AMERICAN FORK CITY PLANNING COMMISSION
MARCH 3, 2021
NOTICE OF ELECTRONIC MEETING
REGULAR SESSION

Notice is hereby given that the American Fork City Planning Commission will meet in regular session on March 3, 2021, 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 Zone Map Amendment for property located at 349 South 100 West, from the GC-2 (Planned Commercial) zone to the PI-1 (Planned Industrial) zone

2. Hearing, review and action on a Zone Map Amendment for property located at approximately 760 North 200 East, from the RA-1 (Residential Agriculture) zone to the R1-9,000 zone

3. Review and action on a commercial site plan for King & McCleary located at 230 and 240 West Main Street, in the CC-2 (Central Commercial) zone

4. Other Business

5. Site Plan Committee Report

6. Review and action on the minutes of the February 17, 2021 Planning Commission Regular Session

7. 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

NOTICE OF ELECTRONIC MEETING

In accordance with Resolution No. 2020-07-20R, Chairman Woffinden has determined that conducting meetings of the Planning Commission with an anchor location, such as the City Council Chambers, presents a substantial risk to the health and safety of those who may be present there. The following are facts upon which this determination has been made:

- Utah has been in a declared state of emergency due to COVID-19 since March 6, 2020, a virus outbreak that has been recognized by the World Health Organization, federal, state and local leaders as a pandemic.
- The Centers for Disease Control and Prevention (CDC) has stated that COVID-19 is easily spread from person to person between people who are in close contact with one another through respiratory droplets when an infected person coughs, sneezes, or talks. This virus can also be spread by people who are non-symptomatic.
- As reported by the Utah Department of Health, reported COVID-19 cases in Utah County continue to rise at a rate higher than reported rates for the state.
- Federal, state, and local authorities recommend that individuals limit public gatherings, wear face masks, and follow social distancing guidelines.
- It is difficult to anticipate the number of attendees at any meeting in order to maintain social distancing to comply with State Phased guidelines. Further, regardless of the number of attendees, social distancing measures for Planning Commission, staff, and attendees will be difficult to maintain in the City Council Chambers.
- COVID-19 continues to pose an immediate threat to the health, safety, and welfare of American Fork City residents.
- American Fork City can provide a way for the public to hear, or hear and view, open portions of Planning Commission meetings and to provide a way to participate in public hearings.

For the next 30 days, all Planning Commission meetings will be conducted via electronic means. The meetings are broadcast live-streamed, and available at a later time, at https://www.americanfork.gov/AgendaCenter. To make a public comment, email comments to zoompubliccomment@afcity.net prior to 5:00 p.m. the day of the meeting for the comment to be read into record. Please indicate in the subject line which item your comment refers to.

AMERICAN FORK CITY
PLANNING COMMISSION

MEETING DATE: March 3, 2021
STAFF PRESENTATION: Adam Olsen

AGENDA TOPIC: Hearing, review and action on a zone map amendment for property located at 349 South 100 West, from the GC-2 (Planned Commercial) zone to the PI-1 (Planned Industrial) zone.

ACTION REQUESTED: Recommendation of approval for the zone map amendment.

BACKGROUND INFORMATION					
Location:		349 South 100 West			
Applicants:		Steve Strate			
Existing Land Use:		Commercial			
Proposed Land Use:		Commercial			
Surrounding Land Use:	North	I-15			
	South	Residential			
	East	Commercial			
	West	Commercial			
Existing Zoning:		GC-2 (Planned Commercial)			
Proposed Zoning:		PI-1 (Planned Industrial)			
Surrounding Zoning:	North	PF (Public Facilities)			
	South	R2-7,500			
	East	PI-1 (Planned Industrial)			
	West	PI-1 (Planned Industrial)			
Land Use Plan Designation:		Design Industrial			
Zoning within Land Use Plan Designation?		x	Yes		No

Background

The applicant proposes a zone map amendment for property located at 349 South 100 West to the PI-1 zone. It is currently zoned GC-2 (Planned Commercial). The property has a structure in place, has been used by various commercial entities and consists of approximately .88 acres. Properties to the east and west are zoned PI-1, and this will provide a continuous area of the PI-1 zone along the frontage road, immediately north of the railroad tracks and south of I-15. This could be considered a “house keeping” item; cleaning up a lone area of GC-2 and converting it to PI-1.

POTENTIAL MOTIONS:

APPROVAL

Mr. Chairman, I move that we recommend approval of the zone map amendment subject to any conditions listed in the Engineering report.

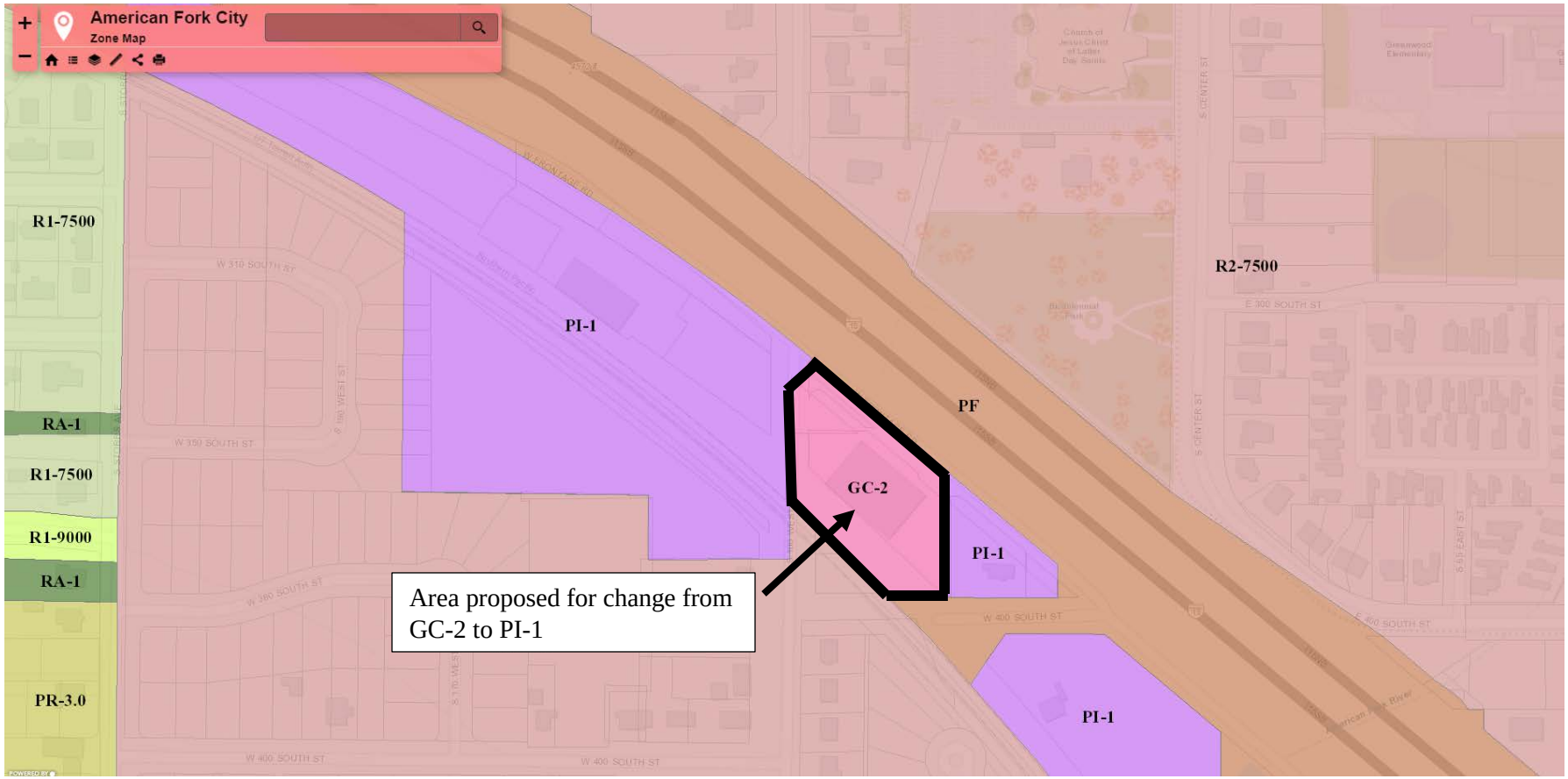
DENIAL

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.

Zone Map


American Fork City
Zone Map
R1-7500
RA-1
R1-7500
R1-9000
RA-1
PR-3.0
PI-1
PF
GC-2
PI-1
PI-1
R2-7500
Area proposed for change from GC-2 to PI-1

AMERICAN FORK CITY ENGINEERING DIVISION
STAFF REPORT

Planning Commission Meeting Date: 3/3/2021

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: 349 South 100 West Zone Change

Project Address: 349 South 100 West

Developer / Applicant's Name: Steve Strate

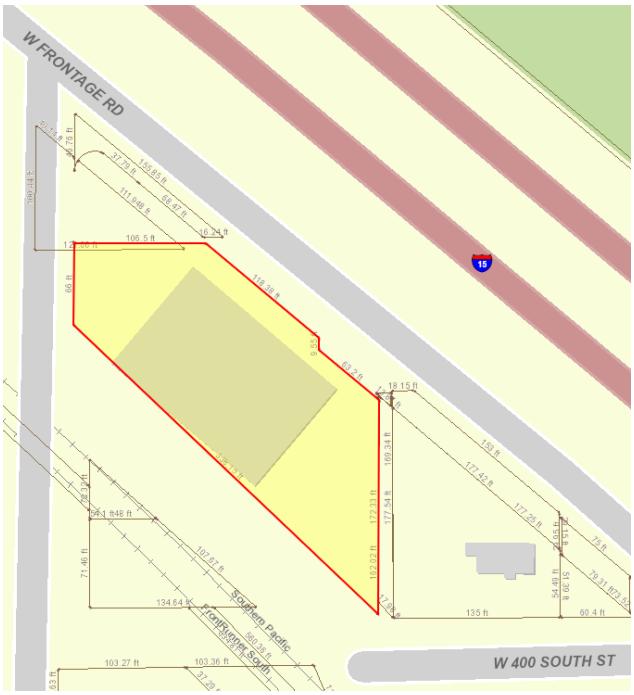
Type of Application:

- ☐ 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. A portion of the existing roadway improvements (asphalt, curb, gutter, sidewalk, etc.) for 100 West are currently part of the applicant's parcel. As a condition of the zone map change, the portions of the applicants parcel which are encompassed by the roadway improvements shall be dedicate as public right-of-way to the City at no cost to the City. Any related costs for preparing the legal description for dedication shall be the responsibility of the applicant and verified by City staff.

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. **Professional Verification:** Submit final stamped construction documentation or legal descriptions by all appropriate professionals.
4. **Fees:** Payment of all development, inspection, recording, street light, and other project related fees.

AMERICAN FORK CITY – Public Works Department
275 EAST 200 NORTH, AMERICAN FORK UT 84003
Phone: 801-763-3060 Fax: 801-763-3005 www.afcity.org

ZONE CHANGE (blue)

Technical Review Committee Submittal Form

Project Name: ALPINE EQUIPMENT REPAIR

Location: 349 SOUTH 100 WEST AMERICAN FORK, UTAH 84003

Reason/Description TO OPEN A EQUIPMENT AND EQUIPMENT RENTAL DEALERSHIP

Utah County Parcel No(s): 13:050:0210 13:050:0211

Property Owner Name: CCS HOLDINGS LLC

Property Owner Signature: STEVE STRATE/PARTNER

Property Owner or Authorized Representative Contact Information: (By indicating an authorized representative, all communication from the City regarding the project will be directed to your authorized representative.)

Name: STEVE STRATE

Address: P O BOX 970730 OREM, UTAH 84097

Telephone: 801 358-3131 Fax: _____

Email: strate1955@aol.com

Submit the following to [illegible]

1. Five pages submittals including plans (sized 11" x 17") and all reports (sized 8.5" x 11")
2. Electronic submittal on **DISC**:
   a. a full plan set in one (1) single pdf
   b. an electronic design file AutoCAD 2009 format (N.A.D. 83 Coordinates)
   c. reports (drainage, geotechnical, title) each in a separate pdf
3. Fee as determined at time of Site Plan Review Fee: $250.00

PAID $ 250
PLAN REVIEW DEPOSIT
2/4/21

Applications will not be accepted without ALL the required submittal materials. The City will not hold partial submittals.

Acceptance of this submittal to the Technical Review Committee (TRC) for review is not an acknowledgement by the City of a complete application. This determination will be made by the TRC in accordance with UCA 10-9a-509.5

By submitting an application, owner/authorized representative hereby authorizes American Fork City Representatives to enter the property for purposes of evaluating this application.

SUBMITTAL CHECKLIST (applicant – check the box to indicate items are included in this submittal)

☒	Property Size (acres): one Current Zone Classification: GC-2
☒	What changed or changing conditions make the proposed amendment reasonably necessary to promote the purposes of the American Fork City Development Code? (typewritten)
☒	Does the proposed zone change conform to the Land Use Plan? ☒ Yes ☐ No If no, please submit a request for General Plan Amendment with this application.

XX	What zone classification are you proposing for the area to be considered? PL+1
XX	Map illustrating property to be changed.

Link to Development Code

https://www2.municode.com/library/ut/american_fork/codes/code_of_ordinances

- Amendments – Chapter 17.11
- General Provisions – Sections 17.1.101 and 17.1.102

Requesting a zone change from a GC-2 to a PL-1 to allow a equipment repair and equipment rental dealership.

100 West Street

Stop Sign

Existing Billboard

Transformer Pad

Stop

Stop Sign

Stop

Stop Sign

N 00°31'24" E 89.39'

Dock

100.00'

15' x 15' Overhead Door

150.00'

15' x 15' Overhead Door

Existing Warehouse
Area = 15,000 sq.ft.

Finish Floor = 4568.00

15' Driveway

150.00'

100.00'

N 49°42'37" W

15' Driveway

Painted Island

Found Right of Way Marker

N 50°08'12" W 59.86'

East 16.58'

West 18.00

N

Total Area
24,453 SF
0.56 Acre

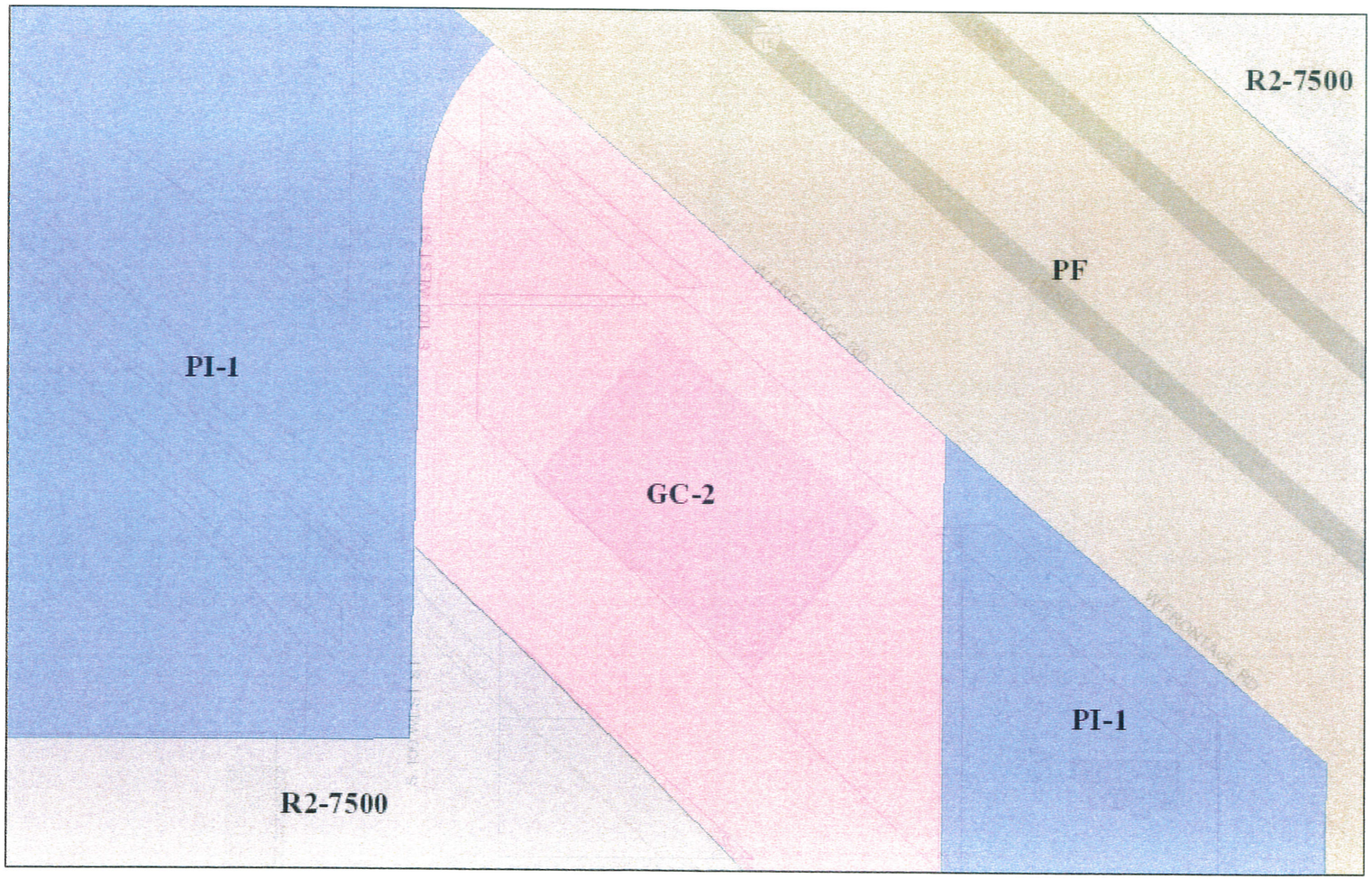
114.03'

Existing Fence

Frontage Roa
(13:05

32.43'

American Fork City



February 4, 2021

1:1,128

0 0.01 0.01 0.02 mi

0 0.01 0.02 0.04 km

American Fork GIS Division, City of American Fork, County of Utah, Bureau

AMERICAN FORK CITY
PLANNING COMMISSION

MEETING DATE: March 3, 2021
STAFF PRESENTATION: Adam Olsen

AGENDA TOPIC: Hearing, review and action on a zone map amendment for property located at approximately 760 North 200 East, from the RA-1 (Residential Agriculture) zone to the R1-9,000 Residential zone.

ACTION REQUESTED: Recommendation of approval for the zone map amendment.

BACKGROUND INFORMATION					
Location:		757 N. 200 E.			
Applicants:		Dennis & Maeta Beck/Keaton Morton			
Existing Land Use:		Residential/Agriculture			
Proposed Land Use:		Residential			
Surrounding Land Use:	North	Residential			
	South	Residential			
	East	Residential			
	West	Residential			
Existing Zoning:		RA-1			
Proposed Zoning:		R1-9,000			
Surrounding Zoning:	North	R1-9,000 & RA-1			
	South	R1-7,500			
	East	RA-1			
	West	R1-9,000			
Land Use Plan Designation:		Residential Low Density			
Proposed Zoning within Land Use Plan Designation?		x	Yes		No

Background

The applicant proposes a zone map amendment for property located at 757 North 200 East from the RA-1 to the R1-9,000 zone. If approved, the applicants will develop a residential subdivision under the provisions of a Planned Unit Development (PUD) within the R1-9,000 zone. The property has historically been used for residential and agriculture purposes. The City's Land Use Plan designates this area as "Low Density Residential" and the R1-9,000 zone conforms to this designation. The R1-9,000 zone exists to the west and north, and the R1-7,500 zone is present to the south.

POTENTIAL MOTIONS:

APPROVAL

Mr. Chairman, I move that we recommend approval of the zone map amendment subject to any conditions listed in the Engineering report.

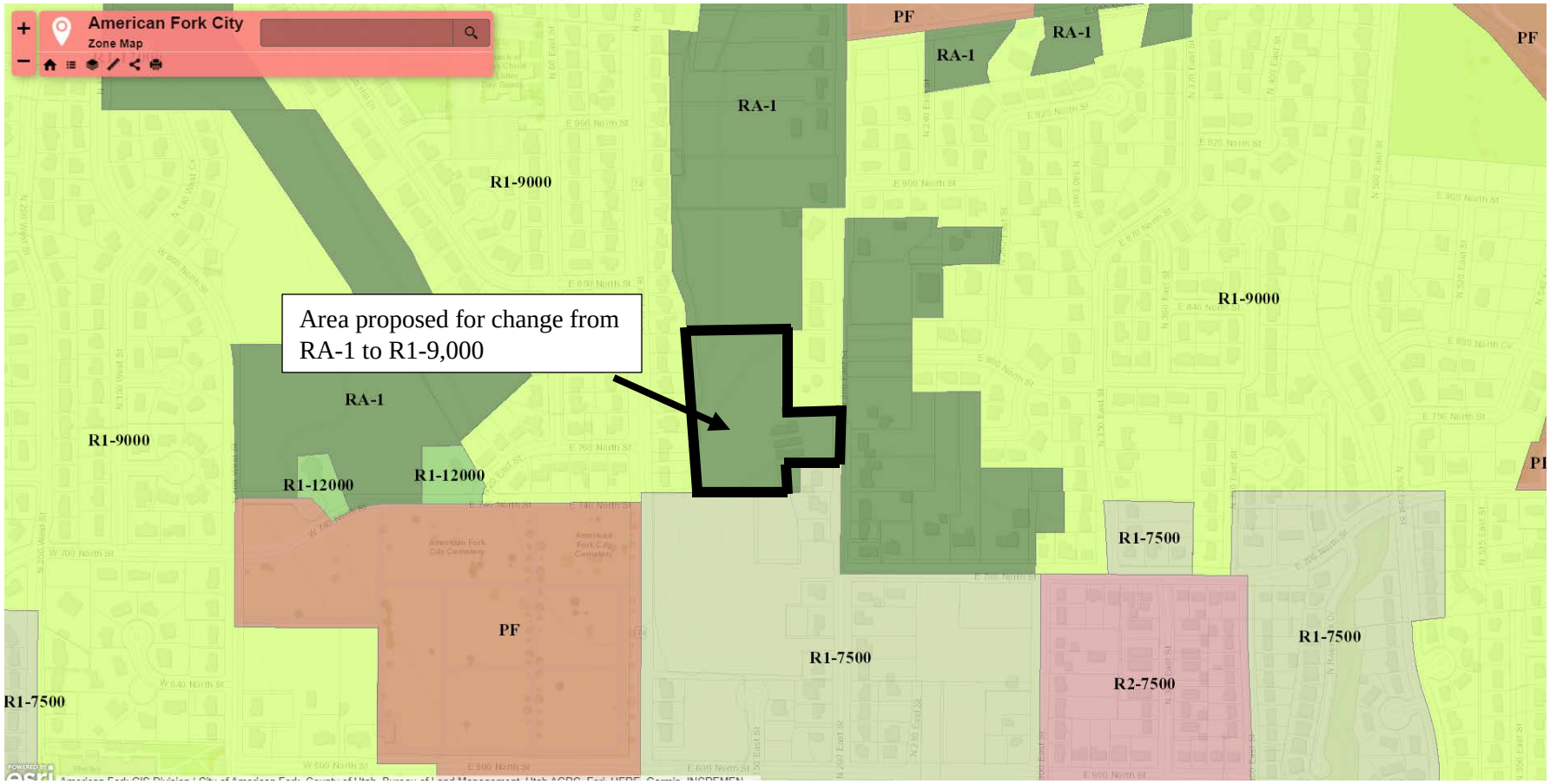
DENIAL

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.

Zone Map


American Fork City
Zone Map
Area proposed for change from RA-1 to R1-9,000
RA-1
R1-9000
R1-12000
PF
R1-7500
R2-7500

AMERICAN FORK CITY ENGINEERING DIVISION
STAFF REPORT

Planning Commission Meeting Date: 3/3/2021

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: Beck Zone Change

Project Address: 757 North 200 East

Developer / Applicant's Name: Dennis & Maeta Beck/Keaton Morton

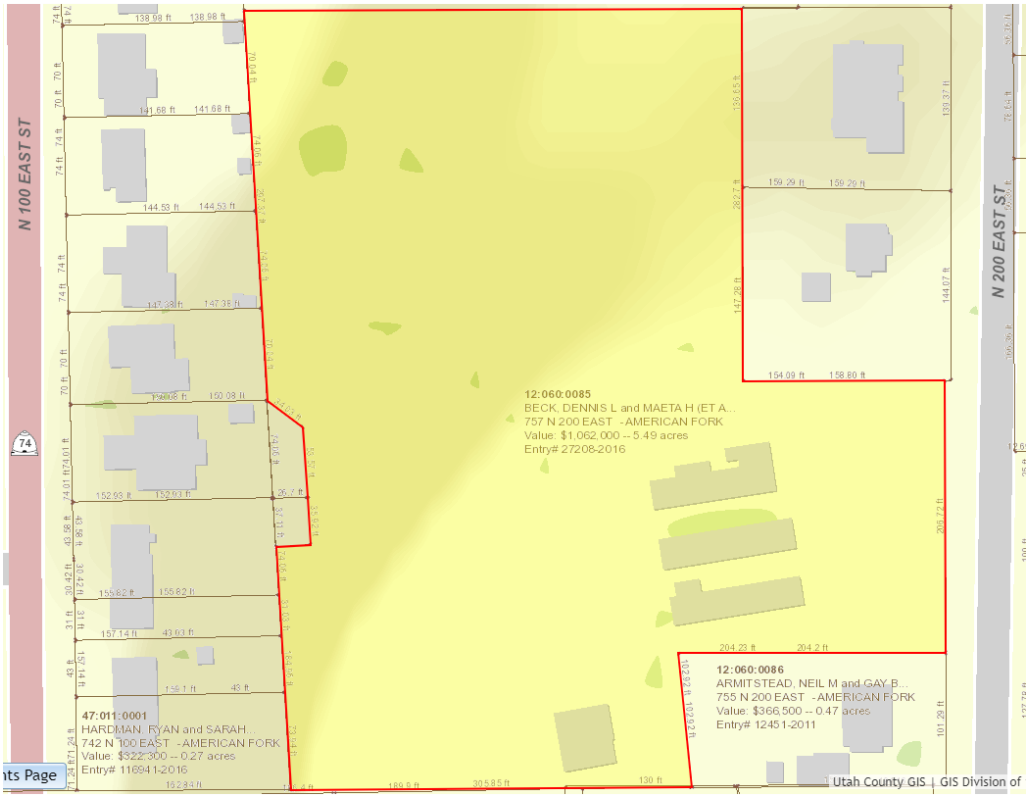
Type of Application:

- ☐ 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. An additional 5' of right-of-way for 200 East shall be dedicated to the City at no cost to the City as a condition of this zone map change.

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).

AMERICAN FORK CITY – Public Works Department
275 EAST 200 NORTH, AMERICAN FORK UT 84003
Phone: 801-763-3060 Fax: 801-763-3005 www.afcity.org

ZONE CHANGE (blue)

Technical Review Committee Submittal Form

Project Name: Beck Hillside Estates

Location: 757 N 200 EAST

Reason/Description:

Utah County Parcel No(s): 12:060:0085

Property Owner Name: Dennis and Maeta Beck

Property Owner Signature: Dennis Beck / Maeta Beck

Property Owner or Authorized Representative Contact Information: (By indicating an authorized representative, all communication from the City regarding the project will be directed to your authorized representative.)

Name: Keaton Morton

Address: 9537 South 700 East

Telephone: 801.856.2478 Fax:

Email: keaton@and-dev.com

Submit the following to Lisa Halversen, Public Works Dept, 275 East 200 North.

1. **Five paper** submittals including plans (sized 11" x 17") and all reports (sized 8.5" x 11")
2. **Electronic** submittal on **DISC**:
   a. a full plan set in one (1) single pdf
   b. an electronic design file AutoCAD 2009 format (N.A.D. 83 Coordinates)
   c. reports (drainage, geotechnical, title) each in a separate pdf
3. **Fee** as determined at time of Site Plan Review Fee: $250.00

Applications will not be accepted without ALL the required submittal materials. The City will not hold partial submittals.

Acceptance of this submittal to the Technical Review Committee (TRC) for review is not an acknowledgement by the City of a complete application. This determination will be made by the TRC in accordance with UCA 10-9a-509.5

By submitting an application, owner/authorized representative hereby authorizes American Fork City Representatives to enter the property for purposes of evaluating this application.

SUBMITTAL CHECKLIST (applicant – check the box to indicate items are included in this submittal)

[X]	Property Size (acres): 5.49 Current Zone Classification: RA-1
[X]	What changed or changing conditions make the proposed amendment reasonably necessary to promote the purposes of the American Fork City Development Code? (typewritten)
[X]	Does the proposed zone change conform to the Land Use Plan? [X] Yes [ ] No If no, please submit a request for General Plan Amendment with this application.

☒	What zone classification are you proposing for the area to be considered? R-1-9000
☒	Map illustrating property to be changed.

