AMERICAN FORK CITY COUNCIL
OCTOBER 27, 2020
REGULAR SESSION AGENDA

NOTICE OF ELECTRONIC MEETING

In accordance with Resolution No. 2020-07-20R, Mayor Frost has determined that conducting meetings of the City Council with an anchor location, such as the City Council Chambers or Administration Conference Room, 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 declared a Statewide Public Health Emergency due to COVID-19 on October 14, 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 asymptomatic.
- 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 Utah Health Guidance levels. Further, regardless of the number of attendees, social distancing measures for Council, staff, and attendees will be difficult to maintain in the City Council Chambers and Administration Conference Room.
- 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 City Council meetings and to provide a way to participate in public hearings.

For the next 30 days, all City Council 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. You may also make public comment in person at City Hall (31 N. Church Street). No more than ten individuals will be allowed in City Hall at one time to ensure social distancing guidelines are capable of being followed. Masks shall be worn inside City Hall.

The American Fork City Council will meet in a regular session on Tuesday, October 27, 2020, electronically, commencing at 7:00 p.m. The agenda shall be as follows:

REGULAR SESSION

1. Pledge of Allegiance; Invocation by Council Member Christiansen; roll call.
2. Twenty-minute public comment period - limited to two minutes per person.
3. City Administrator's Report

4. Council Reports
5. Mayor's Report

COMMON CONSENT AGENDA

(*Common Consent* is that class of Council action that requires no further discussion or which is routine in nature. All items on the Common Consent Agenda are adopted by a single motion unless removed from the Common Consent Agenda.)

1. Approval of the October 6, 2020, work session minutes.
2. Approval of the October 13, 2020, city council minutes.
3. Common consent consideration regarding authorization to release the Improvements Durability Retainer of $1830.00 for TLMA/TRA located at 1625 South 580 East.
4. Ratification of city payments (October 7, 2020 to October 20, 2020) and approval of purchase requests over $25,000.

ACTION ITEMS

1. Review and action on the water banking agreement with Erik R. Heras.
2. Review and action on the water banking agreement with Layne Downs.
3. Review and action on the water banking agreement with Cadence Homes, LLC.
4. Review and action on a performance-in-lieu agreement with Smart Cadence, LLC regarding actual construction in lieu of providing an Improvements Construction Guarantee associated with Timp Hollow Plat D.
5. Review and action on a resolution approving a land use map amendment from the Residential High Density to the Residential Medium Density designation, located in the area of 65 East 400 South.
6. Review and action on an ordinance approving a zone map amendment from the R1-7,500 Residential to the R2-7,500 Residential zone located in the area of 165 East 300 North.
7. Review and action on subdivisions, commercial projects, condominiums, and PUD's including 1) plat approval; 2) method of satisfaction of water rights requirements; 3) posting of an improvement bond or setting of a time frame for improvement installation; and 4) authorization to sign the final plat and acceptance of all dedications to the public and to have the plat recorded.
    a. Review and action on an ordinance approving a commercial site plan for Bishop Storage, located at 16 West 1500 South in the PI-1 Planned Industrial zone.
    b. Review and action on the final plat of Timp Hollow Plat D subdivision, located in the area of 1030 North 1150 East in the R1-12,000 Residential zone.
8. Review and action on a resolution approving an interlocal agreement with Cedar Hills, Highland, and Pleasant Grove regarding the Mill Ditch Pipeline Enclosure project.
9. Review and action on a software license and maintenance agreement with Azteca Systems LLC. for Cityworks Asset Management Software.
10. Review and action on a contract for Centricity GIS to provide professional consulting services for the configuration and implementation of Cityworks Asset Management Software.

11. Review and action on a reimbursement agreement with White Horse Developers LLC for off-site sewer system improvements along 1100 West.
12. Review and action on connector's agreements (a/k/a pioneering agreement) with White Horse Developers for off-site system improvements along various roadways of the recently approved Rockwell Ranch development.
13. Consideration and action to enter into a closed session to discuss items described in Utah State Code 52-4-204 and 52-4-205.
14. Adjournment.

Dated this 23 day of October, 2020.

Terilyn Lurker
City Recorder

- In accordance with the Americans with Disabilities Act, the City of American Fork will make reasonable accommodations to participate in the meeting. Requests for assistance can be made by contacting the City Recorder at 801-763-3000 at least 48 hours in advance of the meeting.
- The order of agenda items may be changed to accommodate the needs of the City Council, staff, and the public.

REQUEST FOR COUNCIL ACTION
CITY OF AMERICAN FORK
OCTOBER 27, 2020

Department Public Works **Director Approval** *Scott Sensanbaugher*

AGENDA ITEM Common consent consideration regarding authorization to release the Improvements Durability Retainer of $_1830.00_ for TLMA/TRA located at 1625 South 580 East.

SUMMARY RECOMMENDATION The City Engineer recommends that the Improvements Durability Retainer be released. The improvements were found in a condition meeting City standards for workmanship and performance after one (1) year of service.

BACKGROUND Pursuant to the terms of Sections 17.9.100 and 17.9.403 of the City Development Code, the City Council may authorize the release of the Improvements Durability Retainer following the one (1) year durability testing period. The release is based on a finding that the quality of construction and materials have endured without evidence of unusual depreciation, wear, non-conformance of City standards or need for remedial action.

BUDGET IMPACT Following the release of the Improvements Durability Retainer, the City is responsible for all future maintenance and replacement costs for any publicly-owned property or improvement. In developments with Home-Owners or Unit-Owners Associations, all common area maintenance and replacement responsibilities will then fall to the Association. All privately-owned improvements will be the responsibility of the owner of the given parcel.

SUGGESTED MOTION Move to authorize the City Engineer to issue documents and/or payments to release the Improvements Durability Retainer of $1830.00 for TLMA/TRA. Find that the quality of construction and materials have endured without evidence of unusual depreciation, wear, non-conformance of City standards, or need for remedial action.

SUPPORTING DOCUMENTS

Bond Release Request-TLMA-Durability (PDF)
Durability_Release_Authorization-TLMA (PDF)
Performance Guarantee - TLMA (XLSX)

BOND RELEASE REQUEST

Development Name: TLMA

Development Address: 1625 South 580 East A.F. 8403

*All outstanding fees must be paid prior to any release.

☐ Partial Improvement Assurance Release ☐ Final Improvement Assurance Release ☒ Improvement Warranty Release (10% Durability Release)

Description of Item	Quantity	Units	Unit Price	Total	Inspector Use Only Complete? Yes/No
			Total		

Bond Type: ☒ Cash Deposit ☐ Escrow Account ☐ Letter of Credit ☐ Surety Bond

Please send check/bank letter to:

Name: Terry F Anderson

Bank (if applicable):

Address: 1159 North 1150 East

City: American Fork State: Utah Zip: 84003

Phone: 801-360-6999 Email: terryf trasnowandsun.com

Signature: Terry F Anderson Date: 10-14-2020

City Official Use Only

☒ Fees paid and current

Administrative Signature: Carolyn Lloyd Date: 10-19-20

Inspector Signature: Dan Howard 9/2/20 Inspection Date: 10/15/20

Attachment: Bond Release Request-TLMA-Durability (Durability Release - TLMA/TRA)

IMPROVEMENT WARRANTY RELEASE AUTHORIZATION

The City Council of American Fork City, a Municipal Corporation and Body Politic in the State of Utah, hereby authorizes the release of the Improvement Warranty for TLMA/TRA pursuant to the terms of Section 17.9.100 and 17.9.403 of the City Development Code. The City Council finds that the quality of construction and materials have endured without evidence of unusual depreciation, wear, non-conformance to City standards, or need for remedial action.

The City Council hereby authorizes the City Engineer to issue a letter to the financial guarantee institution authorizing release of the Improvement Warranty or to issue an authorized City check as appropriate for the type of guarantee provided.

Amount Released: $__1830.00_____

PASSED THIS 27 DAY OF _OCTOBER__, 2020

_____
City Representative, American Fork City

ATTEST:

_____
Terilyn Lurker, City Recorder

Attachment: Durability_Release_Authorization-TLMA (Durability Release - TLMA/TRA)

Name of Development: TLMA/TRA

Date		Date		Date		Date		Date		Date		
8/27/2019	Partial	10/22/2019										

	Description of Item	Quantity	Unit	Unit Price	Total	Release #1	Amount Requested	Release #2	Amount Requested	Release #3	Amount Requested	Release #4	Amount Requested	Release #5	Amount Requested	Release #6	Amount Requested	Balance
	Install pour in place 4' manhole	1	Each	$3,500.00	$3,500.00	1	$3,500.00		$0.00		$0.00		$0.00		$0.00		$0.00	$0.00
	Road cut for storm drain	1	Each	$3,750.00	$3,750.00	1	$3,750.00		$0.00		$0.00		$0.00		$0.00		$0.00	$0.00
	Hot tap watermain & install 6" C900, Hot tap & isntall fire hydrant	1	Each	$7,500.00	$7,500.00	1	$7,500.00		$0.00		$0.00		$0.00		$0.00		$0.00	$0.00
	24" Curb and Gutter	30	LF	$20.00	$600.00	30	$600.00		$0.00		$0.00		$0.00		$0.00		$0.00	$0.00
	5' Sidewalk	30	LF	$15.00	$450.00	30	$450.00		$0.00		$0.00		$0.00		$0.00		$0.00	$0.00
	Drive Approach	1	Each	$2,500.00	$2,500.00	1	$2,500.00		$0.00		$0.00		$0.00		$0.00		$0.00	$0.00
					$18,300.00		$17,300.00		$1,000.00		$0.00		$0.00		$0.00		$0.00	**$0.00** Available for Release

10% Durability - retained at ICG release $1,830.00 Released 10-27-2020 $1,830.00 Durability Period

ICG Amount **$20,130.00**

Recording Fee $133.00

Printing Fee $42.50

TOTAL **$20,305.50**

Reserved $1000 until as-builts are turned in, partial release of $17,300.00 processed on 8/26/19.

As-builts turned in, processed final $1000.00 on 10/22/19

Attachment: Performance Guarantee - TLMA (Durability Release - TLMA/TRA)

REQUEST FOR COUNCIL ACTION
CITY OF AMERICAN FORK
OCTOBER 27, 2020

Department Public Works **Director Approval** *Scott Sensanbaugher*

AGENDA ITEM Review and action on the Water Banking Agreement for Water Shares with Erik R. Heras for 2.12 acre-feet of water.

SUMMARY RECOMMENDATION The City Engineer recommends approval of the Water Banking Agreement with Erik R. Heras for water shares as shown in the agreement.

BACKGROUND Water banking agreements are authorized by the American Fork municipal code to document and track water dedicated to the city in exchange for water credits that can be used or assigned to another person to be used to meet the city's water dedication requirements.

BUDGET IMPACT N/A

SUGGESTED MOTION Move to authorize the City to sign the Water Banking Agreement for Water Shares with Erik R. Heras for 2.12 acre-feet of water.

SUPPORTING DOCUMENTS

Erik Heras - Water Banking Agreement for Water Shares (DOCX)

WATER BANKING AGREEMENT FOR WATER SHARES

This Water Banking Agreement for Water Shares ("**Agreement**") is entered into as of the 27 day of October, 2020 ("**Effective Date**"), by and between Erik R. Heras ("**Owner**"), and AMERICAN FORK CITY, a municipal corporation and political subdivision of the State of Utah ("**City**").

RECITALS

WHEREAS Certificate No. 2213 ("**Water Share**") representing 0.20 shares in Lehi Irrigation Company and Certificate No. 6927 and 6978 ("Water Share") representing 0.22 and 0.78 shares in Pleasant Grove Irrigation Company has been or will be conveyed and assigned by Owner to the City; and

WHEREAS Owner is transferring the Water Share to City in order to meet City's water dedication requirements for Owner's development(s) and/or to bank the water with City for use by others to meet City's water dedication requirements for development; and

WHEREAS City is willing to accept the Water Share for use in its system in satisfaction of its water dedication requirements for present or future developments of Owner or Owner's assigns, to the extent provided by City Code section 17.1.400, or any successor provision.

NOW, THEREFORE, in consideration of the foregoing premises, the mutual covenants hereafter set forth, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Owner and City, incorporating the recitals set forth above, agree as follows:

AGREEMENT

1. Transfer and Acceptance of the Water Share. Owner has conveyed and assigned, or will convey and assign, the Water Share to City by endorsement of the share certificate, or such other method required by the irrigation company, and City has accepted or will accept the conveyance and assignment of the Water Share. City agrees and acknowledges that the Water Share is an acceptable water share for purposes of satisfying City's water dedication requirements. Owner acknowledges that under the Article XI, Section 6 of the Utah Constitution, City is prohibited from returning to Owner any portion of the Water Share.

2. Water Credits. In exchange for the transfer of the Water Share, City hereby grants to Owner water dedication credits for 2.12 acre-feet of water ("**Credits**"). As provided herein, the Credits may be used by Owner to meet City's water dedication requirements for Owner's development(s) or may be assigned by Owner to others. The City Recorder shall maintain a credit log to keep track of any Credits that have not yet been dedicated to a specific development to meet City's water dedication requirements. Owner, or any assignee of all or a portion of the Credits, may request a copy of the credit log by making a written request to the City Recorder. Within ten business days of receiving the request, the City Recorder will provide a copy of the credit log.

Attachment: Erik Heras - Water Banking Agreement for Water Shares (Water Banking Agreement with Erik R. Heras)

Approved as to form by City's attorney 6/9/2018

3. Use of Credits for Owner's Developments. Owner may use the Credits in order to meet City's water dedication requirements as part of the development approval process. Prior to final plat approval, Owner shall send the City Recorder a written request to apply a portion of the Credits to a specific development. The number of acre-feet from the Credits required for dedication to a particular development shall be determined by City ordinances and policies existing at the time of the dedication. A decision to apply the Credits to a specific development is final, and any Credits so applied are no longer available for application to another project or assignment to a third party.

4. Assignment of Credits. Owner may assign any or all of the Credits to others using an Assignment of Water Credits form similar to Exhibit A ("**Assignment**"). An assignee shall present the Assignment, with original signatures, to the City Recorder, at which time the City Recorder shall update the credit log to account for the Assignment. The City Recorder shall also keep a copy of each Assignment in his/her records. An assignee may assign the Credits in the same manner outlined herein or may use the Credits in order to meet City's water dedication requirements. Any assignment of Credits that is not presented to the City Recorder as provided in this paragraph shall be void as against any subsequent purchaser, in good faith and for valuable consideration, of the same Credits, or any portion thereof, where the subsequent purchaser's assignment is first presented to the City Recorder.

5. Use of Credits by Assignees. An assignee may use the Credits in order to meet City's water dedication requirements as part of the development approval process. Prior to final plat approval, assignee shall send the City Recorder a written request to apply a portion of the Credits to a specific development. The number of acre-feet from the Credits required for dedication to a particular development shall be determined by City ordinances and policies existing at the time of the dedication. A decision to apply the Credits to a specific development is final, and any Credits so applied are no longer available for application to another project or assignment to a third party.

6. City's Use of Water Share. Upon execution of this Agreement, City shall have the full and unencumbered right to divert and beneficially use the water under the Water Share. City bears the responsibility to protect and maintain in good standing the Water Share, including placing the Water Share to beneficial use and paying assessments levied by the irrigation company. Owner agrees to provide any information or other assistance, as requested by City, that is reasonably necessary to protect and maintain the Water Share. Owner's rights to Credits under this Agreement will not be affected if the Water Share is forfeited, abandoned, or otherwise lost due to City's nonuse.

7. Termination by Owner. Owner may, at any time and in its sole discretion, terminate this Agreement by filing written notice of termination with the City Recorder. Upon termination, any Credits that have not been dedicated to a specific development shall immediately and automatically pass to City.

8. Cessation of Owner's Use. Upon execution of this Agreement, Owner shall immediately cease any and all use of the Water Share.

9. Successors and Assigns. Pursuant to the terms of this Agreement, Owner shall have the right to assign its rights, duties, and obligations. The parties acknowledge that the rights, duties, and obligations of Owner will also apply to any successor or assign of Owner, and that the use of the term "Owner" in this contract includes Owner's successors or assigns.

Attachment: Erik Heras - Water Banking Agreement for Water Shares (Water Banking Agreement with Erik R. Heras)

10. Ownership of Water Facilities. Nothing in this Agreement shall alter the ownership of any wells or other water facilities of Owner or City.

11. Entire Agreement. This Agreement represents the entire agreement between the parties and supersedes all prior agreements and understandings concerning its subject matter. This Agreement shall not be amended or modified except by written instrument signed by both parties.

12. Construction and Enforcement. This Agreement shall be construed in accordance with and governed by the laws of the State of Utah. This Agreement may be specifically enforced.

13. Third Party Beneficiaries. Except for the assignees of Credits, this Agreement is not intended to and shall not create any rights in any person or entity not a party to this Agreement.

14. Attorney Fees. In any action arising out of this Agreement, the prevailing party shall be entitled to costs and reasonable attorney fees.

15. Further Assurances. After the execution of this Agreement, the parties agree to execute and deliver such documents, and to take or cause to be taken all such other actions, as either party may reasonably deem necessary or appropriate in order to carry out the intents and purposes of this Agreement.

16. Severability. If any term, covenant, or condition of this Agreement shall be determined by a court of competent jurisdiction to be invalid or unenforceable, the remainder of this Agreement shall not be affected thereby, and the remainder of the Agreement shall remain in full force and effect.

17. Authority of Parties. The persons signing this Agreement represent and warrant that they have full authority to do so and that their corporation or entity has undertaken and obtained whatever formalities and approvals are necessary to enter into this Agreement.

Attachment: Erik Heras - Water Banking Agreement for Water Shares (Water Banking Agreement with Erik R. Heras)

Approved as to form by City's attorney 6/9/2018

IN WITNESS WHEREOF, the parties have executed this Agreement as of the Effective Date.

AMERICAN FORK CITY

_____ Attest: _____
Bradley J. Frost, Mayor Terilyn Lurker, City Recorder

STATE OF UTAH)
:ss
COUNTY OF _____)

On the _____ day of _____, 20__, personally appeared before me Bradley J. Frost and Terilyn Lurker, known to me to be the Mayor and City Recorder, respectively, of American Fork City, who acknowledged to me that they executed the within Water Banking Agreement pursuant to a resolution of the City Council adopted pursuant to notice at a regular meeting at which a quorum was in attendance.

_____
NOTARY PUBLIC

_____
Erik R. Heras

STATE OF UTAH)
:ss
COUNTY OF _____)

On the _____ day of _____, 20__, Erik R. Heras personally appeared before me and duly acknowledged that he, executed this Water Banking Agreement for Water Shares for the purposes stated therein.

_____
NOTARY PUBLIC

Attachment: Erik Heras - Water Banking Agreement for Water Shares (Water Banking Agreement with Erik R. Heras)

EXHIBIT A

ASSIGNMENT OF WATER CREDITS

This Assignment of Water Credits ("Assignment") is entered into as of this _____ day of _____, 20___, by and between Erik R. Heras ("Assignor"), whose mailing address is 482 North 50 West #14, American Fork, Utah 84003, and _____ ("Assignee"), whose mailing address is _____. For good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, Assignor transfers and assigns to Assignee _____ acre-feet of water credits that were banked with American Fork City pursuant to the Water Banking Agreement for Water Shares between American Fork City and Erik R. Heras, dated October 27, 2020.

In order to effectuate this Assignment, Assignee shall present this original signed and notarized Assignment to the American Fork City Recorder.

DATED this _____ day of _____, 20___.

_____
Transferor

State of _____)
:ss
County of _____)

On the _____ day of _____, 20___, personally appeared before me Erik R. Heras, personally known to me to be the person whose name is subscribed to this instrument, who acknowledged that he/she executed it.

_____
Notary Public

Attachment: Erik Heras - Water Banking Agreement for Water Shares (Water Banking Agreement with Erik R. Heras)

Approved as to form by City's attorney 6/9/2018

REQUEST FOR COUNCIL ACTION
CITY OF AMERICAN FORK
OCTOBER 27, 2020

Department Public Works **Director Approval** *Scott Sensanbaugher*

AGENDA ITEM Review and action on the Water Banking for Water Shares Agreement with Layne Downs for 7.49 acre-feet of water.

SUMMARY RECOMMENDATION The City Engineer recommends approval of the Water Banking Agreement with Layne Downs for water rights as shown in the agreement.

BACKGROUND Water banking agreements are authorized by the American Fork municipal code to document and track water dedicated to the city in exchange for water credits that can be used or assigned to another person to be used to meet the city's water dedication requirements.

BUDGET IMPACT N/A

SUGGESTED MOTION Move to authorize the City to sign the Water Banking Agreement for Water Shares with Layne Downs for 7.49 acre-feet of water.

SUPPORTING DOCUMENTS

Layne Downs - Water Banking Agreement for Water Shares 2020.10.27 (DOCX)

WATER BANKING AGREEMENT FOR WATER SHARES

This Water Banking Agreement for Water Shares ("**Agreement**") is entered into as of the 27 day of October, 2020 ("**Effective Date**"), by and between Layne Downs ("**Owner**"), and AMERICAN FORK CITY, a municipal corporation and political subdivision of the State of Utah ("**City**").

RECITALS

WHEREAS Certificate No. 5510 ("**Water Share**") representing 4.5 shares in Provo Reservoir Water Users Company has been or will be conveyed and assigned by Owner to the City; and

WHEREAS Owner is transferring the Water Share to City in order to meet City's water dedication requirements for Owner's development(s) and/or to bank the water with City for use by others to meet City's water dedication requirements for development; and

WHEREAS City is willing to accept the Water Share for use in its system in satisfaction of its water dedication requirements for present or future developments of Owner or Owner's assigns, to the extent provided by City Code section 17.1.400, or any successor provision.

NOW, THEREFORE, in consideration of the foregoing premises, the mutual covenants hereafter set forth, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Owner and City, incorporating the recitals set forth above, agree as follows:

AGREEMENT

1. Transfer and Acceptance of the Water Share. Owner has conveyed and assigned, or will convey and assign, the Water Share to City by endorsement of the share certificate, or such other method required by the irrigation company, and City has accepted or will accept the conveyance and assignment of the Water Share. City agrees and acknowledges that the Water Share is an acceptable water share for purposes of satisfying City's water dedication requirements. Owner acknowledges that under the Article XI, Section 6 of the Utah Constitution, City is prohibited from returning to Owner any portion of the Water Share.

2. Water Credits. In exchange for the transfer of the Water Share, City hereby grants to Owner water dedication credits for 7.49 acre-feet of water ("**Credits**"). As provided herein, the Credits may be used by Owner to meet City's water dedication requirements for Owner's development(s) or may be assigned by Owner to others. The City Recorder shall maintain a credit log to keep track of any Credits that have not yet been dedicated to a specific development to meet City's water dedication requirements. Owner, or any assignee of all or a portion of the Credits, may request a copy of the credit log by making a written request to the City Recorder. Within ten business days of receiving the request, the City Recorder will provide a copy of the credit log.

3. Use of Credits for Owner's Developments. Owner may use the Credits in order to meet City's water dedication requirements as part of the development approval process. Prior to final

Attachment: Layne Downs - Water Banking Agreement for Water Shares 2020.10.27 (Water Banking Agreement with Layne Downs)

Approved as to form by City's attorney 6/9/2018

plat approval, Owner shall send the City Recorder a written request to apply a portion of the Credits to a specific development. The number of acre-feet from the Credits required for dedication to a particular development shall be determined by City ordinances and policies existing at the time of the dedication. A decision to apply the Credits to a specific development is final, and any Credits so applied are no longer available for application to another project or assignment to a third party.

4. Assignment of Credits. Owner may assign any or all of the Credits to others using an Assignment of Water Credits form similar to Exhibit A ("**Assignment**"). An assignee shall present the Assignment, with original signatures, to the City Recorder, at which time the City Recorder shall update the credit log to account for the Assignment. The City Recorder shall also keep a copy of each Assignment in his/her records. An assignee may assign the Credits in the same manner outlined herein or may use the Credits in order to meet City's water dedication requirements. Any assignment of Credits that is not presented to the City Recorder as provided in this paragraph shall be void as against any subsequent purchaser, in good faith and for valuable consideration, of the same Credits, or any portion thereof, where the subsequent purchaser's assignment is first presented to the City Recorder.

5. Use of Credits by Assignees. An assignee may use the Credits in order to meet City's water dedication requirements as part of the development approval process. Prior to final plat approval, assignee shall send the City Recorder a written request to apply a portion of the Credits to a specific development. The number of acre-feet from the Credits required for dedication to a particular development shall be determined by City ordinances and policies existing at the time of the dedication. A decision to apply the Credits to a specific development is final, and any Credits so applied are no longer available for application to another project or assignment to a third party.

6. City's Use of Water Share. Upon execution of this Agreement, City shall have the full and unencumbered right to divert and beneficially use the water under the Water Share. City bears the responsibility to protect and maintain in good standing the Water Share, including placing the Water Share to beneficial use and paying assessments levied by the irrigation company. Owner agrees to provide any information or other assistance, as requested by City, that is reasonably necessary to protect and maintain the Water Share. Owner's rights to Credits under this Agreement will not be affected if the Water Share is forfeited, abandoned, or otherwise lost due to City's nonuse.

7. Termination by Owner. Owner may, at any time and in its sole discretion, terminate this Agreement by filing written notice of termination with the City Recorder. Upon termination, any Credits that have not been dedicated to a specific development shall immediately and automatically pass to City.

8. Cessation of Owner's Use. Upon execution of this Agreement, Owner shall immediately cease any and all use of the Water Share.

9. Successors and Assigns. Pursuant to the terms of this Agreement, Owner shall have the right to assign its rights, duties, and obligations. The parties acknowledge that the rights, duties, and obligations of Owner will also apply to any successor or assign of Owner, and that the use of the term "Owner" in this contract includes Owner's successors or assigns.

Attachment: Layne Downs - Water Banking Agreement for Water Shares 2020.10.27 (Water Banking Agreement with Layne Downs)

10. Ownership of Water Facilities. Nothing in this Agreement shall alter the ownership of any wells or other water facilities of Owner or City.

11. Entire Agreement. This Agreement represents the entire agreement between the parties and supersedes all prior agreements and understandings concerning its subject matter. This Agreement shall not be amended or modified except by written instrument signed by both parties.

12. Construction and Enforcement. This Agreement shall be construed in accordance with and governed by the laws of the State of Utah. This Agreement may be specifically enforced.

13. Third Party Beneficiaries. Except for the assignees of Credits, this Agreement is not intended to and shall not create any rights in any person or entity not a party to this Agreement.

14. Attorney Fees. In any action arising out of this Agreement, the prevailing party shall be entitled to costs and reasonable attorney fees.

15. Further Assurances. After the execution of this Agreement, the parties agree to execute and deliver such documents, and to take or cause to be taken all such other actions, as either party may reasonably deem necessary or appropriate in order to carry out the intents and purposes of this Agreement.

16. Severability. If any term, covenant, or condition of this Agreement shall be determined by a court of competent jurisdiction to be invalid or unenforceable, the remainder of this Agreement shall not be affected thereby, and the remainder of the Agreement shall remain in full force and effect.

17. Authority of Parties. The persons signing this Agreement represent and warrant that they have full authority to do so and that their corporation or entity has undertaken and obtained whatever formalities and approvals are necessary to enter into this Agreement.

Attachment: Layne Downs - Water Banking Agreement for Water Shares 2020.10.27 (Water Banking Agreement with Layne Downs)

Approved as to form by City's attorney 6/9/2018

IN WITNESS WHEREOF, the parties have executed this Agreement as of the Effective Date.

AMERICAN FORK CITY

_____ Attest: _____

Bradley J. Frost, Mayor Terilyn Lurker, City Recorder

STATE OF UTAH)
:ss
COUNTY OF _____)

On the _____ day of _____, 20__, personally appeared before me Bradley J. Frost and Terilyn Lurker, known to me to be the Mayor and City Recorder, respectively, of American Fork City, who acknowledged to me that they executed the within Water Banking Agreement pursuant to a resolution of the City Council adopted pursuant to notice at a regular meeting at which a quorum was in attendance.

_____
NOTARY PUBLIC

_____
By: Layne Downs

STATE OF UTAH)
:ss
COUNTY OF _____)

On the _____ day of _____, 20__, Layne Downs personally appeared before me and duly acknowledged that he, executed this Water Banking Agreement for Water Shares for the purposes stated therein.

_____
NOTARY PUBLIC

Attachment: Layne Downs - Water Banking Agreement for Water Shares 2020.10.27 (Water Banking Agreement with Layne Downs)

Approved as to form by City's attorney 6/9/2018

EXHIBIT A

ASSIGNMENT OF WATER CREDITS

This Assignment of Water Credits ("Assignment") is entered into as of this _____ day of _____, 20___, by and between Layne Downs ("Assignor"), whose mailing address is 211 South 500 West, Lehi, Utah, 84043, and _____ ("Assignee"), whose mailing address is _____. For good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, Assignor transfers and assigns to Assignee _____ acre-feet of water credits that were banked with American Fork City pursuant to the Water Banking Agreement for Water Shares between American Fork City and Layne Downs, dated October 27, 2020.

In order to effectuate this Assignment, Assignee shall present this original signed and notarized Assignment to the American Fork City Recorder.

DATED this _____ day of _____, 20___.

_____
Layne Downs

State of _____)
:ss
County of _____)

On the _____ day of _____, 20___, personally appeared before me Layne Downs, personally known to me to be the person whose name is subscribed to this instrument, who acknowledged that he executed it.

_____
Notary Public

Attachment: Layne Downs - Water Banking Agreement for Water Shares 2020.10.27 (Water Banking Agreement with Layne Downs)

Approved as to form by City's attorney 6/9/2018

REQUEST FOR COUNCIL ACTION
CITY OF AMERICAN FORK
OCTOBER 27, 2020

Department Public Works **Director Approval** *Scott Sensanbaugher*

AGENDA ITEM Review and action on the Water Banking Agreement for Water Shares with Cadence Homes, LLC for 7.77 acre-feet of water

SUMMARY RECOMMENDATION The City Engineer recommends approval of the Water Banking Agreement with Cadence Homes, LLC for water rights as shown in the agreement.

BACKGROUND Water banking agreements are authorized by the American Fork municipal code to document and track water dedicated to the city in exchange for water credits that can be used or assigned to another person to be used to meet the city's water dedication requirements.

BUDGET IMPACT N/A

SUGGESTED MOTION Move to authorize the City to sign the Water Banking Agreement for Water Shares with Cadence Homes, LLC for 7.77 acre-feet of water.

SUPPORTING DOCUMENTS

Cadence Homes - Water Banking Agreement for Water Shares (DOCX)

WATER BANKING AGREEMENT FOR WATER SHARES

This Water Banking Agreement for Water Shares ("**Agreement**") is entered into as of the 27 day of October, 2020 ("**Effective Date**"), by and between Cadence Homes, LLC ("**Owner**"), and AMERICAN FORK CITY, a municipal corporation and political subdivision of the State of Utah ("**City**").

RECITALS

WHEREAS Certificate No. 5488 ("**Water Share**") representing 2 shares in Provo Reservoir Water Users Company has been or will be conveyed and assigned by Owner to the City; and

WHEREAS Owner is transferring the Water Share to City in order to meet City's water dedication requirements for Owner's development(s) and/or to bank the water with City for use by others to meet City's water dedication requirements for development; and

WHEREAS City is willing to accept the Water Share for use in its system in satisfaction of its water dedication requirements for present or future developments of Owner or Owner's assigns, to the extent provided by City Code section 17.1.400, or any successor provision.

