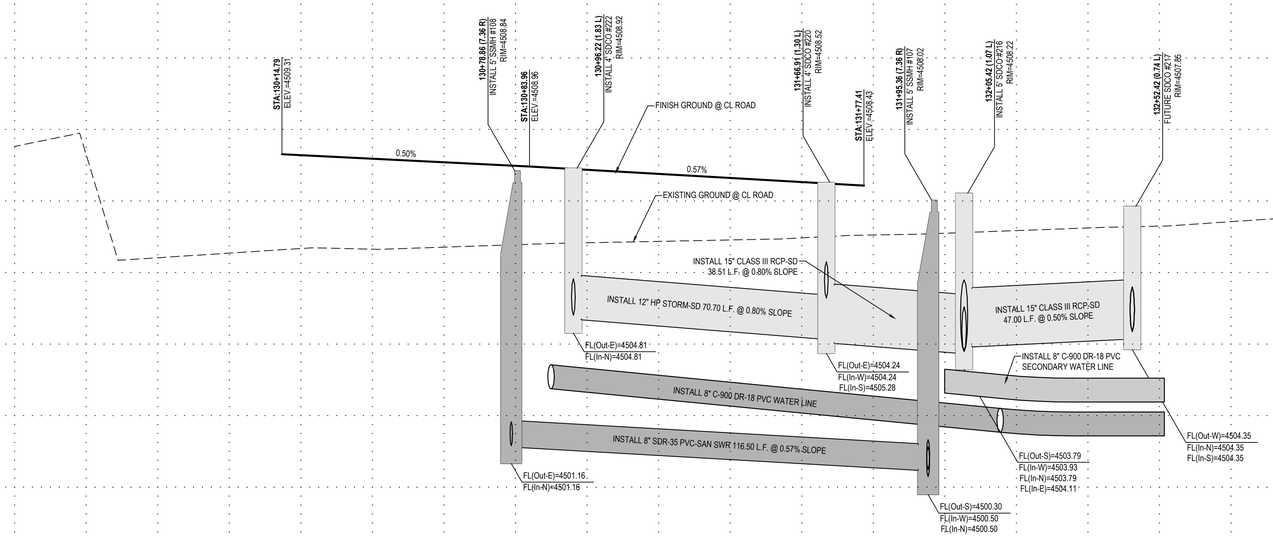
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HORIZONTAL GRAPHIC SCALE

20 0 10 20 40

(IN FEET)
HORZ: 1 inch = 20 ft.
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LICENSED PROFESSIONAL ENGINEER
No. 7675714-2202
JARED K. FORD
7-13-2020
STATE OF UTAH

PLAN AND PROFILE
ROAD 10

PROJECT NUMBER	PRINT DATE
8799F.1	7/10/20
DRAWN BY	CHECKED BY
BCA	J.FORD
PROJECT MANAGER	
J.FORD	

PP-6

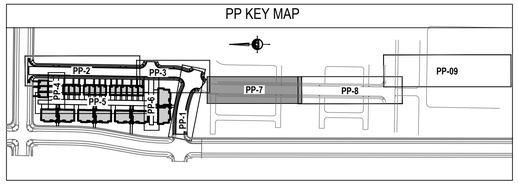
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811 Know what's below. Call before you dig.

BENCHMARK

NW CORNER OF SECTION 22, TOWNSHIP 5 SOUTH, RANGE 1 EAST SALT LAKE BASE AND MERIDIAN

ELEV = 4524.26'



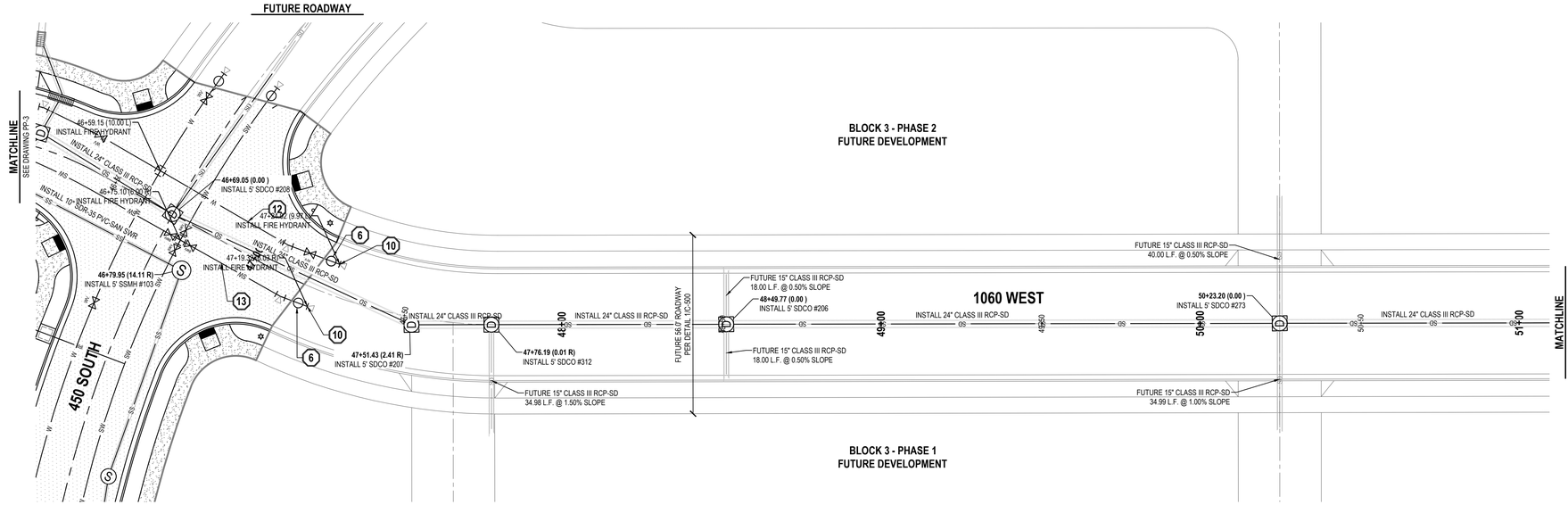
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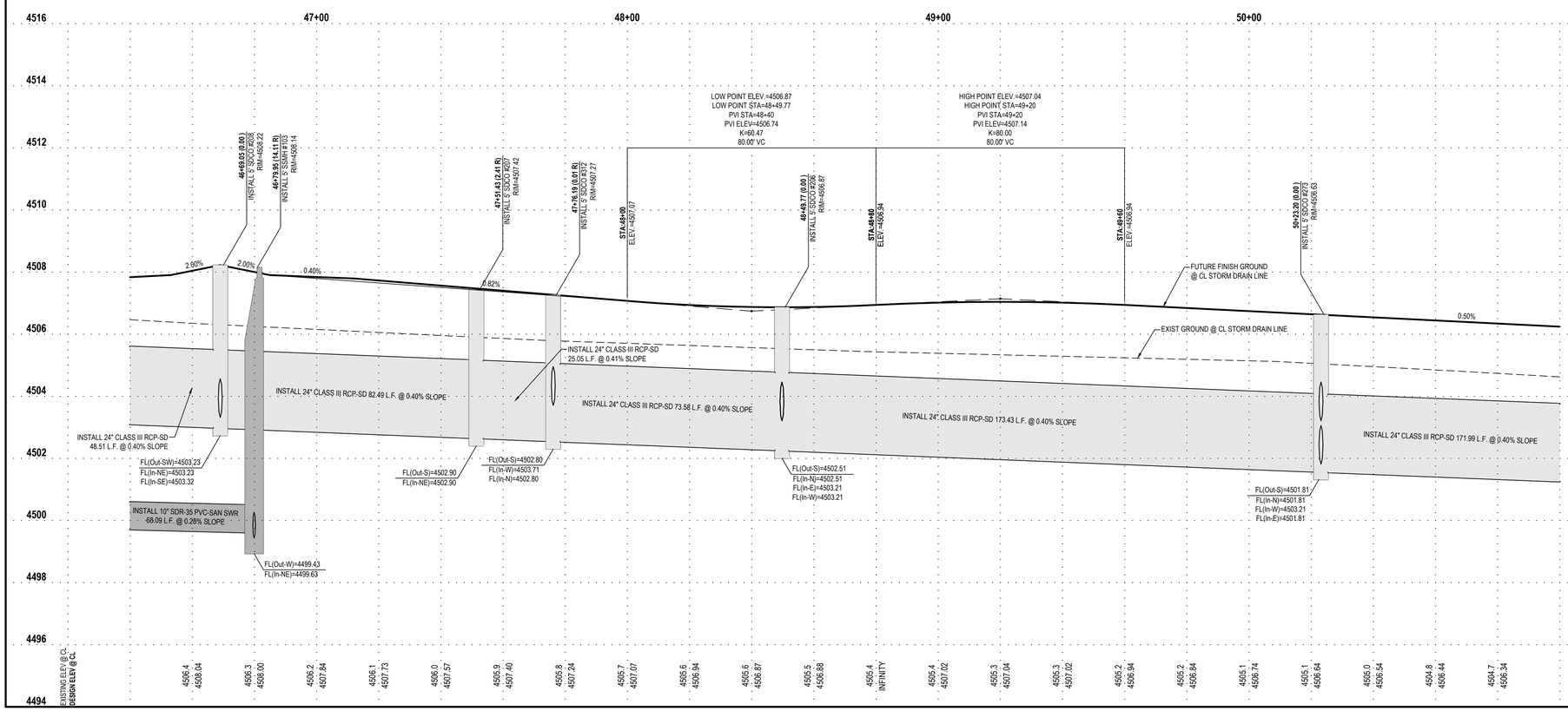
SCOPE OF WORK:

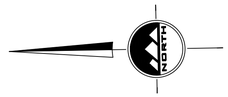
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OFFSITE STORM DRAIN - 1A





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PROJECT MANAGER	
J.FORD	

PP-7

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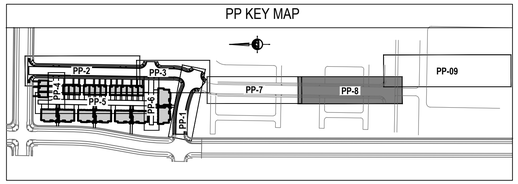
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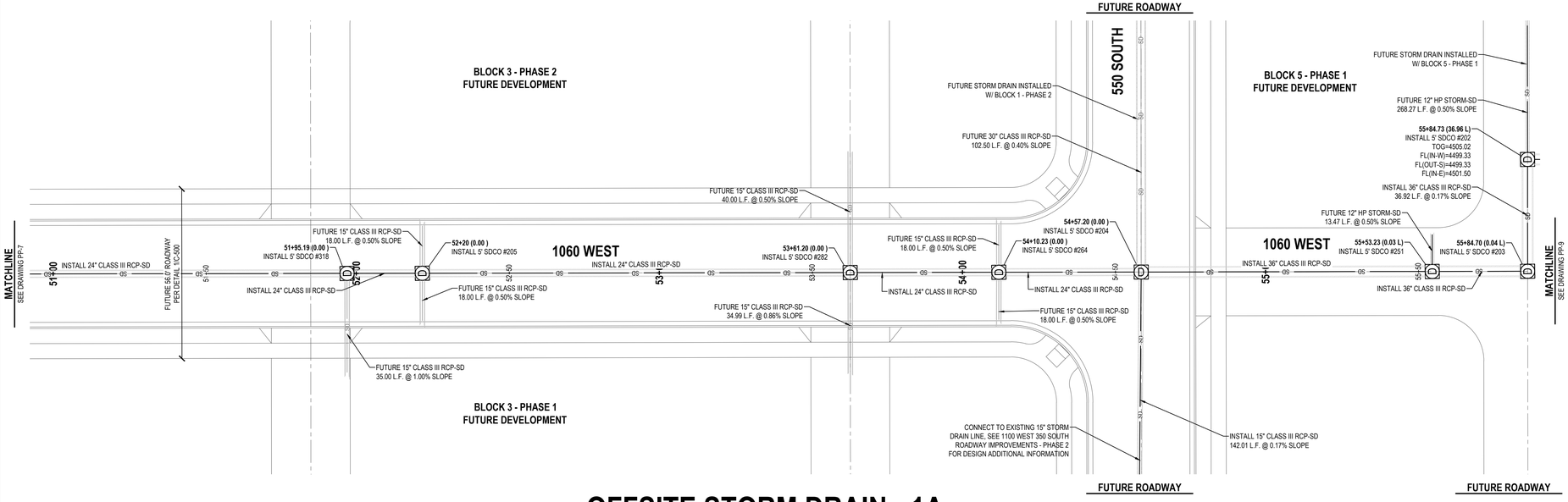
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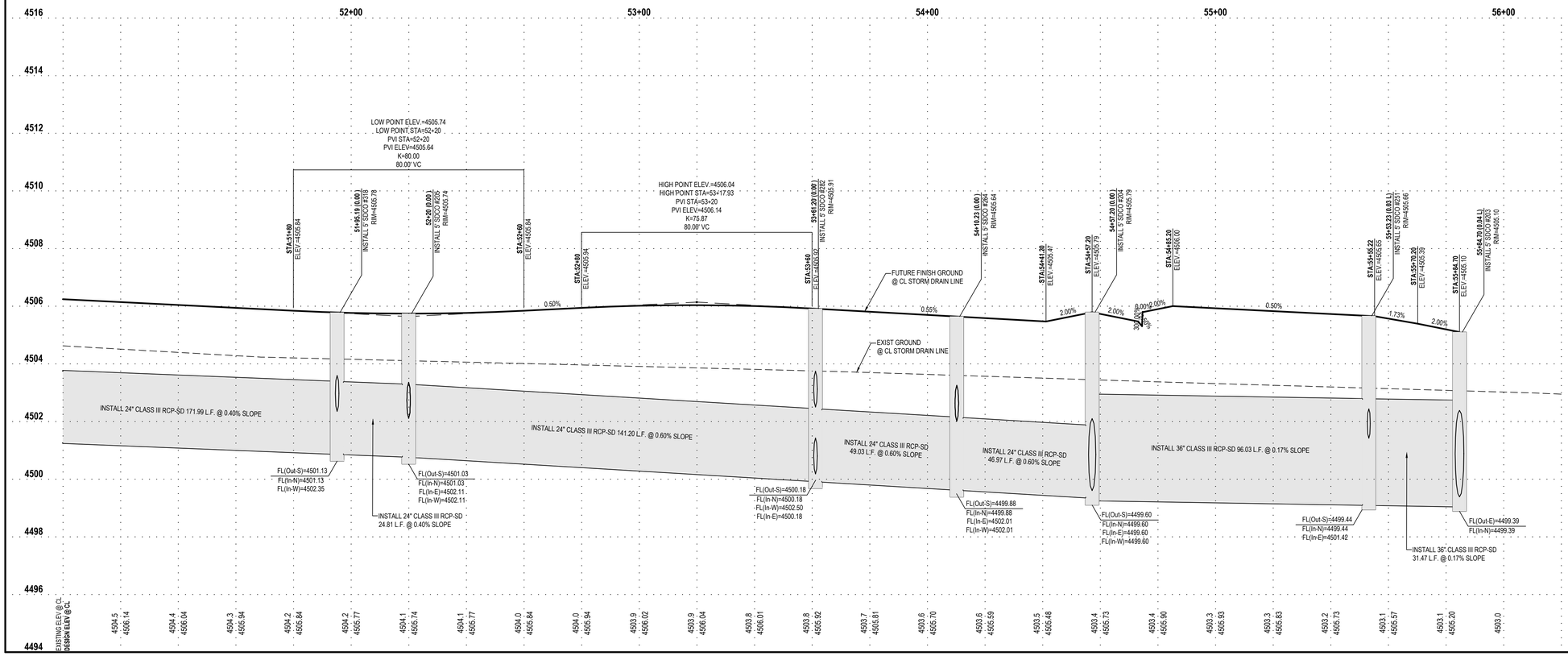
ELEV = 4524.26'

PP KEY MAP





OFFSITE STORM DRAIN - 1A



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NORTH

HORIZONTAL GRAPHIC SCALE

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(IN FEET)
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JARED K. FORD
7-13-2020
STATE OF UTAH

PLAN AND PROFILE OFFSITE STORM DRAIN - 1A

PROJECT NUMBER	PRINT DATE
8799F.1	7/10/20
DRAWN BY	CHECKED BY
BCA	J.FORD
PROJECT MANAGER	
J.FORD	

PP-8

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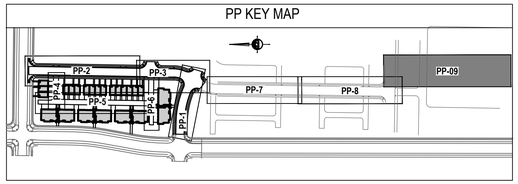
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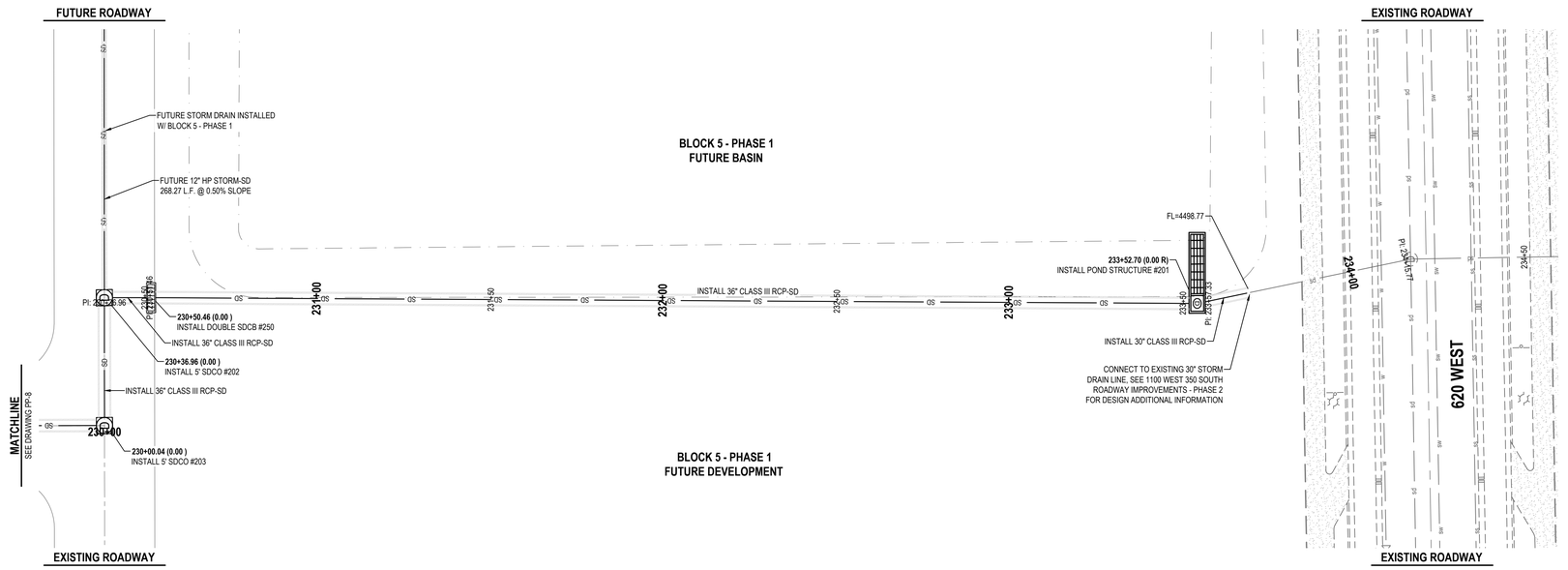
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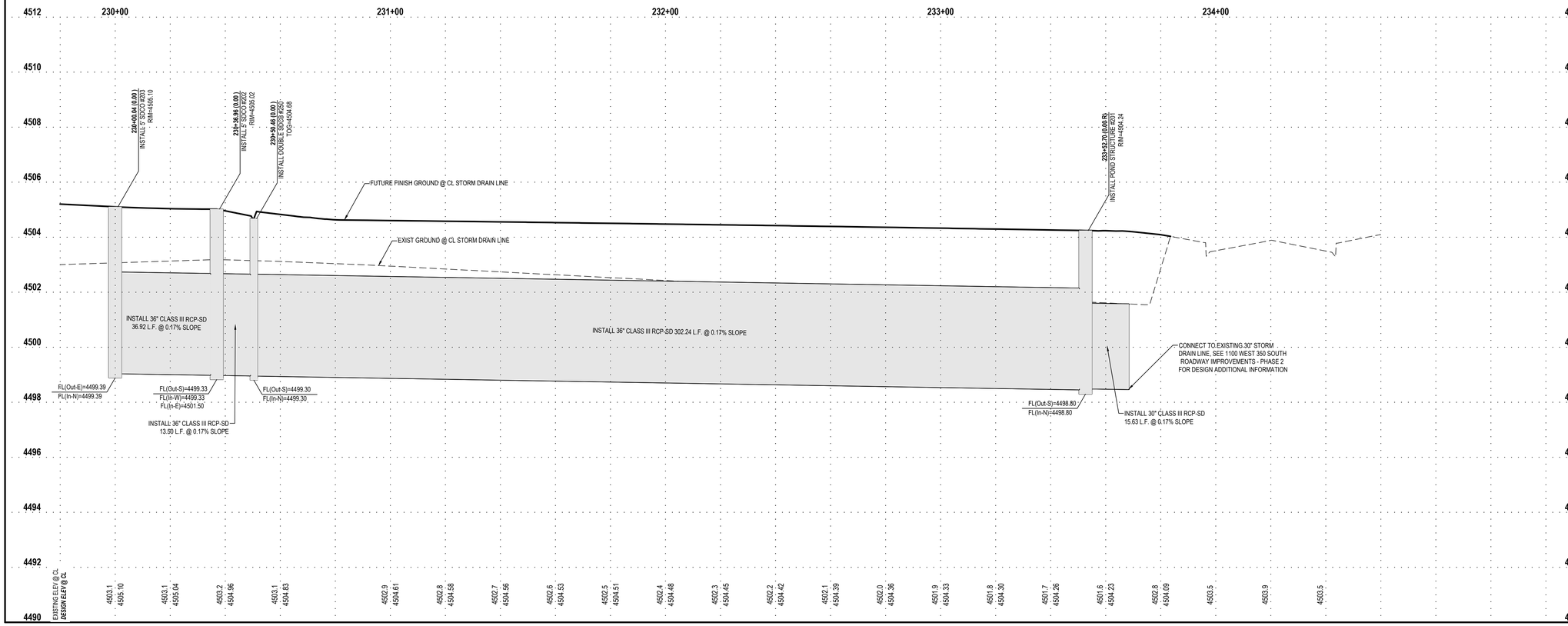
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OFFSITE STORM DRAIN - 1A



HORIZONTAL GRAPHIC SCALE

20 0 10 20 40

(IN FEET)

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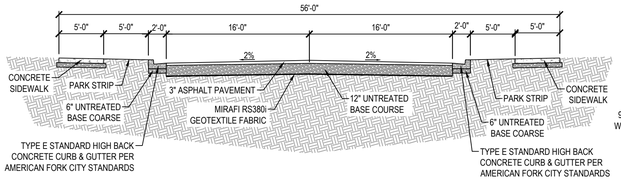
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PLAN AND PROFILE OFFSITE STORM DRAIN - 1A

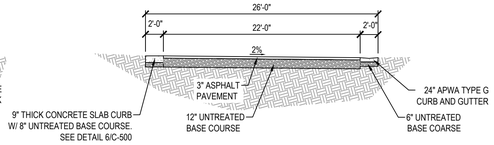
PROJECT NUMBER	PRINT DATE
8799F.1	7/10/20
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BCA	J.FORD
PROJECT MANAGER	
J.FORD	

PP-9



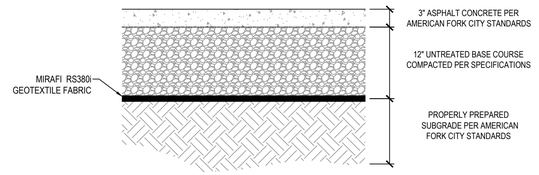
1 56' ROAD CROSS SECTION

SCALE: NONE



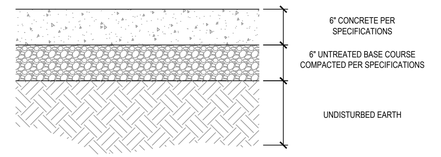
2 26' ROAD CROSS SECTION

SCALE: NONE



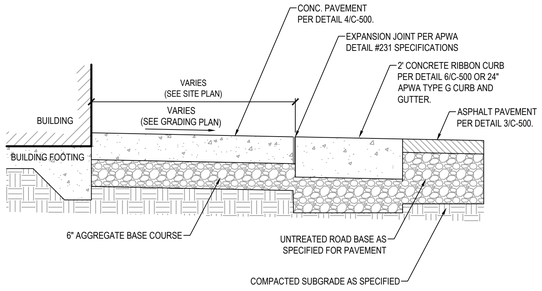
3 ASPHALT PAVEMENT SECTION

SCALE: NONE



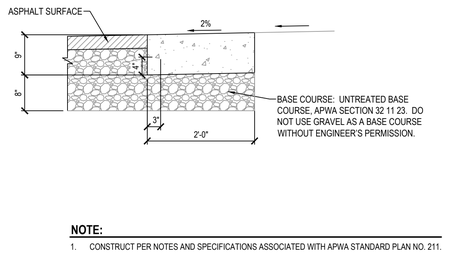
4 CONCRETE PAVEMENT SECTION

SCALE: NONE



5 DRIVEWAY

SCALE: NONE

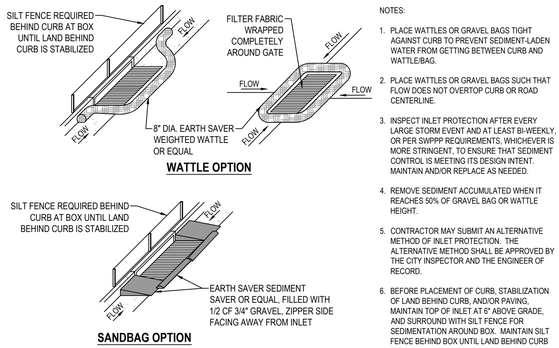


NOTE:

1. CONSTRUCT PER NOTES AND SPECIFICATIONS ASSOCIATED WITH APWA STANDARD PLAN NO. 211.

6 2' CONCRETE RIBBON CURB

SCALE: NONE

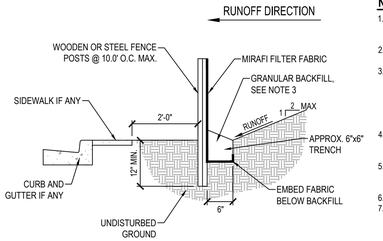


NOTES:

1. PLACE WATTLES OR GRAVEL BAGS TIGHT AGAINST CURB TO PREVENT SEDIMENT-LADEN WATER FROM GETTING BETWEEN CURB AND WATTLE/BAG.
2. PLACE WATTLES OR GRAVEL BAGS SUCH THAT FLOW DOES NOT OVERTOP CURB OR ROAD CENTERLINE.
3. INSPECT INLET PROTECTION AFTER EVERY LARGE STORM EVENT AND AT LEAST BI-WEEKLY, OR PER SWPPP REQUIREMENTS, WHICHEVER IS MORE STRINGENT, TO ENSURE THAT SEDIMENT CONTROL IS MEETING ITS DESIGN INTENT. MAINTAIN AND/OR REPLACE AS NEEDED.
4. REMOVE SEDIMENT ACCUMULATED WHEN IT REACHES 50% OF GRAVEL BAG OR WATTLE HEIGHT.
5. CONTRACTOR MAY SUBMIT AN ALTERNATIVE METHOD OF INLET PROTECTION. THE ALTERNATIVE METHOD SHALL BE APPROVED BY THE CITY INSPECTOR AND THE ENGINEER OF RECORD.
6. BEFORE PLACEMENT OF CURB, STABILIZATION OF LAND BEHIND CURB, AND/OR PAVING, MAINTAIN TOP OF INLET AT 6" ABOVE GRADE, AND SURROUND WITH SILT FENCE FOR SEDIMENTATION AROUND BOX. MAINTAIN SILT FENCE BEHIND BOX UNTIL LAND BEHIND CURB IS STABILIZED.

7 SAG INLET PROTECTION

SCALE: NONE

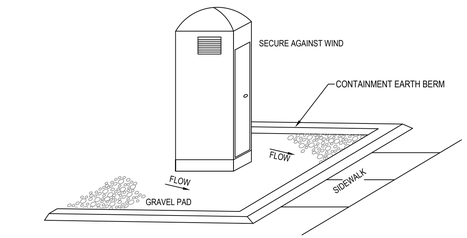


NOTES:

1. EXCAVATE 6"x6" TRENCH ALONG LIMITS OF DISTURBANCE AS SHOWN ON CONSTRUCTION DRAWINGS.
2. POSTS SHALL BE POSITIONED ON DOWNSTREAM SIDE OF FENCE.
3. LAY TOE-IN FABRIC FLAP IN BOTTOM OF TRENCH. BACKFILL TRENCH WITH FREE DRAINING GRANULAR MATERIAL. COMPACT TRENCH TO SATISFACTION OF THE ENGINEER OF RECORD.
4. SILT FENCE GEOTEXTILE SHALL MEET AASHTO M288-92 REQUIREMENTS.
5. REMOVE & DISPOSE OF SEDIMENT WHEN ACCUMULATION IS 50% OF EXPOSED FENCE HEIGHT.
6. 10' MAX. SPACING BETWEEN STAKES.
7. SILT FENCES SHALL BE INSTALLED ALONG CONTOURS, NOT UP AND DOWN SLOPES, WITH 10' OVERLAP AT BREAKS.

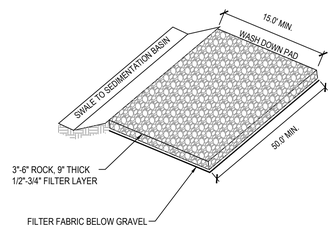
8 TEMPORARY SILT FENCE

SCALE: NONE



9 PORTABLE TOILET

SCALE: NONE

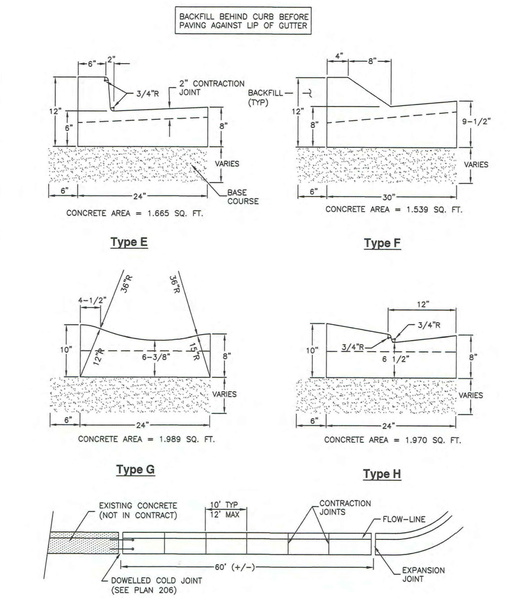


NOTE:

1. PLACE SIGN ADJACENT TO ENTRANCE " CONSTRUCTION TRAFFIC ONLY - ALL CONSTRUCTION TRAFFIC SHALL ENTER AND EXIT SITE AT THIS LOCATION"

10 STABILIZED CONSTRUCTION ENTRANCE

SCALE: NONE



APWA Utah Chapter

Curb and gutter

Plan **205.2**
April 2011

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WHITE HORSE DEVELOPERS
520 SOUTH 850 EAST, SUITE A4
LEHI, UTAH 84043
CONTACT:
JAKE HORAN
PHONE: 801-362-8420

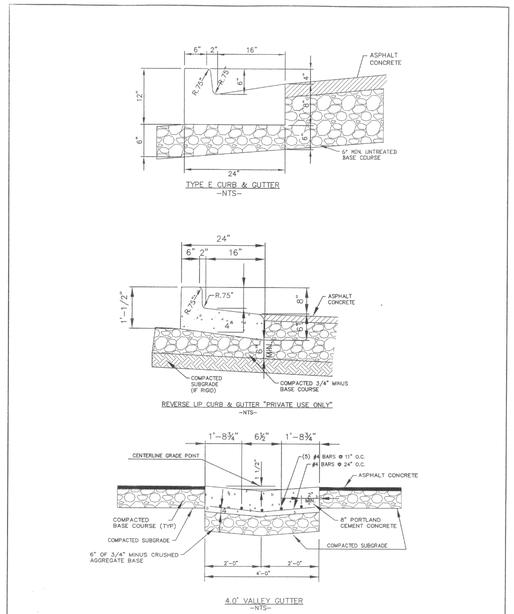
THE VILLAS AT ROCKWELL RANCH
BLOCK 1 - PHASE 1
1060 WEST 420 SOUTH
AMERICAN FORK, UTAH 84003

LICENSED PROFESSIONAL ENGINEER
No. 7675714-2202
JARED K. FORD
7-13-2020
STATE OF UTAH

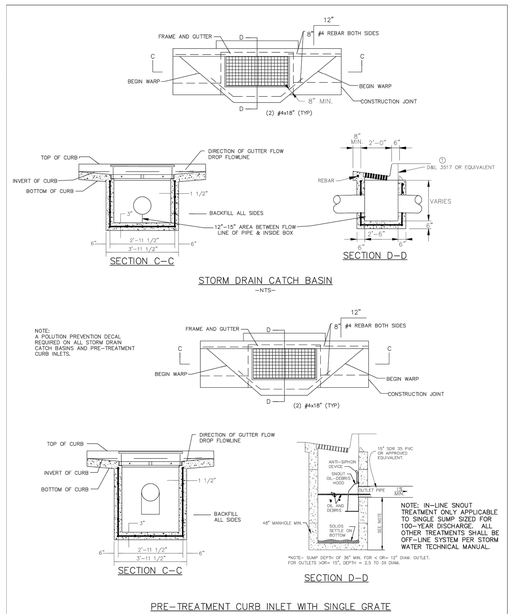
DETAILS SHEET

PROJECT NUMBER	PRINT DATE
8799F.1	7/10/20
DRAWN BY	CHECKED BY
BCA	J.FORD
PROJECT MANAGER	
J.FORD	

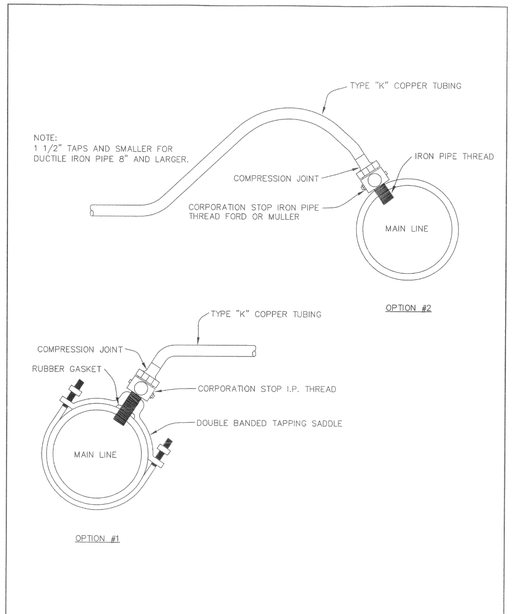
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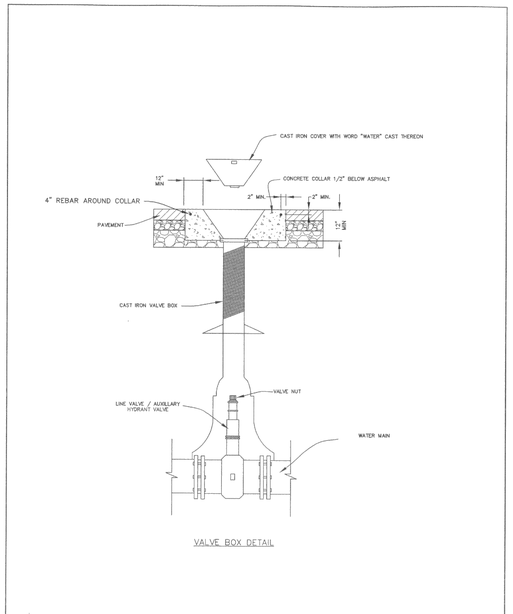
DRAWN: JRP REVISED: DATE: MAY 2002 SCALE: VARIES	Northern ENGINEERING LAND PLANNING CONSTRUCTION MANAGEMENT 1040 E. 800 N. OREM, UTAH 84057 (801) 225-0692	AMERICAN FORK CITY	STANDARD DETAIL FOR: TYPE B1 C&G REVERSE LIP C&G VALLEY GUTTER	DRAWING NO. 15.1



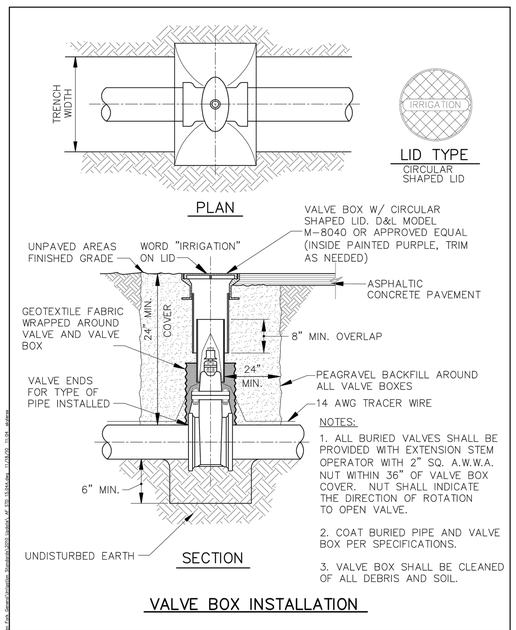
DRAWN: JRP REVISED: AJS DATE: APRIL 2012 SCALE: VARIES	AMERICAN FORK — 1853 —	AMERICAN FORK CITY	STANDARD DETAIL FOR: CATCH BASIN	DRAWING NO. 15.2



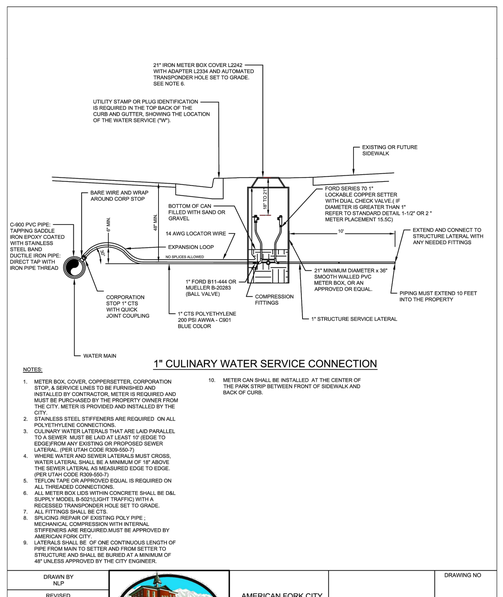
DRAWN: JRP REVISED: DATE: JULY 2002 SCALE: VARIES	Northern ENGINEERING LAND PLANNING CONSTRUCTION MANAGEMENT 1040 E. 800 N. OREM, UTAH 84057 (801) 225-0692	AMERICAN FORK CITY	STANDARD DETAIL FOR: TYPICAL WATERMAN TAPS	DRAWING NO. 15.3



DRAWN: JRP REVISED: DATE: JULY 2002 SCALE: VARIES	Northern ENGINEERING LAND PLANNING CONSTRUCTION MANAGEMENT 1040 E. 800 N. OREM, UTAH 84057 (801) 225-0692	AMERICAN FORK CITY	STANDARD DETAIL FOR: VALVE BOX DETAIL	DRAWING NO. 15.4



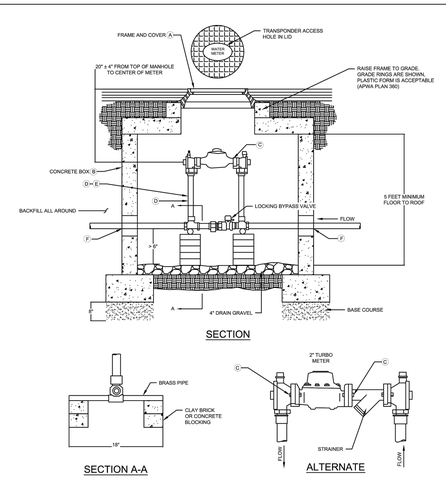
DRAWN: REVISED: 11/2010 DATE: SCALE: NONE	HORROCKS ENGINEERS 5781 WEST MAIN P.O. BOX 337 AMERICAN FORK (801) 763–5100	AMERICAN FORK CITY	STANDARD DETAIL FOR: SECONDARY WATER VALVE BOX DETAIL	DRAWING NO. 15.4A



NOTES:

1. METER BOX, COVER, COPPERSETTER, CORPORATION STOP, & SERVICE LINES TO BE FURNISHED AND INSTALLED BY CONTRACTOR. METER IS REQUIRED AND MUST BE PURCHASED BY THE PROPERTY OWNER FROM THE CITY. METER IS PROVIDED AND INSTALLED BY THE CITY.
2. STAINLESS STEEL STIFFENERS ARE REQUIRED ON ALL POLYETHYLENE CONNECTIONS.
3. CULINARY WATER LINES AND THAT ARE LAID PARALLEL TO SEWER, MUST BE LAID AT LEAST 10' (EDGE TO EDGE)FROM ANY EXISTING OR PROPOSED SEWER LATERAL. (PER UTAH CODE R309-550-7)
4. WHERE WATER AND SEWER LATERALS MUST CROSS, WATER LATERAL SHALL BE A MINIMUM OF 18"ABOVE THE SEWER LATERAL AS MEASURED EDGE TO EDGE. (PER UTAH CODE R309-550-7)
5. A 1" CTS POLYETHYLENE 200 PSI EQUAL IS REQUIRED ON ALL UNLEADED CONNECTIONS.
6. ALL METER BOX LIDS WITHIN CONCRETE SHALL BE D&L SUPPLY MODEL S-502 FLIGHT TRAFFIC WITH A RECESSED TRANSPONDER HOLE SET TO GRADE.
7. ALL FITTINGS SHALL BE CTS.
8. SPLICING /REPAIR OF EXISTING POLY PIPE ; MECHANICAL COMPRESSION WITH INTERNAL STIFFENERS ARE REQUIRED.MUST BE APPROVED BY THE CITY ENGINEER.
9. LATERALS SHALL BE OF ONE CONTINUOUS LENGTH OF PIPE FROM MAIN TO SETTER AND FROM SETTER TO STRUCTURE AND SHALL BE BURIED AT A MINIMUM OF 48" UNLESS APPROVED BY THE CITY ENGINEER.
10. METER CAN SHALL BE INSTALLED AT THE CENTER OF THE PARK STRIP BETWEEN FRONT OF SIDEWALK AND BACK OF CURB.

DRAWN BY NLP REVISED ABM DATE 9/18/2019. SCALE VARIES	AMERICAN FORK — 1853 —	AMERICAN FORK CITY PUBLIC WORKS 275 EAST 200 NORTH (801)763-9030	1" CULINARY WATER SERVICE CONNECTION	DRAWING NO 15.5



TURBO METER INSTALLATION FOR ALL SYSTEMS USED EXCLUSIVELY FOR IRRIGATION OR FIRE PROTECTION.

LEGEND

NO.	*	ITEM	DESCRIPTION
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 REVISED: DATE: FEB 2019 SCALE: VARIES	AMERICAN FORK — 1853 —	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

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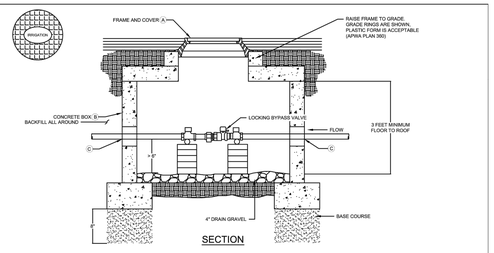
THE VILLAS AT ROCKWELL RANCH
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AMERICAN FORK, UTAH 84003

LICENSED PROFESSIONAL ENGINEER
No. 7675714-2202
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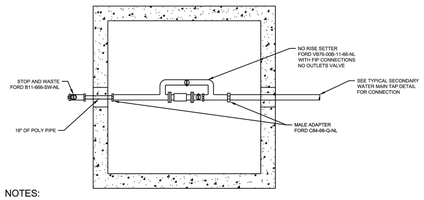
DETAILS SHEET

PROJECT NUMBER 8799F.1
PRINT DATE 7/10/20
DRAWN BY BCA
CHECKED BY J.FORD
PROJECT MANAGER J.FORD

C-501



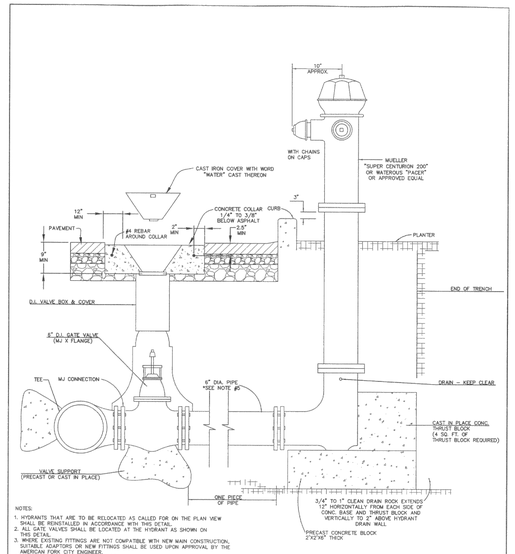
SECTION



NOTES:
VAULT TO BE PLACED ONE FOOT FRONT OF WALK WITHIN AN EIGHT FOOT PARK STRIP OR WITHIN 10' FRONT PUE.

		LEGEND	
NO.	*	ITEM	DESCRIPTION
A		27" FRAME AND COVER	APWA PLAN 502. CAST IRON LID WITH "IRRIGATION" AND RECESSED ORION HOLE. PART NUMBER 12.25PBLKWAMBO 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.

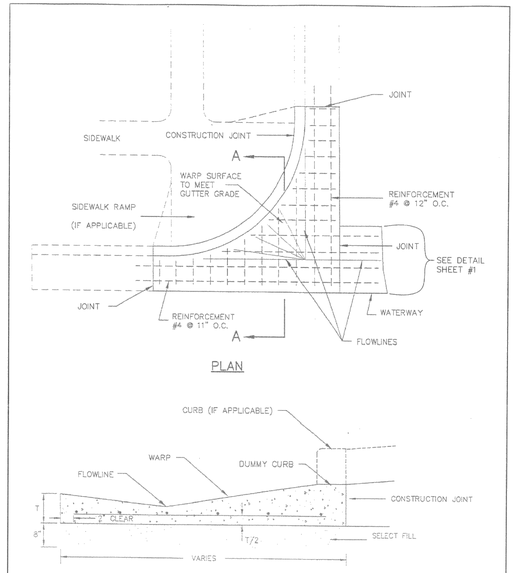
DRAWN: MVU	AMERICAN FORK CITY PUBLIC WORKS 275 EAST 200 NORTH (801) 763-9030	STANDARD DETAIL FOR 1-1/2" OR 2" PI METER PLACEMENT	DRAWING NO. 15.5E
REVISED:			
DATE: AUG 2019			
SCALE: VARIES			



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 STD. DWG.
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 BEAR AGAINST UNDISTURBED SOIL.
5. IF LENGTH EXCEEDS 1 LENGTH OF PIPE, INCREASE DIAMETER TO 8 INCH MINIMUM.

FIRE HYDRANT DETAIL
-NTS-

DRAWN: JRP	Northern Engineering and Planning, Construction Management, 1040 E. 800 N. Orem, Utah 84057, (801) 802-8992	AMERICAN FORK CITY	STANDARD DETAIL FOR FIRE HYDRANT	DRAWING NO. 15.6
REVISED:				
DATE: MAY 2002				
SCALE: VARIES				

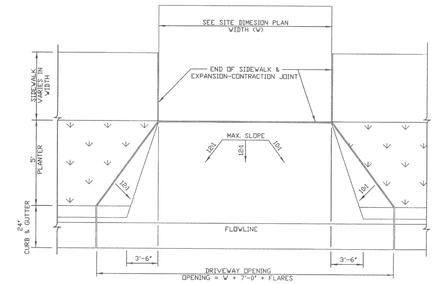


PLAN

SECTION A-A

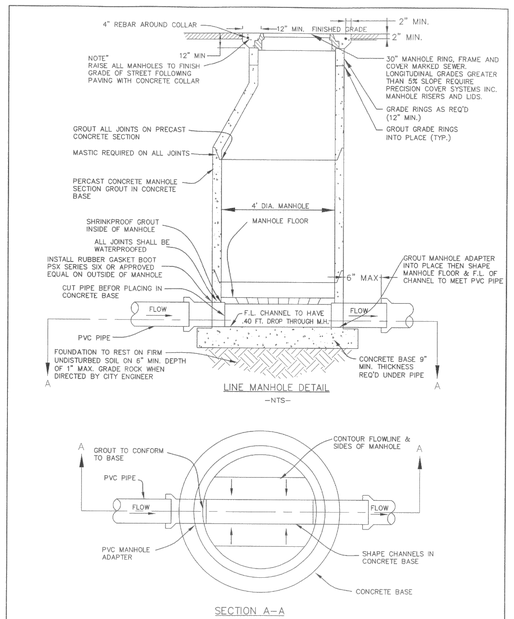
DRAWN: JRP	Northern Engineering and Planning, Construction Management, 1040 E. 800 N. Orem, Utah 84057, (801) 802-8992	AMERICAN FORK CITY	STANDARD DETAIL FOR INTERSECTION RADIUS REBAR DETAIL	DRAWING NO. 15.8
REVISED:				
DATE: MAY 2002				
SCALE: VARIES				

NOTE: SIDEWALK DEPTH SHALL BE 4" IN RESIDENTIAL ZONES; 6" ADJACENT TO RESIDENTIAL DRIVEWAY APPROACHES AND IN ALL COMMERCIAL AND INDUSTRIAL ZONES.