Link to Development Code

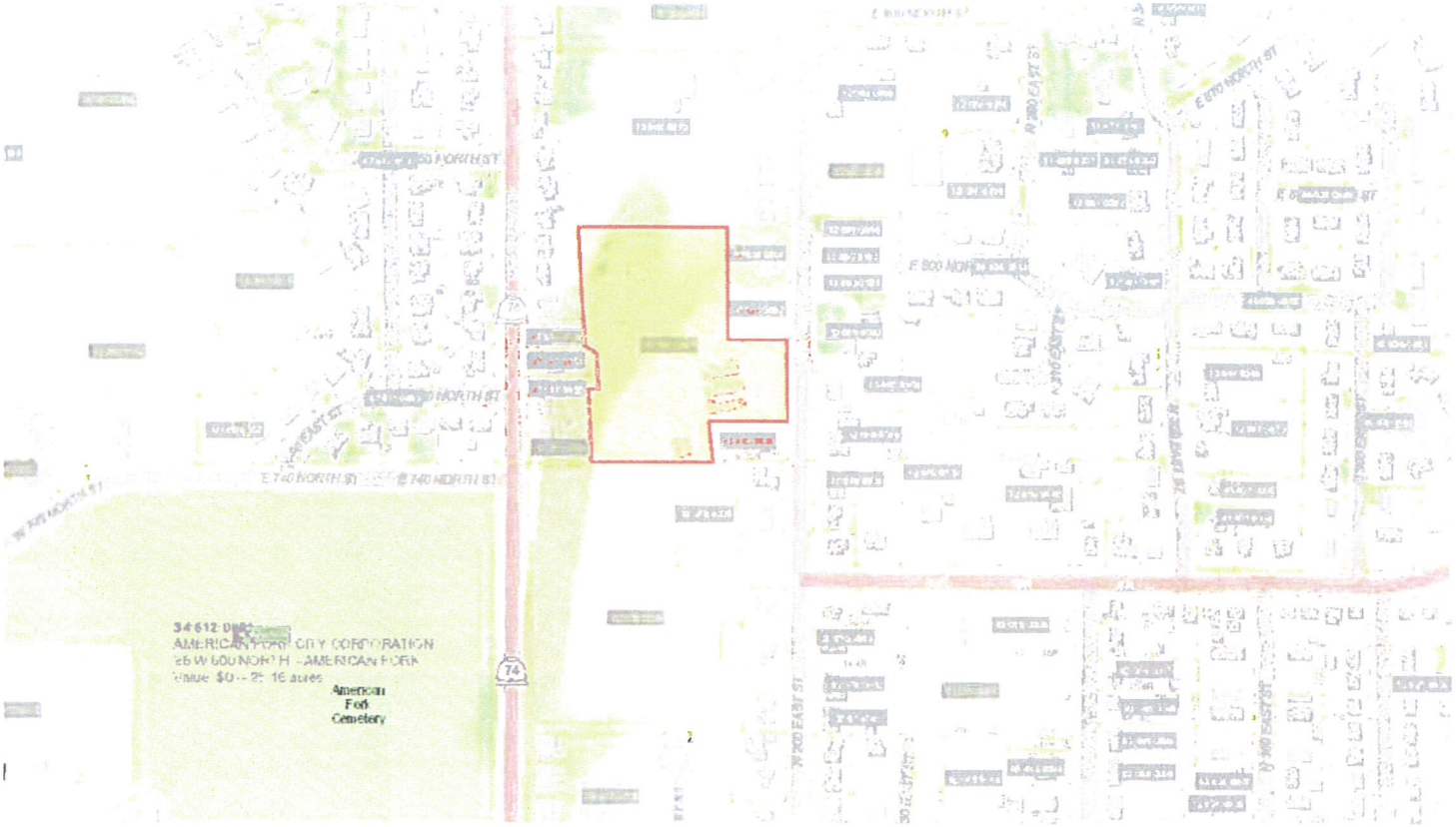
https://www2.municode.com/library/ut/american_fork/codes/code_of_ordinances

- Amendments – Chapter 17.11
- General Provisions – Sections 17.1.101 and 17.1.102

x

Zone Change Application

1. Landowner no longer wants to utilize land as existing use. Applicant seeks to develop land similar to surrounding area.


E 740 NORTH ST
74
American
Fork
Cemetery

AMERICAN FORK CITY
PLANNING COMMISSION

MEETING DATE: March 3, 2021
STAFF PRESENTATION: Adam Olsen

AGENDA TOPIC: Review and action on a commercial site plan for King & McCleary located at 230 and 240 West Main Street, in the CC-2 (Central Commercial) zone.

ACTION REQUESTED: Approval of the site plan.

BACKGROUND INFORMATION					
Location:		230 and 240 West Main Street			
Applicants:		Excel Engineering			
Existing Land Use:		Residential			
Proposed Land Use:		Commercial			
Surrounding Land Use:	North	Residential			
	South	Commercial			
	East	Commercial			
	West	Commercial			
Existing Zoning:		CC-2 (Central Commercial)			
Proposed Zoning:		N/A			
Surrounding Zoning:	North	R4-7,500			
	South	CC-2 (Central Commercial)			
	East	CC-2 (Central Commercial)			
	West	CC-2 (Central Commercial)			
Land Use Plan Designation:		General Commercial			
Zoning within density range?		x	Yes		No

Background

King & McCleary received approval of a site plan in early 2020; converting an existing residential structure to office use. They have opted to do a new-build instead and the structure has been removed. The proposal is for a two-story office building. Access will be shared between the existing and proposed structures. Parking has been provided and meets the requirements of the Code. Renderings of the proposed structure are included in the packet materials.

Consistency with the Land Use Plan:

The Land Use Plan designates this area as “General Commercial”. The site is consistent with the Land Use Plan designation.

Section 17.6.101.B of the Development Code

Application for site plan approval shall be submitted on forms provided by the City and shall be accompanied by maps and drawings showing the following:

a. The location of all existing and proposed buildings and structures on the site, with full dimensions showing the distance between buildings and distances from buildings to adjacent property lines.

   This criterion is met.

b. The location of all parking spaces, driveways, and points of vehicular ingress and egress.

   The location of driveways and points of vehicular ingress and egress has been illustrated.

c. A landscaping plan showing the location, types and initial sizes of all planting materials to be used together with the location of fences, walls, hedges, and decorative materials.

   A landscape plan has been provided.

d. Preliminary elevations of main buildings showing the general appearance and types of external materials to be used.

   Elevations have been provided for the proposed two-story structure.

e. The location of solid waste receptacles and trash pick-up areas.

   This criterion has been met.

FINDING OF FACT

After reviewing the application for site plan approval, the following finding of fact is offered for consideration:

1. The proposed site plan meets the review criteria as found in Section 17.6.101.B of the Development Code.

POTENTIAL MOTIONS

APPROVAL

Mr. Chairman, I move that we approve the site plan for King & McCleary, with the finding 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 deny the site plan for King & McCleary.

TABLE

Mr. Chairman, I move that we table action on the site plan for King & McCleary.

AMERICAN FORK CITY ENGINEERING DIVISION
STAFF REPORT

Planning Commission Meeting Date: 3/3/2021

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: King & McCleary

Project Address: 230 West Main Street

Developer / Applicant's Name: Stephen King

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 3/3/2021 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:

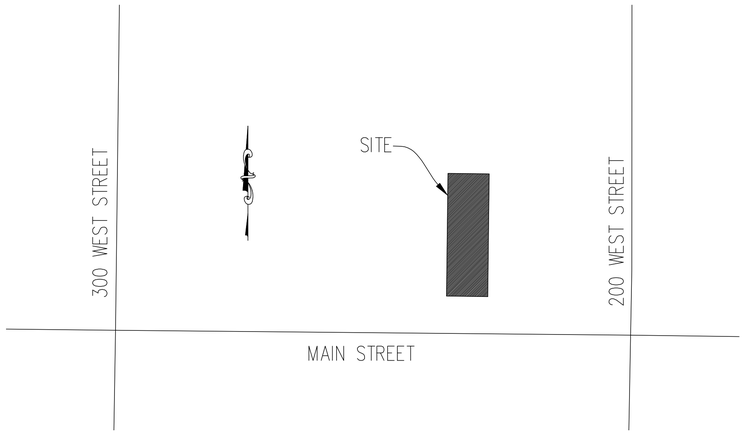
APPLICANT is responsible and shall submit/post/obtain all necessary documentation and evidence to comply with these Standard Conditions of Approval prior to any platting, permitting, or any other form of authorization by the City including plat recording or other property conveyance to the City and prior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

1. **Performance Guarantee:** Post a performance guarantee for all required public and essential common improvements.
2. **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.
3. **Land Disturbance Permit:** Obtain a Land Disturbance Permit.
4. **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.
5. **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.
6. **Sensitive Lands:** Record all applicable documents required for compliance with the City's Sensitive Lands Ordinance.
7. **Utility Notification Form:** Submit a Subdivision Utility Notification Form.
8. **Professional Verification:** Submit final stamped construction documentation by all appropriate professionals.
9. **Fees:** Payment of all development, inspection, recording, street light, and other project related fees.
10. **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).

KING & MCCLEARY PAYROLL SERVICES

ADDRESS: 230 WEST MAIN STREET

LOCATED IN THE SOUTHWEST QUARTER
OF SECTION 14, TOWNSHIP 5 SOUTH, RANGE 1 EAST,
SALT LAKE BASE AND MERIDIAN
AMERICAN FORK, UTAH COUNTY, UTAH



VICINITY PLAN

CONTACT LIST:

COMPANY		CONTACT	PHONE
CENTURY LINK	– TELEPHONE	K.C. Lunt	(435) 623 4252
ROCKY MNT. POWER	– POWER	Teria Walker	(801) 756 1310
COMCAST	– CABLE	Elysia Valdez	(801) 401 3017
COMCAST	– FIBER TEL	Sade Christensen	(801) 369 7360
QUESTAR GAS	– GAS (FOREMAN)	Wendy Edwards	(801) 853 8513
QUESTAR GAS	– GAS (HP)	Gaylan Sorensen	(801) 370 6577
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	– PLANNING	Adam Olsen	(801) 763 3060
AMERICAN FORK CITY	– ENGINEERING	Ben Hunter	(801) 763 3060
AMERICAN FORK CITY	– INSPECTOR	Dee Howard	(801) 763 3060
FIRE MARSHALL	– FIRE DEPT	Mat Sacco	(801) 763 3045
AF FIBER		Kyle Petersen	(801) 400–2933
AF FLOOD IRRIGATION COMPANY		Ernie John	(801) 471 6576
FIRE & RESCUE			911
TIMPANOGOS SPECIAL SERVICE DISTRICT		David Barlow	(801) 756 5231

ABBREVIATION TABLE

FFE	FINISHED FLOOR ELEV.
BOW	BACK OF WALK
GB	GRADE BREAK
TC	TOP OF CONCRETE
TBC	TOP BACK OF CURB
TA	TOP OF ASPHALT
EA	EDGE OF ASPHALT
RIM	RIM ELEVATION
FL	FLOWLINE
EG	EXIST GROUND
FG	FINISHED GRADE
TW	TOP OF WALL
BW	BOTTOM OF WALL
SF	SQUARE FOOTAGE
P.U.E.	PUBLIC UTILITY EASEMENT
SLB&M	SALT LAKE BASE & MERIDIAN
COR	CORNER
N	NORTH
S	SOUTH
E	EAST
W	WEST
P.I.	PRESSURIZED IRRIGATION
SS	SANITARY SEWER
SD	STORM DRAIN
T	TOWNSHIP
R	RANGE
RCP	REINFORCED CONCRETE PIPE
WM	WATER METER
CB	CATCH BASIN
SDMH	STORM DRAIN MANHOLE
SSMH	SANITARY SEWER MANHOLE
FH	FIRE HYDRANT
L.F.	LINEAR FEET
S=%	SLOPE
IE	INVERT ELEVATION
C.O.	CLEAN OUT
SL	SEWER LATERAL

SHEET INDEX

C1 COVER SHEET
C2 DEMOLITION PLAN
C3 SITE, UTILITY & LANDSCAPE PLAN
C4 GRADING & DRAINAGE PLAN
C5 EROSION CONTROL PLAN
C6 BMP DETAILS
C7 AMERICAN FORK STANDARD CONSTRUCTION NOTES
C8 DETAIL SHEET

NOTES TO CONTRACTOR

1. CONTRACTOR TO FIELD VERIFY ALL EXISTING CURB & GUTTER, STORM DRAIN, & SEWER ELEVATIONS OR INVERTS PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER WHEN ELEVATIONS OR INVERTS DO NOT MATCH PLANS.
2. THE LOCATION OF EXISTING UNDERGROUND UTILITIES IS SHOWN IN APPROXIMATE LOCATIONS. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. HE AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE AND ALL UNDERGROUND UTILITIES, WHETHER OR NOT SUCH FACILITIES ARE SHOWN ON THESE PLANS.

REGISTERED PROFESSIONAL ENGINEER
1/20/21
No. 270393
DAVID W. PETERSON
STATE OF UTAH

SURVEYOR:
LEVEL OF FOCUS, INC
1334 East 1150 South
Spanish Fork, Utah 84660
(801) 319-5441

Know what's below. Call before you dig.

BENCH MARK

SOUTH QUARTER CORNER, SECTION 14, TOWNSHIP 5 SOUTH, RANGE 1 EAST, SALT LAKE BASE AND MERIDIAN
ELEVATION = 4594.27 (NGVD 29 DATUM)

REVISIONS

Rev.	Date	Description
1	01/20/21	REVISED PER CITY COMMENTS

Developer: King & McCleary, LLC
240 W. Main Street, American Fork, UT 84003
801-756-2915

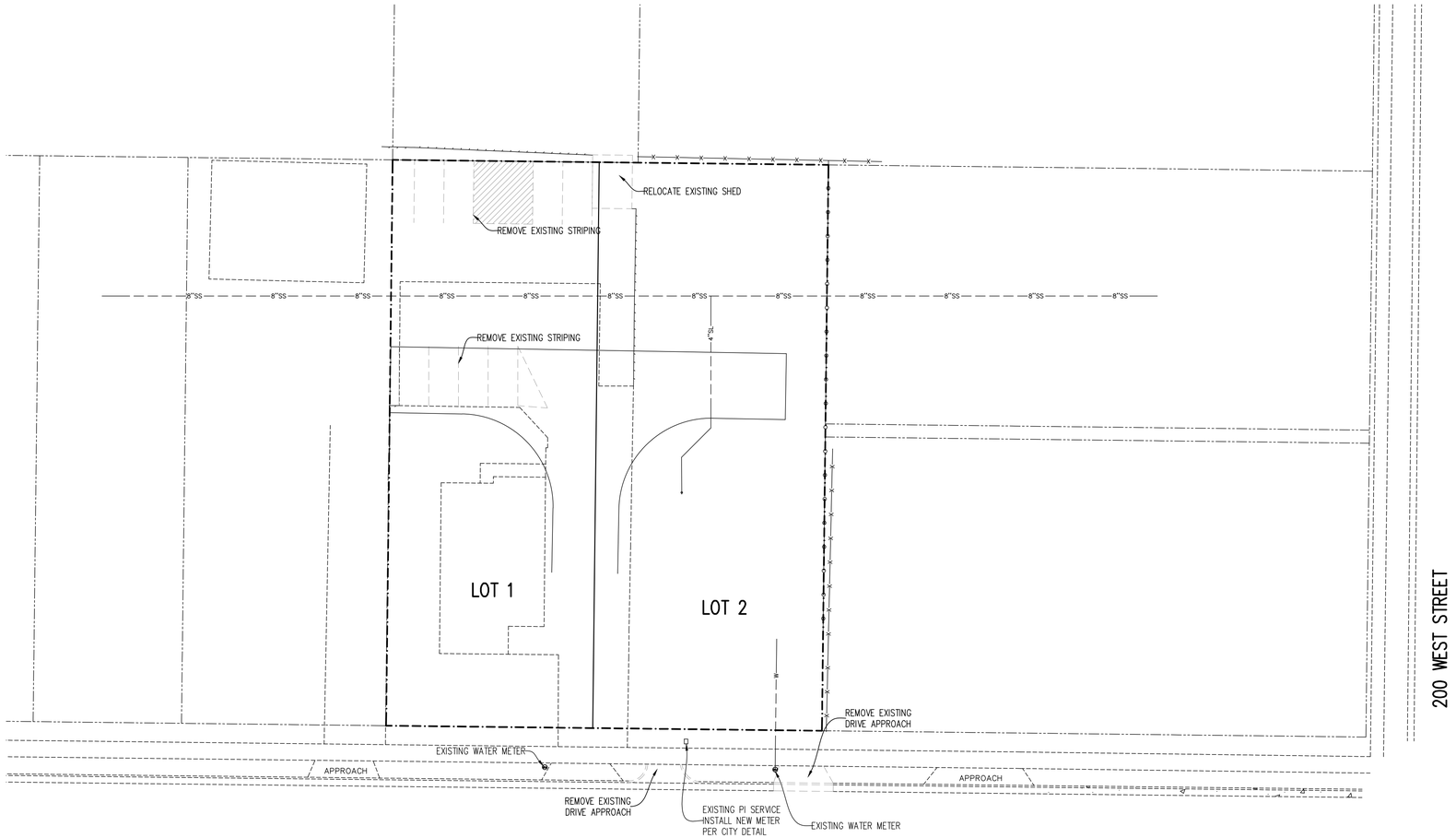
EXCEL ENGINEERING
David W. Peterson, P.E., License #270393
12 West 100 North, Suite 201, American Fork, UT 84003
P: (801) 756-4504; david@excelcivil.com

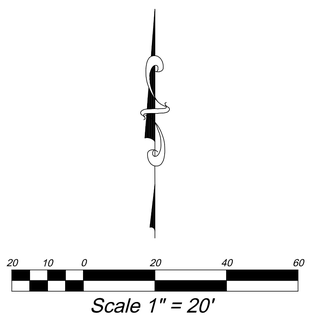
KING & MCCLEARY PAYROLL SERVICES
AMERICAN FORK 230 W. MAIN ST. UTAH

Drawn by: D.W.P.
Designed by: D.W.P.
Checked by: D.W.P.

COVER SHEET

Scale: NTS
Date: 10/30/20
C1





REGISTERED PROFESSIONAL ENGINEER
9/24/21
No. 270393
DAVID W. PETERSON
STATE OF UTAH

SURVEYOR:
LEVEL OF FOCUS, INC
1334 East 1150 South
Spanish Fork, Utah 84660
(801) 319-5441

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

BENCH MARK	REVISIONS		
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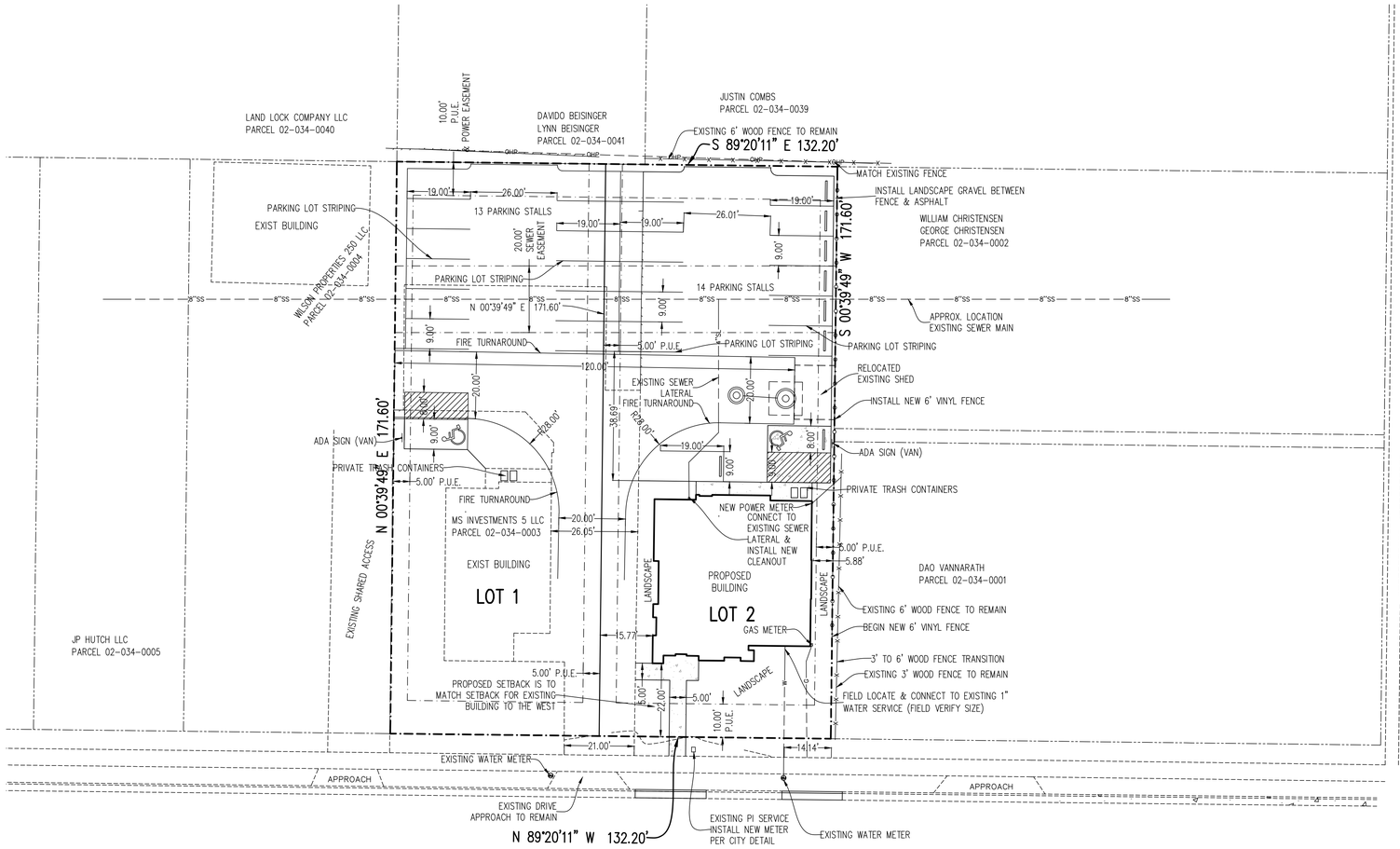
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P: (801) 756-4504; david@excelcivil.com

KING & MCCLEARY PAYROLL SERVICES

AMERICAN FORK 230 W. MAIN ST. UTAH

Drawn by: D.W.P.	DEMOLITION PLAN	Scale: 1"=20'
Designed by: D.W.P.		Date: 10/30/20
Checked by: D.W.P.		C2



BOUNDARY DESCRIPTION

A PARCEL OF GROUND SITUATE IN THE NORTHWEST QUARTER OF SECTION 23 AND SOUTHWEST QUARTER OF SECTION 14, TOWNSHIP 5 SOUTH, RANGE 1 EAST, SALT LAKE BASE AND MERIDIAN, ALSO LOCATED WITHIN BLOCK 21, PLAT A, AMERICAN FORK CITY SURVEY OF BUILDING LOTS, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING 132.20 FEET WEST OF SOUTHEAST CORNER OF BLOCK 21, PLAT "A" AMERICAN FORK CITY SURVEY OF BUILDING LOTS, SAID SOUTHEAST BLOCK CORNER BEING LOCATED SOUTH 89°58'58" WEST ALONG THE SECTION LINE 679.43 FEET AND SOUTH 70.89 FEET FROM THE NORTH QUARTER CORNER OF SECTION 23, TOWNSHIP 5 SOUTH, RANGE 1 EAST, SALT LAKE BASE AND MERIDIAN; THENCE WEST 132.20 FEET; THENCE NORTH 171.60 FEET; THENCE EAST 132.20 FEET; THENCE SOUTH 171.60 FEET TO THE POINT OF BEGINNING.

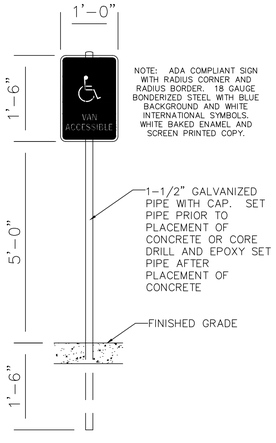
AREA = 22,686 SQ. FT. OR 0.5208 ACRES, MORE OR LESS

LOT DIMENSION NOTES:

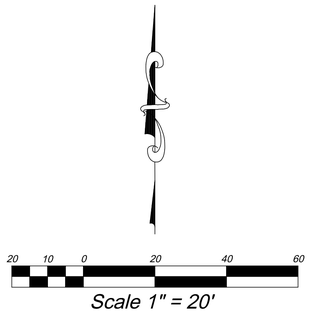
SEE THE PROPOSED PLAT FOR THE LOT DIMENSIONS AND SECTION TIE.

GENERAL SITE NOTES

1. CURRENT ZONING: CC2
2. ALL CONSTRUCTION TO CONFORM TO AMERICAN FORK CITY STANDARDS AND SPECIFICATIONS.
3. SURVEYING BY LEVEL OF FOCUS
4. NEW BUILDING TOTAL SQUARE FOOTAGE: 4,054 S.F.
5. PROPOSED BUILDING PARKING TABULATIONS:
   4,054 S.F./250 S.F. = 17 PARKING STALLS REQUIRED
   EXISTING BUILDING PARKING TABULATIONS (240 WEST BUILDING):
   OFFICE AREA ENTIRE BUILDING = 2,425 S.F./250 S.F. = 10 PARKING STALLS REQUIRED
   TOTAL REQUIRED PARKING STALLS FOR BOTH BUILDINGS = 27 STALLS
   TOTAL PROVIDED PARKING STALLS = 27 STALLS
   PARKING STALLS ARE TO BE SHARED. A SIGNED AND RECORDED CROSS PARKING AGREEMENT IS IN PLACE FOR THE SHARED PARKING BETWEEN THE 2 LOTS.
6. PAVEMENT SECTION: SEE GRADING PLAN
7. THERE IS NO GREASE TRAP PROPOSED FOR THIS BUILDING
8. LIGHTING WILL BE BUILDING MOUNTED
9. FLOOD ZONE DESIGNATION: ZONE X (AREA OF MINIMAL FLOOD HAZARD), FIRM MAP PANEL #: 49049C0168F EFFECTIVE DATE: 6/19/20
10. TRASH DISPOSAL WILL BE HANDLED BY INDIVIDUAL ROLL-AWAY TRASH CONTAINER THAT WILL BE STORED IN THE REAR OF THE BUILDING.



ADA VAN PARKING SIGN



STATE ROAD – 89 POSTED SPEED LIMIT

POSTED SPEED LIMIT ON SR-89 IS 30 MPH

SITE TABULATIONS:

TOTAL PROPERTY AREA = 11,931 S.F. = 100%
NEW BUILDING AREA = 2,190 S.F. = 18.3%
IMPERVIOUS AREA = 7,453 S.F. = 62.5%
LANDSCAPE AREA = 2,288 S.F. = 19.2%

REGISTERED PROFESSIONAL ENGINEER
No. 270393
DAVID W. PETERSON
STATE OF UTAH

PUBLIC IMPROVMENT NOTE

IF THERE ARE ANY PUBLIC RIGHT-OF-WAY IMPROVEMENTS THAT DO NOT MEET CITY STANDARDS, THEY WILL NEED TO BE REPLACED

ALTA SURVEY EASEMENTS

THE TITLE REPORT DID NOT CONTAIN ANY EXISTING EASEMENTS THAT NEEDED TO BE INCLUDED ON THE SURVEY

SURVEYOR:
LEVEL OF FOCUS, INC
1334 East 1150 South
Spanish Fork, Utah 84660
(801) 319-5441

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

BENCH MARK

SOUTH QUARTER CORNER, SECTION 14, TOWNSHIP 5 SOUTH, RANGE 1 EAST, SALT LAKE BASE AND MERIDIAN
ELEVATION = 4594.27 (NGVD 29 DATUM)

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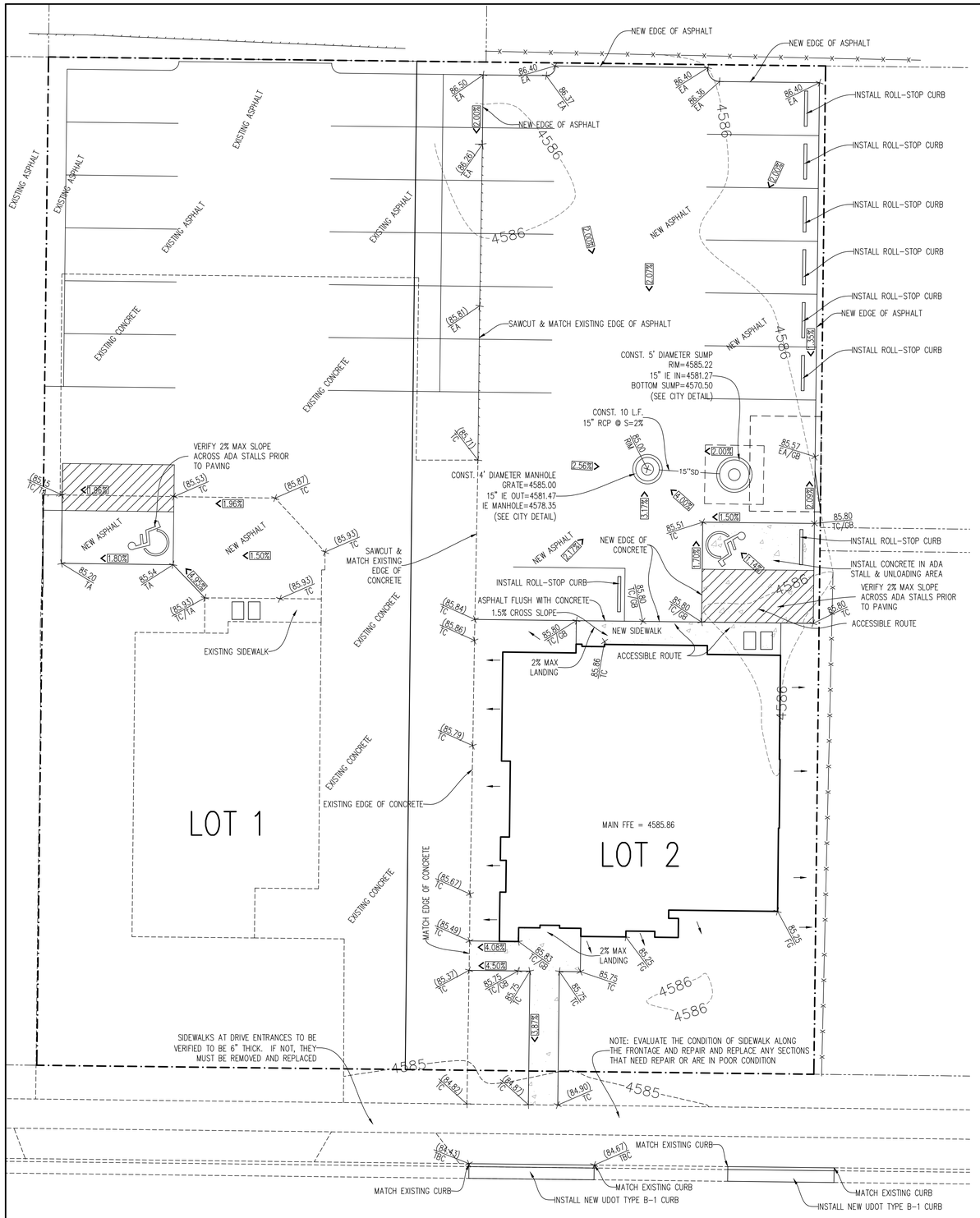
KING & MCCLEARY PAYROLL SERVICES

AMERICAN FORK 230 W. MAIN ST. UTAH

Drawn by: D.W.P.
Designed by: D.W.P.
Checked by: D.W.P.

SITE & UTILITY PLAN

Scale: 1"=20'
Date: 10/30/20
C3



10 5 0 10 20 30

Scale 1" = 10'

King & McCleary Payroll Services
Storm Water Calculations - 100 year
10-Oct-19

The storm drain calculations were performed using the rational method.