NOW, THEREFORE, in consideration of the foregoing premises, the mutual covenants hereafter set forth, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Owner and City, incorporating the recitals set forth above, agree as follows:

AGREEMENT

1. Transfer and Acceptance of the Water Share. Owner has conveyed and assigned, or will convey and assign, the Water Share to City by endorsement of the share certificate, or such other method required by the irrigation company, and City has accepted or will accept the conveyance and assignment of the Water Share. City agrees and acknowledges that the Water Share is an acceptable water share for purposes of satisfying City's water dedication requirements. Owner acknowledges that under the Article XI, Section 6 of the Utah Constitution, City is prohibited from returning to Owner any portion of the Water Share.

2. Water Credits. In exchange for the transfer of the Water Share, City hereby grants to Owner water dedication credits for 7.77 acre-feet of water ("**Credits**"). As provided herein, the Credits may be used by Owner to meet City's water dedication requirements for Owner's development(s) or may be assigned by Owner to others. The City Recorder shall maintain a credit log to keep track of any Credits that have not yet been dedicated to a specific development to meet City's water dedication requirements. Owner, or any assignee of all or a portion of the Credits, may request a copy of the credit log by making a written request to the City Recorder. Within ten business days of receiving the request, the City Recorder will provide a copy of the credit log.

3. Use of Credits for Owner's Developments. Owner may use the Credits in order to meet City's water dedication requirements as part of the development approval process. Prior to final plat approval, Owner shall send the City Recorder a written request to apply a portion of the Credits

Attachment: Cadence Homes - Water Banking Agreement for Water Shares (Water Banking Agreement for Cadence Homes, LLC.)

to a specific development. The number of acre-feet from the Credits required for dedication to a particular development shall be determined by City ordinances and policies existing at the time of the dedication. A decision to apply the Credits to a specific development is final, and any Credits so applied are no longer available for application to another project or assignment to a third party.

4. Assignment of Credits. Owner may assign any or all of the Credits to others using an Assignment of Water Credits form similar to Exhibit A ("**Assignment**"). An assignee shall present the Assignment, with original signatures, to the City Recorder, at which time the City Recorder shall update the credit log to account for the Assignment. The City Recorder shall also keep a copy of each Assignment in his/her records. An assignee may assign the Credits in the same manner outlined herein or may use the Credits in order to meet City's water dedication requirements. Any assignment of Credits that is not presented to the City Recorder as provided in this paragraph shall be void as against any subsequent purchaser, in good faith and for valuable consideration, of the same Credits, or any portion thereof, where the subsequent purchaser's assignment is first presented to the City Recorder.

5. Use of Credits by Assignees. An assignee may use the Credits in order to meet City's water dedication requirements as part of the development approval process. Prior to final plat approval, assignee shall send the City Recorder a written request to apply a portion of the Credits to a specific development. The number of acre-feet from the Credits required for dedication to a particular development shall be determined by City ordinances and policies existing at the time of the dedication. A decision to apply the Credits to a specific development is final, and any Credits so applied are no longer available for application to another project or assignment to a third party.

6. City's Use of Water Share. Upon execution of this Agreement, City shall have the full and unencumbered right to divert and beneficially use the water under the Water Share. City bears the responsibility to protect and maintain in good standing the Water Share, including placing the Water Share to beneficial use and paying assessments levied by the irrigation company. Owner agrees to provide any information or other assistance, as requested by City, that is reasonably necessary to protect and maintain the Water Share. Owner's rights to Credits under this Agreement will not be affected if the Water Share is forfeited, abandoned, or otherwise lost due to City's nonuse.

7. Termination by Owner. Owner may, at any time and in its sole discretion, terminate this Agreement by filing written notice of termination with the City Recorder. Upon termination, any Credits that have not been dedicated to a specific development shall immediately and automatically pass to City.

8. Cessation of Owner's Use. Upon execution of this Agreement, Owner shall immediately cease any and all use of the Water Share.

9. Successors and Assigns. Pursuant to the terms of this Agreement, Owner shall have the right to assign its rights, duties, and obligations. The parties acknowledge that the rights, duties, and obligations of Owner will also apply to any successor or assign of Owner, and that the use of the term "Owner" in this contract includes Owner's successors or assigns.

10. Ownership of Water Facilities. Nothing in this Agreement shall alter the ownership of any wells or other water facilities of Owner or City.

Attachment: Cadence Homes - Water Banking Agreement for Water Shares (Water Banking Agreement for Cadence Homes, LLC.)

11. Entire Agreement. This Agreement represents the entire agreement between the parties and supersedes all prior agreements and understandings concerning its subject matter. This Agreement shall not be amended or modified except by written instrument signed by both parties.

12. Construction and Enforcement. This Agreement shall be construed in accordance with and governed by the laws of the State of Utah. This Agreement may be specifically enforced.

13. Third Party Beneficiaries. Except for the assignees of Credits, this Agreement is not intended to and shall not create any rights in any person or entity not a party to this Agreement.

14. Attorney Fees. In any action arising out of this Agreement, the prevailing party shall be entitled to costs and reasonable attorney fees.

15. Further Assurances. After the execution of this Agreement, the parties agree to execute and deliver such documents, and to take or cause to be taken all such other actions, as either party may reasonably deem necessary or appropriate in order to carry out the intents and purposes of this Agreement.

16. Severability. If any term, covenant, or condition of this Agreement shall be determined by a court of competent jurisdiction to be invalid or unenforceable, the remainder of this Agreement shall not be affected thereby, and the remainder of the Agreement shall remain in full force and effect.

17. Authority of Parties. The persons signing this Agreement represent and warrant that they have full authority to do so and that their corporation or entity has undertaken and obtained whatever formalities and approvals are necessary to enter into this Agreement.

Attachment: Cadence Homes - Water Banking Agreement for Water Shares (Water Banking Agreement for Cadence Homes, LLC.)

Approved as to form by City's attorney 6/9/2018

IN WITNESS WHEREOF, the parties have executed this Agreement as of the Effective Date.

AMERICAN FORK CITY

_____ Attest: _____
Bradley J. Frost, Mayor Terilyn Lurker, City Recorder

STATE OF UTAH)
:ss
COUNTY OF _____)

On the _____ day of _____, 20__, personally appeared before me Bradley J. Frost and Terilyn Lurker, known to me to be the Mayor and City Recorder, respectively, of American Fork City, who acknowledged to me that they executed the within Water Banking Agreement pursuant to a resolution of the City Council adopted pursuant to notice at a regular meeting at which a quorum was in attendance.

_____
NOTARY PUBLIC

CADENCE HOMES, LLC.

_____
By: Ryan Bybee, Manager

STATE OF UTAH)
:ss
COUNTY OF _____)

On the _____ day of _____, 20__, Ryan Bybee personally appeared before me and duly acknowledged that he, acting in his authorized capacity as Manager of Cadence Homes, LLC, executed this Water Banking Agreement for Water Shares for the purposes stated therein.

_____
NOTARY PUBLIC

Attachment: Cadence Homes - Water Banking Agreement for Water Shares (Water Banking Agreement for Cadence Homes, LLC.)

EXHIBIT A

ASSIGNMENT OF WATER CREDITS

This Assignment of Water Credits ("Assignment") is entered into as of this _____ day of _____, 20___, by and between Cadence Homes, LLC. ("Assignor"), whose mailing address is 2801 North Thanksgiving Way, #100, Lehi, Utah 84043, and _____ ("Assignee"), whose mailing address is _____. For good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, Assignor transfers and assigns to Assignee _____ acre-feet of water credits that were banked with American Fork City pursuant to the Water Banking Agreement for Water Shares between American Fork City and Cadence Homes, LLC., dated October 27, 2020.

In order to effectuate this Assignment, Assignee shall present this original signed and notarized Assignment to the American Fork City Recorder.

DATED this _____ day of _____, 20___.

_____
Transferor

State of _____)
:ss
County of _____)

On the _____ day of _____, 20___, personally appeared before me Ryan Bybee, personally known to me to be the person whose name is subscribed to this instrument, who acknowledged that he executed it.

_____
Notary Public

Attachment: Cadence Homes - Water Banking Agreement for Water Shares (Water Banking Agreement for Cadence Homes, LLC.)

Approved as to form by City's attorney 6/9/2018

REQUEST FOR COUNCIL ACTION
CITY OF AMERICAN FORK
OCTOBER 27, 2020

Department Public Works **Director Approval** *Scott Sensanbaugher*

AGENDA ITEM Review and action on a Performance-in-Lieu Agreement with Smart Cadence, LLC regarding actual construction in lieu of providing an Improvements Construction Guarantee associated with Timp Hollow Plat D.

SUMMARY RECOMMENDATION Staff recommends approval of the Agreement.

BACKGROUND City ordinance provides for an option wherein a developer can petition the City Council to allow construction of improvements in lieu of providing a performance guarantee. In this instance the recording of the plat is deferred until the project improvements are deemed complete. The Council has the option to require a petitioner to prove sufficient resources to complete the project.

BUDGET IMPACT N/A

SUGGESTED MOTION Move to approve the Performance-in-Lieu Agreement with Smart Cadence, LLC for Timp Hollow Plat D.

SUPPORTING DOCUMENTS

Performance in Lieu Agreement - Timp Hollow Plat D (PDF)

Agreement for Performance in Lieu

THIS AGREEMENT is made and entered as of the 27 day of October, 2020, by and between the City of American Fork ("City"), a political subdivision of the State of Utah, and Smart Cadence ("Owner"), a limited liability company.

WHEREAS, Owner owns property in the City located at approximately 1150 East 1000 North, American Fork, UT 84003 (the "Property");

WHEREAS, the Owner has recently proposed to the City and obtained conditional approval to commence with the Project;

WHEREAS, the Owner desires to adhere to City Ordinance Section 17.9.600 by constructing the project's public landscaping and public improvements (hereinafter collectively referred to as "Improvements") in lieu of posting an Improvement Completion Assurance;

WHEREAS, the American Fork City Council finds that the developer has sufficient financial resources to accomplish the construction of the required Improvements within the time frame outlined herein;

WHEREAS, the parties desire to enter into this Agreement to specify the rights and responsibilities of Owner to construct Improvements in lieu of posting an Improvement Completion Assurance as expressed in this Agreement and the rights and responsibilities of the City to allow and regulate such construction pursuant to the requirements of this Agreement; and

WHEREAS, Owner and the City have cooperated in the preparation of this Agreement.

NOW, THEREFORE, in consideration of the mutual covenants contained herein, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the City and Owner hereby agree to the following:

1. **Incorporation of Recital**. The foregoing Recitals are hereby incorporated in this Agreement.

2. **Improvement Completion Assurance.** Owner shall be permitted to construct Improvements in lieu of posting an Improvement Completion Assurance. Such construction shall be completed in accordance with the terms set forth herein.

3. **Time for Construction of Improvements.**

3.1_ Final construction documents and permits in accordance with City Ordinances shall be provided to the City Engineer for review immediately following the execution of

Approved as to form:
American Fork City Attorney

Attachment: Performance in Lieu Agreement - Timp Hollow Plat D (Performance-in-Lieu Agreement for Smart Cadence, LLC.)

this Agreement. Upon approval of the City Engineer, construction of Improvements shall commence within thirty days.

3.2_ Improvements shall be constructed in accordance with the Construction Schedule attached hereto as Exhibit A and incorporated herein.

3.3_ Improvements shall be completed no later than two hundred seventy five (275) days from the date of execution of this Agreement. Any extension of this time period shall be in accordance with City Ordinance Section 17.9.601.

3.4_ Owner agrees and acknowledges that if construction of Improvements is not complete within the specified time set forth in this Agreement, or Owner fails to obtain an authorized extension, the Project may be declared a Dormant Project by the City.

4. **Permits and Fees**

4.1_ Prior to construction, Owner shall pay to the City the following:

1. The portion of the Improvement Completion Assurance amount attributable to costs of inspection, clean-up, reimbursement of prior constructed public improvements, and other city costs; and
2. An Improvement Warranty pursuant to City Ordinance Section 17.9.400

4.2_ Prior to construction, Owner shall obtain all necessary permits, including a land disturbance permit.

5. **Payment to City for Street Tree Specific Improvement Completion Assurance.** This assurance shall be managed independent of the other required Improvements. The Improvement Warranty period shall also be enacted independent of this requirement. Planting of trees shall be deferred until the structure constructed on a given lot is ready for first occupancy inspection.

6. **Blanket Easement.** The Owner shall submit a recorded blanket easement over the entire project area, which shall expire upon the recording of the final plat, authorizing the installation of required Improvements in the locations shown on the approved final plat and engineering drawings.

7. **Recording of Final Plat.** Owner agrees and acknowledges that the final plat shall not be recorded with the Utah County Recorder until all Improvements for the Project are constructed and accepted by the City Council, who shall issue a Notice of Completion and Acceptance of Improvements and Release of Improvement Completion Assurance.

8. **Early Recording of Final Plat.** If at any point during the construction process the Owner wishes to record the plat an Improvement Completion Assurance shall be provided per the terms of City Ordinance Section 17.9 for any and all remaining required Improvements. Upon verification of this posting and any other approval condition, the City Recorder shall be authorized to record the plat.

9. **Improvement Warranty.** The Improvement Warranty period shall commence at the recording of the final plat.

Approved as to form:
American Fork City Attorney

Attachment: Performance in Lieu Agreement - Timp Hollow Plat D (Performance-in-Lieu Agreement for Smart Cadence, LLC.)

10. **Compliance.** All construction shall comply with all applicable Federal, State and local laws, ordinances, regulations, standards, and specifications.

11. **Attorney Fees.** In the event that legal remedies are sought by either party hereto to enforce the terms of this Agreement, the prevailing party shall be entitled to costs of suit and a reasonable attorney's fee.

12. **Entire Agreement.** This Agreement constitutes the entire agreement between the two parties on the subject matter of the Improvement Completion Assurance for the Project. Any provision that may be deemed unlawful shall be removed and the balance of the agreement shall remain in full effect.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement by and through their respective, duly authorized representatives as of the day and year first herein above written.

[Signature Page Follows]

Attachment: Performance in Lieu Agreement - Timp Hollow Plat D (Performance-in-Lieu Agreement for Smart Cadence, LLC.)

Approved as to form:
American Fork City Attorney

AMERICAN FORK CITY

Attest:

_____
Bradley J. Frost, Mayor

_____
Terilyn Lurker, City Recorder

Approved as to Content:

_____
Scott Sensanbaugher, Public Works Director

SMART CADENCE, LLC

_____
BY: Ryan Bybee
ITS: Manager

OWNER ACKNOWLEDGMENT

STATE OF UTAH
COUNTY OF UTAH

On _____ ____, 2020, Ryan Bybee personally appeared before me, who being by me duly sworn, did say that he is the Manager of Smart Cadence, a limited liability company and that the foregoing instrument was duly authorized by the company.

_____
NOTARY PUBLIC

Approved as to form:
American Fork City Attorney

Attachment: Performance in Lieu Agreement - Timp Hollow Plat D (Performance-in-Lieu Agreement for Smart Cadence, LLC.)

Exhibit ‘A’

Begin Construction: October 27, 2020

Grading: October 2020 – November 2020

Pipe Work: October 2020 – December 15, 2020

Road Improvements: January 10, 2021 – February 1, 2021

Paving (as weather permits): April 1, 2021

Completion: April 1, 2021 – April 15, 2021

Attachment: Performance in Lieu Agreement - Timp Hollow Plat D (Performance-in-Lieu Agreement for Smart Cadence, LLC.)

Approved as to form:
American Fork City Attorney

REQUEST FOR COUNCIL ACTION
CITY OF AMERICAN FORK
OCTOBER 27, 2020

Department Planning **Director Approval** *Adam Olsen*

AGENDA ITEM Review and action on a resolution approving a land use map amendment from the Residential High Density to the Residential Medium Density designation, located in the area of 65 East 400 South.

SUMMARY RECOMMENDATION The planning commission recommended approval of the land use map amendment as stated in the attached minutes of the October 7, 2020 planning commission meeting

BACKGROUND This land use map amendment was initiated by the American Fork City Council during its September 22nd, 2020 regular session after discussing a different amendment for a higher density residential designation in the same neighborhood that eventually failed. For further analysis, please refer to the attached staff report and planning commission minutes.

BUDGET IMPACT No direct budgetary impact is anticipated as a result of this approval.

SUGGESTED MOTION I move to adopt the resolution approving an amendment to the land use element of the general plan from the Residential High Density to the Residential Medium Density designation, located in the area of 65 East 400 South.

SUPPORTING DOCUMENTS

1. Res (PDF)
2. Staff Report (PDF)
3. Minutes (PDF)

RESOLUTION NO.

A RESOLUTION APPROVING AN AMENDMENT TO THE LAND USE ELEMENT OF THE GENERAL PLAN LOCATED IN THE VICINITY OF 65 EAST 400 SOUTH FROM THE RESIDENTIAL HIGH DENSITY TO THE RESIDENTIAL MEDIUM DENSITY DESIGNATION.

WHEREAS, Section 10-9a-401(1), Utah Code Annotated, 1953, as amended, requires each municipality in the State of Utah to prepare and adopt a comprehensive, long range general plan for: (1) present and future needs of the municipality; and (2) growth and development of the land within the municipality; and

WHEREAS, Section 10-9a-403, Utah Code Annotated, 1953, as amended, recommends and describes the general content of each of the major elements typically included within a general plan including, but not limited to, a Land Use Element that designates the long term goals and the proposed extent, general distribution, and location of land for housing, business, industry, agriculture, recreation, education, public buildings and grounds, open space and other categories of public and private uses of land; and

WHEREAS, Section 10-9a-403, Utah Code Annotated, 1953, as amended, anticipated that the Land Use Element will, from time to time, be amended and updated to reflect changes in condition or policy within the City; and

WHEREAS, the Planning Commission has reviewed the proposed amendment to the Land Use Element, advertised and held a public hearing thereon, duly considered the comments received at the hearing, and provided a positive recommendation regarding this request and

WHEREAS, the City Council has received a positive recommendation from the Planning Commission, and has reviewed the request further, all in accordance with Utah State law.

NOW THEREFORE BE IT RESOLVED BY THE CITY COUNCIL OF AMERICAN FORK CITY, UTAH:

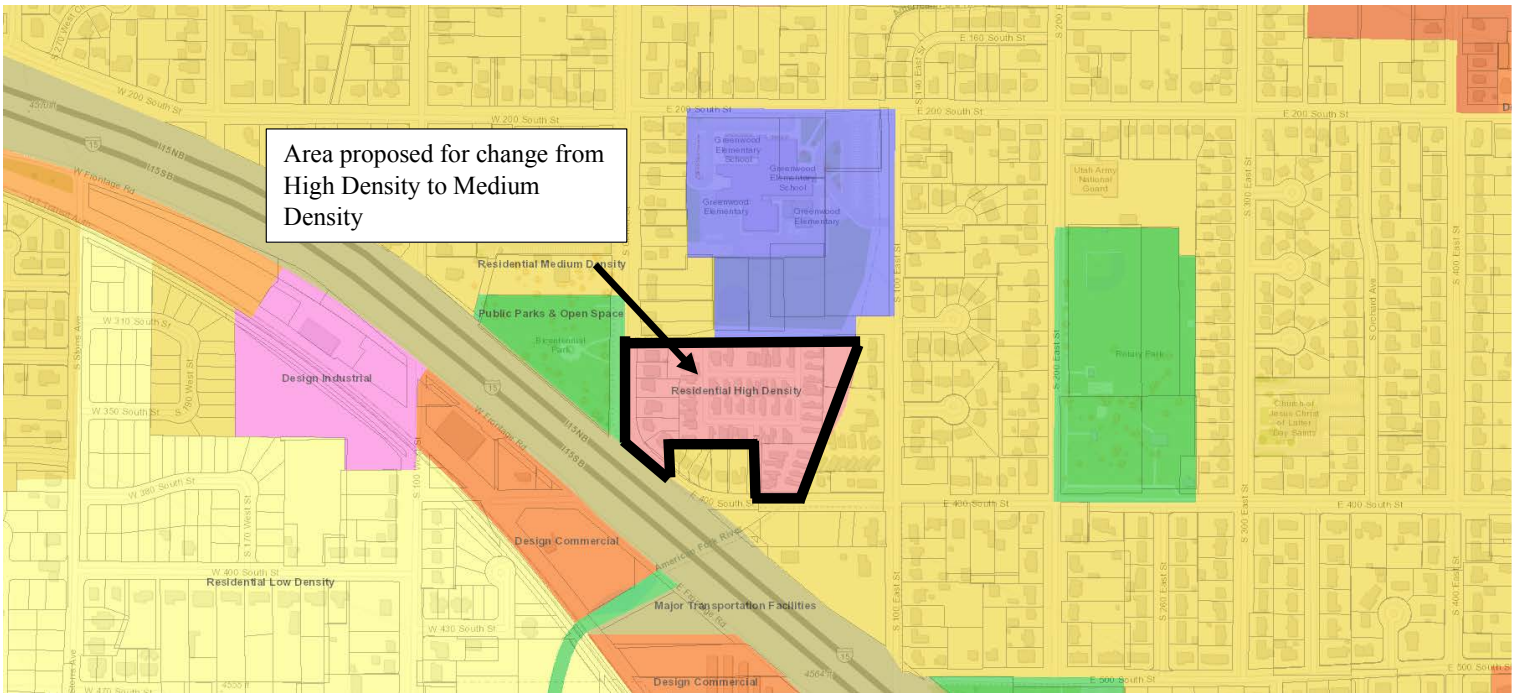
SECTION 1. That certain map entitled AMERICAN FORK CITY - LAND USE PLAN is hereby amended to show that the parcels located in the vicinity of 65 East 400 South be amended from the Residential High Density to the Residential Medium Density designation, as shown in Exhibit A below. Said change in designation is hereby adopted as an amendment to the Land Use Element of the General Plan of American Fork, Utah.

SECTION 2. The City Council hereby directs that the American Fork Land Use Plan Map be modified to incorporate the changes approved by this Resolution.

Attachment: 1. Res (Land Use 400 South MH Park)

Exhibit A

Land Use Map



Attachment: 1. Res (Land Use 400 South MH Park)

SECTION 3. It is the express intent of the City Council that said plan be followed, complied with, and otherwise adhered to.

SECTION 4. The Planning Commission and City Staff are hereby directed to recommend such ordinances and policies as recommended under the plan and deemed essential for its implementation.

PASSED AND ADOPTED THIS 27th DAY OF OCTOBER, 2020.

Brad Frost, Mayor

ATTEST:

Terilyn Lurker, Recorder

Attachment: 1. Res (Land Use 400 South MH Park)

AMERICAN FORK CITY
PLANNING COMMISSION

MEETING DATE: October 7, 2020
STAFF PRESENTATION: Adam Olsen

AGENDA TOPIC: Hearing, review and action on a land use map amendment from the Residential High Density to the Residential Medium Density designation, located in the area of 65 E. 400 S.

ACTION REQUESTED: Recommendation of approval for the land use map amendment.

BACKGROUND INFORMATION		
Location:		65 E. 400 S.
Applicants:		American Fork City
Existing Land Use:		Residential
Proposed Land Use:		NA
Surrounding Land Use:	North	Greenwood Elementary School
	South	Residential
	East	Residential
	West	Residential
Existing Zoning:		R2-7,500
Proposed Zoning:		NA
Surrounding Zoning:	North	R2-7,500
	South	R2-7,500
	East	R2-7,500
	West	R2-7,500
Land Use Plan Designation:		Residential High Density

Background

The city-initiated land use map amendment proposes a change from the Residential High-Density designation to the Residential Medium-Density designation. The amendment will bring into congruence the existing zoning (R2-7,500) with the underlying land use designation (Medium Density). The land use map designation was changed to high density a few years ago in anticipation of a high-density redevelopment project which never occurred. The surrounding neighborhood was vocal in its opposition to the change and the proposed project; subsequently the developer removed his request.

POTENTIAL MOTIONS:

Attachment: 2. Staff Report (Land Use 400 South MH Park)

APPROVAL

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

DENIAL

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

TABLE

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

Attachment: 2. Staff Report (Land Use 400 South MH Park)

Chairman Woffinden	**Aye**
Chris Christiansen	**Aye**
Christine Anderson	**Aye**
Ryan Hunter	**Aye**
Rod Brocious	**Aye**
Harold Dudley	**Aye**

The motion passed.

3. Hearing, review and action on a land use map amendment from the Residential High Density to the Residential Medium Density designation, located in the area of 65 East 400 South

Mr. Olsen indicated that this city-initiated land use map amendment proposes a change from the Residential High-Density designation to the Residential Medium-Density designation. The amendment will bring into congruence the existing zoning (R2-7,500) with the underlying land use designation (Medium Density). The land use map designation was changed to high density a few years ago in anticipation of a high-density redevelopment project which never occurred. The surrounding neighborhood was vocal in its opposition to the change and the proposed project; subsequently the developer removed his request.

Public Hearing Opened

Public Hearing Closed

Mr. Chris Christiansen moved to approve the land use amendment.

Ms. Christine Anderson seconded the motion. Voting was as follows:

Chairman Woffinden	**Aye**
Chris Christiansen	**Aye**
Christine Anderson	**Aye**
Ryan Hunter	**Aye**
Rod Brocious	**Aye**
Harold Dudley	**Aye**

The motion passed.

Attachment: 3. Minutes (Land Use 400 South MH Park)

REQUEST FOR COUNCIL ACTION
CITY OF AMERICAN FORK
OCTOBER 27, 2020

Department Planning **Director Approval** *Adam Olsen*

AGENDA ITEM Review and action on an ordinance approving a zone map amendment from the R1-7,500 Residential to the R2-7,500 Residential zone located in the area of 165 East 300 North.

SUMMARY RECOMMENDATION The planning commission recommended approval of the zone map amendment located at 165 East 300 North as stated in the attached minutes of the October 7, 2020 planning commission meeting.

BACKGROUND The applicants proposes a zone map amendment from the R1-7,500 Residential to the R2-7,500 Residential zone, there are, however, no immediate plans for development. For further analysis, please refer to the attached application, staff report and planning commission minutes.

BUDGET IMPACT No direct budgetary impact is anticipated as a result of this approval.

SUGGESTED MOTION I move to adopt the ordinance approving a zone map amendment from the R1-7,500 Residential to the R2-7,500 Residential zone located in the area of 165 East 300 North.

SUPPORTING DOCUMENTS

1. Ord (PDF)
2. Application (PDF)
3. Minutes (PDF)

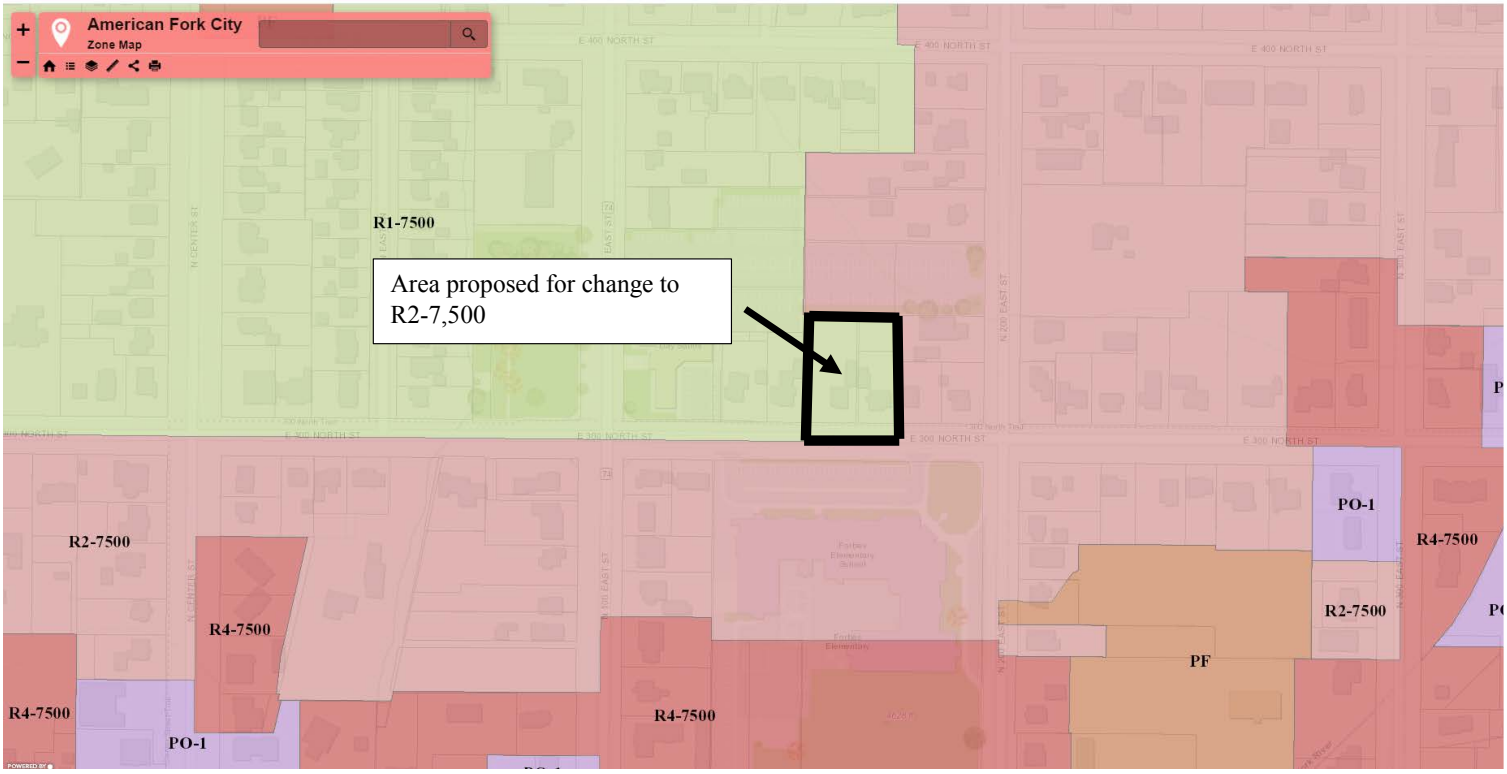
ORDINANCE NO.

AN ORDINANCE AMENDING THE OFFICIAL ZONE MAP OF AMERICAN FORK, UTAH. BE IT ORDAINED BY THE CITY COUNCIL OF AMERICAN FORK CITY, UTAH:

PART I

That the Official Zone Map of American Fork, Utah, is hereby amended from the R1-7,500 Residential to the R2-7,500 Residential zone located in the vicinity of 165 East 300 North as shown on the map below.

Zone Map Amendment



Attachment: 1. Ord (Zoning Rawlings 300 North)

PART II

That said territory shall hereafter be subject to all requirements and conditions applicable with said zone.

PART III

That this Ordinance shall be in force and effect upon its passage and first publication.

PASSED AND ORDERED PUBLISHED BY THE CITY COUNCIL OF AMERICAN FORK, UTAH, THIS 27th DAY OF OCTOBER, 2020.

Brad Frost, Mayor

ATTEST:

Terilyn Lurker, Recorder

Attachment: 1. Ord (Zoning Rawlings 300 North)

To whom it may concern:

I'd like to rezone my property at 165 E 300 N, American Fork, UT 84003.

Currently the school to the South, the church parking lot to the North, and 3 of the 4 neighbors to the East of my property are zoned as R2-7500. In addition, I'd like the option to be able to convert or add to the existing structure to create a duplex.

Sincerely,
Braden Rawlings

Attachment: 2. Application (Zoning Rawlings 300 North)

Please include us (Clark and Kay Harding) in the Rawlings Rezone application for the property located at 165 E. 300 N. American Fork, UT 840 ?

Clark Harding

Kay Harding

Attachment: 2. Application (Zoning Rawlings 300 North)

Christine Anderson	**Nay**
Ryan Hunter	**Aye**
Rod Brocious	**Aye**
Harold Dudley	**Aye**

The motion passed.

5. Hearing, review and action on the Rawlings Zone Map Amendment from the R1-7,500 to R2-7,500 Residential zone located at 165 East 300 North

Mr. Olsen explained that this item was tabled in August in order for the applicant to speak to his neighbor and inquire about expanding the zone change request to include the neighbor's property, in order to eliminate an island of R1-7,500. The neighbor has agreed to be included as part of the request and the application is back before the Planning Commission for consideration. The map has been updated to include the neighboring property.