FLARED DRIVE APPROACH WITH PLANTER
-NTS-

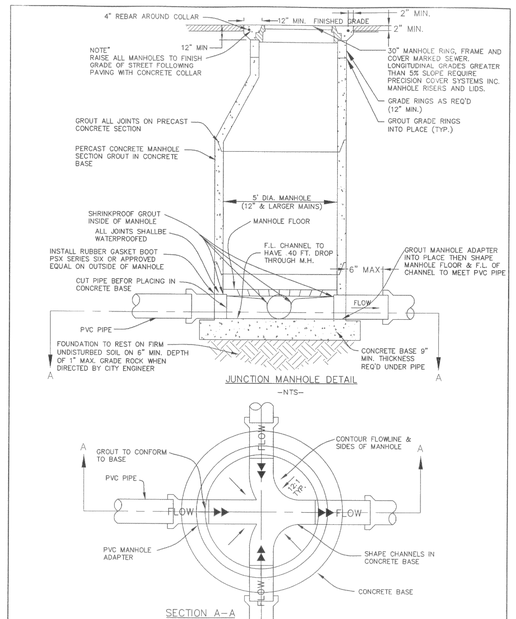
DRAWN: JRP	Northern Engineering and Planning, Construction Management, 1040 E. 800 N. Orem, Utah 84057, (801) 802-8992	AMERICAN FORK CITY	STANDARD DETAIL FOR FLARED DRIVE APPROACH WITH PLANTER	DRAWING NO. 15.9
REVISED:				
DATE: MAY 2002				
SCALE: VARIES				



LINE MANHOLE DETAIL
-NTS-

SECTION A-A
-NTS-

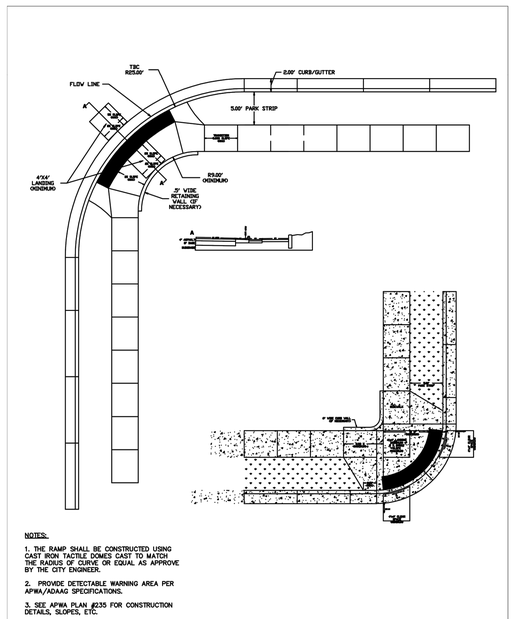
DRAWN: JRP	Northern Engineering and Planning, Construction Management, 1040 E. 800 N. Orem, Utah 84057, (801) 802-8992	AMERICAN FORK CITY	STANDARD DETAIL FOR SANITARY SEWER LINE MANHOLE DETAIL	DRAWING NO. 15.12
REVISED:				
DATE: JULY 2002				
SCALE: VARIES				



JUNCTION MANHOLE DETAIL
-NTS-

SECTION A-A
-NTS-

DRAWN: JRP	Northern Engineering and Planning, Construction Management, 1040 E. 800 N. Orem, Utah 84057, (801) 802-8992	AMERICAN FORK CITY	STANDARD DETAIL FOR SANITARY SEWER JUNCTION MANHOLE DETAIL	DRAWING NO. 15.13
REVISED:				
DATE: JULY 2002				
SCALE: VARIES				



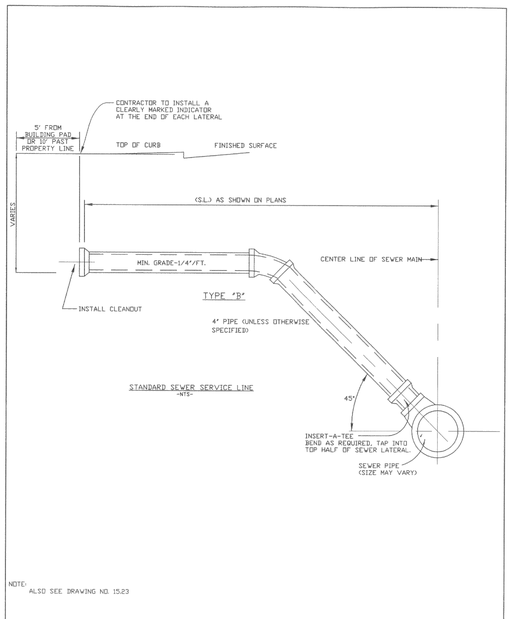
NOTES:

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				



STANDARD SEWER SERVICE LINE
-NTS-

NOTE:
ALSO SEE DRAWING NO. 15.23

DRAWN: JRP	Northern Engineering and Planning, Construction Management, 1040 E. 800 N. Orem, Utah 84057, (801) 802-8992	AMERICAN FORK CITY	STANDARD DETAIL FOR STANDARD SEWER SERVICE LINE	DRAWING NO. 15.19
REVISED:				
DATE: MAY 2002				
SCALE: VARIES				

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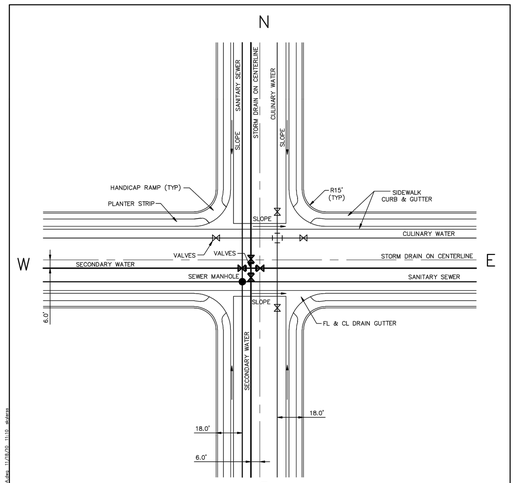
THE VILLAS AT ROCKWELL RANCH
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AMERICAN FORK, UTAH 84003

LICENSED PROFESSIONAL ENGINEER
No. 7675714-2202
JARED K. FORD
7-13-2020
STATE OF UTAH

DETAILS SHEET

PROJECT NUMBER 8799F.1
PRINT DATE 7/10/20
DRAWN BY BCA
CHECKED BY J.FORD
PROJECT MANAGER J.FORD

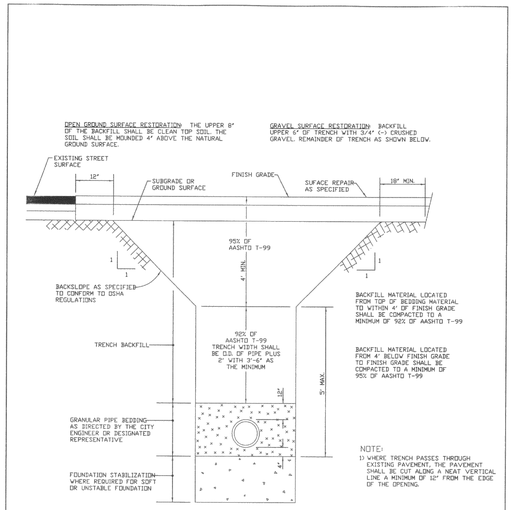
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GENERAL NOTES:

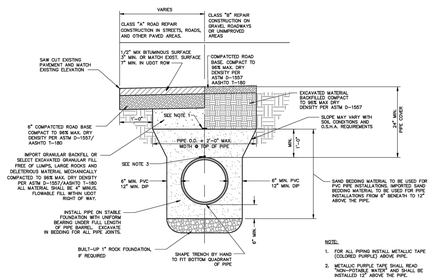
1. INSTALL GATE VALVES AT EXTENSION OF PROPERTY LINES ON CULINARY WATER LINES OF THE SIZE AND TYPE IN COMPLIANCE WITH APPLICABLE AMERICAN FORK CITY SPECIFICATIONS AND DETAIL DRAWINGS.
2. INSTALL MANHOLE OF SIZE AND TYPE IN COMPLIANCE WITH APPLICABLE AMERICAN FORK SPECIFICATIONS AND DETAIL DRAWINGS.
3. DEVIATIONS FROM UTILITY LOCATION AS DETAILED HEREIN MAY ONLY BE MADE AS APPROVED BY THE AMERICAN FORK CITY PUBLIC WORKS DIRECTOR.
4. SANITARY SEWER SHOULD BE LOCATED ON THE SOUTH AND WEST.
5. CULINARY WATER SHOULD BE LOCATED ON THE NORTH AND EAST.
6. SECONDARY WATER SHOULD BE LOCATED ON THE SOUTH AND WEST.
7. INSTALL SECONDARY WATER VALVES AT THE INTERSECTION OF THE CROSS OR TEE.

DRAWN:	HORROCKS ENGINEERS (ONE WEST MAIN P.O. BOX 370 AMERICAN FORK (801) 763-5100)	AMERICAN FORK CITY	STANDARD DETAIL FOR: STANDARD STREET INTERSECTION AND UTILITY LOCATION	DRAWING NO. 15.20A
REVISED: 11/2010				
DATE:				
SCALE:				



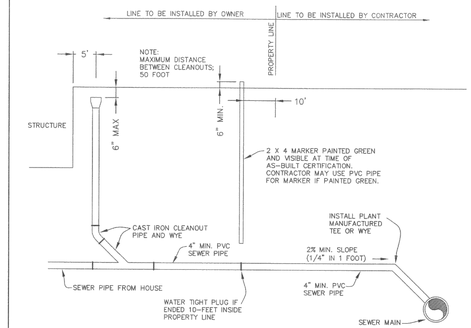
TYPICAL TRENCH DETAIL
-NTS-

DRAWN: JRP	Northern Engineering & Land Planning Consultation & Development, 1060 E. 800 N. Orem, Utah 84057 (801) 802-8992	AMERICAN FORK CITY	STANDARD DETAIL FOR: TYPICAL TRENCH DETAIL	DRAWING NO. 15.22
REVISED:				
DATE: MAY 2002				
SCALE: VARIES				

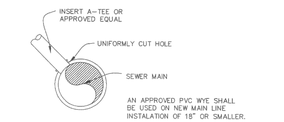


TYPICAL SECONDARY WATER TRENCH DETAIL

DRAWN:	HORROCKS ENGINEERS (ONE WEST MAIN P.O. BOX 370 AMERICAN FORK (801) 763-5100)	AMERICAN FORK CITY	STANDARD DETAIL FOR: TYPICAL SECONDARY WATER TRENCH DETAIL	DRAWING NO. 15.22A
REVISED: 11/2010				
DATE:				
SCALE:				



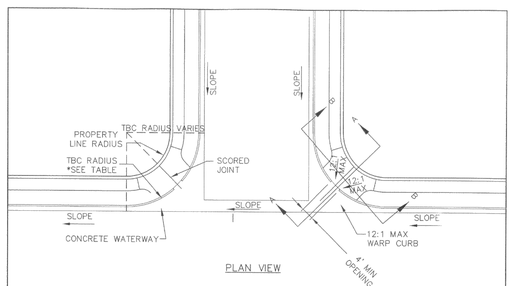
SEWER LATERAL DETAIL
-NTS-



SEWER SERVICE LATERAL SADDLE
-NTS-

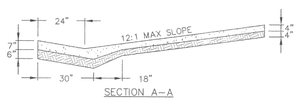
NOTE:
1) LATERAL SHALL NOT ENTER MANHOLE, UNLESS OTHERWISE APPROVED BY CITY ENGINEER.
2) FOR CONCRETE PIPE ADD CONCRETE COLLAR AROUND INSERT-A-TEE.
3) ALSO SEE DRAWING NO. 15.19

DRAWN: JRP	Northern Engineering & Land Planning Consultation & Development, 1060 E. 800 N. Orem, Utah 84057 (801) 802-8992	AMERICAN FORK CITY	STANDARD DETAIL FOR: SANITARY SEWER LATERAL AND CLEAN OUT	DRAWING NO. 15.23
REVISED:				
DATE: JULY 2002				
SCALE: VARIES				

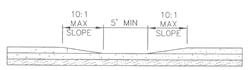


PLAN VIEW

ROADWAY CLASSIFICATION	TOP BACK CURB RADIUS (FEET)	PROPERTY LINE RADIUS (FEET)
ARTERIAL	40	30
COLLECTOR	30	20
LOCAL	25	15



SECTION A-A



SECTION B-B

DRAWN: JRP	Northern Engineering & Land Planning Consultation & Development, 1060 E. 800 N. Orem, Utah 84057 (801) 802-8992	AMERICAN FORK CITY	STANDARD DETAIL FOR: STANDARD STREET INTERSECTION CORNER	DRAWING NO. 15.24
REVISED:				
DATE: MAY 2002				
SCALE: VARIES				

ENSIGN
THE STANDARD IN ENGINEERING

SALT LAKE CITY
45 W. 10000 S., Suite 500
Sandy, UT 84070
Phone: 801.255.0529

LAYTON
Phone: 801.547.1100

TOOELE
Phone: 435.843.3590

CEDAR CITY
Phone: 435.865.1453

RICHFIELD
Phone: 435.896.2983

WWW.ENSIGNENG.COM

FOR:
WHITE HORSE DEVELOPERS
520 SOUTH 850 EAST, SUITE A4
LEHI, UTAH 84043

CONTACT:
JAKE HORAN
PHONE: 801-362-8420

THE VILLAS AT ROCKWELL RANCH
BLOCK 1 - PHASE 1
1060 WEST 420 SOUTH
AMERICAN FORK, UTAH 84003

LICENSED PROFESSIONAL ENGINEER
No. 7675711-2202
JARED K. FORD
7-13-2020
STATE OF UTAH

DETAILS SHEET

PROJECT NUMBER	PRINT DATE
8799F.1	7/10/20
DRAWN BY	CHECKED BY
BCA	J.FORD
PROJECT MANAGER	
J.FORD	

C-503

AMERICAN FORK CITY
PLANNING COMMISSION

MEETING DATE: July 22, 2020
STAFF PRESENTATION: Adam Olsen

AGENDA TOPIC: Hearing, review and action on a commercial site plan for the Davies 500 East Office Warehouse, located at 450 E. Auto Mall Drive, in the PI-1 Planned Industrial zone.

ACTION REQUESTED: Recommendation of approval to City Council.

BACKGROUND INFORMATION					
Location:		450 E. Auto Mall Dr.			
Applicants:		Benchmark Civil/Davies Design			
Existing Land Use:		Vacant			
Proposed Land Use:		Commercial			
Surrounding Land Use:	North	Commercial			
	South	Commercial			
	East	Commercial			
	West	Agriculture			
Existing Zoning:		PI-1 (Planned Industrial)			
Proposed Zoning:		N/A			
Surrounding Zoning:	North	GC-2 (Planned Commercial)			
	South	GC-1 (General Commercial)			
	East	GC-2 (Planned Commercial)			
	West	Residential Agriculture 5 (Utah County)			
Land Use Plan Designation:		Design Industrial			
Zoning within density range?		x	Yes		No

Background

In early 2020, this area was annexed into the City under the Axley-Way Annexation. The resulting site plan represents a two-phase office-warehouse development. Phase I consists of one structure, 26,496 sq. ft. and Phase II consists of one structure, 59,333 sq. ft. The entire site consists of 6.2 acres. The site is bounded by Auto Mall Drive on the north, 500 East on the east, and the Front Runner and freight tracks to the southwest. Access is provided off both 500 East and Auto Mall Drive.

Parking and landscaping are provided per the City's requirements. Landscape plans have been provided in the submittal materials. There is a discrepancy, however, in the landscape plans and site plan. The site plan indicates landscape along the western property line, adjacent to the Front Runner tracks. The landscape plan does not reflect

this. Per the Development Code, landscaping/screening must be present adjacent to the tracks. Staff recommends a "condition of approval" be added to address this inconsistency and illustrate proposed landscaping treatment and screening in the landscape plan. Renderings of the structures are provided in the submittal materials.

Consistency with the Land Use Plan:

The Land Use Plan designates this area as "Design Industrial". The site plan is consistent with the Land Use Plan Designation.

FINDINGS OF FACT/CONDITION OF APPROVAL

After reviewing the application for site plan approval, the following findings of fact are offered for consideration:

1. The proposed site plan meets the criteria as found in Section 17.7.701 (Planned Industrial Projects) of the Development Code.

2. Landscape treatment shall be illustrated on the landscape plan, providing vegetation/screening along the western boundary of the site.

POTENTIAL MOTIONS

APPROVAL

Mr. Chairman, I move that we recommend approval of the commercial site plan for Davies 500 East Office Warehouse, with the finding and condition listed in the staff report and subject to any findings, conditions and modifications listed in the Engineering report.

DENIAL

Mr. Chairman, I move that we recommend denial of the commercial site plan.

TABLE

Mr. Chairman, I move that we table action on the commercial site plan.

AMERICAN FORK CITY ENGINEERING DIVISION
STAFF REPORT

Planning Commission Meeting Date: 7/22/2020

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 Office & Warehouse

Project Address: 450 East Auto Mall Drive

Developer / Applicant's Name: Davies Design Build

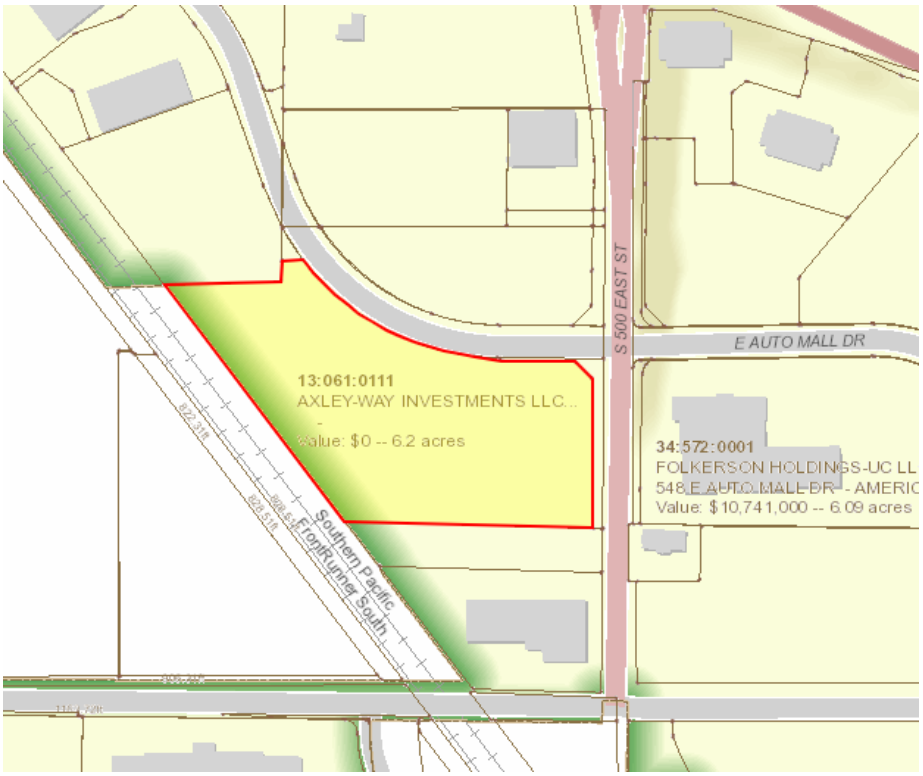
Type of Application:

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

Engineering Division Recommendation: The Engineering Division recommends APPROVAL of the proposed development subject to the following findings and conditions:

1. All Standard Conditions of Approval and items denoted as "Plan Modification(s) Required" in the Click here to enter a date. Engineering Division Staff Report for the City Land Use Authority shall be addressed on all final project documents.

Project Map:



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).

Plan Modifications Required:

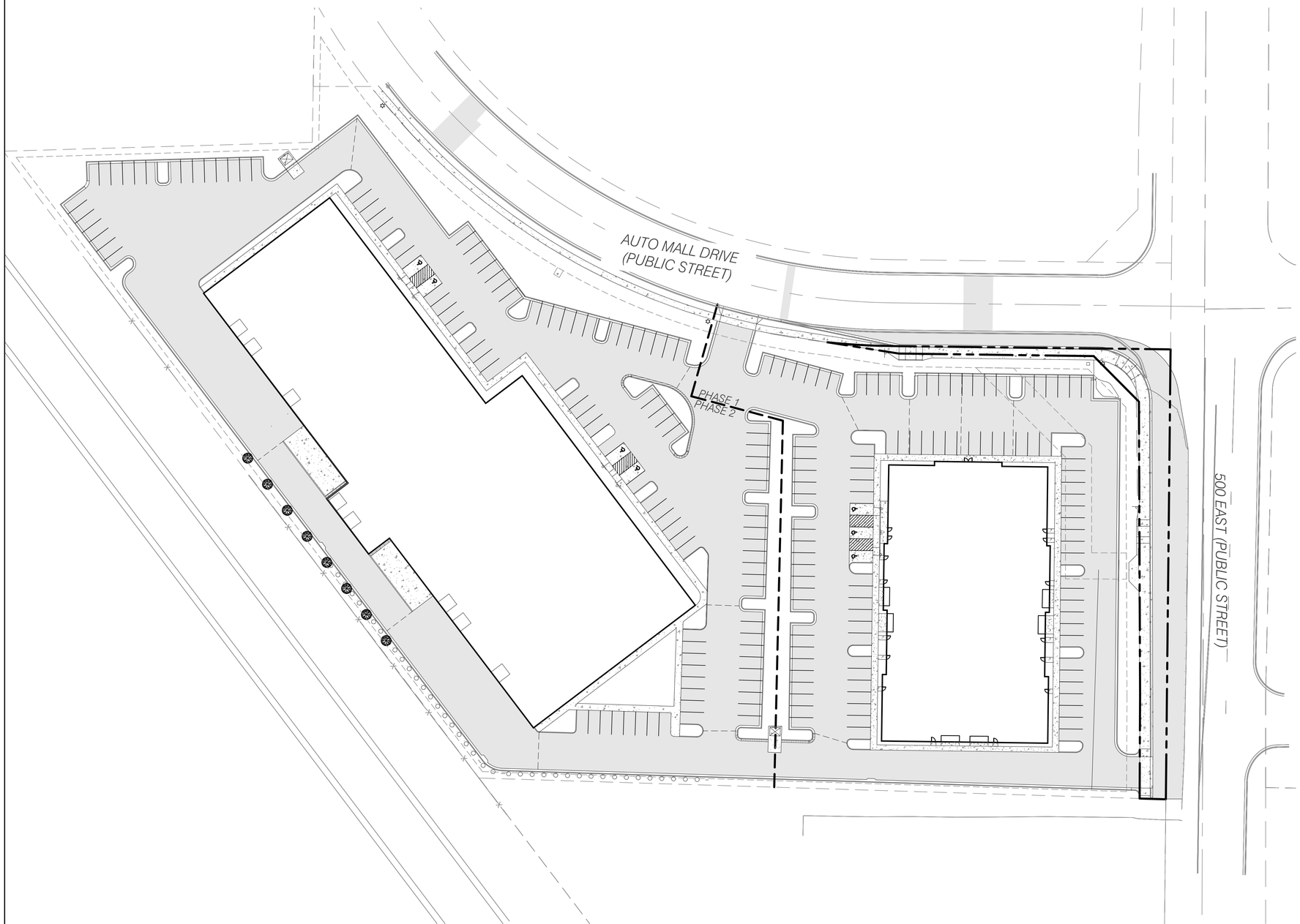
1.

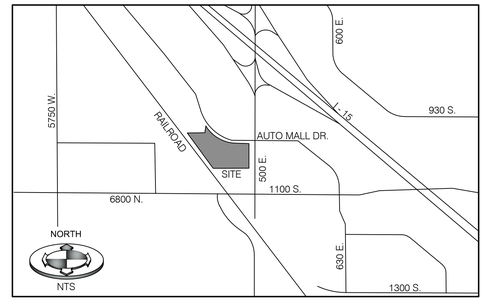
AMERICAN FORK OFFICE & WAREHOUSE

LOCATED IN THE NORTHWEST QUARTER OF SECTION 25,
TOWNSHIP 5 SOUTH, RANGE 1 EAST,
SALT LAKE BASE AND MERIDIAN
AMERICAN FORK CITY, UTAH COUNTY, UTAH

GRAPHIC SCALE
40 0 20 40 80
(IN FEET)
1 inch = 40ft.

NORTH





VICINITY MAP
N.T.S

OWNER/DEVELOPER:
DAVIES DESIGN
JONATHAN JENSEN
240 NORTH 1200 EAST, SUITE 201
LEHI, UTAH 84043
801.592.6044
JON@DAVIESDESIGNBUILD.COM

DRAWING INDEX

COVER	COVER SHEET
CGN.01	GENERAL NOTES, LEGEND & ABBREVIATION
CGN.02	AMERICAN FORK GENERAL NOTES
CSP.01	SITE PLAN
CUP.01	UTILITY PLAN
CGD.01	GRADING & DRAINAGE PLAN
CGD.02	GRADING & DRAINAGE PLAN
CEP.01	EROSION CONTROL PLAN
CEP.02	EROSION CONTROL DETAILS
CDT.01	DETAILS & NOTES
CDT.02	DETAILS & NOTES
CDT.03	DETAILS & NOTES
CDT.04	DETAILS & NOTES
CDT.05	DETAILS & NOTES
CDT.06	DETAILS & NOTES

CIVIL CONSTRUCTION PLANS

FEMA FLOOD HAZARD ZONE: NO DATA DELINEATED BY FEMA
FEMA FLOOD HAZARD COMMUNITY PANEL NUMBER: 4955170120B
FEMA FLOOD HAZARD EFFECTIVE DATE: 07/17/2002

BENCHMARK CIVIL

PROFESSIONAL ENGINEER
7/10/20
No. 11366633
ALLISON G. ALBERT
STATE OF UTAH

BENCHMARK ENGINEERING & LAND SURVEYING
9138 SOUTH STATE STREET SUITE # 100
SANDY, UTAH 84070 (801) 542-7192
www.benchmarkcivil.com

DAVIES DESIGN
450 EAST AUTO MALL DRIVE
AMERICAN FORK CITY, UTAH

DRAFT: SAM	DESIGN: SAM	CHECK: MCP
DATE: 11/05/2019	DATE: 11/11/2019	DATE: 01/22/2020

PROJECT NO. 1905136

No.	DATE	DESCRIPTION
1	02/13/20	CHANGES PER CITY REDLINES
2	04/27/20	CHANGES PER CITY REDLINES
3	06/08/20	CHANGES PER CITY REDLINES
4	06/24/20	CHANGES PER CITY REDLINES
5	07/10/20	CHANGES PER CITY REDLINES

COVER

BENCHMARK ENGINEERING CONTACT: M. CHRIS POULSEN, PE

LINETYPES:

NEW | EXISTING

- SECTION LINE
- PROPERTY LINE
- ADJACENT PL or LOT LINES
- RIGHT-OF-WAY LINE
- CENTERLINE of ROAD
- EASEMENT LINE
- CURB & GUTTER
- EDGE OF ASPHALT
- FENCE / WALL, STONE
- FENCE, BLOCK
- FENCE, BRICK
- FENCE, CHAIN
- FENCE, IRON
- FENCE, VINYL
- FENCE, WIRE (X)
- FENCE, WOOD
- INDEX CONTOUR LINE (4475)
- INTERMEDIATE CONTOUR LINE
- SPOT ELEVATION (XX.XX TOC)
- SANITARY SEWER LINE (SS)
- STORM DRAIN LINE (SD)
- WATER LINE (W)
- IRRIGATION LINE (IRR)
- OVERHEAD POWER LINE (OHP)
- UNDERGROUND POWER LINE (UG)
- GAS LINE (GAS)
- TELEPHONE LINE (T)
- CABLE TELEVISION LINE (CATV)
- DRAINAGE / DITCH CENTERLINE
- TREE LINE EDGE
- FIBER OPTIC LINE (FO)
- PROPOSED ASPHALT
- PROPOSED CONCRETE

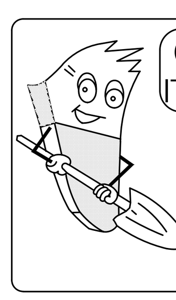
SYMBOLS:

NEW | EXISTING

- SECTION CORNER (FOUND)
- SECTION CORNER (NOT FOUND)
- STREET MONUMENT (FOUND)
- STREET MONUMENT (NOT FOUND)
- BRASS CAP MONUMENT
- POWER POLE & OVERHEAD POWER
- LIGHT POLE
- GUY WIRE
- TELEPHONE MANHOLE
- SANITARY SEWER MANHOLE
- STORM DRAIN MANHOLE
- CATCH BASIN
- DIRECTION OF DRAINAGE
- WATER MANHOLE
- WATER VALVE
- WATER METER
- FIRE HYDRANT
- IRRIGATION VALVE
- GAS MANHOLE
- TREE

ABBREVIATIONS

BC	BAR & CAP	PUE	PUBLIC UTILITY EASEMENT
BOW	BOTTOM OF VISIBLE WALL	R	RADIUS OF CURVE
COR.	SECTION CORNER	RR	RAILROAD
CB	CATCH BASIN	ROW	RIGHT-OF-WAY
CF	CUBIC FEET	R/W	RIGHT-OF-WAY
D	DELTA ANGLE	SMH	SEWER MANHOLE
EG	EXISTING GROUND	SD	STORM DRAIN
EOA	EDGE OF ASPHALT	SF	SQUARE FEET
EOC	EDGE OF CONCRETE	TBC	TOP BACK OF CURB
EX	EXISTING	TMH	TELEPHONE MANHOLE
FFE	FINISH FLOOR ELEVATION	TOA	TOP OF ASPHALT
FG	FINISHED GRADE	TOC	TOP OF CONCRETE
FH	FIRE HYDRANT	TOF	TOP OF FOOTING
FL	FLOW LINE	TOE	TOE OF SLOPE
GB	GRADE BREAK	TOG	TOP OF GRATE
GW	GUY WIRE	TOP	TOP OF SLOPE
HW	HEAD WALL	TOW	TOP OF WALL
I.E.	INVERT ELEVATION	TR	TELEPHONE RISER
LIP	LENGTH OF CURVE	UGP	UNDERGROUND POWER
L	LIP OF CURB	VPC	VERTICAL POINT OF CURVATURE
LF	LINEAR FEET	VPI	VERTICAL POINT INTERSECTION
LP	LOW POINT	VPT	VERTICAL POINT OF TANGENCY
M-M	MONUMENT TO MONUMENT	WM	WATER METER
MH	MANHOLE	WV	WATER VALVE
MON.	SURVEY MONUMENT		
OHP	OVERHEAD POWER		
PC	POINT OF CURVATURE		
PI	POINT OF INTERSECTION		
PP	POWER POLE		
PT	POINT OF TANGENCY		



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BLUE STAKES OF UTAH
UTILITY NOTIFICATION CENTER

1-800-662-4111
www.bluestakes.org
811

NOTE:

IN THE EVENT THAT THE CONSTRUCTION NOTES CONFLICT WITH RESPONSIBLE DISTRICT OR AGENCY STANDARDS NOTES AND SPECIFICATIONS, THE DISTRICT OR AGENCY STANDARD NOTES AND SPECIFICATIONS GOVERN.

CAUTION NOTICE TO CONTRACTORS

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS ARE BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.

THE CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY: THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO THE NORMAL WORKING HOURS; AND THE CONTRACTOR SHALL DEFEND, INDEMNIFY, AN HOLD THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.

CONSTRUCTION NOTES

RESPONSIBLE DISTRICTS OR AGENCIES AND APPLICABLE STANDARDS
CITY OR COUNTY- AMERICAN FORK CITY
WATER UTILITY COMPANY- AMERICAN FORK PUBLIC WORKS
SEWER- AMERICAN FORK PUBLIC WORKS
STORM DRAIN/GROUNDWATER- AMERICAN FORK CITY
ELECTRICAL- ROCKY MOUNTAIN POWER
TELEPHONE- CENTURY LINK/COMCAST
NATURAL GAS- DOMINION ENERGY

APPLICABLE STANDARDS:
APWA 2017 STANDARDS
2018 INTERNATIONAL FIRE CODE

GENERAL

1. ALL MATERIALS AND CONSTRUCTION IN THE PUBLIC RIGHT OF WAY SHALL BE IN ACCORDANCE WITH RESPONSIBLE DISTRICT OR AGENCY.

2. CONTRACTOR AND APPLICABLE SUBCONTRACTORS SHALL ATTEND ALL PRE-CONSTRUCTION CONFERENCES AND PERIODIC PROGRESS MEETINGS. PRIOR TO ANY WORK BEING PERFORMED, THE CONTRACTOR SHALL CONTACT RESPONSIBLE DISTRICT OR AGENCY FOR A PRE-CONSTRUCTION CONFERENCE. CONTRACTOR SHALL ALSO NOTIFY THE APPROPRIATE PROJECT CONTACTS (48) HOURS IN ADVANCE OF SAID MEETING.

3. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PUBLIC SAFETY AND OSHA STANDARDS.

4. THE CONTRACTOR SHALL FAMILIARIZE HIM/HER SELF WITH THE PLANS, THE GEOLOGY REPORTS AND THE SITE CONDITIONS PRIOR TO COMMENCING WORK. CONTRACTOR SHALL INSPECT THE SITE OF WORK PRIOR TO BIDDING TO SATISFY THEMSELVES BY PERSONAL EXAMINATION OR BY SUCH OTHER MEANS AS THEY MAY PREFER, OF THE LOCATION OF THE PROPOSED WORK, AND OF THE ACTUAL CONDITIONS OF AND AT THE SITE OF WORK.

CONDITIONS WHICH APPEAR TO THEM TO BE IN CONFLICT WITH THE LETTER OR SPIRIT OF THE PROJECT PLANS AND SPECIFICATIONS, THEY SHALL CONTACT THE ENGINEER FOR ADDITIONAL INFORMATION AND EXPLANATION BEFORE SUBMITTING THEIR BID.

SUBMISSION OF A BID BY THE CONTRACTOR SHALL CONSTITUTE ACKNOWLEDGMENT THAT, IF AWARDED THE CONTRACT, THEY HAVE RELIED AND ARE RELYING ON THEIR OWN EXAMINATION OF (1) THE SITE OF THE WORK, (2) ACCESS TO THE SITE, AND (3) ALL OTHER DATA AND MATTERS REQUISITE TO THE FULFILLMENT OF THE WORK AND ON THEIR OWN KNOWLEDGE OF EXISTING FACILITIES ON AND IN THE VICINITY OF THE SITE OF THE WORK TO BE CONSTRUCTED UNDER THIS CONTRACT.

THE INFORMATION PROVIDED BY THE OWNER OR THE ENGINEER IS NOT INTENDED TO BE A SUBSTITUTE FOR, OR A SUPPLEMENT TO, THE INDEPENDENT VERIFICATION BY THE CONTRACTOR TO THE EXTENT SUCH INDEPENDENT INVESTIGATION OF SITE CONDITIONS IS DEEMED NECESSARY OR DESIRABLE BY THE CONTRACTOR. CONTRACTOR SHALL ACKNOWLEDGE THAT THEY HAVE NOT RELIED SOLELY UPON OWNER OR ENGINEER FURNISHED INFORMATION REGARDING SITE CONDITIONS IN PREPARING AND SUBMITTING THEIR BID.

5. ALL WORK SHALL COMPLY WITH THE AMERICAN PUBLIC WORKS ASSOCIATION UTAH CHAPTER (APWA) MANUAL OF STANDARD SPECIFICATIONS 2017 EDITION AND THE MANUAL OF STANDARD PLANS 2017 EDITION. SAID STANDARD SPECIFICATIONS AND PLANS SHALL BE SUBSIDIARY TO MORE STRINGENT REQUIREMENTS BY APPLICABLE LOCAL JURISDICTION.

6. THE CONTRACTOR SHALL BE SKILLED AND REGULARLY ENGAGED IN THE GENERAL CLASS AND TYPE OF WORK CALLED FOR IN THE PROJECT PLANS AND SPECIFICATIONS. THEREFORE, THE OWNER IS RELYING UPON THE EXPERIENCE AND EXPERTISE OF THE CONTRACTOR, IT SHALL BE EXPECTED THAT THE PRICES PROVIDED WITHIN THE CONTRACT DOCUMENTS SHALL INCLUDE ALL LABOR AND MATERIALS NECESSARY AND PROPER FOR THE WORK CONTEMPLATED AND THAT THE WORK BE COMPLETED IN ACCORDANCE WITH THEIR TRUE INTENT AND PURPOSE.

THE CONTRACTOR SHALL BE COMPETENT, KNOWLEDGEABLE AND HAVE SPECIAL SKILLS ON THE NATURE, EXTENT AND INHERENT CONDITIONS OF THE WORK TO BE PERFORMED. CONTRACTOR SHALL ALSO ACKNOWLEDGE THAT THERE ARE CERTAIN REGULAR AND INHERENT CONDITIONS EXISTENT IN THE CONSTRUCTION OF THE PARTICULAR FACILITIES WHICH MAY CREATE, DURING THE CONSTRUCTION PROGRAM, UNUSUAL OR PECULIAR UNSAFE CONDITIONS HAZARDOUS TO PERSONS, PROPERTY AND THE ENVIRONMENT. CONTRACTOR SHALL BE AWARE OF SUCH PECULIAR RISKS AND HAVE THE SKILL AND EXPERIENCE TO FORESEE AND TO ADOPT PROTECTIVE MEASURES TO ADEQUATELY AND SAFELY PERFORM THE CONSTRUCTION WORK WITH RESPECT TO SUCH HAZARDS.

7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PERMITS AND LICENSES REQUIRED FOR THE CONSTRUCTION AND COMPLETION OF THE PROJECT, AND SHALL PERFORM ALL WORK IN ACCORDANCE WITH THE REQUIREMENTS AND CONDITIONS OF ALL PERMITS AND APPROVALS APPLICABLE TO THIS PROJECT. THE CONTRACTOR SHALL ENSURE THAT THE NECESSARY RIGHT-OF-WAY, EASEMENTS, AND/OR PERMITS ARE SECURED PRIOR TO CONSTRUCTION. CONTRACTOR SHALL OBTAIN APPROPRIATE PERMITS WHERE APPLICABLE FOR ANY WORK DONE WITHIN RIGHT-OF-WAY OR EASEMENTS FROM THE CITY AND/OR UDOT. CONTRACTOR SHALL NOTIFY CITY, COUNTY, AND/OR STATE, 24 HOURS IN ADVANCE OF COMMUNICATING THE WORK, OR AS REQUIRED BY SAID PERMITS.

8. CONSTRUCTION STAKING FOR GRADING, CURB, GUTTER, SIDEWALK, SANITARY SEWER, STORM DRAIN, WATER, AND ELECTROLIERS SHALL BE DONE BY THE OWNER'S SURVEYOR. THE CONTRACTOR SHALL NOTIFY THE SURVEYOR FORTY-EIGHT (48) HOURS IN ADVANCE OF THE NEED FOR STAKING. ANY STAKING REQUESTED BY THE CONTRACTOR OR THEIR SUBCONTRACTORS THAT IS ABOVE AND BEYOND STANDARD STAKING NEEDS, WILL BE SUBJECT TO AN EXTRA WORK BACK CHARGE TO THE CONTRACTOR. THE CONTRACTOR SHALL EXERCISE DUE CAUTION AND SHALL CAREFULLY PRESERVE BENCH MARKS, CONTROL POINTS, REFERENCE POINTS AND ALL SURVEY STAKES, AND SHALL BEAR ALL EXPENSES FOR REPLACEMENT AND/OR ERRORS CAUSED BY THEIR UNNECESSARY LOSS OR DISTURBANCE.

9. IT IS INTENDED THAT THESE PLANS AND SPECIFICATIONS REQUIRE ALL LABOR AND MATERIALS NECESSARY AND PROPER FOR THE WORK CONTEMPLATED AND THAT THE WORK BE COMPLETED IN ACCORDANCE WITH THEIR TRUE INTENT AND PURPOSE. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY REGARDING ANY DISCREPANCIES OR AMBIGUITIES WHICH MAY EXIST IN THE PLANS OR SPECIFICATIONS. THE ENGINEER'S INTERPRETATION THEREOF SHALL BE CONCLUSIVE. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY FIELD CHANGES MADE WITHOUT PRIOR WRITTEN AUTHORIZATION FROM THE OWNER AND/OR ENGINEER.

10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADEQUATELY SCHEDULING INSPECTION AND TESTING OF ALL FACILITIES CONSTRUCTED UNDER THIS CONTRACT. ALL TESTING SHALL CONFORM TO THE REGULATORY AGENCY'S STANDARD SPECIFICATIONS. ALL TESTING AND INSPECTION SHALL BE PAID FOR BY THE OWNER; ALL RE-TESTING AND/OR REINSPECTION SHALL BE PAID FOR BY THE CONTRACTOR.

11. IF EXISTING IMPROVEMENTS NEED TO BE DISTURBED AND/OR REMOVED FOR THE PROPER PLACEMENT OF IMPROVEMENTS TO BE CONSTRUCTED BY THESE PLANS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING EXISTING IMPROVEMENTS FROM DAMAGE. COST OF REPLACING OR REPAIRING EXISTING IMPROVEMENTS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEMS REQUIRING REMOVAL AND/OR REPLACEMENT OF EXISTING IMPROVEMENTS AND ANYTHING THAT HAS ALREADY BEEN CONSTRUCTED. THERE WILL BE NO EXTRA COST DUE THE CONTRACTOR FOR REPLACING OR REPAIRING EXISTING IMPROVEMENTS. WHENEVER EXISTING FACILITIES ARE REMOVED, DAMAGED, BROKEN, OR CUT IN THE INSTALLATION OF THE WORK COVERED BY THESE PLANS OR SPECIFICATIONS, SAID FACILITIES SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE, AFTER PROPER BACKFILLING AND/OR CONSTRUCTION, WITH MATERIALS EQUAL TO OR BETTER THAN THE MATERIALS USED IN THE ORIGINAL EXISTING FACILITIES. THE FINISHED PRODUCT SHALL BE SUBJECT TO THE APPROVAL OF THE OWNER, THE ENGINEER, AND THE RESPECTIVE REGULATORY AGENCY.

12. THE CONTRACTOR SHALL MAINTAIN A NEATLY MARKED SET OF FULL-SIZE AS-BUILT RECORD DRAWINGS SHOWING THE FINAL LOCATION AND LAYOUT OF ALL MECHANICAL; ELECTRICAL AND INSTRUMENTATION EQUIPMENT; PIPING AND CONDUITS; STRUCTURES AND OTHER FACILITIES. THE AS-BUILTS OF THE ELECTRICAL SYSTEM SHALL INCLUDE THE STREET LIGHT LAYOUT PLAN SHOWING LOCATION OF LIGHTS, CONDUITS, CONDUCTORS, POINTS OF CONNECTIONS TO SERVICES, PULLBOXES, AND WIRE SIZES. AS-BUILT RECORD DRAWINGS SHALL REFLECT CHANGE ORDERS, ACCOMMODATIONS, AND ADJUSTMENTS TO ALL IMPROVEMENTS CONSTRUCTED. WHERE NECESSARY, SUPPLEMENTAL DRAWINGS SHALL BE PREPARED AND SUBMITTED BY THE CONTRACTOR.

13. PRIOR TO ACCEPTANCE OF THE PROJECT, THE CONTRACTOR SHALL DELIVER TO ENGINEER. ONE SET OF NEATLY MARKED AS-BUILT RECORD DRAWINGS SHOWING THE INFORMATION REQUIRED ABOVE. AS-BUILT RECORD DRAWINGS SHALL BE REVIEWED AND THE COMPLETE AS-BUILT RECORD DRAWING SET SHALL BE CURRENT WITH ALL CHANGES AND DEVIATION REDLINES AS A PRECONDITION TO THE FINAL PROGRESS PAYMENT APPROVAL AND/OR FINAL ACCEPTANCE.

UTILITIES

14. CONTRACTOR TO SPACE UTILITIES TO PROVIDE MINIMUM DISTANCES AS REQUIRED BY LOCAL, COUNTY, STATE, AND INDIVIDUAL UTILITY CODES.

15. ALL UTILITES INSTALLED IN ACCORDANCE WITH THE RESPONSIBLE DISTRICTS OR AGENCIES STANDARDS AND SPECIFICATIONS.

16. COORDINATE ALL SERVICE LATERAL AND BUILDING CONNECTIONS WITH CORRESPONDING ARCHITECTURAL, MECHANICAL OR ELECTRICAL DRAWING FOR LOCATION AND ELEVATION. NOTIFY ENGINEER IMMEDIATELY IF ANY DISCREPANCIES ARE ENCOUNTERED.

17. ALL STORM DRAIN MANHOLES AND CATCH BASINS ARE TO BE PRECAST CONCRETE FROM APPROVED LOCAL MANUFACTURER UNLESS OTHERWISE NOTED. AND COMPLY WITH CITY/COUNTY STANDARD

18. ALL STORM WATER CONVEYANCE PIPING TO BE RCP - CLASS 3 OR ADS HDPE PIPE OR EQUAL UNLESS OTHERWISE NOTED.

19. ALL ELECTRICAL CONDUITS/LINES TO BE PVC SCH 40 OR BETTER.

20. ALL GAS LINES TO BE HDPE WITH COPPER TRACER WIRE AND DETECTA TAPE. TERMINATE TRACER WIRE AT APPROVED LOCATIONS.

21. ALL GAS LINE TAPS, VALVES AND CAPS TO BE FUSED USING ELECTRO - FUSION TECHNOLOGY.

22. ALL PHONE AND TV CONDUITS TO BE PVC SCH 40 OR BETTER.

23. NO GROUNDWATER OR DEBRIS TO BE ALLOWED TO ENTER THE NEW PIPE DURING CONSTRUCTION. THE OPEN END OF ALL PIPES IS TO BE COVERED AND EFFECTIVELY SEALED AT THE END OF EACH DAYS WORK.

24. THE CONTRACTOR SHALL PROVIDE ALL SHORING, BRACING, SLOPING OR OTHER PROVISIONS NECESSARY TO PROTECT WORKMEN FOR ALL AREAS TO BE EXCAVATED TO A DEPTH OF 4' OR MORE AND SHALL COMPLY WITH INDUSTRIAL COMMISSION OF UTAH SAFETY ORDERS SECTION 68 - EXCAVATIONS, AND SECTION 69 - TRENCHES, ALONG WITH ANY LOCAL CODES OR ORDINANCES.

25. PRIOR TO OPENING AN EXCAVATION, EFFORT SHALL BE MADE TO DETERMINE WHETHER UNDERGROUND INSTALLATIONS; I.E. SEWER, WATER, FUEL, ELECTRIC LINES, ETC., WILL BE ENCOUNTERED AND IF SO, WHERE SUCH UNDERGROUND INSTALLATIONS ARE LOCATED. WHEN THE EXCAVATION APPROACHES THE APPROXIMATE LOCATION OF SUCH AN INSTALLATION, THE EXACT LOCATION SHALL BE DETERMINED BY CAREFUL PROBING OR HAND DIGGING; AND, WHEN IT IS UNCOVERED, ADEQUATE PROTECTION SHALL BE PROVIDED FOR THE EXISTING INSTALLATION. ALL KNOWN OWNERS OF UNDERGROUND FACILITIES IN THE AREA CONCERNED SHALL BE ADVISED OF PROPOSED WORK AT LEAST 48 HOURS PRIOR TO THE START OF ACTUAL EXCAVATION.

26. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO INSTALL PIPE OF ADEQUATE CLASSIFICATION WITH SUFFICIENT BEDDING TO MEET ALL REQUIREMENTS AND RECOMMENDATIONS FOR H-20 LOAD REQUIREMENTS.