Hydrologic Calculations

CA CALCULATION

	C	Area (sf)	C * A
Parking Lot area	0.9	5781	5203
Total CA		5781	5203

The percolation rate used is 1 minute/inch
The infiltration area for the sump will be bottom and side areas of the gravel surrounding the sump.
The infiltration area = (10' length x 10' width) gravel area = 100 s.f. (see 'Sump Volume Calculation' below)
The infiltration rate = (100 s.f.)(1 inch/1 min.)(1 ft/12 inch)(1 min./60 sec.)= 0.14 cfs

Retention calculations

Lapsed Time (min.)	Rainfall intensity (in/hr)	Total Rainfall (in)	Rainfall Volume (cu.ft.)	Release Volume (cu.ft.)	Required Storage (cu.ft.)
A	B	C	D	E	F
15	4.50	1.15	499	125	374
30	3.00	1.50	650	250	400
45	2.25	1.69	733	375	358
60	1.85	1.85	802	500	302
90	1.30	1.95	845	750	95
120	1.00	2.00	867	1000	-133
180	0.70	2.10	911	1500	-589
360	0.45	2.70	1171	3000	-1829
720	0.25	3.00	1301	6000	-4699
1440	0.15	3.60	1561	12000	-10439

Required Retention Storage = 400 cf

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

Sump Volume Calculation

Assume a 5' diameter, 12' deep sump: Volume = (3.14)(2.5)^2(12') = 236 cf
Assume 10'x10' gravel area around sump with 40% voids = (10'x10'-(3.14)(3^2))*(10')(.40) =287 cf
2' Gravel under sump w/ 40% voids = (10'x10'x2' x 0.40) = 80 c.f.
Storage Volume of each sump =602 cf

Discussion

1. 1 sump provides 602 c.f. of storage
2. Provided storage volume of 602 c.f. exceeds required storage volume of 400 cf.

EARTHTEC ENGINEERING

1497 West 40 South **Lindon, Utah - 84042** *Phone (801) 225-5711*
840 West 1700 South, #10 **Salt Lake City, Utah - 84104** *Phone (801) 787-9138*
1596 W. 2650 S. #108 **Ogden, Utah - 84401** *Phone (801) 399-9516*

October 1, 2019

King & McCleary
240 West Main Street
American Fork, Utah 84003

Re: Percolation Testing
King & McCleary
230 West Main Street
American Fork, Utah
Job No: 198788

Gentlemen:

This letter summarizes our percolation testing at the subject site in American Fork, Utah. This testing was completed on September 30, 2019.

A percolation test was performed at the north end of the lot at 4½ feet below the existing ground surface. The test was performed by digging a small hole with a shovel, filling the hole with water, and measuring the water loss over time. The test was performed until the rate stabilized. The final measured rate for the percolation test performed is shown in the table below.

Percolation Test Location	Test Depth (ft)	Percolation Rate (min/in)	Soil Types
Perc-1	4½	Less than 1	GP-GM

The information presented in this letter applies only to the soils tested in the percolation test hole at the subject site. The observations and recommendations presented in this letter were conducted within the limits prescribed by our client, with the usual thoroughness and competence of the engineering profession in the area at this time. No warranty or representation is intended in our proposals, contracts, letters, or reports.

We appreciate the opportunity of providing our services on this project. If we can answer questions or be of further service, please call.

Respectfully;
EARTHTEC ENGINEERING

Jeremy A. Balleck, E.I.T.
Staff Engineer

Timothy A. Mitchell, P.E.
Senior Geotechnical Engineer

JB/tm

Attachments: Figure No. 1 *Aerial Photograph Showing Location of Percolation Test*

Professional Engineering Services ~ Geotechnical Engineering ~ Geologic Studies ~ Code Inspections ~ Special Inspection / Testing ~ Non-Destructive Examination ~ Failure Analysis

ON-SITE PAVEMENT DESIGN

3" ASPHALT
6" UNTREATED ROAD BASE

OR

6" CONCRETE
5" UNTREATED ROAD BASE

GRADING LEGEND

FFE	FINISHED FLOOR ELEV.
BOW	BACK OF WALK
GB	GRADE BREAK
TC	TOP OF CONCRETE
TBC	TOP BACK OF CURB
TA	TOP OF ASPHALT
EA	EDGE OF ASPHALT
RIM	RIM ELEVATION
FL	FLOWLINE
EG	EXIST GROUND
FG	FINISHED GRADE
TW	TOP OF WALL
BW	BOTTOM OF WALL
IE	INVERT ELEVATION
<0.00%	DIRECTION OF DRAINAGE
(00.00)	EXISTING ELEVATION
00.00 TBC	PROPOSED ELEVATION
4808	EXISTING CONTOUR

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

REGISTERED PROFESSIONAL ENGINEER — No. 270393 — DAVID W. PETERSON — STATE OF UTAH — 1/20/21

BENCH MARK

SOUTH QUARTER CORNER, SECTION 14, TOWNSHIP 5 SOUTH, RANGE 1 EAST, SALT LAKE BASE AND MERIDIAN
ELEVATION = 4594.27 (NGVD 29 DATUM)

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P: (801) 756-4504; david@excelcivil.com

KING & MCCLEARY PAYROLL SERVICES
AMERICAN FORK 230 W. MAIN ST. UTAH

Drawn by: D.W.P.
Designed by: D.W.P.
Checked by: D.W.P.

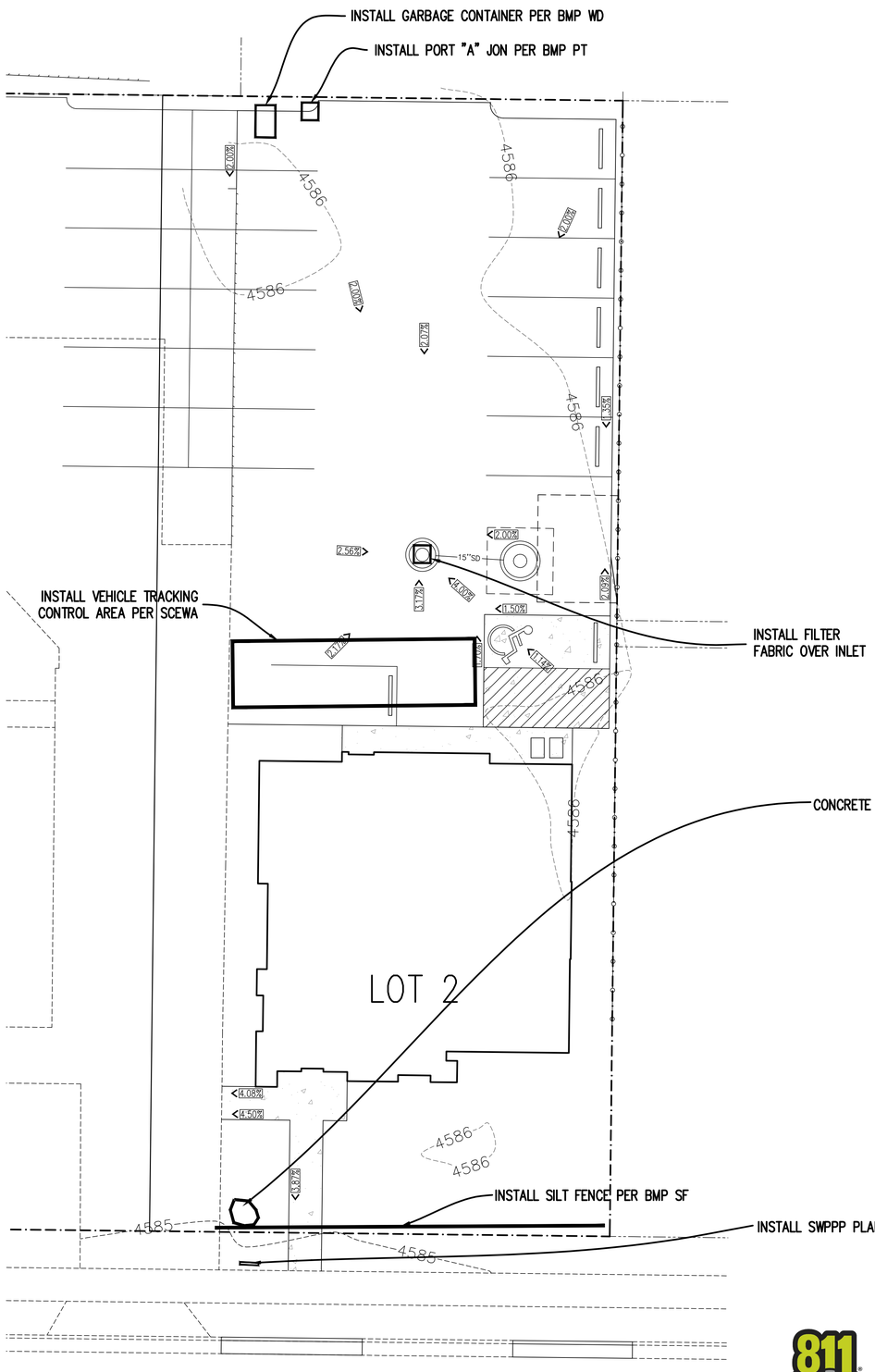
GRADING & DRAINAGE PLAN

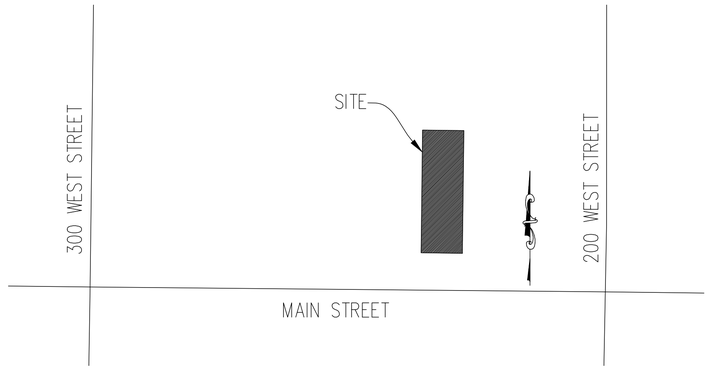
Scale: 1"=10'
Date: 10/30/20
C4

KING & MCCLEARY PAYROLL SERVICES

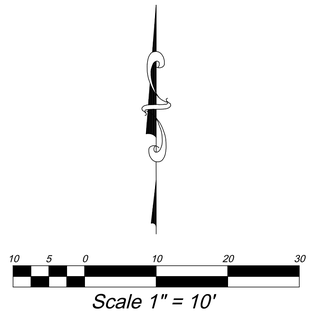
ADDRESS: 230 WEST MAIN STREET

LOCATED IN THE SOUTHWEST QUARTER
OF SECTION 14, TOWNSHIP 5 SOUTH, RANGE 1 EAST,
SALT LAKE BASE AND MERIDIAN
AMERICAN FORK, UTAH COUNTY, UTAH





VICINITY PLAN



SWPPP CONTACT LIST:

COMPANY	CONTACT	PHONE
AF STORM DRAIN SEWER	Ashton Hardy	(801) 404 6162
AF STORM WATER INSPECTOR	Harlan Nielson	(801) 404 6361
AF FLOOD IRRIGATION COMPANY	Ernie Johns	(801) 756 6626
TIMPANOGOS SPECIAL SERVICE DISTRICT	Jon Adams	(801) 756 5231
LEHI CITY SEWER & WATER	Lee Barnes	(801) 836 1036
MITCHELL HOLLOW IRRIGATION	Jeff Mitchell	(801) 367 9026

SITE OPERATOR IS RESPONSIBLE FOR THE FOLLOWING:

1. SUBMITTING A NOTICE OF INTENT (NOI) TO THE UTAH STATE DIVISION OF WATER QUALITY. A COPY OF THE NOI MUST BE SUBMITTED TO AMERICAN FORK CITY.
2. SUBMITTING A SWPPP DOCUMENT TO AMERICAN FOR CITY FOR APPROVAL BEFORE CONSTRUCTION.
3. OBTAIN A LAND DISTURBANCE PERMIT FROM AMERICAN FORK CITY AT LEAST 15 DAYS PRIOR TO CONSTRUCTION.

SWMP CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

REGISTERED PROFESSIONAL ENGINEER
1/20/21
No. 270393
DAVID W. PETERSON
STATE OF UTAH

PE STAMP, SIGN AND DATE

SWPPP Storm Water Pollution Prevention Plan

A Utah Pollutant Discharge Elimination System (UPDES) permit covers this construction site, If any Non-Storm water discharge or severe vehicle tracking occurs please call 420-1272.

Project Name: 123abc

SWPPP Location: ABC Company Construction Trailer
100 W Center

SWPPP Contact: John Doe
XYZ Environmental
801-111-2233

MINIMUM SIGN DIMENSION = 4'X4'

NOI 8.5"x 11"

NOI 8.5"x 11"

SWPPP Drawing 17"x 22"

C-VALUE BEFORE CONSTRUCTION = 0.58
C-VALUE AFTER CONSTRUCTION = 0.81

PERCOLATION RATE: 1 MINUTE PER INCH

DISTURBED AREA = 0.165 ACRES

NOTE: CIVIL ENGINEER ACCEPTS NO RESPONSIBILITY FOR THE IMPLEMENTATION OF THIS PLAN DURING CONSTRUCTION. SUCH RESPONSIBILITY IS SOLELY THE CONTRACTOR'S.

EROSION CONTROL NOTES:

1. INSTALL VEHICLE TRACKING CONTROL AREA. PER SCEWA
2. INSTALL SILT FENCE. SEE BMP SF
3. INSTALL CONCRETE WASH OUT AREA. SEE BMP CWM
4. INSTALL FILTER FABRIC UNDER INSTALLED INLET.
5. INSTALL GARBAGE CONTAINER. SEE BMP WD
6. INSTALL PORTABLE TOILET. SEE BMP PT
7. CONTRACTOR WILL BE RESPONSIBLE FOR THE IMPLEMENTATION AND MAINTENANCE OF BMP'S DURING CONSTRUCTION.
8. CONTRACTOR TO WATER SITE AT LEAST WEEKLY OR MORE FREQUENTLY AS NEEDED TO CONTROL DUST POLLUTION.
9. SWEEP STREET AND PARKING LOT. SEE BMPS DC & PLSV
10. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE IMPLEMENTATION OF THE BMP'S. CONTACT DEVELOPER FOR CONTRACTOR INFORMATION.

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

BENCH MARK

SOUTH QUARTER CORNER, SECTION 14, TOWNSHIP 5 SOUTH, RANGE 1 EAST, SALT LAKE BASE AND MERIDIAN ELEVATION = 4594.27 (NGVD 29 DATUM)

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P. (801) 756-4504; david@excelcivil.com

KING & MCCLEARY PAYROLL SERVICES
AMERICAN FORK 230 W. MAIN ST. UTAH

Drawn by:	Scale:
D.W.P.	1"=10'
Designed by: D.W.P.	Date: 10/30/20
Checked by: D.W.P.	C4

EROSION CONTROL PLAN

BMP: Dust Controls — DC



Description:
Dust control measures are used to stabilize soil from wind erosion, and reduce dust by construction activities.

Application:
Dust control is useful in any process area, loading and unloading area, material handling areas, and transfer areas where dust is generated. Street sweeping is limited to areas that are paved.

Installation/Application Criteria:
- Two kinds of street sweepers are common; brush and vacuum. Vacuum sweepers are more efficient and work best when the area is dry.
- Mechanical equipment should be operated according to the manufacturers' recommendations and should be inspected regularly.
- Water may be sprayed on the ground surface to moisten dry soils, making it less susceptible to wind erosion.

Limitations:
- Street sweeping is labor and equipment intensive and may not be effective for al pollutants.
- Water sprayed from water trucks must be done at a rate such that the water is absorbed in the soil; if excessive amounts of water are used, it may run off, carrying soil with it.

Maintenance:
If excess water results from water spraying, dust-contaminated waters should not be allowed to run off site. Areas may need to be resprayed to keep dust from spreading.

Objectives
- ☒ Housekeeping Practices
- ☐ Contain Waste
- ☒ Minimize Disturbed Areas
- ☒ Stabilize Disturbed Areas
- ☐ Protect Slopes/Channels
- ☐ Control Site Perimeter
- ☐ Control Internal Erosion

Adapted from Salt Lake County BMP Fact Sheet

Targeted Pollutants
- ■ Sediment
- ☐ Nutrients
- ☐ Toxic Materials
- ☐ Oil & Grease
- ☐ Floatable Materials
- ☐ Other Waste

- ■ High Impact
- ☒ Medium Impact
- ☐ Low or Unknown Impact

Implementation Requirements
- ☒ Capital Costs
- ☐ O&M Costs
- ☒ Maintenance
- ☒ Training

■ High ☒ Medium ☐ Low

BMP: Parking Lot Sweeping/Vacuuming — PLSV



Description:
Reduce the discharges of pollutants to stormwater from parking lot surfaces by conducting parking lot cleaning on a regular basis.

Approach:
- Restrict parking prior to and during sweeping.
- Establish frequency of sweeping based on anticipated need and observations of debris or sediment accumulation
- Increase sweeping frequency just before the rainy season.
- Lots that generate greater amounts of debris or sediment must be swept more frequently. These include lots associated with or adjacent to recreational, commercial, or industrial areas, or other areas of high vehicle or pedestrian traffic.
- Manually remove debris from corners or other areas of the parking lot that equipment cannot reach.
- Keep accurate operation logs to track programs.
- Equipment selection can be key for this particular BMP. There are two types used, the mechanical broom sweepers (more effective at picking up large debris and cleaning wet streets), and the vacuum sweepers (more effective at removing fine particles and associated heavy metals). It may be useful to have the ability to use both kinds.

Limitations:
- Conventional sweepers are not able to remove oil and grease.
- Mechanical sweepers are not effective at removing finer sediments.
- Effectiveness may also be limited by parking lot conditions, presence of parked vehicles, presence of construction projects, climatic conditions and condition of curbs.

Maintenance:
- Acquisition and maintenance of equipment is generally handled by the company hired to perform the sweeping/vacuuming.

Program Elements
- ☐ New Development
- ☐ Residential
- ☒ Commercial Activities
- ☒ Industrial Activities
- ☒ Municipal Facilities
- ☒ Illegal Discharges

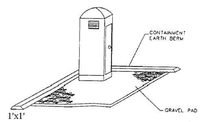
Targeted Pollutants
- ■ Sediment
- ■ Nutrients
- ☒ Heavy Metals
- ☒ Toxic Materials
- ■ Oxygen Demanding Substances
- ☐ Oil & Grease
- ☒ Floatable Materials
- ☐ Bacteria & Viruses

- ■ High Impact
- ☒ Medium Impact
- ☐ Low or Unknown Impact

Implementation Requirements
- ☐ Capital Costs
- ☒ O&M Costs
- ☐ Regulatory
- ☐ Training
- ☐ Staffing
- ☒ Administrative

■ High ☒ Medium ☐ Low

BMP: Portable Toilets — PT



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.
- Stake toilets to prevent them from tipping.

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.

Objectives
- ☒ Housekeeping Practices
- ☒ Contain Waste
- ☐ Minimize Disturbed Areas
- ☐ Stabilize Disturbed Areas
- ☐ Protect Slopes/Channels
- ☐ Control Site Perimeter
- ☐ Control Internal Erosion

Adapted from Salt Lake County BMP Fact Sheet

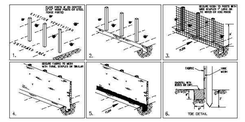
Targeted Pollutants
- ☐ Sediment
- ☐ Nutrients
- ☐ Toxic Materials
- ☐ Oil & Grease
- ☐ Floatable Materials
- ■ Other Waste

- ■ High Impact
- ☒ Medium Impact
- ☐ Low or Unknown Impact

Implementation Requirements
- ☒ Capital Costs
- ☒ O&M Costs
- ☒ Maintenance
- ☐ Training

■ High ☒ Medium ☐ Low

BMP: Silt Fence — SF



Description:
A temporary sediment barrier consisting of entrenched filter fabric stretched across and secured to supporting posts.

Application:
- Perimeter control: place barrier at downgradient limits of disturbance
- Sediment barrier: place barrier at toe of slope or soil stockpile
- Protection of existing waterways: place barrier near top of stream bank
- Inlet protection: place fence surrounding catchbasins

Installation/Application Criteria:
- Place posts 6 feet apart on center along contour (or use preassembled unit) and drive 2 feet minimum into ground. Excavate an anchor trench immediately upgradient of posts.
- Secure wire mesh (14 gage min. With 6 inch openings) to upslope side of posts. Attach with heavy duty 1 inch long wire staples, tie wires or hog rings.
- Cut fabric to required width, unroll along length of barrier and drape over barrier. Secure fabric to mesh with twine, staples, or similar, with trailing edge extending into anchor trench.
- Backfill trench over filter fabric to anchor.

Limitations:
- Recommended maximum drainage area of 0.5 acre per 100 feet of fence
- Recommended maximum upgradient slope length of 150 feet
- Recommended maximum uphill grade of 2:1 (50%)
- Recommended maximum flow rate of 0.5 cfs
- Ponding should not be allowed behind fence

Maintenance:
- Inspect immediately after any rainfall and at least daily during prolonged rainfall.
- Look for runoff bypassing ends of barriers or undercutting barriers.
- Repair or replace damaged areas of the barrier and remove accumulated sediment.
- Reanchor fence as necessary to prevent shortcutting.
- Remove accumulated sediment when it reaches ½ the height of the fence.

Objectives
- ☐ Housekeeping Practices
- ☐ Contain Waste
- ☐ Minimize Disturbed Areas
- ☐ Stabilize Disturbed Areas
- ☒ Protect Slopes/Channels
- ☒ Control Site Perimeter
- ☒ Control Internal Erosion

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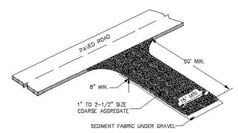
Targeted Pollutants
- ■ Sediment
- ☐ Nutrients
- ☐ Toxic Materials
- ☐ Oil & Grease
- ☐ Floatable Materials
- ☐ Other Waste

- ■ High Impact
- ☒ Medium Impact
- ☐ Low or Unknown Impact

Implementation Requirements
- ☒ Capital Costs
- ☒ O&M Costs
- ☒ Maintenance
- ☐ Training

■ High ☒ Medium ☐ Low

BMP: Stabilized Construction Entrance and Wash Area — SCEWA



Description:
A stabilized pad of crushed stone located where construction traffic enters or leaves the site from or to paved surface. The area can be used to spray off vehicles before they leave the site.

Applications:
At any point of ingress or egress at a construction site where adjacent traveled way is paved. Generally applies to sites over 2 acres unless special conditions exist.

Installation/Application Criteria:
- Clear and grub area and grade to provide maximum slope of 2%.
- Compact subgrade and place filter fabric if desired (recommended for entrances to remain for more than 3 months).
- Place coarse aggregate, 1 to 2-1/2 inches in size, to a minimum depth of 8 inches.
- Provide water to the area that can be used to spray off vehicles as needed to prevent the tracking of mud off of the construction site. This may not be needed during dry periods of work, but is needed when construction is proceeding under wet conditions.
- Provide berming as needed to prevent sediment laden wash water from entering storm water facilities or other water bodies, or leaving the site.

Limitations:
- Requires periodic top dressing with additional stones.
- Should be used in conjunction with street sweeping on adjacent public right-of-way.
- Must be situated such that waste water does not run off site.

Maintenance:
- Inspect daily for loss of gravel or sediment buildup.
- Inspect adjacent roadway for sediment deposit and clean by shoveling and sweeping.
- Repair entrance and replace gravel as required to maintain control in good working condition.
- Expand stabilized area as required to accommodate traffic and prevent erosion at driveways.

Objectives
- ☒ Housekeeping Practices
- ☐ Contain Waste
- ☐ Minimize Disturbed Areas
- ☐ Stabilize Disturbed Areas
- ☐ Protect Slopes/Channels
- ☒ Control Site Perimeter
- ☐ Control Internal Erosion

Adapted from Salt Lake County BMP Fact Sheet

Targeted Pollutants
- ■ Sediment
- ☐ Nutrients
- ☐ Toxic Materials
- ☐ Oil & Grease
- ☐ Floatable Materials
- ☐ Other Waste

- ■ High Impact
- ☒ Medium Impact
- ☐ Low or Unknown Impact

Implementation Requirements
- ☒ Capital Costs
- ☒ O&M Costs
- ☒ Maintenance
- ☐ Training

■ High ☒ Medium ☐ Low

BMP: BMP Inspection and Maintenance — BMPIM



Description:
Inspect and maintain all structural BMP's (both existing and new) on a routine basis to remove pollutants from entering storm drain inlets. This includes the establishment of a schedule for inspections and maintenance.

Approach:
Regular maintenance of all structural BMP's is necessary to ensure their proper functionality.
- Annual inspections.
- Prioritize maintenance to clean, maintain, and repair or replace structures in areas beginning with the highest pollutant loading.
- Clean structural BMP's in high pollutant areas just before the wet season to remove sediments and debris accumulated during the summer and fall.
- Keep accurate logs of what structures were maintained and when they were maintained.
- Record the amount of waste collected.

Limitations:
- Availability of trained staff

Applications
- ☐ Manufacturing
- ☒ Material Handling
- ☒ Vehicle Maintenance
- ☐ Construction
- ☐ Commercial Activities
- ☐ Roadways
- ☒ Waste Containment
- ☒ Housekeeping Practices

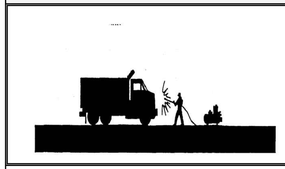
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- ■ Nutrients
- ☐ Heavy Metals
- ■ Toxic Materials
- ☐ Oxygen Demanding Substances
- ■ Oil & Grease
- ■ Floatable Materials
- ☐ Bacteria & Viruses

- ■ High Impact
- ☒ Medium Impact
- ☐ Low or Unknown Impact

Implementation Requirements
- ■ Capital Costs
- ■ O&M Costs
- ☒ Maintenance
- ☒ Staffing
- ☐ Training
- ☐ Administrative

■ High ☒ Medium ☐ Low

BMP: Vehicle And Equipment Cleaning — VEC



Description:
Prevent or reduce the discharge of pollutants to storm water from vehicle and equipment cleaning by using off-site facilities, washing in designated, contained areas only, eliminating discharges to the storm drain by infiltrating or recycling the wash water, and/or training employees and subcontractors.

Installation/Application:
- Use off-site commercial washing businesses as much as possible. Washing vehicles and equipment outdoors or in areas where wash water flows onto paved surfaces or into drainage pathways can pollute storm water. If you wash a large number of vehicles or pieces of equipment, consider conducting this work at an off-site commercial business. These businesses are better equipped to handle and dispose of the wash waters properly. Performing this work off-site can also be economical by eliminating the need for a separate washing operation at your site.
- If washing must occur on-site, use designated, bermed wash areas to prevent wash water contact with storm water, creeks, rivers, and other water bodies. The wash area can be sloped for wash water collection and subsequent infiltration into the ground.
- Use as little water as possible to avoid having to install erosion and sediment controls for the wash area. Use phosphate-free biodegradable soaps. Educate employees and subcontractors on pollution prevention measures. Do not permit steam cleaning on-site. Steam cleaning can generate significant pollutant concentrations.

Limitations:
- Even phosphate-free, biodegradable soaps have been shown to be toxic to fish before the soap degrades.
- Sending vehicles/equipment off-site should be done in conjunction with Stabilized Construction Entrance.

Maintenance:
- Minimal, some berm repair may be necessary.

Objectives
- ☒ Housekeeping Practices
- ☐ Contain Waste
- ☐ Minimize Disturbed Areas
- ☐ Stabilize Disturbed Areas
- ☐ Protect Slopes/Channels
- ☒ Control Site Perimeter
- ☒ Control Internal Erosion

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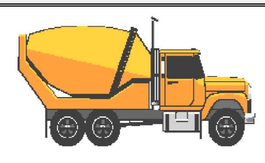
Targeted Pollutants
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- ☐ Nutrients
- ☒ Toxic Materials
- ☒ Oil & Grease
- ☐ Floatable Materials
- ☐ Other Waste

- ■ High Impact
- ☒ Medium Impact
- ☐ Low or Unknown Impact

Implementation Requirements
- ☒ Capital Costs
- ☐ O&M Costs
- ☒ Maintenance
- ☐ Training

■ High ☒ Medium ☐ Low

BMP: Concrete Waste Management — CWM



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.

Objectives
- ☐ Housekeeping Practices
- ☒ Contain Waste
- ☐ Minimize Disturbed Areas
- ☐ Stabilize Disturbed Areas
- ☐ Protect Slopes/Channels
- ☐ Control Site Perimeter
- ☐ Control Internal Erosion

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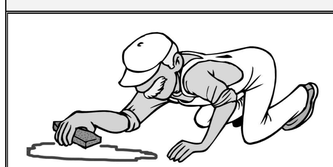
Targeted Pollutants
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- ☐ Nutrients
- ☐ Toxic Materials
- ☐ Oil & Grease
- ☐ Floatable Materials
- ☒ Other Waste

- ■ High Impact
- ☒ Medium Impact
- ☐ Low or Unknown Impact

Implementation Requirements
- ☐ Capital Costs
- ☐ O&M Costs
- ☒ Maintenance
- ☒ Training

■ High ☒ Medium ☐ Low

BMP: Spill Clean-Up — SCU



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 #801-536-4100) for any spill of reportable quantity.