The applicant proposes to change the zone on his property from R1-7,500 to R2-7,500. The underlying land use map designates the area as "medium density residential" and a change to the R2-7,500 is supported by the underlying land use designation. Single-family and duplex uses are allowed in the R2-7,500 zone. The applicant would like the ability to convert his single-family use to a duplex use; provided his property meets the parameters for duplex use.

Mr. Ben Hunter indicated that the Engineering Division doesn't have any concerns.

Public Hearing Opened

Public Hearing Closed

Mr. Ryan Hunter moved to recommend approval of the zone map amendment.

Ms. Christine Anderson seconded the motion. Voting was as follows:

Chairman Woffinden	**Aye**
Chris Christiansen	**Aye**
Christine Anderson	**Aye**
Ryan Hunter	**Aye**
Rod Brocious	**Aye**
Harold Dudley	**Aye**

The motion passed.

Mr. Ryan Hunter thanks staff and applicant for going to the additional effort to avoid leaving an island in the middle of a different zone.

Attachment: 3. Minutes (Zoning Rawlings 300 North)

REQUEST FOR COUNCIL ACTION
CITY OF AMERICAN FORK
OCTOBER 27, 2020

Department Planning **Director Approval** *Adam Olsen*

AGENDA ITEM Review and action on an ordinance approving a commercial site plan for Bishop Storage, located at 16 West 1500 South in the PI-1 Planned Industrial zone.

SUMMARY RECOMMENDATION The planning commission recommended approval of the commercial site plan for Bishop Storage as stated in the attached minutes of the October 7, 2020 planning commission meeting.

BACKGROUND The applicant proposes a commercial site plan for a storage project located in the PI-1 Planned Industrial zone. The project was tabled during the September 16th meeting due to inconsistencies in the plans and then recommended for approval during the October 7th planning commission regular session. For further analysis, please refer to the attached site plan, staff report and planning commission minutes.

BUDGET IMPACT No direct budgetary impact is anticipated as a result of this approval.

SUGGESTED MOTION I move to adopt the ordinance approving a commercial site plan for Bishop Storage, located at 16 West 1500 South in the PI-1 Planned Industrial zone with instructions to the city recorder to withhold publication of the ordinance subject to:

- All conditions identified in the public record associated with the September 16th and October 7th, 2020 planning commission meetings.

SUPPORTING DOCUMENTS

1. Ord (PDF)
2. Site Plan (PDF)
3. Staff Report (PDF)
4. Minutes (PDF)

ORDINANCE NO.

AN ORDINANCE APPROVING THE SITE PLAN FOR BISHOP STORAGE LOCATED AT 16 WEST 1500 SOUTH

BE IT ORDAINED BY THE CITY COUNCIL OF AMERICAN FORK, UTAH,

PART I

DEVELOPMENT APPROVED - ZONE MAP AMENDED

A. The site plan for Bishop Storage as set forth in the attachment, is hereby approved.

B. Said Plans are hereby adopted as an amendment to the Official Zone Map and territory included in the Plans is hereby designated as Large-Scale Development Overlay Zone _____.

C. Said Plans shall hereafter constitute the zone requirements applicable within the property so described.

PART II

ENFORCEMENT, PENALTY, SEVERABILITY, EFFECTIVE DATE

A. Hereafter, these amendments shall be construed as a part of the Zoning Ordinance of American Fork, Utah, to the same effect as if originally a part thereof, and all provisions of said Ordinance shall be applicable thereto including, but not limited to, the enforcement, violation, and penalty provision thereof.

B. All ordinances, or resolutions, or parts thereof, in conflict with the provisions of this ordinance, are hereby repealed.

C. This ordinance shall take effect upon its passage and first publication following completion of all terms and conditions of approval, as set forth under the motion to approve, passed and adopted by the American Fork City Council.

PASSED AND ORDERED PUBLISHED BY THE CITY COUNCIL OF AMERICAN FORK, UTAH, THIS 27th DAY OF OCTOBER, 2020.

Brad Frost, Mayor

ATTEST:

Terilyn Lurker, Recorder

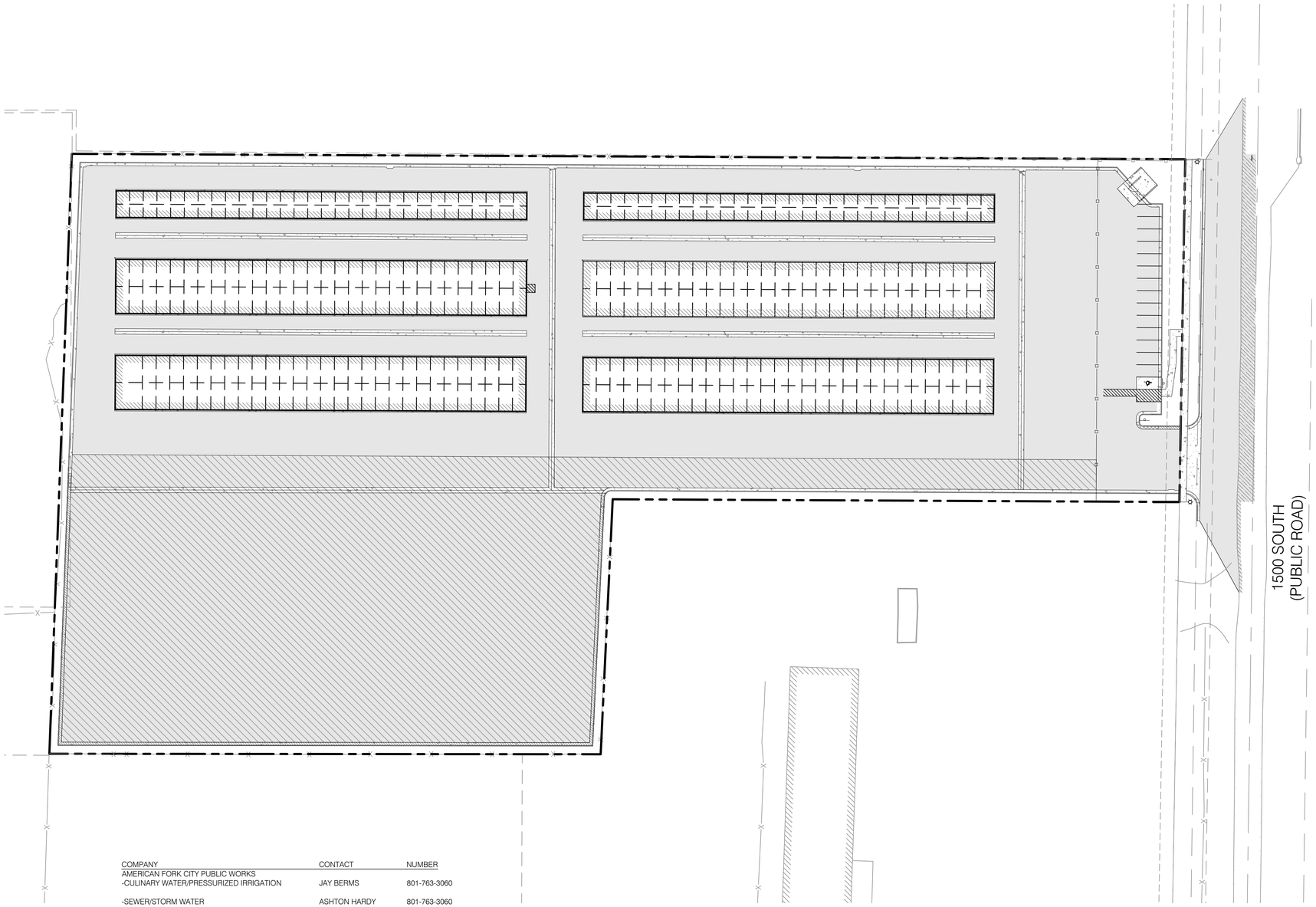
Attachment: 1. Ord (Bishop Storage)

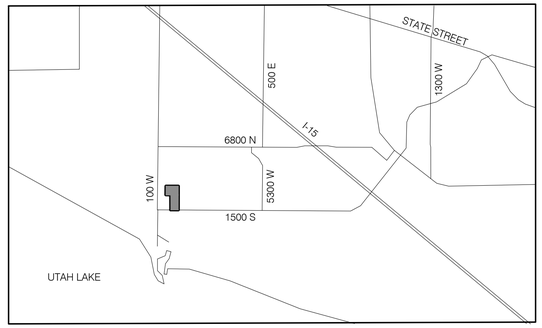
MATT BISHOP STORAGE

LOCATED IN THE SOUTHEAST QUARTER OF SECTION 26 &
THE NORTHEAST QUARTER OF SECTION 35,
TOWNSHIP 5 SOUTH, RANGE 1 EAST,
SALT LAKE BASE AND MERIDIAN
AMERICAN FORK CITY, UTAH COUNTY, UTAH

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

NORTH





VICINITY MAP
N.T.S

OWNER/DEVELOPER: MATT BISHOP
(801) 830-7745
snaptrucking@gmail.com
16 WEST 1500 SOUTH

DRAWING INDEX

COVER	COVER SHEET
CGN.01	GENERAL NOTES, LEGEND & ABBREVIATION
CSP.01	SITE PLAN
CSP.02	SITE FIRE ACCESS PLAN
CUP.01	UTILITY PLAN
CGD.01	GRADING & DRAINAGE PLAN
CPP.01	PLAN AND PROFILE
CEP.01	EROSION CONTROL PLAN
CEP.02	EROSION CONTROL DETAILS
CDT.01	DETAILS & NOTES
CDT.02	DETAILS & NOTES
CDT.03	DETAILS & NOTES
CDT.04	DETAILS & NOTES

CIVIL CONSTRUCTION PLANS

COMPANY	CONTACT	NUMBER
AMERICAN FORK CITY PUBLIC WORKS		
-CULINARY WATER/PRESSURIZED IRRIGATION	JAY BERMS	801-763-3060
-SEWER/STORM WATER	ASHTON HARDY	801-763-3060
-CITY INSPECTOR	DEE HOWARD	801-763-3060
-SWPPP INSPECTOR	HARLAN NIELSON	801-763-3060
AMERICAN FORK CITY FIRE MARSHAL	MATT SACCO	801-763-3045
AF FIBER	WILL DAVIS	801-897-9826
AMERICAN FORK IRRIGATION COMPANY	ERNIE JOHN	801-471-6576
CENTURY LINK	BILL WESTFALL	432-623-4252
COMCAST	ELYSIA VALDEZ	801-401-3017
DOMINION ENERGY	TRENT JOHNSON	801-853-6548
ROCKY MOUNTAIN POWER	TERIA WALKER	801-756-1310
TIMPANOGOS SPECIAL SERVICE DISTRICT	DAVID BARLOW	801-756-5231

BENCHMARK CIVIL

PROFESSIONAL ENGINEER
9/23/20
No. 10360773
M. CHRIS POULSEN
STATE OF UTAH

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

MATT BISHOP STORAGE
5950 W 6400 N
AMERICAN FORK, UTAH

DRAFT: MNJ	DESIGN: AGA	CHECK: AGA
DATE: 01/27/2020	DATE: 01/28/2020	DATE: 03/27/2020

No.	DATE	DESCRIPTION
1	06/19/20	REVISIONS PER CITY REDLINES
2	08/21/20	REVISIONS PER CITY REDLINES
3	09/08/20	REVISIONS PER CITY REDLINES

PROJECT NO: 1907191

COVER

1 OF 13

BENCHMARK ENGINEERING CONTACT: ALLISON G. ALBERT, PE

Attachment: 2. Site Plan (Bishop Storage)

LINETYPES:

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

SYMBOLS:

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

ABBREVIATIONS

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

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811

NOTE:

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

CAUTION NOTICE TO CONTRACTORS

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

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

CONSTRUCTION NOTES

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

APPLICABLE STANDARDS: APWA 2017 STANDARDS

GENERAL

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

UTILITIES

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

SEWER

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

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

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

32. DURING CONSTRUCTION OF THE SEWER LINE, ALL LATERAL CONNECTIONS SHALL BE AN INSERTA-TEE WITH A WYE ORIENTED AT 10 O'CLOCK POSITIONING TO THE CENTER OF THE MAIN LINE. (SEE RESPONSIBLE DISTRICT OR AGENCY STANDARDS)

WATER

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

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

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

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

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

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

EXISTING UTILITIES

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

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

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

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

CLEARING AND GRADING

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

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

45. SUBSOIL INVESTIGATIONS MUST BE CONDUCTED BY A LICENSED GEOTECHNICAL ENGINEER AT THE SITE OF THE WORK. BEFORE FOOTING, FOUNDATION OR STRUCTURAL WALL CONSTRUCTION CAN COMMENCE.

46. SOIL INVESTIGATIONS MUST BE CONDUCTED BY A LICENSED GEOTECHNICAL ENGINEER FOR DESIGN PURPOSES; THE DATA SHOWN IN THE REPORT WILL BE FOR SUBSURFACE CONDITIONS FOUND AT THE TIME OF THE INVESTIGATION. THE OWNER AND ENGINEER DISCLAIM RESPONSIBILITY FOR THE INTERPRETATION BY THE CONTRACTOR OF DATA, SUCH PROJECTION OR EXTRAPOLATION, FROM THE TEST HOLES TO OTHER LOCATIONS ON THE SITE OF THE WORK, SOIL BEARING VALUES AND PROFILES, SOIL STABILITY AND THE PRESENCE, LEVEL AND EXTENT OF UNDERGROUND WATER FOR SUBSURFACE CONDITIONS DURING CONSTRUCTION OPERATIONS.

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

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

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

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

THE EXISTING TOPOGRAPHY ON THESE PLANS IS BASED ON A TOPOGRAPHIC SURVEY PERFORMED BY BENCHMARK ENGINEERING AND LAND SURVEYING ON 8/28/2019 AND MAY HAVE BEEN MODIFIED SINCE THIS SURVEY WAS PERFORMED.

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

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

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

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

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

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

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

57. WHERE NEW CURB AND GUTTER IS BEING CONSTRUCTED ADJACENT TO EXISTING ASPHALT OR CONCRETE PAVEMENT, THE FOLLOWING SHALL APPLY: PRIOR TO PLACEMENT OF ANY CONCRETE THE CONTRACTOR SHALL HAVE A LICENSE SURVEYOR VERIFY THE GRADE AND CROSS SLOPE OF THE CURB AND GUTTER FORMS, THE CONTRACTOR SHALL SUBMIT THE SLOPE AND GRADES TO THE ENGINEER FOR APPROVAL PRIOR TO PLACEMENT OF CONCRETE. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY OF ANY SECTION WHICH DOES NOT CONFOR

CONSTRUCTION KEY NOTE REFERENCE

NO.	DESCRIPITON	DETAIL
1	ASPHALT PAVEMENT WITH GRANULAR BASE	2/CDT.02
2	CONCRETE PAVEMENT WITH GRANULAR BASE	2/CDT.01
3	DRIVE APPROACH PER AMERICAN FORK STDS.	
4	TYPE 'A' CURB AND GUTTER PER APWA #205	
5	SAWCUT PER APWA #225	
6	6' BLACK VINYL COATED CHAINLINK FENCE WITH BARBED WIRE ARM	
7	CONCRETE APRON	
8	INTEGRAL SIDEWALK	4/CDT.02
9	4' WATERWAY PER APWA #211	
10	RELEASE CURB AND GUTTER	3/CDT.02
11	TRANSITION CURB AND GUTTER	
12	ADA RAMP	4/CDT.01
13	ADA SIGN	4/CDT.01
14	ASPHALT MILLING	

CONSTRUCTION KEY NOTE REFERENCE CONTINUED

NO.	DESCRIPITON	DETAIL
15	6' WROGHT IRON FENCING	
16	ASPHALT PAVEMENT PER AMERICAN FORK STDS.	2/CDT.04
17	SIDEWALK PER AMERICAN FORK STDS.	
18	CURB AND GUTTER PER AMERICAN FORK STDS.	3/CDT.04
19	6' CHAINLINK FENCE	
20	DUMPSTER PER AMF STD. 17.5.121	2/CDT.03
21	"NO FIRE ACCESS BEYOND THIS POINT" SIGN	
22	BOLLARD	6/CDT.02

ZONING: PLANNED INDUSTRIAL ZONE ONE (PI-1)

FEMA FLOOD HAZARD ZONE: FLOOD ZONE A
FEEM FLOOD HAZARD COMMUNITY PANEL NUMBER: 49049C0306F
FEMA FLOOD HAZARD EFFECTIVE DATE: 06/19/2020

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

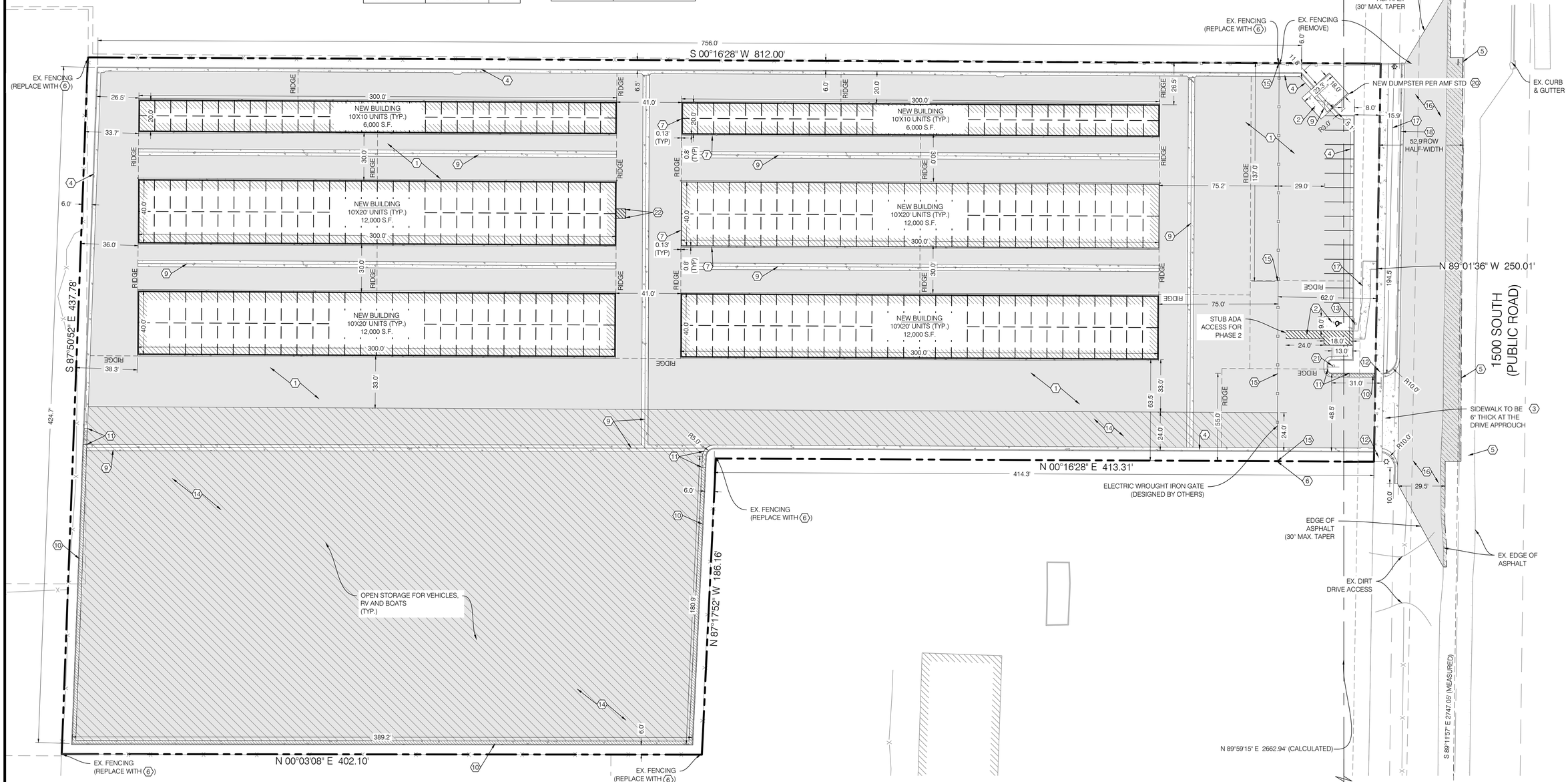
NORTH

AREA TABLE

PARTICULARS	S.F.	%
BUILDING	62,030	22.2
HARDSCAPE	200,326	71.8
LANDSCAPE	16,537	5.9
TOTAL	278,893	100

PARKING COUNT

PARTICULARS	PROVIDED	
	STANDARD	ADA
PARKING STALLS	17	1
TOTAL	18	



BENCHMARK:
THE WITNESS CORNER FOR THE SOUTH QUARTER CORNER OF SECTION 26, TOWNSHIP 5 SOUTH, RANGE 1 EAST, SALT LAKE BASE AND MERIDIAN.
ELEVATION = 4502.79 (NAVD 29)

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No.	DATE	DESCRIPTION
1	06/19/20	REVISIONS PER CITY REDLINES
2	08/21/20	REVISIONS PER CITY REDLINES
3	09/08/20	REVISIONS PER CITY REDLINES
4	09/23/20	REVISIONS PER FIRE MARSHAL TO FIRE ROUTE

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

DRAWN BY: MNJ
CHECKED BY: AGA
FIELD CREW: KD
DATE: 03/27/20
DWG FILE: 1907191_SITE

PROFESSIONAL ENGINEER
9/23/20
No. 10360773
M. CHRIS POULSEN
STATE OF UTAH

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

BISHOP STORAGE - PHASE 1

5950 W 6400 N
AMERICAN FORK, UTAH

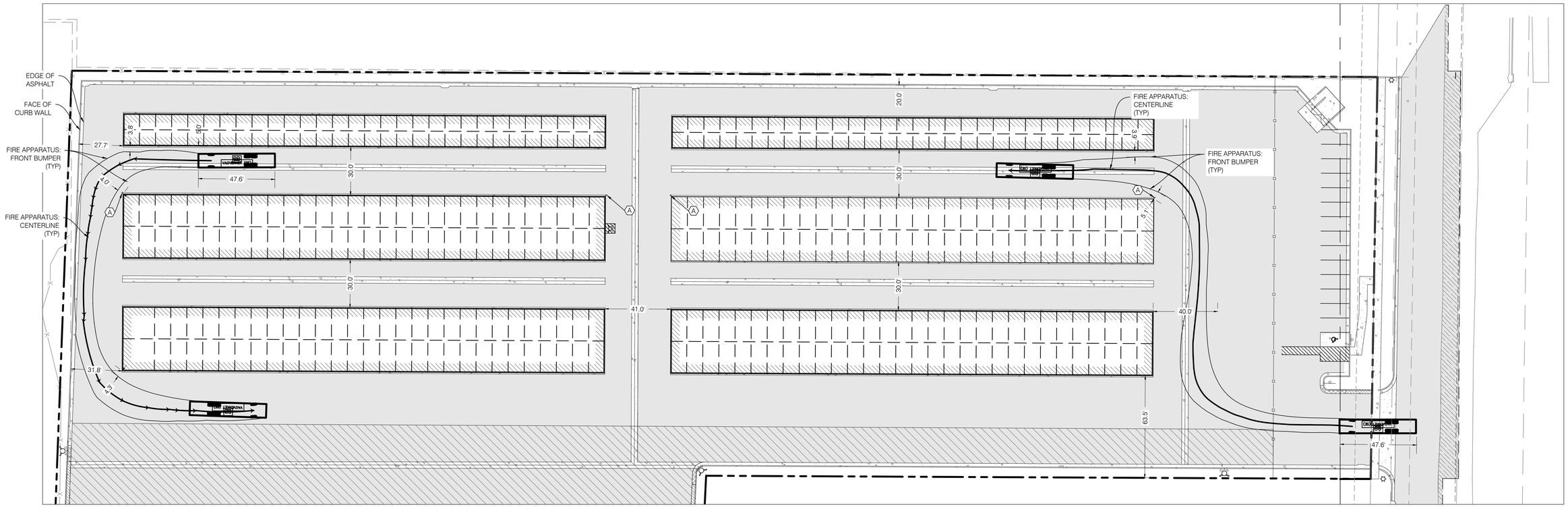
PROJECT NO. 1907191

SITE PLAN

CSP.01
3 OF 13

Attachment: 2. Site Plan (Bishop Storage)

NOTE: (A)
BOLLARDS ARE LOCATED 1.0 FOOT FROM BUILDING CORNER



47.6' VEHICLE TURNING MODEL (A)
SCALE: 1:30

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0 0.5 1

PROFESSIONAL ENGINEER
9/23/20
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BISHOP STORAGE - PHASE 1
5950 W 6400 N
AMERICAN FORK, UTAH

PROJECT NO. 1907191

SITE FIRE ACCESS PLAN

CSP.02
4 OF 13

Attachment: 2. Site Plan (Bishop Storage)

CONSTRUCTION KEY NOTE REFERENCE		
NO.	DESCRIPITON	DETAIL
1	NEW STREET LIGHT (DESIGNED BY OTHERS)	
2	1" WATER METER & VAULT PER AMERICAN FORK STD. 15.5	2/CDT.01
3	1" POLY WATER SERVICE LINE	
4	4" PVC SDR-35 SEWER LATERAL PER APWA #431	
5	SEWER CLEAN OUT @ 75' PER AMERICAN FORK STDS.	1/CDT.01
6	2" FIRE LINE (MUST BE VERIFIED BY MECHANICAL ENGINEER)	
7	1" POLY PRESSURIZED IRRIGATION LINE	3/CDT.01
8	1" PI METER & VAULT	3/CDT.01
9	GATE VALVE PER AMERICAN FORK STD.	
10	THRUST BLOCK PER AMERICAN FORK STD 15.6	1/CDT.04
11	8" C-900 FIRE MAIN PER AMERICAN FORK STD.	
12	FIRE HYDRANT PER AMERICAN FORK STD 15.6	4/CDT.04
13	12" PVC C-900 PI PER AMERICAN FORK STD.	
14	GROUNDWATER MONITORING STATION	5/CDT.02
15	6" C-900 FIRE LINE LATERAL PER AMERICAN FORK STD.	

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

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

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

NOTE:
ALL EXISTING OVERHEAD UTILITIES SHALL BE BURIED

NORTH

GRAPHIC SCALE

30 0 15 30 60

(IN FEET)
1 inch = 30ft.

SSMH
RIM=4502.09
IE(60")=4492.04

EX. 12" PRESSURIZED IRRIGATION MAIN

CONNECT TO PI MAIN PER AMERICAN FORK STDS.

EX. OVERHEAD POWER LINE (COORDINATE WITH ROCKY MOUNTAIN POWER TO RELOCATE AND BURRY POWER LINES)

1500 SOUTH (PUBLIC ROAD)

STUB FOR PHASE 2

SEE NOTE A (TYP)

CONNECT TO WATER MAIN PER AMERICAN FORK SPECS. (TYP.)

CONNECT TO WATER MAIN PER AMERICAN FORK SPECS. (TYP.)

NEW PI DRAIN

EX. 16" D.I. WATER MAIN

EX. SSMH
RIM=4500.97
IE(60")=4492.32

EX. 60" SANITARY SEWER MAIN

EX. OVERHEAD POWER LINE

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4	09/23/20	REVISIONS PER FIRE MARSHAL TO FIRE ROUTE

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

DRAWN BY: MNJ
DESIGNED BY: AGA
FIELD CHECK: KD
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DWG FILE: 1907191_SITE

PROFESSIONAL ENGINEER
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M. CHRIS POULSEN
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9/23/20

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BISHOP STORAGE - PHASE 1
5950 W 6400 N
AMERICAN FORK, UTAH

PROJECT NO. 1907191

UTILITY PLAN

CUP.01
5 OF 13

Attachment: 2. Site Plan (Bishop Storage)

GRADING AND DRAINAGE KEY NOTE REFERENCE

NO.	DESCRIPITON	DETAIL
1	GRADE SITE TO ELEVATIONS SHOWN ON PLAN	
2	STORM DRAIN INLET BOX PER APWA #315	
3	3'X3' CATCH BASIN	
4	STORM DRAIN INLET BOX WITH SUMP PER APWA #315	
5	SNOUT	2/CDT.03
6	12" HDPE SD PIPE	
7	18" HDPE SD PIPE	
8	15" RCP SD PIPE	
9	24" HDPE SD PIPE	
10	AREA 1, BED 1 MC3500 STORMTECH CHAMBERS	1/CDT.02
11	AREA 1, BED 2 MC3500 STORMTECH CHAMBERS	1/CDT.03
12	AREA 2, BED 3 MC3500 STORMTECH CHAMBERS	1/CDT.04
13	SDIB WITH SUMP PER AMERICAN FORK STD	5/CDT.01

SURVEY CONTROL NOTE:
THE CONTRACTOR OR SURVEYOR PERFORMING THE CONSTRUCTION SURVEYING SHALL BE RESPONSIBLE TO PROVIDE CONSTRUCTION LAYOUT PER THE APPROVED PLANS ONLY. THE SURVEYOR SHALL ALSO BE RESPONSIBLE FOR VERIFYING HORIZONTAL CONTROL FROM THE SURVEY MONUMENTS AND FOR VERIFYING ANY ADDITIONAL CONTROL POINTS SHOWN ON THE SURVEY OR IMPROVEMENTS PLANS OR ON ELECTRONIC DATA PROVIDED BY BENCHMARK ENGINEERING AND LAND SURVEYING. THE SURVEYOR SHALL ALSO USE THE BENCHMARKS AS SHOWN ON THE PLAN, AND VERIFY THEM AGAINST NO LESS THAN THREE EXISTING HARD IMPROVEMENT ELEVATIONS INCLUDED ON THESE PLANS OR ON ELECTRONIC DATA PROVIDED BY BENCHMARK ENGINEERING AND LAND SURVEYING. IF ANY DISCREPANCIES ARE ENCOUNTERED, THE SURVEYOR SHALL IMMEDIATELY NOTIFY THE ENGINEER AND RESOLVE THE DISCREPANCIES BEFORE PROCEEDING WITH ANY CONSTRUCTION SURVEYING. IT IS ALSO THE RESPONSIBILITY OF THE SURVEYOR TO VERIFY ANY ELECTRONIC DATA WITH THE APPROVED STAMPED AND SIGNED PLANS AND NOTIFY THE ENGINEER WITH ANY DISCREPANCIES.