27. ACTUAL CONNECTIONS TO EXISTING WATER LINES WILL NOT BE PERMITTED PRIOR TO THE COMPLETION OF STERILIZATION AND TESTING OF NEW WATER MAINS. ALL EXISTING WATER VALVES TO BE OPERATED UNDER THE DIRECTION OF THE CITY/COUNTY PUBLIC WORKS DEPARTMENT PERSONNEL ONLY.

28. ALL UNDERGROUND UTILITIES SHALL BE IN PLACE INSPECTED, TESTED, AND APPROVED BY AUTHORITIES HAVING JURISDICTION PRIOR TO INSTALLATION OF CURB, GUTTER, SIDEWALK, AND STREET PAVING.

SEWER

29. ALL SEWER MAINS AND LATERALS MUST BE INSPECTED AND APPROVED BY THE CITY INSPECTOR BEFORE TRENCH BACKFILLING IS COMPLETED.

30. ALL SEWER LINES TO BE FLUSHED, PRESSURE TESTED TO 5 PSI VIDEO INSPECTED AND OTHERWISE TESTED IN ACCORDANCE WITH DISTRICT STANDARDS PRIOR TO PLACING IN SERVICE.

31. ALL SEWER PIPES ARE TO BE SDR-35 PVC PIPE.

32. SEWER MANHOLES, LATERALS AND CLEANOUTS TO BE INSTALLED PER RESPONSIBLE DISTRICT OR AGENCY STANDARDS. THE UNIT COST OF THE SEWER LATERAL INCLUDES CONNECTION TO THE SEWER MAIN. THE CLEANOUT RISER FOR EACH SERVICE SHALL BE INSTALLED BY THE CONTRACTOR.

33. DURING CONSTRUCTION OF THE SEWER LINE, THE LATERAL CONNECTION SHALL INSERT-A-TEE OR WYE AT TEN O'CLOCK POSITIONING TO THE CENTER OF THE MAIN LINE AND SHALL BE ENCASED IN CONCRETE AFTER INSPECTION IS MADE. (SEE RESPONSIBLE DISTRICT OR AGENCY STANDARDS)

WATER

34. WATERLINES TO BE PVC C-900. WATER LINES SHALL BE A MINIMUM OF 10' HORIZONTALLY FROM SEWER MAINS. CROSSINGS SHALL MEET STATE HEALTH STANDARDS. (MECHANICAL JOINTS REQUIRED WHEN LESS THAN 18" VERTICAL OR TEN FEET HORIZONTAL SEPARATION FROM SEWERLINE)

35. ALL WATERLINES SHALL BE 8" MINIMUM SIZE AND SERVICE LATERALS SHALL BE 1-1/2" MINIMUM UNLESS OTHERWISE NOTED.

36. WATER SERVICE LATERALS TO INCLUDE ALL BRASS SADDLE; CORP. STOP LATERAL, DOUBLE CHECK VALVE AND BACKFLOW PREVENTION DEVICE, AND SHUTOFF VALVE IN BOX NEAR BUILDING EDGE.

37. ALL WATERLINES SHALL BE 48" BELOW FINISH GROUND TO TOP OF PIPE. ALL VALVE BOXES AND MANHOLES SHALL BE RAISED OR LOWERED TO FINISH GRADE AND SHALL INCLUDE A CONCRETE COLLAR IN PAVED AREAS. ALL WATER LINES SHALL BE LOOPED AROUND GRAVITY LINES OR ROPED PER RESPONSIBLE DISTRICT OR AGENCY INSPECTOR.

38. CONTRACTOR TO NOTIFY RESPONSIBLE DISTRICT OR AGENCY FOR CHLORINE TEST PRIOR TO FLUSHING LINES, CHLORINE LEFT IN PIPE 24 HRS. MINIMUM WITH 25 PPM RESIDUAL. ALL TURNING OF MAINLINE VALVES, CHLORINATION, FLUSHING, PRESSURE TESTING, BACTERIA TESTING, ETC. TO BE COORDINATED WITH RESPONSIBLE DISTRICT OR AGENCY. ALL TESTS TO BE IN ACCORDANCE WITH RESPONSIBLE DISTRICT OR AGENCY.

39. BOTTOM FLANGE OF FIRE HYDRANTS TO BE SET TO APPROXIMATELY 4 INCHES ABOVE BACK OF CURB ELEVATION. HYDRANTS TO INCLUDE TEE, 6" LINE VALVE, AND HYDRANT COMPLETE TO MEET RESPONSIBLE DISTRICT OR AGENCY STANDARDS, UNLESS OTHERWISE NOTED ON PLANS.

EXISTING UTILITIES

40. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL UTILITIES SHOWN OR NOT SHOWN. THE INFORMATION SHOWN ON THE PLANS WITH REGARDS TO THE EXISTING UTILITIES AND/OR IMPROVEMENTS WAS DERIVED FROM FIELD INVESTIGATION AND/OR RECORD INFORMATION. NO REPRESENTATION IS MADE AS TO THE ACCURACY OR COMPLETENESS OF SAID UTILITY INFORMATION. THE CONTRACTOR SHALL TAKE DUE PRECAUTIONARY MEASURES TO PROTECT THE FACILITIES SHOWN AND ANY OTHER FACILITIES NOT OF RECORD OR NOT SHOWN ON THESE PLANS. PRIOR TO CONSTRUCTION, IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO VERIFY ALL EXISTING IMPROVEMENTS AND TO EXPOSE ALL EXISTING UNDERGROUND UTILITIES RELATED TO THE PROJECT, INCLUDING BUT NOT LIMITED TO, SEWER, STORM DRAIN, WATER IRRIGATION, GAS, ELECTRICAL, ETC. AND SHALL NOTIFY THE ENGINEER IN WRITING FORTY-EIGHT (48) HOURS IN ADVANCE OF EXPOSING THE UTILITIES SO, THAT THE EXACT LOCATION AND ELEVATION CAN BE VERIFIED AND DOCUMENTED. THE COST ASSOCIATED TO PERFORM THIS WORK SHALL BE INCLUDED IN EITHER THE LUMP SUMP CLEARING COST OR IN THE VARIOUS ITEMS OF WORK. IF LOCATION AND/OR ELEVATION DIFFERS FROM THAT SHOWN ON THE DESIGN PLANS, PROVISIONS TO ACCOMMODATE NEW LOCATION BE MADE PRIOR TO CONSTRUCTION.

41. PRIOR TO COMMENCING ANY WORK, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO HAVE EACH UTILITY COMPANY LOCATE, IN THE FIELD, THEIR MAIN AND SERVICE LINES. THE CONTRACTOR SHALL NOTIFY BLUE STAKES 48 HOURS IN ADVANCE OF PERFORMING ANY EXCAVATION WORK THE CONTRACTOR SHALL RECORD THE BLUE STAKES ORDER NUMBER AND FURNISH ORDER NUMBER TO OWNER AND ENGINEER PRIOR TO ANY EXCAVATION. IT WILL BE THE CONTRACTORS SOLE RESPONSIBILITY TO DIRECTLY CONTACT ANY OTHER UTILITY COMPANIES THAT ARE NOT MEMBERS OF BLUE STAKES. IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO PROTECT ALL EXISTING UTILITIES SO THAT NO DAMAGE RESULTS TO THEM DURING THE PERFORMANCE OF THIS CONTRACT. ANY REPAIRS NECESSARY TO DAMAGED UTILITIES SHALL BE PAID FOR BY THE CONTRACTORS AND UTILITY COMPANIES INSTALLING NEW STRUCTURES, UTILITIES AND SERVICE TO THE PROJECT.

42. ALL MANHOLE RIMS, LAMPHOLES, VALVE BOX COVERS, MONUMENT BOXES AND CATCH BASIN GRATES ARE TO BE ADJUSTED TO FIT THE FINISHED GRADE AFTER PAVING, UNLESS OTHERWISE NOTED. COST FOR THIS WORK SHALL BE INCLUDED IN THE UNIT PRICES FOR SAID FACILITIES.

43. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ASSURE THAT ALL PIPES, WALLS, ETC. ARE ADEQUATELY BRACED DURING CONSTRUCTION.

CLEARING AND GRADING

44. CONTRACTOR SHALL PERFORM EARTHWORK IN ACCORDANCE WITH APWA 2017 STANDARD DRAWINGS AND STANDARD SPECIFICATIONS AND THE RECOMMENDED EARTHWORK SPECIFICATION FOUND IN THE PROFESSIONALLY PREPARED REPORT OF GEOTECHNICAL INVESTIGATION.

45. THE CONTRACTOR SHALL REMOVE ALL VEGETATION AND DELETERIOUS MATERIALS FROM THE SITE UNLESS NOTED OTHERWISE; ALL EXISTING WELLS AND SEPTIC TANKS SHALL BE REMOVED AND/OR ABANDONED PER THE REQUIREMENTS OF ALL LOCAL, STATE AND FEDERAL REGULATIONS. THE COST TO PERFORM THIS WORK SHALL BE INCLUDED IN THE LUMP SUM CLEARING COST.

46. SUBSOIL INVESTIGATIONS HAVE BEEN CONDUCTED AT THE SITE OF THE WORK. BEFORE FOOTING, FOUNDATION OR STRUCTURAL WALL CONSTRUCTION CAN COMMENCE, A REVIEW OF THE PROFESSIONAL REPORT OF THESE INVESTIGATIONS, MUST BE REVIEWED BY CMT ENGINEERING LABORATORIES.

SOIL INVESTIGATIONS WERE CONDUCTED BY CMT ENGINEERING LABORATORIES ON AUGUST 2ND, 2019 FOR DESIGN PURPOSES ONLY, AND THE DATA SHOWN IN THE REPORTS ARE FOR SUBSURFACE CONDITIONS FOUND AT THE TIME OF THE INVESTIGATION. THE OWNER AND ENGINEER DISCLAIM RESPONSIBILITY FOR THE INTERPRETATION BY THE CONTRACTOR OF DATA, SUCH PROJECTION OR EXTRAPOLATION, FROM THE TEST HOLES TO OTHER LOCATIONS ON THE SITE OF THE WORK, SOIL BEARING VALUES AND PROFILES, SOIL STABILITY AND THE PRESENCE, LEVEL AND EXTENT OF UNDERGROUND WATER FOR SUBSURFACE CONDITIONS DURING CONSTRUCTION OPERATIONS.

47. ALL PROPOSED ELEVATIONS SHOWN ON THE GRADING PLAN ARE TO FINISHED SURFACE, THE CONTRACTOR IS RESPONSIBLE TO DEDUCT THE THICKNESS OF THE PAVEMENT STRUCTURAL SECTION FOR TOP OF SUB GRADE ELEVATIONS.

48. IF AT ANY TIME DURING CONSTRUCTION ANY UNFAVORABLE GEOLOGICAL CONDITIONS ARE ENCOUNTERED, WORK IN THAT AREA WILL STOP UNTIL APPROVED CORRECTIVE MEASURES ARE OBTAINED FROM THE ENGINEER.

49. UNSUITABLE MATERIAL, SUCH AS TOP SOIL, WEATHERED BED ROCK, ETC., SHALL BE REMOVED AS REQUIRED BY THE SOILS ENGINEER (AND/OR ENGINEERING GEOLOGIST, WHERE EMPLOYED) FROM ALL AREAS TO RECEIVE COMPACTED FILL OR DRAINAGE STRUCTURES.

50. NO TREES SHALL BE REMOVED OR DAMAGED WITHOUT SPECIFIC WRITTEN AUTHORIZATION FROM PROPERTY OWNER.

THE EXISTING TOPOGRAPHY ON THESE PLANS IS BASED ON A TOPOGRAPHIC SURVEY PERFORMED BY BENCHMARK ENGINEERING AND LAND SURVEYING ON AUGUST 8TH, 2019 AND MAY HAVE BEEN MODIFIED SINCE THIS SURVEY WAS PERFORMED.

51. FILLS IN EXCESS OF 4 FEET IN THICKNESS AND BENEATH ALL FOUNDATIONS OR PAVEMENT SECTIONS SHALL BE COMPACTED TO 95 PERCENT OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE ASTM D-1557 COMPACTION CRITERIA. ALL OTHER STRUCTURAL FILL LESS THAN 4 FEET IN THICKNESS SHOULD BE COMPACTED TO AT LEAST 90 PERCENT OF THE ABOVE CRITERIA. REFERENCE GEOTECHNICAL REPORT PREPARED BY CMT ENGINEERING LABORATORIES ON AUGUST 2, 2019..

52. COMPACTION TESTING WILL BE ACCOMPLISHED BY THE CONTRACTOR, OR THE CONTRACTOR WILL HAVE SUCH TESTING ACCOMPLISHED BY A SEPARATE CONTRACTOR. TEST RESULTS WILL BE SUBMITTED FOR REVIEW WITHIN 24 HOURS AFTER TEST.

53. CONTRACTOR TO SUBMIT PROCTOR AND/OR MARSHALL TEST DATA 24 HOURS PRIOR TO COMPACTION TESTS.

54. STRAIGHT GRADE SHALL BE MAINTAINED BETWEEN CONTOUR LINES AND SPOT ELEVATIONS UNLESS OTHERWISE SHOWN ON PLANS.

55. ALL SLOPES IN ADJOINING STREETS, DRAINAGE CHANNELS, OR OTHER FACILITIES SHALL BE GRADED NO STEEPER THAN 2 TO 1 FOR CUT AND FILL.

56. GRADES WITHIN ASPHALT PARKING AREAS SHALL BE CONSTRUCTED TO WITHIN 0.10 FEET OF THE DESIGN GRADE. HOWEVER, THE CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE IN ALL PAVEMENT AREAS AND ALONG ALL CURBS. ALL CURBS SHALL BE BUILT IN ACCORDANCE TO THE PLAN. CURBS AND PAVEMENT AREAS WHICH ARE NOT INSTALLED PER PLAN MUST BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.

57. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING HIS OWN ESTIMATE OF EARTHWORK QUANTITIES.

58. WHERE NEW CURB AND GUTTER IS BEING CONSTRUCTED ADJACENT TO EXISTING ASPHALT OR CONCRETE PAVEMENT, THE FOLLOWING SHALL APPLY; PRIOR TO PLACEMENT OF ANY CONCRETE THE CONTRACTOR SHALL HAVE A LICENSE SURVEYOR VERIFY THE GRADE AND CROSS SLOPE OF THE CURB AND GUTTER FORMS, THE CONTRACTOR SHALL SUBMIT THE SLOPE AND GRADES TO THE ENGINEER FOR APPROVAL PRIOR TO PLACEMENT OF CONCRETE. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY OF ANY SECTION WHICH DOES NOT CONFORM TO THE DESIGN OR TYPICAL CROSS SECTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR CURB AND GUTTER POURS WITHOUT THE APPROVAL OF THE ENGINEER.

59. SITE WORK SHALL MEET OR EXCEED OWNER'S SITE SPECIFICATIONS.

60. ALL SITE CONCRETE OR CONCRETE ELEMENT NOT SPECIFICALLY SHOWN AND DETAILED ON STRUCTURAL DRAWINGS TO HAVE A MINIMUM OF 28 DAY COMPRESSION STRENGTH OF 4000 PSI.

61. CUT SLOPES SHALL BE NO STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL

62. FILL SLOPES SHALL BE NO STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL

63. APPROVED PROTECTIVE MEASURES AND TEMPORARY DRAINAGE PROVISIONS MUST BE USED TO PROTECT ADJOINING PROPERTIES DURING THE GRADING PROJECT.

DEWATERING

64. THE CONTRACTOR SHALL FURNISH, INSTALL, OPERATE AND MAINTAIN ALL MACHINERY, APPLIANCES AND EQUIPMENT TO MAINTAIN ALL EXCAVATIONS FREE FROM WATER DURING CONSTRUCTION. THE CONTRACTOR SHALL DISPOSE OF THE WATER SO AS NOT TO CAUSE DAMAGE TO PUBLIC OR PRIVATE PROPERTY, OR TO CAUSE A NUISANCE OR MENACE TO THE PUBLIC OR VIOLATE THE LAW. THE DEWATERING SYSTEM SHALL BE INSTALLED AND OPERATED SO THAT THE GROUND LEVEL OUTSIDE THE EXCAVATION IS NOT REDUCED TO THE EXTENT WHICH WOULD CAUSE DAMAGE OR ENDANGER ADJACENT STRUCTURES OR PROPERTY. ALL COST FOR DEWATERING SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ALL PIPE CONSTRUCTION. THE STATIC WATER LEVEL SHALL BE DRAWN DOWN A MINIMUM OF 1 FOOT BELOW THE BOTTOM OF EXCAVATIONS TO MAINTAIN THE UNDISTURBED STATE OF NATURAL SOILS AND ALLOW THE PLACEMENT OF ANY FILL TO THE SPECIFIED DENSITY. THE CONTRACTOR SHALL HAVE ON HAND, PUMPING EQUIPMENT AND MACHINERY IN GOOD CONDITION FOR EMERGENCIES AND SHALL HAVE WORKMEN AVAILABLE FOR ITS OPERATION: DEWATERING SYSTEM SHALL OPERATE CONTINUOUSLY UNTIL BACKFILL HAS BEEN COMPLETED TO 1 FOOT ABOVE THE NORMAL STATIC GROUNDWATER LEVEL.

65. THE CONTRACTOR SHALL CONTROL SURFACE WATER TO PREVENT ENTRY INTO EXCAVATIONS. AT EACH EXCAVATION, A SUFFICIENT NUMBER OF TEMPORARY OBSERVATION WELLS TO CONTINUOUSLY CHECK THE GROUNDWATER LEVEL SHALL BE PROVIDED.

66. SUMPS SHALL BE NO DEEPER THAN 5 FEET AND SHALL BE AT THE LOW POINT OF EXCAVATION. EXCAVATION SHALL BE GRADED TO DRAIN TO THE SUMPS.

67. THE CONTROL OF GROUNDWATER SHALL BE SUCH THAT SOFTENING OF THE BOTTOM OF EXCAVATIONS, OR FORMATION OF "QUICK" CONDITIONS OR "BOILS", DOES NOT OCCUR. DEWATERING SYSTEMS SHALL BE DESIGNED AND OPERATED SO AS TO PREVENT REMOVAL OF NATURAL SOILS. THE RELEASE OF GROUNDWATER AT ITS STATIC LEVEL SHALL BE PERFORMED IN SUCH A MANNER AS TO MAINTAIN THE UNDISTURBED STATE OF NATURAL FOUNDATION SOILS, PREVENT DISTURBANCE OF COMPACTED BACKFILL, AND PREVENT FLOTATION OR MOVEMENT OF STRUCTURES, PIPELINES AND SEWERS. IF A UPDES (UTAH POLLUTANT DISCHARGE ELIMINATION SYSTEM) PERMIT IS REQUIRED FOR DISPOSAL OF WATER FROM CONSTRUCTION DEWATERING ACTIVITIES, IT SHALL BE OBTAINED BY THE CONTRACTOR PRIOR TO ANY DEWATERING ACTIVITIES.

68. ONE HUNDRED PERCENT STANDBY PUMPING CAPACITY SHALL BE AVAILABLE ON SITE AT ALL TIMES AND SHALL BE CONNECTED TO THE DEWATERING SYSTEM PIPING AS TO PERMIT IMMEDIATE USE. IN ADDITION STANDBY EQUIPMENT AND APPLIANCES FOR ALL ORDINARY EMERGENCIES, AND COMPETENT WORKMEN FOR OPERATION AND MAINTENANCE OF ALL DEWATERING EQUIPMENT SHALL BE ON SITE AT ALL TIMES. STANDBY EQUIPMENT SHALL INCLUDE EMERGENCY POWER GENERATION AND AUTOMATIC SWITCH OVER TO THE EMERGENCY GENERATOR WHEN NORMAL POWER FAILS. DEWATERING SYSTEMS SHALL NOT BE SHUT DOWN BETWEEN SHIFTS, ON HOLIDAYS, ON WEEKENDS, OR DURING WORK STOPPAGES.

SITE SAFETY AND MAINTENANCE

69. THE CONTRACTOR SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR THE JOB SITE CONDITIONS, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY, DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY, AND SHALL NOT BE LIMITED TO NORMAL WORKING HOURS. THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH PERFORMANCE OF WORK ON THIS PROJECT.

70. THE CONTRACTOR AGREES THAT:

A. THEY SHALL BE RESPONSIBLE TO CLEAN THE JOB SITE AT THE END OF EACH PHASE OF WORK.

B. THEY SHALL BE RESPONSIBLE TO REMOVE AND DISPOSE OF ALL TRASH, SCRAP AND UNUSED MATERIAL AT THEIR OWN EXPENSE IN A TIMELY MANNER.

C. THEY SHALL BE RESPONSIBLE TO MAINTAIN THE SITE IN A NEAT, SAFE AND ORDERLY MANNER AT ALL TIMES.

D. THEY SHALL BE RESPONSIBLE TO KEEP MATERIALS, EQUIPMENT, AND TRASH OUT OF THE WAY OF OTHER CONTRACTORS SO AS NOT TO DELAY THE JOB. FAILURE TO DO SO WILL RESULT IN A DEDUCTION FOR THE COST OF CLEAN UP FROM THE FINAL PAYMENT.

E. THEY SHALL BE RESPONSIBLE FOR THEIR OWN SAFETY, TRAFFIC CONTROL, PERMITS, RETESTING AND REINSPECTIONS AT THEIR OWN EXPENSE.

F. UNLESS OTHERWISE NOTED ALL EXCESS SOILS AND MATERIALS SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE LAWFULLY DISPOSED OF OFF SITE AT THE CONTRACTOR'S EXPENSE.

G. THE CONTRACTOR SHALL PROVIDE ALL LIGHTS, BARRICADES, SIGNS, FLAGMEN OR OTHER DEVICES NECESSARY FOR PUBLIC SAFETY.

H. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE ALL WATER, POWER, SANITARY FACILITIES AND TELEPHONE SERVICES AS REQUIRED FOR THE CONTRACTORS USE DURING CONSTRUCTION.

I. ALL DEBRIS AND FOREIGN MATERIAL SHALL BE REMOVED FROM THE SITE AND DISPOSED OF AT APPROVED DISPOSAL SITES. THE CONTRACTOR SHALL OBTAIN NECESSARY PERMITS FOR THE TRANSPORTATION OF MATERIAL TO AND FROM THE SITE.

72. FOR ALL WORK WITHIN PUBLIC RIGHTS-OF-WAY OR EASEMENTS, THE CONTRACTOR SHALL PRESERVE THE INTEGRITY AND LOCATION OF ANY AND ALL PUBLIC UTILITIES AND PROVIDE THE NECESSARY CONSTRUCTION TRAFFIC CONTROL. CONTRACTOR SHALL, THROUGH THE ENCROACHMENT PERMIT PROCESS, VERIFY WITH THE NECESSARY REGULATORY AGENCIES, THE NEED FOR ANY TRAFFIC ROUTING PLAN. IF PLAN IS REQUIRED, CONTRACTOR SHALL PROVIDE PLAN AND RECEIVED PROPER APPROVALS PRIOR TO BEGINNING CONSTRUCTION. WORK IN EASEMENT AND/OR RIGHTS-OF-WAY IS SUBJECT TO THE APPROVAL AND ACCEPTANCE OF THE REGULATORY AGENCY RESPONSIBLE FOR OPERATION AND/OR MAINTENANCE OF SAID AND/OR RIGHT-OF-WAY. ALL CONSTRUCTION WORK IN UDOT RIGHT- OF -WAY SHALL BE SUBJECT TO INSPECTION BY THE STATE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO INSURE THAT INSPECTIONS TAKE PLACE WHERE AND WHEN REQUIRED AND TO INSURE THAT ALL WORK IS COMPLETED TO UDOT STANDARDS.

SURFACE IMPROVEMENTS:

73. SUBGRADE PREPARATION: SUBGRADE SHALL BE COMPACTED TO A 95% RELATIVE C0MPACTION TO A MINIMUM DEPTH OF 6" FOR ALL ON-SITE DEVELOPMENT. ALL OFF-SITE IMPROVEMENTS ARE TO BE DONE PER APWA STANDARDS.

74. AGGREGATE SUB-BASE: AGGREGATE SUB-BASE SHALL BE GRANULAR BACKFILL BORROW. AGGREGATE SUB-BASE MATERIAL SHALL BE CLEAN AND FREE FROM VEGETABLE MATTER AND OTHER DELETERIOUS SUBSTANCE. AGGREGATE SHALL COMPLY WITH THE GUIDELINE REQUIREMENTS FOR PAVEMENTS FOUND IN THE PROFESSIONALLY PREPARED OF THE SOILS INVESTIGATIONS COMPLETED ON THIS SITE.

75. AGGREGATE BASE: AGGREGATE BASE SHALL BE GRADE 3/4 UNTREATED BASE COURSE, AND COMPLY PREPARED REPORT OF THE SOILS INVESTIGATION PREPARED ON THIS SITE.

76. ALL SIDEWALKS AND CROSSINGS TO MEET CURRENT ADA STANDARDS/ APWA STANDARDS.

77. PAYMENT FOR PAVEMENT WILL BE MADE ONLY FOR AREAS SHOWN ON PLANS. REPLACEMENT OF PAVEMENT WHICH IS BROKEN OR CUT DURING THE INSTALLATION OF THE WORK COVERED BY THESE GENERAL NOTES, AND WHICH LIES OUTSIDE OF SAID AREAS, SHALL BE INCLUDED IN THE CONTRACTOR'S UNIT PRICE FOR PAVEMENT, AND NO ADDITIONAL PAYMENT SHALL BE MADE FOR SUCH WORK.

78. INSTALLATION OF STREET LIGHTS SHALL BE IN ACCORDANCE WITH CITY STANDARDS.

79. PRIOR TO FINAL ACCEPTANCE OF THE IMPROVEMENTS BUILT BY THESE PLANS AND SPECIFICATIONS THE CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH THE OWNER, CITY, AND POWER COMPANY TO HAVE THE ELECTRICAL SYSTEM AND ALL STREET LIGHTS ENERGIZED.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL STRIPING AND/OR PAVEMENT MARKINGS NECESSARY TO THE EXISTING STRIPING INTO FUTURE STRIPING. METHOD OF REMOVAL SHALL BE BY GRINDING OR SANDBLASTING.

80. STRIPING AND PAVEMENT MARKINGS SHALL BE IN CONFORMANCE WITH MUTCD & APWA 32 17 23.

81. DURING THE BIDDING PROCESS, CONTRACTOR TO REVIEW DESIGN SLOPES SHOWN FOR PAVEMENT AND WARRANTY THE PAVEMENT TO THE OWNER BASED UPON THE DESIGN SLOPES SHOWN HEREON. CONCERNS WITH SLOPES MUST BE BROUGHT DURING THE BIDDING PROCESS.

82. IT IS THE INTENT ON THESE PLANS THAT ALL PAVEMENT SLOPE TO A CATCH BASIN, INLET BOX OR OUT INTO A STREET.CONTRACTOR TO VERIFY FINISH SPOT ELEVATIONS AND NOTIFY ENGINEER IF THERE ARE DISCREPANCIES THAT WOULD CAUSE PUDDLING ON THE SITE.

No.	DATE	DESCRIPTION
1	02/13/20	CHANGES PER CITY REDLINES
2	04/27/20	CHANGES PER CITY REDLINES
3	06/08/20	CHANGES PER CITY REDLINES
4	06/24/20	CHANGES PER CITY REDLINES
5	07/10/20	CHANGES PER CITY REDLINES

DRAWN BY: SAM
CHECKED BY: MCP
FIELD CREW: SURVEY
DATE: 01/22/20
DWG. FILE: 1905136_SITE

0 0.5 1
SCALE MEASURES 1-INCH ON FULL SIZE SHEETS
ADJUST ACCORDINGLY FOR REDUCED SIZE SHEETS

PROFESSIONAL ENGINEER
7/10/20
No. 11366633
ALLISON G. ALBERT
STATE OF UTAH

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AMERICAN FORK OFFICE & WAREHOUSE

450 EAST AUTO MALL DR.
AMERICAN FORK, UTAH

PROJECT NO. 1905136

GEN. NOTES
LEGEND &
ABBREV.

AMERICAN FORK GENERAL NOTES

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.

26. 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
QWEST	- TELEPHONE	Darren Keller	(801) 356-6975
PACIFIC CORP	- POWER	Dennis Patten	(801) 756-1341
COMCAST	- CABLE	Heidi Hawkey	(801) 401-3023
QUESTAR GAS	- GAS	Steve Adams	(801) 324 3383
AMERICAN FORK CITY	- WATER	Jay Brems	(801) 763-3060
AMERICAN FORK CITY	- SEWER	Ashton Hardy	(801) 763-3060
AMERICAN FORK CITY	- STORM	Ashton Hardy	(801) 763-3060
AMERICAN FORK CITY	- SWPPP	Harlan Nielson	(801) 763-3060
AMERICAN FORK CITY	- P.I.	Jay Brems	(801) 763-3060
AMERICAN FORK CITY	- INSPECTOR	Dee Howard	(801) 763-3060

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.

NOTE:

IN THE EVENT THAT THE CONSTRUCTION NOTES CONFLICT WITH AMERICAN FORK CITY CITY STANDARDS NOTES AND SPECIFICATIONS, THE AMERICAN FORK CITY CITY STANDARD NOTES AND SPECIFICATIONS GOVERN.

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. The minimum water main size shall be 8 inches. Water main 12 inches or less in diameter may be PVC C-900. Water lines greater than 12 inches in diameter 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 Ductile Iron Pipes shall have mechanical restraints if within high groundwater area.

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, pre-treatment shall be provided prior to discharge into public storm sewer.

3. 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.

4. Granular backfill shall be compacted granular material according to American Fork City Standard Specifications.

5. 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.

6. 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.

7. Storm inlets or catch basins shall be channelized and have bicycle safe grates. Manhole lids shall include the word STORM.

8. 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.



No.	DATE	DESCRIPTION
1	02/13/20	CHANGES PER CITY REDLINES
2	04/27/20	CHANGES PER CITY REDLINES
3	06/09/20	CHANGES PER CITY REDLINES
4	06/24/20	CHANGES PER CITY REDLINES
5	07/10/20	CHANGES PER CITY REDLINES

SCALE MEASURES 1-INCH ON FULL SIZE SHEETS
ADJUST ACCORDINGLY FOR REDUCED SIZE SHEETS
0 0.5 1

DRAWN BY: SAM
CHECKED BY: MCP
FIELD CREW: SURVEY
DATE: 01/22/20
DWG. FILE: 1905136_SITE

PROFESSIONAL ENGINEER
7/10/20
No. 11366633
ALLISON G. ALBERT
STATE OF UTAH

BENCHMARK ENGINEERING & LAND SURVEYING
9138 SOUTH STATE STREET SUITE #100
SANDY, UTAH 84070 (801) 542-7192
www.benchmarkcivil.com

BENCHMARK CIVIL

AMERICAN FORK OFFICE & WAREHOUSE
450 EAST AUTO MALL DR.
AMERICAN FORK, UTAH

PROJECT NO. 1905136

AM. FORK GENERAL NOTES

CGN.02
3 OF 15

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811

NOTE:
ALL WORK WITHIN THE CITY PUBLIC OF RIGHT OF WAY SHALL BE DONE IN ACCORDANCE WITH THE AMERICAN FORK CITY STANDARDS AND SPECIFICATIONS

NOTE:
EXISTING IMPROVEMENTS NEED TO MEET CITY STANDARD AND QUALITY

NOTE:
SAWCUT WIDTH, LOCATIONS AND TIE-IN ELEVATIONS IN EXISTING HARDSCAPE ARE APPROXIMATE, CONTRACTOR TO FIELD VERIFY LOCATION AND EXTENT OF SAWCUTTING PRIOR TO CONSTRUCTION. NOTIFY CIVIL ENGINEER IF REVISIONS ARE REQUIRED. SEE NOTE 58 ON CGN.01 FOR FURTHER DETAIL.

NOTE:
SLOPE ACROSS THE ACCESSIBLE PARKING STALLS & ACCESS ISLE SHALL NOT EXCEED A 1:48 (2.00%) SLOPE, THE MAX GRADE DIFFERENCE BETWEEN THE ASPHALT SURFACE, ACCESSIBLE RAMP, AND SIDEWALK SHALL NOT EXCEED 1/4 INCH VERTICAL OR 1/2 INCH WHEN BEVELED. THE ACCESSIBLE MEANS OF EGRESS INCLUDING THE DRIVEWAY PORTION SHALL NOT EXCEED A SLOPE OF 1:20 (5.0%) & A CROSS SLOPE OF 1:48 (2.0%). ALL EXTERIOR DOOR WAY ACCESS REQUIRE AN EXTERIOR LANDING 60 INCHES IN LENGTH WITH A SLOPE NOT EXCEEDING A 1:48 (2.0%) SLOPE

CONSTRUCTION KEY NOTE REFERENCE

NO.	DESCRIPITON	DETAIL
1	ASPHALT PAVEMENT WITH GRANULAR BASE	1/CDT.01
2	CONCRETE CURB AND GUTTER PER AMERICAN FORK STDS.	3/CDT.01
3	RELEASE CURB & GUTTER	2/CDT.01
4	SIDEWALK THICKENED EDGE	4/CDT.02
5	SIDEWALK PER AMERICAN FORK STDS.	
6	ADA RAMP	1/CDT.02
7	ADA SIGN	1/CDT.02
8	DIP DRIVE APPROACH PER AMERICAN FORK STDS.*	4/CDT.01
9	FLARED DRIVE APPROACH PER APWA #225*	
10	CONCRETE PAVEMENT W/ GRANULAR BASE	1/CDT.01
11	CURB WALL	3/CDT.02
12	TRANSITION CURB AND GUTTER	
13	SAWCUT AND RESTORE ASPHALT PER AMERICAN FORK STDS.	
14	SIDEWALK FLUSH WITH ASPHALT	
15	SCREENING - 2" CALIPER FLOWERING PLUM TREE'S 25' ON CENTER	
16	20.0' WIDE EASEMENT IN FAVOR OF AMERICAN FORK CITY	
17	DUMPSTER ENCLOSURE PER AMERICAN FORK CITY STD.	4/CDT.06

* SIDEWALK AT DRIVE APPROACH SHALL BE 6" THICK.

NORTH

GRAPHIC SCALE
30 0 15 30 60
(IN FEET)
1 inch = 30ft.

No.	DATE	DESCRIPTION
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2	04/27/20	CHANGES PER CITY REDLINES
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5	07/10/20	CHANGES PER CITY REDLINES

SCALE MEASURES 1-INCH ON FULL SIZE SHEETS
ADJUST ACCORDINGLY FOR REDUCED SIZE SHEETS
0 0.5 1

DRAWN BY: SAM
CHECKED BY: MCP
FIELD CREW: SURVEY
DATE: 01/22/20
DWG. FILE: 190516_SITE

PROFESSIONAL ENGINEER
7/10/20
No. 11366633
ALLISON G. ALBERT
STATE OF UTAH

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PROJECT NO. 1905136

SITE PLAN

CSP.01
4 OF 15

NORTHWEST CORNER OF SECTION 25, TOWNSHIP 5 SOUTH, RANGE 1 EAST, SALT LAKE BASE AND MERIDIAN (FOUND BRASS CAP)

BASIS OF BEARINGS
N 00°05'48" W 2659.38' (MEASURED)

NORTH 639.15'

TKT AUTOMALL, LLC
LOT 1, NORTHSHORE CORPORATION CENTER PLAT "F"
PARCEL# 47-335:001

EAST 44.05'

N 00°59'20" E 42.68'

5.0' PUE

DUMPSTER ENCLOSURE (PER AMERICAN FORK CITY STANDARD) 17

N 88°21'00" E

2' CURB CUT

STREET LIGHT (TYP)

6" PERFORATED PVC GROUND WATER MONITOR PIPE

UTILITY EASEMENT IN FAVOR OF AMERICAN FORK CITY

10.0' PUE

L=458.93
R=508.00
Δ=51°45'40"
CH=S 63°26'04" E
CL=443.48

EX. CURB AND GUTTER (PROTECT)

AUTO MALL DRIVE (PUBLIC STREET)

8.0' BIKE RAMP 6

BIKE RAMP EXIT SIGN

EX. CURB AND GUTTER (REMOVE)

NEW ADA CORNER RAMP PER UDOT # PA 4

S 89°18'37" E 214.04'

POINT OF BEGINNING

NEW SIGNAL POLE & JUNCTION BOX (SEE HALES ENGINEERING FOR DETAILS)

EAST 1759.39'

EX. PROPERTY LINE (REMOVE, SEE ANNEXATION PLAT)

PHASE 1
PHASE 2

EX. EDGE OF ASPHALT

EX. WIRE FENCE (PROTECT)

RIDGE

RETAINING WALL (DESIGNED BY OTHERS)

938 SOUTH AUTO MALL DRIVE
BUILDING 2
AREA = 59,333 SF

492 EAST AUTO MALL DRIVE
BUILDING 1
AREA = 26,496 SF

ROCK OR BLOCK PROTECTED SLOPES (TYP) (SEE DETAIL A/CGD.01)

N 37°10'59" W 601.26'

N 88°13'25" W 524.70'

S 00°36'10" W 343.89'

500 EAST (PUBLIC STREET)

ROW IN FAVOR OF PACIFIC CORP

EX. PROPERTY LINE (RELOCATE)

EX. CENTERLINE

10.0' PUE & SIDEWALK EASEMENT

D&D PROPERTIES, LLC
PARCEL# 13:061:0031

TOTAL AREA TABLE		
PARTICULARS	S.F.	%
BUILDING	85,829	31.7
HARDSCAPE	135,962	50.4
LANDSCAPE	48,787	18.0
TOTAL	270,578	100

TOTAL PARKING COUNT		
PARTICULARS	PROVIDED	
	STANDARD	ADA
PARKING STALLS	217	7
TOTAL PROVIDED	224	
TOTAL REQUIRED	209	

WEST QUARTER CORNER OF SECTION 25, TOWNSHIP 5 SOUTH, RANGE 1 EAST, SALT LAKE BASE AND MERIDIAN (FOUND BRASS CAP)

S 00°04'25" E 38.96' (MEASURED)
S 00°05'12" E 39.00' (RECORD)

WITNESS CORNER FOR THE WEST QUARTER CORNER OF SECTION 25, TOWNSHIP 5 SOUTH, RANGE 1 EAST, SALT LAKE BASE AND MERIDIAN (FOUND BRASS CAP)

BUILDING 1	
PARTICULARS	S.F.
TOTAL SQUARE FEET	37,327
TOTAL SQUARE FEET OF ALL T.I. PORTIONS	21,662
TOTAL PARKING STALLS REQUIRED PER T.I. PORTIONS	87
TOTAL SQUARE FEET REMAINING	15,665
TOTAL REMAINING OFFICE SPACE (20%)	3,133
REMAINING OFFICE STALLS REQUIRED	13
TOTAL REMAINING WAREHOUSE SPACE (80%)	12,523
REMAINING WAREHOUSE STALLS REQUIRED	13
TOTAL STALLS REQUIRED	113

BUILDING 2	
PARTICULARS	S.F.
TOTAL SQUARE FEET	59,333
TOTAL OFFICE SPACE (20%)	11,867
OFFICE STALLS REQUIRED	48
TOTAL WAREHOUSE SPACE (80%)	47,466
WAREHOUSE STALLS REQUIRED	48
TOTAL STALLS REQUIRED	96

NOTE A:
12" OF VERTICAL SEPARATION REQUIRED BETWEEN STORM AND WATER LINES. LOOP WATER MAIN IF IN CONFLICT.

NOTE:
PRIOR TO FABRICATION OR CONSTRUCTION, BEGIN AT THE LOW END OF ALL GRAVITY UTILITY LINES AND VERIFY THE INVERT ELEVATION OF THE POINT OF CONNECTION AND NOTIFY ENGINEER IF THIS POINT IS HIGHER THAN SHOWN ON THE PLANS FOR A REDESIGN.

NOTE:
POTHOLE TO IDENTIFY ANY CONFLICTS BEFORE ANY PIPE INSTALLATION. CONTACT ENGINEER IF ANY CONFLICTS ARE IDENTIFIED.

NOTE:
INSULATE ALL SEWER PIPING THAT HAS LESS THAN 4' OF COVER.

CONSTRUCTION KEY NOTE REFERENCE

NO.	DESCRIPITON	DETAIL
1	GATE VALVE PER AMERICAN FORK STDS.	2/CDT.03
2	1" POLY WATER SERVICE LINE	
3	1" WATER METER & VAULT PER AMERICAN FORK STDS.*	1/CDT.03
4	THRUST BLOCK PER AMERICAN FORK CITY STDS	4/CDT.04
5	6" PVC C-900 FIRELINE	
6	FIRE HYDRANT PER AMERICAN FORK STDS	3/CDT.03
7	1" POLY IRRIGATION SERVICE LINE	
8	6" PVC SDR-35 SEWER LATERAL (MIN SLOPE @ 0.50%)	3/CDT.04
9	SEWER CLEAN OUT	3/CDT.04
10	1" IRRIGATION METER PER AMERICAN FORK STDS	1/CDT.04

*INSTALL WATER METER LEVEL WITH SIDEWALK

NORTH

GRAPHIC SCALE

30 0 15 30 60

(IN FEET)
1 inch = 30ft.

EX. FIRE HYDRANT (PROTECT)
EX. 2' SEWER LATERAL STUB-OUT (REMOVE)
EX. FIRE HYDRANT (PROTECT)
FIRE RISER ROOM & FDC
SSMH RIM=4532.97 IE = 4529.07
EX. COMMUNICATION LINE (PROTECT)
EX. 6" PVC IRRIGATION MAIN (PROTECT)
EX. 8" SEWER MAIN (PROTECT)
EX. GAS MAIN (PROTECT)
EX. FIBER OPTIC LINE (PROTECT)
6" PERFORATED PVC GROUND WATER MONITOR PIPE
EX. 2' SEWER LATERAL STUB-OUT (REMOVE)
SSMH RIM=4531.81 IE = 4527.70
EX. 8" DUCTILE IRON WATER MAIN (PROTECT)
SSMH RIM=4530.54 IE = 4526.73
EX. FIRE HYDRANT (PROTECT)
AUTO MALL DRIVE (PUBLIC STREET)
TEE WITH L BEND
PHASE 1
PHASE 2
FUTURE 20.0' PUE IN FAVOR AMERICAN FORK CITY
10' WIDE WATER LINE EASEMENT IN FAVOR OF AMERICAN FORK CITY
FFE = 4530.09
FFE = 4327.18
IE = 4526.59
(TYP.) 9
IE SD = 4522.69
IE SS = 4526.18
(TYP.) 8
488 LF OF 6" PVC SEWER LATERAL SLOPE @ 0.98% W/ CLEANOUTS EVERY 75'
IE SD = 4522.49
IE SS = 4524.31
110 LF OF 6" PVC SEWER LATERAL SLOPE @ 1.00% SLOPE
IE = 4322.92
SSMH RIM=4527.77 IE = 4520.13
IE SD = 4522.94
IE SS = 4522.26
IE SD = 4522.93
IE SS = 4522.24
500 EAST (PUBLIC STREET)
EX. OVERHEAD POWER (PROTECT)
EX. COMMUNICATION LINE (PROTECT)
EX. 6" PVC IRRIGATION MAIN (PROTECT)
EX. 21" SEWER MAIN (PROTECT)
EX. 36" STORM MAIN (PROTECT)
I.E. 21" = 4520.07
I.E. 6" = 4521.82
I.E. 21" = 4520.05
I.E. 6" = 4521.80

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SCALE MEASURES 1-INCH ON FULL SIZE SHEETS
ADJUST ACCORDINGLY FOR REDUCED SIZE SHEETS

DRAWN BY: SAM
DESIGNED BY: MCP
FIELD CREW: SURVEY
DATE: 01/22/20
DWG. FILE: 1905136_SITE

7/10/20
No. 11366633
ALLISON G. ALBERT
STATE OF UTAH

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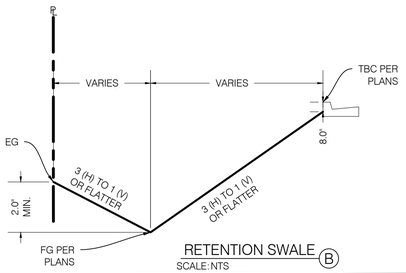
PROJECT NO. 1905136

UTILITY PLAN

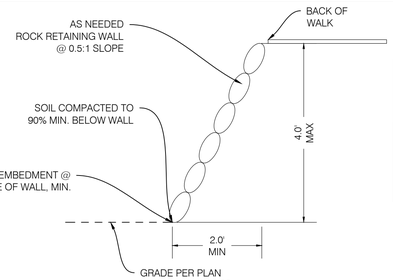
CUP.01
5 OF 15

GRADING AND DRAINAGE KEY NOTE REFERENCE

NO.	DESCRIPITON	DETAIL
1	GRADE SITE TO ELEVATIONS SHOWN ON PLAN	
2	STORM DRAIN INLET BOX PER AMERICAN FORK STDS.	5/CDT.01
3	12" Ø FLARED END SECTION	
4	3'X3' CATCH BASIN	2/CDT.02
5	18F SNOUT	4/CDT.03
6	3.6" Ø ORIFICE PLATE	6/CDT.01
7	ACO TRENCH DRAIN (OR ENGINEER APPROVED EQUAL)	2/CDT.04
8	STORM DRAIN CLEANOUT BOX	
9	HD R-TANK SYSTEM	1/CDT.05

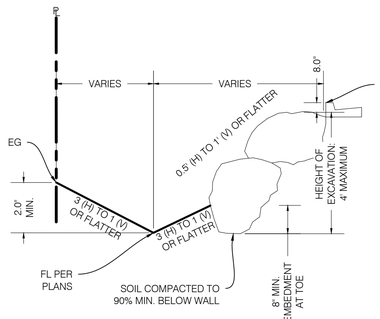


RETENTION SWALE (B)
SCALE:NTS



NOTES:
1. NOMINAL ROCK SIZES SHALL BE AT LEAST ONE THIRD (⅓) THE HEIGHT OF THE WALL.
2. IN SANDY OR SILTY SOILS A FILTER FABRIC SHALL BE PLACED BEHIND THE ROCK FACED SLOPE.
3. ROCK MUST BE ANGULAR AND FITTED TOGETHER TO INTERACT WITH ADJACENT ROCKS.
4. A MINIMUM SETBACK OF FOUR (4) FEET FROM BUILDING OR STRUCTURES SHALL BE MAINTAINED ABOVE OR BELOW THE ROCK FACED SLOPE.

TYPICAL ROCK PROTECTED SLOPE (C)
SCALE:NTS



RETENTION SWALE WITH ROCK OR BLOCK PROTECTED SLOPE (A)
SCALE:SCALE

BENCHMARK
THE FOUND RIGHT OF WAY MARKER AT THE NORTHWEST CORNER OF THE INTERSECTION OF 500 EAST & AUTO MALL DRIVE, AS SHOWN.
BENCHMARK ELEVATION = 4530.32 (FROM R2)

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NORTH

GRAPHIC SCALE
20 0 10 20 40
(IN FEET)
1 inch = 20ft.

NEW 3' X 3' CB (#419) (4)
TG: 4527.59
IE (NW):4523.38
IE (SE):4523.38

2' Ø HDPE SD PIPE
120 L.F. @ 0.40% SLOPE

2' CURB CUT

NEW 3' X 3' CB (#403) (4)
RIM:4527.35
IE (SE):4523.92

12' Ø HDPE SD PIPE
82 L.F. @ 0.40% SLOPE

12' Ø HDPE SD PIPE
334 L.F. @ 0.45% SLOPE

12' Ø HDPE SD PIPE
152 L.F. @ 0.45% SLOPE

12' Ø HDPE SD PIPE
204 L.F. @ 0.45% SLOPE

6' Ø HDPE SD PIPE
38 L.F. @ 4.00% SLOPE

6' Ø HDPE SD PIPE
39 L.F. @ 3.90% SLOPE

(7) TRENCH DRAIN
TG: 4526.09
IE: 4525.32

TRENCH DRAIN
TG: 4526.09 (7)
IE: 4525.32

RIDGE

MATCH CGD.02

NEW SDIB (#406)
(2) TBC:4529.53
IE (SE):4523.81
IE (NW):4523.81
IE (E):4523.81
IE (N):4523.81

(2) NEW SDIB (#407)
(5) TBC:4528.47
IE (NW):4522.89
IE (E):4522.89
BTTM: 4519.89
PLACE SNOUT ON EAST OUTLET

NEW 12" Ø FLARED END SECTION (#415)
IE (SE):4525.32 (3)

DRAINAGE SWALE

4530.09 FFE

No.	DATE	DESCRIPTION
1	02/13/20	CHANGES PER CITY REDLINES
2	04/27/20	CHANGES PER CITY REDLINES
3	06/09/20	CHANGES PER CITY REDLINES
4	06/24/20	CHANGES PER CITY REDLINES
5	07/10/20	CHANGES PER CITY REDLINES

SCALE MEASURES 1-INCH ON FULL SIZE SHEETS
ADJUST ACCORDINGLY FOR REDUCED SIZE SHEETS

DRAWN BY: SAM
CHECKED BY: MCP
FIELD CREW: SURVEY
DATE: 01/22/20
DWG. FILE: 1905136_SITE

PROFESSIONAL ENGINEER
7/10/20
No. 11366633
ALLISON G. ALBERT
STATE OF UTAH

BENCHMARK ENGINEERING & LAND SURVEYING
9138 SOUTH STATE STREET SUITE #100
SANDY, UTAH 84070 (801) 542-7192
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AMERICAN FORK OFFICE & WAREHOUSE
450 EAST AUTO MALL DR.
AMERICAN FORK, UTAH

PROJECT NO. 1905136

GRADING & DRAINAGE PLAN

CGD.01
6 OF 15

RELOCATION NOTE:
STORM DRAIN INLET BOX PIPE ELEVATIONS ARE CALCULATED. CONTRACTOR TO FIELD VERIFY EXISTING BOX INLET ELEVATIONS PRIOR TO INSTALLATION.