Objectives
- ☒ Housekeeping Practices
- ☒ Contain Waste
- ☐ Minimize Disturbed Areas
- ☐ Stabilize Disturbed Areas
- ☐ Protect Slopes/Channels
- ☐ Control Site Perimeter
- ☐ Control Internal Erosion

Adapted from Salt Lake County BMP Fact Sheet

Targeted Pollutants
- ☐ Sediment
- ☐ Nutrients
- ■ Toxic Materials
- ☒ Oil & Grease
- ☐ Floatable Materials
- ☐ Other Waste

- ■ High Impact
- ☒ Medium Impact
- ☐ Low or Unknown Impact

Implementation Requirements
- ☒ Capital Costs
- ☐ O&M Costs
- ☐ Maintenance
- ■ Training

■ High ☒ Medium ☐ Low

REGISTERED PROFESSIONAL ENGINEER
10/20/20
No. 270393
DAVID W. PETERSON
STATE OF UTAH

Developer: King & McCleary, LLC
240 W. Main Street, American Fork, UT 84003
801-756-2915

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

KING & MCCLEARY PAYROLL SERVICES
AMERICAN FORK 230 W. MAIN ST. UTAH

Drawn by: D.W.P.	BMP DETAILS	Scale: NTS
Designed by: D.W.P.		Date: 10/30/20
Checked by: D.W.P.		C5

GENERAL NOTES

1. City of American Fork, A.P.W.A, Utah Chapter and Utah Department of Transportation Construction and Material Specifications, current editions, and any supplements thereto (hereafter referred to as Standard Specifications), shall govern all construction items unless otherwise noted. If a conflict between specifications is found, the more strict specification will apply as decided by the City Engineer. Item Numbers listed refer to City of American Fork Item Numbers unless otherwise noted.
2. The City Engineer will not be responsible for means, methods, procedures, techniques, or sequences of construction that are not specified herein. The City Engineer will not be responsible for safety on the work site, or for failure by the Contractor to perform work according to contract documents.
3. The Developer or Contractor shall be responsible to obtain all necessary permits including but not limited to Road Cut Permits and Notices of Intent (NOI), Building Permits, etc.
4. The Contractor shall notify the City of American Fork, Public Works Department in writing at least 7 working days prior to beginning construction and request a pre-construction meeting. Bond for public improvements and inspection fees must be paid in full prior to requesting a pre-construction meeting.
5. The Contractor shall be solely responsible for complying with all federal, state and local safety requirements including the Occupational Safety and Health Act of 1970. The Contractor shall exercise precaution always for the protection of persons (including employees) and property. It shall also be the sole responsibility of the Contractor to initiate, maintain and supervise all safety requirements, precautions and programs in connection with the work, including the requirements for confined spaces per 29 CFR 1910.146.
6. Following completion of construction of the site improvements and before requesting occupancy, a proof survey shall be provided to the City of American Fork, Public Works Department, that documents "as _ built" elevations, dimensions, slopes and alignments of all elements of this project. The proof survey shall be prepared, signed and submitted by the Professional Engineer who sealed the constructions drawings.
7. The Contractor shall restrict construction activity to public right_of_way and areas defined as permanent and/or temporary construction easements, unless otherwise authorized by the City Engineer.
8. The Contractor shall carefully preserve benchmarks, property corners, reference points, stakes and other survey reference monuments or markers. In cases of willful or careless destruction, the Contractor shall be responsible for restorations. Resetting of markers shall be performed by a License Utah Professional Surveyor as approved by the City Engineer.
9. Non_rubber tired vehicles shall not be moved on or across public streets or highways without the written permission of the City Engineer.
10. The Contractor shall restore all disturbed areas to equal or better condition than existed before construction. Drainage ditches or watercourses that are disturbed by construction shall be restored to the grades and cross_sections that existed before construction.
11. Tracking or spilling mud, dirt or debris upon streets, residential or commercial drives, sidewalks or bike paths is prohibited. Any such occurrence shall be cleaned up immediately by the Contractor at no cost to the City. If the Contractor fails to remove said mud, dirt, debris, or spillage, the City reserves the right to remove these materials and clean affected areas, the cost of which shall be the responsibility of the Contractor.
12. Disposal of excess excavation within Special Flood Hazard Areas (100-year floodplain) must be approved by the City Engineer.
13. All signs, landscaping, structures or other appurtenances within right-of-way disturbed or damaged during construction shall be replaced or repaired to the satisfaction of the City Engineer. The cost of this work shall be the responsibility of the Contractor.
14. All field tile broken or encountered during excavation shall be replaced or repaired and connected to the public storm sewer system as directed by the City Engineer. The cost of this work shall be the responsibility of the Contractor.
15. All precast concrete products shall be inspected at the location of manufacture. Approved precast concrete products will be stamped or have such identification noting that inspection has been conducted by the City of American Fork. Precast concrete products without proof of inspection shall not be approved for installation.
16. All trenches within public right-of-way shall be backfilled according to the approved construction drawings or securely plated during nonworking hours.
17. Trenches outside these areas shall be backfilled or shall be protected by approved temporary fencing or barricades during nonworking hours. Clean up shall follow closely behind the trenching operation.
18. All trees within the construction area not specifically designated for removal shall be preserved, whether shown or not shown on the approved construction drawings. Trees to be preserved shall be protected with high visibility fencing placed a minimum 15 feet from the tree trunk. Trees 6 – inches or greater at DBH (Diameter Breast Height) must be protected with fencing placed at the critical root zone or 15 feet, whichever is greater.
19. Trees not indicated on the approved construction drawings for removal may not be removed without prior approval of the Division of Engineering.
20. Permits to construct in the right-of-way of existing streets must be obtained from the City of American Fork, Public Works Department before commencing construction.
21. The Contractor shall be responsible for the condition of trenches within the right-of-way and public easements for a period of one year from the final acceptance of the work, and shall make any necessary repairs at no cost to the City.
22. Pavements shall be cut in neat, straight lines the full depth of the existing pavement, or as required by the City Engineer.
23. The replacement of driveways, handicapped ramps, sidewalks, bike paths, parking lot pavement, etc. shall be provided according to the approved construction drawings and the City of American Fork standard construction drawings.
24. Any modification to the work shown on drawings must have prior written approval by the City Engineer.
25. Traffic control and other regulatory signs shall comply with the Utah Department of Transportation Traffic Control guidelines and MUTCD Manual, current edition
26. Public street signs shall meet all City of American Fork specifications with lettering colored in white displayed over a green background.
27. Private street signs shall meet all City of American Fork specifications with lettering colored in white displayed over a blue background

UTILITIES

1. The following utilities are known to be located within the limits of this project:

COMPANY		CONTACT	PHONE
CENTURYLINK	– TELEPHONE	Ryan Allred	(385) 223 0084
ROCKY MTN. POWER	– POWER	Teria Walker	(801) 756 1310
COMCAST	– CABLE	Elysia Valdez	(801) 401 3017
QUESTAR GAS	– GAS	Wendy Edwards	(801) 853 8513
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 Nielsen	(801) 763 3060
AMERICAN FORK CITY	– P.I.	Jay Brems	(801) 763 3060
AMERICAN FORK CITY	– PLANNING	Adam Olsen	(801) 763 3000
AMERICAN FORK CITY	– ENGINEERING	Ben Hunter	(801) 763 3060
FIRE MARSHALL	– FIRE DEPT	Mat Sacco	(801) 7633040
FIRE & RESCUE			911

2. The Contractor shall give notice of intent to construct to Blue Stake (telephone number 800-662-4111) at least 2 working days before start of construction.
3. The identity and locations of existing underground utilities in the construction area have been shown on the approved construction drawings as accurately as provided by the owner of the underground utility. The City of American Fork and the City Engineer assumes no responsibility for the accuracy or depths of underground facilities shown on the approved construction drawings. If damage is caused, the Contractor shall be responsible for repair of the same and for any resulting contingent damage.
4. Location, support, protection and restoration of all existing utilities and appurtenances, whether shown or not shown on the approved construction drawings, shall be the responsibility of the Contractor.
5. When unknown or incorrectly located underground utilities are encountered during construction, the Contractor shall immediately notify the owner and the City Engineer.

TRAFFIC CONTROL

1. Traffic control shall be furnished, erected, maintained, and removed by the Contractor according to Utah Department Of Transportation, Traffic Control guidelines or Manual of Uniform Traffic Control Devices, current edition.
2. All traffic lanes of public roadways shall be fully open to traffic from 7:00 AM to 9:00 AM and from 4:00 PM to 6:00 PM unless authorized differently by the City Engineer.
3. At all other hours the Contractor shall maintain minimum one _ lane two _ way traffic. Traffic circulation must be supervised by a Certified Flagger.
4. Steady _ burning, Type "C" lights shall be required on all barricades, drums, and similar traffic control devices in use at night.
5. Access from public roadways to all adjoining properties for existing residents or businesses shall be maintained throughout the duration of the project for mail, public water and sanitary sewer service, and emergency vehicles.
6. The Contractor shall provide a traffic control plan detailing the proposed maintenance of traffic procedures. The traffic control plan must incorporate any traffic control details contained herein.
7. The traffic control plan proposed by the Contractor must be approved by the City Engineer prior to construction.
8. Traffic Control requiring road closures and/ or detouring must be approved by the City Council.

EROSION AND SEDIMENT CONTROL

1. The Contractor or Developer is responsible for submitting a Notice of Intent (NOI) to be reviewed and approved by the Utah DWQ.
2. The NOI must be submitted to DWQ 45 days prior to the start of construction and may entitle coverage under the Utah DWQ General Permit for Storm Water Discharges associated with construction activity. A project location map must be submitted with the NOI.
3. A sediment and erosion control plan must be submitted to the City Engineer for approval if a sediment and erosion control plan has not already been included with the approved construction drawings. This plan must be made available at the project site at all times.
4. A UPDES Storm water Discharge Permit may be required. The Contractor shall be considered the Permittee.
5. The Contractor shall provide sediment control at all points where storm water runoff leaves the site, including waterways, overland sheet flow, and storm sewers.
6. Accepted methods of providing erosion/sediment control include but are not limited to: sediment basins, silt filter fence, aggregate check dams, and temporary ground cover. Hay or straw bales are not permitted.
7. The Contractor shall provide adequate drainage of the work area at all times consistent with erosion control practices.
8. Disturbed areas that will remain un-worked for 30 days or more shall be seeded or protected within seven calendar days of the disturbance.
9. Other sediment controls that are installed shall be maintained until vegetative growth has been established. The Contractor shall be responsible for the removal of all temporary sediment devices at the conclusion of construction but not before growth of permanent ground cover.

WATER LINE

1. All water line materials shall be provided and installed according to current specifications of the City of American Fork, Water Department.
2. All public water pipe with a diameter 3 inches to 8 inches shall be Ductile Iron, Class 53. Public water pipe 12 inches in diameter or larger shall be Ductile Iron, Class 54.
3. Only fire hydrants conforming to City of American Fork standards will be approved for use.
4. Public water lines shall be disinfected by the City of American Fork, Water Department. Requests for water line chlorination shall be made through the City of American Fork, Water Department. The cost for chlorination shall be paid for by the Contractor.
5. All water lines shall be disinfected according to City of American Fork Standard specifications. Special attention is directed to applicable sections of American Water Works Association specification C_651, particularly for flushing (Section 5) and for chlorinating valves and fire hydrants (Section 7).
6. Pressure testing shall be performed in accordance with the City of American Fork, Construction and Material Specifications. When water lines are ready for disinfection, the Contractor shall submit two (2) sets of "as-built" plans, and a letter stating that the water lines have been pressure tested and need to be disinfected, to the City of American Fork, Water Department.
7. The Contractor shall be responsible for all costs associated with the disinfection of all water lines construction per this plan. Pressure testing shall be performed in accordance with the City of American Fork, Construction and Material Specifications.
8. The Contractor shall paint all fire hydrants according to City of American Fork standards. The cost of painting fire hydrants shall be included in the contract unit price for fire hydrants.
9. No water taps or service connections (e.g., to curb stops or meter pits) may be issued until adjacent public water lines serving the construction site have been disinfected by the City of American Fork, Water Department and have been accepted by the Public Works Department.
10. The Contractor shall notify the City of American Fork, Water Department at (801) 763 3060 at least 24 hours before tapping into existing water lines.
11. All water main stationing shall be based on street centerline stationing.
12. All bends, joint deflections and fittings shall be backed with concrete per City of American Fork standards.
13. The Contractor shall give written notice to all affected property owners at least 1 working day but not more than 3 working days prior to any temporary interruption of water service. Interruption of water service shall be minimized and must be approved by the City Engineer.
14. All water lines shall be placed at a minimum depth of 4 feet measured from top of finished grade to top of water line. Water lines shall be set deeper at all points where necessary to clear existing or proposed utility lines or other underground restrictions by a minimum of 18 inches.

SANITARY SEWER

1. Sanitary sewage collection systems shall be constructed in accordance with the rules, regulations, standards and specifications of the City of American Fork, Public Works Department and the Utah Department of Health Code and Regulations.
2. The minimum requirements for sanitary sewer pipe with diameters 15 inches and smaller shall be reinforced concrete pipe ASTM C76 Class 3, or PVC sewer pipe ASTM D3034, SDR 35.
3. Pipe for 6-inch diameter house service lines shall be PVC pipe ASTM D3034, SDR 35. PVC pipe shall not be used at depths greater than 28 feet. Pipe materials and related structures shall be shop tested in accordance with City of American Fork Construction Inspection Division quality control requirements.
4. All manhole lids shall be provided with continuous self_sealing gaskets.
5. The approved construction drawings shall show where bolt_down lids are required.
6. Sanitary sewer manholes shall be precast concrete or as approved by the City Engineer and conform to the City of American Fork sanitary manhole standard drawing. Manhole lids shall include the word SEWER.
7. All PVC sewer pipes shall be deflection tested no less than 60 days after completion of backfilling operations.
7. At the determination of the City Engineer, the Contractor may be required to perform a TV inspection of the sanitary sewer system prior to final acceptance by the City. This work shall be completed by the Contractor at his expense.
8. Visible leaks or other defects observed or discovered during TV inspection shall be repaired to the satisfaction of the Engineer.
9. Roof drains, foundation drains, field tile or other clean water connections to the sanitary sewer system are strictly prohibited according to the American Fork Code of Ordinances.
10. All water lines shall be located at least 10 feet horizontally and 18 inches vertically, from sanitary sewers and storm sewers, to the greatest extent practicable.
11. Where sanitary sewers cross water mains or other sewers or other utilities, trench backfill shall be placed between the pipes crossing and shall be compacted granular material according to the city Standard Specifications. In the event that a water line must cross within 18 inches of a sanitary sewer, the sanitary sewer shall be concrete encased or consist of ductile iron pipe material.
12. Existing sanitary sewer flows shall be maintained at all times. Costs for pumping and bypassing shall be included in the Contractor's unit price bid for the related items.
13. The Contractor shall furnish all material, equipment, and labor to make connections to existing manholes.
14. All sewer lines shall be placed at a minimum depth of 4 feet measured from top of finished grade to top of sewer line.

STORM SEWER

1. All storm water detention and retention areas and major flood routing swales shall be constructed to finish grade and hydro _ seeded and hydro _ mulched according to the City of American Fork Standard Specifications.
2. Where private storm sewers connect to public storm sewers, the last run of private storm sewer connecting to the public storm sewer shall be Reinforced Concrete Pipe conforming to ASTM Designation C76, Wall B, Class IV for pipe diameters 12 inches to 15 inches, Class III for 18 inches to 24 inch pipes, and 27 inches and larger pipe shall be Class II, unless otherwise shown on the approved construction drawings.
3. Granular backfill shall be compacted granular material according to American Fork City Standard Specifications.
4. All public storm sewers shall be Reinforced Concrete Pipe conforming to ASTM Designation C76, Wall B, Class IV for pipe diameters 12 inches to 15 inches, Class III for 18 inches to 24 inch pipes, and 27 inches and larger pipe shall be Class II, unless otherwise shown on the approved construction drawings.
5. Headwalls and end walls shall be required at all storm sewer inlets or outlets to and from storm water management facilities. Natural stone and/or brick approved by the City Engineer shall be provided on all visible headwalls and/or end walls surfaces.
6. Storm inlets or catch basins shall be channelized and have bicycle safe grates. Manhole lids shall include the word STORM.
7. Storm sewer outlets greater than 18 inches in diameter accessible from storm water management facilities or watercourses shall be provided with safety grates, as approved by the City Engineer.

STRIPING AND SIGNING

1. All striping must be done following Utah Department of Transportation guidelines and MUTCD Manual recommendations, current edition.
2. All signing must be done following MUTCD Manual recommendations, current edition.
3. Only sand-blasting is allowed for removal of existing striping.
4. Contractor is responsible for removal of conflicting existing striping.
5. Materials used for striping must comply with the Utah Department of Transportation standard specifications.

MAIL DELIVERY

1. The Contractor shall be responsible to ensure that US Mail delivery within the project limits is not disrupted by construction operations.
2. This responsibility is limited to relocation of mailboxes to a temporary location that will allow the completion of the work and shall also include the restoration of mailboxes to their original location or approved new location.
3. Any relocation of mailbox services must be first coordinated with the US Postal Service and the homeowner.
4. Before relocating any mailboxes, the Contractor shall contact the U.S. Postal Service and relocate mailboxes according to the requirements of the Postal Service.

USE OF FIRE HYDRANTS

1. The Contractor shall make proper arrangements with the American Fork City, Water Department for the use of fire hydrants when used for work performed under this project's approval.

PRESSURIZED IRRIGATION LINE

1. All Pressurized irrigation line materials shall be provided and installed according to current specifications of the City of American Fork, PI Department.
2. All pressurized irrigation pipe with a diameter 3 inches to 12 inches shall be C900 PVC purple pipe.
3. Pressure testing shall be performed in accordance with the City of American Fork, Construction and Material Specifications. The Contractor shall submit two (2) sets of "as-built" plans, and a letter stating that the lines have been pressure tested addressed to the City of American Fork, PI Department.
4. The Contractor shall notify the City of American Fork, PI Department at (801) 404-6129 Jay Brems at least 24 hours before tapping into existing water lines.
5. All pressurized irrigation line stationing shall be based on street centerline stationing.
6. All bends, joint deflections and fittings shall be backed with concrete per City of American Fork standards.
7. 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 pressurized irrigation service. Interruption of pressurized irrigation service shall be minimized and must be approved by the City Engineer.
8. All water lines shall be placed at a minimum depth of 2 feet measured from top of finished grade to top of pressurized irrigation line. Pressurized irrigation 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.

REGISTERED PROFESSIONAL ENGINEER
1/20/21
No. 270393
DAVID W. PETERSON
STATE OF UTAH

Developer: King & McCleary, LLC
240 W. Main Street, American Fork, UT 84003
801-756-2915

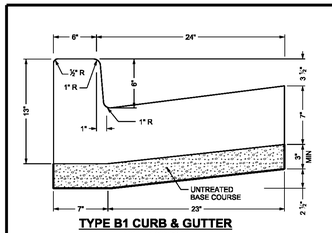
EXCEL ENGINEERING
David W. Peterson, P.E., License #270393
12 West 100 North, Suite 201, American Fork, UT 84003
P: (801) 756-4504; david@excelcivil.com

KING & MCCLEARY PAYROLL SERVICES
AMERICAN FORK 230 W. MAIN ST. UTAH

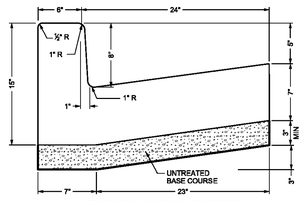
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Designed by:	D.W.P.
Checked by:	D.W.P.
Scale:	NTS
Date:	10/30/20

AMERICAN FORK STANDARD CONSTRUCTION NOTES

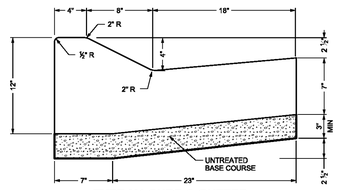
C6



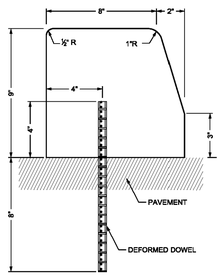
TYPE B1 CURB & GUTTER
AREA = 1.680 SQ FT



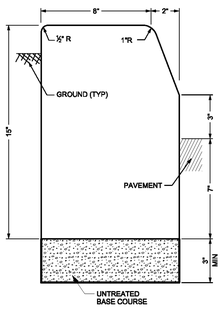
TYPE B2 CURB & GUTTER
AREA = 1.765 SQ FT



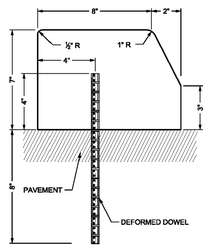
TYPE M1 CURB & GUTTER
AREA = 1.700 SQ FT



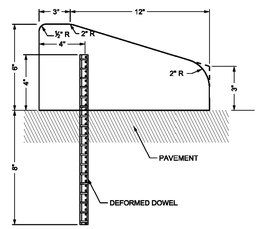
TYPE B3 CURB
AREA = 0.580 SQ FT



TYPE B4 CURB
AREA = 1.033 SQ FT



TYPE B5 CURB
RAISED MEDIAN
AREA = 0.490 SQ FT



TYPE M2 CURB
AREA = 0.484 SQ FT

NOTES:

1. USE ⅞ INCH DEFORMED DOWELS ON 5 FT MAXIMUM CENTERS.
2. PRECAST CURBS:
   A. MINIMUM OF 10 FT IN LENGTH.
   B. DOWELS AT A MINIMUM OF 3 PER 10 FT LENGTH.
   C. INCLUDE ADEQUATE REINFORCING STEEL TO WITHSTAND HANDLING STRESSES.
3. MEASURE CURB HEIGHT VERTICALLY FROM THE FLOW LINE OF THE GUTTER TO TOP BACK OF CURB.
4. REFER TO STD DWG GW 2B FOR CURB AND GUTTER AT ADA ACCESSES.

DESIGN-ONLY NOTES:

A. DRAINAGE CURBS: TYPE B1, B2 & M1.

B. MOUNTABLE CURBS: TYPES M1 & M2. REFER TO THE AASHTO POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS FOR APPLICATION.

C. USE CURBS TYPES B1, B2, B3, B4 & B5 WITH DESIGN SPEED UP TO 40 MPH EXCEPT IN PREDOMINATELY URBAN OR RAPIDLY DEVELOPING RURAL AREAS WHERE CURBS MAY BE USED WITH DESIGN SPEEDS UP TO 50 MPH.

D. USE TYPE B4 ONLY AS BORDER CURB.

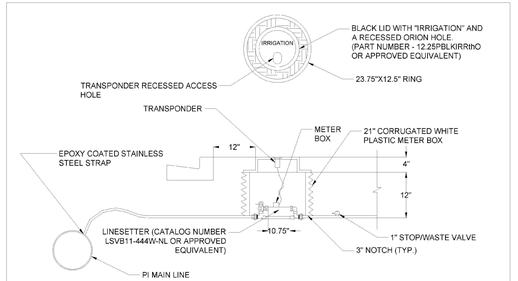
REVISIONS			
NO.	DATE	APPR.	REMARKS

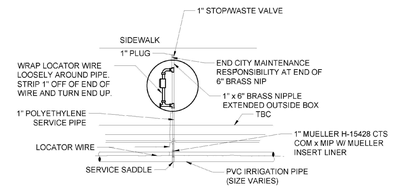
UTAH DEPARTMENT OF TRANSPORTATION
STANDARD DRAWINGS FOR ROAD AND BRIDGE CONSTRUCTION
SALT LAKE CITY, UTAH

RECOMMENDED FOR APPROVAL: Andy L. Hulme — DATE: JAN. 01, 2017
STANDARDS & SPECIFICATIONS ENGINEER
APPROVED: Brent H. Jones — DATE: JAN. 01, 2017
DEPUTY DIRECTOR

CONCRETE CURB AND GUTTER TYPES
STANDARD DRAWING TITLE

STD. DWG. NO.
GW 2A



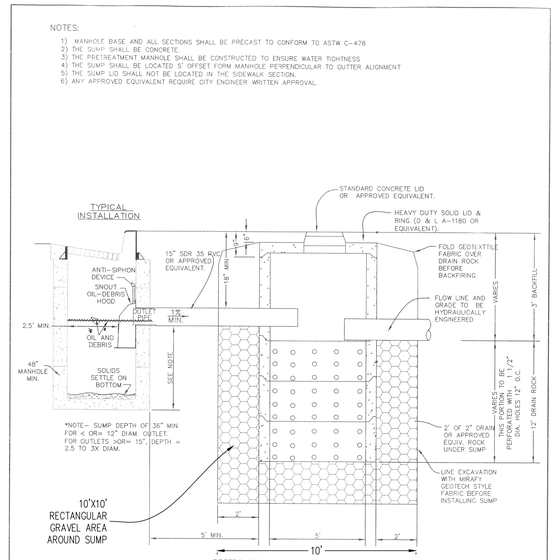


1" PLAN VIEW
NTS

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:	MVJ	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			

NOTES:
1) MANHOLE BASE AND ALL SECTIONS SHALL BE PRECAST TO CONFORM TO ASTM C-478
2) THE SUMP SHALL BE CONCRETE.
3) THE PRETREATMENT MANHOLE SHALL BE CONSTRUCTED TO ENSURE WATER TIGHTNESS
4) THE SUMP SHALL BE LOCATED 5' OFFSET FORM MANHOLE PERPENDICULAR TO GUTTER ALIGNMENT
5) THE SUMP LID SHALL NOT BE LOCATED IN THE SIDEWALK SECTION
6) ANY APPROVED EQUIVALENT REQUIRE CITY ENGINEER WRITTEN APPROVAL.



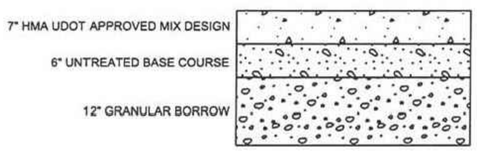
PRETREATMENT MANHOLE AND SUMP DETAIL
-NTS-

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

K:\AMERICAN FORK STANDARDS\Drawings\FINAL\UPDC-TREATMENT SUMP.dwg 05/02/2005 09:09:24 AM MDT

UDOT NOTES

1. UDOT RESERVES THE RIGHT, AT ITS OPTION, TO INSTALL A RAISED MEDIAN ISLAND OR RESTRICT THE ACCESS TO A RIGHT-IN OR RIGHT-OUT AT ANY TIME.
2. WORK ON THE UDOT RIGHT-OF-WAY IS SEASONALLY RESTRICTED FROM OCTOBER 15 TO APRIL 15.
3. ROW WORK: WORK IS NOT ALLOWED ON THE RIGHT-OF-WAY DURING THE AM/PM PEAK TRAFFIC HOURS (6:00-9:00 A.M AND 3:30 - 6:00 P.M.). ADDITIONAL WORK RESTRICTIONS OR MODIFICATIONS MAY BE IMPOSED AT THE TIME OF ENCROACHMENT PERMIT.
4. REPLACE ALL PAVEMENT MARKINGS IN KIND (TAPE WITH TAPE AND PAINT WITH PAINT). INSTALL ALL PAINT LINES WITH PERMANENT PAINT APPLICATION PER UDOT SPECIFICATION 02765. PAINT MUST HAVE AT LEAST 6 MONTHS LIFE AS DETERMINED BY UDOT'S PERMITS OFFICER.
5. ALL NEW PAVEMENT WORDS, ARROWS, AND SYMBOLS MARKING WITHIN THE RIGHT-OF-WAY SHALL BE PRE-FORMED THERMO PLASTIC. ALL LETTERS, ARROWS, AND SYMBOLS SHALL CONFORM WITH THE "STANDARD ALPHABET FOR HIGHWAY SIGNS AND PAVEMENT MARKINGS" ADOPTED BY THE FEDERAL HIGHWAY ADMINISTRATION.
6. ALL SIGNS INSTALLED ON THE UDOT RIGHT-OF-WAY MUST BE HIGH INTENSITY GRADE (TYPE IX SHEETING) WITH B3 SLIP BASE. INSTALL ALL SIGNS PER UDOT SN SERIES STANDARD DRAWINGS.
7. BEFORE COMMENCING WORK ON THE STATE HIGHWAY, THE GENERAL CONTRACTOR IS REQUIRED TO OBTAIN AN ENCROACHMENT PERMIT FROM TEH APPLICABLE REGION'S PERMITS OFFICE BEFORE WORKING WITHIN THE STATE RIGHT-OF-WAY.
8. NO ROAD CUTS ALLOWED ON THIS JOB.
9. FOR ALL UTILITY TAPS (ROAD CUTS), USE FLOWABLE FILL PER UDOT'S CURRENT MIX DESIGN (50-150 PSI) UDOT SPEC. 03575.
10. ALL UTILITIES WITHIN THE PAVED SURFACE MUST BE BORED.
11. FOR EXCAVATIONS OUTSIDE OF THE ROADWAY, BACK FILL WITH UDOT APPROVED GRANULAR BORROW AND ROAD BASE. COMPACTION PER UDOT SPEC. 2056 AND 2721.
12. OWNER, DEVELOPER, AND/OR THE CONTRACTOR IS REQUIRED TO HIRE AN INDEPENDENT COMPANY FOR ALL TESTING WITHIN THE UDOT RIGHT-OF-WAY.
13. OWNER, DEVELOPER, AND THE CONTRACTOR ARE RESPONSIBLE FOR ANY DAMAGE TO THE UDOT RIGHT-OF-WAY THAT MAY BE DIRECTLY OR INDIRECTLY CAUSED BY THE DEVELOPMENT ACTIVITY.
14. TRAFFIC SIGNAL INSTALLATION OR MODIFICATION REQUIRES A SEPARATE WARRANTY BOND ONCE THE WORK HAS BEEN COMPLETED AND ACCEPTED. THE PERMITTEE IS RESPONSIBLE FOR HIRING AN INDEPENDENT INSPECTION COMPANY TO PERFORM INSPECTION SERVICES FOR ALL SIGNAL WORK COMPLETED. FOR A LIST OF THE UDOT APPROVED CONTRACTORS AND CONSULTANTS CONTACT THE APPROPRIATE REGIONS TRAFFIC SIGNALS ENGINEER.
15. PARTIAL CONCRETE PANEL REPLACEMENT IS NOT ALLOWED. WHEN PANELS ARE REMOVED, THE ENTIRE PANEL IS REQUIRED TO BE REPLACED PER UDOT STANDARDS, SPECIFICATIONS, AND STANDARD DRAWINGS.
16. DOUBLE SAW CUT THE CONCRETE TO PREVENT THE SPALLING OF OTHER CONCRETE PANELS AND TO AVOID OTHER CUTS. OVER CUTS AND SPALLS WILL REQUIRE FULL PANEL REPLACEMENT.
17. ALL ABOVE GROUND FEATURES INCLUDING UTILITIES (POLES, FIRE HYDRANTS, BOXES, ETC.) MUST BE RELOCATED OUT OF THE AASHTO CLEAR ZONE OR A MINIMUM OF 18" BEHIND CURB.