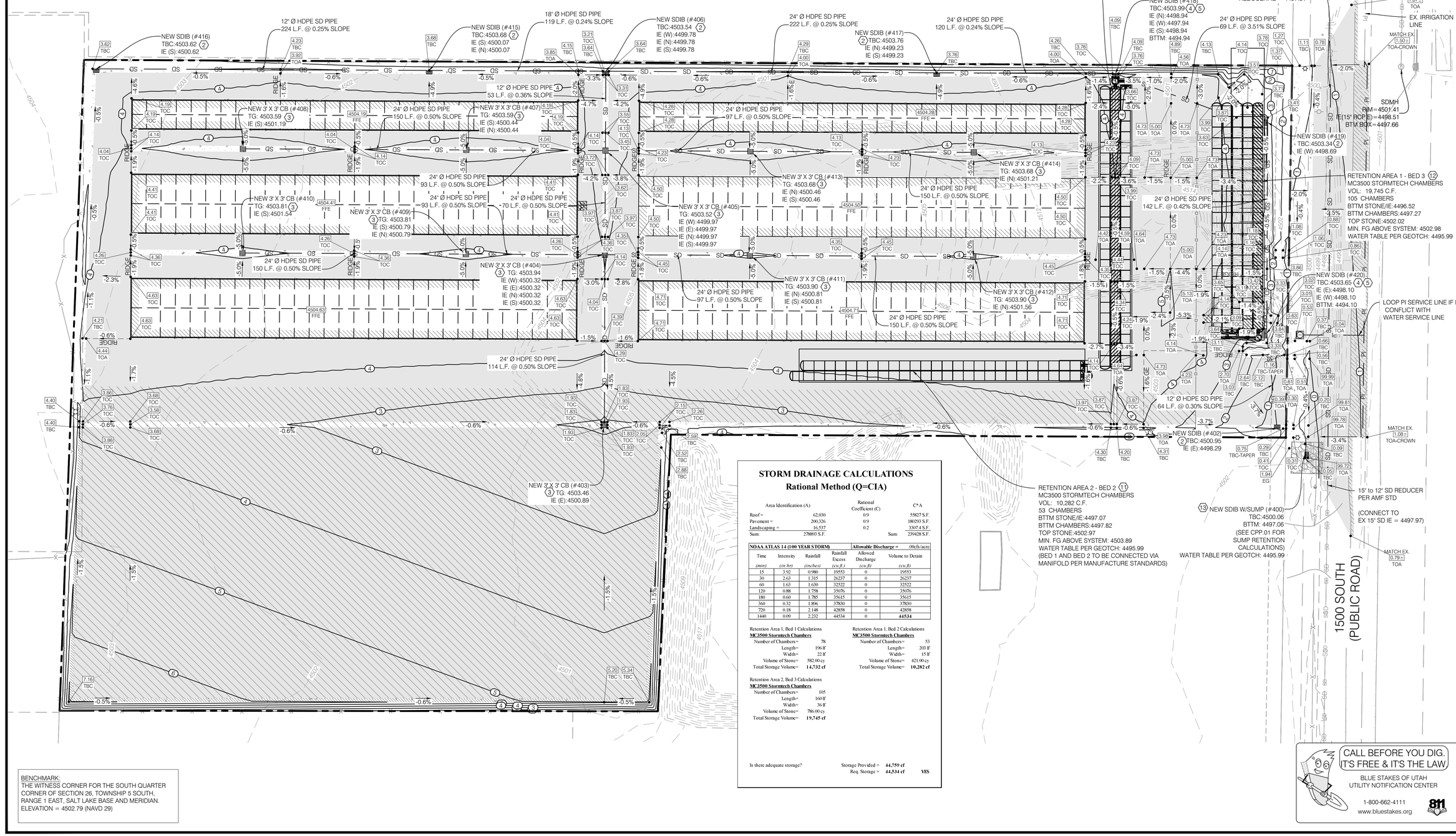
NOTE:
SAWCUT WIDTH, LOCATIONS AND TIE-IN ELEVATIONS IN EXISTING HARDSCAPE ARE APPROXIMATE. CONTRACTOR TO FIELD VERIFY LOCATION AND EXTENT OF SAWCUTTING PRIOR TO CONSTRUCTION. NOTIFY CIVIL ENGINEER IF REVISIONS ARE REQUIRED. SEE NOTE 58 ON CGN.01 FOR FURTHER DETAIL.

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

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

NORTH

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



STORM DRAINAGE CALCULATIONS
Rational Method (Q=CIA)

Area Identification (A)		Rational Coefficient (C)	C*A
Roof =	62,030	0.9	55827 S.F.
Pavement =	200,326	0.9	180293 S.F.
Landscaping =	16,537	0.2	3307.4 S.F.
Sum:	278893 S.F.	Sum:	239428 S.F.

NOAA ATLAS 14 (100 YEAR STORM) — **Allowable Discharge =** (0)cfs/acre

Time (min)	Intensity (in/hr)	Rainfall (inches)	Rainfall Excess (cu.ft.)	Allowed Discharge (cu.ft)	Volume to Detain (cu.ft)
15	3.92	0.980	19553	0	19553
30	2.63	1.315	26237	0	26237
60	1.63	1.630	32522	0	32522
120	0.88	1.758	35076	0	35076
180	0.60	1.785	35615	0	35615
360	0.32	1.896	37830	0	37830
720	0.18	2.148	42858	0	42858
1440	0.09	2.232	44534	0	**44534**

Retention Area 1, Bed 1 Calculations
MC3500 Stormtech Chambers
Number of Chambers= 78
Length= 196 lf
Width= 22 lf
Volume of Stone= 582.00 cy
Total Storage Volume= **14,732 cf**

Retention Area 1, Bed 2 Calculations
MC3500 Stormtech Chambers
Number of Chambers= 53
Length= 203 lf
Width= 15 lf
Volume of Stone= 421.00 cy
Total Storage Volume= **10,282 cf**

Retention Area 2, Bed 3 Calculations
MC3500 Stormtech Chambers
Number of Chambers= 105
Length= 160 lf
Width= 36 lf
Volume of Stone= 786.00 cy
Total Storage Volume= **19,745 cf**

Is there adequate storage? Storage Provided = **44,759 cf** Req. Storage = **44,534 cf** **YES**

BENCHMARK:
THE WITNESS CORNER FOR THE SOUTH QUARTER CORNER OF SECTION 26, TOWNSHIP 5 SOUTH, RANGE 1 EAST, SALT LAKE BASE AND MERIDIAN. ELEVATION = 4502.79 (NAVD 29)

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2	08/21/20	REVISIONS PER CITY REDLINES
3	09/08/20	REVISIONS PER CITY REDLINES
4	09/22/20	REVISIONS PER PRE-MARSHAL TO FIRE ROUTE

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

DRAWN BY MNJ | CHECKED BY AGA | FIELD CREW KD | DATE 03/27/20 | DRG. No.# 1907191_C3.01

PROFESSIONAL ENGINEER 9/22/20 No. 10360773 M. CHRIS POULSEN STATE OF UTAH

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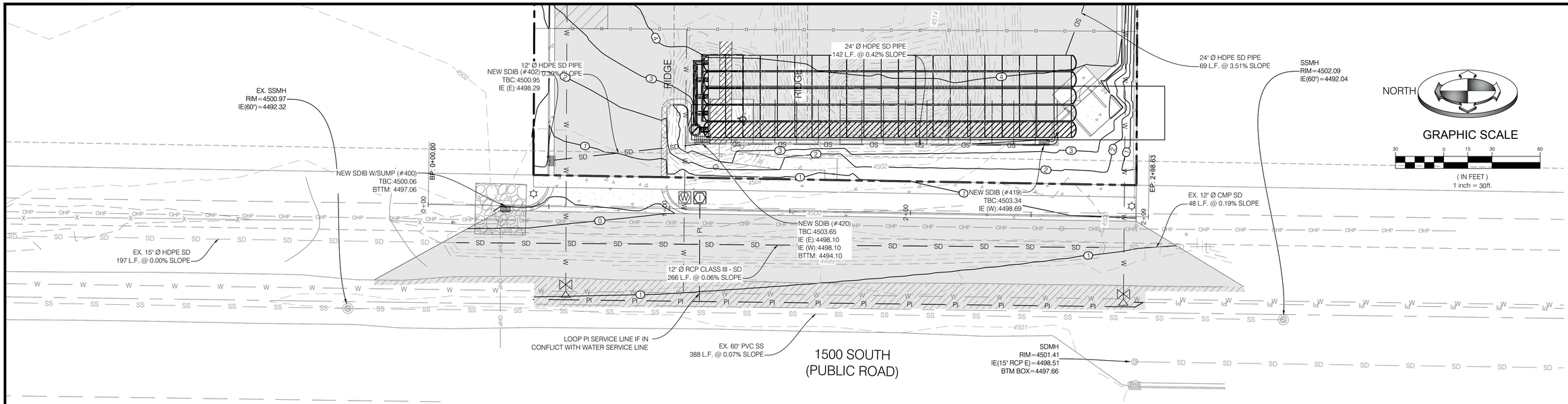
BISHOP STORAGE - PHASE 1
5950 W 6400 N
AMERICAN FORK, UTAH

PROJECT NO. 1907191

GRADING & DRAINAGE PLAN

CGD.01
6 OF 13

Attachment: 2. Site Plan (Bishop Storage)



STORM DRAINAGE CALCULATIONS
Rational Method (Q=CIA)

Area Identification (A)		Rational Coefficient (C)		C*A
Roof =	0	0.9		0 S.F.
Pavement =	8,500	0.9		7650 S.F.
Landscaping =	0	0.2		0 S.F.
Sum:	8500 S.F.		Sum:	7650 S.F.

NOAA ATLAS 14 (25-YEAR STORM)				Allowable Discharge =	0.01 cfs
Time (min)	Intensity (in/hr)	Rainfall (inches)	Rainfall Excess (cu.ft.)	Allowed Discharge (cu.ft)	Volume to Detain (cu.ft)
15	2.64	0.660	421	13	408
30	1.78	0.890	567	26	542
60	1.10	1.100	701	52	650
120	0.61	1.216	775	103	**672**
180	0.43	1.278	815	155	660
360	0.24	1.452	926	309	617
720	0.14	1.716	1094	618	476
1440	0.08	1.848	1178	1236	0

CALCULATED DISCHARGE INTO GROUND: $Q = \frac{S(sf)}{P(sec/ft)}$

Percolation surface area $S = 2(WH + LH) + WL$

Rectangular concrete sump with gravel wrap	
Sump inner width (w)	3.00 ft
Sump inner length (l)	2.50 ft
Sump inner depth (h)	2.50 ft
Sump wall thickness	0.50 ft
Width of gravel wrap	18.00 ft
Length of gravel wrap	3.50 ft
Depth of gravel wrap	1.00 ft
Effective sump width (W)	40.00 ft
Effective sump length (L)	10.50 ft
Effective sump depth (H)	4.00 ft
Percolation surface area per sump (S)	824.00 sf
Sumps provided	1
Total percolation surface area	824.00 sf

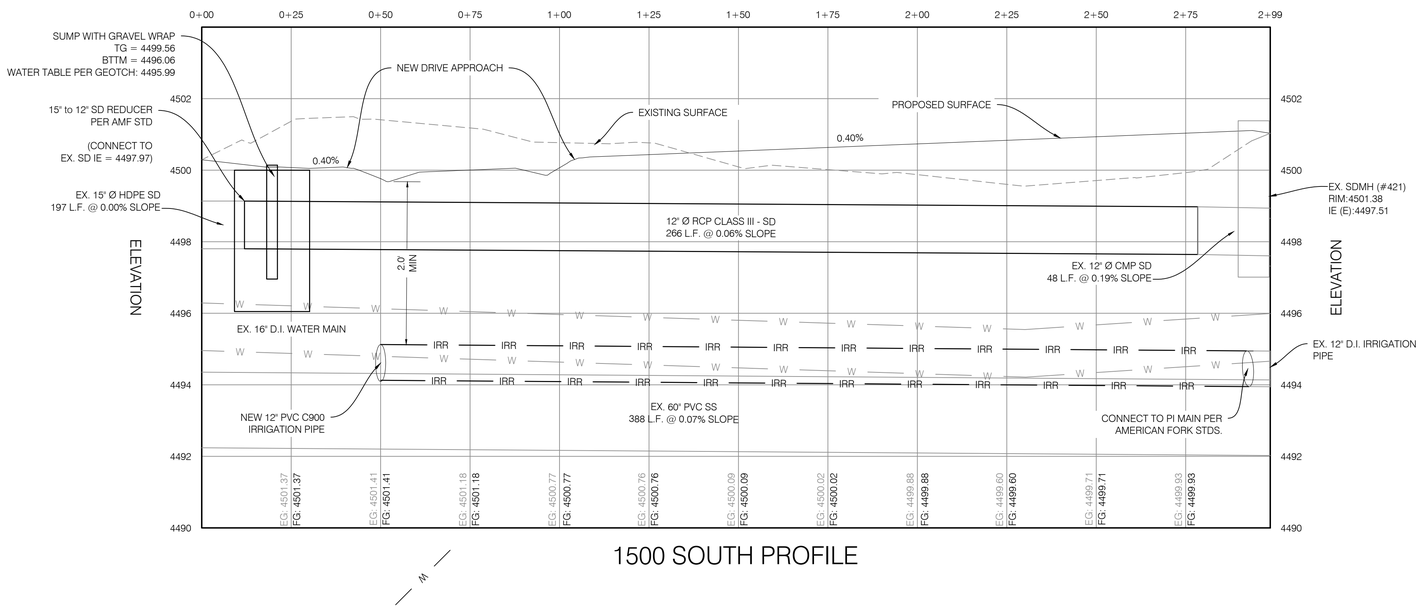
Discharge

Percolation rate (P)	80.00 min/in
Percolation surface area (S)	824.00 sf
Allowed Discharge (Q)	**0.01 cfs**

Sump retention volume $V = (WLH - (w + t)(h + t)(l + t))e + wlh$

Sump inner depth (h)	2.50 ft
Sump inner width (w)	3.00 ft
Sump inner length (l)	2.50 ft
Sump volume	18.75 cf
Sump wall thickness (t)	0.50 ft
Wrap width (W)	40.00 ft
Wrap length (L)	10.50 ft
Wrap depth (H)	4.00 ft
Void area (e)	40%
Wrap gravel volume	659.40 cf
Total volume per sump (V)	678.15 cf
Sumps provided	1
Total sump volume	**678 cf**

Is there adequate storage? Storage Provided = **678 cf**; Req. Storage = **672 cf** **YES**



1500 SOUTH PROFILE

No.	DATE	DESCRIPTION
1	06/19/20	REVISIONS PER CITY REDLINES
2	08/12/20	REVISIONS PER CITY REDLINES
3	09/08/20	REVISIONS PER CITY REDLINES
4	09/23/20	REVISIONS PER PRE-MARSHAL TO FIRE ROUTE

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

DRAWN BY: MNJ
CHECKED BY: AGA
FIELD CREW: KD
DATE: 03/27/20
DRG. FILE: 1907191_C3.DWG

PROFESSIONAL ENGINEER
9/23/20
No. 10360773
M. CHRIS POULSEN
STATE OF UTAH

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

BENCHMARK CIVIL

BISHOP STORAGE - PHASE 1
5950 W 6400 N
AMERICAN FORK, UTAH

PROJECT NO. 1907191

PLAN AND PROFILE

CPP.01
7 OF 13

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811

Attachment: 2. Site Plan (Bishop Storage)

SWPPP KEY NOTES REFERENCE

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

NO.	DESCRIPTION	DETAIL
1	CONCRETE WASTE MANAGEMENT	1/CEP.02
2	INLET PROTECTION WATTLE	2/CEP.02
3	MATERIALS STORAGE	3/CEP.02
4	PORTABLE TOILETS	4/CEP.02
5	SILT FENCE	6/CEP.02
6	TEMPORARY CONSTRUCTION ENTRANCE	7/CEP.02
7	SWPPP INFORMATION SIGN	8/CEP.02

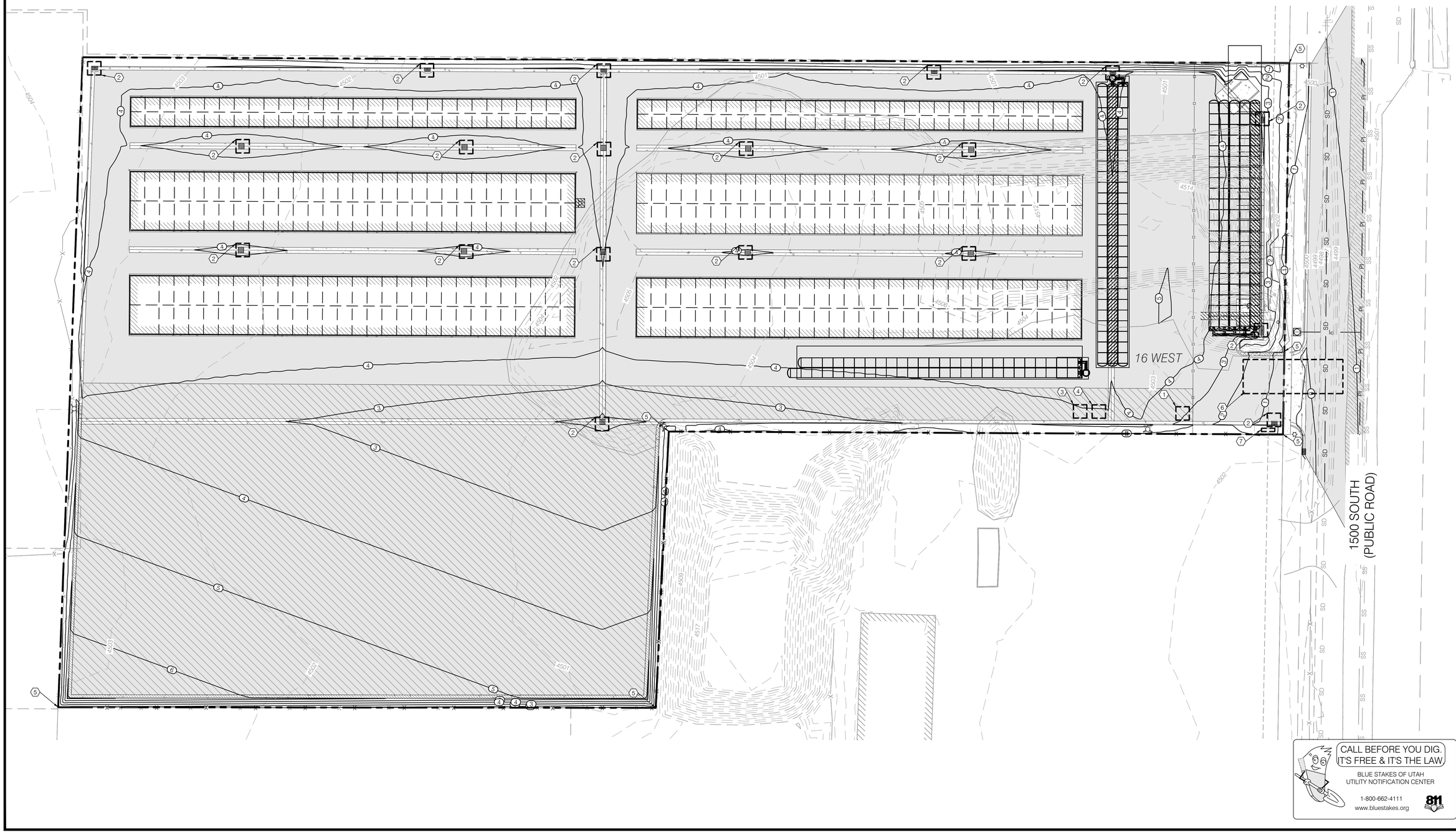
NOTE: CONTRACTOR SHALL INSTALL EROSION CONTROLS (SILT FENCES, STRAW BALES, ETC) AS REQUIRED BY REGULATORY AGENCIES. SAID CONTROLS SHALL BE INSTALLED IN ACCORDANCE WITH AGENCY STANDARDS AND FOLLOWING BEST MANAGEMENT PRACTICES FOR ACTUAL PLACEMENT ON SITE. STRAW BALES SHOWN ON THESE DRAWINGS ARE INTENDED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

NORTH

GRAPHIC SCALE

30 0 15 30 60

(IN FEET)
1 inch = 30ft.



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No.	DATE	DESCRIPTION
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SCALE MEASURES 1-INCH ON FULL SIZE SHEETS
ADJUST ACCORDINGLY FOR REDUCED SIZE SHEETS

0 0.5 1"

DRAWN BY: MNJ
CHECKED BY: AGA
FIELD CREW: KD
DATE: 03/27/20
DWG. FILE: 1907191_CSD.01

PROFESSIONAL ENGINEER
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BENCHMARK CIVIL

BISHOP STORAGE - PHASE 1

5950 W 6400 N
AMERICAN FORK, UTAH

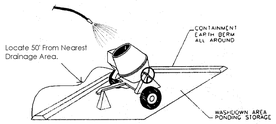
PROJECT NO. 1907191

EROSION CONTROL PLAN

CEP.01
8 OF 13

Attachment: 2. Site Plan (Bishop Storage)

BMP: Concrete Waste Management



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

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

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

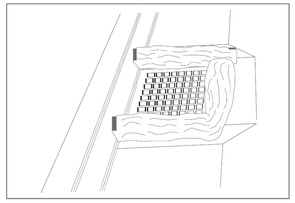
LIMITATIONS:
- Off-site washout of concrete wastes may not always be possible.

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

CONCRETE WASTE MANAGEMENT 1
SCALE: NTS

BMP: Inlet Protection – Wattle

IP-W
CONSTRUCTION



DESCRIPTION:
Sediment barrier erected around storm drain inlet.

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

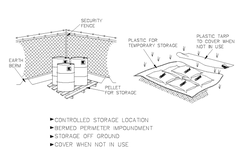
INSTALLATION/APPLICATION CRITERIA:
- Provide up-gradient sediment controls, such as silt fence during construction of inlet
- When construction of curb and gutter and roadways is complete, install gravel filled wattles around perimeter of inlet

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

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

INLET PROTECTION WATTLE 2
SCALE: NTS

BMP: Materials Storage



DESCRIPTION:
Controlled storage of on-site materials.

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

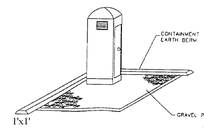
INSTALLATION/APPLICATION CRITERIA:
- Designate a secured area with limited access as the storage location. Ensure no waterways or drainage paths are nearby.
- Construct compacted earthen berm (See Earth Berm Barrier Information Sheet), or similar perimeter containment around storage location for impoundment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

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

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

MATERIALS STORAGE 3
SCALE: NTS

BMP: Portable Toilets



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

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

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

LIMITATIONS:
No limitations.

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

PORTABLE TOILETS 4
SCALE: NTS

BMP: Spill Clean-Up

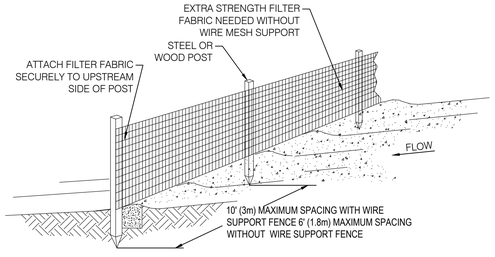
DESCRIPTION:
Practices to clean-up leakage/spillage of on-site materials that may be harmful to receiving waters.

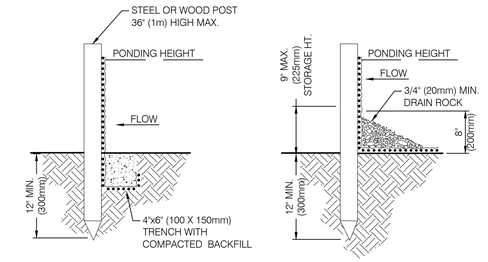
APPLICATION:
All sites

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

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

SPILL CLEAN UP 5
SCALE: NTS





TRENCH DETAIL

INSTALLATION WITHOUT TRENCHING

NOT TO SCALE

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

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

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

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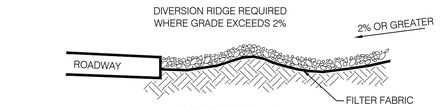
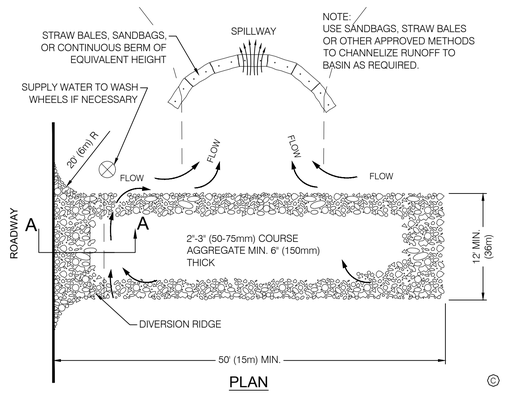
SILT FENCE 6
SCALE: NTS



SECTION A - A



PLAN

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

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

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

TEMPORARY GRAVEL CONSTRUCTION ENTRANCE/EXIT 7
SCALE: NTS

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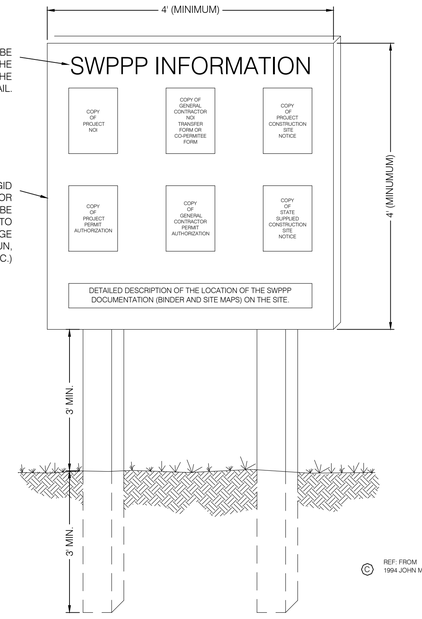

NOTES:
1) THE SWPPP INFORMATION SIGN MUST BE LOCATED NEAR THE CONSTRUCTION EXIT OF THE SITE, SUCH THAT IT IS ACCESSIBLE AND VIEWABLE BY THE GENERAL PUBLIC, BUT NOT OBSTRUCTING VIEWS AS TO CAUSE A SAFETY HAZARD.

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

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

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

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

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SWPPP INFORMATION SIGN 8
SCALE: NTS

No.	DATE	DESCRIPTION
1	06/19/20	REVISIONS PER CITY REDLINES
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SCALE MEASURES 1-INCH ON FULL SIZE SHEETS
ADJUST ACCORDINGLY FOR REDUCED SIZE SHEETS

DRAWN BY: MNJ
CHECKED BY: AGA
FIELD CREW: KD
DATE: 03/27/20
SURF. FILE: 1907191_SITE

PROFESSIONAL ENGINEER
9/23/20
No. 10360773
M. CHRIS POULSEN
STATE OF UTAH

BENCHMARK ENGINEERING & LAND SURVEYING
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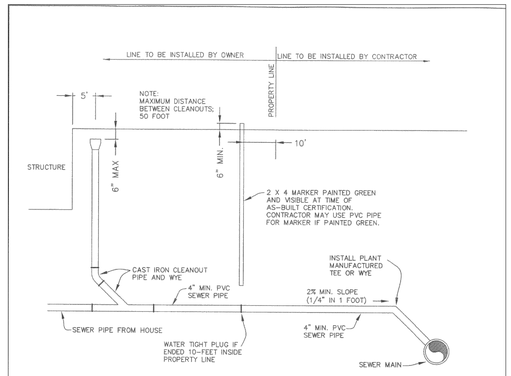
BISHOP STORAGE - PHASE 1
5950 W 6400 N
AMERICAN FORK, UTAH

PROJECT NO. 1907191

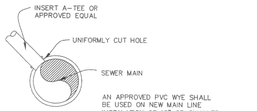
EROSION CONTROL DETAILS

CEP.02
9 OF 13

Attachment: 2. Site Plan (Bishop Storage)



SEWER LATERAL DETAIL
–NTS–

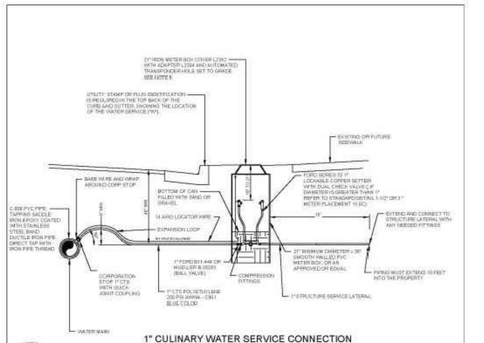


SEWER SERVICE LATERAL SADDLE
–NTS–

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

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

SEWER LATERAL AND CLEANOUT (1)
SCALE: NTS

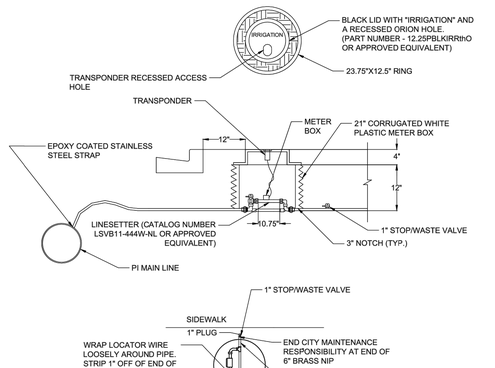


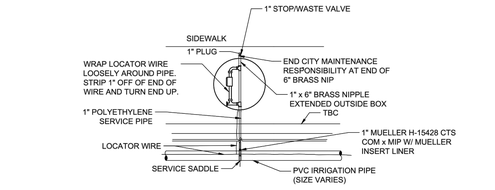
1" CULINARY WATER SERVICE CONNECTION

NOTES:
1. METER BOX, COVER, CORPORATION STOP, CURB STOP, AND METER SHALL BE INSTALLED BY CONTRACTOR. METER IS REQUIRED AND MUST BE PURCHASED BY THE PROPERTY OWNER FROM THE CITY. METER IS PROVIDED AND INSTALLED BY THE CITY.
2. STAINLESS STEEL STIFFENERS ARE REQUIRED ON ALL POLYETHYLENE CONNECTIONS.
3. CULINARY WATER LATERALS THAT ARE LAID PARALLEL TO A SEWER MUST BE LAID AT LEAST 10' HORIZONTALLY EDGE FROM EDGE FROM ANY EXISTING OR PROPOSED SEWER LATERAL. (PER UTAH CODE R309-550-7)
4. WHERE WATER AND SEWER LATERALS MUST CROSS, THE WATER LATERAL SHALL BE LAID AT LEAST 18" ABOVE THE SEWER LATERAL, AS MEASURED EDGE TO EDGE. (PER UTAH CODE R309-550-7)
5. TEFLON TAPE OR APPROVED EQUAL IS REQUIRED ON ALL THREADED CONNECTIONS.
6. ALL METER BOXES SHALL BE CONCRETE SHALL BE EAL SUPPLY MODEL B-63 LIGHT TRAFFIC WITH A RECESSED TRANSPONDER HOLE SET TO GRADE.
7. ALL FITTINGS SHALL BE C-900.
8. SPLICING (REPAIR OF EXISTING) POLY PIPE SHALL BE DONE WITH COMPRESSION PIPE INTERNAL STIFFENERS ARE REQUIRED MUST BE APPROVED BY AMERICAN FORK CITY.
9. LATERALS SHALL BE OF ONE CONTINUOUS LENGTH OF PIPE FROM MAIN TO SETTER AND FROM SETTER TO STRUCTURE AND SHALL BE BURIED AT A MINIMUM OF 48" UNLESS APPROVED BY THE CITY ENGINEER.
10. METER CAN SHALL BE INSTALLED AT THE CENTER OF THE PARK STRIP BETWEEN FRONT OF SIDEWALK AND BACK OF CURB

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

CULINARY WATER SERVICE CONNECTION (2)
SCALE: NTS

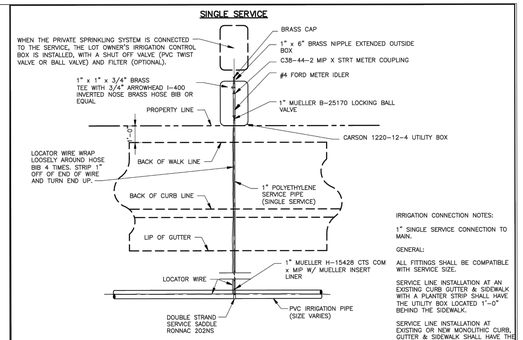




1" PLAN VIEW
NTS

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.

SINGLE SERVICE



IRRIGATION CONNECTION NOTES:

1" SINGLE SERVICE CONNECTION TO MAIN.

GENERAL:

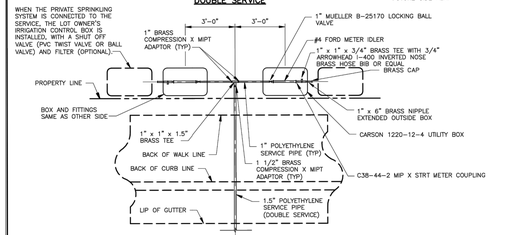
ALL FITTINGS SHALL BE COMPATIBLE WITH SERVICE SIZE.