BENCHMARK:
THE FOUND RIGHT OF WAY MARKER AT THE NORTHWEST CORNER OF THE INTERSECTION OF 500 EAST & AUTO MALL DRIVE, AS SHOWN.
BENCHMARK ELEVATION = 4530.32 (FROM R2)

GRAPHIC SCALE
20 0 10 20 40
(IN FEET)
1 inch = 20ft.

NORTH

GRADING AND DRAINAGE KEY NOTE REFERENCE

NO	DESCRIPITON	DETAIL
1	GRADE SITE TO ELEVATIONS SHOWN ON PLAN	
2	STORM DRAIN INLET BOX PER AMERICAN FORK STDS.	5/CDT.01
3	12" Ø FLARED END SECTION	
4	3X3' CATCH BASIN	2/CDT.02
5	18F SNOUT	4/CDT.03
6	3.6" Ø ORIFICE PLATE	6/CDT.01
7	ACO TRENCH DRAIN (OR ENGINEER APPROVED EQUAL)	2/CDT.04
8	4' X 4' STORM DRAIN CLEANOUT BOX W/ BAFFLE	5/CDT.04
9	HD R-TANK SYSTEM (OR APPROVED EQUAL)	1/CDT.05
10	PRE-TREATMENT (BARRACUDA OR APPORVED EQUAL)	3/CDT.06

STORM DRAINAGE CALCULATIONS
Rational Method (Q=CIA)

Area Identification (A)		Rational Coefficient (C)	C*A
Roof =	86,831	0.9	78147.9 S.F.
Pavement =	134,960	0.9	121464 S.F.
Landscaping =	48,787	0.2	9757.4 S.F.
Sum:	270578 S.F.	Sum:	209369.3 S.F.

NOAA ATLAS 14 (100 YEAR STORM)

Allowable Discharge = 20cfs/acre
Perc + Allowable Discharge 1.52cfs/acre

Time (min)	Intensity (in/hr)	Rainfall (inches)	Rainfall Excess (cu.ft.)	Allowed Discharge (cu.ft.)	Volume to Detain (cu.ft)
15	3.95	0.988	17229	1368	15862
30	2.66	1.330	23205	2735	20470
60	1.65	1.650	28788	5471	**23318**
120	0.89	1.780	31056	10941	20115
180	0.60	1.800	31405	16412	14994
360	0.32	1.920	33499	32823	676
720	0.18	2.160	37686	65646	0
1440	0.09	2.160	37686	131293	0

HD R-Tank Underground Detention:

Number of Single Tanks =	3635	Tank Depth =	1.44 ft
Tanks Wide =	60	Tank Width =	1.31 ft
Tanks Long =	60	Tank Length =	2.35 ft
	Plus 35		
		Volume per Tank =	4.44 cf
		Volume of Tanks =	**16,154 cf**
Stone above R-Tank =	1.00 ft	Total Depth =	2.69 ft
Stone around R-Tank =	2.00 ft	Total Width =	82.75 ft
Stone below R-Tank =	0.25 ft	Total Length =	144.75 ft
Volume of R-Tank System & Wrap (Total L*W*D) =			32,261 cf
Volume of Tanks Only =			16,154 cf
Void Ratio of Rock =			40%
Volume of Voids = (System&Wrap-Tanks)*Void Ratio =			6,443 cf
Total R-Tank System Volume (Tanks + Voids) =			**22,596 cf**

Percolation

Percolation Rate	60.00 min/in
Surface Area	11978 s.f.
Percolation Discharge	0.28 cfs

Tank Elevations:

Top of Tank El =	4,523.95 ft
Bottom of Tank El =	4,522.51 ft
Top of Stone El =	4,524.95 ft
Bottom of Stone El =	4,522.26 ft
Minimum Cover El =	4,525.45 ft
Maximum Cover El =	4,530.94 ft

Detention Area:	Volume =	**77 cf**
Pipe Storage:	Length =	1462.00
	Volume =	**1,148 cf**

Structure Storage:

SDCB #402 =	**14 cf**
SDCB #403 =	**9 cf**
SDIB #406 =	**10 cf**
SDIB #407 =	**18 cf**
SDIB #409 =	**25 cf**
SDCB #411 =	**15 cf**
SDCO #416 =	**29 cf**
SDIB #417 =	**26 cf**
SDCB #419 =	**14 cf**

Is there adequate storage? Storage Provided = **23,980 cf** Req. Storage = **23,318 cf** **YES**

Orifice Design:
The storm runoff will be detained at 0.2 cfs/acre

$$Q = C_d A_0 \sqrt{2gh}$$

Total acreage of development:	6.21 acres
Allowable discharge:	0.2 cfs/acre
Maxhead:	1.00 ft
Design diameter for new orifice:	6.8 inch

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SCALE MEASURES 1-INCH ON FULL SIZE SHEETS
ADJUST ACCORDINGLY FOR REDUCED SIZE SHEETS

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AMERICAN FORK, UTAH

PROJECT NO. 1905136

GRADING & DRAINAGE PLAN

CGD.02
7 OF 15

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MATCH CGD.01

NORTH

GRAPHIC SCALE

30 0 15 30 60

(IN FEET)
1 inch = 30ft.

NOTE: CONTRACTOR SHALL INSTALL EROSION CONTROLS (SILT FENCES, STRAW BALES, ETC) AS REQUIRED BY REGULATORY AGENCIES. SAID CONTROLS SHALL BE INSTALLED IN ACCORDANCE WITH AGENCY STANDARDS AND FOLLOWING BEST MANAGEMENT PRACTICES FOR ACTUAL PLACEMENT ON SITE. STRAW BALES SHOWN ON THESE DRAWINGS ARE INTENDED AS A MINIMUM REQUIREMENT. ADDITIONAL CONTROLS REQUESTED BY AGENCY INSPECTORS SHALL BE REQUIRED. DUST CONTROL SHALL BE PROVIDED AT ALL TIMES, AT THE CONTRACTOR'S EXPENSE, TO MINIMIZE ANY DUST NUISANCE AND SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY.

SWPPP KEY NOTES REFERENCE

PROVIDE, INSTALL AND/OR CONSTRUCT THE FOLLOWING PER THE SPECIFICATIONS GIVEN OR REFERENCED AND THE DETAILS NOTED AND AS SHOWN ON THE CONSTRUCTION DRAWINGS.

NO.	DESCRIPTION	DETAIL
1	CONCRETE WASTE MANAGEMENT	1/CEP.02
2	INLET PROTECTION WATTLE	2/CEP.02
3	MATERIALS STORAGE	3/CEP.02
4	PORTABLE TOILETS	4/CEP.02
5	SILT FENCE	6/CEP.02
6	TEMPORARY CONSTRUCTION ENTRANCE	7/CEP.02

ADD SIGN, "NOT A CONSTRUCTION ENTRANCE"

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0 0.5 1

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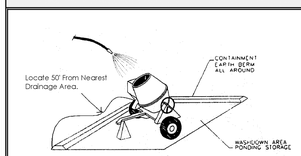
450 EAST AUTO MALL DR.
AMERICAN FORK, UTAH

PROJECT NO. 1905136

EROSION CONTROL PLAN

CEP.01
8 OF 15

BMP: Concrete Waste Management



DESCRIPTION:
Prevent or reduce the discharge of pollutants to storm water from concrete waste by conducting washout off-site, performing on-site washout in a designated area, and training employees and subcontractors.

APPLICATIONS:
This technique is applicable to all types of sites.

INSTALLATION/APPLICATION CRITERIA:
- Store dry and wet materials under cover, away from drainage areas.
- Avoid mixing excess amounts of fresh concrete or cement on-site.
- Perform washout of concrete trucks off-site or in designated areas only.
- Do not wash out concrete trucks into storm drains, open ditches, streets, or streams.
- Do not allow excess concrete to be dumped on-site, except in designated areas.
- When washing concrete to remove fine particles and expose the aggregate, avoid creating runoff by draining the water within a bermed or level area. (See Earth Berm Barrier information sheet.)
- Train employees and subcontractors in proper concrete waste management.

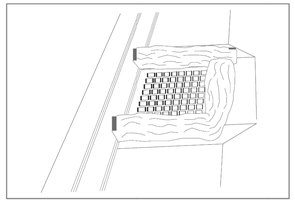
LIMITATIONS:
- Off-site washout of concrete wastes may not always be possible.

MAINTENANCE:
- Inspect subcontractors to ensure that concrete wastes are being properly managed.
- If using a temporary pit, dispose hardened concrete on a regular basis.

CONCRETE WASTE MANAGEMENT 1
SCALE: NTS

BMP: Inlet Protection – Wattle

IP-W
CONSTRUCTION



DESCRIPTION:
Sediment barrier erected around storm drain inlet.

APPLICATION:
Construct at storm drainage inlets located down-gradient of areas to be disturbed by construction.

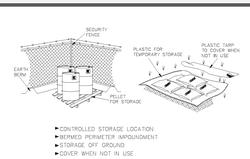
INSTALLATION/APPLICATION CRITERIA:
- Provide up-gradient sediment controls, such as silt fence during construction of inlet
- When construction of curb and gutter and roadways is complete, install gravel filled wattles around perimeter of inlet

LIMITATIONS:
- Recommended maximum contributing drainage area of one acre
- Requires shallow slopes adjacent to inlet

MAINTENANCE:
- Inspect inlet protection following storm event and at a minimum of once every 14 days.
- Remove accumulated sediment when it reaches 4 inches in depth.
- Look for bypassing or undercutting and repair or realign as needed.

INLET PROTECTION WATTLE 2
SCALE: NTS

BMP: Materials Storage



DESCRIPTION:
Controlled storage of on-site materials.

APPLICATION:
- Storage of hazardous, toxic, and all chemical substances.
- Any construction site with outside storage of materials.

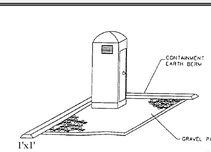
INSTALLATION/APPLICATION CRITERIA:
- Designate a secured area with limited access as the storage location. Ensure no waterways or drainage paths are nearby.
- Construct compacted earthen berm (See Earth Berm Barrier Information Sheet), or similar perimeter containment around storage location for impoundment in the case of spills.
- Ensure all on-site personnel utilize designated storage area. Do not store excessive amounts of material that will not be utilized on site.
- For active use of materials away from the storage area ensure materials are not set directly on the ground and are covered when not in use. Protect storm drainage during use.

LIMITATIONS:
- Does not prevent contamination due to mishandling of products.
- Spill Prevention and Response Plan still required.
- Only effective if materials are actively stored in controlled location.

MAINTENANCE:
- Inspect daily and repair any damage to perimeter impoundment or security fencing.
- Check materials are being correctly stored (i.e. standing upright, in labeled containers, tightly capped) and that no materials are being stored away from the designated location.

MATERIALS STORAGE 3
SCALE: NTS

BMP: Portable Toilets



DESCRIPTION:
Temporary on-site sanitary facilities for construction personnel.

APPLICATION:
All sites with no permanent sanitary facilities or where permanent facility is too far from activities.

INSTALLATION/APPLICATION CRITERIA:
- Locate portable toilets in convenient locations throughout the site.
- Prepare level, gravel surface and provide clear access to the toilets for servicing and for on-site personnel.
- Construct earth berm perimeter (See Earth Berm Barrier Information Sheet), control for spill/protection leak.

LIMITATIONS:
No limitations.

MAINTENANCE:
- Portable toilets should be maintained in good working order by licensed service with daily observation for leak detection.
- Regular waste collection should be arranged with licensed service.
- All waste should be deposited in sanitary sewer system for treatment with appropriate agency approval.

PORTABLE TOILETS 4
SCALE: NTS

BMP: Spill Clean-Up



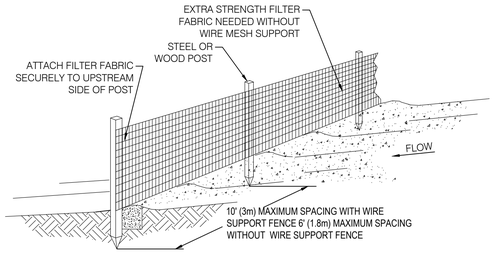
DESCRIPTION:
Practices to clean-up leakage/spillage of on-site materials that may be harmful to receiving waters.

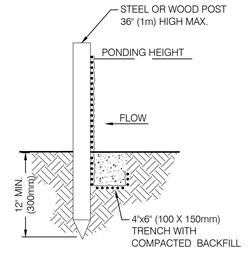
APPLICATION:
All sites

GENERAL:
- Store controlled materials within a storage area.
- Educate personnel on prevention and clean-up techniques.
- Designate an Emergency Coordinator responsible for employing preventative practices and for providing spill response.
- Maintain a supply of clean-up equipment on-site and post a list of local response agencies with phone numbers.

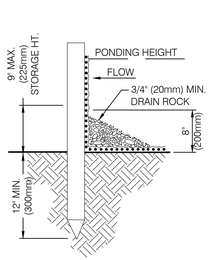
METHODS:
- Clean-up spills/leaks immediately and remediate cause.
- Use as little water as possible. NEVER HOSE DOWN OR BURY SPILL CONTAMINATED MATERIAL.
- Use rags or absorbent material for clean-up. Excavate contaminated soils. Dispose of clean-up material and soil as hazardous waste.
- Document all spills with date, location, substance, volume, actions taken and other pertinent data.
- Contact local Fire Department and State Division of Environmental Response and Remediation (Phone #536-4100) for any spill of reportable quantity.

SPILL CLEAN UP 5
SCALE: NTS





TRENCH DETAIL



INSTALLATION WITHOUT TRENCHING

NOT TO SCALE

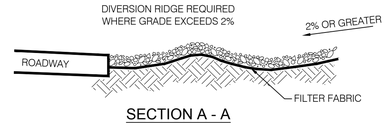
NOTES:
1. SILT FENCE SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY.

2. INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN NECESSARY. 9" (225mm) MAXIMUM RECOMMENDED STORAGE HEIGHT.

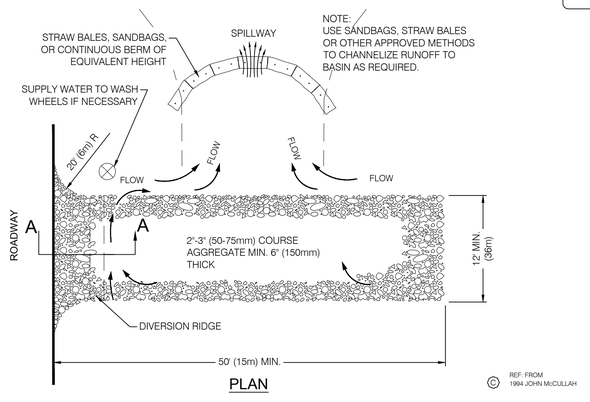
3. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.

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SILT FENCE 6
SCALE: NTS



SECTION A - A



PLAN

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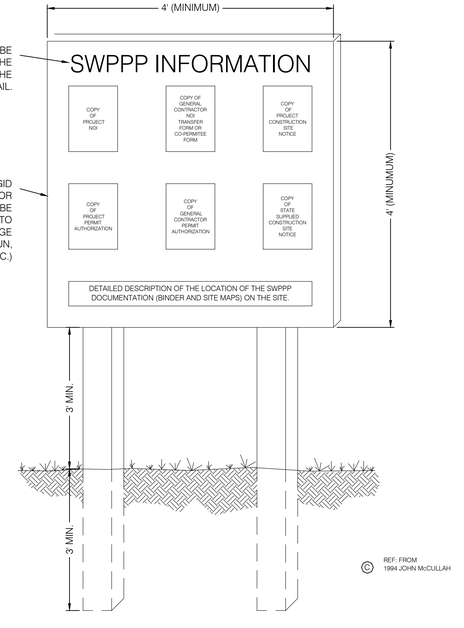
NOTES:
1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEAN OUT OF ANY MEASURES USED TO TRAP SEDIMENT.

2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.

3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.

TEMPORARY GRAVEL CONSTRUCTION ENTRANCE/EXIT 7
SCALE: NTS

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1-800-662-4111
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NOTES:
1) THE SWPPP INFORMATION SIGN MUST BE LOCATED NEAR THE CONSTRUCTION EXIT OF THE SITE, SUCH THAT IT IS ACCESSIBLE AND VIEWABLE BY THE GENERAL PUBLIC, BUT NOT OBSTRUCTING VIEWS AS TO CAUSE A SAFETY HAZARD.

2) ALL POSTED DOCUMENTS MUST BE MAINTAINED IN A CLEARLY READABLE CONDITION AT ALL TIMES THROUGHOUT CONSTRUCTION AND UNTIL THE NOTICE-TO TERMINATION (NOT) IS FILED FOR THE PERMIT.

3) CONTRACTOR SHALL POST OTHER STORM WATER AND/OR EROSION AND SEDIMENT CONTROL RELATED PERMITS ON THE SIGN AS REQUIRED BY THE GOVERNING AGENCY.

4) SIGN SHALL BE LOCATED OUTSIDE OF PUBLIC RIGHT-OF-WAY AND EASEMENTS UNLESS APPROVED BY THE GOVERNING AGENCY.

5) CONTRACTOR IS RESPONSIBLE FOR ENSURING STABILITY IF THE SWPPP INFORMATION SIGN.

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SWPPP INFORMATION SIGN 8
SCALE: NTS

No.	DATE	DESCRIPTION
1	02/13/20	CHANGES PER CITY REDLINES
2	04/27/20	CHANGES PER CITY REDLINES
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4	06/24/20	CHANGES PER CITY REDLINES
5	07/10/20	CHANGES PER CITY REDLINES

SCALE MEASURES 1-INCH ON FULL SIZE SHEETS
ADJUST ACCORDINGLY FOR REDUCED SIZE SHEETS

DRAWN BY: SAM
CHECKED BY: MCP
FIELD CREW: SURVEY
DATE: 01/22/20
DWG. FILE: 1905136_SITE

0 0.5 1

PROFESSIONAL ENGINEER
7/10/20
No. 11366633
ALLISON G. ALBERT
STATE OF UTAH

BENCHMARK ENGINEERING & LAND SURVEYING
9138 SOUTH STATE STREET SUITE #100
SANDY, UTAH 84070 (801) 542-7192
www.benchmarkcivil.com

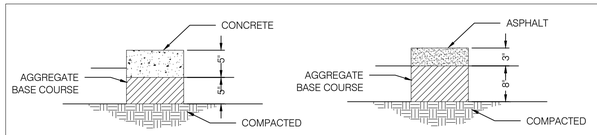
BENCHMARK CIVIL

AMERICAN FORK OFFICE & WAREHOUSE
450 EAST AUTO MALL DR.
AMERICAN FORK, UTAH

PROJECT NO. 1905136

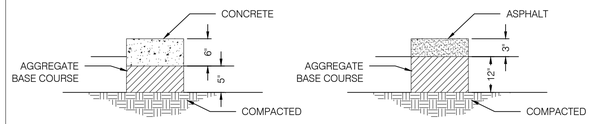
EROSION CONTROL DETAILS

CEP.02
9 OF 15



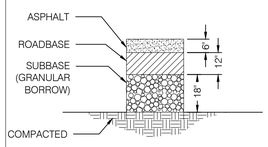
ALTERNATE:	STANDARD
ASPHALT	3"
ROAD BASE	4"
SUB BASE	6"

PARKING AREAS

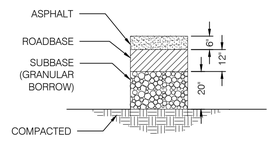


ALTERNATE:	STANDARD
ASPHALT	3"
ROAD BASE	6"
SUB BASE	8"

DRIVE AREAS



500 EAST ROAD

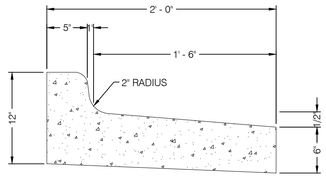


AUTOMALL DRIVE

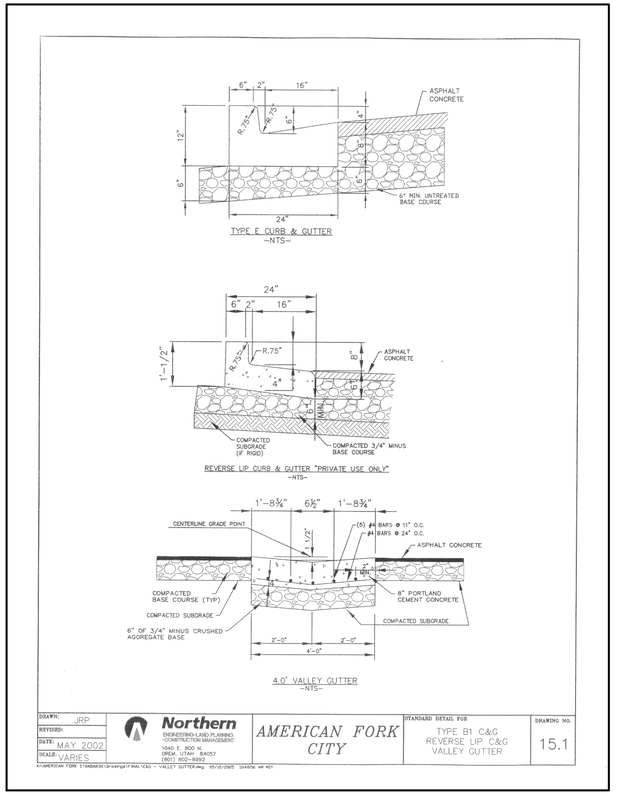
NOTE:
1. FOR REINFORCEMENT DESIGN OF PCC PAVEMENT SECTIONS SEE STRUCTURAL ENGINEER
2. FOR DOWEL DESIGN OF PCC PAVEMENT SECTIONS SEE GEOTECHNICAL ENGINEER.
3. REFER TO GEOTECHNICAL ENGINEERING REPORT FOR PAVEMENT SECTION, ROADBASE AND SUBBASE REQUIREMENTS.

PAVEMENT SECTIONS (1)
SCALE: NTS

NOTE: 6" MIN. OF UNTREATED BASE COURSE REQ'D UNDER CURB AND GUTTER. COMPACT TO 95% ASSHTO T-180 - METHOD D.

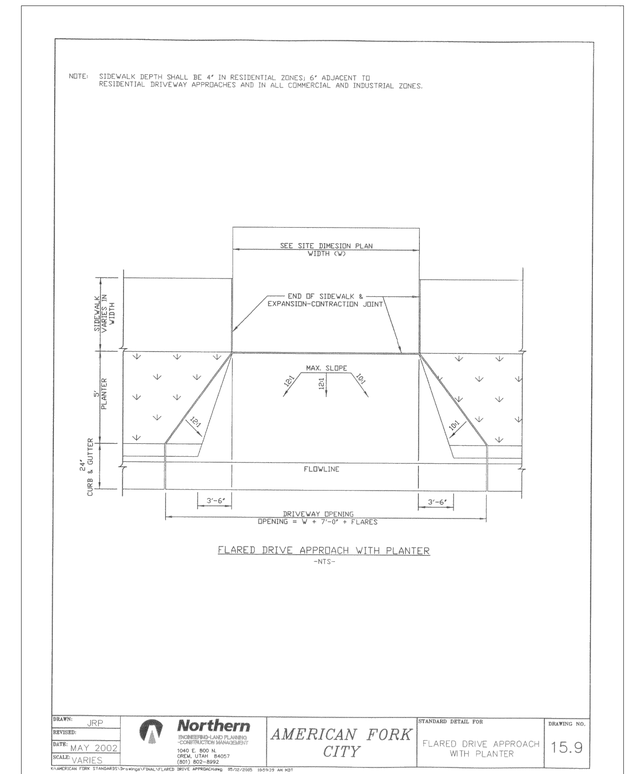


TYPICAL RELEASE CURB & GUTTER (2)
SCALE: NTS



DRAWN: JRP REVISED: DATE: MAY 2002 SCALE: VARIES	Northern ENGINEERING-LAND PLANNING -CONSTRUCTION MANAGEMENT- 1040 E. 800 N. OREM, UTAH 84057 (801) 802-8992	AMERICAN FORK CITY	STANDARD DETAIL FOR: TYPE B1 C&G REVERSE LIP C&G VALLEY GUTTER	DRAWING NO. 15.1

CURB AND GUTTER (3)
SCALE: NTS

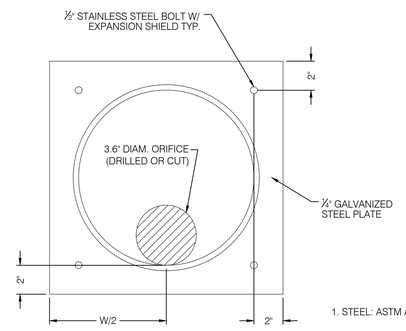


DRAWN: JRP REVISED: DATE: MAY 2002 SCALE: VARIES	Northern ENGINEERING-LAND PLANNING -CONSTRUCTION MANAGEMENT- 1040 E. 800 N. OREM, UTAH 84057 (801) 802-8992	AMERICAN FORK CITY	STANDARD DETAIL FOR: FLARED DRIVE APPROACH WITH PLANTER	DRAWING NO. 15.9

DRIVE APPROACH (4)
SCALE: NTS

DRAWN: JRP REVISED: AJS DATE: APRIL 2012 SCALE: VARIES	AMERICAN FORK	AMERICAN FORK CITY	STANDARD DETAIL FOR: CATCH BASIN	DRAWING NO. 15.2

STORM DRAIN INLET BOX (5)
SCALE: NTS



1. STEEL: ASTM A 36 STEEL

2. BOLTS: USE ½" STAINLESS STEEL BOLTS AND ⅛" STAINLESS WASHERS.

3. COATING: COAT ALL METAL PARTS WITH ASPHALTUM PAINT.

FLOW RESTRICTOR PLATE

ORIFICE RESTRICTOR (6)
SCALE: N.T.S.

No.	DATE	DESCRIPTION
1	02/13/20	CHANGES PER CITY REDLINES
2	04/27/20	CHANGES PER CITY REDLINES
3	06/09/20	CHANGES PER CITY REDLINES
4	06/24/20	CHANGES PER CITY REDLINES
5	07/10/20	CHANGES PER CITY REDLINES

SCALE MEASURES 1-INCH ON FULL SIZE SHEETS
ADJUST ACCORDINGLY FOR REDUCED SIZE SHEETS

DRAWN BY: SAM
CHECKED BY: MCP
FIELD CREW: SURVEY
DATE: 01/22/20
DWG. FILE: 1905136_SITE

0 0.5 1"

PROFESSIONAL ENGINEER
7/10/20
No. 11366633
ALLISON G. ALBERT
STATE OF UTAH

BENCHMARK ENGINEERING & LAND SURVEYING
9138 SOUTH STATE STREET SUITE #100
SANDY, UTAH 84070 (801) 542-7192
www.benchmarkcivil.com

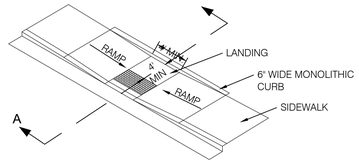
BENCHMARK CIVIL

AMERICAN FORK OFFICE & WAREHOUSE
450 EAST AUTO MALL DR.
AMERICAN FORK, UTAH

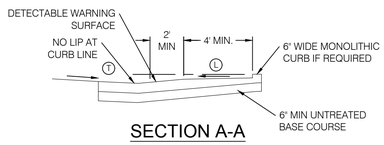
PROJECT NO. 1905136

DETAIL SHEET

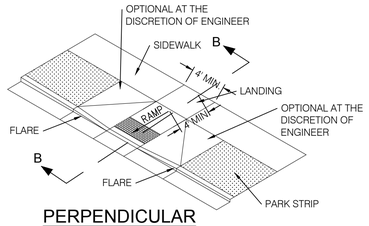
CDT.01
10OF 15



PARALLEL
PEDESTRIAN RAMP

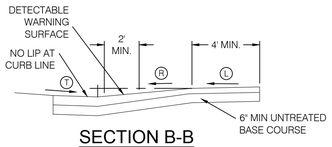


SECTION A-A

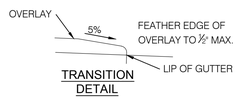


PERPENDICULAR
PEDESTRIAN RAMP

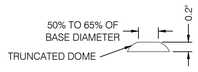
FLARE IS ACCEPTABLE IN LIEU OF FULL HEIGHT CURB SEE LOCAL AGENCY REQUIREMENTS

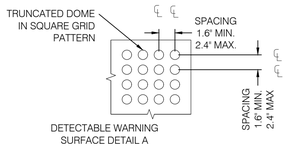


SECTION B-B

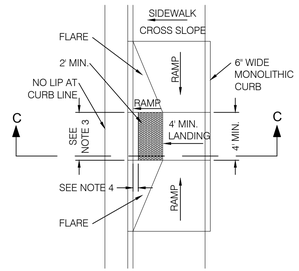


TRANSITION
DETAIL

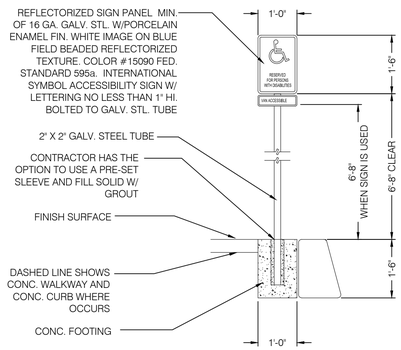




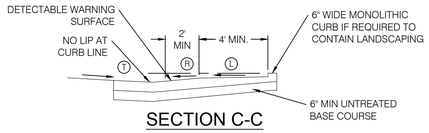
THIS DRAWING PRODUCED BY
THE U.S. ACCESS BOARD



PEDESTRIAN ACCESS
RAMP DETAIL



ADA SIGN POST DETAIL



SECTION C-C



DIRECTION OF TRAVEL
OR APPROACH

THIS DRAWING PRODUCED BY
THE U.S. ACCESS BOARD



INTERNATIONAL SYMBOL
OF ACCESSIBILITY

THIS DRAWING PRODUCED BY
THE U.S. ACCESS BOARD

STRIPING SYMBOLS
SCALE: N.T.S.

NOTES:

1. CONFIGURATION OF RAMPS AND LANDINGS MAY BE CHANGED BUT MUST MEET PEDESTRIAN RAMP DIMENSIONS AND SLOPE REQUIREMENTS. SPECIFIC SITE CONDITIONS WILL VARY. THE USE OF FLARES, CURBWALLS, ETC. ARE AT THE DISCRETION OF THE ENGINEER.
2. PERPENDICULAR AND PARALLEL PEDESTRIAN RAMPS SHOWN ON THIS DRAWING ARE ACCEPTABLE FOR USE AT MID BLOCK OR CORNER INSTALLATIONS.
3. PROVIDE DETECTABLE WARNING SURFACE FOR FULL WIDTH OF RAMP, LANDING OR CURB CUT. SEE DETAIL A FOR DETECTABLE WARNING SURFACE DIMENSIONS.
4. LOCATE DETECTABLE WARNING SURFACE SO THAT THE EDGE NEAREST THE STREET IS 4 TO 6 INCHES FROM THE TOP BACK OF CURB.
5. PROVIDE DETECTABLE WARNING SURFACE. COLOR SHALL BE YELLOW.
6. USE CLASS AA (AE) CONCRETE.
7. USE 6" MIN. DEPTH OR UNTREATED BASE COURSE UNDER ALL CONCRETE FLATWORK COMPACTED TO 96% MAXIMUM DRY DENSITY.

SLOPE TABLE			
	ITEM	RUNNING SLOPE*	CROSS SLOPE
(L)	LANDING	1.5-2% (1V:48H) (b)	1.5-2% (1V:48H) (b)
(R)	RAMP	8.33% (1V:12H) (c)	1.5-2% (1V:48H) (d)
(T)	TRANSITION	5% (1V:20H) (a)	1.5-2% (1V:48H) (d)
	SIDEWALK	--	1.5-2% (1V:48H)
	FLARE	10% (1V:10H)	--

* RUNNING SLOPE IS IN THE DIRECTION OF PEDESTRIAN TRAVEL, WHILE CROSS SLOPE IS PERPENDICULAR TO PEDESTRIAN TRAVEL.

(a) TRANSITION RUNNING SLOPE NEEDS TO BE CONSTANT ACROSS ENTIRE CURB CUT. WARP GUTTER PAN TO MEET REQUIRED TRANSITION SLOPE AT CURB CUT (0.10' MAX. ABOVE FLOWLINE.)

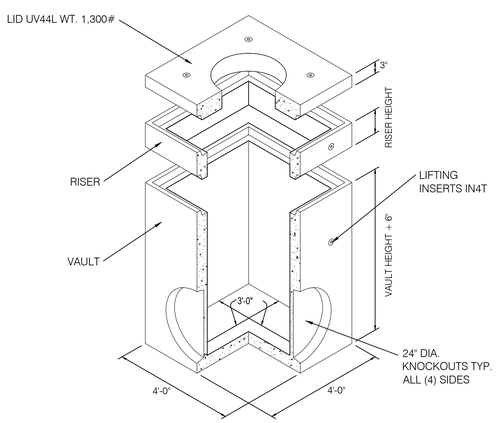
EXCEPTION:

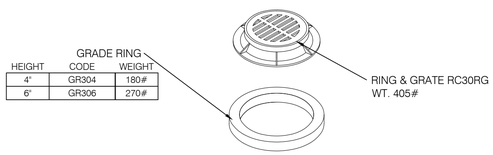
(b) IF SLOPE REQUIREMENTS CANT BE ACHIEVED ON MID-BLOCK RAMPS CONTACT THE ENGINEER.

(c) PARALLEL RAMPS ARE NOT REQUIRED TO EXCEED 15-FEET IN LENGTH.

(d) CROSS SLOPE REQUIREMENT DOES NOT APPLY AT PERPENDICULAR RAMP MID-BLOCK CROSSING.

STANDARD ACCESS RAMP (1)
SCALE: NTS





GRADE RING		
HEIGHT	CODE	WEIGHT
4"	GR304	180#
6"	GR306	270#

RISER

HEIGHT	CODE	WEIGHT
1'	UV441R	1,350#
2'	UV442R	2,700#
3'	UV443R	4,050#
4'	UV444R	5,400#
5'	UV445R	6,750#
6'	UV446R	8,100#

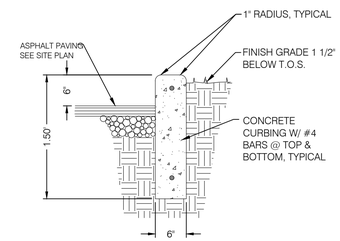
VAULT

HEIGHT	CODE	WEIGHT
3'	CB443	3,225#
4'	CB444	4,575#
5'	CB445	5,925#
6'	CB446	7,275#

NOTES:
1. CATCH BASINS ARE DESIGNED TO MEET ASTM C858 WITH AASHTO HS-20 LOADING.
2. OPENINGS MAY BE SIZED AND LOCATED AS REQUIRED.
3. OPTIONAL GRATING OR COVER MATERIAL MAY BE CAST IN AS REQUIRED.
4. CHECK HARDWARE SECTION FOR OPTIONAL ACCESSORIES.

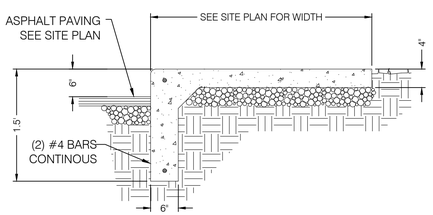
3'x3' CATCH BASIN (2)
SCALE: NTS

NOTE: 6" MIN. OF UNTREATED BASE COURSE REQ'D UNDER CURB AND GUTTER. COMPACT TO 95% ASSHTO T-180 - METHOD D.



POURED CONCRETE CURB REINFORCED W/ POLYPROPYLENE MULTIFILAMENT FIBERS.

TYPICAL CONCRETE
CURB WALL SECTION (3)
SCALE: N.T.S.



INTEGRAL SIDEWALK & CURB (4)
SCALE: NTS

No.	DATE	DESCRIPTION
1	02/13/20	CHANGES PER CITY REDLINES
2	04/27/20	CHANGES PER CITY REDLINES
3	06/09/20	CHANGES PER CITY REDLINES
4	06/24/20	CHANGES PER CITY REDLINES
5	07/10/20	CHANGES PER CITY REDLINES

SCALE MEASURES 1-INCH ON FULL SIZE SHEETS
ADJUST ACCORDINGLY FOR REDUCED SIZE SHEETS

DRAWN BY: SAM
CHECKED BY: MCP
FIELD CREW: SURVEY
DATE: 01/22/20
DWG. FILE: 1905136_STE

0 0.5 1

PROFESSIONAL ENGINEER
7/10/20
No. 11366633
ALLISON G. ALBERT
STATE OF UTAH

BENCHMARK
ENGINEERING &
LAND SURVEYING
9138 SOUTH STATE STREET SUITE #100
SANDY, UTAH 84070 (801) 542-7192
www.benchmarkcivil.com

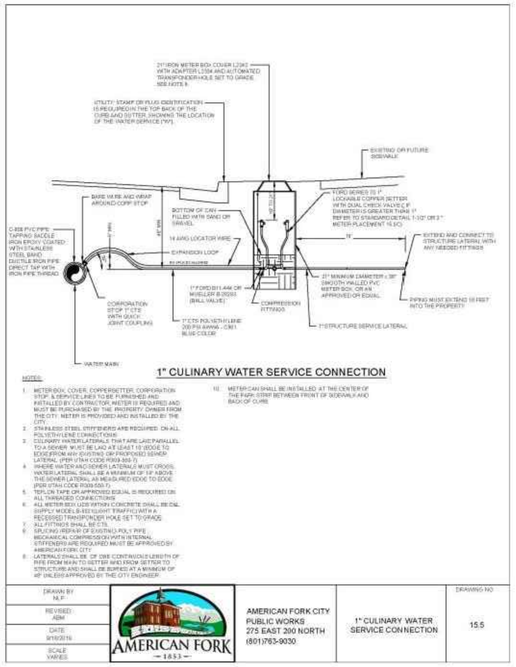
BENCHMARK CIVIL

AMERICAN FORK OFFICE & WAREHOUSE
450 EAST AUTO MALL DR.
AMERICAN FORK, UTAH

PROJECT NO. 1905136

DETAIL
SHEET

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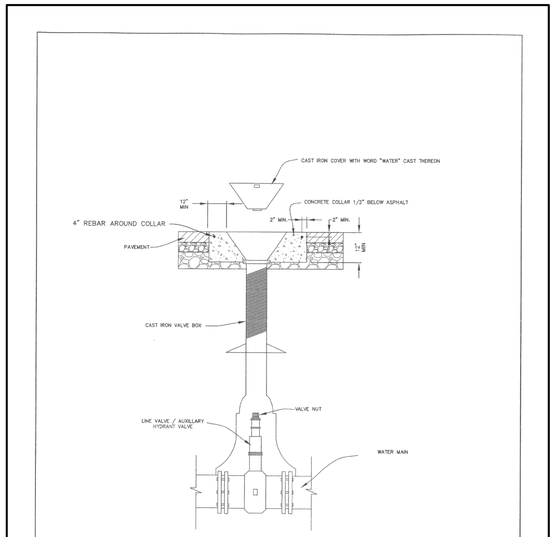
1" CULINARY WATER SERVICE CONNECTION

NOTES:

1. METER BOX, COVER, COPPER SETTER, CORPORATION STOP, & SERVICE LINES TO BE FURNISHED AND INSTALLED BY CONTRACTOR. METER IS REQUIRED AND MUST BE PURCHASED BY THE PROPERTY OWNER FROM THE CITY. METER IS PROVIDED AND INSTALLED BY THE CITY.
2. STAINLESS STEEL STIFFENERS ARE REQUIRED ON ALL POLYBUTYLENE CONNECTIONS.
3. CULINARY WATER LATERALS THAT ARE LAID PARALLEL TO A SEWER MUST BE LAID AT LEAST 10' (EDGE TO EDGE) FROM ANY (EXISTING OR PROPOSED SEWER) LATERAL. (PER UTAH CODE R309-550.7)
4. WHERE WATER AND SEWER LATERALS MUST CROSS, WATER LATERAL SHALL BE A MINIMUM OF 18" ABOVE THE SEWER LATERAL AS MEASURED EDGE TO EDGE.
5. TEFLON TAPE OR APPROVED EQUAL IS REQUIRED ON ALL THREADED CONNECTIONS.
6. ALL METER BOX LIDS WITHIN CONCRETE SHALL BE DAL SUPPLY MODEL B-REDLIGHT TRAFFIC WITH A RECESSED TRANSPONDER HOLE SET TO GRADE.
7. ALL FITTINGS SHALL BE CTS.
8. SPLICING (REPAIR OF EXISTING) POLY PIPE MECHANICAL COMPRESSION WITH INTERNAL STIFFENERS ARE REQUIRED MUST BE APPROVED BY AMERICAN FORK CITY.
9. LATERALS SHALL BE OF ONE CONTINUOUS LENGTH OF PIPE FROM MAIN TO METER AND FROM METER TO STRUCTURE AND SHALL BE BURIED AT A MINIMUM OF 48" UNLESS APPROVED BY THE CITY ENGINEER.
10. METER CAN SHALL BE INSTALLED AT THE CENTER OF THE PARK STRIP BETWEEN FRONT OF SIDEWALK AND BACK OF CURB.

DRAWN BY: MLP	AMERICAN FORK — 1853 —	AMERICAN FORK CITY PUBLIC WORKS 275 EAST 200 NORTH (801)763-9030	1" CULINARY WATER SERVICE CONNECTION	DRAWING NO. 15.5
REVISED: ABM				
DATE: 9/19/2016				
SCALE: VARIES				

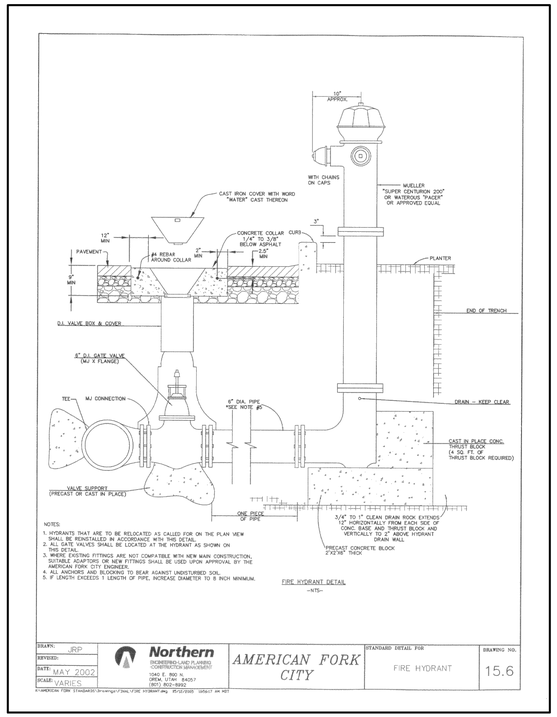
CULINARY WATER SERVICE LINE CONNECTION (1)
SCALE: NTS



VALVE BOX DETAIL

DRAWN: JRP	Northern ENGINEERING AND PLANNING CONSTRUCTION MANAGEMENT 1040 E. 800 N. OREM, UTAH 84057 (801) 802-8992	AMERICAN FORK CITY	STANDARD DETAIL FOR: VALVE BOX DETAIL	DRAWING NO. 15.4
REVISED:				
DATE: JULY 2002				
SCALE: VARIES				

GATE VALVE (2)
SCALE: NTS

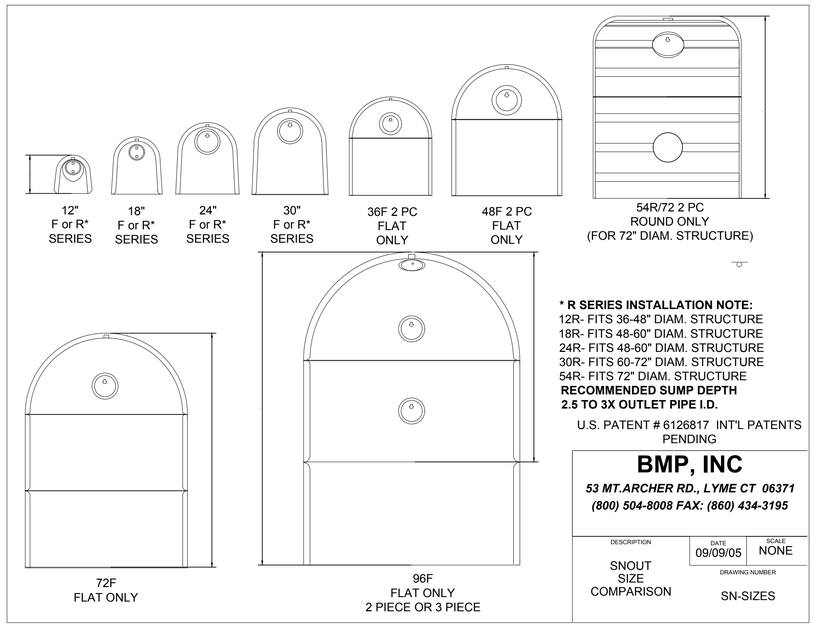


NOTES:
1. HYDRANTS THAT ARE TO BE RELOCATED AS CALLED FOR ON THE PLAN VIEW SHALL BE REINSTALLED IN ACCORDANCE WITH THIS DETAIL.
2. ALL GATE VALVES SHALL BE LOCATED AT THE HYDRANT AS SHOWN ON THIS DETAIL.
3. WHERE EXISTING FITTINGS ARE NOT COMPATIBLE WITH NEW MAIN CONSTRUCTION, THE NEW FITTINGS AND EXISTING FITTINGS SHALL BE USED UPON APPROVAL BY THE AMERICAN FORK CITY ENGINEER.
4. ALL ANCHORS AND BLOCKING TO BEAR AGAINST UNDISTURBED SOIL.
5. IF LENGTH EXCEEDS 1 LENGTH OF PIPE, INCREASE DIAMETER TO 8 INCH MINIMUM.

FIRE HYDRANT DETAIL
-NTS-

DRAWN: JRP	Northern ENGINEERING AND PLANNING CONSTRUCTION MANAGEMENT 1040 E. 800 N. OREM, UTAH 84057 (801) 802-8992	AMERICAN FORK CITY	STANDARD DETAIL FOR: FIRE HYDRANT	DRAWING NO. 15.6
REVISED:				
DATE: MAY 2002				
SCALE: VARIES				

FIRE HYDRANT (3)
SCALE: NTS



*** R SERIES INSTALLATION NOTE:**
12R- FITS 36-48" DIAM. STRUCTURE
18R- FITS 48-60" DIAM. STRUCTURE
24R- FITS 48-60" DIAM. STRUCTURE
30R- FITS 60-72" DIAM. STRUCTURE
54R- FITS 72" DIAM. STRUCTURE
RECOMMENDED SUMP DEPTH
2.5 TO 3X OUTLET PIPE I.D.

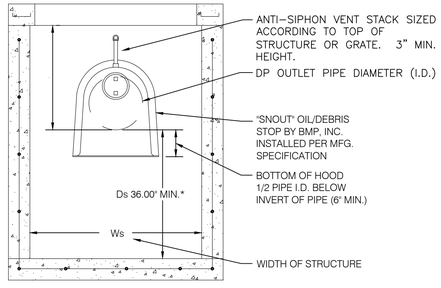
U.S. PATENT # 6126817 INT'L PATENTS PENDING

BMP, INC
53 MT.ARCHER RD., LYME CT 06371
(800) 504-8008 FAX: (860) 434-3195

DESCRIPTION	DATE	SCALE
SNOUT SIZE COMPARISON	09/09/05	NONE
	DRAWING NUMBER: SN-SIZES	

18F SNOUT DETAILS (4)
SCALE: NTS

DESIGN PARAMETER GUIDELINES FOR WATER QUALITY IMPROVEMENT



RULE # 1- AT AN ABSOLUTE MINIMUM, STRUCTURE INTERNAL DIMENSIONS MUST BE AT LEAST LARGE ENOUGH TO ACCOMODATE EXTERNAL DIMENSIONS OF THE SNOUT, AND ALLOW FOR A PERSON TO INSTALL IT. REFER TO BMP, INC. CAD DETAILS FOR PART DIMENSIONS.