PAVEMENT SECTION FOR STATE HIGHWAY
NOTE: ALL MATERIALS TO MEET UDOT SPECIFICATIONS

REGISTERED PROFESSIONAL ENGINEER
12/28/20
No. 270393
DAVID W. PETERSON
STATE OF UTAH

Developer: King & McCleary, LLC
240 W. Main Street, American Fork, UT 84003
801-756-2915

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

KING & MCCLEARY PAYROLL SERVICES
AMERICAN FORK 230 W. MAIN ST. UTAH

Drawn by:	D.W.P.	DETAIL SHEET	Scale: NTS
Designed by:	D.W.P.		Date: 10/30/20
Checked by:	D.W.P.		C7

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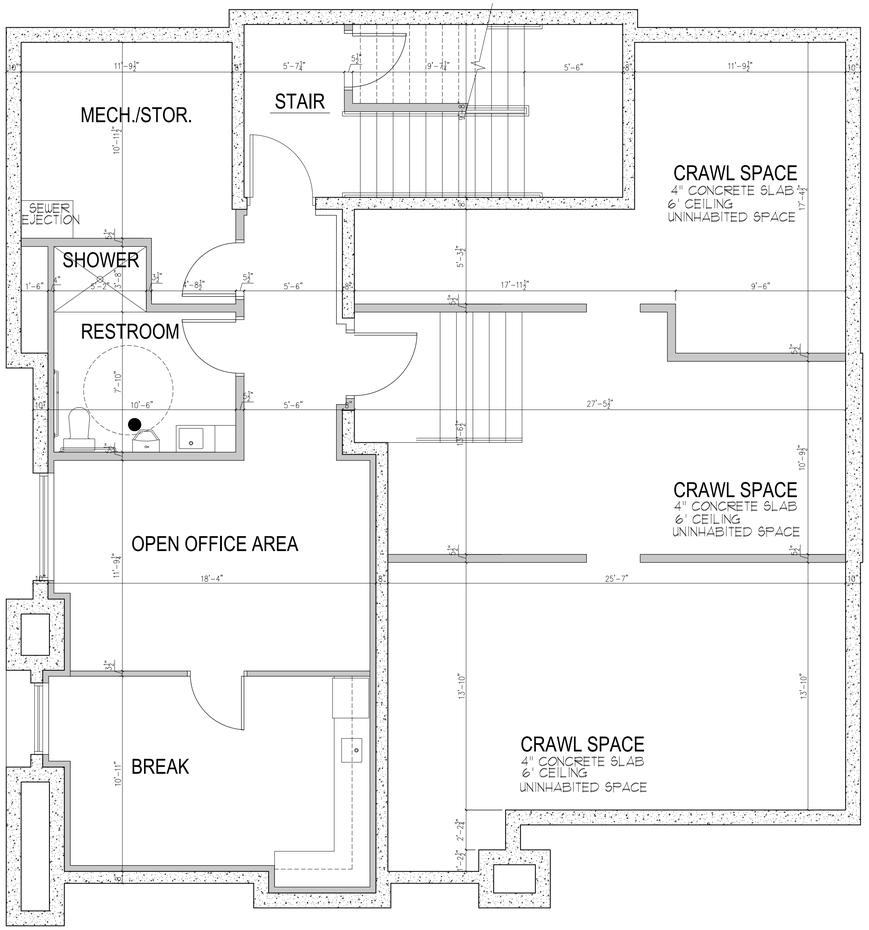
HARRIS ARCHITECTURE

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HARRIS ARCHITECTURE

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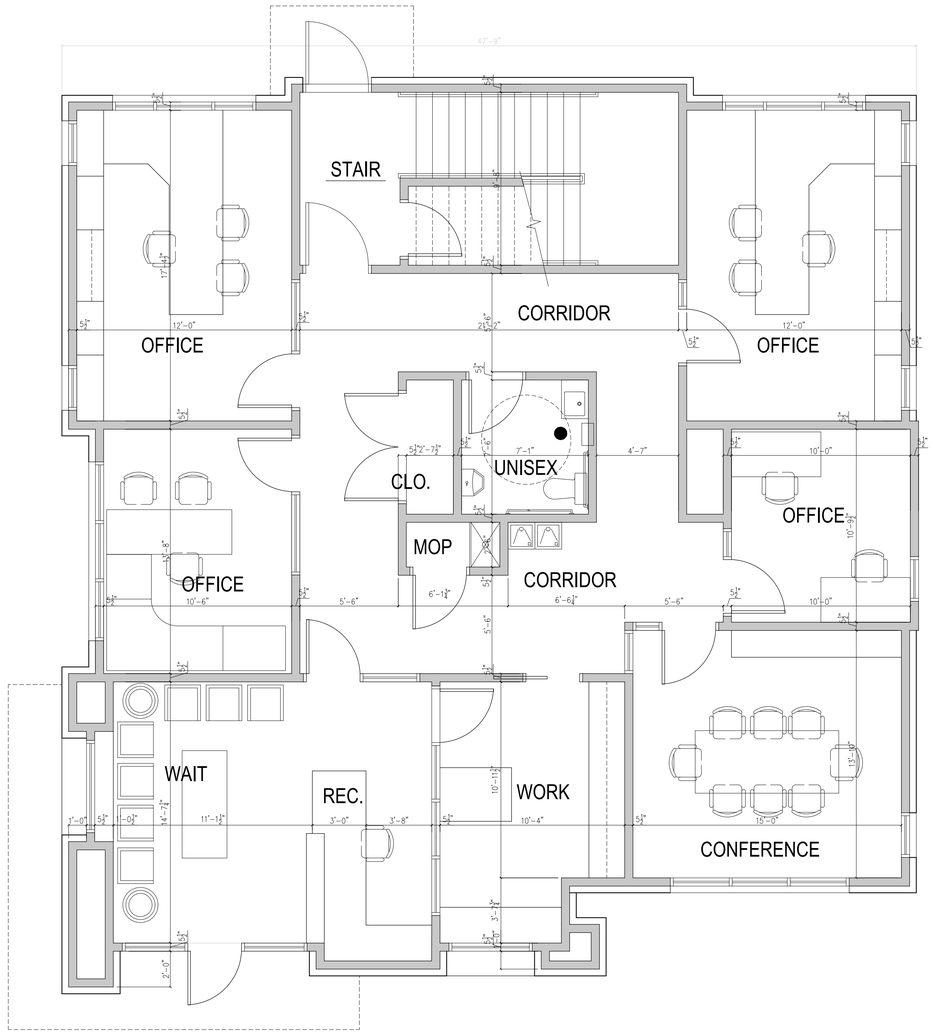
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NORTH

BASEMENT FLOOR PLAN

1/4"=1'-0" 1,090 SF



NORTH

LEVEL 1 FLOOR PLAN

1/4"=1'-0" 2,164 SF

REVISIONS

DRAWN BY

HARRIS ARCHITECTURE
3320 N UNIVERSITY AVENUE #200, PROVO UT 84604 | 801-377-6393 | WWW.HARRIS-ARCHITECTURE.COM

A NEW OFFICE BUILDING IN AMERICAN FORK, UTAH

KING & McCLEARY CPA

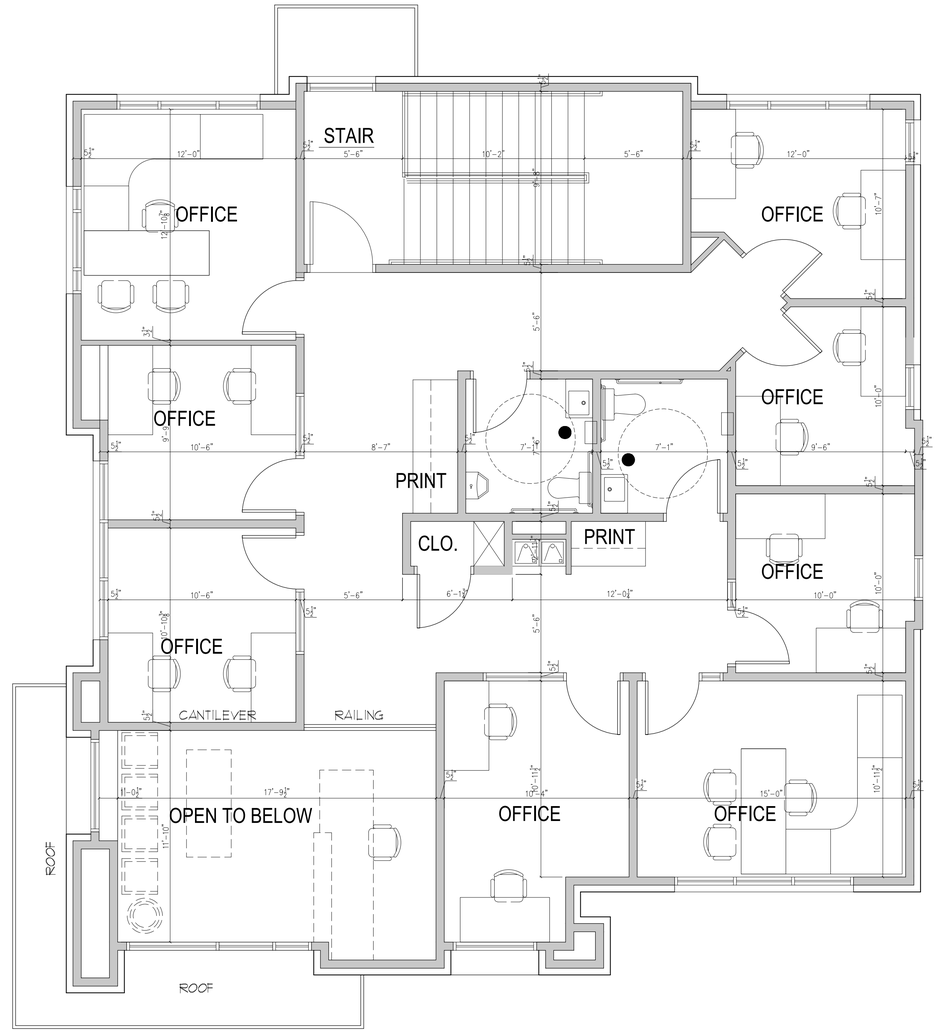
BASEMENT / LEVEL 1 FLOOR PLAN

NOV. 2020

A1.1

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NORTH

LEVEL 2 FLOOR PLAN

1/4" = 1'-0" 1,909 SF

REVISIONS

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A NEW OFFICE BUILDING IN AMERICAN FORK, UTAH

KING & McCLEARY CPA

LEVEL 2 FLOOR PLAN

NOV. 2020

A1.2



SOUTH ELEVATION

1/4"=1'-0"

OPTION A



WEST ELEVATION

1/4"=1'-0"

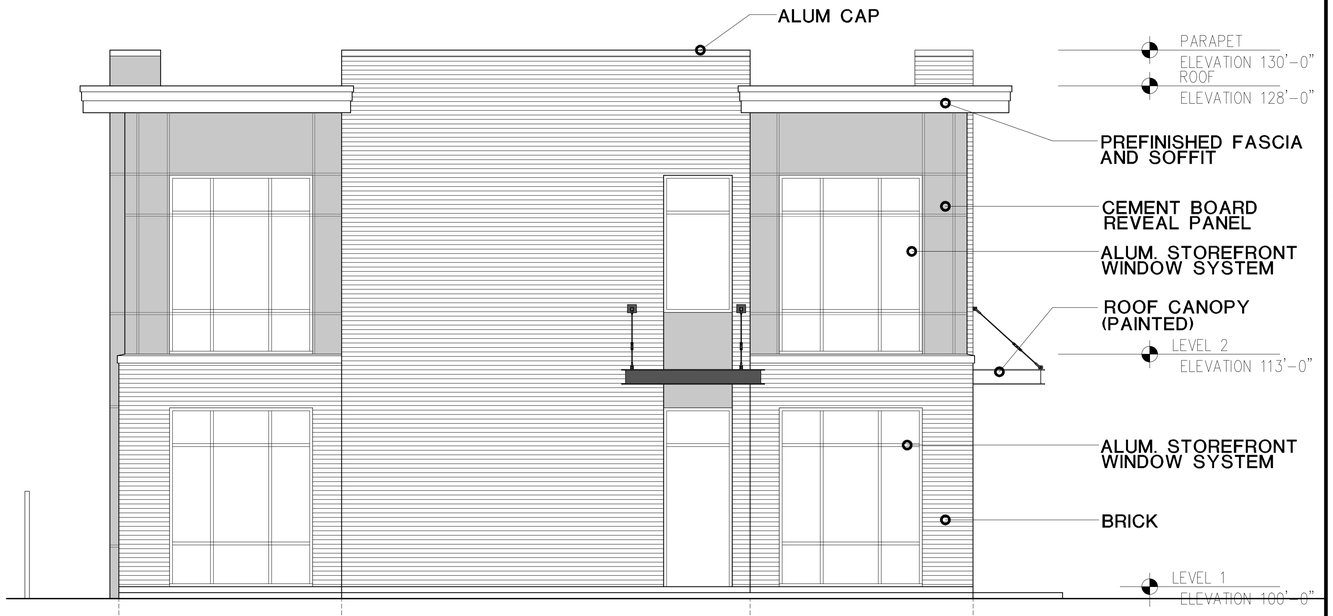
OPTION A



EAST ELEVATION

1/4"=1'-0"

OPTION A



NORTH ELEVATION

1/4"=1'-0"

OPTION A

REVISIONS

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A NEW OFFICE BUILDING IN AMERICAN FORK, UTAH
KING & McCLEARY CPA
ELEVATIONS

NOV. 2020

A1.2

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LANDSCAPE PLAN SPECIFICATIONS

PART 1 - 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. Site Conditions
2. Guarantees
3. Maintenance
4. Soil Amendments
5. Fine Grading
6. Landscape Edging
7. Furnish and Installing Plant
8. Turf Planting
9. Weed Barrier

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 Cerificate 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 75% native soil and 25% 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 Curb 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.

I. Landscape Metal Edging: 5.5" steel edging with 18" dowels into the ground for stabilization.

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 two 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.

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: Sod is to be delivered to the site in good condition. It is to be inspected upon arrival and installed within 24 hours. Sod is to be moist and cool to ensure that decomposition has not begun and is to be free of pests, diseases, or blemishes. The Contractor shall satisfy himself as to the existing conditions prior to any construction. The Contractor shall be fully responsible for furnishing and laying 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 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 in the detail and be lightly watered before laying. 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 ensure that good contact is made between edges and also the ground. If voids or holes are discovered, the sod piece(s) is (are) to be raised and topsoil is to be used to fill in the areas until level. Sod laid on any sloped areas shall be anchored with wooden dowels or other materials which are accepted by the grass sod industry.

F. Sod shall be rolled with a roller that is at least 50% full immediately after installation to ensure the full contact with soil is made.

G. Apply water directly after laying sod. Rainfall is not acceptable.

H. 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.

I. 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.

J. 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. For the health of the soil and the microorganisms, weed barrier is not recommended. If use is required or requested, do not place in annual or grass areas.

B. Cut weed barrier back to the edge of the plant rootball.

C. Overlap rows of fabric min. 6"

D. Stable fabric edges and overlaps to ground.

END OF SECTION

LANDSCAPE NOTES

INSTALLATION

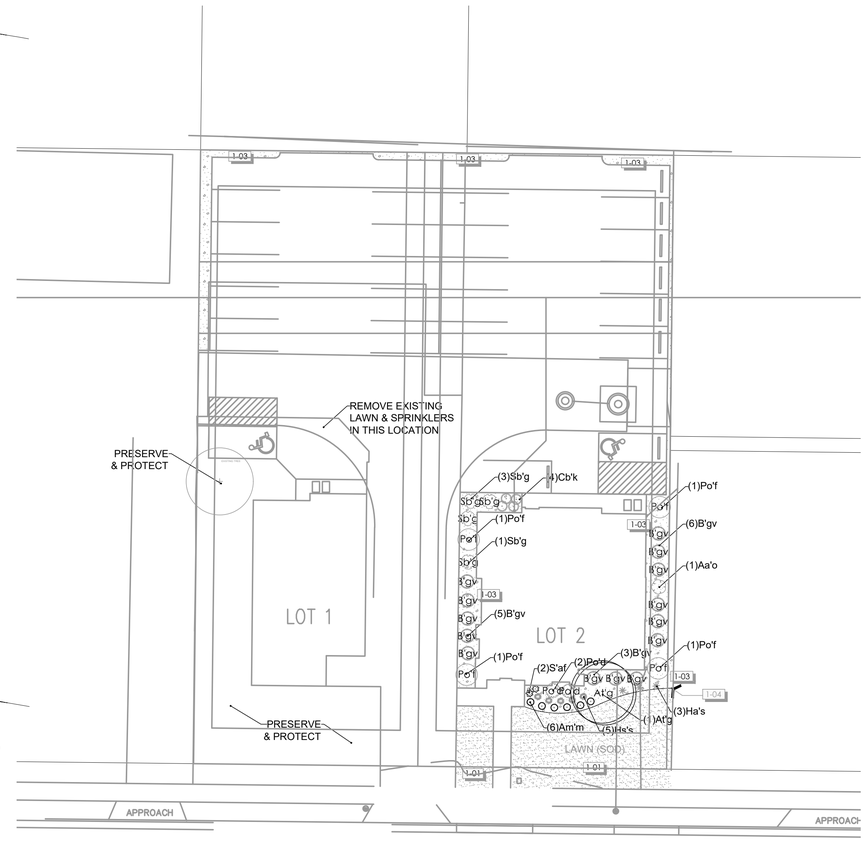
1. LANDSCAPE CONTRACTOR SHALL HAVE ALL UTILITIES BLUE STAKED PRIOR TO DIGGING. ANY DAMAGE TO UTILITIES SHALL BE REPAIRED AT CONTRACTORS EXPENSE WITH NO ADDITIONAL COST TO THE OWNER.
2. DURING THE BIDDING AND INSTALLATION PROCESS, THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR VERIFYING QUANTITIES OF ALL MATERIALS. IF DISCREPANCIES EXIST, THE PLAN SHALL DICTATE QUANTITIES TO BE USED.
3. ALL PLANT MATERIAL SHALL BE PLANTED ACCORDING TO INTERNATIONAL SOCIETY OF ARBORICULTURE (ISA) STANDARDS WITH CONSIDERATION TO INDIVIDUAL SOIL AND SITE CONDITIONS, AND NURSERY CARE AND INSTALLATION INSTRUCTIONS.
4. SELECTED PLANTS WILL BE ACCORDING TO THE PLANT LEGEND. IF SUBSTITUTIONS ARE NECESSARY, PROPOSED LANDSCAPE CHANGES MUST BE SUBMITTED TO THE LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO LAYING SOD.
5. SHOULD THE SITE REQUIRE ADDITIONAL TOPSOIL, REFER TO SOIL TEST WHEN MATCHING EXISTING SOIL. IF A MATCHING SOIL IS NOT LOCATABLE, A 6" DEPTH OF SANDY LOAM TOPSOIL (MIXED PRIOR TO SPREADING WITH 2-3" OF QUALITY COMPOST) CAN BE INCORPORATED INTO THE EXISTING SOIL USING THE FOLLOWING DIRECTIONS: SCARIFY TOP 6" OF EXISTING SUBSOIL AND INCORPORATE 3" OF NEW COMPOST ENRICHED TOPSOIL. SPREAD REMAINING TOPSOIL TO REACH FINISHED GRADE.
6. SOD FOR NEW LAWN AREAS SHALL BE A DROUGHT TOLERANT VARIETY. FINE LEVEL ALL AREAS PRIOR TO LAYING SOD.
7. EDGING, AS INDICATED ON PLAN, IS TO BE INSTALLED BETWEEN ALL LAWN AND PLANTER AREAS. ANY TREES LOCATED IN LAWN MUST HAVE A 4-6' TREE RING OF THE SAME EDGING.
8. IF REQUIRED BY CITY OR OWNER SPECIFIED, DeWitt 5 OZ WEED BARRIER FABRIC TO BE INSTALLED IN ALL PLANTER AREAS EXCEPT UNDER ANNUAL PLANTING AREAS AS SHOWN ON PLAN. WEED BARRIER SHALL BE CUT BACK FROM EACH PLANT TO THE DIAMETER OF THE ROOTBALL.
9. ROCK MULCH (INORGANIC MULCH) TO BE APPLIED 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 (ORGANIC MULCH). NO MULCH SHALL BE PLACED WITHIN 12" OF BASE OF TREE AND 6" WITHIN BASE OF SHRUBS AND PERENNIALS.
10. A NEW UNDERGROUND, AUTOMATIC IRRIGATION SYSTEM IS TO BE INSTALLED BY CONTRACTOR IN ALL LANDSCAPED AREAS. LAWN AREAS TO RECEIVE AT LEAST 100% HEAD TO HEAD COVERAGE AND PLANTER AREAS TO RECEIVE A FULL DRIP SYSTEM TO EACH TREE AND SHRUB. POINT SOURCE DRIP OR IN-LINE DRIP TUBING TO BE SECURED AT EDGE OF ROOTBALL, NOT AGAINST TRUNK. SEE IRRIGATION PLAN.
11. UPON REQUEST, A PLANT GUIDE IS AVAILABLE WITH OUR RECOMMENDATIONS REGARDING WEED BARRIER, PLANT CARE AND MAINTENANCE

INSTALLER RESPONSIBILITIES AND LIABILITIES

1. THESE PLANS ARE FOR BASIC DESIGN LAYOUT AND INFORMATION. LANDSCAPE CONTRACTOR IS REQUIRED TO USE TRADE KNOWLEDGE FOR IMPLEMENTATION. OWNER ASSUMES NO LIABILITIES FOR INADEQUATE ENGINEERING CALCULATIONS, MANUFACTURER PRODUCT DEFECTS, INSTALLATION OF ANY LANDSCAPING AND COMPONENTS, OR TIME EXECUTION.
2. LANDSCAPE CONTRACTOR IS RESPONSIBLE AND LIABLE FOR INSTALLATION OF ALL LANDSCAPING AND IRRIGATION SYSTEMS INCLUDING CODE REQUIREMENTS, TIME EXECUTIONS, INSTALLED PRODUCTS AND MATERIALS.

GRADING AND DRAINAGE REQUIREMENTS

1. AS PER CODE, ALL GRADING IS TO SLOPE AWAY FROM ANY STRUCTURE. SURFACE OF THE GROUND WITHIN 10' FEET OF THE FOUNDATION SHOULD DRAIN AWAY FROM THE STRUCTURE WITH A MINIMUM FALL OF 6"
2. AS PER CODE, FINISHED GRADE WILL NOT DRAIN ON NEIGHBORING PROPERTIES
3. A MINIMUM OF 6" OF FOUNDATION WILL BE LEFT EXPOSED AT ALL CONDITIONS
4. LANDSCAPE CONTRACTOR TO MAINTAIN OR IMPROVE FINAL GRADE AND PROPER DRAINAGE ESTABLISHED BY EXCAVATOR, INCLUDING BUT NOT LIMITED TO ANY MAINTENANCE, PRESERVATION, OR EXAGGERATION OF SLOPES, BERMS, AND SWALES.
5. LANDSCAPE CONTRACTOR IS RESPONSIBLE TO CORRECT ANY DAMAGED OR IMPROPER WATERFLOW OF ALL SWALES, BERMS, OR GRADE
6. DEVICES FOR CHANNELING ROOF RUN-OFF SHOULD BE INSTALLED FOR COLLECTION AND DISCHARGE OF RAINWATER AT A MINIMUM OF 10' FROM THE FOUNDATION, OR BEYOND THE LIMITS OF FOUNDATION WALL BACKFILL; WHICHEVER DISTANCE IS GREATER



PLANT SCHEDULE

DECIDUOUS TREES	CODE	QTY	BOTANICAL / COMMON NAME	CONT	CAL
At'g	At'g	1	Acer tataricum `GarAnn` Hot Wings Tatarian Maple	B & B	2"Cal

DECIDUOUS SHRUBS	CODE	QTY	BOTANICAL / COMMON NAME	CONT
Aa'o	Aa'o	1	Amelanchier alnifolia `Obelisk` TM Standing Ovation Serviceberry	5 gal
Am'm	Am'm	6	Aronia melanocarpa `UCONNAM165` TM Low Scape Mound Chokeberry	5 gal
Po'f	Po'f	4	Physocarpus opulifolius `UMNHarpell` Fireside TM Fireside Ninebark	5 gal
Po'd	Po'd	2	Physocarpus opulifolius First Editions `Donna May` Little Devil Ninebark	5 gal
Sb'g	Sb'g	4	Spiraea betulifolia `Tor Gold` TM Glow Girl Birchleaf Spirea	5 gal

EVERGREEN SHRUBS	CODE	QTY	BOTANICAL / COMMON NAME	CONT
B'gv	B'gv	14	Buxus x `Green Velvet` Green Velvet Boxwood	5 gal

PERENNIALS	CODE	QTY	BOTANICAL / COMMON NAME	CONT
Ha's	Ha's	3	Hymenoxys acaulis `Sundancer` Sundancer Daisy	1 gal
S'af	S'af	2	Sedum x `Autumn Fire` Autumn Fire Sedum	1 gal

GRASSES	CODE	QTY	BOTANICAL / COMMON NAME	CONT
Cb'k	Cb'k	4	Calamagrostis brachytricha Korean Feather Reed Grass	1 gal
Hs's	Hs's	5	Helictotrichon sempervirens `Sapphire` Blue Oat Grass	1 gal

REFERENCE NOTES SCHEDULE KING & MCCLEARY

SYMBOL	1 LANDSCAPE DESCRIPTION	QTY
1-01	SODDED LAWN AREA LAWN AREAS SHALL BE SOD. NEW TURF AREAS TO BE SODDED WITH 18% "BLUESTAR KENTUCKY BLUEGRASS, 19% "MARQUIS" KENTUCKY BLUEGRASS, 17% "NEWPORT" KENTUCKY BLUEGRASS, 17% "TOUCHDOWNY" KENTUCKY BLUEGRASS, 16% "APM PERENNIAL RYEGRASS, 13% "ACCENT PERENNIAL RYEGRASS OR APPROVED EQUAL AT A RATE OF 220 LBS. PER ACRE. FINE LEVEL ALL AREAS PRIOR TO LAYING SOD. ALL LAWN AREAS SHALL BE IRRIGATED WITH 100% COVERAGE BY POP-UP SPRAY HEADS AND GEAR-DRIVEN ROTORS. ALL DECIDUOUS AND CONIFER TREES PLANTED WITHIN SOD AREAS SHALL HAVE A FOUR FOOT(4') DIAMETER TREE RING COVERED WITH CHOCOLATE BROWN BARK MULCH, NO SHREDDED FINES. SUBMIT SAMPLES TO BE APPROVED BY LANDSCAPE ARCHITECT AND OWNER BEFORE INSTALLATION.	1,319 sf
1-03	1" OQUIRRH GRAVEL STONE MULCH 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. PROVIDE 3" DEPTH OF STONE MULCH TOP DRESSING.	1,470 sf
1-04	6" CONCRETE MOW CURB	43 lf

ISSUE DATE	PROJECT NUMBER
1/20/2021	UT20143

NO.	REVISION	DATE
1	XXXX	XX-XX-XX
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' 10' 20' 40' 80'
GRAPHIC SCALE: 1" = 20'

PROJECT INFORMATION

KING AND MCCLEARY
240 W. MAIN ST.
AMERICAN FORK, UTAH

DEVELOPER / PROPERTY OWNER / CLIENT

Developer / Property Owner:
HARRIS ARCHITECTURE
ATT: BRETT HARRIS
801-377-6303
BRETT@HARRIS-ARC.COM

Client / Engineer:
EXCEL ENGINEERING
DAVID W. PETERSON, P.E.
12 West 100 North, SUITE # 201
AMERICAN FORK, UTAH 84003 (801) 756-4504

LANDSCAPE ARCHITECT / PLANNER

PKJ DESIGN GROUP
Landscape Architecture / Planning & Visualization
3450 N. TRIUMPH BLVD. SUITE 102
LEHI, UTAH 84043 (801) 960-2698
www.pkjdesigngroup.com

LICENSE STAMP

LICENSED LANDSCAPE ARCHITECT
ANDRE ARCHIBETH
7317837-5501
01/08/2021
RENEWAL 09-30-22
STATE OF UTAH

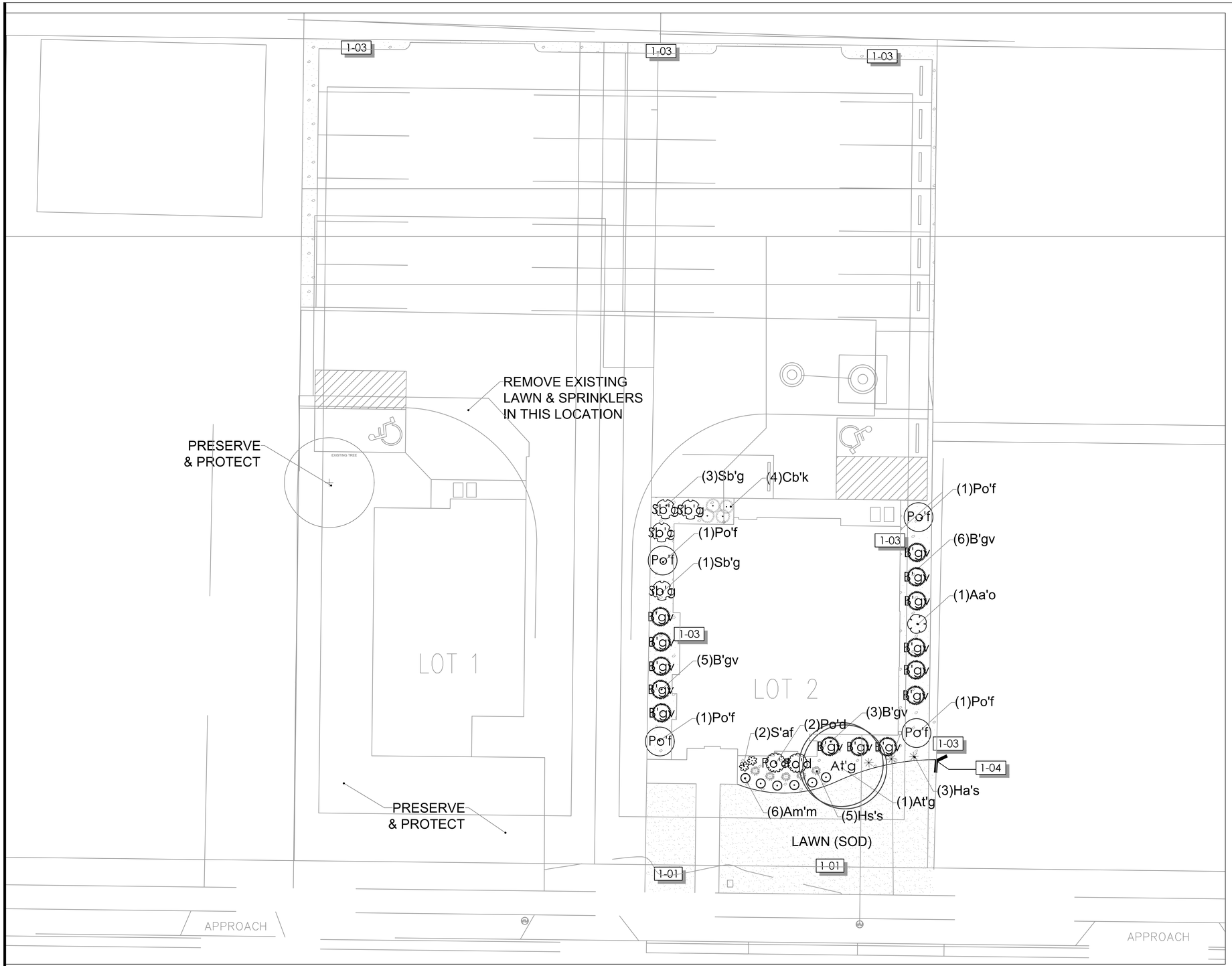
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PM:	JTA
DRAWN:	SAV
CHECKED:	KBA
PLOT DATE:	1/20/2021