SERVICE LINE INSTALLATION AT AN EXISTING CURB GUTTER & SIDEWALK WITH A CURB BOX STRIP SHALL HAVE THE UTILITY BOX LOCATED 1'–0" BEHIND THE SIDEWALK.

SERVICE LINE INSTALLATION AT EXISTING OR NEW MONOLITHIC CURB, GUTTER & SIDEWALK SHALL HAVE THE UTILITY BOX LOCATED 1'–0" BEHIND THE SIDEWALK.

SERVICE LINE INSTALLATION AT A LOCATION WITH NO CURB, GUTTER & SIDEWALK SHALL HAVE THE UTILITY BOX LOCATED 1'–0" BEHIND THE FUTURE SIDEWALK.

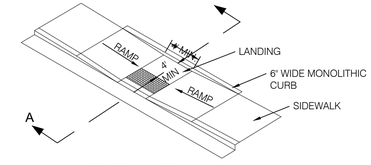
DOUBLE SERVICE



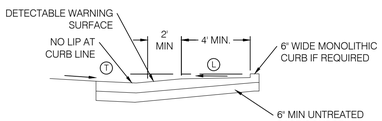
DRAWN: MVU REVISED: DATE: MAY 2019 SCALE: VARIES	AMERICAN FORK – 1853 –	AMERICAN FORK CITY PUBLIC WORKS 275 EAST 200 NORTH (801) 763-9030	STANDARD DETAIL FOR: 1" PI METER PLACEMENT	DRAWING NO. 15.5D

DRAWN: REVISED: 11/2010 DATE: SCALE:	HORROCKS ENGINEERS	ONE WEST MAIN P.O. BOX 377 AMERICAN FORK (801) 763–5100	AMERICAN FORK CITY	STANDARD DETAIL FOR: SINGLE/DOUBLE SERVICE CONNECTION FOR SECONDARY WATER DRAWING NO. 15.5A

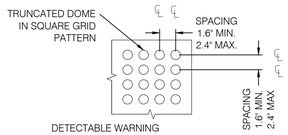
PI METER AND CONNECTION (3)
SCALE: NTS



PARALLEL
PEDESTRIAN RAMP



SECTION A-A



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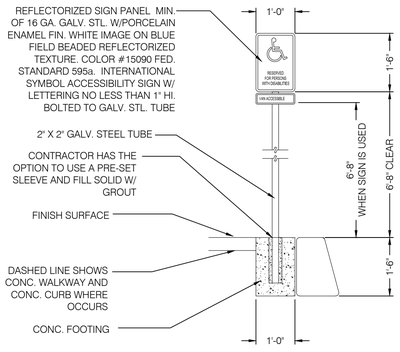
STANDARD ACCESS RAMP (4)
SCALE: NTS



ADA SIGN POST DETAIL

TRANSITION DETAIL

DIRECTION OF TRAVEL OR APPROACH

THIS DRAWING PRODUCED BY THE U.S. ACCESS BOARD

INTERNATIONAL SYMBOL OF ACCESSIBILITY

THIS DRAWING PRODUCED BY THE U.S. ACCESS BOARD

STRIPING SYMBOLS
SCALE: N.T.S.

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

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

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

EXCEPTION:

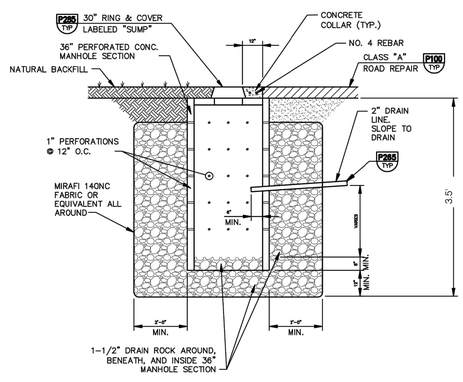
(b) IF SLOPE REQUIREMENTS CAN'T BE ACHIEVED ON MID-BLOCK RAMPS CONTACT THE ENGINEER.

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

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

NOTES:

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



P321 TYP LARGE SUMP N.T.S.

DRAWN: REVISED: 11/2010 DATE: SCALE:	HORROCKS ENGINEERS	ONE WEST MAIN P.O. BOX 377 AMERICAN FORK (801) 763–5100	AMERICAN FORK CITY	STANDARD DETAIL FOR: SUMP DETAILS DRAWING NO. 15.34

LARGE SUMP (5)
SCALE: NTS

No.	DATE	DESCRIPTION
1	06/19/20	REVISIONS PER CITY REDLINES
2	08/12/20	REVISIONS PER CITY REDLINES
3	08/20/20	REVISIONS PER CITY REDLINES
4	08/23/20	REVISIONS PER PIRE MARSHAL TO PIRE ROUTE

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

DRAWN BY: MNJ
CHECKED BY: AGA
FIELD CREW: KD
DATE: 03/27/20
DWG FILE: 1907191.STIE

PROFESSIONAL ENGINEER
9/23/20
No. 10360773
M. CHRIS POULSEN
STATE OF UTAH

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

BENCHMARK CIVIL

BISHOP STORAGE - PHASE 1
5950 W 6400 N
AMERICAN FORK, UTAH

PROJECT NO. 1907191

DETAIL SHEET

CDT.01
10OF 13

Attachment: 2. Site Plan (Bishop Storage)

PROJECT INFORMATION	
ENGINEERED PRODUCT MANAGER	
ADS SALES REP	
PROJECT NO.	

ADVANCED DRAINAGE SYSTEMS, INC.

BISHOP HOLDINGS - BED #1 14732

AM FORK, UT

SiteASSIST Beta — FOR STORMTECH INSTALLATION — DOWNLOAD THE INSTALLATION APP

MC-3500 STORMTECH CHAMBER SPECIFICATIONS

1. CHAMBERS SHALL BE STORMTECH MC-3500.
2. CHAMBERS SHALL BE ARCH-SHAPED AND SHALL BE MANUFACTURED FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE COPOLYMERS.
3. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418-16a, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS" CHAMBER CLASSIFICATION 45x76 DESIGNATION SS.
4. CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORTS THAT WOULD IMPEDE FLOW OR LIMIT ACCESS FOR INSPECTION.
5. THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL, AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET FOR: 1) LONG-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCES.
6. CHAMBERS SHALL BE DESIGNED, TESTED AND ALLOWABLE LOAD CONFIGURATIONS DETERMINED IN ACCORDANCE WITH ASTM F2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS". LOAD CONFIGURATIONS SHALL INCLUDE: 1) INSTANTANEOUS (+1 MIN.) AASHTO DESIGN TRUCK LIVE LOAD ON MINIMUM COVER 2) MAXIMUM PERMANENT (75-YR) COVER LOAD AND 3) ALLOWABLE COVER WITH PAVING (1-WEEK). AASHTO DESIGN TRUCK.
7. REQUIREMENTS FOR HANDLING AND INSTALLATION:
   - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
   - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 3".
   - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2418 SHALL BE GREATER THAN OR EQUAL TO 550 LBS/IN/IN. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.
8. ONLY CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WILL BE ALLOWED. UPON REQUEST BY THE SITE DESIGN ENGINEER OR OWNER, THE CHAMBER MANUFACTURER SHALL SUBMIT A STRUCTURAL EVALUATION FOR APPROVAL BEFORE DELIVERY OF CHAMBERS TO THE PROJECT SITE. THE EVALUATION SHALL:
   - THE STRUCTURAL EVALUATION SHALL BE SEALED BY A REGISTERED PROFESSIONAL ENGINEER.
   - THE STRUCTURAL EVALUATION SHALL DEMONSTRATE THAT THE SAFETY FACTORS ARE GREATER THAN OR EQUAL TO 1.95 FOR DEAD LOAD AND 1.75 FOR LIVE LOAD. THE MINIMUM REQUIRED BY ASTM F2787 AND BY SECTIONS 3 AND 12.12 OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR THERMOPLASTIC PIPE.
   - THE STRUCTURAL EVALUATION SHALL DEMONSTRATE THAT THE SHALL BE USED FOR PERMANENT DEAD LOAD DESIGN EXCEPT THAT IT SHALL BE THE 75-YEAR MODULUS USED FOR DESIGN.
9. CHAMBERS AND END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.

IMPORTANT - NOTES FOR THE BIDDING AND INSTALLATION OF MC-3500 CHAMBER SYSTEM

1. STORMTECH MC-3500 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
2. STORMTECH MC-3500 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
3. CHAMBERS ARE NOT TO BE BACKFILLED WITH A DOZER OR AN EXCAVATOR SITUATED OVER THE CHAMBERS. STORMTECH RECOMMENDS 3 BACKFILL METHODS:
   - STONE/AGGREGATE LOCATED OFF THE CHAMBER BED.
   - BACKFILL FROM A SIDE DUMP TRUCK AT THE ACTIVE JOINT ON THE FOUNDATION STONE OR SUBGRADE.
   - BACKFILL FROM OUTSIDE THE EXCAVATION USING A LONG BOOM HOE OR EXCAVATOR.
4. THE FOUNDATION STONE SHALL BE LEVELED AND COMPACTED PRIOR TO PLACING CHAMBERS.
5. JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEATED PRIOR TO PLACING STONE.
6. MAINTAIN MINIMUM - 6" (150 mm) SPACING BETWEEN THE CHAMBER ROWS.
7. INLET AND OUTLET MANIFOLDS MUST BE INSERTED A MINIMUM OF 12" (300 mm) INTO CHAMBER END CAPS.
8. EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE MEETING THE AASHTO M43 DESIGNATION OF #3 OR #4.
9. STONE MUST BE PLACED ON THE TOP CENTER OF THE CHAMBER TO ANCHOR THE CHAMBERS IN PLACE AND PRESERVE ROW SPACING.
10. THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION MATERIALS BEARING CAPACITIES TO THE SITE DESIGN ENGINEER.
11. ADS RECOMMENDS THE USE OF "FLEXSTORM CATCH IT" INSERTS DURING CONSTRUCTION FOR ALL INLETS TO PROTECT THE SUBSURFACE STORMWATER MANAGEMENT SYSTEM FROM CONSTRUCTION SITE RUNOFF.

NOTES FOR CONSTRUCTION EQUIPMENT

1. STORMTECH MC-3500 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
2. THE USE OF EQUIPMENT OVER MC-3500 CHAMBERS IS LIMITED:
   - NO RUBBER TIRED EXCAVATORS ALLOWED UNTIL PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
   - NO RUBBER TIRED LOADER, DUMP TRUCK, OR EXCAVATORS ARE ALLOWED UNTIL PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
   - WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
3. FULL 36" (900 mm) OF STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR DUMPING.

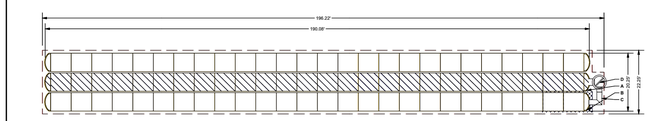
USE OF A DOZER TO PUSH EMBEDMENT STONE BETWEEN THE ROWS OF CHAMBERS MAY CAUSE DAMAGE TO CHAMBERS AND IS NOT AN ACCEPTABLE BACKFILL METHOD. ANY CHAMBER DAMAGED BY USING THE "DUMP AND PUSH" METHOD ARE NOT COVERED UNDER THE STORMTECH STANDARD WARRANTY.

CONTACT STORMTECH AT 1-888-892-2694 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT.

PROPOSED LAYOUT		CONCEPTUAL ELEVATIONS	
78	STORMTECH MC-3500 CHAMBERS	MAXIMUM ALLOWABLE GRADE (TOP OF PAVEMENT/UNPAVED)	13.00
6	STORMTECH MC-3500 END CAPS	MINIMUM ALLOWABLE GRADE (UNPAVED WITH TRAFFIC)	12.00
13	STONE ABOVE (in)	MINIMUM ALLOWABLE GRADE (UNPAVED NO TRAFFIC)	11.50
9	STONE BASE (in)	MINIMUM ALLOWABLE GRADE (BASE OF FLEXIBLE PAVEMENT)	11.00
40	STONE VOID	MINIMUM ALLOWABLE GRADE (BASE OF FLEXIBLE PAVEMENT)	10.50
14734	INSTALLED SYSTEM VOLUME (CF) (PERIMETER STONE INCLUDED)	TOP OF STONE	13.00
	EXCAVATION VOLUME (CF) (EXCAVATION STONE INCLUDED)	TOP OF MC-3500 CHAMBER	12.50
		BASE STONE INCLUDED	11.00
4334	SYSTEM AREA (SF)	BOTTOM OF MC-3500 CHAMBER	10.50
438.9	SYSTEM PERIMETER (ft)	BOTTOM OF STONE	9.00

*INVERT ABOVE BASE OF CHAMBER

PART TYPE	ITEM ON LAYOUT	DESCRIPTION	INVERT*	MAX FLOW
PREFABRICATED END CAP	A	24" BOTTOM CORED END CAP/TYP OF ALL 24" BOTTOM CONNECTIONS AND ISOLATOR ROW	3.06"	
PREFABRICATED END CAP	B	12" BOTTOM CORED END CAP/TYP OF ALL 12" BOTTOM CONNECTIONS	1.78"	
MANIFOLD	C	18" x 12" BOTTOM MANIFOLD, ADS N-12	1.73"	
CONCRETE STRUCTURE	D	(DESIGN BY ENGINEER / PROVIDED BY OTHERS)		5.5 CFS IN



ISOLATOR ROW (SEE DETAIL)

PLACE MINIMUM 11.50" OF ADS GEOSYNTHETICS 315WTM WOVEN GEOTEXTILE OVER BEDDING STONE AND UNDERNEATH CHAMBER FEET FOR SCOUR PROTECTION AT ALL CHAMBER INLET ROWS

BED LIMITS

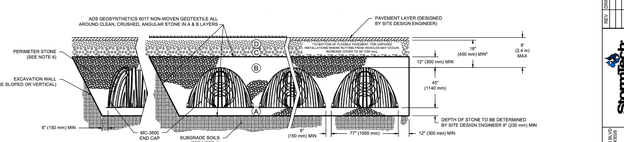
NOTES

- MANIFOLD SIZE TO BE DETERMINED BY SITE DESIGN ENGINEER. SEE TECH NOTE #6.32 FOR MANIFOLD SIZING GUIDANCE.
- DUE TO THE ADAPTATION OF THIS CHAMBER SYSTEM TO SPECIFIC SITE AND DESIGN CONSTRAINTS, IT MAY BE NECESSARY TO CUT AND COUPLE ADDITIONAL PIPE TO STANDARD MANIFOLD STUBS AT THE FACTORY.
- THE SITE DESIGN ENGINEER MUST REVIEW ELEVATIONS AND IF NECESSARY ADJUST GRADING TO ENSURE THE CHAMBER COVER REQUIREMENTS ARE MET.
- THIS CHAMBER SYSTEM WAS DESIGNED WITHOUT SITE-SPECIFIC INFORMATION ON SOIL CONDITIONS OR BEARING CAPACITY. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR DETERMINING THE SUITABILITY OF THE SOIL AND PROVIDING THE BEARING CAPACITY OF THE IN-SITU SOILS. THE BASE STONE DEPTH MAY BE INCREASED OR DECREASED ONCE THIS INFORMATION IS KNOWN.
- **NOT FOR CONSTRUCTION:** THIS LAYOUT IS FOR DIMENSIONAL PURPOSES ONLY TO PROVE CONCEPT & THE REQUIRED STORAGE VOLUME CAN BE ACHIEVED ON SITE.

ACCEPTABLE FILL MATERIALS: STORMTECH MC-3500 CHAMBER SYSTEMS

	MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	**FINAL FILL:** FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED TRAFFIC APPLICATIONS MAY REQUIRE ASPHALT MATERIAL AND PREPARATION REQUIREMENTS.
C	**INITIAL FILL:** FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 24" (600 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. OR MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M145[1] A-1, A-2-4, A-3 OR AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 24" (600 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 12" (300 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS.
B	**EMBEDMENT STONE:** FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43[1] 3, 4	NO COMPACTION REQUIRED.
A	**FOUNDATION STONE:** FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43[1] 3, 4	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE.[2,3]

PLEASE NOTE:
1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 9" (230 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
3. UNDER PAVED FINISHED SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.
4. ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.



NOTES:

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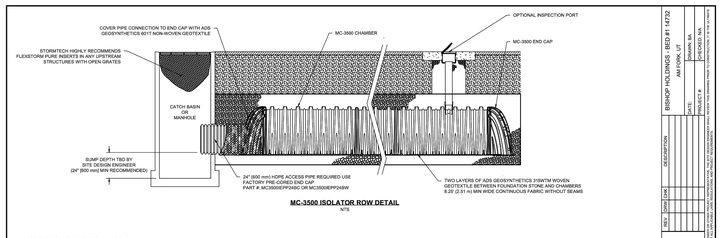
2. MC-3500 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
3. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
4. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
5. REQUIREMENTS FOR HANDLING AND INSTALLATION:
   - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
   - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 3".
   - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2418 SHALL BE GREATER THAN OR EQUAL TO 550 LBS/IN/IN. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.



MC-3500 ISOLATOR ROW DETAIL

NTS

INSPECTION & MAINTENANCE

STEP 1) INSPECT ISOLATOR ROW FOR SEDIMENT
- A. INSPECTION PORTS (IF PRESENT)
  - A.1. REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN
  - A.2. REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
  - A.3. USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
  - A.4. LOWER A CAMERA INTO ISOLATOR ROW FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
  - A.5. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- B. ALL ISOLATOR ROWS
  - B.1. REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW
  - B.2. USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW THROUGH OUTLET PIPE
    - 1) USE A MIRROR ON POLES OR CAMERA MAY BE USED TO AVOID A CONFINED SPACE ENTRY
    - 2) FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
  - B.3. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.

STEP 2) CLEAN OUT ISOLATOR ROW USING THE JETVAC PROCESS
- A. A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45° (1.1 m) OR MORE IS PREFERRED
- B. APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
- C. VACUUM STRUCTURE SUMP AS REQUIRED

STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.

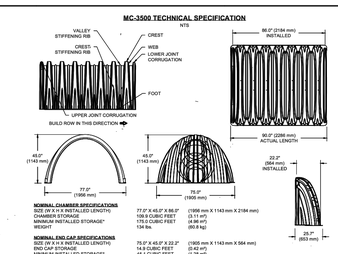
STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

NOTES

1. INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
2. CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.

MC-3500 TECHNICAL SPECIFICATION

NTS



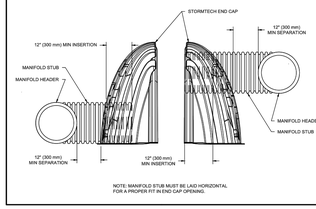
NOMINAL CHAMBER SPECIFICATIONS
SIZE (W X H X INSTALLED LENGTH): 77.0" X 45.0" X 86.0" (1956 mm X 1143 mm X 2184 mm)
CHAMBER STORAGE: 109.9 CUBIC FEET (3.11 m³)
MINIMUM INSTALLED STORAGE*: 175.0 CUBIC FEET (4.96 m³)
WEIGHT: 134 lbs. (60.8 kg)

NOMINAL END CAP SPECIFICATIONS
SIZE (W X H X INSTALLED LENGTH): 75.0" X 45.0" X 22.2" (1905 mm X 1143 mm X 564 mm)
END CAP STORAGE: 14.8 CUBIC FEET (0.42 m³)
MINIMUM INSTALLED STORAGE*: 45.1 CUBIC FEET (1.28 m³)
WEIGHT: 49 lbs. (22.2 kg)

*ASSUMES 12" (305 mm) STONE ABOVE, 9" (229 mm) STONE FOUNDATION, 6" SPACING BETWEEN CHAMBERS, 9" (152 mm) STONE PERIMETER IN FRONT OF END CAPS AND 40% STONE POROSITY

MC-SERIES END CAP INSERTION DETAIL

NTS



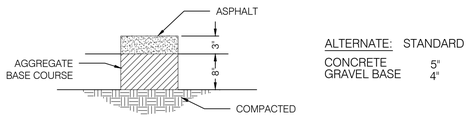
NOTE: MANIFOLD STUB MUST BE LAID HORIZONTAL FOR A PROPER FIT IN END CAP OPENING.

STUBS AT BOTTOM OF END CAP FOR PART NUMBERS ENDING WITH "B"
STUBS AT TOP OF END CAP FOR PART NUMBERS ENDING WITH "T"
END CAPS WITH A WELDED CROWN PLATE END WITH "C"
END CAPS WITH A PREFABRICATED WELDED STUB END WITH "W"

PART #	STUB	B	C
MC3500EPP06B	6" (150 mm)	33.27" (844 mm)	—
MC3500EPP06T			0.98" (21 mm)
MC3500EPP08B	8" (200 mm)	31.16" (791 mm)	—
MC3500EPP08T			0.51" (21 mm)
MC3500EPP10T	10" (250 mm)	29.04" (738 mm)	—
MC3500EPP10B			0.93" (24 mm)
MC3500EPP12T	12" (300 mm)	26.36" (670 mm)	—
MC3500EPP12B			1.33" (34 mm)
MC3500EPP15T	15" (375 mm)	23.39" (594 mm)	—
MC3500EPP15B			1.92" (34 mm)
MC3500EPP18TC	18" (450 mm)	20.03" (509 mm)	—
MC3500EPP18TW			
MC3500EPP18BC		—	1.77" (45 mm)
MC3500EPP18BW			
MC3500EPP24TC	24" (600 mm)	14.48" (368 mm)	—
MC3500EPP24TW			
MC3500EPP24BC		—	2.08" (52 mm)
MC3500EPP24BW			
MC3500EPP30BC	30" (750 mm)	—	2.79" (70 mm)

CUSTOM PRECORED INVERTS ARE AVAILABLE UPON REQUEST. FOR EXAMPLE: 24" (600 mm) SIZE 12-24" (300-600 mm) SIZE ON SIZE AND 15-48" (375-1200 mm) ECCENTRIC MANIFOLDS. CUSTOM INVERTS ARE MADE BY CUTTING END CAP CUT IN THE FIELD AND NOT RECOMMENDED FOR PIPE SIZES GREATER THAN 10" (255 mm). THE INVERT LOCATION IN COLUMN 'B' ARE THE HIGHEST POSSIBLE FOR THE PIPE SIZE.

NOTE: ALL DIMENSIONS ARE NOMINAL



ALTERNATE: STANDARD

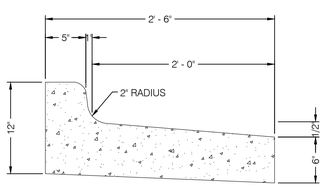
CONCRETE	5"
GRAVEL BASE	4"

STANDARD DUTY PAVEMENT

PAVEMENT SECTIONS (2)

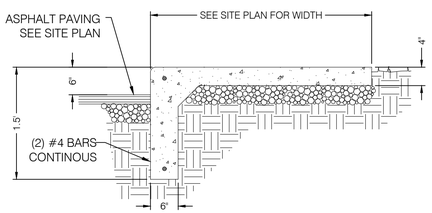
SCALE: NTS

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



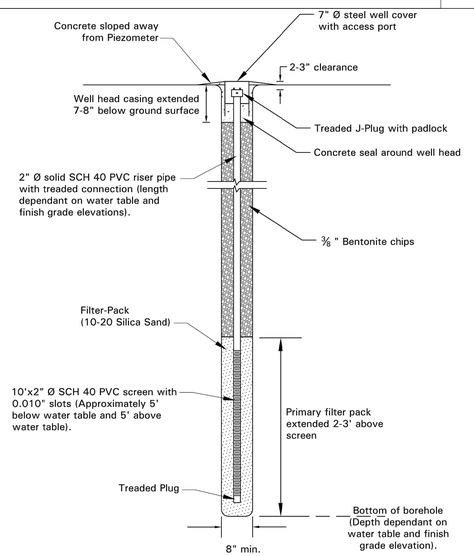
TYPICAL RELEASE CURB & GUTTER (3)

SCALE: NTS



INTEGRAL SIDEWALK & CURB (4)

SCALE: NTS



TYPICAL PIEZOMETER COMPLETION (5)

SCALE: NTS

1200116	AGEC	Typical Piezometer Completion	Figure 1

AREA 1, BED 1 MC3500 STORMTECH CHAMBERS (1)

SCALE: NTS

AquaShield — STORMWATER TREATMENT SOLUTIONS
2733 Kanasita Drive, Suite 111, Chattanooga, TN 37343
Phone: (888) 344-9044 Fax: (423) 826-2112
www.aquashieldinc.com

Typical Bollard Detail Plan & Section

Document:	Concrete	Rev. Date	CAD Op.	Description of Revision
Drawn By:	JCW			
Scale:	1:20			
Date:	12/08/14			

BOLLARD DETAIL (6)

SCALE: NTS

No.	DATE	DESCRIPTION
1	06/16/20	REVISIONS PER CITY REQ'MENTS
2	08/21/20	REVISIONS PER CITY REQ'MENTS
3	09/08/20	REVISIONS PER CITY REQ'MENTS
4	09/23/20	REVISIONS PER PRE-MARSHAL TO PRE ROUTE

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

DRAWN BY: MNJ | CHECKED BY: AGA | READ CHK'D BY: KD | DATE: 03/27/20 | DWG FILE: 1907191_SITE

BISHOP HOLDINGS - BED #1 14732 — AM FORK, UT — DRAWN: BA — CHECKED: MNJ — PROJECT #

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

PROFESSIONAL ENGINEER — STATE OF UTAH — 9/23/20 — No. 10360773 — M. CHRIS POULSEN

BISHOP STORAGE - PHASE 1
5950 W 6400 N
AMERICAN FORK, UTAH

PROJECT NO. 1907191

DETAIL SHEET

CDT.02
11 OF 13

Attachment: 2. Site Plan (Bishop Storage)

PROJECT INFORMATION	
ENGINEERED PRODUCT MANAGER	
ADS SALES REP	
PROJECT NO.	

ADVANCED DRAINAGE SYSTEMS, INC.

SiteASSIST — FOR STORMTECH DESIGN — DOWNLOAD THE INSTALLATION APP

BISHOP HOLDINGS - BED #2 - 10282
AM FORK, UT

MC-3500 STORMTECH CHAMBER SPECIFICATIONS

1. CHAMBERS SHALL BE STORMTECH MC-3500.
2. CHAMBERS SHALL BE ARCH-SHAPED AND SHALL BE MANUFACTURED FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE COPOLYMERS.
3. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418-16a, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS" CHAMBER CLASSIFICATION 60/475 DESIGNATION SS.
4. CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORTS THAT WOULD IMPEDE FLOW OR LIMIT ACCESS FOR INSPECTION.
5. THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL, AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LONG-TERM VERTICAL DEFLECTION OF THE CHAMBER SYSTEM UNDER THE COMBINED DEAD LOAD PLUS LIVE LOAD (LONG-LOAD AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCES.
6. CHAMBERS SHALL BE DESIGNED, TESTED AND ALLOWABLE LOAD CONFIGURATIONS DETERMINED IN ACCORDANCE WITH ASTM F2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS". THE CHAMBERS SHALL BE CAPABLE OF WITHSTANDING A MINIMUM OF 2.5 FEET OF EARTH COVER WITH AASHTO LOADING AND A MAXIMUM PERMANENT (25 YR) COVER LOAD AND 8) ALLOWABLE COVER WITH PARKED (1-WEEK) AASHTO DESIGN TRUCK.
7. REQUIREMENTS FOR HANDLING AND INSTALLATION:
   - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
   - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 6".
   - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2418 SHALL BE GREATER THAN OR EQUAL TO 550 LBS/IN/IN. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.
8. ONLY CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WILL BE ALLOWED. UPON REQUEST BY THE SITE DESIGN ENGINEER, THE CHAMBER MANUFACTURER SHALL SUBMIT A STRUCTURAL EVALUATION FOR APPROVAL BEFORE DELIVERING CHAMBERS TO THE PROJECT SITE AS FOLLOWS:
   - THE STRUCTURAL EVALUATION SHALL BE SEALED BY A REGISTERED PROFESSIONAL ENGINEER.
   - THE STRUCTURAL EVALUATION SHALL DEMONSTRATE THAT THE CHAMBER SYSTEM IS CAPABLE OF HANDLING THAN OR EQUAL TO 1.35 FOR DEAD LOAD AND 1.75 FOR LIVE LOAD. THE MINIMUM REQUIRED BY ASTM F2787 AND BY SECTION 12.12 OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR THERMOPLASTIC PIPE.
   - THE SITE DESIGN ENGINEER SHALL SUBMIT PLANS THAT CLEARLY SHOW THE CHAMBER SYSTEM TO BE USED FOR PERMANENT DEAD LOAD DESIGN EXCEPT THAT IT SHALL BE THE 75 YEAR MODULUS USED FOR DESIGN.
9. CHAMBERS AND END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.

IMPORTANT - NOTES FOR THE BIDDING AND INSTALLATION OF MC-3500 CHAMBER SYSTEM

1. STORMTECH MC-3500 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
2. STORMTECH MC-3500 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
3. CHAMBERS ARE NOT TO BE BACKFILLED WITH A DOZER OR AN EXCAVATOR SITUATED OVER THE CHAMBERS. STORMTECH RECOMMENDS 3 BACKFILL METHODS:
   - STONE AND ROLL FOR LARGE STONE AGGREGATE
   - BACKFILL AS ROWS ARE BUILT USING AN EXCAVATOR ON THE FOUNDATION STONE OR SUBGRADE.
   - BACKFILL FROM OUTSIDE THE EXCAVATION USING A LONG BOOM HOE OR EXCAVATOR.
4. THE FOUNDATION STONE SHALL BE LEVELED AND COMPACTED PRIOR TO PLACING CHAMBERS.
5. JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEATED PRIOR TO PLACING STONE.
6. MAINTAIN MINIMUM - 6" (150 mm) SPACING BETWEEN THE CHAMBER ROWS.
7. INLET AND OUTLET MANIFOLDS MUST BE INSERTED A MINIMUM OF 12" (300 mm) INTO CHAMBER END CAPS.
8. EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE MEETING THE AASHTO M43 DESIGNATION OF #3 OR #4.
9. STONE MUST BE PLACED ON THE TOP CENTER OF THE CHAMBER TO ANCHOR THE CHAMBERS IN PLACE AND PRESERVE ROW SPACING.
10. THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION MATERIALS BEARING CAPACITIES TO THE SITE DESIGN ENGINEER.
11. ADS RECOMMENDS THE USE OF FLEXSTORM CATCH IT INSERTS DURING CONSTRUCTION FOR ALL INLETS TO PROTECT THE SUBSURFACE STORMWATER MANAGEMENT SYSTEM FROM CONSTRUCTION SITE RUNOFF.

NOTES FOR CONSTRUCTION EQUIPMENT

1. STORMTECH MC-3500 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
2. THE USE OF EQUIPMENT OVER MC-3500 CHAMBERS IS LIMITED:
   - NO EQUIPMENT IS ALLOWED ON BARE CHAMBERS.
   - NO RUBBER TIRED LOADER, DUMP TRUCK, OR EXCAVATORS ARE ALLOWED UNTIL PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
   - WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
3. FULL 36" (900 mm) OF STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR DUMPING.

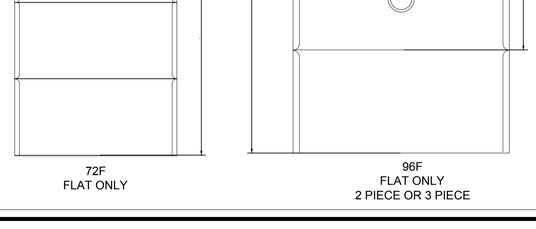
USE OF A DOZER TO PUSH EMBEDMENT STONE BETWEEN THE ROWS OF CHAMBERS MAY CAUSE DAMAGE TO CHAMBERS AND IS NOT AN ACCEPTABLE BACKFILL METHOD. ANY CHAMBERS DAMAGED BY USING THE "DUMP AND PUSH" METHOD ARE NOT COVERED UNDER THE STORMTECH STANDARD WARRANTY.