RULE #2- USE ONLY "F" SERIES SNOUTS FOR RECTANGULAR OR SQUARE STRUCTURES, AVAILABLE IN 12", 18", 24", 30", 48", 72" AND 96" SIZES. USE ONLY "R" SERIES SNOUTS FOR ROUND STRUCTURES, AVAILABLE IN 12", 18", 24", 30", AND 54" SIZES.

*SUMP DEPTH (Ds)- SUMP DEPTH SHOULD BE A MINIMUM OF 36" FOR ANY NEW CONSTRUCTION FOR PIPES 12" AND LESS. FOR 15"-18" PIPE, MIN. DEPTH SHOULD BE 48". OPTIMAL SIZING IS AT LEAST 2.5X TO 3X OUTLET PIPE PIPE DIAMETER (Dp) FOR MAXIMUM POLLUTANT REMOVAL EFFICIENCY AND MINIMAL CLEANOUT FREQUENCY.

STRUCTURE DIMENSIONS- PLAN DIMENSIONS FOR A STRUCTURE SHOULD BE UP TO 7X AREA OF OUTLET PIPE FOR MAXIMUM POLLUTANT REMOVAL EFFICIENCY AND MINIMAL CLEANOUT FREQUENCY.
(SEE "MAINTENANCE CONSIDERATIONS" DOCUMENT FOR MORE INFORMATION)

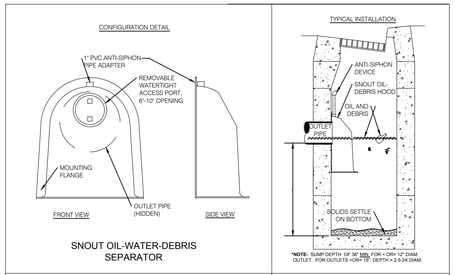
IMPORTANT NOTICE: DO NOT CONFUSE PIPE O.D WITH PIPE I.D. A SNOUT FITS OVER A PIPE, NOT IN IT. THUS, SNOUT MUST BE SIZED TO FIT OVER PIPE OPENING IN STRUCTURE. SNOUTS ARE AVAILABLE FOR ROUND STRUCTURES TO ACCOMODATE PIPES OF 54" O.D. MAX. FOR PIPES 54" O.D. AND ABOVE, USE SQUARE OR RECTANGULAR STRUCTURES.

SIZING EXAMPLES:

OUTLET HOLE SIZE	SNOUT SIZE
11.9" O.D. OR LESS	12 F or R (R FITS 36"-48" DIAM STRUCTURE)
12.0"-17.9" O.D.	18 F or R (R FITS 48"-60" DIAM STRUCTURE)
18.0"-23.9" O.D.	24 F or R (R FITS 48"-60" DIAM STRUCTURE)
24.0"-29.9" O.D.	30 F or R (R FITS 60"-72" DIAM STRUCTURE)
30.0"-35.9" O.D.	36F
30.0"-47.9" O.D.	48 F
30.0"-53.9" O.D.	54R/72 (FITS 72" DIAM STRUCTURE ONLY)
48.0"-71.9" O.D.	72F
72"-95.9" O.D.	96 F

BMP, INC.
53 MT. ARCHER ROAD, LYME, CT. 06371
(800) 504-8008 FAX: (860)434-3195

DESCRIPTION	DATE	SCALE
SNOUT SIZING CHART	09/09/05	NONE
	DRAWING NUMBER: SP-SI	



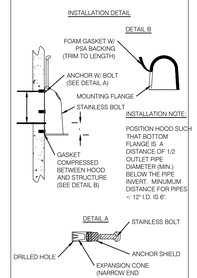
SNOUT OIL-WATER-DEBRIS SEPARATOR

*NOTE- SUMP DEPTH OF 36" MIN. FOR < OR= 12" DIAM. OUTLET. FOR OUTLETS >OR"15", DEPTH = 2.5-3X DIAM.

NOTES:

1. ALL HOODS AND TRAPS FOR CATCH BASINS AND WATER QUALITY STRUCTURES SHALL BE AS MANUFACTURED BY: BEST MANAGEMENT PRODUCTS, INC. 53 MT. ARCHER RD. LYME, CT 06371 (860) 434-5277, (860) 434-3195 FAX TOLL FREE: (800) 504-8008 OR (888) 354-7585 WEB SITE: www.bestmp.com OR PRE-APPROVED EQUAL
2. ALL HOODS SHALL BE CONSTRUCTED OF A GLASS REINFORCED RESIN COMPOSITE WITH ISO GEL COAT EXTERIOR FINISH WITH A MINIMUM 0.125" LAMINATE THICKNESS.
3. ALL HOODS SHALL BE EQUIPPED WITH A WATERTIGHT ACCESS PORT, A MOUNTING FLANGE, AND AN ANTI-SIPHON VENT AS DRAWN. (SEE CONFIGURATION DETAIL)
4. THE SIZE AND POSITION OF THE HOOD SHALL BE DETERMINED BY OUTLET PIPE SIZE AS PER MANUFACTURER'S RECOMMENDATION.
5. THE BOTTOM OF THE HOOD SHALL EXTEND DOWNWARD A DISTANCE EQUAL TO 1/2 THE OUTLET PIPE DIAMETER WITH A MINIMUM DISTANCE OF 6" FOR PIPES <12" I.D.
6. THE ANTI-SIPHON VENT SHALL EXTEND ABOVE HOOD BY MINIMUM OF 3' AND A MAXIMUM OF 24' ACCORDING TO STRUCTURE CONFIGURATION.
7. THE SURFACE OF THE STRUCTURE WHERE THE HOOD IS MOUNTED SHALL BE FINISHED SMOOTH AND FREE OF LOOSE MATERIAL.
8. THE HOOD SHALL BE SECURELY ATTACHED TO STRUCTURE WALL WITH 3/8" STAINLESS STEEL BOLTS AND OIL-RESISTANT GASKET AS SUPPLIED BY MANUFACTURER. (SEE INSTALLATION DETAIL)
9. INSTALLATION INSTRUCTIONS SHALL BE FURNISHED WITH MANUFACTURER SUPPLIED INSTALLATION KIT.
   INSTALLATION KIT SHALL INCLUDE:
   A. INSTALLATION INSTRUCTIONS
   B. PVC ANTI-SIPHON VENT PIPE AND ADAPTER
   C. OIL-RESISTANT CRUSHED CELL FOAM GASKET WITH PSA BACKING
   D. 3/8" STAINLESS STEEL BOLTS
   E. ANCHOR SHIELDS

US Patent # 6126817



HOOD SPECIFICATION FOR CATCH BASINS AND WATER QUALITY STRUCTURES

DESCRIPTION	DATE	SCALE
OIL- DEBRIS HOOD SPECIFICATION AND INSTALLATION (TYPICAL)	09/06/00	NONE
	DRAWING NUMBER: SP-SN	

No.	DATE	DESCRIPTION
1	02/13/20	CHANGES PER CITY REDLINES
2	04/27/20	CHANGES PER CITY REDLINES
3	06/08/20	CHANGES PER CITY REDLINES
4	06/24/20	CHANGES PER CITY REDLINES
5	07/10/20	CHANGES PER CITY REDLINES

SCALE MEASURES 1-INCH ON FULL SIZE SHEETS
ADJUST ACCORDINGLY FOR REDUCED SIZE SHEETS
0 0.5 1

DRAWN BY: SAM
CHECKED BY: MCP
FIELD CREW: SURVEY
DATE: 01/22/20
DWG FILE: 1905136_SITE

PROFESSIONAL ENGINEER
7/10/20
No. 11366633
ALLISON G. ALBERT
STATE OF UTAH

BENCHMARK ENGINEERING & LAND SURVEYING
9138 SOUTH STATE STREET SUITE #100
SANDY, UTAH 84070 (801) 542-7192
www.benchmarkcivil.com

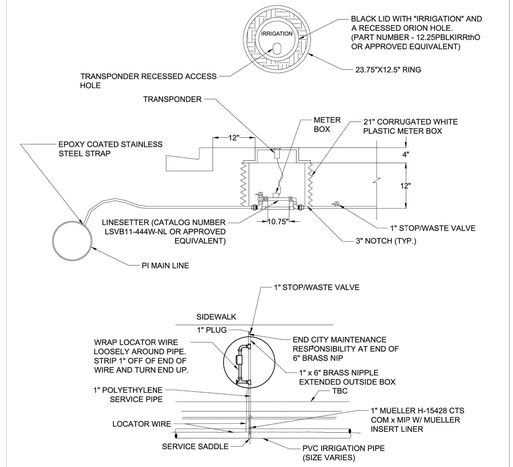
BENCHMARK CIVIL

AMERICAN FORK OFFICE & WAREHOUSE
450 EAST AUTO MALL DR.
AMERICAN FORK, UTAH

PROJECT NO. 1905136

DETAIL SHEET

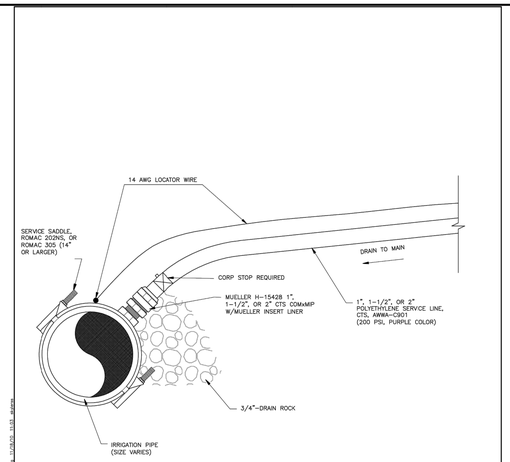
CDT.03
12OF 15



1" PLAN VIEW
NTS

NOTES:
1. CITY MAINTENANCE RESPONSIBILITY ENDS AT THE END OF THE 6" BRASS NIPPLE.
2. STOP/WASTE VALVE IS THE PROPERTY OWNER'S VALVE TO ISOLATE SPRINKLER SYSTEM.
3. REFER TO SECTION 7.6 OF AMERICAN FORK STANDARDS FOR SECONDARY WATER SERVICE LATERAL CONNECTION.

DRAWN:	MVU	AMERICAN FORK CITY PUBLIC WORKS 275 EAST 200 NORTH (801) 763-9030	STANDARD DETAIL FOR: 1" PI METER PLACEMENT	DRAWING NO. 15.5D
REVISED:				
DATE:	MAY 2019			
SCALE:	VARIES			



MUELLER 110 COMPRESSION INSERT LINER	
PART SIZE	PART NO.
1" CTS	504365
1 1/2" CTS	506139
2" CTS	506141

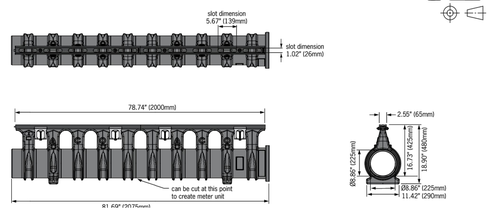
DRAWN:		HORROCKS ENGINEERS ONE WEST MAIN P.O. BOX 277 AMERICAN FORK (801) 763-5100	AMERICAN FORK CITY	STANDARD DETAIL FOR: TYPICAL SECONDARY WATER MAIN TAP	DRAWING NO. 15.3A
REVISED:	11/2010				
DATE:					
SCALE:					

SECONDARY WATER METER AND CONNECTION (1)
SCALE: NTS

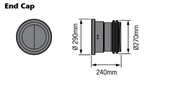
ACO INFRASTRUCTURE

Qmax - 225 channel with Q-Flow ductile iron rail

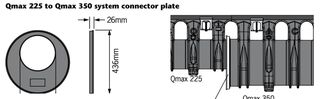
Two meter channel



End Cap



Qmax 225 to Qmax 350 system connector plate



April 2018 www.ACOInfrastructure.us

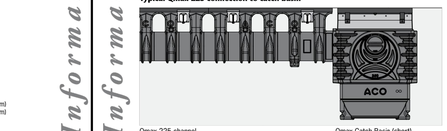
ACO Specification Information

ACO INFRASTRUCTURE

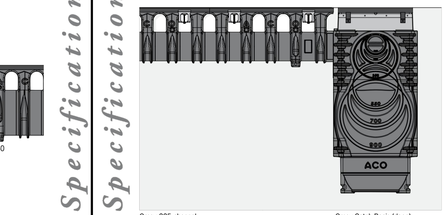
Qmax - 225 channel with Q-Flow ductile iron rail

Description	Part No	Invert inches	Wgt lbs
Qmax® 225 channel with Q-Flow ductile iron rail - 78.75" (2000mm)	32800	16.73	52.8
Accessories			
Qmax 225 End cap assembly	42221	-	3.1
Qmax 225 to Qmax® 350 System connector plate	32880	-	1.8

Typical Qmax 225 connection to catch basin



Qmax 225 channel — Qmax Catch Basin (short) -see appropriate Spec Info



Qmax 225 channel — Qmax Catch Basin (deep) -see appropriate Spec Info

Specifications

General
The surface drainage system shall be ACO Qmax 225 with ductile iron Q-Flow ADA compliant top as manufactured by ACO, Inc. or equal approved.

Materials
The trench system bodies shall be manufactured from medium density polyethylene with:

Compressive strength: 8,450 psi
Flexural strength: 2,224 psi
Water absorption 0.31%

The nominal clear opening shall be 8.86" (225mm) with unit overall width of 11.42" (290mm). Units shall be manufactured with a neutral invert of 16.73" (425mm). Each unit will feature a full radius in the channel bottom and a male to female interconnecting end profile, a rubber seal shall be fitted to the bell end of the channel unit. Units shall have molded anchoring features on the outside wall to ensure maximum mechanical bond to the surrounding bedding material and pavement surface.

Grate Unit
Grates shall be factory fitted to MDPE bodies to provide a monolithic unit. Water intake area per 2 meter unit will be 33.87in² (21,850mm²)

Catch Basin
See appropriate spec info for catch basin information.

Installation
The trench drain system shall be installed in accordance with the manufacturer's installation instructions and recommendations.

ACO, Inc.
Northeast Sales Office
94-70 Pinecrest Drive
Mentor, OH 44060
Tel: (440) 639-7230
Toll free: (800) 543-4764
Fax: (440) 639-7235

West Sales Office
825 W. Beechcraft St.
Casa Grande, AZ 85122
Tel: (520) 421-9988
Toll Free: (888) 490-9552
Fax: (520) 421-9899

Southeast Sales Office
4211 Pleasant Road
Fort Mill, SC 29708
Toll free: (800) 543-4764
Fax: (803) 802-1063

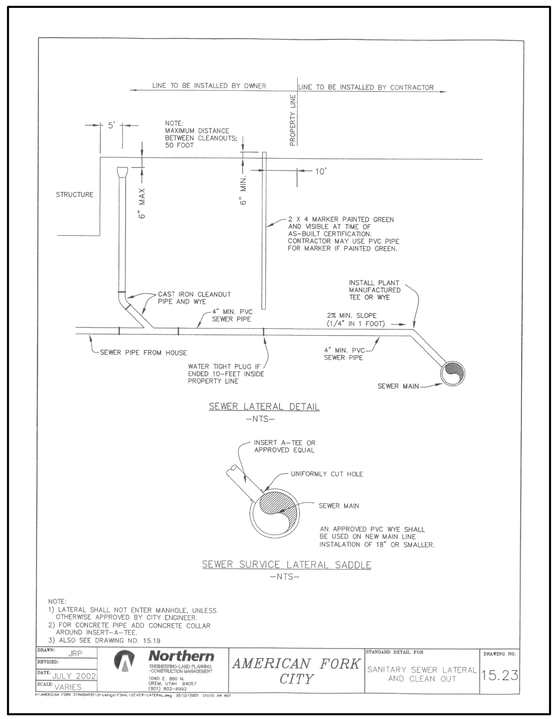
Follow us on
Electronic Contact:
info@acousa.com
www.acousa.com

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SPEC INFO

April 2018 www.ACOInfrastructure.us

TRENCH DRAIN (2)
SCALE: NTS



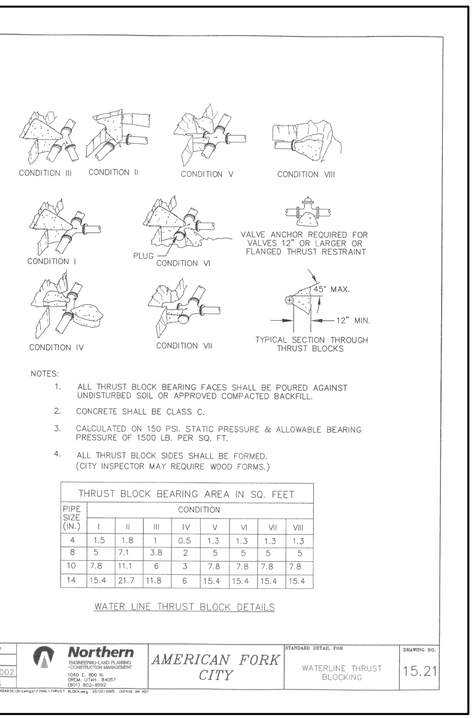
SEWER LATERAL DETAIL
-NTS-

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	Northern ENGINEERING LAND PLANNING CONSTRUCTION MANAGEMENT 1040 E. 800 N. OREM, UTAH 84057 (801) 802-8992	AMERICAN FORK CITY	STANDARD DETAIL FOR: SANITARY SEWER LATERAL AND CLEAN OUT	DRAWING NO. 15.23
REVISED:					
DATE:	JULY 2002				
SCALE:	VARIES				

SEWER LATERAL AND CLEANOUT (3)
SCALE: NTS



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.)

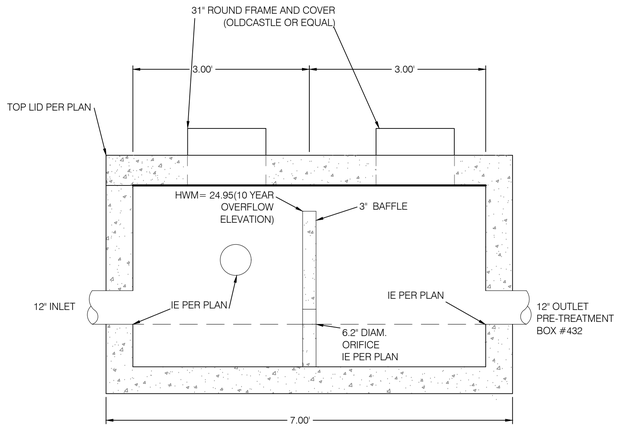
THRUST BLOCK BEARING AREA IN SQ. FEET

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	Northern ENGINEERING LAND PLANNING CONSTRUCTION MANAGEMENT 1040 E. 800 N. OREM, UTAH 84057 (801) 802-8992	AMERICAN FORK CITY	STANDARD DETAIL FOR: WATERLINE THRUST BLOCKING	DRAWING NO. 15.21
REVISED:					
DATE:	MAY 2002				
SCALE:	VARIES				

THRUST BLOCK (4)
SCALE: NTS



4'X6' CLEANOUT BOX WITH BAFFLE (5)
SCALE: N.T.S.

No.	DATE	DESCRIPTION
1	02/13/20	CHANGES PER CITY REDLINES
2	04/27/20	CHANGES PER CITY REDLINES
3	06/08/20	CHANGES PER CITY REDLINES
4	06/24/20	CHANGES PER CITY REDLINES
5	07/10/20	CHANGES PER CITY REDLINES

SCALE MEASURES 1-INCH ON FULL SIZE SHEETS
ADJUST ACCORDINGLY FOR REDUCED SIZE SHEETS

DRAWN BY: SAM
CHECKED BY: MCP
FIELD CREW:
DATE: 01/22/20
DWG. FILE: 1905136_STE

PROFESSIONAL ENGINEER
7/10/20
No. 11366633
ALLISON G. ALBERT
STATE OF UTAH

BENCHMARK ENGINEERING & LAND SURVEYING
9138 SOUTH STATE STREET SUITE #100
SANDY, UTAH 84070 (801) 542-7192
www.benchmarkcivil.com

BENCHMARK CIVIL

AMERICAN FORK OFFICE & WAREHOUSE
450 EAST AUTO MALL DR.
AMERICAN FORK, UTAH

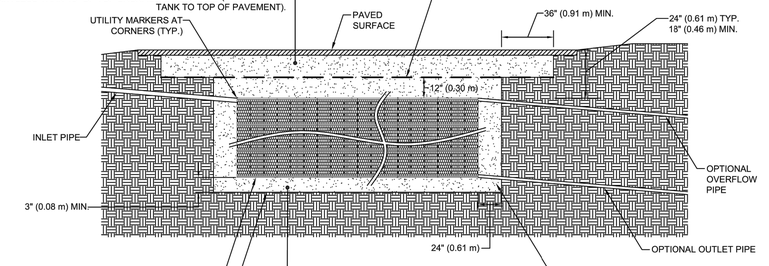
PROJECT NO. 1905136

DETAIL SHEET

CDT.04
13OF 15

TOP BACKFILL: 18" MINIMUM AND 24" RECOMMENDED. FIRST 12" MUST FREE DRAINING BACKFILL (SPEC SECTION 2.03B): STONE <1.5" OR SOIL (USCS CLASS GW, GP, SW OR SP). ADDITIONAL FILL MAY BE STRUCTURAL FILL (SPEC SECTION 2.03C): STONE OR SOIL (USCS CLASS SM, SP, SW, GM, GP OR GW) WITH MAX CLAY CONTENT<10%, MAX 25% PASSING NO. 200 SIEVE, AND MAX PLASTICITY INDEX OF 4 A MIN. 12" COVER MUST BE MAINTAINED BETWEEN BACKFILL EQUIPMENT AND THE TOP OF THE R-TANK™ SYSTEM AT ALL TIMES. FOR BEST RESULTS, PUSH OUT 14" TO MAINTAIN A MIN. 12" COVER. REFER TO THE R-TANK^{HD} INSTALLATION GUIDE FOR LISTING OF ACCEPTABLE EQUIPMENT. TOTAL HEIGHT OF TOP BACKFILL SHOULD NOT EXCEED 10'.CONTACT ACF ENVIRONMENTAL IF MORE THAN 10' OR LESS THAN 18" OF TOP BACKFILL IS REQUIRED (FROM TOP OF TANK TO TOP OF PAVEMENT).

NOTES:
- FOR COMPLETE MODULE DATA, SEE APPROPRIATE R-TANK^{HD} SHEET (SINGLE MODULE, DOUBLE MODULE, TRIPLE MODULE, QUAD MODEL, OR PENTA MODEL)
- INSTALLATIONS PER THIS DETAIL MEET GUIDELINES OF H20 LOADING PER THE 1983, 13TH EDITION OF THE AMERICAN ASSOCIATION OF STATE, HIGHWAY AND TRAFFIC OFFICIALS (AASHTO) STANDARD SPECIFICATIONS
- PRE-TREATMENT STRUCTURES NOT SHOWN

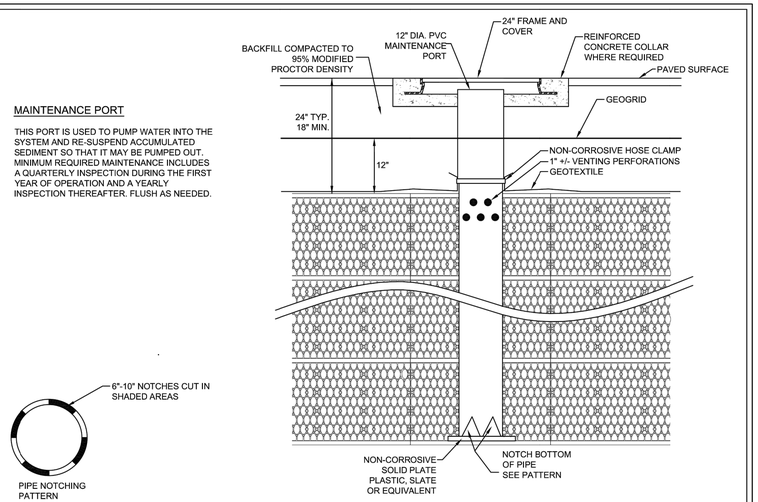


R-TANK^{HD} - H20 LOADS

FOR ADDITIONAL INFORMATION PLEASE CONTACT: ACF ENVIRONMENTAL, 1-800-448-3636, www.acfenvironmental.com

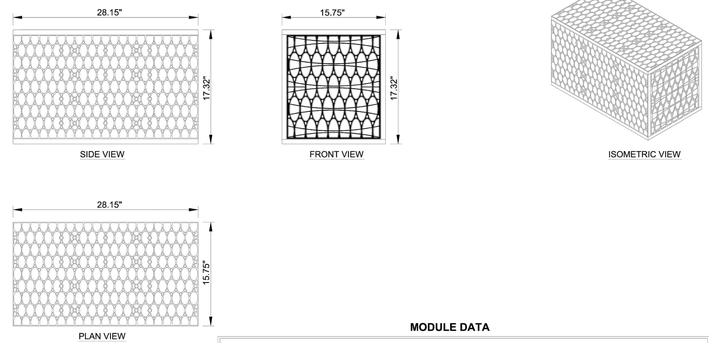
MAINTENANCE PORT

THIS PORT IS USED TO PUMP WATER INTO THE SYSTEM AND RE-SUSPEND ACCUMULATED SEDIMENT SO THAT IT MAY BE PUMPED OUT. MINIMUM REQUIRED MAINTENANCE INCLUDES A QUARTERLY INSPECTION DURING THE FIRST YEAR OF OPERATION AND A YEARLY INSPECTION THEREAFTER. FLUSH AS NEEDED.



R-TANK^{HD} TYPICAL MAINTENANCE PORT

FOR ADDITIONAL INFORMATION PLEASE CONTACT: ACF ENVIRONMENTAL, 1-800-448-3636, www.acfenvironmental.com



MODULE DATA

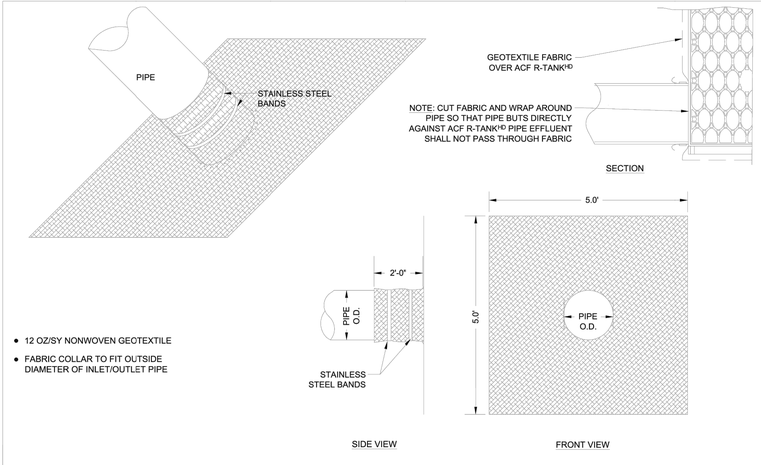
GEOMETRY: LENGTH = 28.15 IN. (715 MM)
WIDTH = 15.75 IN. (400 MM)
HEIGHT = 17.32 IN. (440 MM)
STORAGE VOLUME = 4.22 CF (119 L)
VOID INTERNAL VOLUME: 95%
VOID SURFACE AREA: 90%

LOAD RATING: 40 PSI, (MODULE ONLY)
HS25, (WITH ACF COVER SYSTEM)

MATERIAL: 85% RECYCLED POLYPROPYLENE

R-TANK^{HD} - SINGLE MODULE

FOR ADDITIONAL INFORMATION PLEASE CONTACT: ACF ENVIRONMENTAL, 1-800-448-3636, www.acfenvironmental.com



- 12 OZ/SY NONWOVEN GEOTEXTILE
- FABRIC COLLAR TO FIT OUTSIDE DIAMETER OF INLET/OUTLET PIPE

FABRIC PIPE BOOT FOR R-TANK^{HD}

FOR ADDITIONAL INFORMATION PLEASE CONTACT: ACF ENVIRONMENTAL, 1-800-448-3636, www.acfenvironmental.com

HD R-TANK SYSTEM (1)
SCALE: NTS

No.	DATE	DESCRIPTION
1	02/13/20	CHANGES PER CITY REDLINES
2	04/27/20	CHANGES PER CITY REDLINES
3	06/08/20	CHANGES PER CITY REDLINES
4	06/24/20	CHANGES PER CITY REDLINES
5	07/10/20	CHANGES PER CITY REDLINES

SCALE MEASURES 1-INCH ON FULL SIZE SHEETS
ADJUST ACCORDINGLY FOR REDUCED SIZE SHEETS
0 0.5 1"

DRAWN BY: SAM
CHECKED BY: MCP
FIELD CREW: SURVEY
DATE: 01/22/20
DWG. FILE: 1905136_STE

PROFESSIONAL ENGINEER
7/10/20
No. 11366633
ALLISON G. ALBERT
STATE OF UTAH

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9138 SOUTH STATE STREET SUITE #100
SANDY, UTAH 84070 (801) 542-7192
www.benchmarkcivil.com

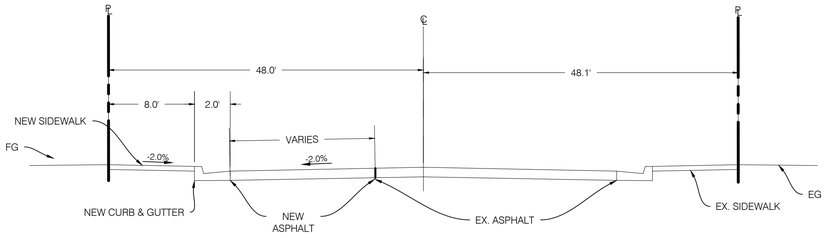
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450 EAST AUTO MALL DR.
AMERICAN FORK, UTAH

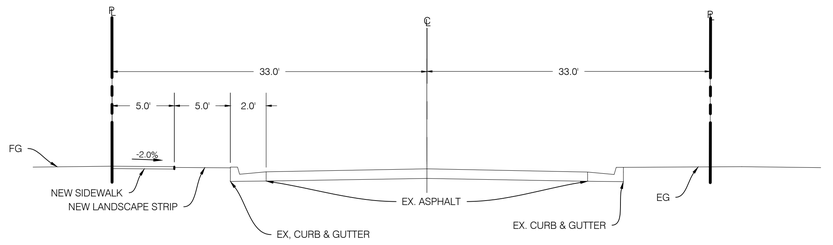
PROJECT NO. 1905136

DETAIL SHEET

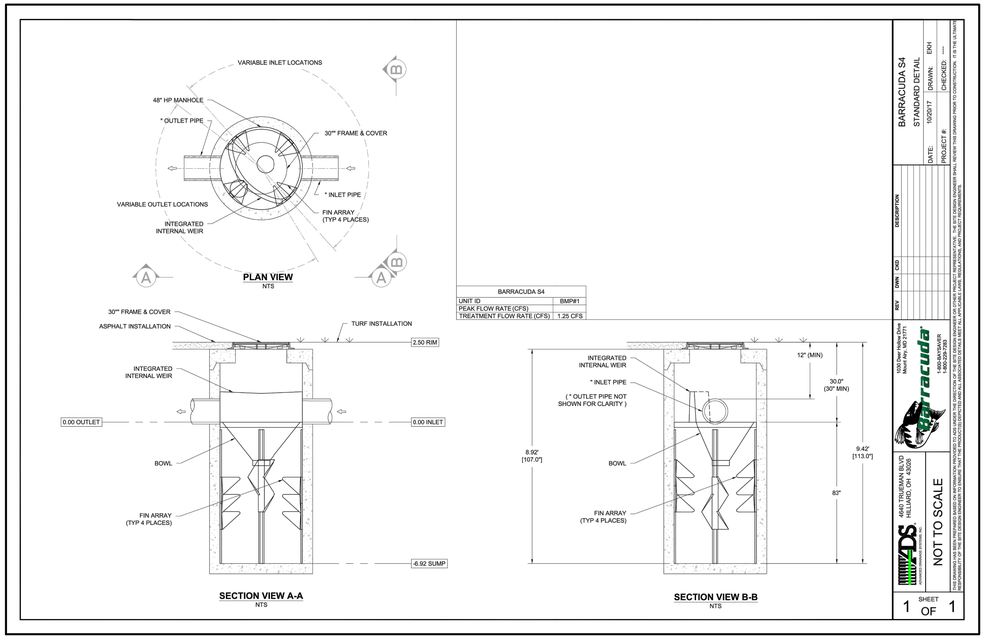
CDT.05
14OF 15



500 EAST ROW CROSS SECTION (1)
SCALE: NTS



AUTO MALL DRIVE ROW CROSS SECTION (2)
SCALE: NTS



BARRACUDA S4	
UNIT ID	BMP#1
PEAK FLOW RATE (CFS)	
TREATMENT FLOW RATE (CFS)	1.25 CFS

BARRACUDA S4
STANDARD DETAIL
DATE: 10/20/17 DRAWN: EKH
PROJECT #: CHECKED: ----

REV	DWN	CKD	DESCRIPTION

1620 Dear Island Drive
Mount Pleasant, SC 29578
1-800-927-7999
www.fbnsolutions.com

4640 TRUEMAN BLVD
HILLIARD, OH 43026

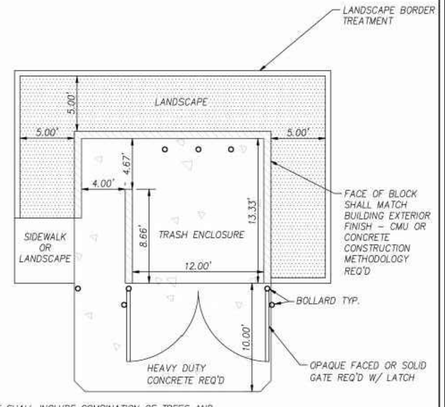
NOT TO SCALE

SHEET 1 OF 1

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STORMWATER PRE-TREATMENT (3)
SCALE: NTS

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:\CAD-PROJECTS\AF-CITY-STANDARDS\DUMPSTER.DWG
DATE: NOV 18, 2010

DUMPSTER ENCLOSURE (4)
SCALE: NTS

No.	DATE	DESCRIPTION
1	02/13/20	CHANGES PER CITY REDLINES
2	04/27/20	CHANGES PER CITY REDLINES
3	06/09/20	CHANGES PER CITY REDLINES
4	06/24/20	CHANGES PER CITY REDLINES
5	07/10/20	CHANGES PER CITY REDLINES

SCALE MEASURES 1-INCH ON FULL SIZE SHEETS
ADJUST ACCORDINGLY FOR REDUCED SIZE SHEETS

1" 0.5 0

DRAWN BY: SAM
CHECKED BY: MCP
FIELD CREW: SURVEY
DATE: 01/22/20
DWG. FILE: 1905136_SITE

PROFESSIONAL ENGINEER
7/10/20
No. 11366633
ALLISON G. ALBERT
STATE OF UTAH

BENCHMARK ENGINEERING & LAND SURVEYING
9138 SOUTH STATE STREET SUITE #100
SANDY, UTAH 84070 (801) 542-7192
www.benchmarkcivil.com

BENCHMARK CIVIL

AMERICAN FORK OFFICE & WAREHOUSE
450 EAST AUTO MALL DR.
AMERICAN FORK, UTAH

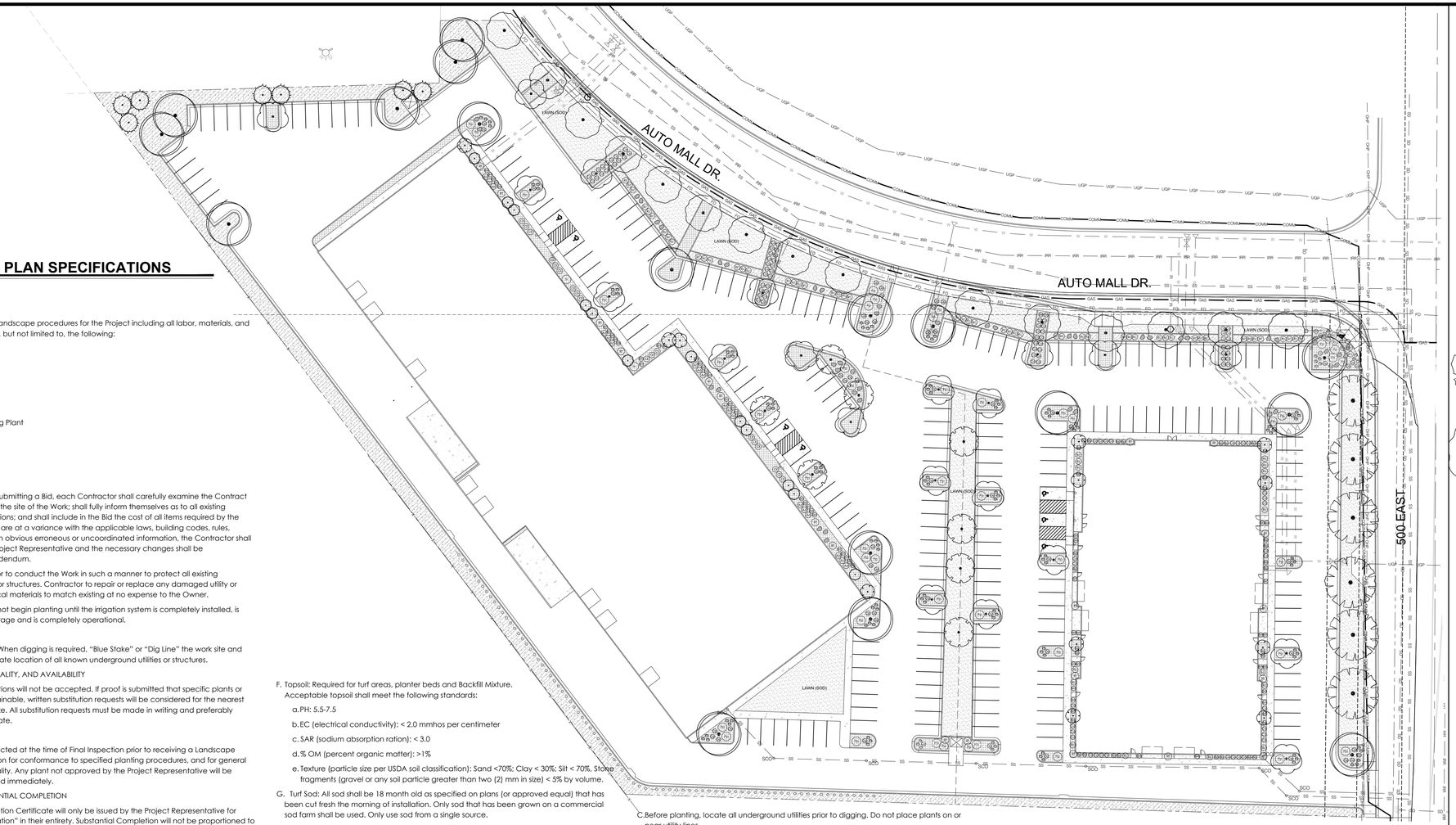
PROJECT NO. 1905136

DETAIL SHEET

CDT.06
15OF 15



aeurbia
architects and engineers



PLANT SCHEDULE

TREES	QTY	BOTANICAL NAME	COMMON NAME	CONT	CAL
	21	Acer platanoides `Fairview`	Fairview Maple	15 gal	
	12	Fagus sylvatica `Dawyck Purple`	European Beech	15 gal	
	8	Ginkgo biloba `Princeton Sentry`	Princeton Sentry Ginkgo	15 gal	
	12	Prunus cerasifera `Crimson Pointe`	`Crimson Pointe Flowering Plum	15 gal	
	17	Zelkova serrata	Sawleaf Zelkova	B & B	2"Cal

DECIDUOUS TREES	QTY	BOTANICAL NAME	COMMON NAME	CONT	CAL
	6	Gleditsia triacanthos inermis	Thornless Common Honeylocust	B & B	2"Cal
	15	Ulmus parvifolia	Lacebark Elm	B & B	2"Cal

EVERGREEN TREES	QTY	BOTANICAL NAME	COMMON NAME	CONT	CAL
	7	Picea pungens `Colorado Green`	Blue Spruce	B & B	

SHRUBS	QTY	BOTANICAL NAME	COMMON NAME	CONT
Bp	35	Berberis thunbergii `Crimson Pygmy`	Crimson Pygmy Barberry	5 gal
Bm	54	Buxus microphylla japonica `Winter Gem`	Winter Gem Boxwood	5 gal
Ad	18	Cornus sericea `Alleman's Compact`	Dwarf Red Twig Dogwood	5 gal
Iv	2	Itea virginica `Henry's Garnet`	Henry's Garnet Sweetspire	10 gal
Pp	46	Picea pungens glauca `Globosa`	Globed Blue Spruce	10 gal
Gp	64	Potentilla fruticosa `Gold Drop`	Gold Drop Potentilla	5 gal
Ol	18	Prunus laurocerasus `Otto Luyken`	Luykens Laurel	5 gal
Rf	20	Rhamnus frangula `Columnaris`	Tall Hedge Buckthorn	10 gal
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Ca	103	Calamagrostis x acutiflora `Karl Foerster`	Feather Reed Grass	2 gal

REFERENCE NOTES SCHEDULE

SYMBOL	1 LANDSCAPE DESCRIPTION	QTY	DETA
1-01	SODDED LAWN AREA	20,796 sf	
1-02	1" WASATCH GRAY COBBLE: 3" DEPTH OF ROCK. PLANTING AREAS TO RECEIVE MIN. 12" DEPTH OF QUALITY TOPSOIL. IF TOPSOIL IS PRESENT ON SITE, PROVIDE SOIL TEST TO DETERMINE SOIL QUALITY FOR PROPOSED PLANTINGS.	14,956 sf	
1-03	1"-1.5" OQUIRRH GRAVEL COBBLE: 3" DEPTH OF ROCK. PLANTING AREAS TO RECEIVE MIN. 12" DEPTH OF QUALITY TOPSOIL. IF TOPSOIL IS PRESENT ON SITE, PROVIDE SOIL TEST TO DETERMINE SOIL QUALITY FOR PROPOSED PLANTINGS.	15,465 sf	
1-04	CONCRETE CURBING: SEE DETAIL	0 lf	
1-06	BOULDERS - DECORATIVE	45	

LANDSCAPE PLAN SPECIFICATIONS

PART I - GENERAL

1.1 SUMMARY

A. This section includes landscape procedures for the Project including all labor, materials, and installation necessary, but not limited to, the following:

1. Soil Amendments
2. Fine Grading
3. Cultivation
4. Landscape Edging
5. Turf Planting
6. Furnish and Installing Plant
7. Maintenance
8. Mowing
9. Weeding

1.2 SITE CONDITIONS

A. Examination: Before submitting a Bid, each Contractor shall carefully examine the Contract Documents; shall visit the site of the Work; shall fully inform themselves as to all existing conditions and limitations; and shall include in the Bid the cost of all items required by the Contract Documents are at a variance with the applicable laws, building codes, rules, regulations, or contain obvious erroneous or uncoordinated information, the Contractor shall promptly notify the Project Representative and the necessary changes shall be accomplished by Addendum.

B. Protection: Contractor to conduct the Work in such a manner to protect all existing underground utilities or structures. Contractor to repair or replace any damaged utility or structure using identical materials to match existing at no expense to the Owner.

C. Irrigation System: Do not begin planting until the irrigation system is completely installed, is adjusted for full coverage and is completely operational.

1.3 PERMITS

A. Blue Stake/ Dig Line: When digging is required, "Blue Stake" or "Dig Line" the work site and identify the approximate location of all known underground utilities or structures.

1.4 PLANT DELIVERY, QUALITY, AND AVAILABILITY

A. Unauthorized substitutions will not be accepted. If proof is submitted that specific plants or plant sizes are unobtainable, written substitution requests will be considered for the nearest equivalent plant or size. All substitution requests must be made in writing and preferably before the bid due date.

1.5 FINAL INSPECTION

A. All plants will be inspected at the time of Final Inspection prior to receiving a Landscape Substantial Completion for conformance to specified planting procedures, and for general appearance and vitality. Any plant not approved by the Project Representative will be rejected and replaced immediately.

1.6 LANDSCAPE SUBSTANTIAL COMPLETION

A. A Substantial Completion Certificate will only be issued by the Project Representative for "landscape and irrigation" in their entirety. Substantial Completion will not be proportioned to be designated areas of a project.

1.7 MAINTENANCE

A. Plant Material: The Contractor is responsible to maintain all planted materials in a healthy and growing condition for 30 days after receiving a Landscape Substantial Completion at which time the Guarantee period commences. This maintenance is to include mowing, weeding, cultivating, fertilizing, monitoring water schedules, controlling insects and diseases, re-guying and staking, and all other operations of care necessary for the promotion of root growth and plant life so that all plants are in a condition satisfactory at the end of the guarantee period. The Contractor shall be held responsible for failure to monitor watering operations and shall replace any and all plant material that is lost due to improper application of water.

1.8 GUARANTEE

A. Guarantee: A guarantee period of one year shall begin from end of maintenance period and final acceptance for trees, shrubs, and ground covers. All plants shall grow and be healthy for the guarantee period and trees shall live and grow in acceptable upright position. Any plant not alive, in poor health, or in poor condition at the end of the guarantee period will be replaced immediately. Any plant will only need to be replaced once during the guarantee period. Contractor to provide documentation showing where each plant to be replaced is located. Any outside factors, such as vandalism or lack of maintenance on the part of the Owner, shall not be part of the guarantee

PART II - PRODUCTS

2.1 LANDSCAPE MATERIALS

A. Tree Staking: All trees shall be staked for one year warranty period. All trees not plumb shall be replaced. Staked trees shall use vinyl tree ties and tree stakes two (2) inch by two (2) by eight (8) foot common pine stakes used as shown on the details.

B. Tree Wrap: Tree wrap is not to be used.

C. Mulch/Rock: See Plans. All planter beds to receive a minimum 3" layer for trees, shrubs, and perennials and 1" for groundcovers.

D. Weed Barrier: DeWitt 5 oz. weed barrier fabric. Manufactured by DeWitt Company, dewittcompany.com or approved equal.

E. Tree, Shrub, and Grass Backfill Mixture: Backfill mixture to be 50% native soil and 50% topsoil, thoroughly mixed together prior to placement.

F. Topsoil: Required for turf areas, planter beds and Backfill Mixture. Acceptable topsoil shall meet the following standards:

a. PH: 5.5-7.5

b. EC (electrical conductivity): < 2.0 mmhos per centimeter

c. SAR (sodium absorption ration): < 3.0

d. % OM (percent organic matter): >1%

e. Texture (particle size per USDA soil classification): Sand <70%; Clay < 30%; Silt < 70%. Stone fragments (gravel or any soil particle greater than two (2) mm in size) < 5% by volume.

G. Turf Sod: All sod shall be 18 month old as specified on plans (or approved equal) that has been cut fresh the morning of installation. Only sod that has been grown on a commercial sod farm shall be used. Only use sod from a single source.

H. Landscape Edging: Headers and Edging six (6) inches by four (4) inches extruded concrete curb made up of the following materials:

a. Washed mortar sand free of organic material.

b. Portland Cement (see concrete spec. below for type)

c. Reinforced fiber - Specifically produced for compatibility with aggressive alkaline environment of Portland cement-based composites.

d. Only potable water for mixing.

PART III - EXECUTION

3.1 GRADING

A. Topsoil Preparation: Grade planting areas according to the grading plan. Eliminate uneven areas and low spots. Provide for proper grading and drainage.

B. Topsoil Placement: Slope surfaced away from building at two (2) percent slope with no pockets of standing water. Establish finish grades of one (1) inches for planters below grade of adjacent paved surfaced. Provide neat, smooth, and uniform finish grades. Remove surplus sub-soil and topsoil from the site.

C. Compaction: compaction under hard surface areas (asphalt paths and concrete surfaces) shall be ninety-five (95) percent. Compaction under planting areas shall be between eighty-five (85) and ninety (90) percent.

3.2 TURF GRADING

A. The surface on which the sod is to be laid shall be firm and free from footprints, depressions, or undulations of any kind. The surface shall be free of all materials larger than 1/2" in diameter.

B. The finish grade of the topsoil adjacent to all sidewalks, mow-strips, etc. prior to the laying of sod, shall be set such that the crown of the grass shall be at the same level as the adjacent concrete or hard surface. No exceptions.