LANDSCAPE PLAN

PRELIMINARY PLANS NOT FOR CONSTRUCTION

LP-100



PLANT SCHEDULE

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LICENSE STAMP

REGISTERED LANDSCAPE ARCHITECT
JEREMY ANDREW KAPP
8139171-5301
01/20/2021
STATE OF UTAH

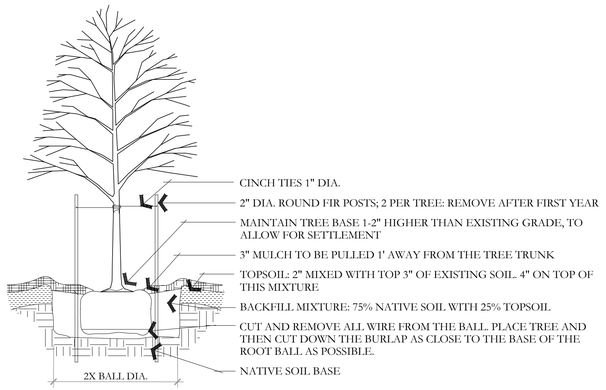
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DRAWN:	SAV
CHECKED:	KBA
PLOT DATE:	1/20/2021

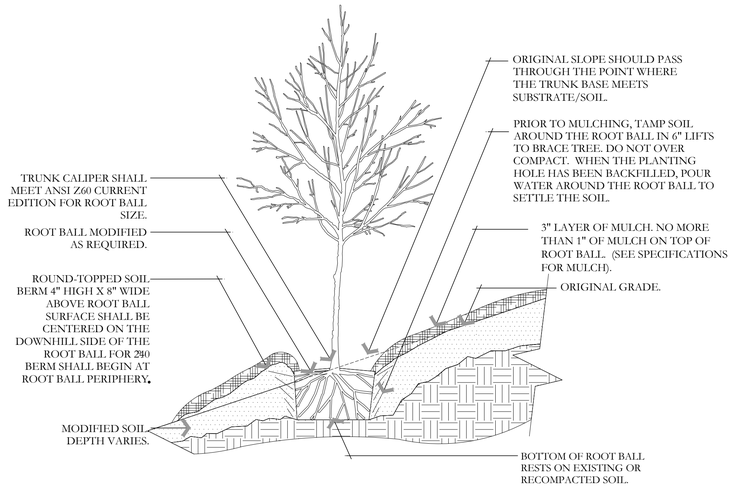
LANDSCAPE PLAN

PRELIMINARY PLANS NOT FOR CONSTRUCTION

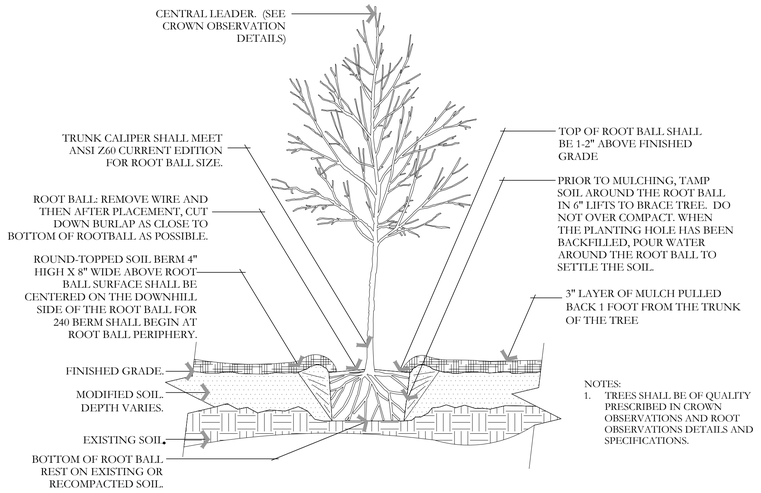
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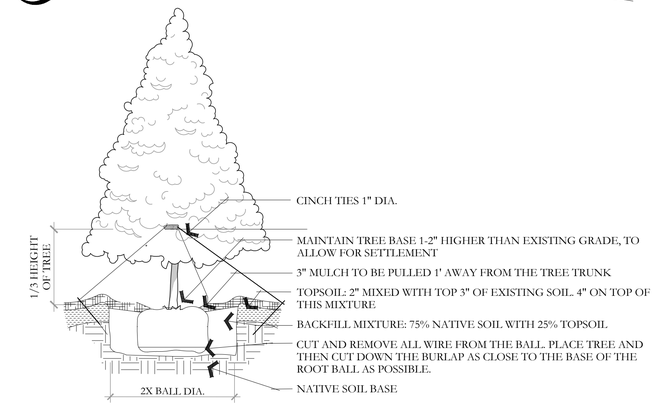
A DECIDUOUS TREE PLANTING
NOT TO SCALE
PKJ DESIGN GROUP



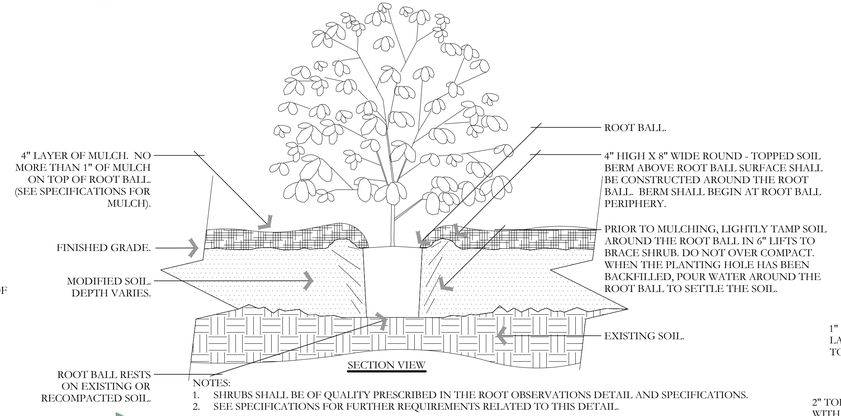
B TREE ON SLOPE 5% (20:1) TO 50% (2:1)
NOT TO SCALE
PKJ DESIGN GROUP



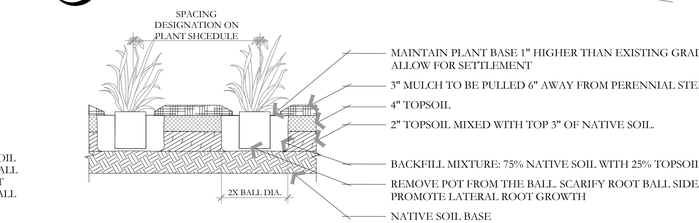
C TREE W/ BERM (EXISTING SOIL MODIFIED)
NOT TO SCALE
PKJ DESIGN GROUP



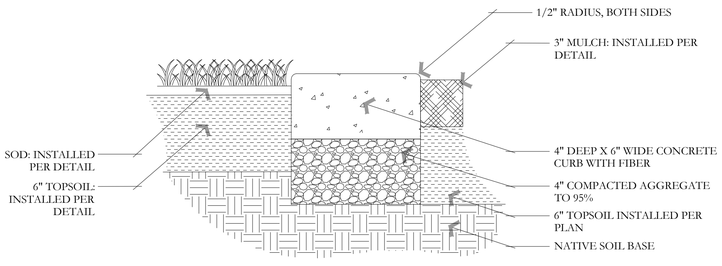
D EVERGREEN TREE PLANTING
NOT TO SCALE
PKJ DESIGN GROUP



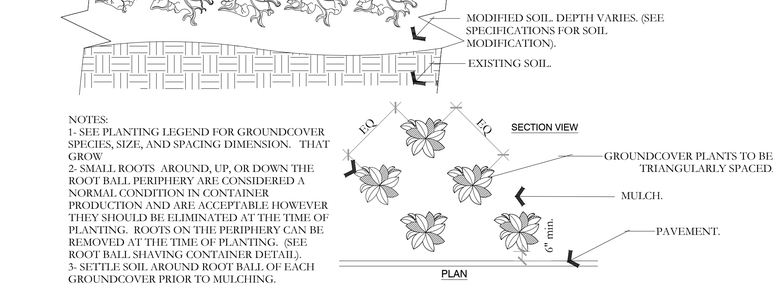
E SHRUB - MODIFIED SOIL
NOT TO SCALE
PKJ DESIGN GROUP



F PERENNIAL PLANTING
NOT TO SCALE
PKJ DESIGN GROUP

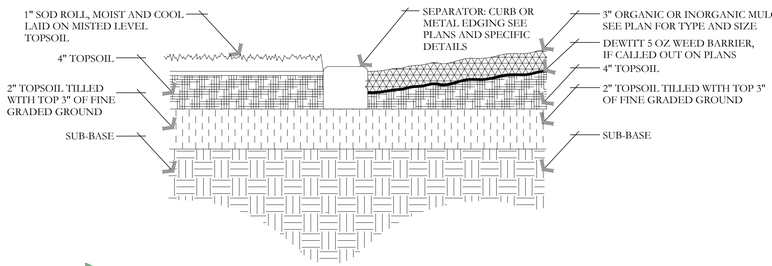


G CONCRETE MOWCURB
NOT TO SCALE
PKJ DESIGN GROUP

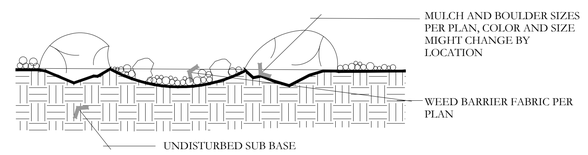


NOTES:
1- SEE PLANTING LEGEND FOR GROUNDCOVER SPECIES, SIZE, AND SPACING DIMENSION. THAT GROW
2- SMALL ROOTS AROUND, UP, OR DOWN THE ROOT BALL PERIPHERY ARE CONSIDERED A NORMAL CONDITION IN CONTAINER PRODUCTION AND ARE ACCEPTABLE HOWEVER THEY SHOULD BE ELIMINATED AT THE TIME OF PLANTING. ROOTS ON THE PERIPHERY CAN BE REMOVED AT THE TIME OF PLANTING. (SEE ROOT BALL SHAVING CONTAINER DETAIL).
3- SETTLE SOIL AROUND ROOT BALL OF EACH GROUNDCOVER PRIOR TO MULCHING.

H PERENNIAL/GROUNDCOVER PLANTING
NOT TO SCALE
PKJ DESIGN GROUP



I SOD LAYING/MULCH DETAIL
NOT TO SCALE
PKJ DESIGN GROUP



J BOULDER AND DRY STREAM BED DETAIL
NOT TO SCALE
PKJ DESIGN GROUP

ISSUE DATE	PROJECT NUMBER
1/20/2021	UT20143

NO.	REVISION	DATE
1	XXXX	XX-XX-XX
2		
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4		
5		
6		
7		

PLAN INFORMATION

811 BLUE STAKES OF UTAH
UTILITY NOTIFICATION CENTER, INC
1-800-662-4111
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PROJECT INFORMATION

KING AND MCCLEARY
240 W. MAIN ST.
AMERICAN FORK, UTAH

DEVELOPER / PROPERTY OWNER / CLIENT

Developer / Property Owner:
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LICENSE STAMP

JOSEPH ANDERSON — LICENSED LANDSCAPE ARCHITECT — 8159611-5301 — 01/20/2021 — STATE OF UTAH

DRAWING INFO

PM:	JTA
DRAWN:	SAV
CHECKED:	KBA
PLOT DATE:	1/20/2021

LANDSCAPE DETAILS

PRELIMINARY PLANS NOT FOR CONSTRUCTION

LP-501

KING AND MCCLEARY

AMERICAN FORK, UTAH

IRRIGATION PLAN SPECIFICATIONS

IRRIGATION SPECIFICATIONS

PART 1 - 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. Remove and dispose of any existing sprinkler system components which are disturbed during the construction process and are not to be saved. 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 popc 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: Secondary water piping and components, furnished and installed by others to provide irrigation water to this Project, including but not limited to filter, 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 filter, 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, 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 in this section prior to acceptance by OAR.

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 settled 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 evacuating system of all water pressure regulation devices. 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 indicated.

2.3 CONNECTION ASSEMBLY

A. Secondary water shall be used on this Project. Install filter 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 P707#D.

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 ¼" 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 ¼", 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, repair or replacement shall be performed by the original installer of that work. 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 for 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 more than 24 hours at a time.

3.2 TRENCHING AND BACKFILLING

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. Wiring 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 one 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. Then 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 picked up daily.

B. Open trenches or hazards shall be protected with yellow caution tape.

C. Contractor is responsible for removal and disposal of offsite 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

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.

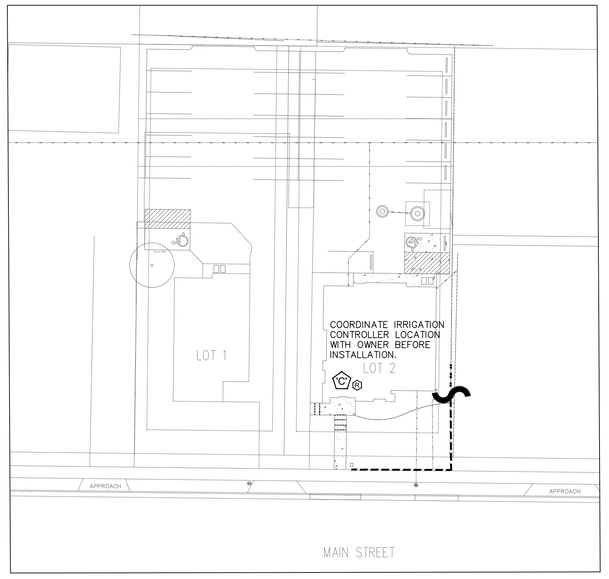
Regular Irrigation Schedule (see Seasonal Differential Chart)

	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



1.5" MAINLINE ROUTING ,CONTROLLER AND P.O.C. LOCATION OVERVIEW

ISSUE DATE	PROJECT NUMBER
1/20/2021	UT20143

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' 15' 30' 60' 120'

GRAPHIC SCALE: 1" = 30'

PROJECT INFORMATION

KING AND MCCLEARY
240 W. MAIN ST.
AMERICAN FORK, UTAH

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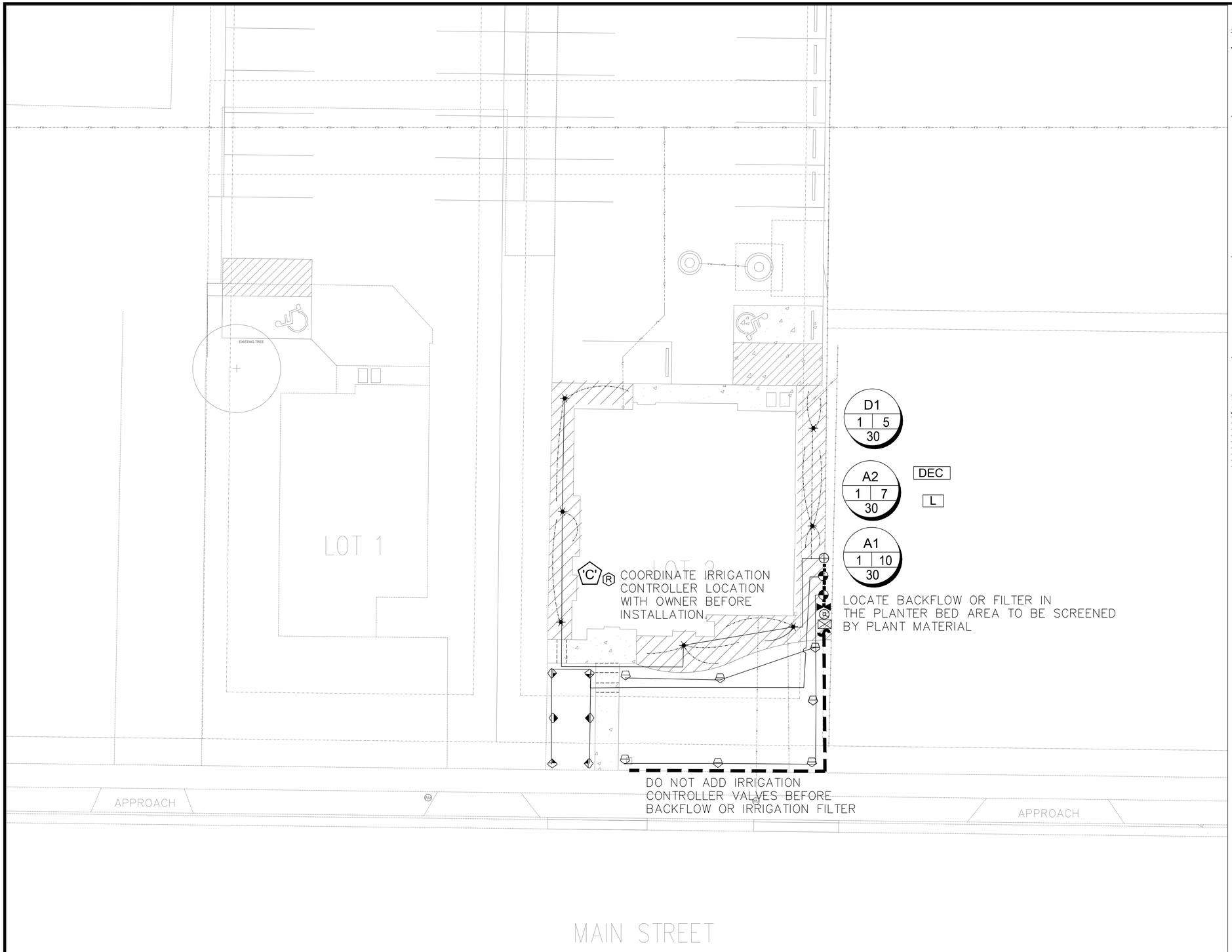
LICENSED LANDSCAPE ARCHITECT
JEREMY AINSWORTH
812812-5301
01/20/2021
RENEWAL DATE
STATE OF UTAH

DRAWING INFO

PM:	KBA
DRAWN:	KBA
CHECKED:	JTA
PLOT DATE:	1/20/2021

PRELIMINARY PLANS NOT FOR CONSTRUCTION

IR 100



IRRIGATION LEGEND

SYMBOL	MANUFACTURER-MODEL NUMBER
	RAINBIRD RD04-S-PRS POP UP SPRAY 5 SERIES @ 30 PSI
	RAINBIRD RD04-S-PRS POP UP SPRAY 8 U-SERIES @ 30 PSI
	RAINBIRD RD04-S-PRS POP UP SPRAY 10 U-SERIES @ 30 PSI
	RAINBIRD RD04-S-PRS POP UP SPRAY 12 U-SERIES @ 30 PSI
	RAINBIRD RD04-S-PRS POP UP SPRAY 15 U-SERIES @ 30 PSI
	RAINBIRD RD04-S-PRS POP UP SPRAY 15 SST @ 30 PSI
	RAINBIRD RD04-S-PRS POP UP SPRAY 15 EST @ 30 PSI
	RAINBIRD 5000 SERIES MPR NOZZLES @ 55 PSI
	RAINBIRD 8005 SERIES Q#8-6.6 GPM, H#14-12.6 GPM, F#26-24.3 GPM NOZZLES @ 55 PSI
S	POINT OF CONNECTION (SECONDARY WATER) SEE PLAN FOR SIZE
'C'	CONTROLLER: RAINBIRD ESP-ME3 CONTROLLER WITH LIMR REMOTE KIT. CONTRACTOR TO ADJUST LOCATION WITH OWNER PRIOR TO CONSTRUCTION.
R	RAINBIRD WR2-RC WIRELESS RAIN SHUT OFF DEVICE
	ISOLATION BALL VALVE - LINE SIZED INSTALL PER MANUFACTURER'S SPEC.
	2" "Y" SUPER AMIAD PLASTIC FILTER - INSTALL PER MANUFACTURES. RECOMMENDATIONS (130 MICRON)
M	MASTER VALVE
F	FLOW SENSOR
Q	QUICK COUPLER: RAINBIRD 44LRC INSTALL PER MANUFACTURER'S SPEC.
DEC / L	VALVE DECODER (AT ALL VALVE GROUPINGS) INSTALL PER MANUFACTURER'S SPEC. LIGHTNING ARRESTER (AT ALL VALVE GROUPINGS) INSTALL PER MANUFACTURER'S SPEC.
	REMOTE CONTROL VALVE: RAINBIRD PESB-NP-PRS-D AUTOMATIC CONTROL VALVE (SIZE AS NOTED ON PLAN- USE JUMBO BOX-PURPLE LID)
	DRIP CONTROL ZONE KIT: RAINBIRD XCZ-(PER PLAN)-PRBR-COM MED FLOW (SIZE AS NOTED ON PLAN)
	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 CONNECTION. PROVIDE DRIP IRRIGATION TO ALL TREES, SHRUBS, AND PERENNIALS IN PLANTER AREAS
	DRIP LINE: RAINBIRD XFSP-09-18-100 OR EQUIVALENT
	CLASS 200 SLEEVE PER PLAN
NO SYMBOL	WIRE CHASE, SIZE TO BE TWICE THE DIAMETER OF THE WIRE BUNDLE WITHIN. 1.1/4" DIAMETER MINIMUM
NO SYMBOL	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

IRRIGATION NOTES

1. BEFORE WORK IS TO COMMENCE, BLUE STAKES/DIG LINE IS TO BE CALLED AND NOTIFIED. IF ANY DAMAGE TO UTILITIES HAPPEN DURING CONSTRUCTION, THE CONTRACTOR SHALL REPAIR IT AT THEIR EXPENSE WITH NO ADDITIONAL COST TO THE OWNER.
2. CONTRACTOR SHALL APPLY AND PAY FOR ALL NECESSARY PERMITS IN ACCORDANCE WITH CITY AND/OR COUNTY CODES AND COMPLY WITH SPECIFICATIONS AND DRAWINGS.
3. INVESTIGATE TO MAKE SURE THAT THE IRRIGATION SYSTEM IS, IN FACT, BEING CONNECTED TO A SECONDARY SYSTEM. IF IT IS NOT CONNECTED TO SECONDARY, CONTACT THE OWNER AND LANDSCAPE ARCHITECT TO COORDINATE A CULINARY SYSTEM AND REQUIRED COMPONENTS. A FUNCTIONING AMIAD FILTER IS TO BE USED AT THE POINT OF CONNECTION.
4. VERIFY THAT THE POINT OF CONNECTION IS IN THE CORRECT LOCATION BEFORE INSTALLATION. ALL CONNECTIONS ON THIS PROJECT ARE TO SECONDARY WATER AND SHOULD BE NOTED AS SUCH; THEREFORE, ALL PARTS MUST MEET WATER STANDARDS THAT PERTAIN TO SECONDARY WATER.USE PURPLE VALVE BOXES FOR SECONDARY WATER SYSTEMS.
5. ON OCCASION AND FOR GRAPHIC PURPOSES ONLY, THE IRRIGATION SYSTEM MIGHT BE SHOWN IN HARDSCAPE AREAS. THIS IRRIGATION IS TO BE PLACED IN LANDSCAPED AREAS ON THE PROPERTY SITE.
6. CONTRACTOR SHALL USE ONLY COMMERCIAL GRADE IRRIGATION PRODUCTS. THIS INCLUDES PIPE TO BE SCHEDULE 40 PVC OR BETTER. NO POLY PIPE IS TO BE USED. FITTINGS UP TO 1-1/2" MUST BE SCHEDULE 40 OR BETTER. FITTINGS LARGER THAN 1-1/2" SHALL BE SCHEDULE 80 OR BETTER. CONTRACTOR IS RESPONSIBLE FOR ENSURING ACCURATE COUNTS AND QUANTITIES OF ALL IRRIGATION MATERIALS FOR BIDDING AND INSTALLATION.
7. MAIN LINES SHALL BE A MINIMUM OF 24" DEEP AND LATERAL LINES A MINIMUM OF 12" DEEP. NO ROCK GREATER THAN 1/2" DIAMETER SHALL BE ALLOWED IN TRENCHES. TRENCHING BACKFILL MATERIAL SHALL BE COMPACTED TO PROPER FINISHED GRADE.
8. NO IRRIGATION MAIN LINE MAY BE LOCATED WITHIN 5 FEET OF ANY STRUCTURE.
9. TO AVOID PIPE DAMAGE, ADJUST LOCATION OF PIPE TO NOT BE DIRECTLY UNDER PLANT MATERIALS. VALVE BOXES ARE PREFERRED TO BE IN PLANTER BEDS INSTEAD OF THE LAWN.
10. PLAN INDICATES 100% OR BETTER HEAD TO HEAD COVERAGE. SHOULD CONTRACTOR FIND DISCREPANCIES DUE TO NECESSARY FIELD ADJUSTMENTS, CONTACT LANDSCAPE ARCHITECT FOR IRRIGATION CORRECTION.
11. DRIP IRRIGATION TO BE INSTALLED PER DETAILS. CONTRACTOR SHALL MAKE NECESSARY ADJUSTMENTS. TUBING SHOULD REST TOWARD OUTER EDGE OF ROOTBALL AND NOT AGAINST TRUNK OF PLANT.
12. A QUICK COUPLER SHALL BE INSTALLED AT POINT OF CONNECTION TO ALLOW BLOW OUT OF SYSTEM BY AIR COMPRESSOR AT END OF EACH SEASON.
13. INSTALL SLEEVES FOR ALL PIPES AND WIRE CONDUIT THAT ARE PLACED UNDER PAVEMENT AND SIDEWALKS. SLEEVES SHALL BE 2 SIZES LARGER THAN PIPE BEING PLACED INTERNALLY. WIRE CONDUIT SHALL BE INSTALLED IN CLASS 200 PIPE. AT ANY DIRECTIONAL CHANGE THAT OCCURS, A JUNCTION BOX IS TO PLACED.
14. CONDUITS CAN NOT BE SHARED BY WATER AND ELECTRICAL LINES. ALL WIRE TO BE PUT IN PVC CONDUIT. ALL WIRE CONNECTIONS TO BE PLACED IN A VALVE BOX. ALL WIRE CONNECTIONS TO USE WATERPROOF WIRE CONNECTORS WITH AT LEAST 3' OF EXTRA WIRE. PROVIDE PLENTY OF EXTRA WIRE AT EVERY DIRECTIONAL CHANGE. INSULATED 14 GAUGE COPPER TO BE USED FOR ALL CONTROL WIRES AND INSTALLED PER MANUFACTURER'S SPECIFICATIONS.
15. CONTRACTOR TO INSTALL LIGHTNING ARRESTOR AND GROUNDING RODS ON SITE PER MANUFACTURER'S RECOMMENDATIONS, SEE DETAILS.
16. CONTRACTOR TO SEPARATE SYSTEM (CONTROLLER, VALVES, AND DIFFERENT COLORED WIRE) FROM CITY MAINTAINED PROPERTY AND HOA/OWNER MAINTAINED PROPERTY.
17. DUCT TAPE ALL SLEEVES TO PREVENT SOIL OR OTHER DEBRIS ENTERING PIPE. IDENTIFY ALL SLEEVES BY WOOD OR PVC STAKES AND SPRAY PAINT WITH MARKING PAINT. REMOVE STAKES ONCE IRRIGATION SYSTEM IS COMPLETE.
18. TO PREVENT EROSION AND LOW POINT DRAINAGE CONTRACTOR SHALL INSTALL CHECK VALVES
19. LOCATE SPRAY HEADS NO CLOSER THAN 6" FROM WALLS, FENCES OR BUILDINGS AND 2" AWAY FROM WALKS, PATHS OR CURBS.
20. PRESSURE TEST MAINLINE FOR LEAKS PRIOR TO BACKFILLING. CONTACT LANDSCAPE ARCHITECT/OWNER AT THIS TIME FOR COMPLIANCE.
21. CONTRACTOR TO CONSULT WITH OWNER ON EXACT LOCATION OF CONTROLLER. CONTRACTOR TO COORDINATE WITH ELECTRICAL CONTRACTOR AND OWNER FOR THE POWER SUPPLY. INSTALL ALL PER MANUFACTURER'S SPECIFICATIONS. CONTRACTOR SHALL INSTALL A RAIN SENSOR WITH THE CONTROLLER UNLESS OTHERWISE DIRECTED BY OWNER OR LANDSCAPE ARCHITECT.
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

A1 — CONTROLLER NUMBER, VALVE NUMBER
1.0 — VALVE SIZE
18 — GALLONS PER MINUTE
55 — PSI AT LAST HEAD IN ZONE

NOTE:
1. VALVE ID TAGS ARE LOCATED NEAR VALVES IN THE ORDER THE VALVES APPEAR ON THE DRAWING

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PLAN INFORMATION

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N

0' 5' 10' 20' 40'
GRAPHIC SCALE: 1" = 10'

PROJECT INFORMATION

KING AND MCCLEARY
240 W. MAIN ST.
AMERICAN FORK, UTAH

DEVELOPER / PROPERTY OWNER / CLIENT

Developer / Property Owner:
HARRIS ARCHITECTURE
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BRETT@HARRIS-ARC.COM

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PKJ DESIGN GROUP
Landscape Architecture / Planning & Visualization
3450 N. TRIUMPH BLVD. SUITE 102
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LICENSE STAMP

LICENSED LANDSCAPE ARCHITECT — JEREMY AINSWORTH — 8128127 - 5301 — 01/20/2021 — REGISTERED LANDSCAPE ARCHITECT — STATE OF UTAH

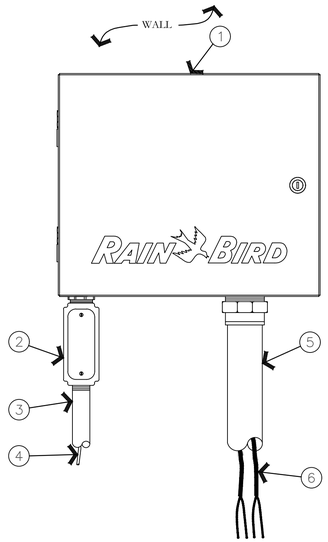
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IRRIGATION PLAN

PRELIMINARY PLANS NOT FOR CONSTRUCTION

IR 101

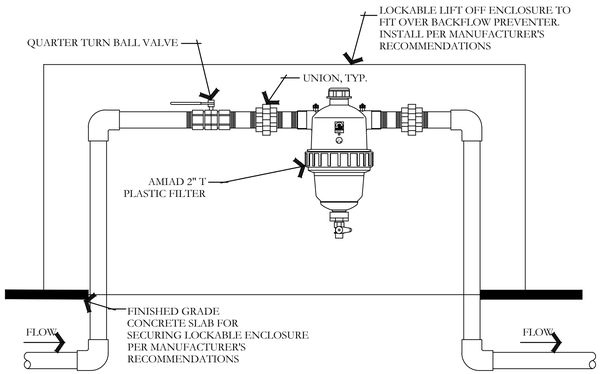


1. TWO-WIRE DECODER CONTROLLER: RAIN BIRD ESP-LXD TWO-WIRE DECODER CONTROLLER IN LXMM METAL CABINET WITH OUTSIDE WALL MOUNT. INSTALL CONTROLLER AND CABINET ON WALL PER MANUFACTURER'S RECOMMENDATIONS.
2. JUNCTION BOX
3. 1-INCH CONDUIT AND FITTINGS TO POWER SUPPLY
4. POWER SUPPLY WIRE
5. 2-INCH CONDUIT AND FITTINGS FOR TWO-WIRE CABLE
6. MAXICABLE TWO-WIRE PATH TO DECODERS USE A DIFFERENT CABLE JACKET COLOR FOR EACH PATH

NOTES:
1. ESP-LXD CONTROLLER COMES WITH 50 STATIONS AVAILABLE. TWO ADDITIONAL 75 STATION ESPLXD-SUM75 MODULES MAY BE ADDED TO EXPAND THE CONTROLLER UP TO 200 TOTAL STATIONS.
2. USE STEEL CONDUIT FOR ABOVE GRADE AND SCH 40 PVC CONDUIT FOR BELOW GRADE CONDITIONS.
3. PROVIDE PROPER GROUNDING COMPONENTS TO ACHIEVE GROUND RESISTANCE OF 10 OHMS OR LESS.