CONTACT STORMTECH AT 1-888-892-2694 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT.

ACCEPTABLE FILL MATERIALS: STORMTECH MC-3500 CHAMBER SYSTEMS

	MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	**FINAL FILL:** FILL MATERIAL FOR LAYER D STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER	ANY SOIL/ROCK MATERIAL, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. IF PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	**INITIAL FILL:** FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 24" (600 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M145* A-1, A-2-4, A-3 OR AASHTO M43* 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 24" (600 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 6" (150 mm) MAX LIFTS TO A MIN. 95% RELATIVE DENSITY FOR WELL-GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS.
B	**EMBEDMENT STONE:** FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43* 3, 4	NO COMPACTION REQUIRED.
A	**FOUNDATION STONE:** FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43* 3, 4	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE.[1,2]

PLEASE NOTE:
1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43 STONE)".
2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 9" (230 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
3. CARE MUST BE TAKEN TO AVOID CONTAMINATION OF THE 'A' STONE BY FINES WHICH MAY BE CONTAINED IN THE 'B' MATERIAL. THE 'A' STONE MUST BE COMPRESSED BY COMPACTION. FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.
4. ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.



NOTES:

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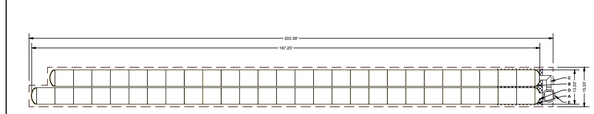
2. MC-3500 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
3. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
4. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
5. REQUIREMENTS FOR HANDLING AND INSTALLATION:
   - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
   - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 6".
   - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2418 SHALL BE GREATER THAN OR EQUAL TO 550 LBS/IN/IN. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.

PROPOSED LAYOUT		CONCEPTUAL ELEVATIONS				
33	STORMTECH MC-3500 CHAMBERS	MAXIMUM ALLOWABLE GRADE (TOP OF PAVEMENT/UNPAVED)	12	END CAP	TOP OF MC-3500 CHAMBER	0.93
6	STORMTECH MC-3500 END CAPS	MINIMUM ALLOWABLE GRADE (TOP OF PAVEMENT)	6		BOTTOM OF MC-3500 CHAMBER	0.00
1	HYDRO BOX (48")	MINIMUM ALLOWABLE GRADE (TOPSOIL/NO TRAFFIC)	0		TOP OF FOUNDATION STONE	0.00
8	HYDRO BOX (24")	MINIMUM ALLOWABLE GRADE (TOP OF BASE/CONCRETE PAVEMENT)	0		BOTTOM OF FOUNDATION STONE	-1.07
80	LF 6" SDR 35	MINIMUM ALLOWABLE GRADE (BASE OF FLEXIBLE PAVEMENT)	0		SITE DESIGN ELEVATION	0.00
	SUPPLEMENTAL STORAGE VOLUME (CF)	TOP OF STONE	0		BOTTOM OF STRUCTURE	-3.5 CATCH IN
10294	PERIMETER STONE INCLUDED	TOP OF MC-3500 CHAMBER	0.93			
	EXCAVATION INCLUDED	TOP OF MC-3500 CHAMBER	0.93			
	BASE STONE INCLUDED	TOP OF STONE BELOW INVERT	0.00			
3285	SYSTEM AREA (SF)	BOTTOM OF MC-3500 CHAMBER	-1.00			
4214	SYSTEM PERIMETER (ft)	BOTTOM OF STONE	-1.00			



NO ISOLATOR ROW

PLACE MINIMUM 17.50' OF ADS GEOSYNTHETICS 315WTW WOVEN GEOTEXTILE OVER BEDDING STONE AND UNDERNEATH CHAMBER FEET FOR SCOUR PROTECTION AT ALL CHAMBER INLET ROWS

— — — BED LIMITS

NOTES
- FINAL INVERT AND GRADE SHALL BE DETERMINED BY SITE DESIGN ENGINEER. SEE TECH NOTE #6.32 FOR MANIFOLD SIZING GUIDANCE.
- DUE TO THE ADAPTATION OF THIS CHAMBER SYSTEM TO SPECIFIC SITE AND DESIGN CONSTRAINTS, IT MAY BE NECESSARY TO CUT AND COUPLE ADDITIONAL PIPE TO STANDARD MANIFOLD CONFIGURATIONS.
- THE SITE DESIGN ENGINEER MUST REVIEW ELEVATIONS AND IF NECESSARY ADJUST GRADING TO ENSURE THE CHAMBER COVER REQUIREMENTS ARE MET.
- THIS CHAMBER SYSTEM WAS DESIGNED WITHOUT SITE-SPECIFIC INFORMATION ON SOIL CONDITIONS OR BEARING CAPACITY. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR DETERMINING THE BEARING CAPACITY OF THE SOIL AND PROVIDING THE BEARING CAPACITY OF THE INSITU SOILS. THE BASE STONE DEPTH MAY BE INCREASED OR DECREASED ONCE THIS INFORMATION IS PROVIDED.
- **NOT FOR CONSTRUCTION:** THIS LAYOUT IS FOR DIMENSIONAL PURPOSES ONLY TO PROVE CONCEPT & THE REQUIRED STORAGE VOLUME CAN BE ACHIEVED ON SITE.

MC-3500 TECHNICAL SPECIFICATION

NOMINAL CHAMBER SPECIFICATIONS
SIZE (W x H x 8' INSTALLED LENGTH): 77.0" X 45.0" X 85.0" (1956 mm X 1143 mm X 2164 mm)
CHAMBER STORAGE: 109.9 CUBIC FEET (3.11 m³)
MINIMUM INSTALLED STORAGE*: 175.0 CUBIC FEET (4.96 m³)
WEIGHT: 134 lbs (60.8 kg)

NOMINAL END CAP SPECIFICATIONS
END CAP (8' INSTALLED LENGTH): 70.0" X 45.0" X 22.2" (1905 mm X 1143 mm X 564 mm)
END CAP STORAGE: 14.8 CUBIC FEET (0.42 m³)
MINIMUM INSTALLED STORAGE*: 45.1 CUBIC FEET (1.28 m³)
WEIGHT: 49 lbs (22.2 kg)

*ASSUMES 12" (305 mm) STONE ABOVE, 9" (228 mm) STONE FOUNDATION, 9" SPACING BETWEEN CHAMBERS, 9" (152 mm) STONE PERIMETER IN FRONT OF END CAPS AND 40% STONE POROSITY

STUB AT BOTTOM OF END CAP FOR PART NUMBERS ENDING WITH "B" (SEE CHART BELOW). STUB AT CENTER OF END CAP FOR PART NUMBERS WITH "T" END CAPS WITH A WELDED CROWN PLATE END WITH "C" END CAPS WITH A PREFABRICATED WELDED STUB END WITH "W"

PART #	STUB	B	C
MC3500EPP06T	6" (150 mm)	33.21" (844 mm)	---
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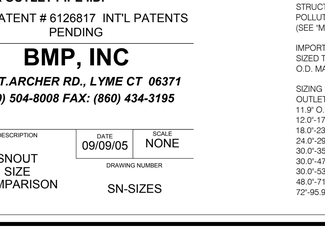
MC3500EPP30BC	30" (750 mm)	---	2.79" (70 mm)

NOTE: ALL DIMENSIONS ARE NOMINAL

CUSTOM PRECORED INVERTS ARE AVAILABLE UPON REQUEST. INVENTORIED MANIFOLDS INCLUDE ALL STANDARD SIZE ORIFICES AND 18-48" (375-1200 mm) ECCENTRIC MANIFOLDS. CUSTOM MANIFOLDS CAN ALSO BE BUILT WITH ANY END CAP OUT IN THE FIELD AND NOT RECOMMENDED FOR PIPE SIZES GREATER THAN 24" (600 mm). INVERT LOCATION IS COLUMN 'B' AND THE HIGHEST POSSIBLE FOR THE PIPE SIZE.

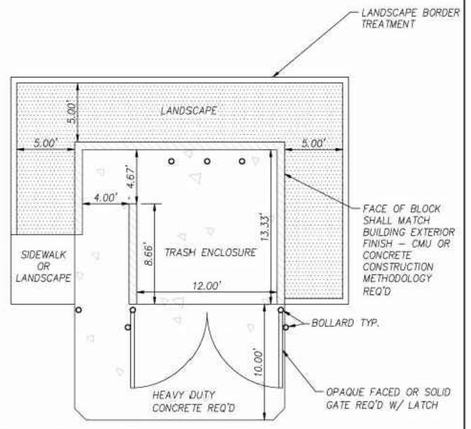
MC-SERIES END CAP INSERTION DETAIL



NOTE: MANIFOLD STUB MUST BE LAID HORIZONTAL FOR A PROPER FIT IN END CAP OPENING.

AREA 1, BED 2 MC3500 STORMTECH CHAMBERS (1)
SCALE: NTS

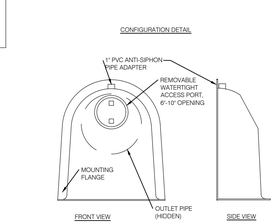
CITY STANDARD - DUMPSTER/ TRASH ENCLOSURE STANDARD 17.5.121.B



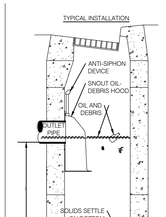
NOTES:
1. LANDSCAPE SHALL INCLUDE COMBINATION OF TREES AND SHRUBBERY TO CREATE A LANDSCAPE SCREEN FOR THE ENCLOSURE
2. ENCLOSURE SHALL BE 6' TALL MIN.
3. ENCLOSURE EXTERIOR FINISH SHALL MATCH THE EXTERIOR OF THE BUILDING FOR WHICH IT SUPPORTS.
3. LANDSCAPE DIMENSIONS SHOWN ARE MINIMUMS.
4. ENCLOSURE DIMENSIONS MAY VARY DEPENDING UPON INTENDED USE, AS SUCH, CITY ENGINEER/CITY PLANNER SHALL HAVE THE ABILITY TO REVIEW AND RECOMMEND APPROPRIATE SIZE OF A GIVEN ENCLOSURE FOR A SPECIFIC USE.
5. A VARIANCE FROM THE REQUIREMENT OF AN ENCLOSURE CAN BE GRANTED BY THE LAND USE AUTHORITY FOR A GIVEN ZONE IF IT CAN BE DEMONSTRATED THAT THE USE FOR THE SITE DOES NOT REQUIRE MORE THAN A TRADITIONAL CURB SIDE PICK UP CONTAINER. CURB SIDE CONTAINER MUST BE AVAILABLE IN THAT AREA TO QUALIFY FOR THIS EXCEPTION.

T:\LD-PROJECT-W~2\TH-STANDARDS\DUMPSTER.DWG
DATE: NOV. 18, 2010

DUMPSTER (2)
SCALE: NTS

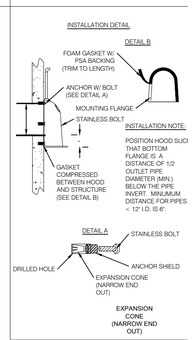


SNOUT OIL-WATER-DEBRIS SEPARATOR



NOTES:
1. ALL HOODS AND TRAPS FOR CATCH BASINS AND WATER QUALITY STRUCTURES SHALL BE AS MANUFACTURED BY: BEST MANAGEMENT PRODUCTS, INC. 53 MT. ARCHER RD. LYME, CT 06371 (860) 434-0277, (860) 434-3195 FAX TOLL FREE: (800) 504-8008 OR (888) 354-7585 WEB SITE: www.bestmp.com OR PRE-APPROVED EQUAL
2. ALL HOODS SHALL BE CONSTRUCTED OF A GLASS REINFORCED RESIN COMPOSITE WITH ISO GEL COAT EXTERIOR FINISH WITH A MINIMUM 0.125" LAMINATE THICKNESS.
3. ALL HOODS SHALL BE EQUIPPED WITH A WATERTIGHT ACCESS PORT, A MOUNTING FLANGE, AND AN ANTI-SIPHON VENT AS DRAWN. (SEE CONFIGURATION DETAIL)
4. THE SIZE AND POSITION OF THE HOOD SHALL BE DETERMINED BY OUTLET PIPE SIZE AS PER MANUFACTURER'S RECOMMENDATION.
5. THE BOTTOM OF THE HOOD SHALL EXTEND DOWNWARD A DISTANCE EQUAL TO 1/2 THE OUTLET PIPE DIAMETER WITH A MINIMUM DISTANCE OF 6" FOR PIPES < 12" I.D.
6. THE ANTI-SIPHON VENT SHALL EXTEND ABOVE HOOD BY MINIMUM OF 3" AND A MAXIMUM OF 24" ACCORDING TO STRUCTURE CONFIGURATION.
7. THE SURFACE OF THE STRUCTURE WHERE THE HOOD IS MOUNTED SHALL BE FINISHED SMOOTH AND FREE OF LOOSE MATERIAL.
8. THE HOOD SHALL BE SECURELY ATTACHED TO STRUCTURE WALL WITH 3/8" STAINLESS STEEL BOLTS AND OIL-RESISTANT GASKET AS SUPPLIED BY MANUFACTURER. (SEE INSTALLATION DETAIL)
9. INSTALLATION INSTRUCTIONS SHALL BE FURNISHED WITH MANUFACTURER SUPPLIED INSTALLATION KIT. INSTALLATION KIT SHALL INCLUDE:
   A. INSTALLATION INSTRUCTIONS
   B. PVC ANTI-SIPHON VENT PIPE AND ADAPTER
   C. OIL-RESISTANT CRUSHED CELL FOAM GASKET WITH PSA BACKING
   D. 3/8" STAINLESS STEEL BOLTS
   E. ANCHOR SHIELDS

US Patent # 6126817



HOOD SPECIFICATION FOR CATCH BASINS AND WATER QUALITY STRUCTURES

DESCRIPTION	DATE	SCALE
OIL- DEBRIS HOOD SPECIFICATION AND INSTALLATION (TYPICAL)	09/08/00	NONE
	DRAWING NUMBER	SP-SN

SNOUT DETAILS (3)
SCALE: NTS

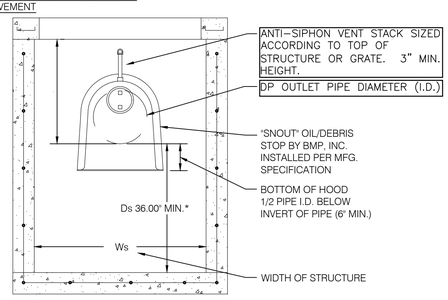
*** R SERIES INSTALLATION NOTE:**
12R- FITS 36-48" DIAM. STRUCTURE
18R- FITS 48-60" DIAM. STRUCTURE
24R- FITS 48-60" DIAM. STRUCTURE
30R- FITS 60-72" DIAM. STRUCTURE
54R- FITS 72" DIAM. STRUCTURE
RECOMMENDED SUMP DEPTH
2.5 TO 3X OUTLET PIPE I.D.

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

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

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

DESIGN PARAMETER GUIDELINES FOR WATER QUALITY IMPROVEMENT



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

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

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

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

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

SIZING EXAMPLES:

OUTLET HOLE SIZE	SNOUT SIZE
11.9" O.D. OR LESS	12 F or R (R FITS 36"-48" DIAM STRUCTURE)
12.0"-17.9" O.D.	18 F or R (R FITS 48"-60" DIAM STRUCTURE)
18.0"-23.9" O.D.	24 F or R (R FITS 48"-60" DIAM STRUCTURE)
24.0"-29.9" O.D.	30 F or R (R FITS 60"-72"

PROJECT INFORMATION	
ENGINEERED PRODUCT MANAGER	
ADS SALES REP	
PROJECT NO.	

ADVANCED DRAINAGE SYSTEMS, INC.

BISHOP HOLDINGS - BED #3

AM FORK, UT

SiteASSIST — FOR STORMTECH INSTRUCTIONS, DOWNLOAD THE INSTALLATION APP

MC-3500 STORMTECH CHAMBER SPECIFICATIONS

1. CHAMBERS SHALL BE STORMTECH MC-3500.
2. CHAMBERS SHALL BE ARCH-SHAPED AND SHALL BE MANUFACTURED FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE COPOLYMERS.
3. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418-16a, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS" CHAMBER CLASSIFICATION 45kPA DESIGNATION SS.
4. CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORTS THAT WOULD IMPEDE FLOW OR LIMIT ACCESS FOR INSPECTION.
5. THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL, AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LONG-TERM STRUCTURAL INTEGRITY OF THE SYSTEM IS MAINTAINED UNDER SPECIFIED LOADING CONDITIONS (U.N. MIE TEST PROTOCOL LONG-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCES.
6. CHAMBERS SHALL BE DESIGNED, TESTED AND ALLOWABLE LOAD CONFIGURATIONS DETERMINED IN ACCORDANCE WITH ASTM F2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS", LOAD CONFIGURATIONS SHALL INCLUDE: 1) INSTANTANEOUS (+1 MIN) AASHTO DESIGN TRUCK LIVE LOAD ON MINIMUM COVER 2) MAXIMUM PERMANENT (75 YR) COVER LOAD AND 3) ALLOWABLE COVER WITH PARKED (1-WEEK) AASHTO DESIGN TRUCK.
7. REQUIREMENTS FOR HANDLING AND INSTALLATION:
   - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
   - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 3".
   - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2418 SHALL BE GREATER THAN OR EQUAL TO 600 LBS/IN/IN. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C) CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.
8. ONLY CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WILL BE ALLOWED. UPON REQUEST BY THE SITE DESIGN ENGINEER OR OWNER, THE CHAMBER MANUFACTURER SHALL SUBMIT A STRUCTURAL EVALUATION FOR APPROVAL BEFORE DELIVERY OF CHAMBERS TO THE PROJECT SITE.
   - THE STRUCTURAL EVALUATION SHALL BE SEALED BY A REGISTERED PROFESSIONAL ENGINEER.
   - THE STRUCTURAL EVALUATION SHALL DEMONSTRATE THAT THE SAFETY FACTORS ARE GREATER THAN OR EQUAL TO 1.95 FOR DEAD LOAD AND 1.75 FOR LIVE LOAD, THE MINIMUM REQUIRED BY ASTM F2787 AND BY SECTIONS 3 AND 12.12 OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR THERMOPLASTIC PIPE.
   - THE STRUCTURAL EVALUATION SHALL BE PERFORMED FOR THE LOADS SHALL BE USED FOR PERMANENT DEAD LOAD DESIGN EXCEPT THAT IT SHALL BE THE 75-YEAR MODULUS USED FOR DESIGN.
9. CHAMBERS AND END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.

IMPORTANT - NOTES FOR THE BIDDING AND INSTALLATION OF MC-3500 CHAMBER SYSTEM

1. STORMTECH MC-3500 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
2. STORMTECH MC-3500 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
3. CHAMBERS ARE NOT TO BE BACKFILLED WITH A DOZER OR AN EXCAVATOR SITUATED OVER THE CHAMBERS. STORMTECH RECOMMENDS 3 BACKFILL METHODS:
   - STONESHOOTER LOCATED OFF THE CHAMBER BED.
   - BACKFILL AS SHOWN IN THE STORMTECH DETAIL FROM THE FOUNDATION STONE OR SUBGRADE.
   - BACKFILL FROM OUTSIDE THE EXCAVATION USING A LONG BOOM HOE OR EXCAVATOR.
4. THE FOUNDATION STONE SHALL BE LEVELED AND COMPACTED PRIOR TO PLACING CHAMBERS.
5. JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEATED PRIOR TO PLACING STONE.
6. MAINTAIN MINIMUM - 6" (150 mm) SPACING BETWEEN THE CHAMBER ROWS.
7. INLET AND OUTLET MANIFOLDS MUST BE INSERTED A MINIMUM OF 12" (300 mm) INTO CHAMBER END CAPS.
8. EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE MEETING THE AASHTO M43 DESIGNATION OF #3 OR #4.
9. STONE MUST BE PLACED ON THE TOP CENTER OF THE CHAMBER TO ANCHOR THE CHAMBERS IN PLACE AND PRESERVE ROW SPACING.
10. THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION MATERIALS BEARING CAPACITIES TO THE SITE DESIGN ENGINEER.
11. ADS RECOMMENDS THE USE OF "FLEXSTORM CATCH IT" INSERTS DURING CONSTRUCTION FOR ALL INLETS TO PROTECT THE SUBSURFACE STORMWATER MANAGEMENT SYSTEM FROM CONSTRUCTION SITE RUNOFF.

NOTES FOR CONSTRUCTION EQUIPMENT

1. STORMTECH MC-3500 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
2. THE USE OF EQUIPMENT OVER MC-3500 CHAMBERS IS LIMITED:
   - NO RUBBER TIRED LOADER, DUMP TRUCK, OR EXCAVATOR
   - NO RUBBER TIRED LOADER, DUMP TRUCK, OR EXCAVATORS ARE ALLOWED UNTIL PROPER FILL DEPTH ARE REACHED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
   - WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
3. FULL 36" (900 mm) OF STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR DUMPING.

USE OF A DOZER TO PUSH EMBEDMENT STONE BETWEEN THE ROWS OF CHAMBERS MAY CAUSE DAMAGE TO CHAMBERS AND IS NOT AN ACCEPTABLE BACKFILL METHOD. ANY CHAMBERS DAMAGED BY USING THE "DUMP AND PUSH" METHOD ARE NOT COVERED UNDER THE STORMTECH STANDARD WARRANTY.

CONTACT STORMTECH AT 1-888-892-2694 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT.

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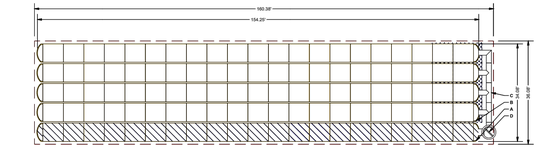
PROPOSED LAYOUT	
105	STORMTECH MC-3500 CHAMBERS
15	STORMTECH MC-3500 END CAPS
12	STONE ABOVE (in)
9	STONE BELOW (in)
40	STONE VOID
10748	INSTALLED SYSTEM VOLUME (CF) (PERIMETER STONE INCLUDED) (COVER STONE INCLUDED)
1747	SYSTEM AREA (SF)
662.9	SYSTEM PERIMETER (ft)

CONCEPTUAL ELEVATIONS	
MAXIMUM ALLOWABLE GRADE (TOP OF PAVEMENT/UNDISTURBED)	12.00
MINIMUM ALLOWABLE GRADE (UNPAVED) WITH TRAFFIC	7.00
MINIMUM ALLOWABLE GRADE (UNPAVED) NO TRAFFIC	6.00
BOTTOM OF MC-3500 CHAMBER	4.00
MINIMUM ALLOWABLE GRADE (BASE OF FLEXIBLE PAVEMENT)	6.50
TOP OF STONE	6.00
TOP OF MC-3500 CHAMBER	5.00
TOP OF MC-3500 NOMINAL CHAMBER	5.00
BOTTOM OF MC-3500 CHAMBER	0.00

PART TYPE	ITEM ON LAYOUT	DESCRIPTION	"INVERT" ABOVE BASE OF CHAMBERS: INVERT	MAX FLOW
A		24" BOTTOM CORED END CAP(TYP OF ALL 24" BOTTOM CONNECTIONS AND ISOLATOR ROW)	2.00"	
B		24" PREFABRICATED END CAP	4.75"	
C		12" x 18" BOTTOM MANIFOLD, ADS N-12	3.21"	
D		CONCRETE STRUCTURE (DESIGN BY ENGINEER / PROVIDED BY OTHERS)		20.8 CFS IN



ISOLATOR ROW (SEE DETAIL)

PLACE MINIMUM 17.50" OF ADS GEOSYNTHETICS 315WTN WOVEN GEOTEXTILE OVER BEDDING STONE AND UNDERNEATH CHAMBER FEET FOR ADDITIONAL SCOUR PROTECTION AT ALL CHAMBER INLET ROWS

BED LIMITS

NOTES

- MANIFOLD SIZE TO BE DETERMINED BY SITE DESIGN ENGINEER. SEE TECH NOTE #6.32 FOR MANIFOLD SIZING GUIDANCE.
- DUE TO THE ADAPTATION OF THIS CHAMBER SYSTEM TO SPECIFIC SITE AND DESIGN CONSTRAINTS, IT MAY BE NECESSARY TO CUT AND COUPLE ADDITIONAL PIPE TO STANDARD MANIFOLD FOR CONNECTION.
- ALL PIPE CONFIGURATIONS MUST REVIEW ELEVATIONS AND IF NECESSARY ADJUST GRADING TO ENSURE THE CHAMBER COVER REQUIREMENTS ARE MET.
- THIS CHAMBER SYSTEM WAS DESIGNED WITHOUT SITE-SPECIFIC INFORMATION ON SOIL CONDITIONS OR BEARING CAPACITY. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR DETERMINING THE SUITABILITY OF THE SOIL AND PROVIDING THE BEARING CAPACITY OF THE INSTALLED SOILS. THE BASE STONE DEPTH MAY BE INCREASED OR DECREASED ONCE THIS INFORMATION IS PROVIDED.
- **NOT FOR CONSTRUCTION:** THIS LAYOUT IS FOR DIMENSIONAL PURPOSES ONLY TO PRICE CONCEPT & THE REQUIRED STORAGE VOLUME CAN BE ACHIEVED ON SITE.

BISHOP HOLDINGS - BED #3 — AM FORK, UT — DRAWN: BA — DATE: — PROJECT #: — CHECKED: N/A

REV	DATE	CHK	DESCRIPTION

StormTech — 70 COMMERCE DRIVE, ROCKY HILL, CT 06067 — PHONE: (860) 529-8188 FAX: (860) 529-8040 — CHAMBERS, CHAMBER, STORMTECH, ISOLATOR, ISOLATOR PLUS, AND THE STORMTECH LOGO ARE TRADEMARKS OF STORMTECH, INC. REGISTERED IN THE U.S. PATENT AND TRADEMARK OFFICE. — THIS DRAWING IS THE PROPERTY OF STORMTECH, INC. AND IS NOT TO BE USED FOR ANY PURPOSE OTHER THAN THE DESIGN OF STORMTECH CHAMBER SYSTEMS.

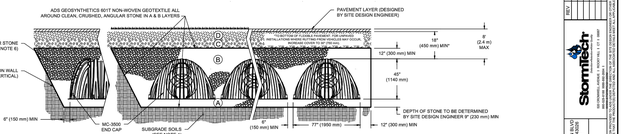
ADS TECHNICIAN SLOT — INSTALLED ON: 4/2020 — CERTIFIED: 4/2020

SHEET 2 OF 5

ACCEPTABLE FILL MATERIALS: STORMTECH MC-3500 CHAMBER SYSTEMS

	MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	**FINAL FILL:** FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	**INITIAL FILL:** FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 24" (600 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M145* A-1, A-2-4, A-3 OR AASHTO M43* 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 24" (600 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 6" (150 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS.
B	**EMBEDMENT STONE:** FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43* 3, 4	NO COMPACTION REQUIRED.
A	**FOUNDATION STONE:** FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43* 3, 4	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE.[1,2]

PLEASE NOTE:
1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 9" (230 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
3. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.
4. ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.



NOTES:

1. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418-16a, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS" CHAMBER CLASSIFICATION 45kPA DESIGNATION SS.
2. MC-3500 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
3. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
4. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
5. REQUIREMENTS FOR HANDLING AND INSTALLATION:
   - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
   - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 3".
   - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2418 SHALL BE GREATER THAN OR EQUAL TO 300 LBS/IN/IN. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C) CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.

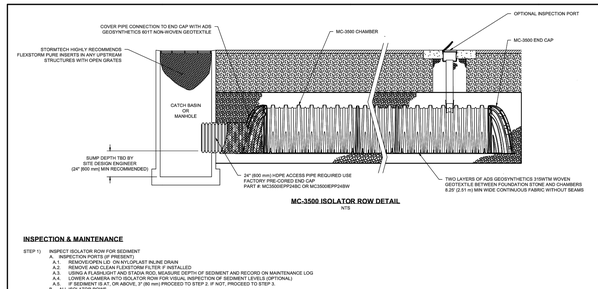
BISHOP HOLDINGS - BED #3 — AM FORK, UT — DRAWN: BA — DATE: — PROJECT #: — CHECKED: N/A

REV	DATE	CHK	DESCRIPTION

StormTech — 70 COMMERCE DRIVE, ROCKY HILL, CT 06067 — PHONE: (860) 529-8188 FAX: (860) 529-8040 — CHAMBERS, CHAMBER, STORMTECH, ISOLATOR, ISOLATOR PLUS, AND THE STORMTECH LOGO ARE TRADEMARKS OF STORMTECH, INC. REGISTERED IN THE U.S. PATENT AND TRADEMARK OFFICE. — THIS DRAWING IS THE PROPERTY OF STORMTECH, INC. AND IS NOT TO BE USED FOR ANY PURPOSE OTHER THAN THE DESIGN OF STORMTECH CHAMBER SYSTEMS.

ADS TECHNICIAN SLOT — INSTALLED ON: 4/2020 — CERTIFIED: 4/2020

SHEET 3 OF 5



MC-3500 ISOLATOR ROW DETAIL
NTS

INSPECTION & MAINTENANCE

STEP 1) INSPECT ISOLATOR ROW FOR SEDIMENT
- A. INSPECTION PORTS (IF PRESENT)
  - A.1 REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN
  - A.2 REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
  - A.3 USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
  - A.4 LOWER A CAMERA INTO ISOLATOR ROW FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
  - A.5 IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- B. ALL ISOLATOR ROWS
  - B.1 REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW
  - B.2 USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW THROUGH OUTLET PIPE
    - i) MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
    - ii) FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
  - B.3 IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.

STEP 2) CLEAN OUT ISOLATOR ROW USING THE JETVAC PROCESS
- A. A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45° (1.1 m) OR MORE IS PREFERRED
- B. APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
- C. VACUUM STRUCTURE SUMP AS REQUIRED

STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.

STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

NOTES

1. INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
2. CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.

BISHOP HOLDINGS - BED #3 — AM FORK, UT — DRAWN: BA — DATE: — PROJECT #: — CHECKED: N/A

REV	DATE	CHK	DESCRIPTION

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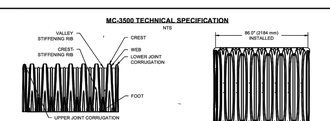
ADS TECHNICIAN SLOT — INSTALLED ON: 4/2020 — CERTIFIED: 4/2020

SHEET 4 OF 5

MC-3500 TECHNICAL SPECIFICATION

NTS



NOMINAL CHAMBER SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	77.0" X 45.0" X 96.0" (1956 mm X 1143 mm X 2184 mm)
CHAMBER STORAGE	109.8 CUBIC FEET (3.11 m³)
MINIMUM INSTALLED STORAGE*	175.0 CUBIC FEET (4.96 m³)
WEIGHT	134 lbs. (60.8 kg)

NOMINAL END CAP SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	75.0" X 45.0" X 22.2" (1905 mm X 1143 mm X 564 mm)
END CAP STORAGE	14.9 CUBIC FEET (0.42 m³)
MINIMUM INSTALLED STORAGE*	45.1 CUBIC FEET (1.28 m³)
WEIGHT	49 lbs. (22.2 kg)

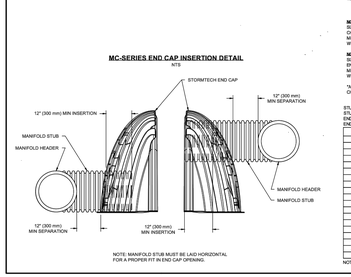
*ASSUMES 12" (305 mm) STONE ABOVE, 9" (229 mm) STONE FOUNDATION, 6" SPACING BETWEEN CHAMBERS, 6" (152 mm) STONE PERIMETER IN FRONT OF END CAPS AND 40% STONE POROSITY

STUBS AT BOTTOM OF END CAP FOR PART NUMBERS ENDING WITH "B"
STUBS AT TOP OF END CAP FOR PART NUMBERS ENDING WITH "T"
END CAPS WITH A WELDED CROWN PLATE END WITH "C"
END CAPS WITH A PREFABRICATED WELDED STUB END WITH "W"

PART #	STUB	B	C
MC3500EPP06T	6" (150 mm)	33.27" (844 mm)	0.66" (17 mm)
MC3500EPP06B		31.18" (791 mm)	---
MC3500EPP08T	8" (200 mm)	---	0.81" (21 mm)
MC3500EPP08B		29.04" (738 mm)	---
MC3500EPP10T	10" (250 mm)	---	0.93" (24 mm)
MC3500EPP10B		26.39" (670 mm)	---
MC3500EPP12T	12" (300 mm)	---	1.33" (34 mm)
MC3500EPP12B		23.39" (594 mm)	---
MC3500EPP15T	15" (375 mm)	---	1.50" (38 mm)
MC3500EPP15B		20.03" (509 mm)	---
MC3500EPP18TC	18" (450 mm)	---	---
MC3500EPP18TW		---	1.77" (45 mm)
MC3500EPP18BC		---	---
MC3500EPP18BW		14.48" (368 mm)	---
MC3500EPP24TC	24" (600 mm)	---	---
MC3500EPP24TW		---	2.06" (52 mm)
MC3500EPP24BC		---	---
MC3500EPP24BW		---	2.75" (70 mm)
MC3500EPP30C	30" (750 mm)	---	---

NOTE: ALL DIMENSIONS ARE NOMINAL

CUSTOM PRECORED INVERTS ARE AVAILABLE UPON REQUEST. INVENTORIED MANIFOLDS INCLUDE 12-24" (300-600 mm) SIZE ON SIZE AND 12-48" (300-1200 mm) SIZE ON RADIAL MANIFOLDS ONLY. CUSTOM INVERT LOCATIONS ON THE MC-3500 END CAP CUT IN THE FIELD ARE NOT RECOMMENDED FOR INVERTS GREATER THAN 15" (250 mm). THE INVERT LOCATION IN COLUMN 'B' ARE THE HIGHEST POSSIBLE FOR THE PIPE SIZE.



NOTE: MANIFOLD STUB MUST BE LAID HORIZONTAL FOR A PROPER FIT IN END CAP OPENING

BISHOP HOLDINGS - BED #3 — AM FORK, UT — DRAWN: BA — DATE: — PROJECT #: — CHECKED: N/A

REV	DATE	CHK	DESCRIPTION

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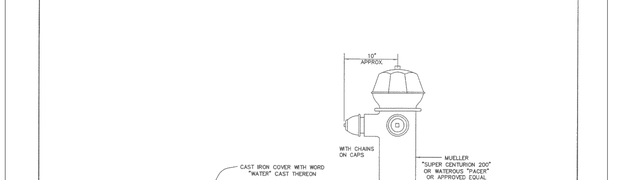
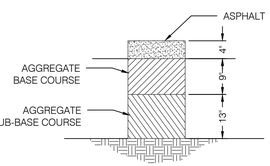
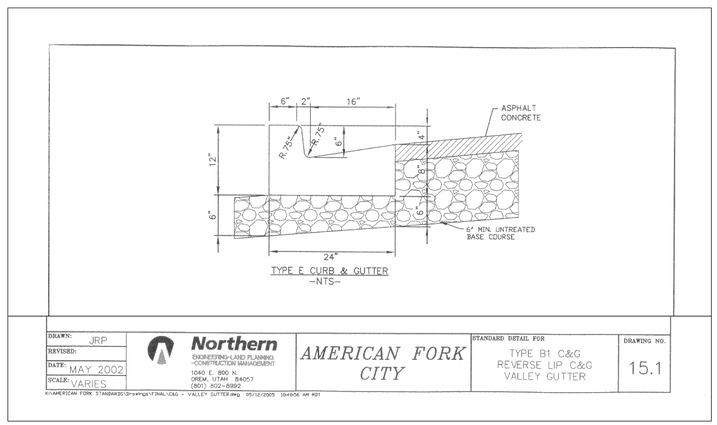
SHEET 5 OF 5





STANDARD DUTY PAVEMENT PER AMERICAN FORK STANDARD SECTION 12

PAVEMENT SECTIONS 2
SCALE: NTS



TYPE E CURB & GUTTER
-NTS-

DRAWN: JRP	Northern ENGINEERING-LAND PLANNING -CONSTRUCTION MANAGEMENT 1040 E. 800 N. OREM, UTAH 84057 (801) 802-5992	AMERICAN FORK CITY	STANDARD DETAIL FOR: TYPE B1 C&G REVERSE LIP C&G VALLEY GUTTER — DRAWING NO. 15.1
REVISED:			
DATE: MAY 2002			
SCALE: VARIES			

K:\AMERICAN FORK STANDARDS\Drawings\7.0\ALT\C&G - VALLEY GUTTER.dwg 05/12/2005 09:09:56 AM MDT

CURB AND GUTTER PER 3
SCALE: NTS

NOTES:
1. HYDRANTS THAT ARE TO BE RELOCATED AS CALLED FOR ON THE PLAN VIEW SHALL BE REINSTALLED IN ACCORDANCE WITH THIS DETAIL.
2. ALL GATE VALVES SHALL BE LOCATED AT THE HYDRANT AS SHOWN ON THIS DETAIL.
3. WHERE EXISTING FITTINGS ARE NOT COMPATIBLE WITH NEW MAIN CONSTRUCTION, SUITABLE ADAPTORS OR NEW FITTINGS SHALL BE USED UPON APPROVAL BY THE AMERICAN FORK CITY ENGINEER.
4. ALL ANCHORS AND BLOCKING TO BEAR AGAINST UNDISTURBED SOIL.
5. 6" LENGTH EXCEEDS 1 LENGTH OF PIPE, INCREASE DIAMETER TO 8 INCH MINIMUM.

FIRE HYDRANT DETAIL
-NTS-

DRAWN: JRP	Northern ENGINEERING-LAND PLANNING -CONSTRUCTION MANAGEMENT 1040 E. 800 N. OREM, UTAH 84057 (801) 802-5992	AMERICAN FORK CITY	STANDARD DETAIL FOR: FIRE HYDRANT — DRAWING

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. Soil Amendments
2. Fine Grading
3. Cultivation
4. Landscape Edging
5. Turf Planting
6. Furnish and Installing Plant
7. Maintenance
8. Mowing
9. Weeding

1.2 SITE CONDITIONS

A. Examination: Before submitting a Bid, each Contractor shall carefully examine the Contract Documents; shall visit the site of the Work; shall fully inform themselves as to all existing conditions and limitations; and shall include in the Bid the cost of all items required by the Contract Documents are at a variance with the applicable laws, building codes, rules, regulations, or contain obvious erroneous or uncoordinated information, the Contractor shall promptly notify the Project Representative and the necessary changes shall be accomplished by Addendum.

B. Protection: Contractor to conduct the Work in such a manner to protect all existing underground utilities or structures. Contractor to repair or replace any damaged utility or structure using identical materials to match existing at no expense to the Owner.

C. Irrigation System: Do not begin planting until the irrigation system is completely installed, is adjusted for full coverage and is completely operational.

1.3 PERMITS

A. Blue Stake/ Dig Line: When digging is required, "Blue Stake" or "Dig Line" the work site and identify the approximate location of all known underground utilities or structures.

1.4 PLANT DELIVERY, QUALITY, AND AVAILABILITY

A. Unauthorized substitutions will not be accepted. If proof is submitted that specific plants or plant sizes are unobtainable, written substitution requests will be considered for the nearest equivalent plant or size. All substitution requests must be made in writing and preferably before the bid due date.

1.5 FINAL INSPECTION

A. All plants will be inspected at the time of Final Inspection prior to receiving a Landscape Substantial Completion for conformance to specified planting procedures, and for general appearance and vitality. Any plant not approved by the Project Representative will be rejected and replaced immediately.

1.6 LANDSCAPE SUBSTANTIAL COMPLETION

A. A Substantial Completion Certificate will only be issued by the Project Representative for "landscape and irrigation" in their entirety. Substantial Completion will not be proportioned to be designated areas of a project.

1.7 MAINTENANCE

A. Plant Material: The Contractor is responsible to maintain all planted materials in a healthy and growing condition for 30 days after receiving a Landscape Substantial Completion at which time the Guarantee period commences. This maintenance is to include mowing, weeding, cultivating, fertilizing, monitoring water schedules, controlling insects and diseases, re-guying and staking, and all other operations of care necessary for the promotion of root growth and plant life so that all plants are in a condition satisfactory at the end of the guarantee period. The Contractor shall be held responsible for failure to monitor watering operations and shall replace any and all plant material that is lost due to improper application of water.

1.8 GUARANTEE

A. Guarantee: A guarantee period of one year shall begin from end of maintenance period and final acceptance for trees, shrubs, and ground covers. All plants shall grow and be healthy for the guarantee period and trees shall live and grow in acceptable upright position. Any plant not alive, in poor health, or in poor condition at the end of the guarantee period will be replaced immediately. Any plant will only need to be replaced once during the guarantee period. Contractor to provide documentation showing where each plant to be replaced is located. Any outside factors, such as vandalism or lack of maintenance on the part of the Owner, shall not be part of the guarantee

PART II - PRODUCTS

2.1 LANDSCAPE MATERIALS

A. Tree Staking: All trees shall be staked for one year warranty period. All trees not plumb shall be replaced. Staked trees shall use vinyl tree ties and tree stakes two (2) inch by two (2) by eight (8) foot common pine stakes used as shown on the details.

B. Tree Wrap: Tree wrap is not to be used.

C. Mulch/Rock: See Plans. All planter beds to receive a minimum 3" layer for trees, shrubs, and perennials and 1" for groundcovers.

D. Weed Barrier: DeWitt 5 oz. weed barrier fabric. Manufactured by DeWitt Company, dewittcompany.com or approved equal.

E. Tree, Shrub, and Grass Backfill Mixture; Backfill mixture to be 50% native soil and 50% topsoil, thoroughly mixed together prior to placement.

F. Topsoil: Required for turf areas, planter beds and Backfill Mixture. Acceptable topsoil shall meet the following standards:

a. PH: 5.5-7.5
b. EC (electrical conductivity): < 2.0 mmhos per centimeter
c. SAR (sodium absorption ration): < 3.0
d. % OM (percent organic matter): >1%
e. Texture (particle size per USDA soil classification): Sand <70%; Clay < 30%; Silt < 70%, Stone fragments (gravel or any soil particle greater than two (2) mm in size) < 5% by volume.

G. Turf Sod: All sod shall be 18 month old as specified on plans (or approved equal) that has been cut fresh the morning of installation. Only sod that has been grown on a commercial sod farm shall be used. Only use sod from a single source.

H. Landscape Edging: Headers and Edging six (6) inches by four (4) inches extruded concrete curb made up of the following materials:

a. Washed mortar sand free of organic material.
b. Portland Cement (see concrete spec. below for type)
c. Reinforced fiber - Specifically produced for compatibility with aggressive alkaline environment of Portland cement-based composites.
d. Only potable water for mixing.

PART III - EXECUTION

3.1 GRADING

A. Topsoil Preparation: Grade planting areas according to the grading plan. Eliminate uneven areas and low spots. Provide for proper grading and drainage.

B. Topsoil Placement: Slope surfaced away from building at two (2) percent slope with no pockets of standing water. Establish finish grades of one (1) inches for planters below grade of adjacent paved surfaced. Provide neat, smooth, and uniform finish grades. Remove surplus sub-soil and topsoil from the site.

C. Compaction: compaction under hard surface areas (asphalt paths and concrete surfaces) shall be ninety-five (95) percent. Compaction under planting areas shall be between eighty-five (85) and ninety (90) percent.

3.2 TURF GRADING

A. The surface on which the sod is to be laid shall be firm and free from footprints, depressions, or undulations of any kind. The surface shall be free of all materials larger than 1/2" in diameter.

B. The finish grade of the topsoil adjacent to all sidewalks, mow-strips, etc. prior to the laying of sod, shall be set such that the crown of the grass shall be at the same level as the adjacent concrete or hard surface. No exceptions.

3.3 PLANTING OPERATIONS

A. Review the exact locations of all trees and shrubs with the Project Representative for approval prior to the digging of any holes. Prepare all holes according to the details on the drawings.

B. Water plants immediately upon arrival at the site. Maintain in moist condition until planted.

C. Before planting, locate all underground utilities prior to digging. Do not place plants on or near utility lines.

D. The tree planting hole should be the same depth as the root ball, and three times the diameter of the root ball.

E. Trees must be placed on undisturbed soil at the bottom of the planting hole.

F. The tree hole depth shall be determined so that the tree may be set slightly high of finish grade, 1" to 2" above the base of the trunk flare, using the top of the root ball as a guide.

G. Plant immediately after removal of container for container plants.

H. Set tree on soil and remove all burlap, wire baskets, twine, wrappings, etc. before beginning and backfilling operations. Do not use planting stock if the ball is cracked or broken before or during planting operation.

I. Apply vitamin B-1 root stimulator at the rate of one (1) tablespoon per gallon.

J. Upon completion of backfilling operation, thoroughly water tree to completely settle the soil and fill any voids that may have occurred. Use a watering hose, not the area irrigation system. If additional prepared topsoil mixture needs to be added. It should be a courser mix as required to establish finish grade as indicated on the drawings.

K. The amount of pruning shall be limited to the minimum necessary to remove dead or injured twigs and branches. All cuts, scars, and bruises shall be properly treated according to the direction of the Project Representative. Proper pruning techniques shall be used. Do not leave stubs and do not cut the leader branch. Improper pruning shall be cause for rejection of the plant material.

L. Prepare a watering circle of 2' diameter around the trunk. For conifers, extend the watering well to the drip line of the tree canopy. Place mulch around the planted trees.

3.4 TURF - SOD LAYING

A. Top Soil Amendments: Prior to laying sod, commercial fertilizer shall be applied and incorporated into the upper four (4) inches of the topsoil at a rate of four pounds of nitrogen per one thousand (1,000) square feet. Adjust fertilization mixture and rate of application as needed to meet recommendations given by topsoil analysis. Include other amendments as required.

B. Fertilization: Three weeks after sod placement fertilize the turf at a rate of ½ pound of nitrogen per 1000 square feet. Use fertilizer specified above. Adjust fertilization mixture and rates to meet recommendations given by topsoil analysis.

C. Sod Availability and Condition: The Contractor shall satisfy himself as to the existing conditions prior to any construction. The Contractor shall be fully responsible for furnishing and lay all sod required on the plans. He shall furnish new sod as specified above and lay it so as too completely satisfy the intent and meaning of the plans and specification at no extra cost to the owner. In the case of plans and specification at no extra cost to the owner. In the case of any discrepancy in the amount of sod to be removed or amount to be used, it shall be the Contractor's responsibility to report such to the Project Representative prior to commencing the work.

D. Sod Laying: The surface upon which the new sod to be laid will be prepared as specified above. Areas where sod is to be laid shall be cut trimmed, or shaped to receive full width sod (minimum twelve (12) inches). No partial strip or pieces will be accepted.

E. Sod shall be tamped lightly as each piece is set to insure that good contact is made between edges and also the ground. Sod laid on any sloped areas shall be anchored with wooden dowels or other materials which are accepted by the grass sod industry.

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

G. Watering of the sod shall be the complete responsibility of the Contractor by whatever means necessary to establish the sod in an acceptable manner to the end of the Maintenance period. If an irrigation system is in place on the site, but for whatever reason, water is not available in the system. It is the responsibility of the Contractor to water the sod by whatever means, until the sod is accepted by the Project Representative.

H. Protection of the newly laid sod shall be the complete responsibility of the Contractor. The Contractor shall provide acceptable visual barriers, to include barricades set appropriate distances with strings or tapes between barriers, as an indication of new work. The Contractor is to restore any damaged areas caused by others (including vehicular traffic), erosion, etc, until such time as the lawn is accepted by the Owner.

I. All sod that has not been laid within 24 hours shall be deemed unacceptable and will be removed from the site.

3.5 WEED BARRIER

A. Cut a slit or x at each plant location no larger than necessary to install plant.

B. Overlap rows of fabric min. 6"

C. Stable fabric edges and overlaps to ground.

END OF SECTION

LANDSCAPE GENERAL NOTES

INSTALLER RESPONSIBILITIES AND LIABILITIES

1. THESE PLANS ARE FOR BASIC DESIGN LAYOUT AND INFORMATION. THE INSTALLER IS REQUIRED TO REFER TO THEIR INDIVIDUAL TRADE - SCOPE OF WORK. OWNER ASSUMES NO LIABILITIES FOR INADEQUATE ENGINEERING CALCULATIONS. MANUFACTURER PRODUCT DEFECTS, INSTALLATION OF ANY LANDSCAPING AND COMPONENTS, OR TIME EXECUTION.
2. THE INSTALLER OF ALL LANDSCAPING AND IRRIGATION SYSTEMS ARE LIABLE AND RESPONSIBLE FOR ALL JURISDICTIONAL AND CODE REQUIREMENTS, TIME EXECUTIONS, AND INSTALLED PRODUCTS AND MATERIALS.

GRADING AND DRAINAGE REQUIREMENTS

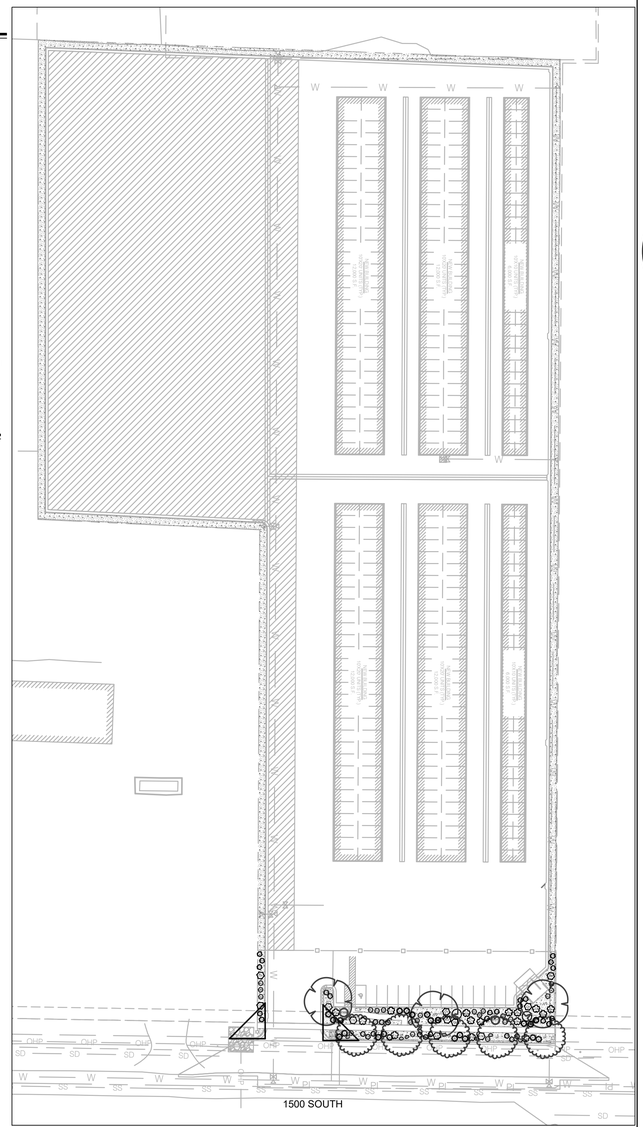
1. ALL GRADING IS TO SLOPE AWAY FROM THE STRUCTURE PER CODE.
2. FINISHED GRADE IS NOT PERMITTED BY CODE TO DRAIN ON NEIGHBORING PROPERTIES
3. 6" MIN. FOUNDATION LEFT EXPOSED AT ALL CONDITIONS
4. LANDSCAPER TO MAINTAIN OR IMPROVE EXISTING FINAL GRADE AND PROPER DRAINAGE ESTABLISHED BY THE EXCAVATOR'S FINAL GRADE ACTIVITIES INCLUDING ANY MAINTENANCE, PRESERVATION, OR EXAGGERATION OF SLOPES, BERMS, AND SWALES.
5. IF ANY SWALE, BERM, OR GRADE HAS BEEN DAMAGED OR IS INCORRECT TO ENSURE CORRECT WATER FLOW THE TRADE CONTRACTOR IS RESPONSIBLE TO FIX STATED ISSUE.
6. ROOF RUN-OFF DEVICES SHOULD BE INSTALLED TO COLLECT AND DISCHARGE ALL ROOF RUNOFF A MINIMUM OF 10 FEET FROM FOUNDATION ELEMENTS OR BEYOND THE LIMITS OF BACKFILL AROUND THE FOUNDATION WALLS; WHICHEVER DISTANCE IS GREATER.
7. THE GROUND SURFACE WITHIN 10 FEET OF THE FOUNDATIONS SHOULD BE SLOPED TO DRAIN AWAY FROM THE STRUCTURE WITH A MINIMUM FALL OF 6 INCHES.

LANDSCAPING REQUIREMENTS

1. ALL LANDSCAPING IS TO BE INSTALLED PER ALL GOVERNING JURISDICTIONS I.E. INTERNATIONAL BUILDING CODE, CITY CODES.
2. NON-COMPLIANCE TO ALL GOVERNING JURISDICTION REQUIREMENTS AND REGULATION ARE THE RESPONSIBILITY OF THE LANDSCAPING INSTALLER.
3. ALL PLANTED LANDSCAPING IS TO BE INSTALLED ACCORDING TO THE NURSERY CARE AND INSTALLATION INSTRUCTIONS WHERE PURCHASED AND BASED ON INDIVIDUAL SOIL CONDITIONS AND SITE CONDITIONS.

LANDSCAPE NOTES

1. LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR VERIFYING QUANTITIES OF ALL MATERIALS FOR BIDDING AND INSTALLATION PURPOSES. IF DISCREPANCIES EXIST, THE PLAN SHALL DICTATE QUANTITIES TO BE USED.
2. PLANT MATERIAL TO BE INSTALLED PER PLANT LEGEND. IF SUBSTITUTIONS ARE WANTED, PROPOSED LANDSCAPE CHANGES MUST BE SUBMITTED TO THE LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO PLANTING.
3. NEW LAWN AREAS TO BE SODDED WITH DROUGHT TOLERANT VARIETY. FINE LEVEL ALL AREAS PRIOR TO LAYING SOD.
4. SANDY LOAM TOPSOIL TO BE IMPLEMENTED AT THE FOLLOWING DEPTHS: 6" TOPSOIL (WITH 2" HUMUS MIXED INTO TOPSOIL PRIOR TO SPREADING) IN ALL NEW PLANTER AREAS AND 4" IN ALL NEW LAWN AREAS. PLANTER BEDS TO BE EXCAVATED AS NECESSARY IN ORDER TO ACCOMMODATE NEW TOPSOIL AND/OR PLANTER BED MULCH TO REACH FINISHED GRADE.
5. 4"X6" EXTRUDED CONCRETE MOW CURB TO BE INSTALLED BETWEEN ALL LAWN AND PLANTER AREAS PER PLAN. ANY TREES LOCATED IN LAWN MUST HAVE A 4' CONCRETE TREE RING.
6. DeWitt 5 OZ. WEED BARRIER FABRIC TO BE INSTALLED IN ALL PLANTER AREAS EXCEPT UNDER ANNUAL PLANTING AREAS AS SHOWN ON PLAN.
7. ROCK MULCH TO BE IMPLEMENTED AT THE FOLLOWING DEPTHS: 3" IN ALL TREE, SHRUB, AND PERENNIAL PLANTER AREAS; ANNUAL PLANTING AREAS AS SHOWN ON PLAN TO RECEIVE 4" OF SOIL AID MATERIAL. PULL BARK MULCH MIN. 3" AWAY FROM BASE OF ALL PERENNIALS AND SHRUBS AND MIN. 6" AWAY FROM ALL TREES.
8. CONTRACTOR TO PROVIDE NEW AUTOMATIC UNDERGROUND IRRIGATION SYSTEM TO BE INSTALLED IN ALL LANDSCAPE AREAS. ALL LAWN AREA TO RECEIVE 100% HEAD TO HEAD COVERAGE WITH SPRAY AND ROTARY SPRINKLER HEADS. ALL PLANTER AREAS NEED TO RECEIVE A FULL DRIP SYSTEM TO EACH TREE AND SHRUB ON PROJECT. SEE IRRIGATION PLAN.



SITE REQUIREMENT CALCULATIONS

STREET FRONTAGE		
1500 SOUTH	REQUIRED:	PROVIDED:
1 TREE / 40 FT (167 LN FT)	5	5
AT LEAST 80% SHADE TREES		
TREE COUNT:	**REQUIRED:**	**PROVIDED:**
1 TREE / 6 PARKING STALLS	3	3
1 SHRUB / 25 SQ FT ISLAND (364 SQ FT)	15	15
PARKING LOT PERIMETER:		
TURF LESS THAN 50%		
75% COVERAGE (TOTAL 12,637 SQ FT BEFORE FENCE)	9,477	10,236 W/ TREE CANOPY

PLANT SCHEDULE

DECIDUOUS TREES	CODE	QTY	BOTANICAL / COMMON NAME	CONT	CAL
UP	UP	5	Ulmus parvifolia Lacebark Elm	B & B	2"Cal
ZS'V	ZS'V	3	Zelkova serrata `Village Green` Sawleaf Zelkova	B & B	2"Cal

EVERGREEN TREES	CODE	QTY	BOTANICAL / COMMON NAME	CONT	CAL
CD'S	CD'S	2	Cedrus deodara `Snow Sprite` Snow Sprite Deodar Cedar	5` TALL	

SHRUBS	CODE	QTY	BOTANICAL / COMMON NAME	CONT
Au	Au	2	Amelanchier utahensis Utah Serviceberry	10 gal
Ch	Ch	31	Chaenomeles speciosa `Orange Storm` Orange Storm Flowering Quince	5 gal
Cb	Cb	11	Cotoneaster dammeri `Coral Beauty` Coral Beauty Cotoneaster	5 gal
Cy	Cy	15	Cytisus scoparius `Moonlight` Moonlight Broom	5 gal
Jc	Jc	22	Juniperus chinensis `Daub`s Frosted` Daub`s Frosted Juniper	5 gal
Mg	Mg	21	Miscanthus sinensis `Gracillimus` Malden Grass	5 gal

REFERENCE NOTES SCHEDULE

SYMBOL	1 LANDSCAPE DESCRIPTION	QTY
I-03	1"-1.5" OQUIRRH GRAVEL, 3" DEPTH, 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.	18,065 sf

SYMBOL	1 LANDSCAPE DESCRIPTION	QTY
I-07	BOULDERS - DECORATIVE	7

ISSUE DATE	PROJECT NUMBER
09-22-2020	UT20031

NO.	REVISION	DATE
1	XXXX	XX-XX-XX
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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

AF STORAGE
16 WEST 1500 NORTH
AMERICAN FORK, UTAH

DEVELOPER / PROPERTY OWNER / CLIENT

Developer / Property Owner:
BISHOP HOLDING, LLC
MATT BISHOP
801-830-7745
SNAPTRUCKING@GMAIL.COM

Client / Engineer:
BENCHMARK ENGINEERING & LAND SURVEYING
9130 SOUTH STATE STREET SUITE #100
SANDY, UTAH 84070 (801) 542-7192
WWW.BENCHMARKCIVIL.COM

LANDSCAPE ARCHITECT / PLANNER

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

LICENSE STAMP

STATE OF UTAH — KEVIN ANCHORTH — 9178727-5301 — 09/22/2020 — LANDSCAPE ARCHITECT

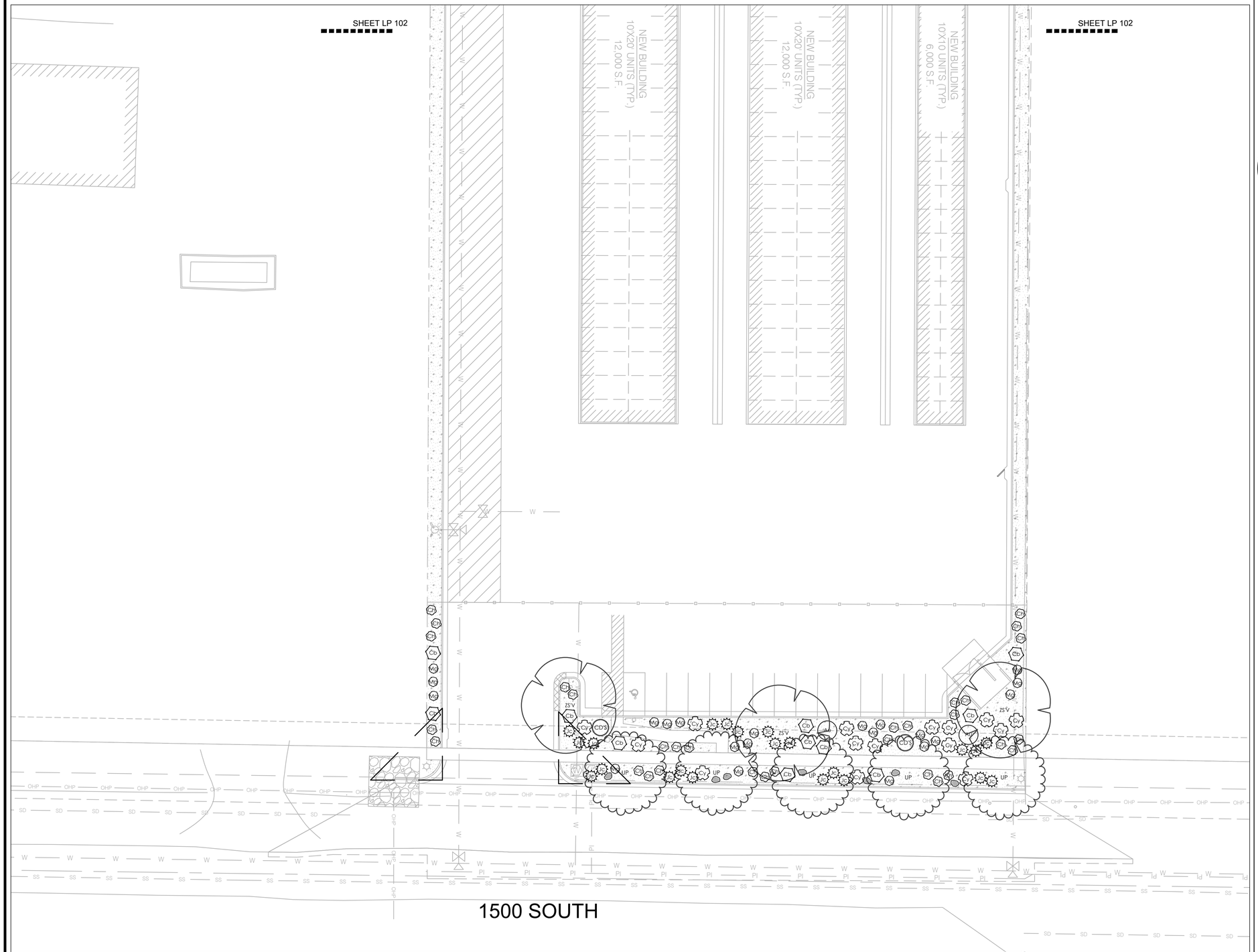
DRAWING INFO

PM:	JTA
DRAWN:	KBA
CHECKED:	TM
PLOT DATE:	9/22/2020

LANDSCAPE PLAN

LP-100

Attachment: 2. Site Plan (Bishop Storage)