3.3 PLANTING OPERATIONS

A. Review the exact locations of all trees and shrubs with the Project Representative for approval prior to the digging of any holes. Prepare all holes according to the details on the drawings.

B. Water plants immediately upon arrival at the site. Maintain in moist condition until planted.

C. Before planting, locate all underground utilities prior to digging. Do not place plants on or near utility lines.

D. The tree planting hole should be the same depth as the root ball, and three times the diameter of the root ball.

E. Trees must be placed on undisturbed soil at the bottom of the planting hole.

F. The tree hole depth shall be determined so that the tree may be set slightly high of finish grade, 1" to 2" above the base of the trunk flare, using the top of the root ball as a guide.

G. Plant immediately after removal of container for container plants.

H. Set tree on soil and remove all burlap, wire baskets, twine, wrappings, etc. before beginning and backfilling operations. Do not use planting stock if the ball is cracked or broken before or during planting operation.

I. Apply vitamin B-1 root stimulator at the rate of one (1) tablespoon per gallon.

J. Upon completion of backfilling operation, thoroughly water tree to completely settle the soil and fill any voids that may have occurred. Use a watering hose, not the area irrigation system. If additional prepared topsoil mixture needs to be added. It should be a courser mix as required to establish finish grade as indicated on the drawings.

K. The amount of pruning shall be limited to the minimum necessary to remove dead or injured twigs and branches. All cuts, scars, and bruises shall be properly treated according to the direction of the Project Representative. Proper pruning techniques shall be used. Do not leave stubs and do not cut the leader branch. Improper pruning shall be cause for rejection of the plant material.

L. Prepare a watering circle of 2' diameter around the trunk. For conifers, extend the watering well to the drip line of the tree canopy. Place mulch around the planted trees.

3.4 TURF - SOD LAYING

A. Top Soil Amendments: Prior to laying sod, commercial fertilizer shall be applied and incorporated into the upper four (4) inches of the topsoil at a rate of four pounds of nitrogen per one thousand (1,000) square feet. Adjust fertilization mixture and rate of application as needed to meet recommendations given by topsoil analysis. Include other amendments as required.

B. Fertilization: Three weeks after sod placement fertilize the turf at a rate of ½ pound of nitrogen per 1000 square feet. Use fertilizer specified above. Adjust fertilization mixture and rates to meet recommendations given by topsoil analysis.

C. Sod Availability and Condition: The Contractor shall satisfy himself as to the existing conditions prior to any construction. The Contractor shall be fully responsible for furnishing and lay all sod required on the plans. He shall furnish new sod as specified above and lay it so as too completely satisfy the intent and meaning of the plans and specification at no extra cost to the owner. In the case of plans and specification at no extra cost to the owner. In the case of any discrepancy in the amount of sod to be removed or amount to be used, it shall be the Contractor's responsibility to report such to the Project Representative prior to commencing the work.

D. Sod Laying: The surface upon which the new sod to be laid will be prepared as specified above. Areas where sod is to be laid shall be cut trimmed, or shaped to receive full width sod (minimum twelve (12) inches). No partial strip or pieces will be accepted.

E. Sod shall be tamped lightly as each piece is set to insure that good contact is made between edges and also the ground. Sod laid on any sloped areas shall be anchored with wooden dowels or other materials which are accepted by the grass sod industry.

F. Apply water directly after laying sod. Rainfall is not acceptable.

G. Watering of the sod shall be the complete responsibility of the Contractor by whatever means necessary to establish the sod in an acceptable manner to the end of the Maintenance period. If an irrigation system is in place on the site, but for whatever reason, water is not available in the system. It is the responsibility of the Contractor to water the sod by whatever means, until the sod is accepted by the Project Representative.

H. Protection of the newly laid sod shall be the complete responsibility of the Contractor. The Contractor shall provide acceptable visual barriers, to include barricades set appropriate distances with strings or tapes between barriers, as an indication of new work. The Contractor is to restore any damaged areas caused by others (including vehicular traffic), erosion, etc, until such time as the lawn is accepted by the Owner.

I. All sod that has not been laid within 24 hours shall be deemed unacceptable and will be removed from the site.

3.5 WEED BARRIER

A. Cut a slit or x at each plant location no larger than necessary to install plant.

B. Overlap rows of fabric min. 6"

C. Stable fabric edges and overlaps to ground.

END OF SECTION

LANDSCAPE NOTES

1. LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR VERIFYING QUANTITIES OF ALL MATERIALS FOR BIDDING AND INSTALLATION PURPOSES. IF DISCREPANCIES EXIST, THE PLAN SHALL DICTATE QUANTITIES TO BE USED.
2. PLANT MATERIAL TO BE INSTALLED PER PLANT LEGEND. IF SUBSTITUTIONS ARE WANTED, PROPOSED LANDSCAPE CHANGES MUST BE SUBMITTED TO THE LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO PLANTING.
3. NEW LAWN AREAS TO BE SODDED WITH DROUGHT TOLERANT VARIETY. FINE LEVEL ALL AREAS PRIOR TO LAYING SOD.
4. SANDY LOAM TOPSOIL TO BE IMPLEMENTED AT THE FOLLOWING DEPTHS: 6" TOPSOIL (WITH 2" HUMUS MIXED INTO TOPSOIL PRIOR TO SPREADING) IN ALL NEW PLANTER AREAS AND 4" IN ALL NEW LAWN AREAS. PLANTER BEDS TO BE EXCAVATED AS NECESSARY IN ORDER TO ACCOMMODATE NEW TOPSOIL AND/OR PLANTER BED MULCH TO REACH FINISHED GRADE.
5. 4"X6" EXTRUDED CONCRETE MOW CURB TO BE INSTALLED BETWEEN ALL LAWN AND PLANTER AREAS PER PLAN. ANY TREES LOCATED IN LAWN MUST HAVE A 4' CONCRETE TREE RING.
6. DeWitt 5 OZ. WEED BARRIER FABRIC TO BE INSTALLED IN ALL PLANTER AREAS EXCEPT UNDER ANNUAL PLANTING AREAS AS SHOWN ON PLAN.
7. ROCK MULCH TO BE IMPLEMENTED AT THE FOLLOWING DEPTHS: 3" IN ALL TREE, SHRUB, AND PERENNIAL PLANTER AREAS; ANNUAL PLANTING AREAS AS SHOWN ON PLAN TO RECEIVE 4" OF SOIL AID MATERIAL. PULL BARK MULCH MIN. 3" AWAY FROM BASE OF ALL PERENNIALS AND SHRUBS AND MIN. 6" AWAY FROM ALL TREES.
8. CONTRACTOR TO PROVIDE NEW AUTOMATIC UNDERGROUND IRRIGATION SYSTEM TO BE INSTALLED IN ALL LANDSCAPE AREAS. ALL LAWN AREA TO RECEIVE 100% HEAD TO HEAD COVERAGE WITH SPRAY AND ROTARY SPRINKLER HEADS. ALL PLANTER AREAS NEED TO RECEIVE A FULL DRIP SYSTEM TO EACH TREE AND SHRUB ON PROJECT. SEE IRRIGATION PLAN.

ISSUE DATE 7/10/2020 **PROJECT NUMBER** UT20001

NO.	REVISION	DATE
1		
2		
3		
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5		
6		
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PLAN INFORMATION

811 BLUE STAKES OF UTAH
UTILITY NOTIFICATION CENTER, INC
1-800-662-4111
www.bluestakes.org

0' 20' 40' 80' 160'
GRAPHIC SCALE: 1" = 40'

PROJECT INFORMATION

OFFICE WAREHOUSE

450 EAST AUTO MALL DRIVE
AMERICAN FORK, UTAH

DEVELOPER / PROPERTY OWNER / CLIENT

Developer / Property Owner:
JONATHON JENSEN
DAVIES DESIGN BUILD
801-592-6044
JON@DAVIESDESIGNBUILD.COM

Building Architect / Engineer:
BENCHMARK ENGINEERING & LAND SURVEYING
9130 SOUTH STATE STREET SUITE #100
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WWW.BENCHMARKCIVIL.COM

LANDSCAPE ARCHITECT / PLANNER

PKJ DESIGN GROUP
PKJ DESIGN GROUP L.L.C.
3450 N. TRIUMPH BLVD. SUITE 102
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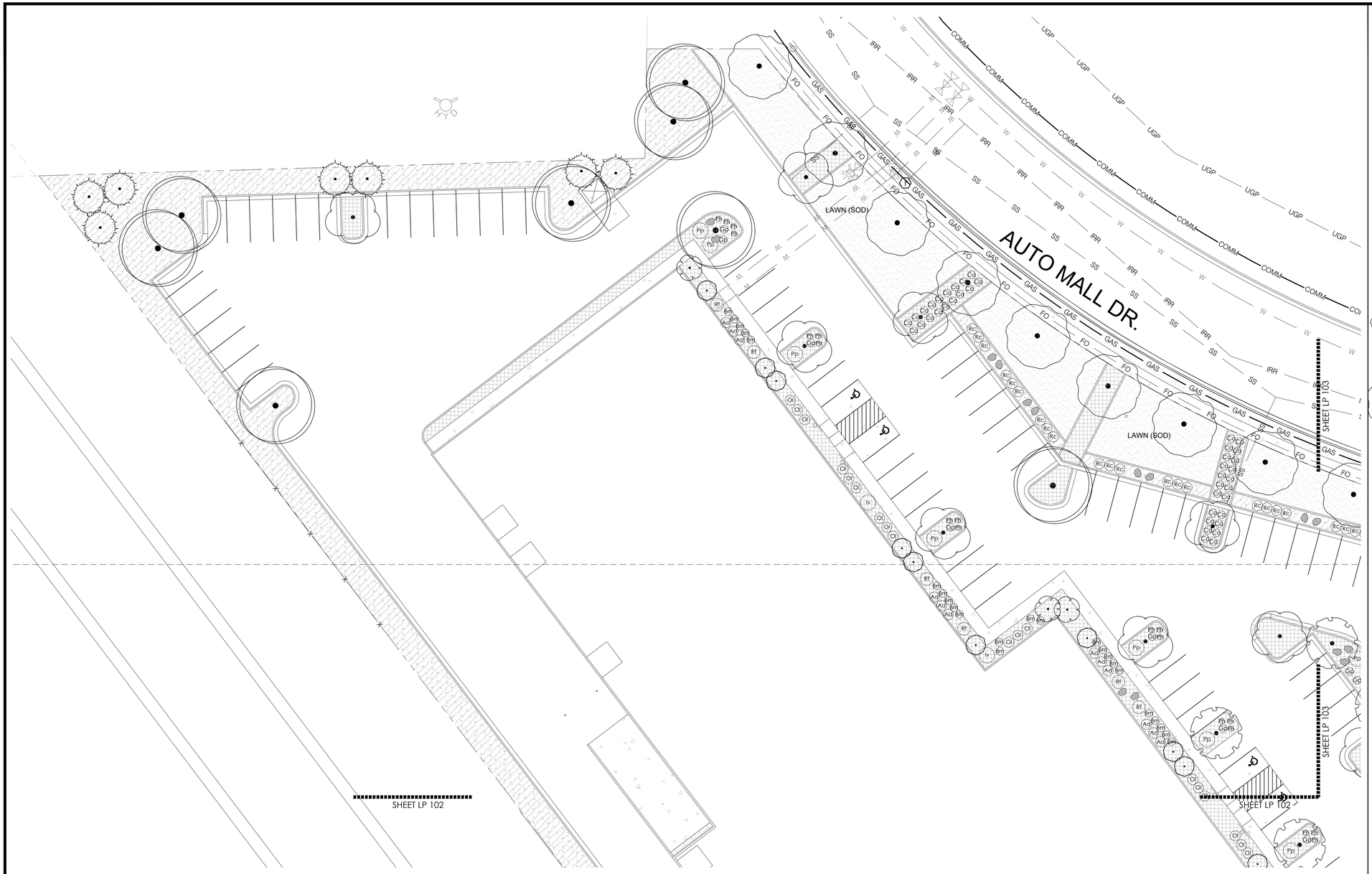
LICENSE STAMP

LICENSED LANDSCAPE ARCHITECT JEREMY ANDERSON 812212-5501 07/10/2020 ELECTRONIC SEAL STATE OF UTAH

PM:	KBA
DRAWN:	KBA
CHECKED:	JTA
PLOT DATE:	7/10/2020

PRELIMINARY PLANS NOT FOR CONSTRUCTION

LP 100



PLANT SCHEDULE

TREES	QTY	BOTANICAL NAME	COMMON NAME	CONT	CAL
	21	Acer platanoides `Fairview`	Fairview Maple	15 gal	
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ISSUE DATE 7/10/2020 **PROJECT NUMBER** UT20001

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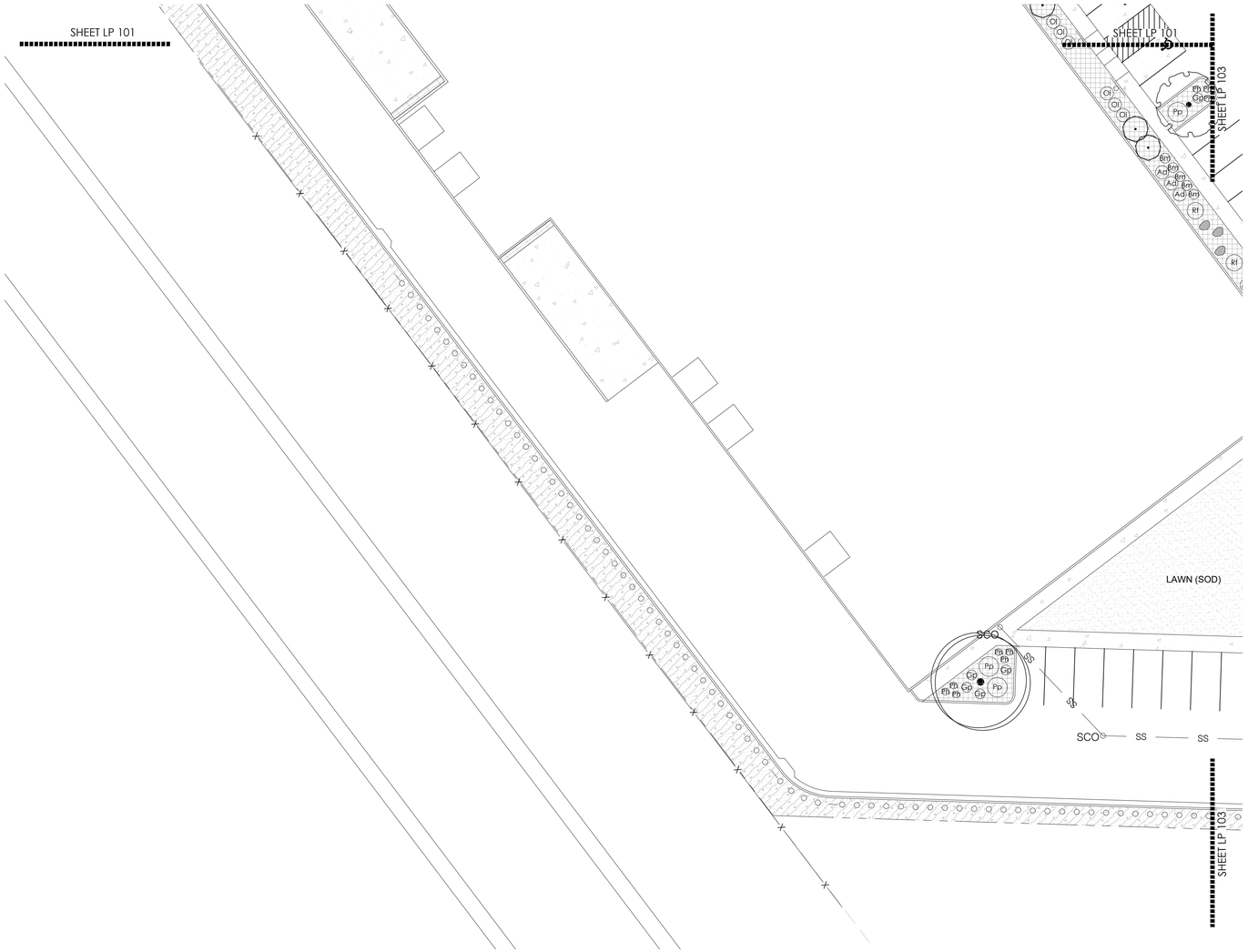
LICENSE STAMP

REGISTERED LANDSCAPE ARCHITECT KRISTY ANNE BOYER 812815 7301 7/10/2020 ELECTRONIC SEAL STATE OF UTAH

PM:	KBA
DRAWN:	KBA
CHECKED:	JTA
PLOT DATE:	7/10/2020

PRELIMINARY PLANS NOT FOR CONSTRUCTION

LP 101



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SYMBOL	1 LANDSCAPE DESCRIPTION	QTY	DETA
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I-02	1" WASATCH GRAY COBBLE: 3" DEPTH OF ROCK. PLANTING AREAS TO RECEIVE MIN. 12" DEPTH OF QUALITY TOPSOIL. IF TOPSOIL IS PRESENT ON SITE, PROVIDE SOIL TEST TO DETERMINE SOIL QUALITY FOR PROPOSED PLANTINGS.	14,956 sf	
I-03	1"-1.5" OQUIRRH GRAVEL COBBLE: 3" DEPTH OF ROCK. PLANTING AREAS TO RECEIVE MIN. 12" DEPTH OF QUALITY TOPSOIL. IF TOPSOIL IS PRESENT ON SITE, PROVIDE SOIL TEST TO DETERMINE SOIL QUALITY FOR PROPOSED PLANTINGS.	15,465 sf	
I-04	CONCRETE CURBING: SEE DETAIL	0 lf	
I-06	BOULDERS - DECORATIVE	45	

ISSUE DATE 7/10/2020 **PROJECT NUMBER** UT20001

NO.	REVISION	DATE
1		
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PLAN INFORMATION

811 BLUE STAKES OF UTAH
UTILITY NOTIFICATION CENTER, INC
1-800-662-4111
www.bluestakes.org

N

0' 10' 20' 40' 80'
GRAPHIC SCALE: 1" = 20'

PROJECT INFORMATION

OFFICE WAREHOUSE
450 EAST AUTO MALL DRIVE
AMERICAN FORK, UTAH

DEVELOPER / PROPERTY OWNER / CLIENT

Developer / Property Owner:
JONATHON JENSEN
DAVIES DESIGN BUILD
801-592-6044
JON@DAVIESDESIGNBUILD.COM

Building Architect / Engineer:
BENCHMARK CIVIL
BENCHMARK ENGINEERING & LAND SURVEYING
9130 SOUTH STATE STREET SUITE #100
SANDY, UTAH 84070 (801) 542-7192
WWW.BENCHMARKCIVIL.COM

LANDSCAPE ARCHITECT / PLANNER

PKJ DESIGN GROUP
PKJ DESIGN GROUP L.L.C.
3450 N. TRIUMPH BLVD. SUITE 102
LEHI, UTAH 84043 (801) 960-2698
www.pkjdesigngroup.com

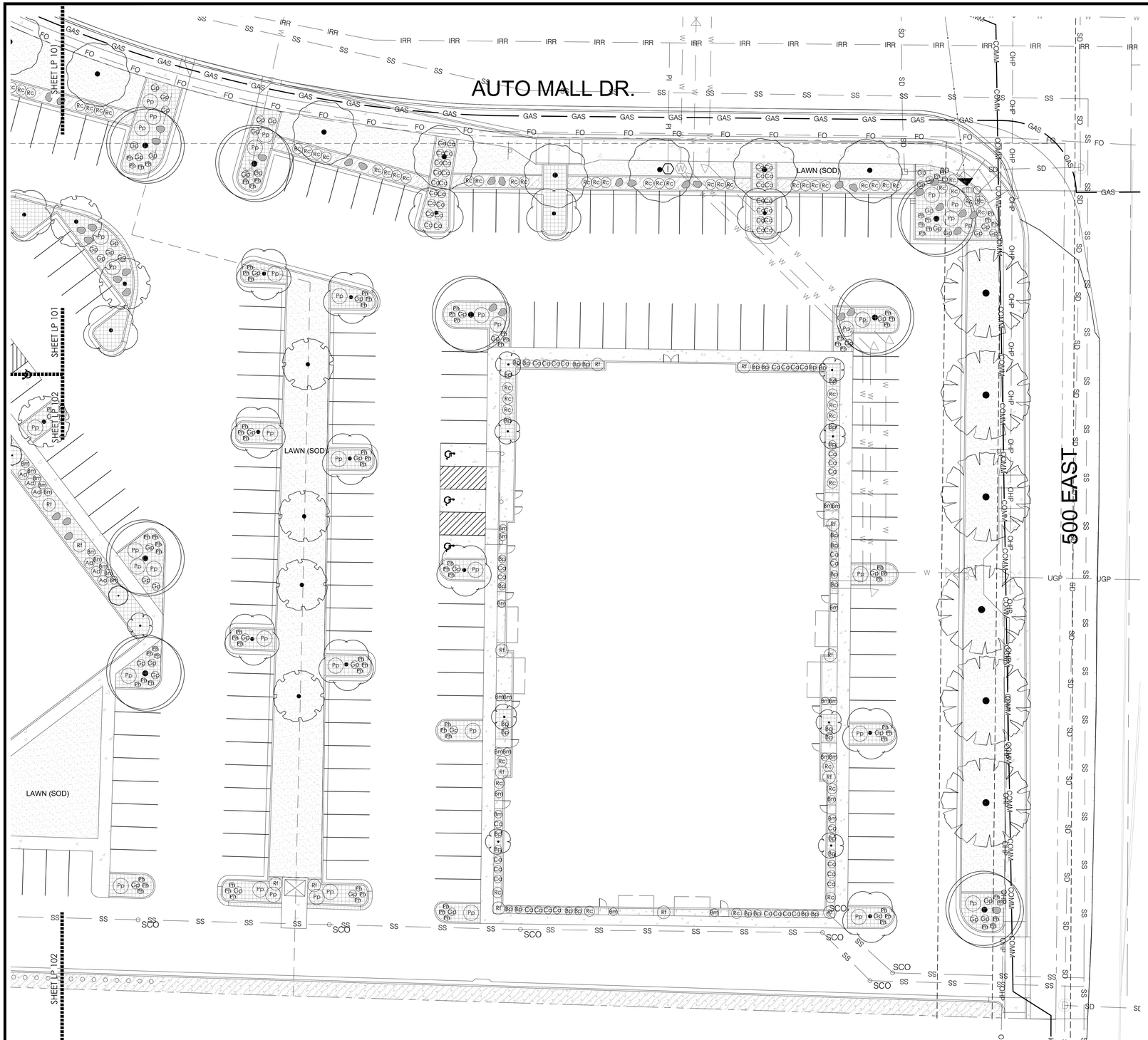
LICENSE STAMP

LICENSED LANDSCAPE ARCHITECT JEREMY AINSWORTH 8129154-5301 7/10/2020 LICENSING SEAL STATE OF UTAH

PM: KBA
DRAWN: KBA
CHECKED: JTA
PLOT DATE: 7/10/2020

PRELIMINARY PLANS NOT FOR CONSTRUCTION

LP 102



PLANT SCHEDULE

TREES	QTY	BOTANICAL NAME	COMMON NAME	CONT	CAL
	21	Acer platanoides `Fairview`	Fairview Maple	15 gal	
	12	Fagus sylvatica `Dawyck Purple`	European Beech	15 gal	
	8	Ginkgo biloba `Princeton Sentry`	Princeton Sentry Ginkgo	15 gal	
	12	Prunus cerasifera `Crimson Pointe`	`Crimson Pointe Flowering Plum	15 gal	
	17	Zelkova serrata	Sawleaf Zelkova	B & B	2"Cal

DECIDUOUS TREES	QTY	BOTANICAL NAME	COMMON NAME	CONT	CAL
	6	Gleditsia triacanthos inermis	Thornless Common Honeylocust	B & B	2"Cal
	15	Ulmus parvifolia	Lacebark Elm	B & B	2"Cal

EVERGREEN TREES	QTY	BOTANICAL NAME	COMMON NAME	CONT	CAL
	7	Picea pungens `Colorado Green`	Blue Spruce	B & B	

SHRUBS	QTY	BOTANICAL NAME	COMMON NAME	CONT
Bp	35	Berberis thunbergii `Crimson Pygmy`	Crimson Pygmy Barberry	5 gal
Bm	54	Buxus microphylla japonica `Winter Gem`	Winter Gem Boxwood	5 gal
Ad	18	Cornus sericea `Alleman's Compact`	Dwarf Red Twig Dogwood	5 gal
Iv	2	Itea virginica `Henry's Garnet`	Henry's Garnet Sweetspire	10 gal
Pp	46	Picea pungens glauca `Globosa`	Globed Blue Spruce	10 gal
Gp	64	Potentilla fruticosa `Gold Drop`	Gold Drop Potentilla	5 gal
Ol	18	Prunus laurocerasus `Otto Luyken`	Luykens Laurel	5 gal
Rf	20	Rhamnus frangula `Columnaris`	Tall Hedge Buckthorn	10 gal
Rc	73	Ribes alpinum	Alpine Currant	5 gal

ANNUALS/PERENNIALS	QTY	BOTANICAL NAME	COMMON NAME	CONT
Ph	115	Pennisetum alopecuroides `Hameln`	Hameln Dwarf Fountain Grass	1 gal

GRASSES	QTY	BOTANICAL NAME	COMMON NAME	CONT
Ca	103	Calamagrostis x acutiflora `Karl Foerster`	Feather Reed Grass	2 gal

REFERENCE NOTES SCHEDULE

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LICENSE STAMP

JEREMY ANSWORTH — 812812 — REGISTERED LANDSCAPE ARCHITECT — STATE OF UTAH

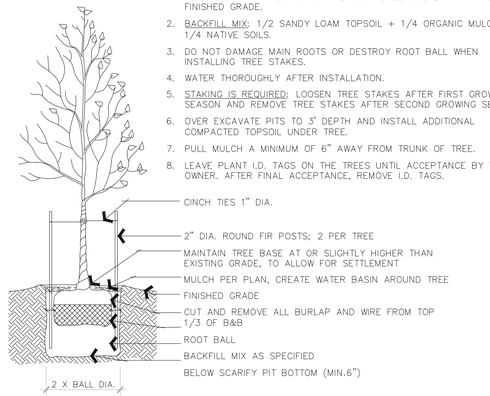
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PLOT DATE:	7/10/2020

PRELIMINARY PLANS NOT FOR CONSTRUCTION

LP 103

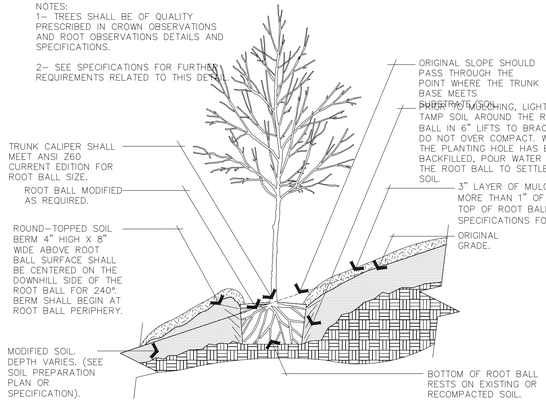
NOTES:

1. PLANT SO THAT THE TOP OF THE ROOT BALL IS EVEN WITH THE FINISHED GRADE.
2. BACKFILL MIX: 1/2 SANDY LOAM TOPSOIL + 1/4 ORGANIC MULCH, & 1/4 NATIVE SOILS.
3. DO NOT DAMAGE MAIN ROOTS OR DESTROY ROOT BALL WHEN INSTALLING TREE STAKES.
4. WATER THOROUGHLY AFTER INSTALLATION.
5. STAKING IS REQUIRED: LOOSEN TREE STAKES AFTER FIRST GROWING SEASON AND REMOVE TREE STAKES AFTER SECOND GROWING SEASON.
6. OVER EXCAVATE PITS TO 3" DEPTH AND INSTALL ADDITIONAL COMPACTED TOPSOIL UNDER TREE.
7. PULL MULCH A MINIMUM OF 6" AWAY FROM TRUNK OF TREE.
8. LEAVE PLANT I.D. TAGS ON THE TREES UNTIL ACCEPTANCE BY THE OWNER. AFTER FINAL ACCEPTANCE, REMOVE I.D. TAGS.

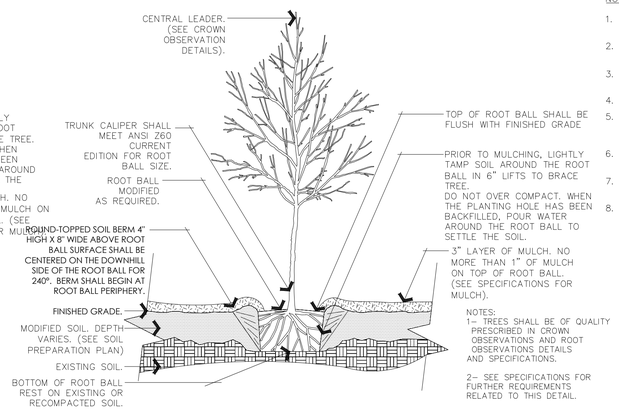


A DECIDUOUS TREE PLANTING DETAIL
NOT TO SCALE — PKJ DESIGN GROUP

NOTES:
1- TREES SHALL BE OF QUALITY PRESCRIBED IN CROWN OBSERVATIONS AND ROOT OBSERVATIONS DETAILS AND SPECIFICATIONS.
2- SEE SPECIFICATIONS FOR FURTHER REQUIREMENTS RELATED TO THIS DETAIL.



B TREE ON SLOPE 5% (20:1) TO 50% (2:1)
NOT TO SCALE — PKJ DESIGN GROUP

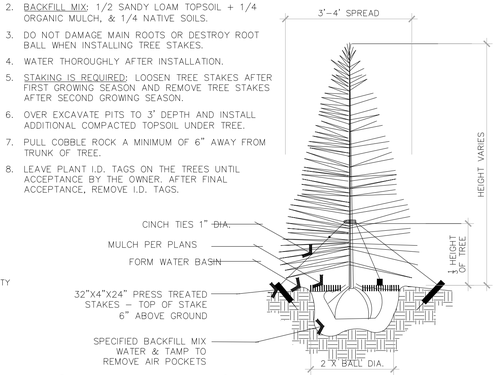


NOTES:
1- TREES SHALL BE OF QUALITY PRESCRIBED IN CROWN OBSERVATIONS AND ROOT OBSERVATIONS DETAILS AND SPECIFICATIONS.
2- SEE SPECIFICATIONS FOR FURTHER REQUIREMENTS RELATED TO THIS DETAIL.

C TREE w/ BERM (EXISTING SOIL MODIFIED)
NOTES: — NOT TO SCALE — PKJ DESIGN GROUP

NOTES:

1. PLANT SO THAT THE TOP OF THE ROOT BALL IS EVEN WITH THE FINISHED GRADE.
2. BACKFILL MIX: 1/2 SANDY LOAM TOPSOIL + 1/4 ORGANIC MULCH, & 1/4 NATIVE SOILS.
3. DO NOT DAMAGE MAIN ROOTS OR DESTROY ROOT BALL WHEN INSTALLING TREE STAKES.
4. WATER THOROUGHLY AFTER INSTALLATION.
5. STAKING IS REQUIRED: LOOSEN TREE STAKES AFTER FIRST GROWING SEASON AND REMOVE TREE STAKES AFTER SECOND GROWING SEASON.
6. OVER EXCAVATE PITS TO 3" DEPTH AND INSTALL ADDITIONAL COMPACTED TOPSOIL UNDER TREE.
7. PULL COBBLE ROCK A MINIMUM OF 6" AWAY FROM TRUNK OF TREE.
8. LEAVE PLANT I.D. TAGS ON THE TREES UNTIL ACCEPTANCE BY THE OWNER. AFTER FINAL ACCEPTANCE, REMOVE I.D. TAGS.



D EVERGREEN TREE PLANTING DETAIL
NOT TO SCALE — PKJ DESIGN GROUP

NOTES:

1. IF PLANT IS BALL & BURLAP, CUT AND REMOVE TOP 1/3 OF BURLAP FROM ROOT BALL.
2. IF PLANT IS CONTAINERIZED, SCARIFY ROOT BALL PRIOR TO PLANTING.
3. BACKFILL MIX: 1/2 SANDY LOAM + 1/4 ORGANIC MULCH + 1/4 NATIVE SOILS IF NATIVE SOILS ARE SUITABLE.
4. DO NOT DAMAGE MAIN ROOTS OR DESTROY ROOT BALL WHEN INSTALLING TREE STAKES.
5. WATER THOROUGHLY AFTER INSTALLATION.
8. LEAVE PLANT I.D. TAGS ON THE TREES UNTIL ACCEPTANCE BY THE OWNER. AFTER FINAL ACCEPTANCE, REMOVE I.D. TAGS.

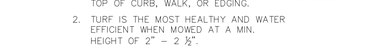


E SHRUB PLANTING DETAIL
NOT TO SCALE — PKJ DESIGN GROUP



F PERENNIAL PLANTING
NOT TO SCALE — PKJ DESIGN GROUP

G MULCH DETAIL
NOT TO SCALE — PKJ DESIGN GROUP



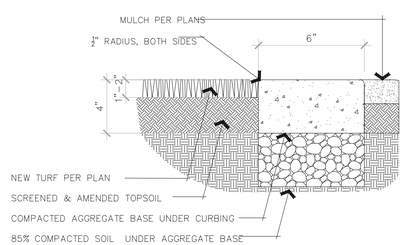
NOTES: .

1. ENSURE FINISH GRADE IS 1"– 2" BELOW TOP OF CURB, WALK, OR EDGING.
2. SUBGRADE COMPACTED TO 85% RELATIVE DENSITY
2. TURF IS THE MOST HEALTHY AND WATER EFFICIENT WHEN MOWED AT A MIN. HEIGHT OF 2" – 2 ½".

H SOD LAYING DETAIL
NOT TO SCALE — PKJ DESIGN GROUP

NOTE:

1. PROVIDE CONTROL JOINT IN CONCRETE EDGE AT 10' INTERVALS, PROVIDE EXPANSION JOINTS EVERY 30'.



I CONCRETE MOWCURB DETAIL
NOT TO SCALE — PKJ DESIGN GROUP

LANDSCAPE GENERAL NOTES

INSTALLER RESPONSIBILITIES AND LIABILITIES
1. THESE PLANS ARE FOR BASIC DESIGN LAYOUT AND INFORMATION. THE INSTALLER IS REQUIRED TO REFER TO THEIR INDIVIDUAL TRADE - SCOPE OF WORK. OWNER ASSUMES NO LIABILITIES FOR INADEQUATE ENGINEERING CALCULATIONS. MANUFACTURER PRODUCT DEFECTS, INSTALLATION OF ANY LANDSCAPING AND COMPONENTS, OR TIME EXECUTION.
2. THE INSTALLER OF ALL LANDSCAPING AND IRRIGATION SYSTEMS ARE LIABLE AND RESPONSIBLE FOR ALL JURISDICTIONAL AND CODE REQUIREMENTS, TIME EXECUTIONS, AND INSTALLED PRODUCTS AND MATERIALS.

GRADING AND DRAINAGE REQUIREMENTS
1. ALL GRADING IS TO SLOPE AWAY FROM THE STRUCTURE PER CODE.
2. FINISHED GRADE IS NOT PERMITTED BY CODE TO DRAIN ON NEIGHBORING PROPERTIES
3. 6" MIN. FOUNDATION LEFT EXPOSED AT ALL CONDITIONS
4. LANDSCAPER TO MAINTAIN OR IMPROVE EXISTING FINAL GRADE AND PROPER DRAINAGE ESTABLISHED BY THE EXCAVATOR'S FINAL GRADE ACTIVITIES INCLUDING ANY MAINTENANCE, PRESERVATION, OR EXAGGERATION OF SLOPES, BERMS, AND SWALES.
5. IF ANY SWALE, BERM, OR GRADE HAS BEEN DAMAGED OR IS INCORRECT TO ENSURE CORRECT WATER FLOW THE TRADE CONTRACTOR IS RESPONSIBLE TO FIX STATED ISSUE.
6. ROOF RUN-OFF DEVICES SHOULD BE INSTALLED TO COLLECT AND DISCHARGE ALL ROOF RUNOFF A MINIMUM OF 10 FEET FROM FOUNDATION ELEMENTS OR BEYOND THE LIMITS OF BACKFILL AROUND THE FOUNDATION WALLS; WHICHEVER DISTANCE IS GREATER.
7. THE GROUND SURFACE WITHIN 10 FEET OF THE FOUNDATIONS SHOULD BE SLOPED TO DRAIN AWAY FROM THE STRUCTURE WITH A MINIMUM FALL OF 6 INCHES.

LANDSCAPING REQUIREMENTS
1. ALL LANDSCAPING IS TO BE INSTALLED PER ALL GOVERNING JURISDICTIONS I.E. INTERNATIONAL BUILDING CODE, CITY CODES.
2. NON-COMPLIANCE TO ALL GOVERNING JURISDICTION REQUIREMENTS AND REGULATION ARE THE RESPONSIBILITY OF THE LANDSCAPING INSTALLER.
3. ALL PLANTED LANDSCAPING IS TO BE INSTALLED ACCORDING TO THE NURSERY CARE AND INSTALLATION INSTRUCTIONS WHERE PURCHASED AND BASED ON INDIVIDUAL SOIL CONDITIONS AND SITE CONDITIONS.

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LICENSE STAMP

PROJECT MANAGER: KBA
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PRELIMINARY PLANS NOT FOR CONSTRUCTION

LP 501

OFFICE WAREHOUSE

AMERICAN FORK, UTAH

IRRIGATION SPECIFICATIONS

IRRIGATION SPECIFICATIONS

PART I - GENERAL

1.1 SUMMARY

Work to be done includes all labor, materials, equipment and services required to complete the Project irrigation system as indicated on the Construction Drawings, and as specified herein. Includes but is not limited to: Furnishing and installing underground and above ground sprinkler system complete with any accessories necessary for proper function and operation of the system. All plant material on the Project shall be irrigated. Removal and disposal of any existing sprinkler system components are not to be saved, which are disturbed during the construction process. Restoration of any altered or damaged existing landscape to original state and condition.

1.2 SYSTEM DESCRIPTION

A. Design of irrigation components: Locations of irrigation components on Construction Drawings may be approximate. Piping, sleeving and/or other components shown on Construction drawings may be shown schematically for graphic clarity and demonstration of component groupings and separations. All irrigation components shall be placed in landscaped areas, with the exception of pope and wire in sleeving under hardscapes. Actual routing of pipe, wire or other components may be altered due to site conditions not accounted for in the design process.

B. Construction requirements: Actual placement may vary as required to achieve a minimum of 100% coverage without overspray onto hardscape, buildings or other features.

C. Layout of Irrigation Components: During layout and staking, consult with Owner Approved Representative (hereafter referred to as OAR) to verify proper placement of irrigation components and to provide Contractor recommendations for changes, where revisions may be advisable. Small or minor adjustments to system layout are permissible to avoid existing field obstructions such as utility boxes or street light poles. Contractor shall place remote control valves in groups as practical to economize on quantity of manifold isolation valves. Quick coupler valves shall be placed with manifold groups and protected by manifold isolation valves. Quick coupler valves are shown on Construction Documents in approximate locations.

1.3 DEFINITIONS

A. Water Supply: Culinary water piping and components, furnished and installed by others to provide irrigation water to this Project, including but not limited to backflow preventor, saddles, nipples, spools, shut off valves, corporation stop valves, water meters, pressure regulation valves, and piping upstream of (or prior to) the Point of Connection.

B. Point of Connection: Location where the Contractor shall tie into the water supply. May require backflow preventor, saddle, nipples, spools, isolation valves or Stop and Waste valve for landscape irrigation needs and use.

C. Main Line Piping: Pressurized piping downstream of the Point of Connection to provide water to remote control valves and quick couplers. Normally under constant pressure.

D. Lateral Line Piping: Circuit piping downstream of remote control valves to provide water to sprinkler heads, sprinkler heads, drip systems or bubblers.

1.4 REFERENCES

A. The following standards will apply to the work of this Section:

a. ASTM-American Society for Testing and Materials

b. IA - The Irrigation Association: Main BMP Document, Landscape Irrigation Scheduling and Water Management Document.

1.5 SUBMITTALS

A. At least thirty (30) days prior to ordering of any materials, the Contractor shall provide manufacturer catalog cut sheet and current printed specifications for each element or component of the irrigation system. Submittals shall be in three ring binders or other similar bound form. Provide five copies of submittals to OAR for distribution. Place cover or index sheet indicating order in submittal document. No material shall be ordered, delivered or any work preceded in the field until the required submittals have need reviewed in its entirety and stamped approved. Delivered material shall match the approved samples.

B. Operation and Maintenance Manual:

a. At least thirty (30) days prior to final inspection, the Contractor shall provide Operation and Maintenance manual to OAR, containing:

i. Manufacturer catalog cut sheet and current printed specifications for each element or component of the irrigation system.

ii. Parts list for each operating element of the system

iii. Manufacturer printed literature on operation and maintenance of operating elements of the system.

iv. Section listing instructions for overall system operation and maintenance. Include directions for Spring Start-up and Winterization.

b. Project Record Copy

i. Maintain at project site one copy of all project documents clearly marked "Project Record Copy". Mark any deviation in material installation on Construction drawings. Maintain and update drawing at least weekly. Project Record Copy to be available to OAR on demand.

ii. Completed Project As-Built Drawings

1. Prior to final inspection, prepare and submit to OAR accurate as-built drawings
2. Show detail and dimension changes made during installation. Show significant details and dimensions that were not shown in original Contract Documents.
3. Field dimension locations of sleeving, points of connection, main line piping, wiring runs not contained in main line pipe trenches, valves and valve boxes, quick coupler valves.
4. Dimensions are to be taken from permanent constructed surfaces, features, or finished edges located at or above finished grade.
5. Controller Map: upon completion of system, place in each controller a color coded copy of the area that controller services: indicating zone number, type of plant material and location on project that zone services. Laminate map with heat shrink clear plastic.

1.6 QUALITY ASSURANCE

A. Acceptance: Do not install work of this section prior to acceptance by OAR of area to receive such work.

B. Regulatory Requirements: All work and materials shall be according to any and all rules, regulations or codes, whether they are State or Local laws and ordinances. Contract documents, drawings or specifications may not be construed or interpreted to permit work or materials not conforming to the above codes.

C. Adequate Water Supply: Water supply to this Project exists, installed by others. Connections to these supply lines shall be by this Contractor. Verify that proper connection is available to supply line and is of adequate size. Verify that secondary connection components may be installed if necessary. Perform static pressure test prior to commencement of work. Notify OAR in writing of problems encountered prior to proceeding.

D. Workmanship and Materials:

a. It is the intent of this specification that all material herein specified and shown on the construction documents shall be of the highest quality available and meeting the requirements specified.

b. All work shall be performed in accordance with the best standards of practice relating to the trade.

E. Contractor Qualifications:

a. Contractor shall provide document or resume including at least the following items:

i. That Contractor has been installing sprinklers on commercial projects for five previous consecutive years.

ii. Contractor is licensed to perform Landscape and Irrigation construction in the State of this Project.

iii. Contractor is bondable for the work to be performed.

iv. References of five projects of similar size and scope completed within the last five years. Three of the projects listed shall be local.

v. Listing of suppliers where materials will be obtained for use on this Project.

vi. Project site Foreman or Supervisor has at least five consecutive years of commercial irrigation installation experience. This person shall be a current Certified Irrigation Contractor in good standing as set forth by the Irrigation Association. This person shall be on Project site at least 75% of each working day.

vii. Evidence that Contractor currently employs workers in sufficient quantities to complete Project within time limits that are established by the Contract.

viii. All General laborers or workers on the Project shall be previously trained and familiar with sprinkler installation and have a minimum of one-year experience. Those workers performing tasks related to PVC pipe shall have certificates designated below.

1.7 DELIVERY-STORAGE-HANDLING

A. During delivery, installation and storage of materials for Project, all materials shall be protected from contamination, damage, vandalism, and prolonged exposure to sunlight. All material stored at Project site shall be neatly organized in a compact arrangement and storage shall not disrupt Project Owner or other trades on Project site. All material to be installed shall be handled by Contractor with care to avoid breakage or damage. Damaged materials attributed to Contractor shall be replaced with new at Contractor's expense.

1.8 SEQUENCING

A. Perform site survey, research utility records, contact utility location services. The Contractor shall familiarize himself with all hazards and utilities prior to work commencement. Install sleeving prior to installation of concrete, paving or other permanent site elements. Irrigation system Point of Connection components, backflow prevention and pressure regulation devices shall be installed and operational prior to all downstream components. All main lines shall be thoroughly flushed of all debris prior to installation of any sprinkler heads.

1.9 WARRANTY

A. Contractor shall provide one year Warranty. Warranty shall cover all materials, workmanship and labor. Warranty shall include filling and or repairing depressions or replacing turf or other plantings due to settlement of irrigation trenches or irrigation system elements. Valve boxes, sprinklers or other components settles from original finish grade shall be restored to proper grade. Irrigation system shall have been adjusted to provide proper, adequate coverage of irrigated areas.

1.10 OWNER'S INSTRUCTION

A. After system is installed, inspected, and approved, instruct Owner's Representatives in complete operation and maintenance procedures. Coordinate instruction with references to previously submitted Operation and Maintenance Manual.

1.11 MAINTENANCE

A. Furnish the following items to Owner's Representative:

a. Two quick coupler keys with hose swivels.

b. One of each type or size of quick coupler valve and remote control valve. Five percent of total quantities used of each sprinkler and sprinkler nozzle.

B. Provide the following services:

a. Winterize entire irrigation system installed under this contract. Winterize by 'blow-out' method using compressed air. Compressor shall be capable of minimum of 175 CFM. This operation shall occur at the end of first growing season after need for plant irrigation but prior to freezing. Compressor shall be capable of evacuation system of all water pressure regulation device. Compressor shall be regulated to not more than 60 PSI. Start up system the following spring after danger of freezing has passed. Contractor shall train Owner's Representative in proper start-up and winterization procedure.

PART 2 - PRODUCTS

2.1 GENERAL NOTES

A. Contractor shall provide materials to be used on this Project. Contractor shall not remove any material purchased for this Project from the Project Site, nor mix Project materials with other Contractor owned materials. Owner retains right to purchase and provide project material.

2.2 POINT OF CONNECTION

A. The Contractor shall connect onto existing irrigation or water main line as needed for Point(s) of Connection. Contractor shall install new main line as indicate.

2.3 CONNECTION ASSEMBLY

A. Culinary water shall be used on this Project. Install backflow preventor and RPZ as needed.

2.4 CONTROL SYSTEM

A. Power supply to the irrigation controller shall be provided for by this Contract.

B. Controller shall be as specified in the drawings. Controller shall be surge protected.

a. Installation of wall-mount controllers: Irrigation contractor shall be responsible for this task. Power configuration for wall-mount controllers shall be 120 VAC unless otherwise noted.

b. Locate Controller(s) in general location shown on Construction drawings. Coordinate power supply and breaker allocation with electrical contractor. Contractor shall be responsible for all power connections to Controllers, whether they are wall mount or pedestal mount. Contractor shall coordinate with electrical or other Project trades as needed to facilitate installation of power to controllers.

C. Wires connecting the remote control valves to the irrigation controller are single conductors, type PE. Wire construction shall incorporate a solid copper conductor and polyethylene (PE) insulation with a minimum thickness of 0.045 inches. The wires shall be UL listed for direct burial in irrigation systems and be rated at a minimum of 30 VAC. Paige Electric Co., LP specification number P7079D.

a. A minimum of 24" of additional wire shall be left at each valve, each splice box and at each controller.

b. Common wire shall be white in color, 12 gauge. Control wire shall be red in color, 14 gauge. Spare wire shall be looped within each valve box of the grouping it is to service.

D. RCV wire splicing connectors shall be 3M brand DBY or DBR. Wire splicing between controller and valves shall be avoided if at all possible. Any wire splices shall be contained within a valve box. Splices within a valve box that contains no control valves shall be stamped 'WIRE SPLICE' or 'WS' on box lid.

2.5 SLEEVING

A. Contractor shall be responsible to protect existing underground utilities and components. Sleeving minimum size shall be 2". Sleeving 2" through 4" in size shall be S/40 PVC solvent weld. Sleeving 6" and larger shall be CL 200 PVC gasketed. Sleeve diameter shall be at least two times the diameter of the pipe within the sleeve. Sleeves shall be extended 6" minimum beyond walk or edge of pavement. Wire or cable shall not be installed in the same sleeve as piping, but shall be installed in separate sleeves. Sleeve ends on sleeve sizes 4" and larger shall be capped with integral corresponding sized PVC slip cap, pressure fit, until used, to prevent contamination. Sleeves shall be installed at appropriate depths for main line pipe or lateral pipe.