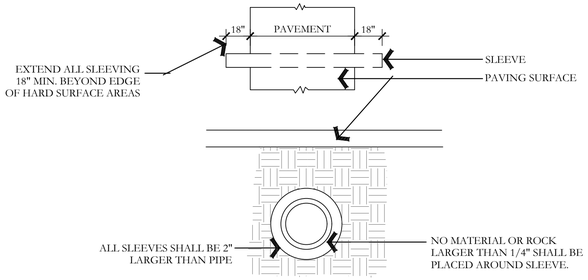
A TWO-WIRE DECODER CONTROLLER DETAIL

NOT TO SCALE — PKJ DESIGN GROUP



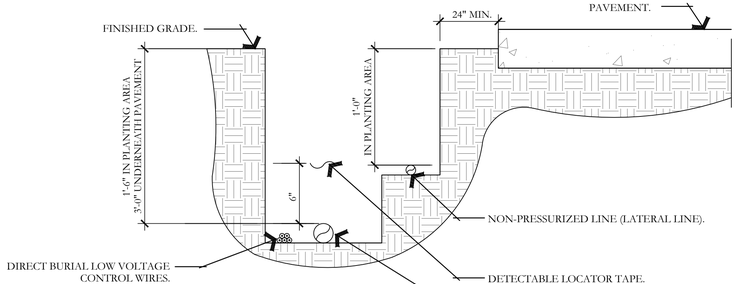
B 2" PLASTIC FILTER DETAIL

NOT TO SCALE — PKJ DESIGN GROUP



D TYPICAL SLEEVING DETAIL

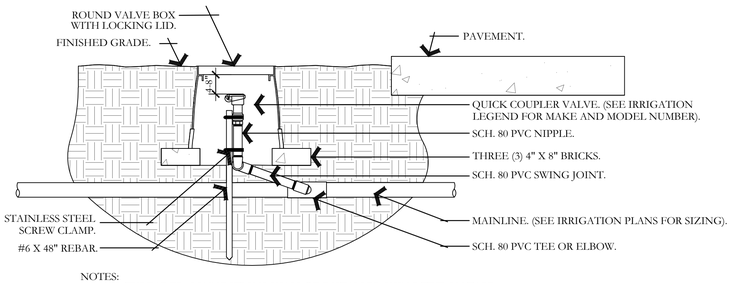
NOT TO SCALE — PKJ DESIGN GROUP



NOTES:
1. SEE IRRIGATION LEGEND FOR MAINLINE AND LATERAL LINE PIPE SIZE AND TYPE.
2. DIRECT BURIAL CONTROL WIRES SHALL BE INSTALLED IN SCH. 40 PVC ELECTRICAL CONDUIT IF REQUIRED.
3. 2-WIRE IRRIGATION WIRE SHALL BE INSTALLED IN SCH. 40 PVC ELECTRICAL CONDUIT.
4. DETECTABLE LOCATOR TAPE SHALL BE LOCATED SIX INCHES (6") ABOVE THE ENTIRE MAINLINE RUN.

E IRRIGATION TRENCHING DETAIL

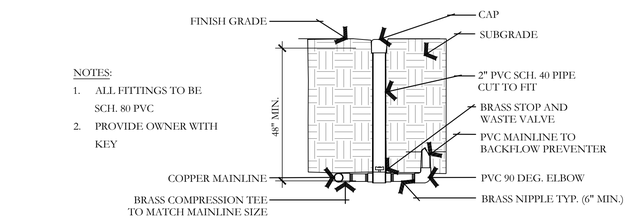
NOT TO SCALE — PKJ DESIGN GROUP



NOTES:
1. ALL THREADED CONNECTIONS SHALL BE INSTALLED USING TEFLON TAPE.
2. VALVE BOX SHALL BE WRAPPED WITH A MINIMUM 3 MIL THICK PLASTIC AND SECURED TO THE VALVE BOX USING DUCT TAPE OR ELECTRICAL TAPE.
3. ALL QUICK COUPLERS SHALL BE INSTALLED A MINIMUM OF 18" OFF OF THE MAINLINE.
4. VALVE BOXES SHALL BE LOCATED IN PLANTING AREAS.

G QUICK COUPLER DETAIL

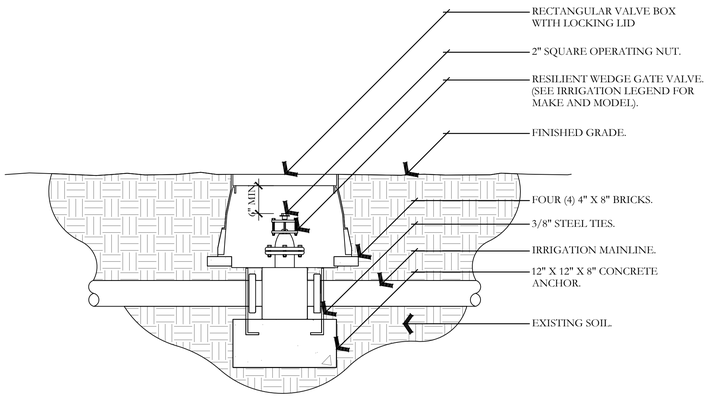
NOT TO SCALE — PKJ DESIGN GROUP



NOTES:
1. ALL FITTINGS TO BE SCH. 80 PVC
2. PROVIDE OWNER WITH KEY

H STOP AND WASTE VALVE ASSEMBLY DETAIL

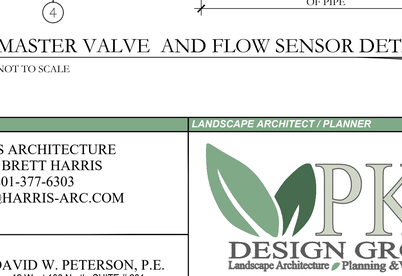
NOT TO SCALE — PKJ DESIGN GROUP



NOTES:
1. INSTALL GATE VALVE PER MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS.
2. VALVE BOX SHALL BE WRAPPED WITH MINIMUM 3 MIL. THICK PLASTIC AND SECURE IT TO VALVE BOX USING DUCT TAPE OR ELECTRICAL TAPE.
3. VALVE BOX SHALL BE LOCATED IN PLANTING AREA.

C GATE VALVE AND ANCHOR DETAIL

NOT TO SCALE — PKJ DESIGN GROUP

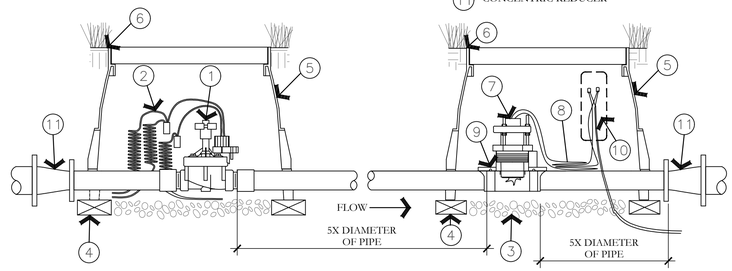


NOTES:
1. ALL FITTINGS TO BE SCH. 80 PVC
2. PROVIDE OWNER WITH KEY

F MANUAL DRAIN DETAIL

NOT TO SCALE — PKJ DESIGN GROUP

1. NORMALLY OPEN MASTER VALVE(S)
2. 36-INCH LENGTH OF COILED WIRE TO SATELLITE CONTROLLER SPARE STATION
3. 3-INCH MINIMUM DEPTH OF 3/4-INCH WASHED GRAVEL
4. BRICK (1 OF 4)
5. VALVE BOX WITH COVER - 12-INCH SIZE
6. FINISH GRADE
7. RAIN BIRD FS SERIES 350 FLOW SENSOR(S)
8. 36-INCH LENGTH OF COILED PE-CABLE TO FLOW SENSING EQUIPMENT AT CCU/SATELLIT CONTROLLER ASSEMBLY
9. DOUBLE-STRAP SADDLE
10. SEE MAXICOM DETAIL 611 FOR SPLICE. SEE FLOW SENSOR DETAIL FOR WIRING DIAGRAM.
11. CONCENTRIC REDUCER



I MASTER VALVE AND FLOW SENSOR DETAIL

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LICENSE STAMP

LICENSED LANDSCAPE ARCHITECT — JEREMY AINSWORTH — 812812-5301 — 01/20/2021 — RENEWAL DATE — STATE OF UTAH

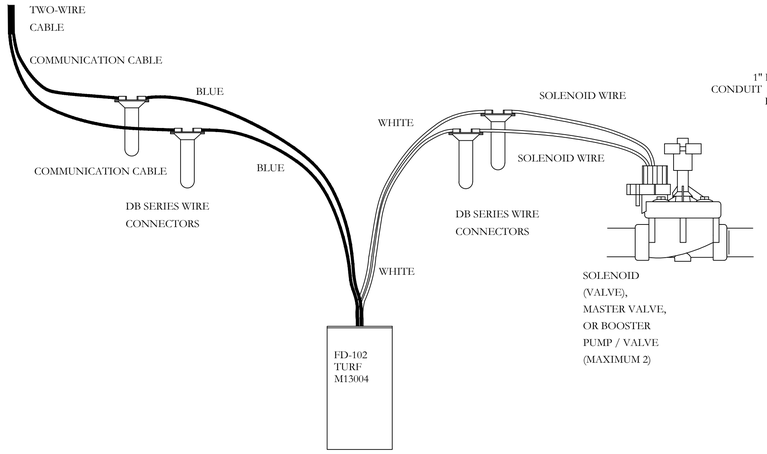
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IRRIGATION DETAILS

PRELIMINARY PLANS NOT FOR CONSTRUCTION

IR 501

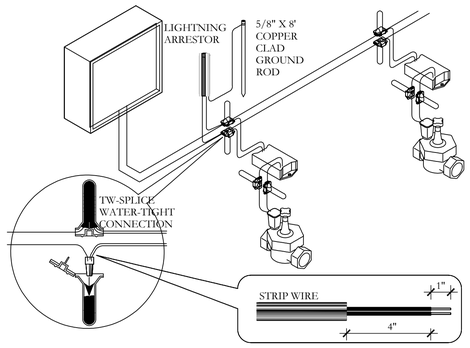


NOTE:
1. MAXIMUM LENGTH OF SECONDARY WIRE PATH (14 AWG) FROM FIELD DECODER TO SOLENOID IS 450 FEET.

J DECODER WIRING DIAGRAM DETAIL

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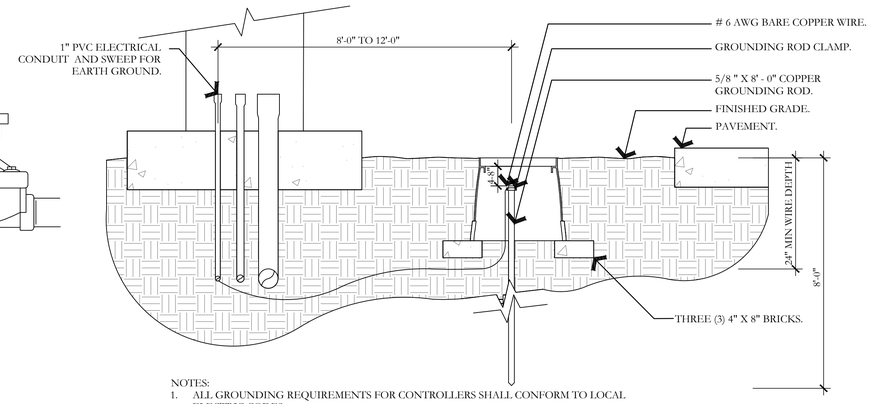
NOT TO SCALE



M 2-WIRE CONNECTION DETAIL

PKJ DESIGN GROUP

NOT TO SCALE



NOTES:
1. ALL GROUNDING REQUIREMENTS FOR CONTROLLERS SHALL CONFORM TO LOCAL ELECTRIC CODES.
2. GROUNDING ROD SHALL NOT BE LOCATED IN THE SAME TRENCH AS THE IRRIGATION MAINLINES OR LATERAL LINES.
3. VALVE BOX SHALL BE WRAPPED WITH A MINIMUM 3 MIL THICK PLASTIC AND SECURED TO THE VALVE BOX USING DUCT TAPE OR ELECTRICAL TAPE.
4. INSTALL GROUNDING ROD PER THE CONTROLLER MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS.

K GROUNDING ROD DETAIL

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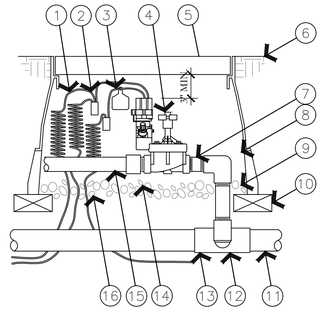
NOT TO SCALE

1. FINISH GRADE/TOP OF MULCH
2. VALVE BOX WITH COVER: RAIN BIRD VB-6RND
3. PVC SCH 40 TEE
4. PVC LATERAL PIPE
5. FILTERED DRAIN VALVE: RAIN BIRD 16A-FDV-075
6. BRICK (1 OF 2)
7. 6-INCH MINIMUM DEPTH OF 3/4" WASHED GRAVEL

N LATERAL LINE DRAIN VALVE DETAIL

PKJ DESIGN GROUP

NOT TO SCALE

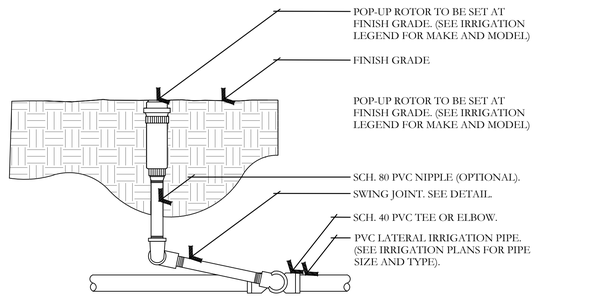


1. 30-INCH LINEAR LENGTH OF WIRE, COILED.
2. WATERPROOF CONNECTION RAIN BIRD SPLICE-1 (1 OF 2)
3. ID TAG: RAIN BIRD VID SERIES
4. REMOTE CONTROL VALVE: RAIN BIRD PESB-PRS-D WITH NP-HAN
5. VALVE BOX WITH COVER: RAIN BIRD VB-STD
6. FINISH GRADE/TOP OF MULCH
7. PVC SCH 80 NIPPLE (CLOSE)
8. PVC SCH 40 ELL
9. PVC SCH 80 NIPPLE (LENGTH AS REQUIRED)
10. BRICK (1 OF 4)
11. PVC MAINLINE PIPE
12. SCH 80 NIPPLE (2-INCH LENGTH, HIDDEN) AND SCH 40 ELL
13. PVC SCH 40 TEE OR ELL
14. PVC SCH 40 MALE ADAPTER
15. PVC LATERAL PIPE
16. 3.0-INCH MINIMUM DEPTH OF 3/4 " WASHED GRAVEL

L ELECTRIC REMOTE-CONTROL VALVE DETAIL

PKJ DESIGN GROUP

NOT TO SCALE

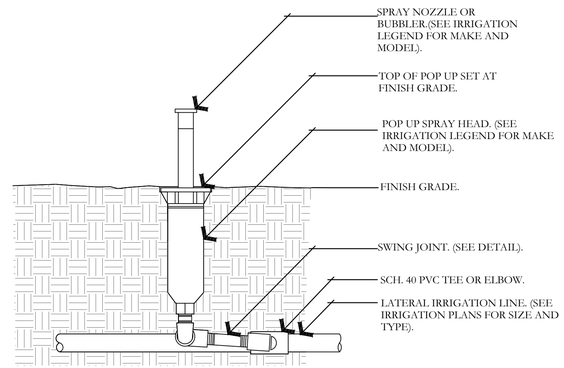


NOTES:
1. ALL THREADED CONNECTION POINTS BETWEEN SCH. 40 PVC AND SCH. 80 PVC FITTING SHALL BE INSTALLED USING TEFLON TAPE.
2. CONTRACTOR SHALL COMPACT SOIL AROUND ROTOR AND RISER PRIOR TO PLANTING, PLUGGING, SEEDING, OR LAYING OF SOD.

O ROTOR SPRAYHEAD DETAIL

PKJ DESIGN GROUP

NOT TO SCALE



NOTE:
1. 6" POP UPS SHALL BE USED IN TURF AREAS.
2. CONTRACTOR SHALL SETTLE SOIL AROUND THE POP UP AFTER INSTALLATION.
3. ALL POP UP SPRAY HEADS SHALL HAVE CHECK VALVES.
4. ALL SCH. 40 PVC TO SCH. 80 PVC CONNECTIONS SHALL BE MADE USING TEFLON TAPE.

P POP UP-SPRAY HEAD DETAIL

PKJ DESIGN GROUP

NOT TO SCALE

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LEHI, UTAH 84043 (801) 960-2698
www.pkjdesigngroup.com

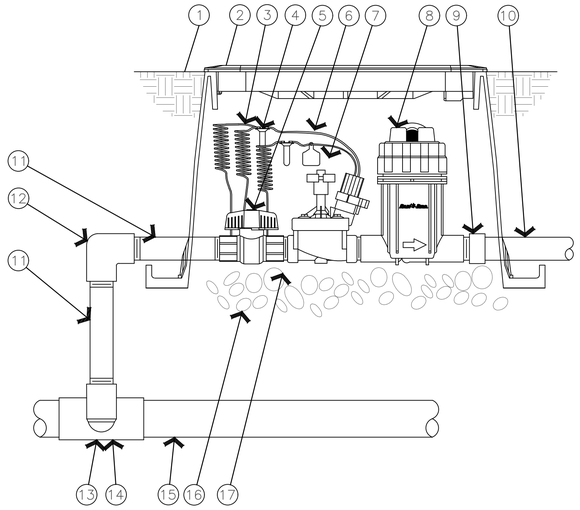
LICENSE STAMP

LICENSED LANDSCAPE ARCHITECT
JEREMY AINSWORTH
8128171-5301
01/20/2021
RENEWAL DATE
STATE OF UTAH

PM:	KBA
DRAWN:	KBA
CHECKED:	JTA
PLOT DATE:	1/20/2021

PRELIMINARY PLANS NOT FOR CONSTRUCTION

IR 502

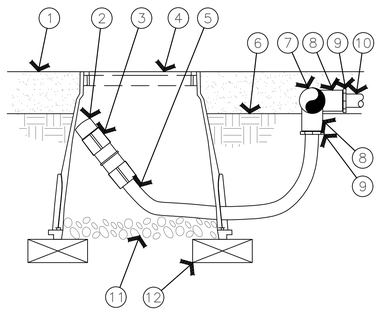


1. FINISH GRADE/TOP OF MULCH
2. VALVE BOX WITH COVER: RAIN BIRD VB-STD
3. 30-INCH LINEAR LENGTH OF WIRE, COILED
4. WATERPROOF CONNECTION: RAIN BIRD DB SERIES
5. 1-INCH BALL VALVE (INCLUDED IN XCZ-PRB-100-COM KIT)
6. ID TAG
7. REMOTE CONTROL VALVE: RAIN BIRD PESB (INCLUCED IN XCZ-PRB-100-COM KIT)
8. PRESSURE REGULATING QUICK CHECK BASKET FILTER: RAIN BIRD PRB-QKCHK-100 (INCLUDED IN XCZ-PRB-100-COM KIT)
9. PVC SCH 40 FEMALE ADAPTOR
10. LATERAL PIPE
11. PVC SCH 80 NIPPLE (LENGTH AS REQUIRED)
12. PVC SCH 40 ELL
13. PVC SCH 80 NIPPLE (2-INCH LENGTH, HIDDEN) AND PVC SCH 40 ELL
14. PVC SCH 40 TEE OR ELL
15. MAINLINE PIPE
16. 3-INCH MINIMUM DEPTH OF 3/4-INCH WASHED GRAVEL
17. PVC SCH 80 NIPPLE, CLOSE (INCLUDED IN XCZ-PRB-100-COM KIT)

Q DRIP CONTROL ZONE KIT DETAIL

NOT TO SCALE

PKJ DESIGN GROUP



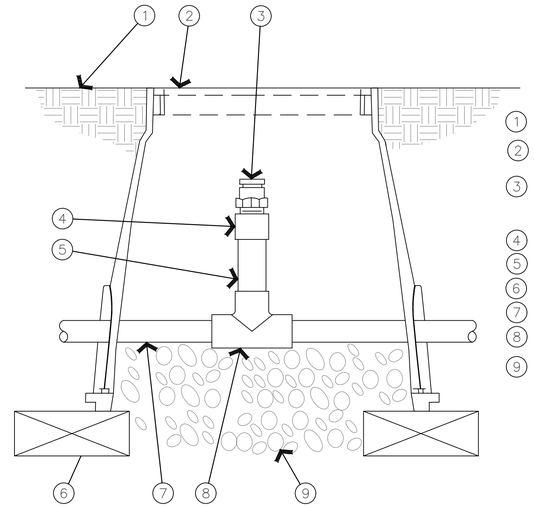
1. MULCH
2. FLUSH CAP FOR EASY FIT COMPRESSION FITTINGS: POTABLE:RAIN BIRD MDCFCAP
3. EASY FIT COUPLING: RAIN BIRD MDCFCOUP
4. SUBTERRANEAN EMITTER BOX: RAIN BIRD SEB 7XB
5. ½" POLYETHYLENE TUBING: RAIN BIRD XF BLANK TUBING
6. FINISH GRADE
7. PVC EXHAUST HEADER
8. PVC SCH 40 TEE OR EL
9. BARB X MALE FITTING: RAIN BIRD XFF-MA FITTING (TYPICAL)
10. ON-SURFACE DRIPLINE: RAIN BIRD XF SERIES DRIPLINE POTABLE: XFCV DRIPLINE
11. 3-INCH MINIMUM DEPTH OF 3/4 " WASHED GRAVEL
12. BRICK (1 OF 2)

NOTE:
1. ALLOW A MINIMUM OF 6-INCHES OF DRIPLINE TUBING IN VALVE BOX IN ORDER TO DIRECT FLUSHED WATER OUTSIDE VALVE BOX.

R ON-SURFACE DRIPLINE FLUSH POINT DETAIL

NOT TO SCALE

PKJ DESIGN GROUP

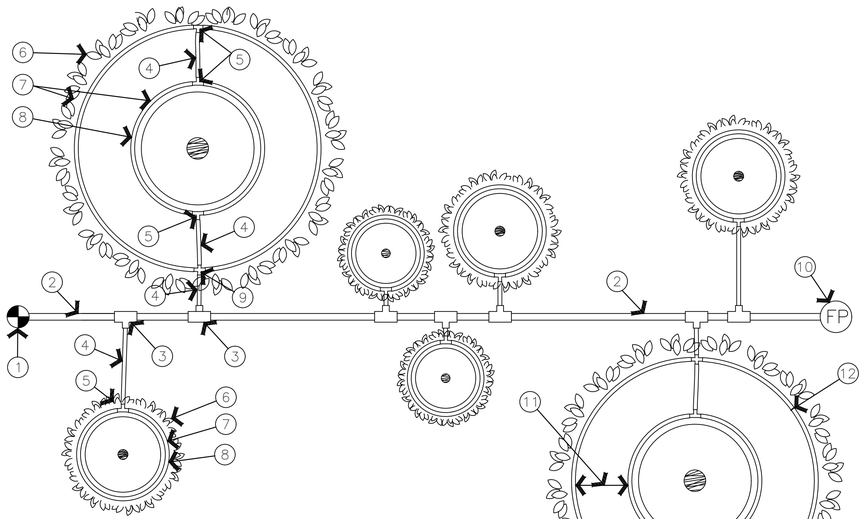


1. FINISH GRADE
2. SUBTERRANEAN EMITTER BOX: RAIN BIRD SEB 7XB
3. ½" AIR RELIEF VALVE: RAIN BIRD ARV050 TO BE INSTALLED AT HIGH POINTS IN DRIP ZONE
4. PVC SCH 40 FEMALE ADAPTER
5. PVC SCH 80 RISER
6. BRICK (1 OF 2)
7. PVC HEADER PIPE
8. PVC SCH 40 TEE
9. 3" MINIMUM DEPTH OF 3/4" WASHED GRAVEL

S AIR RELIEF VALVE DETAIL

NOT TO SCALE

PKJ DESIGN GROUP



1. RAIN BIRD CONTROL ZONE KIT (SIZED TO ACCOMIDATE LATERAL FLOW DEMAND)
2. PVC DRIP MANIFOLD PIPE
3. PVC SCH 40 TEE OR EL (TYPICAL)
4. ½" POLYETHYLENE TUBING: RAIN BIRD XF SERIES BLANK TUBING (TYPICAL)
5. BARB X BARB INSERT TEE: RAIN BIRD XFF-TEE (TYPICAL)
6. PROJECTED CANOPY LINE OF TREE OR SHRUB (TYPICAL)
7. ON-SURFACE DRIPLINE: RAIN BIRD XF SERIES DRIPLINE POTABLE: XFCV SERIES PLACE AS SHOWN (LENGTH AS REQUIRED, TYPICAL)
8. ROOT BALL (TYPICAL)
9. BARB X BARB INSERT CROSS: RAIN BIRD XFD-CROSS (TYPICAL)
10. DRIPLINE FLUSH POINT (SEE RAIN BIRD DETAIL: "XFCV DRIPLINE FLUSH POINT WITH BALL VALVE")
11. SPACING PER SPECIFICATION
12. TIE DOWN STAKE: RAIN BIRD TDS-050 WITH BEND (QUANTITY AS REQUIRED, SEE NOTES 2-3 BELOW)

NOTES:
1. INSTALL MULTIPLE RINGS AS REQUIRED TO PROVIDE IRRIGATION COVERAGE FROM ROOT BALL TO PROJECTED TREE CANOPY. REFER TO RAIN BIRD DESIGN GUIDELINES AND SPECIFICATIONS FOR RECOMMENDED SPACING BETWEEN RINGS.
2. PLACE TIE DOWN STAKES EVERY THREE FEET IN SAND, FOUR FEET IN LOAM, AND FIVE FEET IN CLAY.
3. AT FITTINGS WHERE THERE IS A CHANGE OF DIRECTION SUCH AS TEES OR ELBOWS, USE TIE-DOWN STAKES ON EACH LEG OF THE CHANGE OF DIRECTION.

T ON-SURFACE DRIPLINE TREE/SHRUB DETAIL

NOT TO SCALE

PKJ DESIGN GROUP

ISSUE DATE	PROJECT NUMBER
1/20/2021	UT20143

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

PROJECT INFORMATION

KING AND MCCLEARY
240 W. MAIN ST.
AMERICAN FORK, UTAH

DEVELOPER / PROPERTY OWNER / CLIENT

Developer / Property Owner:
HARRIS ARCHITECTURE
ATT: BRETT HARRIS
801-377-6303
BRETT@HARRIS-ARC.COM

Building Architect / Engineer:
EXCEL ENGINEERING
DAVID W. PETERSON, P.E.
12 West 100 North, SUITE # 201
AMERICAN FORK, UTAH 84003 (801) 756-4504

LANDSCAPE ARCHITECT / PLANNER

PKJ DESIGN GROUP
Landscape Architecture / Planning & Visualization
3450 N. TRIUMPH BLVD. SUITE 102
LEHI, UTAH 84043 (801) 960-2698
www.pkjdesigngroup.com

LICENSE STAMP

LICENSED LANDSCAPE ARCHITECT
KEVIN AINSWORTH
8128121-5301
01/20/2021
STATE OF UTAH

PM:	KBA
DRAWN:	KBA
CHECKED:	JTA
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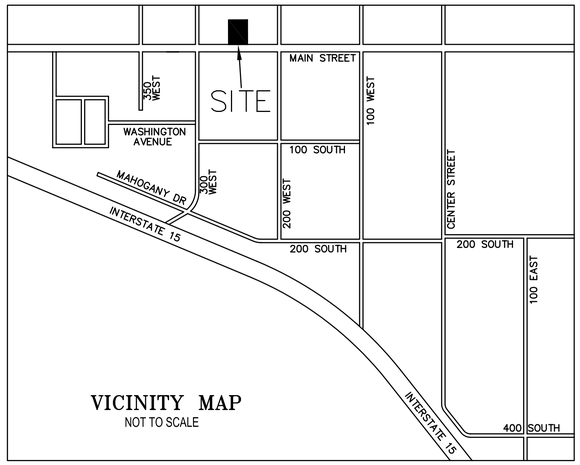
IR 503

KING & McCLEARY PLAT A

LOCATED IN THE NORTHWEST QUARTER OF SECTION 23 AND THE SOUTHWEST QUARTER OF SECTION 14, TOWNSHIP 5 SOUTH, RANGE 1 EAST, SALT LAKE BASE & MERIDIAN
AMERICAN FORK CITY
COUNTY OF UTAH
STATE OF UTAH

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

NORTH



VICINITY MAP
NOT TO SCALE

LAND LOCK COMPANY LLC
PARCEL 02-034-0040

DAVIDO BEISINGER
LYNN BEISINGER
PARCEL 02-034-0041

JUSTIN COMBS
PARCEL 02-034-0039

EAST (S 89°20'11" E) 132.20'

10' P.U.E. & POWER EASEMENT 62.67' | 69.53' 10' P.U.E. & POWER EASEMENT

31.31' | 29.78'

20' SEWER EASEMENT | 20' SEWER EASEMENT

171.60'

LOT 1
10,754 SQ. FT.
0.2469 ACRES

LOT 2
11,931 SQ. FT.
0.2739 ACRES

171.60'

5' P.U.E. | 5' P.U.E. | 5' P.U.E.