2.6 MAIN LINE PIPE

A. All main line pipe 4" and larger shall be Class 200 gasketed bell end. All main line pipe 3" in size and smaller shall be Schedule 40 PVC solvent weld bell end.

a. Maximum flows allowed through main line pipe shall be:

3/4"	8 GPM
1"	12 GPM
1-1/2"	30 GPM
2"	53 GPM
2-1/2"	75 GPM
3"	110 GPM
4"	180 GPM

b. Main line pipe shall be buried with 24" cover

2.7 MAIN LINE FITTINGS

A. All main line fittings 3" and larger shall be gasketed ductile iron material. All ductile iron fittings having change of direction shall have proper concrete thrust block installed. All main line fittings smaller than 3" in size shall be Schedule 80 PVC.

2.8 ISOLATION VALVES

A. Isolation valves 3" and larger shall be Waterous brand model 2500 cast iron gate valve, resilient wedge, push on type, with 2" square operating nut. Place sleeve of 6" or larger pipe over top of valve vertically and then extend to grade. Place 10" round valve box over sleeve at grade.

B. Isolation valves 2-1/2" and smaller shall be Apollo brand 70 series brass ball valves, contained in a Carson Standard size valve box. Valves shall be installed with S/80 PVC TOE Nipples on both sides of the valve. Valve shall be placed so that the handle is vertical toward the top of the valve box in the 'off' position.

2.9 MANIFOLDS

A. Action Manifold fittings shall be used to create unions on both sides of each control valve, allowing the valve to be removed from the box without cutting piping. Valves shall be located in boxes with ample space surrounding them to allow access for maintenance and repair. Where practical, group remote control valves in close proximity, and protect each grouping with a manifold isolation valve as shown in details. Manifold Main Line (or Sub-Main Line) and all manifold components and isolation valves shall be at least as large as the largest diameter lateral served by the respective manifold.

2.10 REMOTE CONTROL VALVES

A. Remote control valves shall be as specified on the drawings. Remote control valves shall be located separately and individually in separate control boxes.

2.11 MANUAL CONTROL VALVES

A. Quick coupler valve shall be attached to the manifold sub-main line using a Lasco G175212 swing joint assembly with snap-lock outlet and brass stabilizer elbow. Quick coupler valve shall be placed within a Carson 10" round valve box. Top of quick coupler valve cover shall allow for complete installation of valve box lid, but also allow for insertion and operation of key. Base of quick coupler valve and top of quick coupler swing joint shall be encased in ¾" gravel. Contractor shall not place quick coupler valves further than 200 feet apart, to allow for spot watering or supplemental irrigation of new plant material. Quick coupler valve at POC shall not be eliminated or relocated.

2.12 LATERAL LINE PIPE

A. All lateral piping shall be Schedule 40 PVC, solvent weld, and bell end. Lateral pipe shall be buried with 12-18" of cover typically. Lateral pipe shall be ¾", 1", 1 ¼", 1 ½" or 2" in size as indicated on Construction Drawings.

2.13 LATERAL LINE FITTINGS

A. All lateral line fittings shall be S/40 PVC

2.14 Spray Sprinklers

A. Spray head sprinklers shall be as specified on the drawings. Nozzles shall be as specified on the drawings.

2.15 VALVE BOXES

A. Carson valve boxes shall be used on this project. Sizes are as directed in these Specifications, detail sheets or plan sheets. Valve boxes shall be centered over the control valve or element they cover. Valve box shall be sized large enough to allow ample room for services access, removal or replacement of valve or element. Valve box shall be set to flush to finish grade of topsoil or barked areas. Contractor shall provide extensions or stack additional valve boxes as necessary to bring valve box pit to proper grade.

2.16 IMPORT BACKFILL

A. All main line pipe, lateral line pipe and other irrigation elements shall be bedded and backfilled with clean soil, free of rocks 1" and larger. Contractor shall furnish and install additional backfill material as necessary due to rocky conditions. Trenches and other elements shall be compacted and/or water settled to eliminate settling. Debris from trenching operations un-usable for fill shall be removed from project and disposed of properly by Contractor.

2.17 OTHER PRODUCTS

A. Substitution of equivalent products is subject to the OAR's approval and must be designated as accepted in writing.

a. The Contractor shall provide materials to make the system complete and operational.

PART 3 - EXECUTION

3.1 PREPARATION

A. Contractor shall repair or replace work damaged by irrigation system installation. If damaged work is new, replacement or the original installer of that work shall perform repairs. The existing landscape of this Project shall remain in place. Contractor shall protect and work around existing plant material. Coordination of trench and valve locations shall be laid out the OAR prior to any excavation occurring. Plant material deemed damaged by the OAR shall be replaced with new plant material at Contractor's expense. Contractor shall not cut existing tree roots larger than 2" to install this Project. Route pipe, wire and irrigation elements around tree canopy drip line to minimize damage to tree roots. Contractor shall have no part of existing system used by other portions of site landscape without water for without water for more than 24 hours at a time.

3.2 TRENCHING AND BACKFILING

A. Pulling of pipe shall not be permitted on this project. Over excavate trenches both in width and depth. Ensure base of trench is rock or debris free to protect pipe and wire. Grade trench base to ensure flat, even support of piping. Backfill with clean soil or import material. Contractor shall backfill no less than 2" around entire pipe with clean, rock free fill. Main line piping and fittings shall not be backfilled until OAR has inspected and pipe has passed pressure testing. Perform balance of backfill operation to eliminate any settling.

3.3 SLEEVING

A. Sleeve all piping and wiring that pass under paving or hardscape features. Wiring shall be placed in separate sleeving from piping. Sleeves shall be positioned relative to structures or obstructions to allow for pipe or wire within to be removed if necessary.

3.4 GRADES AND DRAINAGE

A. Place irrigation pipe and other elements at uniform grades. Winterization shall be by evacuation with compressed air. Automatic drains shall not be installed on this Project. Manual drains shall only be installed at POC where designated on Construction Drawings.

3.5 PVC PIPE

A. Install pipe to allow for expansion and contraction as recommended by pipe manufacturer.

B. Install main line pipes with 18" of cover, lateral line pipes with 12" of cover.

C. Drawings show diagrammatic or conceptual location of piping - Contractor shall install piping to minimize change of direction, avoid placement under large trees or large shrubs, avoid placement under hardscape features.

D. Plastic pipe shall be cut squarely. Burrs shall be removed. Spigot ends of pipes 3" and larger shall be beveled.

E. Pipe shall not be glued unless ambient temperature is at least 50 degress F. Pipe shall not be glued in rainy conditions unless properly tented. All solvent weld joints shall be assembled using IPS 711 glue and P70 primer according to manufacturer's specification, no exceptions. All workers performing glue operations shall provide evidence of certification. Glued main line pipe shall cure a minimum of 24 hours prior to being energized. Lateral lines shall cure a minimum of 2 hours prior to being energized and shall not remain under constant pressure unless cured for 24 hours.

F. Appropriate thrust blocking shall be performed on fittings 3" and larger. All threaded joints shall be wrapped with Teflon tape or paste unless directed by product manufacturer or sealing by o-ring.

3.6 CONTROLLERS

A. All grounding for pedestal controllers shall be as directed by controller manufacturer and ASIC guidelines, not to exceed a resistance reading of 5 OHMs.

B. Locate controllers in protected, inconspicuous places, when possible. Coordinate location of pedestal controllers with Landscape Architect to minimize visibility.

C. Coordinate location of wall mount controllers with building or electrical Contractor to facilitate electrical service and future maintenance needs. Wall mount shall be securely fastened to surface. If exterior mounted, wall mount controllers shall have electrical service wire and field control wire in separate, appropriate sized weatherproof electrical conduit, PVC pipe shall not be used.

D. Wire under hardscape surfaces shall be placed continuously in conduit. Contractor shall be responsible to coordinate sleeving needs for conduit or sweeps elbows from exterior to interior of building.

E. Pedestal controllers shall be placed upon VIT-Strong Box Quick Pad as per manufacturer's recommendations. Controllers shall be oriented such that Owner's Representative maintenance personnel may access easily and perform field system tests efficiently.

F. Place Standard valve box at base of controller or nearby to allow for three to five feet of slack field control wire to be placed at each controller. This Contractor shall provide conduit access if needed for Electrical Contractor. Electrical supply and installation, as well as hook-up to controller shall be by this Contractor.

3.7 VALVES

A. Isolation valves, remote control valves, and quick coupler valves shall be installed according to manufacturer recommendation and Contract Specifications and Details.

B. Valve boxes shall be set over valves so that all parts of the valve can be reached for service.

C. Valve box and lid shall be set to be flush with finished grade. Only o ne remote control valve may be installed in a Carson 1419124 box. Place a minimum of 4" of ¾" washed gravel beneath valve box for drainage. Bottom of remote control valve shall be a minimum of 2" above gravel.

3.8 SPRINKLER HEADS

A. No sprinkler shall be located closer than 6" to walls, fences, or buildings.

B. Heads adjacent to walks, curbs. Or paths shall be located at grade and 2" away from hardscape.

C. Control valves shall be opened and fully flush lateral line pipe and swing joints prior to installation of sprinklers.

D. Spray heads shall be installed and flushed again prior to installation of nozzles.

E. Contractor shall be responsible for adjustment if necessary due to grade changes during landscape construction.

3.9 FIELD QUALITY CONTROL

A. Main line pipes shall not be backfilled or accepted until the system has been tested for 2 hours at 100 psi.

B. Main line pressure test shall include all pipe and components from the point of connection to the upstream side of remote control valves. Test shall include all manifold components under constant pressure. Piping may be tested in sections that can be isolated.

C. Contractor shall provide pressurized water pump to increase or boost pressure where existing static pressure is less than 100 psi.

D. Schedule testing with OAR 48 hours in advance for approval.

E. Leaks or defects shall promptly be repaired or rectified at the Contractors expense and retested until able to pass testing.

F. Grounding resistance at pedestal controller shall also be tested and shall not exceed 5 OHMs.

3.10 ADJUSTMENT

A. Sprinkler heads shall be adjusted to proper height when installed. Changes in grade or adjustment of head height after installation shall be considered a part of the original contract and at Contractor's expense.

B. Adjust all sprinkler heads for arc, radius, proper trim and distribution to cover all landscaped areas that are to be irrigated.

C. Adjust sprinklers so they do not water buildings, structures, or other hardscape features.

D. Adjust run times of station to meet needs of plant material the station services.

3.11 CLEANING

A. Contractor shall be responsible for cleanliness of jobsite. Work areas shall be swept cleanly and picker up daily.

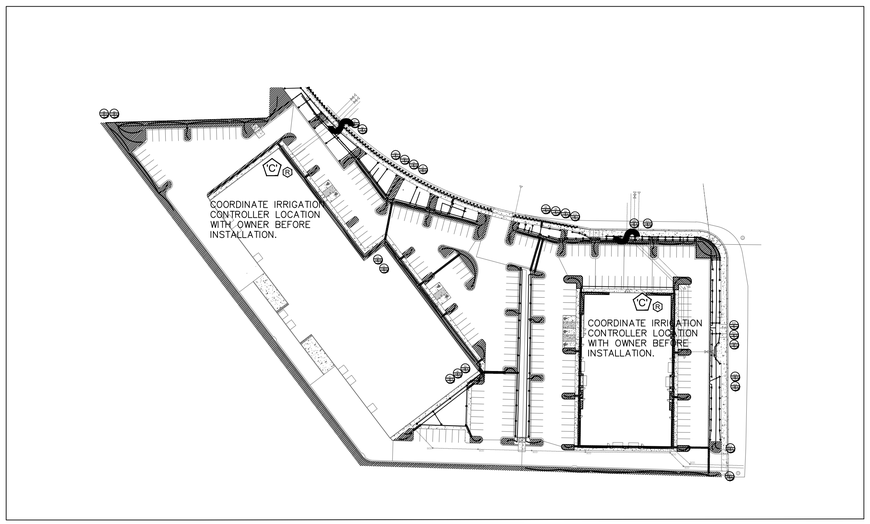
B. Open trenches or hazards shall be protected with yellow caution tape.

C. Contractor is responsible for removal and disposal offsite of trash and debris generated as a result of this Project.

D. OAR shall perform periodic as well as a final cleanliness inspection.

E. Contractor shall leave Project in at least a 'broom clean' condition.

END OF SECTION



1.5" MAINLINE ROUTING ,CONTROLLER AND P.O.C. LOCATION OVERVIEW

ISSUE DATE	PROJECT NUMBER
7/10/2020	UT20001

NO.	REVISION	DATE
1		
2		
3		
4		
5		
6		
7		

PLAN INFORMATION

811 BLUE STAKES OF UTAH
UTILITY NOTIFICATION CENTER, INC
1-800-662-4111
www.bluestakes.org

0' 50' 100' 200' 400'
GRAPHIC SCALE: 1" = 100'

PROJECT INFORMATION

OFFICE WAREHOUSE
450 EAST AUTO MALL DRIVE
AMERICAN FORK, UTAH

DEVELOPER / PROPERTY OWNER / CLIENT

Developer / Property Owner:
JONATHON JENSEN
DAVIES DESIGN BUILD
801-592-6044
JON@DAVIESDESIGNBUILD.COM

Building Architect / Engineer:
BENCHMARK ENGINEERING & LAND SURVEYING
9130 SOUTH STATE STREET SUITE #100
SANDY, UTAH 84070 (801) 542-7192
WWW.BENCHMARKCIVIL.COM

LANDSCAPE ARCHITECT / PLANNER

PKJ DESIGN GROUP
PKJ DESIGN GROUP L.L.C.
3450 N. TRIUMPH BLVD. SUITE 102
LEHI, UTAH 84043 (801) 960-2698
www.pkjdesigngroup.com

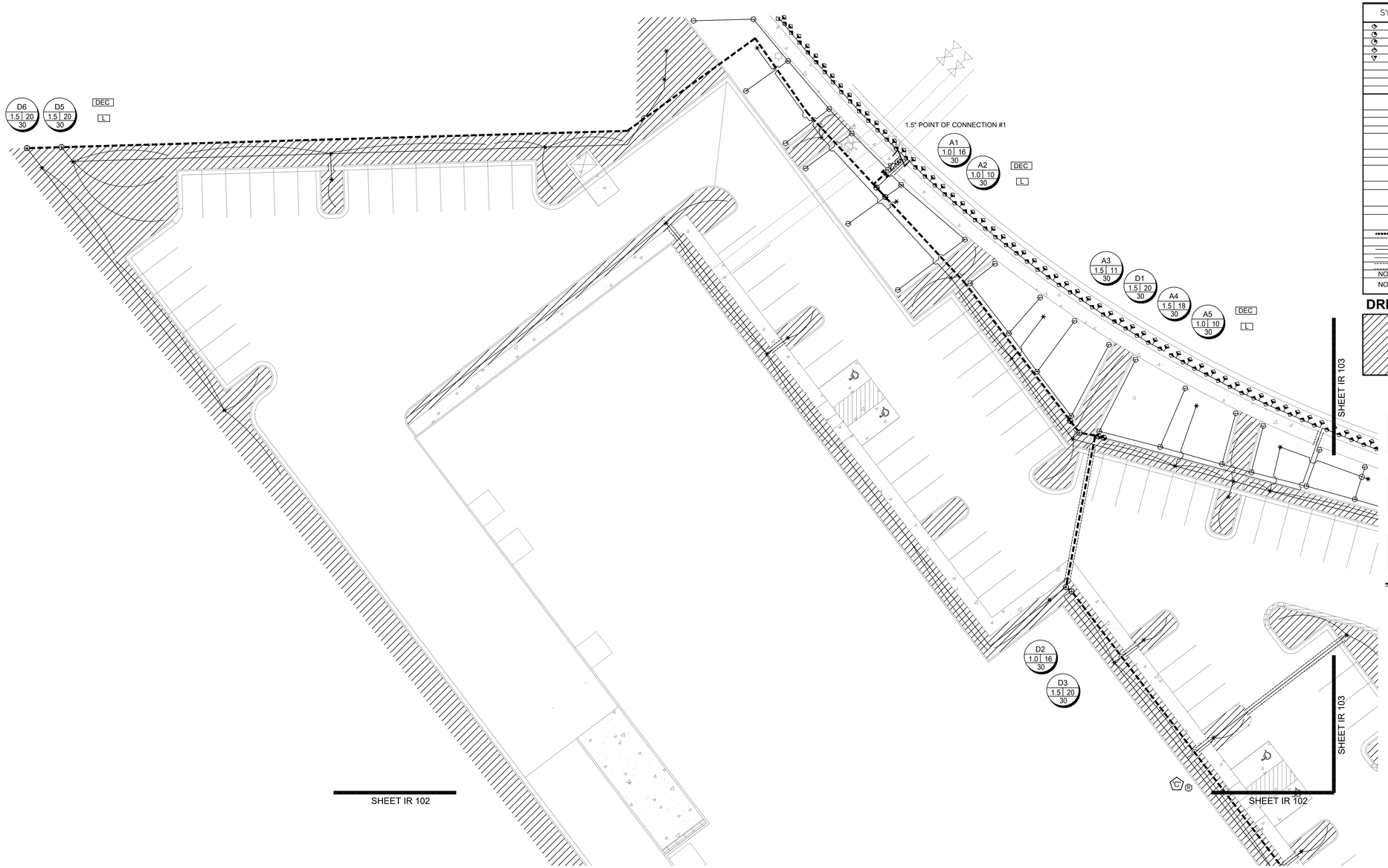
LICENSE STAMP

LICENSED LANDSCAPE ARCHITECT
JEREMY AINSWORTH
812812 - 5301
07/10/2020
STATE OF UTAH

PM:	KBA
DRAWN:	KBA
CHECKED:	JTA
PLOT DATE:	7/10/2020

PRELIMINARY PLANS NOT FOR CONSTRUCTION

IR 100



IRRIGATION LEGEND

SYMBOL	MANUFACTURER–MODEL NUMBER	PAT.	RD.	PSI	GPM Q	T	H	TT	TQ	F
	RAINBIRD RD04-S-PRS POP UP SPRAY 5 SERIES	Q,T,H,F	5'	30	.10	.15	.20	na	na	.40
	RAINBIRD RD04-S-PRS POP UP SPRAY 8 U-SERIES	Q,T,H,F	8'	30	.26	.35	.52	na	na	1.05
	RAINBIRD RD04-S-PRS POP UP SPRAY 10 U-SERIES	Q,T,H,F	10'	30	.39	.53	.79	na	na	1.58
	RAINBIRD RD04-S-PRS POP UP SPRAY 12 U-SERIES	Q,T,H,TT,TQ,F	12'	30	.65	.87	1.30	1.74	1.95	2.60
	RAINBIRD RD04-S-PRS POP UP SPRAY 15 U-SERIES	Q,T,H,TT	15'	30	.92	1.23	1.85	2.48	2.78	3.70
	RAINBIRD RD04-S-PRS POP UP SPRAY 15 SST	SST	15'	30	1.21					
	RAINBIRD RD04-S-PRS POP UP SPRAY 15 EST	EST	15'	30	.61					
	RAINBIRD 5000 SERIES MPR NOZZLES	Q,T,H,F	varies	30	varies	varies	varies	na	na	varies
	RAINBIRD 8005 SERIES #8, #14, #26 NOZZLES	Q,T,H,F	65'	30	6.6	12.6	24.3	na	na	varies
C	CONTROLLER: RAINBIRD ESP-LXD CONTROLLER WITH LIMR REMOTE KIT, PLACE IN LXMM PEDISTAL, CONTRACTOR TO ADJUST LOCATION WITH OWNER PRIOR TO CONSTRUCTION.									
M	MASTER VALVE									
F	FLOW SENSOR									
R	RAINBIRD WR2-RC WIRELESS RAIN SHUT OFF DEVICE									
	IRRIGATION POINT OF CONNECTION AND RPZ BACKFLOW PREVENTION - CONNECT TO WATER SERVICE LINE AND METER. (SEE CIVIL PLANS) CONTRACTOR LOCATE AND VERIFY EXACT LOCATION ON SITE.									
	QUICK COUPLER, RAINBIRD 44LRC INSTALL PER MANUFACTURER'S SPEC. 10" RND. VALVE BOX. SEE DETAIL									
	ISOLATION BALL VALVE - LINE SIZED INSTALL PER MANUFACTURER'S SPEC.									
	REMOTE CONTROL VALVE: RAINBIRD PESB-NP-PRS-D AUTOMATIC CONTROL VALVE (SIZE AS NOTED ON PLAN) JUMBO BOX-PURPLE LID									
	DRIP CONTROL ZONE KIT: RAINBIRD XCZ-(PER PLAN)-PRBR-COM MED FLOW (SIZE AS NOTED ON PLAN)									
	DRIP CONNECTION. PROVIDE DRIP IRRIGATION TO ALL TREES, SHRUBS,AND PERENNIALS IN PLANTER AREAS. INSTALL FLUSH CAP. SEE DETAIL									
	DRIP RWS-S-B-1401 (ROOT WATERING SYSTEM) PROVIDE 2 TO EACH TREE LOCATED IN THE LAWN AREAS.									
	SUB-MAINLINE: SCHEDULE 40 PVC WITH SCHEDULE 80 FITTINGS, 1.5" DIAMETER 24" MIN. COVER									
	LATERAL LINE: SCHEDULE 40 PVC WITH SCH. 40 FITTINGS. SEE PIPE SIZING CHART									
	DRIP LINE: RAINBIRD XFSP-09-18-100 OR EQUIVALENT									
	CLASS 200 SLEEVE PER PLAN									
NOT SHOWN	WIRE CHASE. SIZE TO BE TWICE THE DIAMETER OF THE WIRE BUNDLE WITHIN. 1.1/4" DIAMETER MINIMUM									
NOT SHOWN	14 GAUGE SOLID COPPER SINGLE STRAND CONTROL WIRE. INSTALL PER MANUFACTURER'S SPEC. PROVIDE 2 WIRE LOOP SYSTEM.									

DRIP ZONE

TYPE	PART NUMBER	EMITTER FLOW	EMITTER SPACING	ROW SPACING	ROW SPACING
XFS DRIPLINE	XFSP-09-18	.9 GPH	18"	18"	18-21 IN.

TOTAL DRIP ZONE FLOW	20 GPM	TIME TO APPLY 1/4" OF WATER	23
MAX. LATERAL LENGTH OF TUBING	350 FT	REQUIRED NUMBER OF STAKES	500
TOTAL LENGTH OF ZONE DRIPLINE	2,000 FT (varies per plan)	NUMBER OF FLUSH POINTS	2
APPLICATION RATE	.64 IN. / HR	SUGGESTED HEADER & FOOTER PIPE SIZE	CLASS 200 1.25"

*NUMBERS MAY CHANGE DUE TO SIZE OF DRIP ZONE PER PLAN

90 Day Establishment Period Irrigation Schedule (April, May, June)

	Type	Sun	Mon	Tues	Wed	Thurs	Fri	Sat	Operating Pressure
Turf	Turf	15 min	15 min	15 min	15 min	15 min	15 min	15 min	30 psi
Shrubs	Shrubs	25 min	0	25 min	0	25 min	0	25 min	40 psi

Note: Begin irrigation 4:00 am, only 1 cycle per day.

Regular Irrigation Schedule (see Seasonal Differential Chart)

	Type	Sun	Mon	Tues	Wed	Thurs	Fri	Sat	Operating Pressure
Turf	Turf	15 min	15 min		15 min		15 min		30 psi
Shrubs	Shrubs	45 min		45 min		45 min		45 min	40 psi

Note: Begin irrigation 4:00 am, only 1 cycle per day.

Seasonal Differential

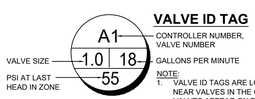
	April	May	June	July	August	Sept.	October
Turf	10 min	10 min	15 min	15 min	15 min	10 min	10 min
Shrubs	30 min	30 min	45 min	45 min	45 min	30 min	30 min

IRRIGATION NOTES

1. ALL PIPE TO BE SCHEDULE 40 PVC PIPE OR BETTER. NO POLY PIPE SHALL BE INCLUDED. FITTINGS MUST BE SCHEDULE 40 OR BETTER ON LATERAL LINES AND SCHEDULE 80 OR BETTER ON MAIN LINE. SIZE PER PLAN.
2. MAIN LINES SHALL BE 24" DEEP MIN. AND LATERAL LINES 12" DEEP MIN. NO ROCK GREATER THAN 1/2" DIAMETER SHALL BE ALLOWED IN TRENCHES. TRENCHING BACKFILL MATERIAL SHALL BE COMPACTED TO PROPER FINISHED GRADE.
3. CONTRACTOR SHALL HAVE ALL UTILITIES BLUE STAKED PRIOR TO DIGGING. ANY DAMAGE TO THE UTILITIES SHALL BE REPAIRED AT THE EXPENSE OF THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
4. PLACE ALL IRRIGATION IN LANDSCAPE AREAS AND ON THE PROPERTY OF THE OWNER.
5. MODIFY LOCATION OF IRRIGATION COMPONENTS TO AVOID PLACING TREES, SHRUBS AND OTHER SITE ELEMENTS DIRECTLY OVER PIPE, PER PLANS. DO NOT LOCATE VALVE BOXES IN LAWN AREAS UNLESS DIRECTED TO BY LANDSCAPE ARCHITECT.
6. CONTRACTOR SHALL INSTALL A QUICK COUPLER AT POINT OF CONNECTION IN ORDER TO BLOW OUT THE SYSTEM WITH AN AIR COMPRESSOR EACH FALL.
7. CONTRACTOR SHALL USE ONLY COMMERCIAL GRADE IRRIGATION PRODUCTS AND IS RESPONSIBLE FOR ENSURING ACCURATE COUNTS AND QUANTITIES OF ALL IRRIGATION MATERIALS FOR BIDDING AND INSTALLATION PURPOSES.
8. INSTALL DRIP IRRIGATION PER DETAILS. CONTRACTOR SHALL MAKE ADJUSTMENTS AS NECESSARY.
9. CONTRACTOR SHALL PROVIDE AND INSTALL SLEEVES FOR ALL PIPES AND WIRES UNDER PAVEMENT AND SIDEWALKS. SLEEVES SHALL BE 2 SIZES LARGER THAN PIPE INSIDE. ALL WIRE SHALL BE IN SEPARATE SLEEVES (NOT SHOWN). ALL CONTROL WIRE SHALL BE INSTALLED IN CLASS 200 PIPE. PLACE JUNCTION BOXES WHERE NECESSARY TO MINIMIZE LONG RUNS OR AT DIRECTIONAL CHANGES. COORDINATE WITH ALL TRADES.
10. WATER LINES AND ELECTRICAL LINES MUST NOT SHARE CONDUITS. ALL WIRE CONNECTIONS MUST BE CONTAINED IN VALVE BOX WITH 3' OF EXTRA WIRE. WIRE TO BE CONNECTED TO MAIN LINE PIPE WHERE POSSIBLE WITH TAPE AT 25' INTERVALS. SLACK IN CONTROL WIRES REQUIRED AT EVERY CHANGE OF DIRECTION. WIRES MUST HAVE SEPARATE COLORS FOR COMMON, CONTROL AND SPARE. MINIMUM 1 SPARE WIRE FOR EVERY 5 VALVES. ALL CONTROL WIRES TO BE INSULATED 14 GAUGE COPPER. ALL SPARE WIRES MUST "HOME RUN" TO CONTROLLER AND SPARE WIRES AVAILABLE AT ALL VALVE MANIFOLDS AND CLUSTERS.
11. ALL SLEEVES INSTALLED SHALL BE DUCT TAPED TO PREVENT DIRT OR OTHER DEBRIS ENTERING PIPE. ALL SLEEVES SHALL BE IDENTIFIED BY WOOD OR PVC STAKES AND BE SPRAY PAINTED WITH MARKING PAINT. REMOVE STAKES ONCE IRRIGATION SYSTEM IS COMPLETE.
12. IRRIGATION SYSTEM MUST CONTAIN CHECK VALVES TO PREVENT LOW POINT DRAINAGE.
13. SPACE ALL SPRAY HEADS 2" AWAY FROM ANY HARDSCAPE.
14. CONTRACTOR SHALL MATCH PRECIPITATION RATES AS MUCH AS POSSIBLE FOR ALL LANDSCAPED AREAS. OVERHEAD IRRIGATION MUST HAVE A MINIMUM DU (DISTRIBUTION UNIFORMITY) OF 60%.
15. IRRIGATION CONTRACTOR SHALL PRESSURE TEST MAINLINE FOR LEAKS PRIOR TO BACKFILLING.
16. ALL WORK SHALL BE IN ACCORDANCE WITH APPLICABLE CITY AND/OR COUNTY CODES. THE CONTRACTOR SHALL APPLY AND PAY FOR ALL NECESSARY PERMITS.
17. IRRIGATION INSTALLATION TO COMPLY WITH APPLICABLE CITY SPECIFICATIONS AND DRAWINGS.
18. ACTUAL INSTALLATION OF IRRIGATION SYSTEM MAY VARY SOMEWHAT FROM PLANS. THE CONTRACTOR IS RESPONSIBLE TO MAKE ADJUSTMENTS AS NEEDED TO ENSURE PROPER COVERAGE OF ALL LANDSCAPED AREAS.
19. CONTRACTOR SHALL INSTALL IRRIGATION SYSTEM WITH HEAD TO HEAD COVERAGE IN ALL TURF AREAS. USE HE-VAN NOZZLES AS NECESSARY TO PROVIDE PROPER COVERAGE AND TO KEEP WATER OFF OF BUILDINGS AND HARDSCAPES.
20. POWER TO CONTROLLER TO BE PROVIDED BY OWNER. OWNER TO SPECIFY EXACT LOCATION OF CONTROLLER. INSTALL PER MANUFACTURERS INSTRUCTIONS. CONTRACTOR SHALL INSTALL A RAIN SENSOR WITH CONTROLLER UNLESS OTHERWISE DIRECTED BY OWNER OR LANDSCAPE ARCHITECT.
21. DESIGN AND INSTALL THE BACKFLOW PREVENTOR IN THE PROPER PLACE TO ENSURE THAT NO WATER IS CONTAMINATING THE SYSTEM.
22. LATERAL LINES SHALL BE NO SMALLER THAN 3/4". LANDSCAPE CONTRACTOR TO ENSURE THE FOLLOWING PIPE SIZES DO NOT EXCEED THE SUGGESTED GPM LISTED BELOW:

3/4"	8 GPM
1"	12 GPM
1-1/2"	30 GPM
2"	53 GPM
2-1/2"	75 GPM
3"	110 GPM
4"	180 GPM

VALVE ID TAG



NOTE:
1. VALVE ID TAGS ARE LOCATED NEAR VALVES IN THE ORDER THE VALVES APPEAR ON THE DRAWING

ISSUE DATE	PROJECT NUMBER
7/10/2020	UT20001

NO.	REVISION	DATE
1		
2		
3		
4		
5		
6		
7		

PLAN INFORMATION

811 BLUE STAKES OF UTAH
UTILITY NOTIFICATION CENTER, INC
1-800-662-4111
www.bluestakes.org

N

0' 10' 20' 40' 80'
GRAPHIC SCALE: 1" = 20'

PROJECT INFORMATION

OFFICE WAREHOUSE

450 EAST AUTO MALL DRIVE
AMERICAN FORK, UTAH

DEVELOPER / PROPERTY OWNER / CLIENT

Developer / Property Owner:
JONATHON JENSEN
DAVIES DESIGN BUILD
801-592-6044
JON@DAVIESDESIGNBUILD.COM

Building Architect / Engineer:
BENCHMARK CIVIL
BENCHMARK ENGINEERING & LAND SURVEYING
9130 SOUTH STATE STREET SUITE #100
SANDY, UTAH 84070 (801) 542-7192
WWW.BENCHMARKCIVIL.COM

LANDSCAPE ARCHITECT / PLANNER

PKJ DESIGN GROUP
PKJ DESIGN GROUP L.L.C.
3450 N. TRIUMPH BLVD. SUITE 102
LEHI, UTAH 84043 (801) 960-2698
www.pkjdesigngroup.com

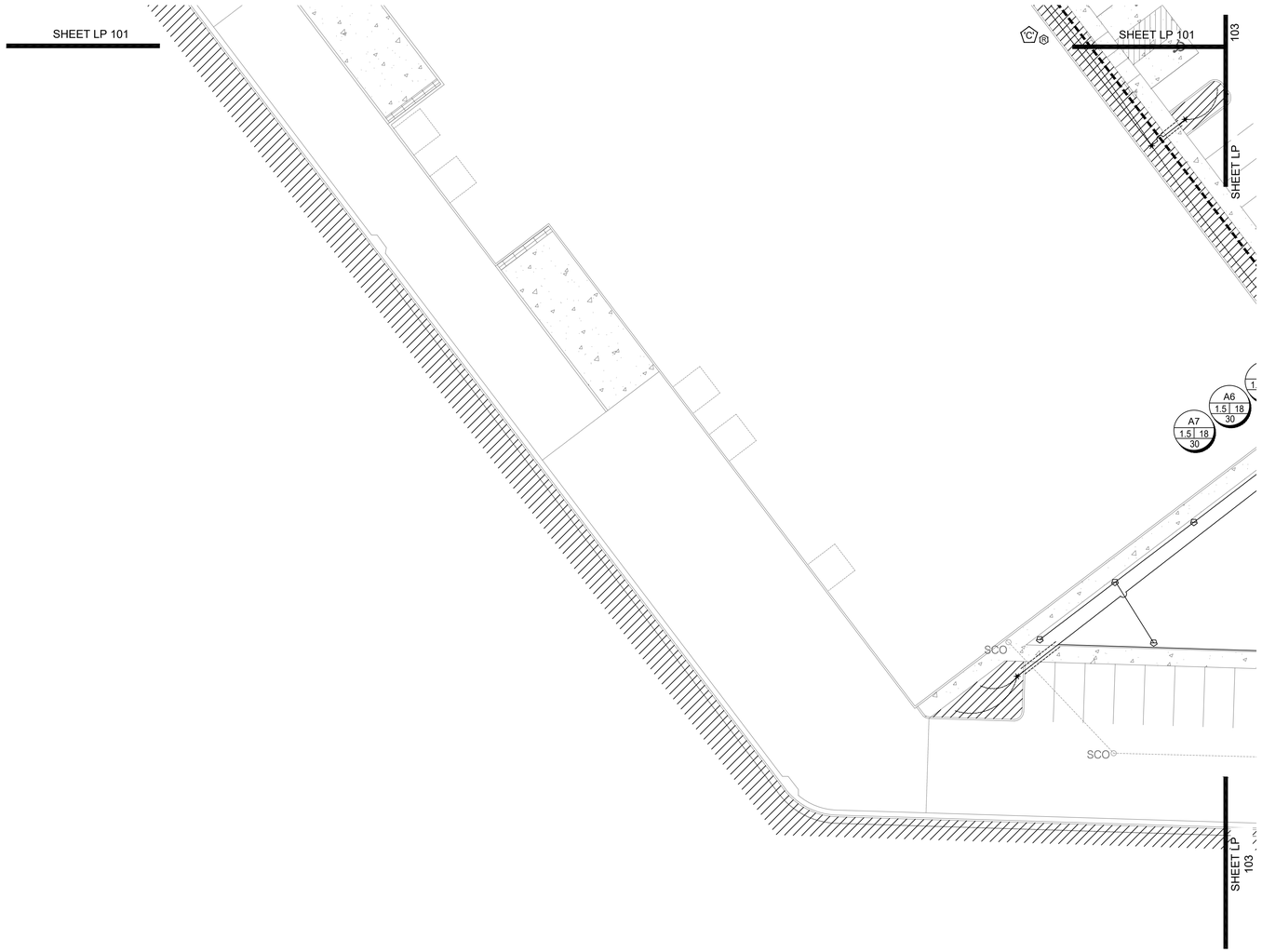
LICENSE STAMP

LICENSED LANDSCAPE ARCHITECT JEREMY AINSWORTH 8128171-5301 REGISTERED 07/10/2020 STATE OF UTAH

PM:	KBA
DRAWN:	KBA
CHECKED:	JTA
PLOT DATE:	7/10/2020

PRELIMINARY PLANS NOT FOR CONSTRUCTION

IR 101



IRRIGATION LEGEND

SYMBOL	MANUFACTURER–MODEL NUMBER	PAT.	RD.	PSI	GPM Q	T	H	TT	TQ	F
	RAINBIRD RD04-S-PRS POP UP SPRAY 5 SERIES	Q,T,H,F	5'	30	.10	.15	.20	na	na	.40
	RAINBIRD RD04-S-PRS POP UP SPRAY 8 U-SERIES	Q,T,H,F	8'	30	.26	.35	.52	na	na	1.05
	RAINBIRD RD04-S-PRS POP UP SPRAY 10 U-SERIES	Q,T,H,F	10'	30	.39	.53	.79	na	na	1.58
	RAINBIRD RD04-S-PRS POP UP SPRAY 12 U-SERIES	Q,T,H,TT,TQ,F	12'	30	.65	.87	1.30	1.74	1.95	2.60
	RAINBIRD RD04-S-PRS POP UP SPRAY 15 U-SERIES	Q,T,H,TT	15'	30	.92	1.23	1.85	2.48	2.78	3.70
	RAINBIRD RD04-S-PRS POP UP SPRAY 15 SST	SST	15'	30	1.21					
	RAINBIRD RD04-S-PRS POP UP SPRAY 15 EST	EST	15'	30	.61					
	RAINBIRD 5000 SERIES MPR NOZZLES	Q,T,H,F	varies	30	varies	varies	varies	na	na	varies
	RAINBIRD 8005 SERIES #8, #14, #26 NOZZLES	Q,T,H,F	65'	30	6.6	12.6	24.3	na	na	varies
C	CONTROLLER: RAINBIRD ESP-LXD CONTROLLER WITH LIMR REMOTE KIT, PLACE IN LXMM PEDISTAL, CONTRACTOR TO ADJUST LOCATION WITH OWNER PRIOR TO CONSTRUCTION.									
M	MASTER VALVE									
	FLOW SENSOR									
R	RAINBIRD WR2-RC WIRELESS RAIN SHUT OFF DEVICE									
	IRRIGATION POINT OF CONNECTION AND RPZ BACKFLOW PREVENTION - CONNECT TO WATER SERVICE LINE AND METER. (SEE CIVIL PLANS) CONTRACTOR LOCATE AND VERIFY EXACT LOCATION ON SITE.									
	QUICK COUPLER: RAINBIRD 44LRC INSTALL PER MANUFACTURER'S SPEC. 10" RND. VALVE BOX. SEE DETAIL									
	ISOLATION BALL VALVE - LINE SIZED INSTALL PER MANUFACTURER'S SPEC.									
	REMOTE CONTROL VALVE: RAINBIRD PESB-NP-PRS-D AUTOMATIC CONTROL VALVE (SIZE AS NOTED ON PLAN) JUMBO BOX-PURPLE LID									
	DRIP CONTROL ZONE KIT: RAINBIRD XCZ-(PER PLAN)-PRBR-COM MED FLOW (SIZE AS NOTED ON PLAN)									
	DRIP CONNECTION. PROVIDE DRIP IRRIGATION TO ALL TREES, SHRUBS,AND PERENNIALS IN PLANTER AREAS. INSTALL FLUSH CAP. SEE DETAIL									
	DRIP RWS-S-B-1401 (ROOT WATERING SYSTEM) PROVIDE 2 TO EACH TREE LOCATED IN THE LAWN AREAS.									
	SUB-MAINLINE: SCHEDULE 40 PVC WITH SCHEDULE 80 FITTINGS, 1.5" DIAMETER 24" MIN. COVER									
	LATERAL LINE: SCHEDULE 40 PVC WITH SCH. 40 FITTINGS. SEE PIPE SIZING CHART									
	DRIP LINE: RAINBIRD XFSP-09-18-100 OR EQUIVALENT									
	CLASS 200 SLEEVE PER PLAN									
NOT SHOWN	WIRE CHASE. SIZE TO BE TWICE THE DIAMETER OF THE WIRE BUNDLE WITHIN. 1.1/4" DIAMETER MINIMUM									
NOT SHOWN	14 GAUGE SOLID COPPER SINGLE STRAND CONTROL WIRE. INSTALL PER MANUFACTURER'S SPEC. PROVIDE 2 WIRE LOOP SYSTEM.									

DRIP ZONE

TYPE	PART NUMBER	EMITTER FLOW	EMITTER SPACING	ROW SPACING	ROW SPACING
XFS DRIPLINE	XFSP-09-18	.9 GPH	18"	18"	18-21 IN.

TOTAL DRIP ZONE FLOW	20 GPM	TIME TO APPLY 1/4" OF WATER	23
MAX. LATERAL LENGTH OF TUBING	350 FT	REQUIRED NUMBER OF STAKES	500
TOTAL LENGTH OF ZONE DRIPLINE	2,000 FT (varies per plan)	NUMBER OF FLUSH POINTS	2
APPLICATION RATE	64 IN. / HR	SUGGESTED HEADER & FOOTER PIPE SIZE	CLASS 200 1.25"

*NUMBERS MAY CHANGE DUE TO SIZE OF DRIP ZONE PER PLAN

90 Day Establishment Period Irrigation Schedule (April, May, June)

	Type	Sun	Mon	Tues	Wed	Thurs	Fri	Sat	Operating Pressure
Turf	Turf	15 min	15 min	15 min	15 min	15 min	15 min	15 min	30 psi
Shrubs	Shrubs	25 min	0	25 min	0	25 min	0	25 min	40 psi

Note: Begin irrigation 4:00 am, only 1 cycle per day.

Regular Irrigation Schedule (see Seasonal Differential Chart)

	Type	Sun	Mon	Tues	Wed	Thurs	Fri	Sat	Operating Pressure
Turf	Turf	15 min	15 min		15 min		15 min		30 psi
Shrubs	Shrubs	45 min		45 min		45 min		45 min	40 psi

Note: Begin irrigation 4:00 am, only 1 cycle per day.

Seasonal Differential

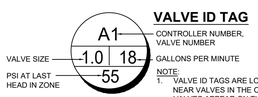
	April	May	June	July	August	Sept.	October
Turf	10 min	10 min	15 min	15 min	15 min	10 min	10 min
Shrubs	30 min	30 min	45 min	45 min	45 min	30 min	30 min

IRRIGATION NOTES

1. ALL PIPE TO BE SCHEDULE 40 PVC PIPE OR BETTER. NO POLY PIPE SHALL BE INCLUDED. FITTINGS MUST BE SCHEDULE 40 OR BETTER ON LATERAL LINES AND SCHEDULE 80 OR BETTER ON MAIN LINE. SIZE PER PLAN.
2. MAIN LINES SHALL BE 24" DEEP MIN. AND LATERAL LINES 12" DEEP MIN. NO ROCK GREATER THAN 1/2" DIAMETER SHALL BE ALLOWED IN TRENCHES. TRENCHING BACKFILL MATERIAL SHALL BE COMPACTED TO PROPER FINISHED GRADE.
3. CONTRACTOR SHALL HAVE ALL UTILITIES BLUE STAKED PRIOR TO DIGGING. ANY DAMAGE TO THE UTILITIES SHALL BE REPAIRED AT THE EXPENSE OF THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
4. PLACE ALL IRRIGATION IN LANDSCAPE AREAS AND ON THE PROPERTY OF THE OWNER.
5. MODIFY LOCATION OF IRRIGATION COMPONENTS TO AVOID PLACING TREES, SHRUBS AND OTHER SITE ELEMENTS DIRECTLY OVER PIPE, PER PLANS. DO NOT LOCATE VALVE BOXES IN LAWN AREAS UNLESS DIRECTED TO BY LANDSCAPE ARCHITECT.
6. CONTRACTOR SHALL INSTALL A QUICK COUPLER AT POINT OF CONNECTION IN ORDER TO BLOW OUT THE SYSTEM WITH AN AIR COMPRESSOR EACH FALL.
7. CONTRACTOR SHALL USE ONLY COMMERCIAL GRADE IRRIGATION PRODUCTS AND IS RESPONSIBLE FOR ENSURING ACCURATE COUNTS AND QUANTITIES OF ALL IRRIGATION MATERIALS FOR BIDDING AND INSTALLATION PURPOSES.
8. INSTALL DRIP IRRIGATION PER DETAILS. CONTRACTOR SHALL MAKE ADJUSTMENTS AS NECESSARY.
9. CONTRACTOR SHALL PROVIDE AND INSTALL SLEEVES FOR ALL PIPES AND WIRES UNDER PAVEMENT AND SIDEWALKS. SLEEVES SHALL BE 2 SIZES LARGER THAN PIPE INSIDE. ALL WIRE SHALL BE IN SEPARATE SLEEVES (NOT SHOWN). ALL CONTROL WIRE SHALL BE INSTALLED IN CLASS 200 PIPE. PLACE JUNCTION BOXES WHERE NECESSARY TO MINIMIZE LONG RUNS OR AT DIRECTIONAL CHANGES. COORDINATE WITH ALL TRADES.
10. WATER LINES AND ELECTRICAL LINES MUST NOT SHARE CONDUITS. ALL WIRE CONNECTIONS MUST BE CONTAINED IN VALVE BOX WITH 3' OF EXTRA WIRE. WIRE TO BE CONNECTED TO MAIN LINE PIPE WHERE POSSIBLE WITH TAPE AT 25' INTERVALS. SLACK IN CONTROL WIRES REQUIRED AT EVERY CHANGE OF DIRECTION. WIRES MUST HAVE SEPARATE COLORS FOR COMMON, CONTROL AND SPARE. MINIMUM 1 SPARE WIRE FOR EVERY 5 VALVES. ALL CONTROL WIRES TO BE INSULATED 14 GAUGE COPPER. ALL SPARE WIRES MUST "HOME RUN" TO CONTROLLER AND SPARE WIRES AVAILABLE AT ALL VALVE MANIFOLDS AND CLUSTERS.
11. ALL SLEEVES INSTALLED SHALL BE DUCT TAPED TO PREVENT DIRT OR OTHER DEBRIS ENTERING PIPE. ALL SLEEVES SHALL BE IDENTIFIED BY WOOD OR PVC STAKES AND BE SPRAY PAINTED WITH MARKING PAINT. REMOVE STAKES ONCE IRRIGATION SYSTEM IS COMPLETE.
12. IRRIGATION SYSTEM MUST CONTAIN CHECK VALVES TO PREVENT LOW POINT DRAINAGE.
13. SPACE ALL SPRAY HEADS 2" AWAY FROM ANY HARDSCAPE.
14. CONTRACTOR SHALL MATCH PRECIPITATION RATES AS MUCH AS POSSIBLE FOR ALL LANDSCAPED AREAS. OVERHEAD IRRIGATION MUST HAVE A MINIMUM DU (DISTRIBUTION UNIFORMITY) OF 60%.
15. IRRIGATION CONTRACTOR SHALL PRESSURE TEST MAINLINE FOR LEAKS PRIOR TO BACKFILLING.
16. ALL WORK SHALL BE IN ACCORDANCE WITH APPLICABLE CITY AND/OR COUNTY CODES. THE CONTRACTOR SHALL APPLY AND PAY FOR ALL NECESSARY PERMITS.
17. IRRIGATION INSTALLATION TO COMPLY WITH APPLICABLE CITY SPECIFICATIONS AND DRAWINGS.
18. ACTUAL INSTALLATION OF IRRIGATION SYSTEM MAY VARY SOMEWHAT FROM PLANS. THE CONTRACTOR IS RESPONSIBLE TO MAKE ADJUSTMENTS AS NEEDED TO ENSURE PROPER COVERAGE OF ALL LANDSCAPED AREAS.
19. CONTRACTOR SHALL INSTALL IRRIGATION SYSTEM WITH HEAD TO HEAD COVERAGE IN ALL TURF AREAS. USE HE-VAN NOZZLES AS NECESSARY TO PROVIDE PROPER COVERAGE AND TO KEEP WATER OFF OF BUILDINGS AND HARDSCAPES.
20. POWER TO CONTROLLER TO BE PROVIDED BY OWNER. OWNER TO SPECIFY EXACT LOCATION OF CONTROLLER. INSTALL PER MANUFACTURERS INSTRUCTIONS. CONTRACTOR SHALL INSTALL A RAIN SENSOR WITH CONTROLLER UNLESS OTHERWISE DIRECTED BY OWNER OR LANDSCAPE ARCHITECT.
21. DESIGN AND INSTALL THE BACKFLOW PREVENTOR IN THE PROPER PLACE TO ENSURE THAT NO WATER IS CONTAMINATING THE SYSTEM.
22. LATERAL LINES SHALL BE NO SMALLER THAN 3/4". LANDSCAPE CONTRACTOR TO ENSURE THE FOLLOWING PIPE SIZES DO NOT EXCEED THE SUGGESTED GPM LISTED BELOW:

3/4"	8 GPM
1"	12 GPM
1-1/2"	30 GPM
2"	53 GPM
2-1/2"	75 GPM
3"	110 GPM
4"	180 GPM

VALVE ID TAG



ISSUE DATE	PROJECT NUMBER
7/10/2020	UT20001

NO.	REVISION	DATE
1		
2		
3		
4		
5		
6		
7		

PLAN INFORMATION

811 BLUE STAKES OF UTAH
UTILITY NOTIFICATION CENTER, INC
1-800-662-4111
www.bluestakes.org

N

0' 10' 20' 40' 80'
GRAPHIC SCALE: 1" = 20'

PROJECT INFORMATION

OFFICE WAREHOUSE

450 EAST AUTO MALL DRIVE
AMERICAN FORK, UTAH

DEVELOPER / PROPERTY OWNER / CLIENT

Developer / Property Owner:

JONATHON JENSEN
DAVIES DESIGN BUILD
801-592-6044
JON@DAVIESDESIGNBUILD.COM

Building Architect / Engineer:

BENCHMARK CIVIL

BENCHMARK ENGINEERING & LAND SURVEYING
9130 SOUTH STATE STREET SUITE #100
SANDY, UTAH 84070 (801) 542-7192
WWW.BENCHMARKCIVIL.COM

LANDSCAPE ARCHITECT / PLANNER

PKJ DESIGN GROUP

PKJ DESIGN GROUP L.L.C.
3450 N. TRIUMPH BLVD. SUITE 102
LEHI, UTAH 84043 (801) 960-2698
www.pkjdesigngroup.com

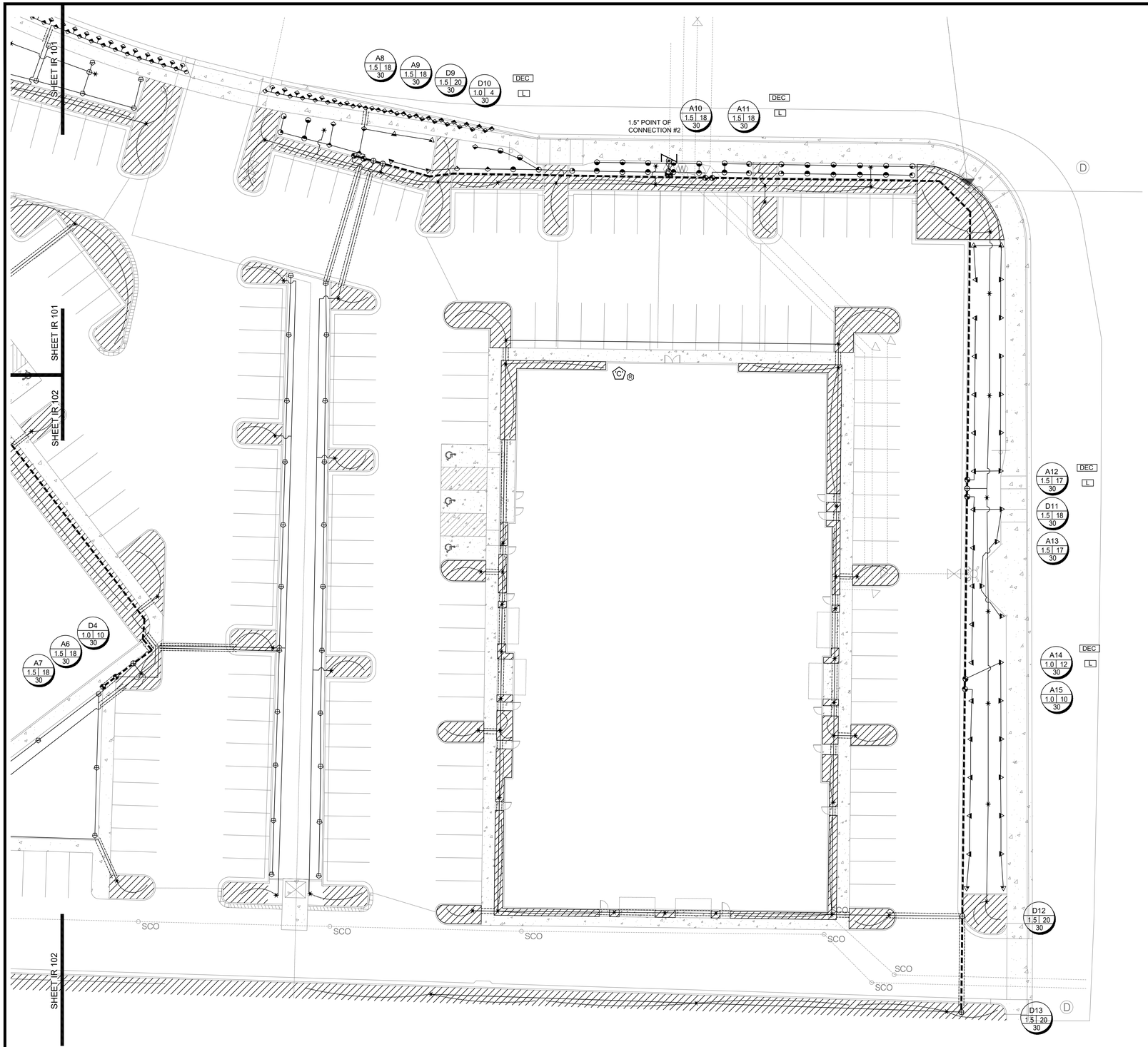
LICENSE STAMP

LICENSED LANDSCAPE ARCHITECT
KREW AINSWORTH
8128121-5301
07/16/2020
STATE OF UTAH

PM:	KBA
DRAWN:	KBA
CHECKED:	JTA
PLOT DATE:	7/10/2020

PRELIMINARY PLANS NOT FOR CONSTRUCTION

IR 102



IRRIGATION LEGEND

SYMBOL	MANUFACTURER–MODEL NUMBER	PAT.	RD.	PSI	GPM Q	T	H	TT	TQ	F
◆ ◆ ◆	RAINBIRD RD04-S-PRS POP UP SPRAY 5 SERIES	Q,T,H,F	5'	30	.10	.15	.20	na	na	.40
● ● ●	RAINBIRD RD04-S-PRS POP UP SPRAY 8 U-SERIES	Q,T,H,F	8'	30	.26	.35	.52	na	na	1.05
● ● ●	RAINBIRD RD04-S-PRS POP UP SPRAY 10 U-SERIES	Q,T,H,F	10'	30	.39	.53	.79	na	na	1.58
◆ ◆ ◆	RAINBIRD RD04-S-PRS POP UP SPRAY 12 U-SERIES	Q,T,H,TT,TQ,F	12'	30	.65	.87	1.30	1.74	1.95	2.60
▼ ▼ ▼	RAINBIRD RD04-S-PRS POP UP SPRAY 15 U-SERIES	Q,T,H,TT	15'	30	.92	1.23	1.85	2.48	2.78	3.70
	RAINBIRD RD04-S-PRS POP UP SPRAY 15 SST	SST	15'	30	1.21					
	RAINBIRD RD04-S-PRS POP UP SPRAY 15 EST	EST	15'	30	.61					
	RAINBIRD 5000 SERIES MPR NOZZLES	Q,T,H,F	varies	30	varies	varies	varies	na	na	varies
	RAINBIRD 8005 SERIES #8, #14, #26 NOZZLES	Q,T,H,F	65'	30	6.6	12.6	24.3	na	na	varies
C	CONTROLLER: RAINBIRD ESP-LXD CONTROLLER WITH LIMR REMOTE KIT, PLACE IN LXMM PEDISTAL, CONTRACTOR TO ADJUST LOCATION WITH OWNER PRIOR TO CONSTRUCTION.									
DEC	VALVE DECODER (AT ALL VALVE GROUPINGS) INSTALL PER MANUFACTURER'S SPEC.									
L	LIGHTNING ARRESTER (AT ALL VALVE GROUPINGS) INSTALL PER MANUFACTURER'S SPEC.									
	MASTER VALVE									
	FLOW SENSOR									
	RAINBIRD WR2-RC WIRELESS RAIN SHUT OFF DEVICE									
	IRRIGATION POINT OF CONNECTION AND RPZ BACKFLOW PREVENTION - CONNECT TO WATER SERVICE LINE AND METER. (SEE CIVIL PLANS) CONTRACTOR LOCATE AND VERIFY EXACT LOCATION ON SITE.									
	QUICK COUPLER: RAINBIRD 44LRC INSTALL PER MANUFACTURER'S SPEC. 10" RND. VALVE BOX. SEE DETAIL									
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	REMOTE CONTROL VALVE: RAINBIRD PESB-NP-PRS-D AUTOMATIC CONTROL VALVE (SIZE AS NOTED ON PLAN) JUMBO BOX-PURPLE LID									
	DRIP CONTROL ZONE KIT: RAINBIRD XCZ-(PER PLAN)-PRBR-COM MED FLOW (SIZE AS NOTED ON PLAN)									
	DRIP CONNECTION. PROVIDE DRIP IRRIGATION TO ALL TREES, SHRUBS AND PERENNIALS IN PLANTER AREAS									
	SUB-MAINLINE: SCHEDULE 40 PVC WITH SCHEDULE 80 FITTINGS, 1.5" DIAMETER 24" MIN. COVER									
	LATERAL LINE: SCHEDULE 40 PVC WITH SCH. 40 FITTINGS. SEE PIPE SIZING CHART									
	DRIP LINE: RAINBIRD XFSP-09-18-100 OR EQUIVALENT									
	CLASS 200 SLEEVE PER PLAN									
NOT SHOWN	WIRE CHASE, SIZE TO BE TWICE THE DIAMETER OF THE WIRE BUNDLE WITHIN. 1.1/4" DIAMETER MINIMUM									
NOT SHOWN	14 GAUGE SOLID COPPER SINGLE STRAND CONTROL WIRE. INSTALL PER MANUFACTURER'S SPEC. PROVIDE 2 WIRE LOOP SYSTEM.									

DRIP ZONE

TYPE	PART NUMBER	EMITTER FLOW	EMITTER SPACING	ROW SPACING	ROW SPACING
XFS DRIPLINE	XFSP-09-18	.9 GPH	18"	18"	18-21 IN.

TOTAL DRIP ZONE FLOW	.20 GPM	TIME TO APPLY 1/4" OF WATER	23
MAX. LATERAL LENGTH OF TUBING	350 FT	REQUIRED NUMBER OF STAKES	500
TOTAL LENGTH OF ZONE DRIPLINE	2,000 FT (varies per plan)	NUMBER OF FLUSH POINTS	2
APPLICATION RATE	.64 IN. / HR	SUGGESTED HEADER & FOOTER PIPE SIZE	CLASS 200 1.25"

*NUMBERS MAY CHANGE DUE TO SIZE OF DRIP ZONE PER PLAN

90 Day Establishment Period Irrigation Schedule (April, May, June)

	Type	Sun	Mon	Tues	Wed	Thurs	Fri	Sat	Operating Pressure
Turf	Turf	15 min	15 min	15 min	15 min	15 min	15 min	15 min	30 psi
Shrubs	Shrubs	25 min	0	25 min	0	25 min	0	25 min	40 psi

Note: Begin irrigation 4:00 am, only 1 cycle per day.

Regular Irrigation Schedule (see Seasonal Differential Chart)

	Type	Sun	Mon	Tues	Wed	Thurs	Fri	Sat	Operating Pressure
Turf	Turf	15 min	15 min		15 min		15 min		30 psi
Shrubs	Shrubs	45 min		45 min		45 min		45 min	40 psi

Note: Begin irrigation 4:00 am, only 1 cycle per day.

Seasonal Differential

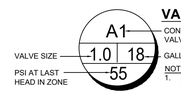
	April	May	June	July	August	Sept.	October
Turf	10 min	10 min	15 min	15 min	15 min	10 min	10 min
Shrubs	30 min	30 min	45 min	45 min	45 min	30 min	30 min

IRRIGATION NOTES

1. ALL PIPE TO BE SCHEDULE 40 PVC PIPE OR BETTER. NO POLY PIPE SHALL BE INCLUDED. FITTINGS MUST BE SCHEDULE 40 OR BETTER ON LATERAL LINES AND SCHEDULE 80 OR BETTER ON MAIN LINE. SIZE PER PLAN.
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12. IRRIGATION SYSTEM MUST CONTAIN CHECK VALVES TO PREVENT LOW POINT DRAINAGE.
13. SPACE ALL SPRAY HEADS 2" AWAY FROM ANY HARDSCAPE.
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3/4"	8 GPM
1"	12 GPM
1-1/2"	30 GPM
2"	53 GPM
2-1/2"	75 GPM
3"	110 GPM
4"	180 GPM

VALVE ID TAG



NOTE:
1. VALVE ID TAGS ARE LOCATED NEAR VALVES IN THE ORDER THE VALVES APPEAR ON THE DRAWING

ISSUE DATE	PROJECT NUMBER
7/10/2020	UT20001

NO.	REVISION	DATE
1		
2		
3		
4		
5		
6		
7		

PLAN INFORMATION

811 BLUE STAKES OF UTAH
UTILITY NOTIFICATION CENTER, INC
1-800-662-4111
www.bluestakes.org

N

0' 10' 20' 40' 80'
GRAPHIC SCALE: 1" = 20'

PROJECT INFORMATION

OFFICE WAREHOUSE

450 EAST AUTO MALL DRIVE
AMERICAN FORK, UTAH

DEVELOPER / PROPERTY OWNER / CLIENT

Developer / Property Owner:
JONATHON JENSEN
DAVIES DESIGN BUILD
801-592-6044
JON@DAVIESDESIGNBUILD.COM

Building Architect / Engineer:
BENCHMARK ENGINEERING & LAND SURVEYING
9130 SOUTH STATE STREET SUITE #100
SANDY, UTAH 84070 (801) 542-7192
WWW.BENCHMARKCIVIL.COM

LANDSCAPE ARCHITECT / PLANNER

PKJ DESIGN GROUP
PKJ DESIGN GROUP L.L.C.
3450 N. TRIUMPH BLVD. SUITE 102
LEHI, UTAH 84043 (801) 960-2698
www.pkjdesigngroup.com

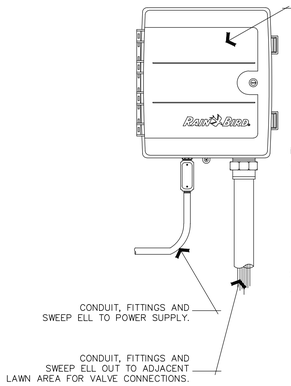
LICENSE STAMP

LICENSED LANDSCAPE ARCHITECT — JEREMY AINSWORTH — 812815 - 5301 — 7/10/2020 — STATE OF UTAH

PM:	KBA
DRAWN:	KBA
CHECKED:	JTA
PLOT DATE:	7/10/2020

PRELIMINARY PLANS NOT FOR CONSTRUCTION

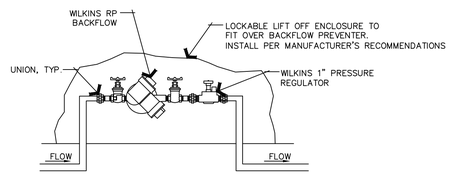
IR 103



NOTES:

1. MOUNT CONTROLLER PER MANUFACTURER'S WRITTEN INSTRUCTIONS AND IN ACCORDANCE WITH ALL LOCAL CODES. EXACT LOCATION TO BE APPROVED BY OWNER. GROUND CONTROLLER PER MANUFACTURERS RECOMMENDATION AND SPECIFICATIONS. ELECTRICAL CONTRACTOR SHALL GROUND CONTROLLER AND PROVIDE SLEEVING FROM ADJACENT LAWN AREA TO CONTROLLER LOCATION.
2. CONNECT CONTROLLER TO POWER AND VALVES.
3. LANDSCAPE CONTRACTOR TO COORDINATE WITH ELECTRICAL CONTRACTOR TO ENSURE PROPER GROUNDING OF CONTROLLER TO BUILDING GROUNDING GRID.

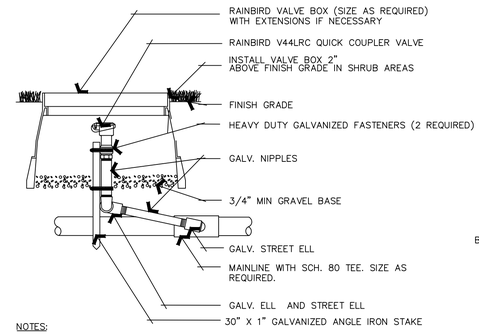
A RAINBIRD CONTROLLER DETAIL — NOT TO SCALE — PKJ DESIGN GROUP



NOTES:

1. INSTALL PER MANUFACTURERS RECOMMENDATIONS.
2. WHEREVER AN IRON BASED MATERIAL ADJOINS A BRASS BASED MATERIAL A DIELECTRIC UNION IS REQUIRED. SIZE AS NECESSARY.
3. WRAP ALL THREADS WITH TEFLON TAPE. 1 1/2 TO 2 WRAPS MAXIMUM.
4. MAIN LINE PIPE SIZE SHALL BE 1-1/2". DOWNSIZE TO 1" THRU BACKFLOW PREVENTER ASSEMBLY AND THEN UPSIZE TO 1-1/2" DIRECTLY DOWNSTREAM OF PRESSURE REGULATOR.

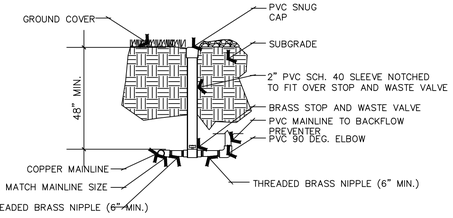
B BACKFLOW DETAIL — NOT TO SCALE — PKJ DESIGN GROUP



NOTES:

1. FLUSH ALL PIPING PRIOR TO INSTALLING VALVE.
2. WRAP ALL THREADS WITH TEFLON TAPE. 1 1/2 TO 2 WRAPS MAXIMUM.
3. COMPACT SOILS AROUND VALVE BOX TO 80% OF ORIGINAL DRY DENSITY.
4. INSTALL GEOFABRIC UNDER VALVE BOXES AND TAPE TO PIPE NIPPLES AND VALVE BOX.
5. BOX COLOR – GREEN IN TURF AND TAN IN PLANTER AREAS.
6. IRRIGATION SYSTEM TO BE BLOWN OUT WITH AIR COMPRESSOR THROUGH QUICK COUPLERS BEFORE FREEZING TEMPERATURES OCCUR, TYP.

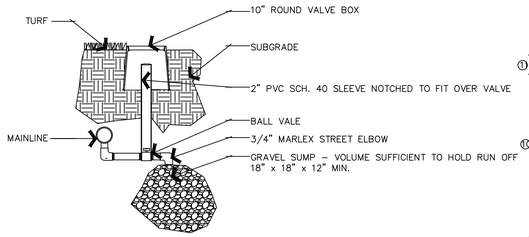
C RAINBIRD QUICK COUPLER — NOT TO SCALE — PKJ DESIGN GROUP



NOTES:

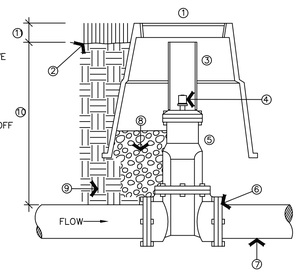
1. ALL PVC NIPPLES AND ELBOWS TO BE SCH. 40 UNLESS OTHERWISE NOTED.
2. PROVIDE VALVE KEY TO OWNER

D STOP AND WASTE VALVE ASSEMBLY — NOT TO SCALE — PKJ DESIGN GROUP



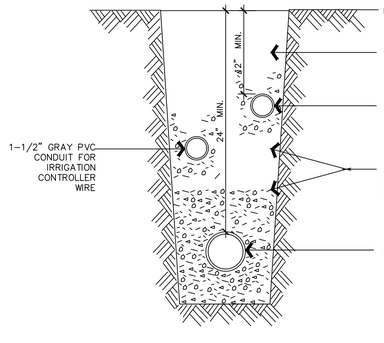
NOTES:

1. ALL PVC NIPPLES AND ELBOWS TO BE SCH. 80 UNLESS OTHERWISE NOTED.
2. PROVIDE VALVE KEY TO OWNER

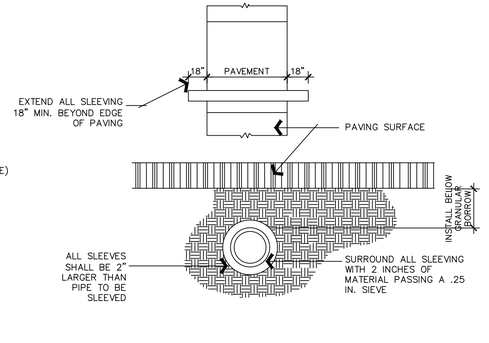


1. 10" ROUND GREEN PLASTIC VALVE BOX W/ BOLT LOCK, CARSON – BROOKS
2. FINISH GRADE
3. 6" PVC SCH. 40 PIPE SLEEVE, 4" – 6" BELOW GRADE
4. 2" SQUARE OPERATING NUT
5. FLANGE X FLANGE GATE VALVE SEE EQUIPMENT SCHEDULE
6. SCH. 80 FLANGE ADAPTER
7. MAIN WATER SUPPLY LINE
8. 6" MIN. GRAVEL
9. SUBGRADE COMPACTED TO 95%
10. DEPTH: 18" – 30"
11. SHRUBS – 2": SOD–1½"; SEED 1"

E MANUAL DRAIN ASSEMBLY — NOT TO SCALE — PKJ DESIGN GROUP

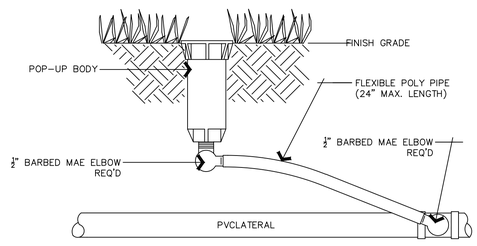


F GATE VALVE ASSEMBLY — NOT TO SCALE — PKJ DESIGN GROUP



G TRENCHING DETAIL — NOT TO SCALE — PKJ DESIGN GROUP

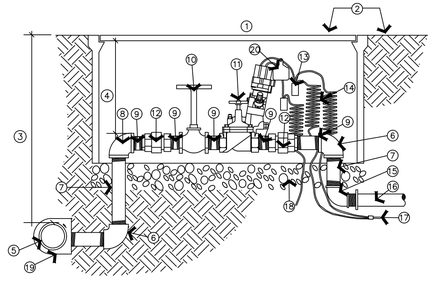
H TYPICAL SLEEVING — NOT TO SCALE — PKJ DESIGN GROUP



NOTES:

1. INSTALL SPRAY AND ROTARY HEADS PER THIS DETAIL.
2. INSTALL 2" AWAY FROM HARDSCAPES.

I SPRAY HEAD DETAIL — NOT TO SCALE — PKJ DESIGN GROUP

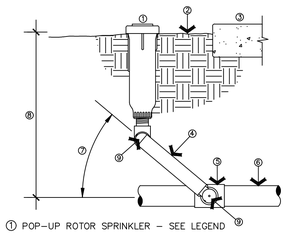


NOTES:

1. ONE REMOTE CONTROL VALVE PER BOX .
2. ALL FITTINGS AND PIPE IN MANIFOLD SHALL BE THREADED SCH. 80 PVC USING TEFLON TAPE AND #5 RECTOR SEAL.

1. CARSON–BROOKS 1419–12 STANDARD OR 1220–12 JUMBO VALVE BOX WITH STAINLESS STEEL BOLTS (SET DOWN 1")
2. FINISH GRADE
3. 30" MAX. DEPTH
4. 10"–14"
5. MAIN WATER SUPPLY LINE
6. PVC SCH. 80 ELBOW
7. PVC SCH. 80 NIPPLE; LENGTH AS REQUIRED (TYP.)
8. PVC SCH. 80 ELL SAME SIZE AS VALVE
9. SCH. 80 NIPPLE. SIZE AS NECESSARY
10. MILWAUKEE BRAND OR APPROVED AMERICAN–MADE BRASS GATE VALVE W/ NON RISING STEM (LINE SIZE)
11. ELECTRIC CONTROL VALVE – SEE EQUIPMENT SCHEDULE
12. PVC SCH. 80 UNION
13. WATER TIGHT CONNECTORS (3M DBY ONLY)
14. PROVIDE 36" EXPANSION LOOP AT EACH WIRE CONNECTOR BOX
15. SCH. 80 ELBOW WITH SCH. 80 NIPPLE INTO SxT BUSHING TO LATERAL
16. LATERAL LINE
17. CONTROL WIRES
18. 6" MINIMUM DEPTH OF WASHED 3/4" GRAVEL
19. PVC SCH. 80 TEE SxSxS WITH SCH. 80 SxT BUSHING OR DOUBLE STRAP SADDLE.
20. ID TAG: RAINBIRD VID SERIES OR APPROVED EQUAL

J CONTROL VALVE ASSEMBLY — NOT TO SCALE — PKJ DESIGN GROUP



1. POP–UP ROTOR SPRINKLER – SEE LEGEND
2. FINISH GRADE
3. NOTE: ALL ROTOR HEADS TO BE PLACED 2" CLEAR OF ALL HARDSCAPE SURFACES
4. SCH. 80 THREADED NIPPLE
5. PVC SCH. 40 SxSxT TEE (OR ELL)
6. PVC LATERAL LINE, SIZE AS NOTED ON PLAN
7. SWING JOINT ARM INSTALLED AT ANGLE BETWEEN 30 AND 45 DRG. OF LATERAL PIPE, USE MALE THREAD MODEL
8. DEPTH – SEE NOTES & TRENCH DETAIL
9. MARLEX STREET ELL'S (3)

I POP UP ROTOR DETAIL — NOT TO SCALE — PKJ DESIGN GROUP

ISSUE DATE	PROJECT NUMBER
7/10/2020	UT20001

NO.	REVISION	DATE
1		
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PLAN INFORMATION

811 BLUE STAKES OF UTAH
UTILITY NOTIFICATION CENTER, INC
1-800-662-4111
www.bluestakes.org

N

0' 10' 20' 40' 80'
GRAPHIC SCALE: 1" = 20'

PROJECT INFORMATION

OFFICE WAREHOUSE

450 EAST AUTO MALL DRIVE
AMERICAN FORK, UTAH

DEVELOPER / PROPERTY OWNER / CLIENT

Developer / Property Owner:
JONATHON JENSEN
DAVIES DESIGN BUILD
801-592-6044
JON@DAVIESDESIGNBUILD.COM

Building Architect / Engineer:
BENCHMARK CIVIL
BENCHMARK ENGINEERING & LAND SURVEYING
9130 SOUTH STATE STREET SUITE #100
SANDY, UTAH 84070 (801) 542-7192
WWW.BENCHMARKCIVIL.COM

LANDSCAPE ARCHITECT / PLANNER

PKJ DESIGN GROUP
PKJ DESIGN GROUP L.L.C.
3450 N. TRIUMPH BLVD. SUITE 102
LEHI, UTAH 84043 (801) 960-2698
www.pkjdesigngroup.com

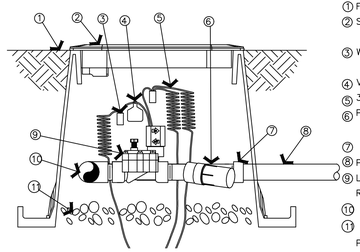
LICENSE STAMP

LICENSED LANDSCAPE ARCHITECT — KEVIN K. AINSWORTH — 8128121-5301 — 07/16/2020 — STATE OF UTAH

PM:	KBA
DRAWN:	KBA
CHECKED:	JTA
PLOT DATE:	7/10/2020

PRELIMINARY PLANS NOT FOR CONSTRUCTION

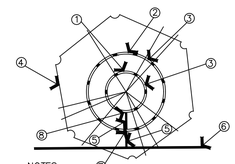
IR 501



① FINISH GRADE
② STANDARD VALVE BOX WITH COVER:
RAIN BIRD VB–STD
③ WATERPROOF CONNECTION:
RAIN BIRD DB SERIES
④ VALVE ID TAG
⑤ 30–INCH LINEAR LENGTH OF WIRE, COILED
⑥ PRESSURE REGULATING FILTER:
RAIN BIRD PRF–100–RBY (INCLUDED IN
⑦ XCZ–100–PRF KIT)
⑧ PVC SCH 40 FEMALE ADAPTOR
⑨ LATERAL PIPE
REMOTE CONTROL VALVE:
⑩ RAIN BIRD 100–DV (INCLUDED IN
⑪ XCZ–100–PRF KIT)
PVC SCH 40 TEE OR ELL TO MANIFOLD
3–INCH MINIMUM DEPTH OF 3/4–INCH WASHED GRAVEL

L DRIP CONTROL VALVE ASSEMBLY

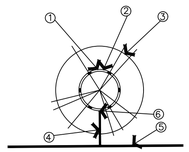
NOT TO SCALE — PKJ DESIGN GROUP



NOTES:
1. LAYOUT DRIPLINE SO EMITTERS ARE IN TRIANGULAR PATTERN AS SHOWN
2. APPROXIMATELY 16.2 GPH PER TREE

TREE

① 8' RADIUS
② 16' RADIUS
③ RAIN BIRD XFS–09–18–100 OR EQUIVALENT
④ TREE (DECIDUOUS OR EVERGREEN)
⑤ RAIN BIRD XT–700 TUBING OR EQUIVALENT AS APPROVED BY ARCHITECT
⑥ LATERAL LINE
⑦ 4–WAY BARBED TEE
BARBED TEE



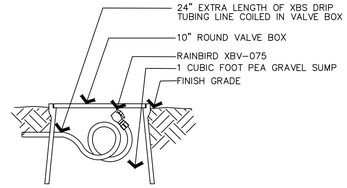
SHRUB

① 12" RADIUS
② RAIN BIRD XFS–09–18–100 OR EQUIVALENT
③ SHRUB
④ RAIN BIRD XT–700 TUBING OR EQUIVALENT AS APPROVED BY ARCHITECT
⑤ LATERAL LINE
⑥ BARBED TEE

NOTE:
1. APPROXIMATELY 5.4 GPH PER SHRUB

M DRIP IRRIGATION - IN LINE EMITTERS

NOT TO SCALE — PKJ DESIGN GROUP

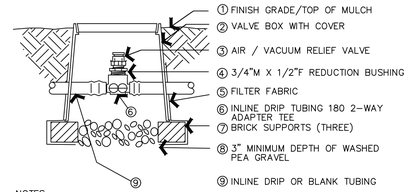


24" EXTRA LENGTH OF XBS DRIP TUBING LINE COILED IN VALVE BOX
10" ROUND VALVE BOX
RAINBIRD XBV–075
1 CUBIC FOOT PEA GRAVEL SUMP
FINISH GRADE

NOTE:
1. INSTALL AT END OF DRIP LINE RUNS FOR WINTERIZATION IN THE FALL.

N FLUSH CAP BOX

NOT TO SCALE — PKJ DESIGN GROUP



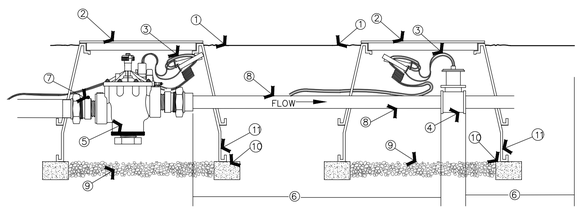
① FINISH GRADE/TOP OF MULCH
② VALVE BOX WITH COVER
③ AIR / VACUUM RELIEF VALVE
④ 3/4"M X 1/2"F REDUCTION BUSHING
⑤ FILTER FABRIC
⑥ INLINE DRIP TUBING 180 2–WAY ADAPTER TEE
⑦ BRICK SUPPORTS (THREE)
⑧ 3" MINIMUM DEPTH OF WASHED PEA GRAVEL
⑨ INLINE DRIP OR BLANK TUBING

NOTES:
1. SECURE ALL BARB FITTINGS WITH A STAINLESS STEEL PINCH CLAMP.
2. INSTALL A AIR/VACUUM RELIEF VALVE AT HIGH POINTS WITHIN DRIP ZONE.
3. INSTALL FILTER FABRIC AROUND EXTERIOR OF VALVE BOX. USE DUCT TAPE TO SECURE FABRIC TO PIPE AND VALVE BOX.

O DRIP AIR/VACUUM RELIEF VALVE ASSEMBLY

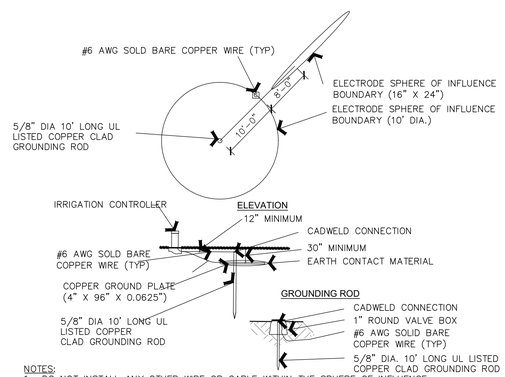
NOT TO SCALE — PKJ DESIGN GROUP

① FINISH GRADE
② GREEN VALVE BOX AND COVER
③ CONTROL WIRES WITH 12" MIN. SERVICE COIL AND WATERPROOF WIRE SPLICE CONNECTORS –
④ FLOW SENSOR PER IRRIGATION LEGEND
⑤ RAIN BIRD PESB SERIES MASTER VALVE
⑥ STRAIGHT PIPE REQUIRED: MINIMUM 10x PIPE DIAMETER UPSTREAM & MINIMUM 5x PIPE DIAMETER DOWNSTREAM
⑦ UNIONS
⑧ PVC MAINLINE – LENGTH AS REQUIRED
⑨ 6" DEPTH OF WASHED ¾" GRAVEL
⑩ CONTINUOUS BRICK SUPPORTS
⑪ VALVE BOX EXTENSIONS REQUIRED



P MASTER VALVE & FLOW SENSOR

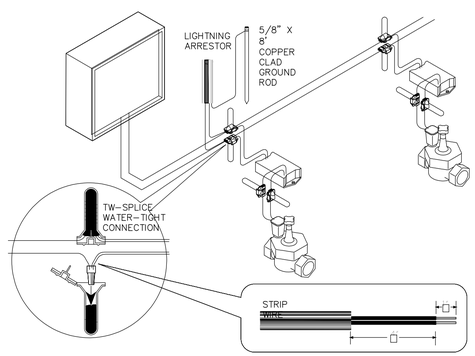
NOT TO SCALE — PKJ DESIGN GROUP



NOTES:
1. DO NOT INSTALL ANY OTHER WIRE OR CABLE WITHIN THE SPHERE OF INFLUENCE.
2. PLACE 100 LB POWER SET SOIL AMENDMENT TO EACH PLATE AS PER MANUFACTURER'S RECOMMENDATIONS.

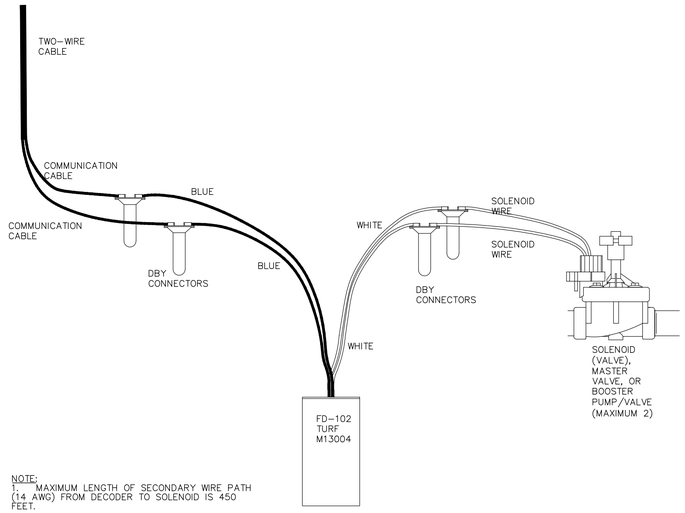
Q GROUNDING DETAIL

NOT TO SCALE — PKJ DESIGN GROUP



R 2-WIRE CONNECTION

NOT TO SCALE — PKJ DESIGN GROUP



NOTE:
1. MAXIMUM LENGTH OF SECONDARY WIRE PATH (14 AWG) FROM DECODER TO SOLENOID IS 450 FEET.

S DECODER WIRING

NOT TO SCALE — PKJ DESIGN GROUP

ISSUE DATE	PROJECT NUMBER
7/10/2020	UT20001

NO.	REVISION	DATE
1		
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PLAN INFORMATION

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0' 10' 20' 40' 80'
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PROJECT INFORMATION

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450 EAST AUTO MALL DRIVE
AMERICAN FORK, UTAH

DEVELOPER / PROPERTY OWNER / CLIENT

Developer / Property Owner:
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DAVIES DESIGN BUILD
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JON@DAVIESDESIGNBUILD.COM

Building Architect / Engineer:
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SANDY, UTAH 84070 (801) 542-7192
WWW.BENCHMARKCIVIL.COM

LANDSCAPE ARCHITECT / PLANNER

PKJ DESIGN GROUP
PKJ DESIGN GROUP L.L.C.
3450 N. TRIUMPH BLVD. SUITE 102
LEHI, UTAH 84043 (801) 960-2698
www.pkjdesigngroup.com

LICENSE STAMP

LICENSED LANDSCAPE ARCHITECT JEREMY AINSWORTH 812813 - 5301 07/10/2020 STATE OF UTAH

PM:	KBA
DRAWN:	KBA
CHECKED:	JTA
PLOT DATE:	7/10/2020

PRELIMINARY PLANS NOT FOR CONSTRUCTION

IR 502

AMERICAN FORK CITY
PLANNING COMMISSION MINUTES
JULY 8, 2020

The American Fork City Planning Commission met in a regular session on July 8, 2020 in an electronic meeting on the Zoom platform, viewable on the City's YouTube link, commencing at 7:00 p.m.

Present: John Woffinden
Chris Christiansen
Ryan Hunter
Christine Anderson
Rod Brocious
Harold Dudley

Absent: Geoff Dupaix

Staff Present: Adam Olsen, City Planner
Wendelin Knobloch, Planner
Ben Hunter, Engineer
Lisa Halversen, Administrative Assistant

Public Comments Received: None

1. Review and action on a site plan and final plat for a building expansion for Kirkham's Upholstery located at 329 West Main Street in the CC-2 Central Commercial zone

Mr. Olsen stated that Kirkham's Upholstery proposes an expansion of their facility at 329 W. Main, by adding a new structure on a vacant portion of property south of the existing facility. The new structure will consist of 4,500 sq. ft. and be a combination of office and warehouse/storage. 12 parking stalls are required and provided. Landscaping will be upgraded and placed along a portion of Main Street, adjacent to the parking area and in front of the existing storefront. Renderings of the new structure are included in the submittal materials. The subdivision plat combines three parcels into one lot (Lot 1), resulting in .46 acres.

Mr. Ben Hunter said that this is a straightforward project and the Engineering Division recommends approval.

Mr. Ryan Hunter moved to approve the site plan and final plat for Kirkham's Upholstery.

Mr. Dudley seconded the motion. Voting was as follows:

Chairman Woffinden	**Aye**
Chris Christiansen	**Aye**
Christine Anderson	**Aye**
Ryan Hunter	**Aye**
Rod Brocious	**Aye**
Harold Dudley	**Aye**

The motion passed.

2. Hearing, review and action on the 1100 West 350 South Road Dedication Plat in the Transit Oriented Development zone

Chairman Woffinden stated that items 2 and 3 will be discussed together but voted on separately.

Mr. Ben Hunter said that the applicant has been working on approval in TOD zones, these roads are on the master transportation plans. There are no major issues, they are just dedicating the land to the city. The Engineering Division recommends approval.

Public Hearing Opened

Public Hearing Closed

Mr. Ryan Hunter moved to approve the 1100 West 350 South Road Dedication Plat.

Ms. Anderson seconded the motion. Voting was as follows:

Chairman Woffinden	**Aye**
Chris Christiansen	**Aye**
Christine Anderson	**Aye**
Ryan Hunter	**Aye**
Rod Brocious	**Aye**
Harold Dudley	**Aye**

The motion passed.

3. Hearing, review and action on the 1100 West 620 South Road Dedication Plat in the Transit Oriented Development zone

Public Hearing Opened

Public Hearing Closed

Mr. Ryan Hunter moved to approve the 1100 West 620 South Road Dedication Plat.

Ms. Anderson seconded the motion. Voting was as follows:

Chairman Woffinden	**Aye**
Chris Christiansen	**Aye**
Christine Anderson	**Aye**
Ryan Hunter	**Aye**
Rod Brocious	**Aye**
Harold Dudley	**Aye**

The motion passed.

4. Hearing, review and action on the Savage Apartments/Parc on 5th Phase 2, located in the area of 620 South 600 East in the Planned Community zone

Mr. Olsen explained that this area received concept plan approval in September 2015. The concept plan envisioned placement of apartments, townhomes, and a commercial area along 500 East; in an area known as the Savage Property. Since conceptual approval, the commercial area along 500 East (Osmond Retail Plaza) has been constructed, as has Phase I of the residential area (Parc on 5th). Phase II anticipates additional residential development, south of Phase I and east of the commercial development along 500 East. Access will be provided off 620 South, through an extension of 600 East. Development of Phase II will consist of additional apartment (142) and townhome (54) units. A clubhouse and pool will be constructed in Phase II, as was done in Phase I. Final project density is 13.8 du/ac; within the allowed ranges of the PC zone. Parking is provided at 2.35 spaces per unit; slightly above the required 2.25 spaces per unit required by the City.

Mr. Ben Hunter said that 600 East and 620 South are on the master transportation plan and they meet design criteria. Utility infrastructure is in place and the project meets all engineering requirements.

Ms. Anderson said that she thinks the extra parking space could be better used as green space instead.

Mr. Olsen indicated that the developer will consider that.

Chairman Woffinden agreed that if they've met the parking requirement it might be good to have some additional greenspace. The property used to be his wife's grandfather's farm, and there was standing water year round. Pumps would run 24/7, there is a very high water table in this area.

Mr. Brocious said that it appears that the drainage calculations on 2B show that drainage needs exceed detention capability.

Mr. Ben Hunter indicated that there is some storage in the pipe system as well.

Chairman Woffinden asked where that water drains to and where it goes.

Mr. Ben Hunter replied that the developer added an additional plan set with other catch basins that cross under the freeway. Drainage for 2B goes into the city's existing storm drain system. Developer will confirm pipe sizes for 2A. Drainage for 2A can be brought south on Utah Valley Drive if needed.

Chairman Woffinden asked if Engineering feels confident with the numbers.

Mr. Ben Hunter said yes, the site has sufficient capacity in his view.

Chairman Woffinden asked Mr. Brocious and Mr. Christiansen if they felt ok about the drainage numbers. Both affirmed that they do.

Public Hearing Opened

Public Hearing Closed

Mr. Brocious moved to approve the Savage Apartments/Parc on 5th Phase 2, with the findings and conditions listed in the staff report and subject to any findings, conditions, and modifications listed in the engineering report.

Mr. Christiansen seconded the motion. Voting was as follows:

Chairman Woffinden	**Aye**
Chris Christiansen	**Aye**
Christine Anderson	**Aye**
Ryan Hunter	**Aye**
Rod Brocious	**Aye**
Harold Dudley	**Aye**

The motion passed.

5. Hearing, review and action on amendments to Section 17.8.409 of the American Fork City Municipal Code relating to underground utilities

Mr. Ben Hunter stated that new development is service by electric power, telephone, natural gas and telecommunications. The proposed amendment regulates when and where utilities shall be placed underground. City staff find items that need to be modified or clarified in the code and bring it to the commission. The verbiage that they are adding clarifies that existing utilities, not only new ones, will be buried by developer.

Public Hearing Opened

Public Hearing Closed

Mr. Christiansen moved to approve the code text amendment.

Mr. Brocious seconded the motion. Voting was as follows:

Chairman Woffinden	**Aye**
Chris Christiansen	**Aye**
Christine Anderson	**Aye**
Ryan Hunter	**Aye**
Rod Brocious	**Aye**
Harold Dudley	**Aye**

The motion passed.

6. Discussion on parking reduction for a potential multi-family project in the downtown area

Chairman Woffinden said that this is a unique concept plan for the downtown area. The parking amount would be very limited, around the .5 to 1 stall per unit range. Units are under 500 square feet. It would be located on Barratt Avenue, across from old bakery.

Mr. Olsen invited the applicant to lead a discussion, commission should give feedback. The downtown area is going to be opened up to residential uses, this could be a possibility.

Mr. Diego Carroll has been a part of similar projects in Salt Lake City. They propose micro apartments of 250-350 sf. There will likely one tenant per unit as these are small studio apartments. He showed pictures of slightly larger units in Seattle. Salt Lake City has convenient transit, so the units there have no parking spaces. The units in American Fork would provide 1 parking space per unit. Orem City requires 1.75 parking space per unit, which means that there would be twice the space tied up in parking that there is in housing units. This proposal would work best with less than 1 stall per unit. Before they move forward, they want to get commission's feedback on the parking reduction issue.

Ms. Anderson loves this idea, it fits in well with the walkable centers concept. This will be a mixed-use area in a walkable downtown. This would be a great location for this concept. With the size of the units, you definitely won't need more than 1 parking stall per unit. As people use transit more that need for parking will decrease.

Mr. Brocious thinks it's an interesting concept, but development has to be supported by significant transportation alternatives. Bus seems to be only alternative in this area. He's not sure the transportation alternatives are available yet to support this kind of development at this point and in this area.

Ms. Anderson thinks this is the direction that would be good for our downtown, the first step always feels uncomfortable. We would be getting parking stalls, they will be a buffer until transit catches up.

Chairman Woffinden likes the idea, it will provide some low-cost housing, but transportation hasn't caught up yet. He likes the concept, there's just no way to tell when transit will catch up.

Ms. Anderson said that this development would be not far from Fresh Market and the downtown area.

Mr. Olsen said that UTA is doing a feasibility study on a Trax line on Main Street or Pacific Drive. Either location will be close to this project, it will have great access. There is no timeline yet for UTA.

Mr. Brocious likes the concept, he thinks it's a timing issue. Without alternative transportation, most people will continue to drive.

Chairman Woffinden asks what the possibilities are if parking turns out to be not needed as transportation catches up to the project?

Mr. Carroll indicated that they probably won't be in control of the project at that time. Unneeded parking could be retrofitted into storage, bicycle parking, etc. They are comfortable with the idea of people having a car, but it would be at most 1 per unit. They can control how much parking is needed by financial costs and incentives. He gives an example of a married couple sharing a car. What happens if there's not enough parking? They want to attract tenants that want a small footprint and will use other transportation. If there's empty parking, it will be in the back and it will feel very walkable.

Mr. Olsen asks if the commission is open to adjustments of numbers of required parking stalls.

Mr. Christiansen indicated that he doesn't want to go below 1. Transportation isn't there quite yet.

Mr. Ryan Hunter is in favor of the bigger picture, it is part of the opportunity zone to revitalize downtown. He feels that micro units don't need 2.25 parking spots.

Mr. Olsen says it's along the edge of the opportunity zone designated by the state, this provides opportunity for investment properties in these areas and tax incentives. This is 1 of 2 such proposals in Utah County.

Ms. Anderson asked if developers in this area get special tax incentives?

Mr. Ryan Hunter said that incentives are provided for investment - opportunities to take parcels and create an investment, the developer will get a tax break.

Mr. Carroll thinks they are barely outside the opportunity zone. Either way the project would be doable. He thanks the commission for their input.

7. Other Business

Chairman Woffinden told commissioners that the commission was overruled by the city council regarding American Eagle. The votes were 4 to 1, Councilman Rob Shelton agreed with the denial. The developer brought in a lot of new material and Mr. Shelton felt like maybe it should have gone back to the Planning Commission. Mr. Olsen doesn't know how the legal process will play out, it's in the council's hands. They accepted the site plan but basically rewrote the requirements.

8. Site Plan Committee Report

Mr. Knobloch reviewed the upcoming Planning Commission items. The next meeting will be held on Wednesday, July 22. On the next agenda there will be a zone map amendment near the Public Works complex, another plat from Stonecreek, and a plat for Rockwell Ranch in the TOD zone.

9. Review and action on the minutes of the June 17, 2020 Planning Commission Regular Session

Ms. Anderson moved to recommend approval of the minutes of the June 17, 2020 Planning Commission Regular Session.

Mr. Ryan Hunter seconded the motion. Voting was as follows:

Chairman Woffinden	**Aye**
Chris Christiansen	**Aye**
Christine Anderson	**Aye**
Ryan Hunter	**Aye**
Rod Brocious	**Aye**
Harold Dudley	**Aye**

The motion carried.

10. Adjournment

Mr. Ryan Hunter moved to adjourn, Mr.Brocious seconded. All voted in favor.

Meeting adjourned at 8 pm.

Lisa Halversen
Administrative Assistant