NORTH (N 00°39'49" E) | NORTH (N 00°39'49" E) | SOUTH (S 00°39'49" W)

240 WEST | 230 WEST

10' P.U.E. 62.67' | 10' P.U.E. 69.53'

WEST (N 89°20'11" W) 132.20'

WILSON PROPERTIES 250 LLC
PARCEL 02-034-0004

WILLIAM CHRISTENSEN
GEORGE CHRISTENSEN
PARCEL 02-034-0002

DAO VANNARATH
PARCEL 02-034-0001

SOUTHEAST CORNER BLOCK 21, PLAT A
AMERICAN FORK CITY SURVEY OF BUILDING LOTS
(NOTHING FOUND)

POINT OF BEGINNING

WEST (N89°20'11"W) 165.00'

200 WEST STREET
(PUBLIC)

MAIN STREET
(PUBLIC)

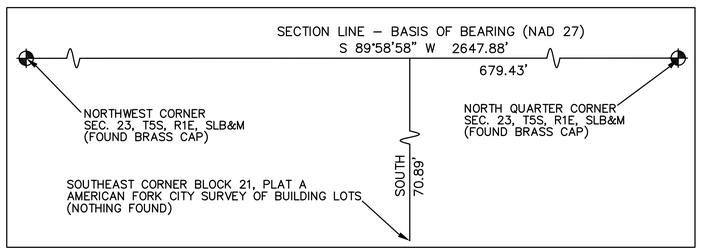
CITY STANDARD NOTES:

1. THE CURRENT ZONE IS CC-2.
2. "LOWEST FLOOR SLAB ELEVATION MUST BE A MINIMUM OF 3 FEET ABOVE WATER LEVEL MEASURED DURING SPRING SEASON"
3. "OFF-SET PINS TO BE PLACED IN THE BACK OF CURB ALONG ROAD FRONTAGES AND A 5/8" X 24" REBAR WITH NUMBERED SURVEY CAP TO BE PLACED AT ALL OTHER LOT CORNERS"
4. "BUILDING PERMITS WILL NOT BE ISSUED FOR ANY BUILDING UNTIL 1) ASPHALT PAVING IS INSTALLED AND 2) FIRE HYDRANTS ARE INSTALLED, APPROVED BY THE FIRE MARSHALL AND CHARGED WITH CULINARY WATER"
5. LOT 1 HAS AN EXISTING BUILDING ON IT.
6. BOTH LOTS HAVE EXISTING CITY SERVICES, INCLUDING SEWER, WATER, POWER, COMMUNICATIONS, GAS, ETC.
7. BY RECORDING THIS PLAT, THE PREVIOUS RECORDED P.U.E.'S WILL BE VACATED AND NEW P.U.E.'S LOCATED AS SHOWN HEREON.

LEGEND

⊕	EXISTING SECTION MONUMENT
⋇	FIRE HYDRANT LOCATION
△	SET PLUGS IN THE CURB ON LOT LINE EXTENSIONS
●	SET REBAR AND CAP OR FOUND REBAR AND CAP

SECTION TIE GRAPHIC



FLOOD PLAIN INFORMATION
ZONE: C
PANEL: ONLY PANEL PRINTED
COMMUNITY PANEL NUMBER:
490152 0005 B
EFFECTIVE: NOVEMBER 25, 1980

SURVEYOR'S CERTIFICATE

I, DAVID F. HUNT, DO HEREBY CERTIFY THAT I AM A PROFESSIONAL LAND SURVEYOR, AND THAT I HOLD CERTIFICATE NO. 5243543 AS PRESCRIBED UNDER THE LAWS OF THE STATE OF UTAH IN ACCORDANCE WITH TITLE 58, CHAPTER 22, PROFESSIONAL ENGINEERS AND PROFESSIONAL LAND SURVEYORS LICENSING ACT. I FURTHER CERTIFY BY AUTHORITY OF THE OWNERS, I HAVE MADE A SURVEY OF THE TRACT OF LAND SHOWN ON THIS PLAT AND DESCRIBED BELOW IN ACCORDANCE WITH SECTION 17-23-17, AND HAVE SUBDIVIDED SAID TRACT OF LAND INTO LOTS, BLOCKS, STREETS, AND EASEMENTS AND THE SAME HAS BEEN CORRECTLY SURVEYED AND PLACED MONUMENTS AS REPRESENTED ON THIS PLAT AND THAT THIS PLAT IS TRUE AND CORRECT.

BOUNDARY DESCRIPTION

A PARCEL OF GROUND SITUATE IN THE NORTHWEST QUARTER OF SECTION 23 AND SOUTHWEST QUARTER OF SECTION 14, TOWNSHIP 5 SOUTH, RANGE 1 EAST, SALT LAKE BASE AND MERIDIAN, ALSO LOCATED WITHIN BLOCK 21, PLAT A, AMERICAN FORK CITY SURVEY OF BUILDING LOTS, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING 165.00 FEET WEST OF SOUTHEAST CORNER OF BLOCK 21, PLAT "A" AMERICAN FORK CITY SURVEY OF BUILDING LOTS, SAID SOUTHEAST BLOCK CORNER BEING LOCATED SOUTH 89°58'58" WEST ALONG THE SECTION LINE 679.43 FEET AND SOUTH 70.89 FEET FROM THE NORTH QUARTER CORNER OF SECTION 23, TOWNSHIP 5 SOUTH, RANGE 1 EAST, SALT LAKE BASE AND MERIDIAN; THENCE WEST 132.20 FEET; THENCE NORTH 171.60 FEET; THENCE EAST 132.20 FEET; THENCE SOUTH 171.60 FEET TO THE POINT OF BEGINNING.

AREA = 22,686 SQ. FT. OR 0.5208 ACRES, MORE OR LESS

BLOCK ROTATION = CLOCKWISE 00°39'49" (SHOWN IN PARENTHESIS)

LOTS = 2

01-12-21
DATE

David F Hunt
SURVEYOR
(See Seal Below)

ACCEPTANCE OF LEGISLATIVE BODY

THE _____ OF _____, COUNTY OF UTAH, APPROVES THIS SUBDIVISION SUBJECT TO THE CONDITIONS AND RESTRICTIONS STATED HEREON, AND HEREBY ACCEPTS THE DEDICATION OF ALL STREETS, EASEMENTS AND OTHER PARCELS OF LAND INTENDED FOR THE PUBLIC PURPOSE OF 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

APPROVED _____ CITY ENGINEER
ATTEST _____ CITY RECORDER (See Seal Below)

SEWER & WATER AUTHORITY

APPROVED SUBJECT TO THE FOLLOWING CONDITIONS: _____

_____
PUBLIC WORKS DIRECTOR

PLANNING COMMISSION APPROVAL

APPROVED THIS ___ DAY OF _____ A.D. 20___ BY THE _____ PLANNING COMMISSION.

PLANNING DEPT. DIRECTOR | CHAIRMAN, PLANNING COMMISSION

PLAT "A"

KING & McCLEARY

LOCATED IN THE NORTHWEST QUARTER OF SECTION 23 AND THE SOUTHWEST QUARTER OF SECTION 14, TOWNSHIP 5 SOUTH, RANGE 1 EAST, SALT LAKE BASE & MERIDIAN

A COMMERCIAL SUBDIVISION

AMERICAN FORK CITY _____ **UTAH COUNTY**
SCALE: 1" = 20 FEET **STATE OF UTAH**

LEVEL OF FOCUS, INC
1334 East 1150 South
Spanish Fork, Utah 84660
(801) 319-5441

OWNER'S DEDICATION

KNOW ALL MEN BY THESE PRESENTS THAT WE, ALL OF THE UNDERSIGNED OWNERS OF ALL OF THE PROPERTY DESCRIBED IN THE SURVEYOR'S CERTIFICATE HEREON AND SHOWN ON THIS MAP,AND SUBJECT TO ANY CONDITIONS AND RESTRICTIONS STATED HEREON, HAVE CAUSED THE SAME TO BE SUBDIVIDED INTO LOTS, BLOCK, STREETS, AND EASEMENTS AND DO HEREBY DEDICATE THE STREETS AND OTHER PUBLIC AREAS AS INDICATED HEREON FOR PERPETUAL USE OF THE PUBLIC.

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

MS INVESTMENTS 5 LLC
BY

MSG INVESTMENTS LLC
BY

ACKNOWLEDGEMENT (PERSONAL)

STATE OF UTAH S.S.
COUNTY OF UTAH

ON THE ___ DAY OF _____ A.D. 20___, PERSONALLY APPEARED BEFORE ME THE SIGNERS OF THE FOREGOING DEDICATION WHO DULY ACKNOWLEDGE TO ME THAT THEY DID EXECUTE THE SAME.

OWNER (S)

NOTARY'S COMMISSION EXPIRATION DATE | NOTARY PUBLIC FULL NAME & COMMISSION NUMBER

"A NOTARY PUBLIC COMMISSIONED IN UTAH" | PRINT NAME

ACKNOWLEDGEMENT (CORPORATE)

STATE OF UTAH S.S.
COUNTY OF UTAH

ON THE ___DAY OF_____, A.D. 20__, PERSONALLY APPEARED BEFORE ME, _____ AND_____, WHO BEING BY ME DULY SWORN DID SAY EACH FOR HIMSELF, THAT HE, THE SAID_____IS THE _____ AND HE THE SAID_____IS THE _____ OF _____CORPORATION, AND THAT THE WITHIN AND FOREGOING INSTRUMENT WAS SIGNED IN BEHALF OF SAID CORPORATION BY AUTHORITY OF A RESOLUTION OF ITS BOARD OF DIRECTORS AND SAID_____ AND_____ EACH DULY ACKNOWLEDGE TO ME THAT SAID CORPORATION EXECUTED THE SAME AND THAT THE SEAL AFFIXED IS THE SEAL OF SAID CORPORATION.

NOTARY'S COMMISSION EXPIRATION DATE | NOTARY PUBLIC FULL NAME & COMMISSION NUMBER

"A NOTARY PUBLIC COMMISSIONED IN UTAH" | PRINT NAME

NOTARY PUBLIC SEAL

SURVEYOR'S SEAL
PROFESSIONAL LAND SURVEYOR
01-12-21
DAVID F. HUNT
LICENSE NO. 5243543-2201
STATE OF UTAH

CLERK-RECORDER SEAL

UNAPPROVED MINUTES

AMERICAN FORK CITY
PLANNING COMMISSION MINUTES
FEBRUARY 17, 2021

The American Fork City Planning Commission met in a regular session on February 17, 2021 in an electronic meeting on the Zoom platform, viewable on the City's YouTube link, commencing at 7:00 p.m.

Present:	Chairman John Woffinden
	Cristine Anderson
	Chris Christiansen
	Rod Brocious
	Harold Dudley
	Geoff Dupaix
Absent:	Ryan Hunter
Staff Present:	Adam Olsen, City Planner
	Ben Hunter, Engineer
	Lisa Halversen, Administrative Assistant
Others Present:	Davy Houle
	Richard Berger

Public Comments Received: Letters from AF Utah, Keystone Construction, Neighborly Ventures, and Wadsworth Construction

Chairman Woffinden read the "Notice of Electronic Meeting."

1. Review and action on a site plan for an accessory structure located at 935 East 50 South in the R1-9,000 zone

Mr. Olsen stated that the applicant requests site plan approval to construct a 2,400 square foot accessory structure at 935 E. 50 S. The proposed accessory structure will be located at the north end of the property. The adjacent property to the north is undeveloped. The property is slightly over half an acre (.56 ac.). Access to the structure will be from a gravel driveway on the west side of an existing dwelling, off of 50 South. The Development Code stipulates in Section 17.5.105 that an accessory structure consisting of 1,000 square feet or greater requires approval by the Planning Commission. Accessory structures are not allowed to be used for any kind of living area, only storage, etc. The plans show a gas and power line going to the structure, this structure cannot be used for any kind of living structure.

Mr. Ben Hunter said that the standards have been met, the Engineering Division doesn't have any concerns.

Mr. Davy Houle, applicant, indicated that he wants to build an accessory structure to house his toys and he would use the heat when he works in there. He stated that he will definitely not use it as a living structure. He has spoken with the neighbors and they are in support.

Mr. Dupaix moved to approve the site plan for an accessory structure with the findings listed in the staff report and subject to any findings, conditions and modifications listed in the Engineering report, with the condition that all residential uses are prohibited.

Mr. Brocious seconded the motion. Voting was as follows:

Chairman Woffinden	**Aye**
Christine Anderson	**Aye**
Chris Christiansen	**Aye**
Rod Brocious	**Aye**
Harold Dudley	**Aye**
Geoff Dupaix	**Aye**

The motion passed.

2. Hearing, review and action on amendments to Section 17.4.608.6.B of the American Fork City Municipal Code regarding requirements to provide office and/or retail uses

Mr. Olsen stated that the proposed revisions will allow clustering of commercial use on streets other than 200 South, within the TOD "mixed use core" area. The 25% equivalent remains in effect; however, clarification is given that the 25% may be clustered into one building or dispersed in separate buildings. Staff recommends a timing structure be placed in the ordinance to ensure delivery of commercial elements (no later than 50% build-out of residential).

This issue was brought before the commission a couple months ago, council requested staff to change the code to allow commercial use to be consolidated and/or spread out. This item is the result of those deliberations at city council. Staff feel strongly about the 50% buildout requirement to ensure that the mixed-use component is delivered. The applicant has submitted comment, three other letters were received and will be entered into the record at the time of public hearing.

Ms. Anderson noted that they all probably agree that commercial is not required to be dispersed evenly through the entire project, but she also doesn't like the idea of all commercial space being consolidated in one building. She asked if there is there a possibility for language that requires the commercial to be dispersed among 25% of the project? This might give the developers some flexibility while still following the intent of the code. This could also allow commercial to be consolidated to the most commercial-friendly corner of the project.

Chairman Woffinden asked what her opinion is regarding the 50% buildout requirement. What does she feel is the correct balance between stipulating an earlier buildout and letting the market have an impact?

Ms. Anderson respects that developers would like to wait until the residential is further along to put the commercial in so that the commercial is viable, but she also emphasizes the need for commercial in a mixed-use area. She expressed that she doesn't want to let the commercial get postponed. She suggested a compromise, maybe a 75% completion requirement.

Chairman Woffinden agreed that may be a good compromise. He is also concerned that if no requirement is specifically mentioned, the commercial uses may never come.

Mr. Brocious supports that idea as well, but he personally feels that the current 50% is the correct timing.

Mr. Dupaix mentioned that they have spent quite a bit of time mulling this over, he asked Mr. Olsen if he had looked TOD's in other areas regarding this issue, how were other requirements met?

Mr. Olsen replied that there is an average of 50% buildout requirements for the commercial. The goal is to allow for flexibility but meet requirements for commercial in the mixed-use area. He also stated that direction from council was to let the commercial be consolidated, developers could choose between consolidating to one building or dispersing it. This is a unique circumstance.

Mr. Brocious can see the advantages of distributing the commercial, but he also sees value in consolidating it as it gives the developer more flexibility. He's a little undecided about both scenarios, they both have advantages. Regarding buildout requirements, he is supportive of the 50% requirement.

Mr. Christiansen is concerned that if there is not a buildout percentage stated, is it just open ended? Could the residential be completely built out and the commercial left undone?

Mr. Olsen replied that the city would have no recourse or mechanism to enforce it.

Mr. Christiansen is concerned about the loss of leverage by the city if a percentage is not spelled out in the requirements. He feels like a 50% residential buildout is fair. It is a TOD area, commercial will be needed to fulfill the vision of a walkable community.

Ms. Anderson understands that council seems to prefer that commercial be allowed to consolidate into one building. However, she would like to give feedback to council that she thinks that as a matter of TOD planning, having commercial uses at street level and abutting the street is best for a mixed-use area. Commercial should be visible and accessible to pedestrians. Regarding how much they can consolidate, she sees the appeal of being able to consolidate into one building but that may not in our best interest. If that was specifically allowed in our code, that may be the default position that developers would gravitate to. She favors keeping a requirement that a certain percentage be commercial and limiting consolidation.

Mr. Dupaix said that council has already set the precedent that consolidation to one building will be allowed. If planning commission recommends something different, developers will say that the council has already decided this issue.

Mr. Olsen said that the council has made recommendations, but planning commission is free to make a motion for council to do whatever they think is right. The council values the opinion of the planning commission.

Mr. Dupaix replied there are places where consolidation into one building would make it more productive, but having the commercial a little more dispersed and ground-level would be more what they're aiming for in a mixed-use area. He is trying to find the sweet spot to reconcile both points of view.

Mr. Dudley pointed out that if they give an exception by allowing consolidation into one building for one, it opens it up to all developers and he isn't sure that's what the vision is for that area.

Mr. Olsen noted that the code requirements should be straightforward so that everyone is playing with the same rules.

Ms. Anderson suggested an example of giving developers a percentage, i.e. if a developer has 10 buildings and the commercial requirement was for 20% then they could put commercial on the ground floor of two buildings. Does something like this make it both flexible for developers and still meet the code requirements?

Mr. Olsen said that the proposed code allows for commercial to be dispersed OR consolidated into one building, so that would need to be changed to require a percentage that must be dispersed AND a percentage that could be consolidated into one area.

Ms. Anderson asked for clarification on the wording.

Mr. Olsen stated that as an example, the code could state that "x%" of the required commercial space may be located in one building, the remainder being dispersed around the project on the ground level. He believes that the council is supportive of the idea that the commercial may be located in one building, but he will take them any recommendation from Planning Commission.

Ms. Anderson asked what the status was of these proposed amendments, are they just suggestions from the council or have they already been approved by council?

Mr. Olsen explained that staff was directed to amend the code to allow the commercial requirements to be satisfied by allowing consolidation into one building. Staff added on the 50% buildout requirement as a trigger point to ensure that we get the commercial.

Ms. Anderson asked how people feel about commercial being required to be on the ground floor? She felt that this would naturally tend to spread it out and disperse it.

Mr. Olsen indicated that the council seems to be supportive of multi-story commercial, there might be good uses for some businesses to have multiple stories. If commissioners feel strongly otherwise, they can make that recommendation to council.

Chairman Woffinden is supportive of commercial being on ground floor. That makes it more accessible.

Mr. Dupaix is fine allowing a couple of floors for commercial. That is common in larger cities. What he is struggling with is how to balance the dispersal requirement, he's still stuck about consolidating into one building.

Chairman Woffinden suggested opening the meeting for public hearing and having Mr. Olsen read the public comment letters.

Public Hearing Opened

Mr. Olsen read the following letters:

Keystone Construction, AF Utah, Wadsworth Construction, Neighborly Ventures

KEYSTONE
CONSTRUCTION

February 16, 2021

RE: Code Section 17.4.608.6.B revision - Agenda Item 2

Planning Commission:

This letter is to publicly express our support of Neighborly Ventures request to update the American Fork Code regarding the configuration of commercial/retail elements in the core blocks of the TOD. We feel that the City zoning for 25% of ground floor area to be designated for office and/or retail use is a good long term plan. However, to force a developer to build retail space before all the residential "roof tops" are in, or before the market has matured, may result in a rushed plan that results in vacant retail/ commercial space that will not fully accomplish what it was originally intended to support in the neighborhood. We feel that it would be wise for Planning Commission to consider that retail be constructed when the "market is ready" rather than dictated by ordinance.

Sincerely,

Grant Lefgren
Keystone Construction & White Horse Developers

AF Utah, LLC
4821 Atlantic Blvd.
Jacksonville, FL 32207
(904) 338-9524 / Fax 338-9527

February 17, 2021

Re: Code section 17.4.608.6.B revision- Agenda Item 2.

Planning Commission,

Thank you for your consideration of the city council's requested updates to the American Fork code regarding the configuration of the commercial/retail elements in the TOD area. We support the proposed changes but request one modification to the specific language proposed by staff.

The current language requires that the office/retail component be completed no later than the completion of 50% build-out of any residential portions of the project area. We would request that the language not contain this this 50% timing requirement. Our specific proposed language is as follows:

> *For buildings within the Mixed use Core sub-district, all buildings abutting 200 south shall have an equivalent of 100% ground floor area designated for office and/or retail use (Table 6E-Building Use). For all buildings within project areas abutting streets other than 200 South, an equivalent of 25% ground floor area shall be designated for office and/or retail use (Table 6E-Building Use). The 25% equivalent may be satisfied collectively in one building, or dispersed throughout the project area in various buildings. Delivery of the office/retail use shall occur no later than at completion of 50% build-out of any residential portions of the project area. Designation of an area for office and/or retail use under this subsection does not require any particular order or phasing of construction of buildings.*

We believe our proposed change to the language is logical and will produce a more vibrant successful community in the end. We have outlined several factors to consider when discussing the timing element of this code change.

1) **Market:** While we understand and agree with the need and desire to have office/retail space incorporated in the TOD area, forcing it to be constructed contemporaneously rather than when market driven is not good policy. Building empty storefront causes a blight on the neighborhood and can actually prevent future commercial tenants who do not want to be in an empty building. We think that the TOD project area will be most successful and vibrant if the code, while maintaining a requirement for an office and retail component of the TOD project, does not artificially impact the natural development progression of the TOD project.
2) **Design:** Office and retail projects are best constructed and envisioned once tenants have been identified and leasing plans have been put into place. While residential developments can be designed to anticipate a particular residential tenant mix, office and retail projects are very much tenant driven and should be designed around specific tenant needs instead of in the abstract on a spec basis. In addition, allowing for time to construct a residential project to provide a customer and occupant base will attract stronger and better office and retail tenants.

3) **Financing:** It is very difficult to finance a mixed use residential and commercial project without preleased tenants to support the commercial aspects of the project. While lenders are comfortable financing ground up multi-family projects, they are typically reticent to provide financing for spec office and retail projects. So even if a developer would like to construct a spec office and retail component as a part of a mixed use retail project, that developer would likely not be able to obtain financing to construct that component. It is obviously a much easier proposition to obtain financing for a retail or commercial project with tenants in place to take occupancy once construction is complete. Once substantial residential growth has occurred around the area, it is much more likely to attract commercial tenants which will allow financing to occur.

We have appreciated working with the City over the last year on the development of this project and the willingness of the City to update its code to allow the TOD project to unfold in a natural and organic way. We believe our project is well thought out and will be an asset to the neighborhood and the City. We request that the planning Commission approve the proposed code amendment without a timing component.

Thank you for your time and consideration.

Christopher Simms
Manager
AF Utah, LLC

neighborly ventures

2925 RIVER RD. SOUTH, SUITE 100 I SALEM, OR 97302 I 503-990-8909 I WWW.THENEIGHBORLYWAY.COM

February 16, 2021

Re: Code section 17.4.608.6.B revision- Agenda Item 2.

Planning Commission,

Thank you for your consideration of the city council's requested updates to the American Fork code regarding the configuration of the commercial/retail elements in the TOD area. We support the proposed changes but request one modification to the specific language proposed by staff.

The staff's language requires that the office/retail component be completed no later than the completion of 50% build-out of any residential portions of the project area. We would request that the language not contain this this 50% timing requirement. Our specific proposed language is as follows:

> *For buildings within the Mixed use Core sub-district, all buildings abutting 200 south shall have an equivalent of 100% ground floor area designated for office and/or retail use (Table 6E-Building Use). For all buildings within project areas abutting streets other than 200 South, an equivalent of 25% ground floor area shall be designated for office and/or retail use (Table 6E-Building Use). The 25% equivalent may be satisfied collectively in one building, or dispersed throughout the project area in various buildings. Designation of an area for office and/or retail use within project areas abutting streets other than 200 South under this subsection does not require any particular order or phasing of construction of buildings.*

We believe our proposed change to the language is logical and will produce a more vibrant successful community in the end. We have outlined several factors to consider when discussing the timing element of this code change.

1) **Market:** While we understand and agree with the need and desire to have office/retail space incorporated in the TOD area, forcing it to be constructed contemporaneously rather than when market driven is not good policy. Building empty storefront causes a blight on the neighborhood and can actually prevent future commercial tenants who do not want to be in an empty building. We think that the TOD project area will be most successful and vibrant if the code, does not artificially impact the natural development progression of the TOD project.
2) **Design:** Office and retail projects are best constructed and envisioned once tenants have been identified and leasing plans have been put into place. While residential developments can be designed to anticipate a particular residential tenant mix, office and retail projects are very much tenant driven and should be designed around specific tenant needs instead of in the abstract. In addition, allowing for time to construct a residential project to provide a customer and occupant base will attract stronger and better office and retail tenants. Those tenants will know their customer base and be able to design their use around that base.

3) **Financing:** It is very difficult to finance a mixed use residential and commercial project without preleased tenants to support the commercial aspects of the project. While lenders are comfortable financing ground up multi-family projects, they are typically reticent to provide financing for spec office and retail projects. Even if a developer would like to construct a spec office and retail component as a part of a mixed use project, that developer would likely not be able to obtain financing to construct that component. It is obviously a much easier proposition to obtain financing for a retail or commercial project with tenants in place to take occupancy once construction is complete. Once substantial residential growth has occurred around the area, it is much more likely to attract commercial tenants which will allow financing to occur.

We have appreciated working with the City over the last year on our development in this TOD area. We also appreciate the willingness of the City to update its code to allow the TOD project to unfold in a natural and organic way. We believe that the code change as we proposed will allow for residential development to occur while reserving areas for quality retail/commercial to occur once the market is right. We request that the Planning Commission approve the code amendment as we proposed without the timing component.

Thank you for your time and consideration.

Richard Berger

neighborly ventures

Director of Development

(503) 584-4593 Direct

February 17, 2021

Re: Code section 17.4.608.6.B revision- Agenda Item 2.

Planning Commission,

Wadsworth Multifamily has worked for many years now with landowners and developers in the American Fork TOD area. We typically represent landowners in the sale of their property and work to maximize land values by identifying developers that understand current market conditions and work diligently to meet American Fork City's goals in the TOD area.

As you are aware, there is currently tremendous demand for housing in along the Wasatch Front, especially in northern Utah County. We fully support the American Fork City's vision for diverse housing product and a mixed use community incorporating commercial space in the TOD area. However, there is currently great uncertainty in the office and retail sector of the real estate market. This is largely due to the COVID-19 pandemic which has accelerated trends such as online shopping and the ability to work from home. No one knows what the landscape will look like for the commercial real estate market once the pandemic is behind us. It may take years for office and retail to fully recover. It is also a possibility that demand may never fully return to pre-pandemic levels for these sectors.

Consequently, lenders and investors are extremely hesitant to provide funding for mixed use developments with significant space allotted for office and retail. This in turn has a negative effect on land values in the TOD area. Few developers will take on the risk of mixed use projects due to great uncertainty in market. Those that will look to offset their risk associated with taking on commercial spec space which may remain vacant for the foreseeable future. This is accomplished by purchasing land at a significantly lower price, thus negatively affecting the current landowners who wish to sell their property.

While we hope the office and retail sectors will quickly bounce back in a post pandemic world, demand has evaporated for office and retail development and we do not know when it will return. However, demand for housing remains at an all-time high. Therefore, we propose that the city remove the current language requiring that the office/retail components be completed no later than the completion of 50% build-out of any residential portions of the project area. This is especially important while access to the TOD remains limited and the timeline for the improvements to 200 South is in flux.

The greatest chance for success in the TOD area is to first build housing, creating a core population of residents which can then support future office and retail development when the commercial market recover and the area matures. Additionally, office and retail space is most successful when it is created with a specific tenant in mind and leasing agreements have been but in place. By permitting developers to preserve space for future commercial development and allowing market demand to dictate the timing for the delivery of office and retail components, we firmly believe the TOD area will become the vibrant and successful community which American Fork City envisions.

Sincerely,

Andrew Wadsworth

Vice President of Investment Sales

Wadsworth Multifamily

801-922-0662

andrew@wadsworthmultifamily.com

Mr. Richard Berger, of Neighborly Ventures, owns property in the TOD zone. They are a development and property management company, they will own the property for the long-term. They look for commercial uses as well in a mixed-use area. He wants to point out that the clustering concept of the commercial requirement only affects properties that do not front 200 South. Buildings along 200 South are the main commercial core and will still have to build retail as described in the code, when the building is built. Other properties can transition by consolidating commercial away from 200 South. Their company chose a premier corner to design a commercial retail building and have designed their project around that to create vibrancy. There is no guarantee a developer will ever build there, but they are guaranteed that this is the only use that can be built. Their plan is to build a parking lot, commercial pad at the same time as a residential, so the vision will be there. They will construct it all at the same time so that people will get the picture of what it is intended to be. Once they get their portion done, people will begin to see the vision. 200 South will be developed as a main commercial corridor. He believes in multiple clusters and multiple projects, and that commercial vibrancy will come with finding good tenants. Synergy comes when people move into the residential and want to be next to retail. Vacant commercial space is the worst nightmare, built just because it was required, and this will affect residential development as well. He feels that the commercial space must be planned for and a space reserved for it.

Mr. Christiansen still would like a timing requirement, he's open to a 75% requirement to give some flexibility. He doesn't think he can support anything without a timing trigger in it.

Mr. Olsen clarifies to ask Mr. Christiansen if that means he would like to see the 50% trigger changed to 75% and leave the rest as is.

Mr. Christensen said that he could support the 50% as well, he can be flexible, but he does think there needs to be fixed guidelines.

Mr. Brocious says that he can see the advantages to a 75% buildout, he just wants the assurance that the required commercial will come in.

Mr. Dupaix is fine with the 75%, he wants to ensure that there are still the commercial features in these transition zones. A business needs to understand what the vision is for that area.

Public Hearing Closed

Mr. Christensen moved to approve the proposed amendments, with the change that commercial development be built no later than 75% residential buildout.

Mr. Brocious seconded the motion. Voting was as follows:

Chairman Woffinden	**Aye**
Christine Anderson	**Nay**
Chris Christiansen	**Aye**
Rod Brocious	**Aye**
Harold Dudley	**Aye**
Geoff Dupaix	**Aye**

The motion passed.

Ms. Anderson clarifies that she is in favor of the 75% buildout requirement, but is undecided as to the consolidation component, so she votes nay.

3. Other Business

Mr. Olsen indicated that the commission is still one planning commissioner short, and staff is working on it.

Ms. Anderson expressed interest in attending the hot-wash meeting on Wednesday morning before Planning Commission meeting. She asked if anyone else would be interested. If so, they can set up a rotation to attend.

Mr. Olsen responded that it would be helpful to have the chair and vice-chair at the meeting. To be in compliance with legal requirements there shouldn't be more than two or three commissioners attending.

Other commissioners indicate that they are fine with Chairman Woffinden and Vice-chair Anderson attending the meeting.

4. Site Plan Committee Report

Mr. Olsen reviewed the items for the upcoming Planning Commission meeting to be held on Wednesday, March 3, 2021. There will be two zone changes and a site plan approval for King & McCleary.

5. Review and action on the minutes of the February 3, 2021 Planning Commission Regular Session

Ms. Anderson moved to recommend approval of the minutes of the February 3, 2021 Planning Commission Regular Session.

Mr. Dupaix seconded the motion. Voting was as follows:

Chairman Woffinden	**Aye**
Christine Anderson	**Aye**
Chris Christiansen	**Aye**
Rod Brocious	**Aye**
Harold Dudley	**Aye**
Geoff Dupaix	**Abstain**

The motion passed.

6. Adjournment

Mr. Dupaix motioned to adjourn.
Mr. Dudley seconded the motion. All voted in favor.

Meeting adjourned at 8 :15 pm.

Lisa Halversen
Administrative Assistant