PLANT SCHEDULE

DECIDUOUS TREES	CODE	QTY	BOTANICAL / COMMON NAME	CONT	CAL
UP	UP	5	Ulmus parvifolia Lacebark Elm	B & B	2"Cal
ZS'V	ZS'V	3	Zelkova serrata `Village Green` Sawleaf Zelkova	B & B	2"Cal

EVERGREEN TREES	CODE	QTY	BOTANICAL / COMMON NAME	CONT	CAL
CD'S	CD'S	2	Cedrus deodara `Snow Sprite` Snow Sprite Deodar Cedar	5` TALL	

SHRUBS	CODE	QTY	BOTANICAL / COMMON NAME	CONT
Au	Au	2	Amelanchier utahensis Utah Serviceberry	10 gal
Ch	Ch	31	Chaenomeles speciosa `Orange Storm` Orange Storm Flowering Quince	5 gal
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Jc	Jc	22	Juniperus chinensis `Daub`s Frosted` Daub`s Frosted Juniper	5 gal
Mg	Mg	21	Miscanthus sinensis `Gracillimus` Malden Grass	5 gal

REFERENCE NOTES SCHEDULE

SYMBOL	1 LANDSCAPE DESCRIPTION	QTY
I-03	1"-1.5" OQUIRRH GRAVEL, 3" DEPTH. 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.	18,065 sf

SYMBOL	1 LANDSCAPE DESCRIPTION	QTY
I-07	BOULDERS - DECORATIVE	7

ISSUE DATE	PROJECT NUMBER
09-10-2020	UT20031

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1	XXXX	XX-XX-XX
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PLAN INFORMATION

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0' 10' 20' 40' 80'
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AMERICAN FORK, UTAH

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MATT BISHOP
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LICENSE STAMP

DRAWING INFO

PM:	JTA
DRAWN:	KBA
CHECKED:	TM
PLOT DATE:	9/22/2020

LANDSCAPE PLAN

LP-101

Attachment: 2. Site Plan (Bishop Storage)

PLANT SCHEDULE

DECIDUOUS TREES	CODE	QTY	BOTANICAL / COMMON NAME	CONT	CAL
UP	UP	5	Ulmus parvifolia Lacebark Elm	B & B	2"Cal
ZS'V	ZS'V	3	Zelkova serrata `Village Green` Sawleaf Zelkova	B & B	2"Cal

EVERGREEN TREES	CODE	QTY	BOTANICAL / COMMON NAME	CONT	CAL
CD'S	CD'S	2	Cedrus deodara `Snow Sprite` Snow Sprite Deodar Cedar	5` TALL	

SHRUBS	CODE	QTY	BOTANICAL / COMMON NAME	CONT
Au	Au	2	Amelanchier utahensis Utah Serviceberry	10 gal
Ch	Ch	31	Chaenomeles speciosa `Orange Storm` Orange Storm Flowering Quince	5 gal
Cb	Cb	11	Cotoneaster dammeri `Coral Beauty` Coral Beauty Cotoneaster	5 gal
Cy	Cy	15	Cytisus scoparius `Moonlight` Moonlight Broom	5 gal
Jc	Jc	22	Juniperus chinensis `Daub`s Frosted` Daub`s Frosted Juniper	5 gal
Mg	Mg	21	Miscanthus sinensis `Gracillimus` Malden Grass	5 gal

REFERENCE NOTES SCHEDULE

SYMBOL	1 LANDSCAPE DESCRIPTION	QTY
1-03	1"-1.5" OQUIRRH GRAVEL, 3" DEPTH, 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.	18,065 sf

SYMBOL	1 LANDSCAPE DESCRIPTION	QTY
1-07	BOULDERS - DECORATIVE	7

ISSUE DATE 09-22-2020 **PROJECT NUMBER** UT20031

NO.	REVISION	DATE
1	XXXX	XX-XX-XX
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PLAN INFORMATION

811 BLUE STAKES OF UTAH
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1-800-662-4111
www.bluestakes.org

N

0' 10' 20' 40' 80'
GRAPHIC SCALE: 1" = 20'

PROJECT INFORMATION

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16 WEST 1500 NORTH
AMERICAN FORK, UTAH

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Landscape Architecture Planning & Visualization
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LEHI, UTAH 84043 (801) 960-2698
www.pkjdesigngroup.com

LICENSE STAMP

KEVIN B. ANDERSON 9125721-5201 09/22/2020 LANDSCAPE ARCHITECT

DRAWING INFO

PM:	JTA
DRAWN:	KBA
CHECKED:	TM
PLOT DATE:	9/22/2020

LANDSCAPE PLAN

LP-102

Attachment: 2. Site Plan (Bishop Storage)

PLANT SCHEDULE

DECIDUOUS TREES	CODE	QTY	BOTANICAL / COMMON NAME	CONT	CAL
UP	UP	5	Ulmus parvifolia Lacebark Elm	B & B	2"Cal
ZS'V	ZS'V	3	Zelkova serrata `Village Green` Sawleaf Zelkova	B & B	2"Cal

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CD'S	CD'S	2	Cedrus deodara `Snow Sprite` Snow Sprite Deodar Cedar	5` TALL	

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Jc	Jc	22	Juniperus chinensis `Daub`s Frosted` Daub`s Frosted Juniper	5 gal
Mg	Mg	21	Miscanthus sinensis `Gracillimus` Malden Grass	5 gal

REFERENCE NOTES SCHEDULE

SYMBOL	1 LANDSCAPE DESCRIPTION	QTY
I-03	1"-1.5" OQUIRRH GRAVEL, 3" DEPTH. 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.	18,065 sf

SYMBOL	1 LANDSCAPE DESCRIPTION	QTY
I-07	BOULDERS - DECORATIVE	7

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09-22-2020	UT20031

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PLAN INFORMATION

811 BLUE STAKES OF UTAH
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1-800-662-4111
www.bluestakes.org

N

0' 10' 20' 40' 80'
GRAPHIC SCALE: 1" = 20'

PROJECT INFORMATION

AF STORAGE
16 WEST 1500 NORTH
AMERICAN FORK, UTAH

DEVELOPER / PROPERTY OWNER / CLIENT

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MATT BISHOP
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SNAPTRUCKING@GMAIL.COM

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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

STEVEN ANDREATH 8736477-5301 09/22/2020 LICENSED LANDSCAPE ARCHITECT STATE OF UTAH

DRAWING INFO

PM:	JTA
DRAWN:	KBA
CHECKED:	TM
PLOT DATE:	9/22/2020

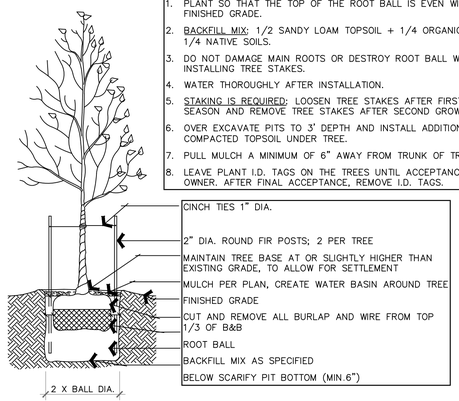
LANDSCAPE PLAN

LP-103

Attachment: 2. Site Plan (Bishop Storage)

NOTES:

1. PLANT SO THAT THE TOP OF THE ROOT BALL IS EVEN WITH THE FINISHED GRADE.
2. BACKFILL MIX: 1/2 SANDY LOAM TOPSOIL + 1/4 ORGANIC MULCH, & 1/4 NATIVE SOILS.
3. DO NOT DAMAGE MAIN ROOTS OR DESTROY ROOT BALL WHEN INSTALLING TREE STAKES.
4. WATER THOROUGHLY AFTER INSTALLATION.
5. STAKING IS REQUIRED: LOOSEN TREE STAKES AFTER FIRST GROWING SEASON AND REMOVE TREE STAKES AFTER SECOND GROWING SEASON.
6. OVER EXCAVATE PITS TO 3' DEPTH AND INSTALL ADDITIONAL COMPACTED TOPSOIL UNDER TREE.
7. PULL MULCH A MINIMUM OF 6" AWAY FROM TRUNK OF TREE.
8. LEAVE PLANT I.D. TAGS ON THE TREES UNTIL ACCEPTANCE BY THE OWNER. AFTER FINAL ACCEPTANCE, REMOVE I.D. TAGS.

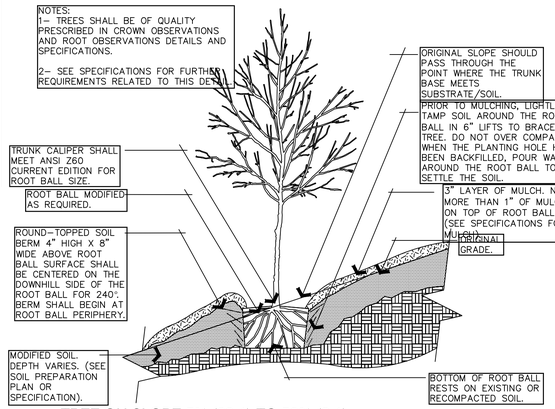


A DECIDUOUS TREE PLANTING DETAIL
NOT TO SCALE
PKJ DESIGN GROUP

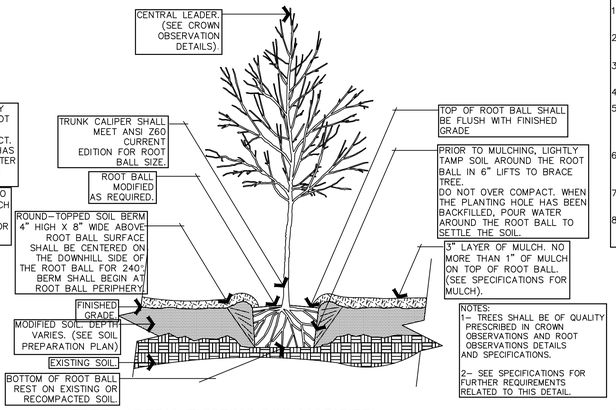
NOTES:

1- TREES SHALL BE OF QUALITY PRESCRIBED IN CROWN OBSERVATIONS AND ROOT OBSERVATIONS DETAILS AND SPECIFICATIONS.

2- SEE SPECIFICATIONS FOR FURTHER REQUIREMENTS RELATED TO THIS DETAIL.



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



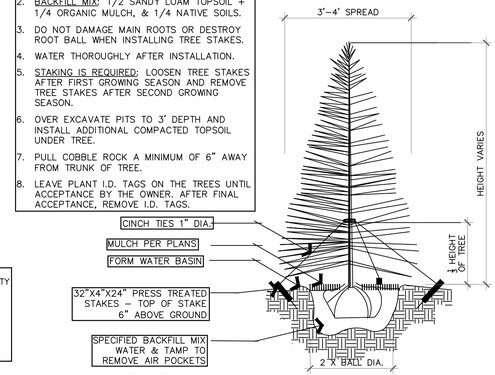
NOTES:
1- TREES SHALL BE OF QUALITY PRESCRIBED IN CROWN OBSERVATIONS AND ROOT OBSERVATIONS DETAILS AND SPECIFICATIONS.

2- SEE SPECIFICATIONS FOR FURTHER REQUIREMENTS RELATED TO THIS DETAIL.

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

NOTES:

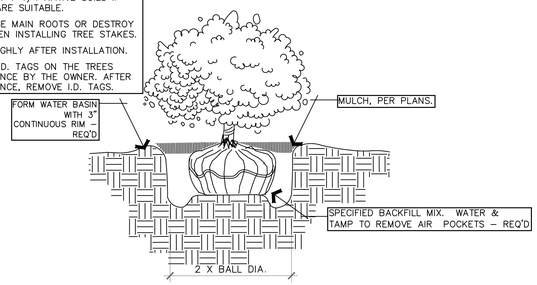
1. PLANT SO THAT THE TOP OF THE ROOT BALL IS EVEN WITH THE FINISHED GRADE.
2. BACKFILL MIX: 1/2 SANDY LOAM TOPSOIL + 1/4 ORGANIC MULCH, & 1/4 NATIVE SOILS.
3. DO NOT DAMAGE MAIN ROOTS OR DESTROY ROOT BALL WHEN INSTALLING TREE STAKES.
4. WATER THOROUGHLY AFTER INSTALLATION.
5. STAKING IS REQUIRED: LOOSEN TREE STAKES AFTER FIRST GROWING SEASON AND REMOVE TREE STAKES AFTER SECOND GROWING SEASON.
6. OVER EXCAVATE PITS TO 3' DEPTH AND INSTALL ADDITIONAL COMPACTED TOPSOIL UNDER TREE.
7. PULL COBBLE ROCK A MINIMUM OF 6" AWAY FROM TRUNK OF TREE.
8. LEAVE PLANT I.D. TAGS ON THE TREES UNTIL ACCEPTANCE BY THE OWNER. AFTER FINAL ACCEPTANCE, REMOVE I.D. TAGS.



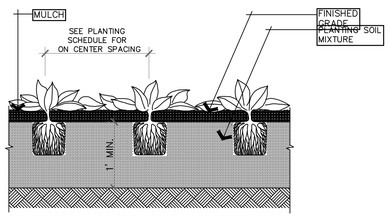
D EVERGREEN TREE PLANTING DETAIL
NOT TO SCALE
PKJ DESIGN GROUP

NOTES:

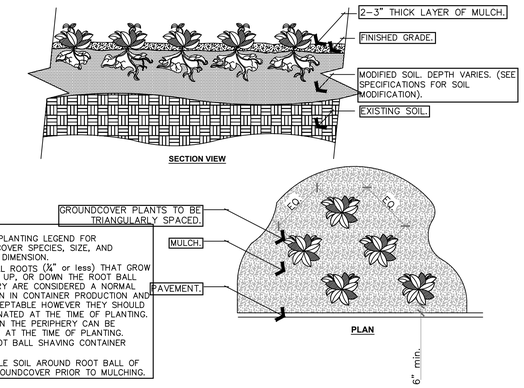
1. IF PLANT IS BALL & BURLAP, CUT AND REMOVE TOP 1/3 OF BURLAP FROM ROOT BALL.
2. IF PLANT IS CONTAINERIZED, SCARIFY ROOT BALL PRIOR TO PLANTING.
3. BACKFILL MIX: 1/2 SANDY LOAM + 1/4 ORGANIC MULCH + 1/4 NATIVE SOILS IF NATIVE SOILS ARE SUITABLE.
4. DO NOT DAMAGE MAIN ROOTS OR DESTROY ROOT BALL WHEN INSTALLING TREE STAKES.
5. WATER THOROUGHLY AFTER INSTALLATION.
8. LEAVE PLANT I.D. TAGS ON THE TREES UNTIL ACCEPTANCE BY THE OWNER. AFTER FINAL ACCEPTANCE, REMOVE I.D. TAGS.



E SHRUB PLANTING DETAIL
NOT TO SCALE
PKJ DESIGN GROUP

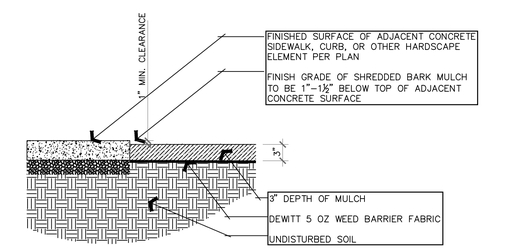


F PERENNIAL PLANTING
NOT TO SCALE
PKJ DESIGN GROUP



NOTES:
1- SEE PLANTING LEGEND FOR GROUNDCOVER SPECIES, SIZE, AND SPACING DIMENSION.
2- SMALL ROOTS (¼" or less) THAT GROW 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.

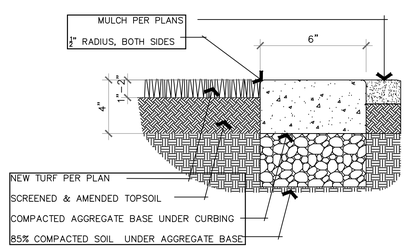
G GROUNDCOVER
NOT TO SCALE
PKJ DESIGN GROUP



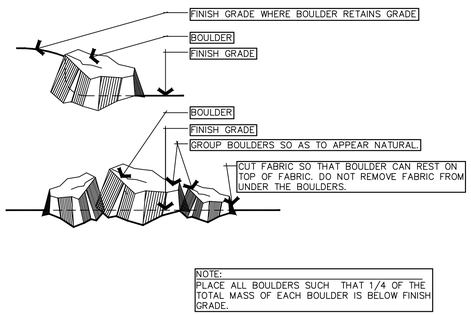
H MULCH DETAIL
NOT TO SCALE
PKJ DESIGN GROUP

NOTE:

1. PROVIDE CONTROL JOINT IN CONCRETE EDGE AT 10' INTERVALS, PROVIDE EXPANSION JOINTS EVERY 30'.



I CONCRETE MOWCURB DETAIL
NOT TO SCALE
PKJ DESIGN GROUP

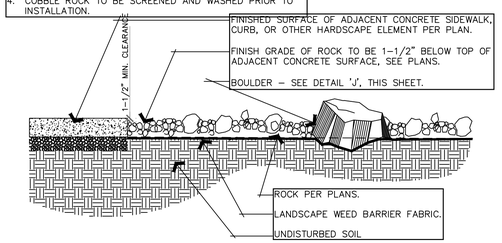


NOTE:
PLACE ALL BOULDERS SUCH THAT 1/4 OF THE TOTAL MASS OF EACH BOULDER IS BELOW FINISH GRADE.

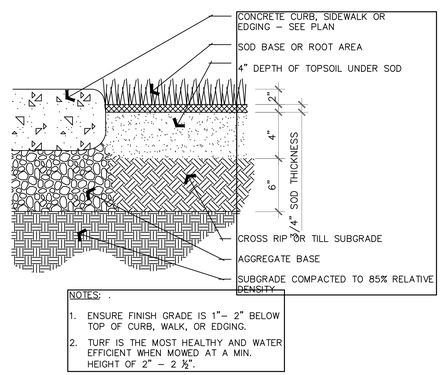
J BOULDER PLACEMENT DETAIL
NOT TO SCALE
PKJ DESIGN GROUP

NOTES:

1. KEEP TOP OF COBBLE ROCK 1½" BELOW ADJACENT WALKS AND CURBS. DO NOT ALLOW COBBLE ROCK TO TOUCH THE TRUNK OF ANY PLANT. INSTALL COBBLE ROCK AFTER INSTALLATION OF WEED BARRIER FABRIC AND PLANT MATERIAL.
2. CONTRACTOR TO ENSURE THAT TOP OF WEED BARRIER FABRIC IS FREE OF SOILS AND DEBRIS PRIOR TO PLACING COBBLE ROCK.
3. SEE LANDSCAPE PLANS FOR ROCK TYPE AND DEPTH.
4. COBBLE ROCK TO BE SCREENED AND WASHED PRIOR TO INSTALLATION.



K COBBLE ROCK AND WEED BARRIER DETAIL
NOT TO SCALE
PKJ DESIGN GROUP



NOTES: .

1. ENSURE FINISH GRADE IS 1"– 2" BELOW TOP OF CURB, WALK, OR EDGING.
2. TURF IS THE MOST HEALTHY AND WATER EFFICIENT WHEN MOWED AT A MIN. HEIGHT OF 2" – 2 ½".

L SOD LAYING DETAIL
NOT TO SCALE
PKJ DESIGN GROUP

ISSUE DATE	PROJECT NUMBER
09-22-2020	UT20031

NO.	REVISION	DATE
1	XXXX	XX-XX-XX
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PLAN INFORMATION

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0' 10' 20' 40' 80'
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AMERICAN FORK, UTAH

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LICENSE STAMP

DRAWING INFO	
PM:	JTA
DRAWN:	KBA
CHECKED:	TM
PLOT DATE:	9/22/2020

LANDSCAPE DETAILS

LP-501

Attachment: 2. Site Plan (Bishop Storage)

AF STORAGE

AMERICAN FORK, UTAH

IRRIGATION SPECIFICATIONS

IRRIGATION SPECIFICATIONS

PART I - GENERAL

1.1 SUMMARY

Work to be done includes all labor, materials, equipment and services required to complete the Project irrigation system as indicated on the Construction Drawings, and as specified herein. Includes but is not limited to: Furnishing and installing underground and above ground sprinkler system complete with any accessories necessary for proper function and operation of the system. All plant material on the Project shall be irrigated. Removal and disposal of any existing sprinkler system components are not to be saved, which are disturbed during the construction process. Restoration of any altered or damaged existing landscape to original state and condition.

1.2 SYSTEM DESCRIPTION

A. Design of irrigation components: Locations of irrigation components on Construction Drawings may be approximate. Piping, sleeving and/or other components shown on Construction drawings may be shown schematically for graphic clarity and demonstration of component groupings and separations. All irrigation components shall be placed in landscaped areas, with the exception of pope and wire in sleeving under hardscapes. Actual routing of pipe, wire or other components may be altered due to site conditions not accounted for in the design process.

B. Construction requirements: Actual placement may vary as required to achieve a minimum of 100% coverage without overspray onto hardscape, buildings or other features.

C. Layout of Irrigation Components: During layout and staking, consult with Owner Approved Representative (hereafter referred to as OAR) to verify proper placement of irrigation components and to provide Contractor recommendations for changes, where revisions may be advisable. Small or minor adjustments to system layout are permissible to avoid existing field obstructions such as utility boxes or street light poles. Contractor shall place remote control valves in groups as practical to economize on quantity of manifold isolation valves. Quick coupler valves shall be placed with manifold groups and protected by manifold isolation valves. Quick coupler valves are shown on Construction Documents in approximate locations.

1.3 DEFINITIONS

A. Water Supply: 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, sprinkler heads, drip systems or bubblers.

1.4 REFERENCES

A. The following standards will apply to the work of this Section:

a. ASTM-American Society for Testing and Materials

b. IA - The Irrigation Association: Main BMP Document, Landscape Irrigation Scheduling and Water Management Document.

1.5 SUBMITTALS

A. At least thirty (30) days prior to ordering of any materials, the Contractor shall provide manufacturer catalog cut sheet and current printed specifications for each element or component of the irrigation system. Submittals shall be in three ring binders or other similar bound form. Provide five copies of submittals to OAR for distribution. Place cover or index sheet indicating order in submittal document. No material shall be ordered, delivered or any work preceded in the field until the required submittals have need reviewed in its entirety and stamped approved. Delivered material shall match the approved samples.

B. Operation and Maintenance Manual:

a. At least thirty (30) days prior to final inspection, the Contractor shall provide Operation and Maintenance manual to OAR, containing:

i. Manufacturer catalog cut sheet and current printed specifications for each element or component of the irrigation system.

ii. Parts list for each operating element of the system

iii. Manufacturer printed literature on operation and maintenance of operating elements of the system.

iv. Section listing instructions for overall system operation and maintenance. Include directions for Spring Start-up and Winterization.

b. Project Record Copy

i. Maintain at project site one copy of all project documents clearly marked "Project Record Copy". Mark any deviation in material installation on Construction drawings. Maintain and update drawing at least weekly. Project Record Copy to be available to OAR on demand.

ii. Completed Project As-Built Drawings

1. Prior to final inspection, prepare and submit to OAR accurate as-built drawings
2. Show detail and dimension changes made during installation. Show significant details and dimensions that were not shown in original Contract Documents.
3. Field dimension locations of sleeving, points of connection, main line piping, wiring runs not contained in main line pipe trenches, valves and valve boxes, quick coupler valves.
4. Dimensions are to be taken from permanent constructed surfaces, features, or finished edges located at or above finished grade.
5. Controller Map: upon completion of system, place in each controller a color coded copy of the area that controller services: indicating zone number, type of plant material and location on project that zone services. Laminate map with heat shrink clear plastic.

1.6 QUALITY ASSURANCE

A. Acceptance: Do not install work of this section prior to acceptance by OAR of area to receive such work.

B. Regulatory Requirements: All work and materials shall be according to any and all rules, regulations or codes, whether they are State or Local laws and ordinances. Contract documents, drawings or specifications may not be construed or interpreted to permit work or materials not conforming to the above codes.

C. Adequate Water Supply: Water supply to this Project exists, installed by others. Connections to these supply lines shall be by this Contractor. Verify that proper connection is available to supply line and is of adequate size. Verify that secondary connection components may be installed if necessary. Perform static pressure test prior to commencement of work. Notify OAR in writing of problems encountered prior to proceeding.

D. Workmanship and Materials:

a. It is the intent of this specification that all material herein specified and shown on the construction documents shall be of the highest quality available and meeting the requirements specified.

b. All work shall be performed in accordance with the best standards of practice relating to the trade.

E. Contractor Qualifications:

a. Contractor shall provide document or resume including at least the following items:

i. That Contractor has been installing sprinklers on commercial projects for five previous consecutive years.

ii. Contractor is licensed to perform Landscape and Irrigation construction in the State of this Project.

iii. Contractor is bondable for the work to be performed.

iv. References of five projects of similar size and scope completed within the last five years. Three of the projects listed shall be local.

v. Listing of suppliers where materials will be obtained for use on this Project.

vi. Project site Foreman or Supervisor has at least five consecutive years of commercial irrigation installation experience. This person shall be a current Certified Irrigation Contractor in good standing as set forth by the Irrigation Association. This person shall be on Project site at least 75% of each working day.

vii. Evidence that Contractor currently employs workers in sufficient quantities to complete Project within time limits that are established by the Contract.

viii. All General laborers or workers on the Project shall be previously trained and familiar with sprinkler installation and have a minimum of one-year experience. Those workers performing tasks related to PVC pipe shall have certificates designated below.

1.7 DELIVERY-STORAGE-HANDLING

A. During delivery, installation and storage of materials for Project, all materials shall be protected from contamination, damage, vandalism, and prolonged exposure to sunlight. All material stored at Project site shall be neatly organized in a compact arrangement and storage shall not disrupt Project Owner or other trades on Project site. All material to be installed shall be handled by Contractor with care to avoid breakage or damage. Damaged materials attributed to Contractor shall be replaced with new at Contractor's expense.

1.8 SEQUENCING

A. Perform site survey, research utility records, contact utility location services. The Contractor shall familiarize himself with all hazards and utilities prior to work commencement. Install sleeving prior to installation of concrete, paving or other permanent site elements. Irrigation system Point of Connection components, backflow prevention and pressure regulation devices shall be installed and operational prior to all downstream components. All main lines shall be thoroughly flushed of all debris prior to installation of any sprinkler heads.

1.9 WARRANTY

A. Contractor shall provide one year Warranty. Warranty shall cover all materials, workmanship and labor. Warranty shall include filling and or repairing depressions or replacing turf or other plantings due to settlement of irrigation trenches or irrigation system elements. Valve boxes, sprinklers or other components settles from original finish grade shall be restored to proper grade. Irrigation system shall have been adjusted to provide proper, adequate coverage of irrigated areas.

1.10 OWNER'S INSTRUCTION

A. After system is installed, inspected, and approved, instruct Owner's Representatives in complete operation and maintenance procedures. Coordinate instruction with references to previously submitted Operation and Maintenance Manual.

1.11 MAINTENANCE

A. Furnish the following items to Owner's Representative:

a. Two quick coupler keys with hose swivels.

b. One of each type or size of quick coupler valve and remote control valve. Five percent of total quantities used of each sprinkler and sprinkler nozzle.

B. Provide the following services:

a. Winterize entire irrigation system installed under this contract. Winterize by 'blow-out' method using compressed air. Compressor shall be capable of minimum of 175 CFM. This operation shall occur at the end of first growing season after need for plant irrigation but prior to freezing. Compressor shall be capable of evacuation system of all water pressure regulation device. Compressor shall be regulated to not more than 60 PSI. Start up system the following spring after danger of freezing has passed. Contractor shall train Owner's Representative in proper start-up and winterization procedure.

PART 2 - PRODUCTS

2.1 GENERAL NOTES

A. Contractor shall provide materials to be used on this Project. Contractor shall not remove any material purchased for this Project from the Project Site, nor mix Project materials with other Contractor owned materials. Owner retains right to purchase and provide project material.

2.2 POINT OF CONNECTION

A. The Contractor shall connect onto existing irrigation or water main line as needed for Point(s) of Connection. Contractor shall install new main line as indicate.

2.3 CONNECTION ASSEMBLY

A. Secondary water shall be used on this Project. Install filter as needed.

2.4 CONTROL SYSTEM

A. Power supply to the irrigation controller shall be provided for by this Contract.

B. Controller shall be as specified in the drawings. Controller shall be surge protected.

a. Installation of wall-mount controllers: Irrigation contractor shall be responsible for this task. Power configuration for wall-mount controllers shall be 120 VAC unless otherwise noted.

b. Locate Controller(s) in general location shown on Construction drawings. Coordinate power supply and breaker allocation with electrical contractor. Contractor shall be responsible for all power connections to Controllers, whether they are wall mount or pedestal mount. Contractor shall coordinate with electrical or other Project trades as needed to facilitate installation of power to controllers.

C. Wires connecting the remote control valves to the irrigation controller are single conductors, type PE. Wire construction shall incorporate a solid copper conductor and polyethylene (PE) insulation with a minimum thickness of 0.045 inches. The wires shall be UL listed for direct burial in irrigation systems and be rated at a minimum of 30 VAC. Paige Electric Co., LP specification number P7079D.

a. A minimum of 24" of additional wire shall be left at each valve, each splice box and at each controller.

b. Common wire shall be white in color, 12 gauge. Control wire shall be red in color, 14 gauge. Spare wire shall be looped within each valve box of the grouping it is to service.

D. RCV wire splicing connectors shall be 3M brand DBY or DBR. Wire splicing between controller and valves shall be avoided if at all possible. Any wire splices shall be contained within a valve box. Splices within a valve box that contains no control valves shall be stamped 'WIRE SPLICE' or 'WS' on box lid.

2.5 SLEEVING

A. Contractor shall be responsible to protect existing underground utilities and components. Sleeving minimum size shall be 2". Sleeving 2" through 4" in size shall be S/40 PVC solvent weld. Sleeving 6" and larger shall be CL 200 PVC gasketed. Sleeve diameter shall be at least two times the diameter of the pipe within the sleeve. Sleeves shall be extended 6" minimum beyond walk or edge of pavement. Wire or cable shall not be installed in the same sleeve as piping, but shall be installed in separate sleeves. Sleeve ends on sleeve sizes 4" and larger shall be capped with integral corresponding sized PVC slip cap, pressure fit, until used, to prevent contamination. Sleeves shall be installed at appropriate depths for main line pipe or lateral pipe.

2.6 MAIN LINE PIPE

A. All main line pipe 4" and larger shall be Class 200 gasketed bell end. All main line pipe 3" in size and smaller shall be Schedule 40 PVC solvent weld bell end.

a. Maximum flows allowed through main line pipe shall be:

3/4"	8 GPM
1"	12 GPM
1-1/2"	30 GPM
2"	53 GPM
2-1/2"	75 GPM
3"	110 GPM
4"	180 GPM

b. Main line pipe shall be buried with 24" cover

2.7 MAIN LINE FITTINGS

A. All main line fittings 3" and larger shall be gasketed ductile iron material. All ductile iron fittings having change of direction shall have proper concrete thrust block installed. All main line fittings smaller than 3" in size shall be Schedule 80 PVC.

2.8 ISOLATION VALVES

A. Isolation valves 3" and larger shall be Waterous brand model 2500 cast iron gate valve, resilient wedge, push on type, with 2" square operating nut. Place sleeve of 6" or larger pipe over top of valve vertically and then extend to grade. Place 10" round valve box over sleeve at grade.

B. Isolation valves 2-1/2" and smaller shall be Apollo brand 70 series brass ball valves, contained in a Carson Standard size valve box. Valves shall be installed with S/80 PVC TOE Nipples on both sides of the valve. Valve shall be placed so that the handle is vertical toward the top of the valve box in the 'off' position.

2.9 MANIFOLDS

A. Action Manifold fittings shall be used to create unions on both sides of each control valve, allowing the valve to be removed from the box without cutting piping. Valves shall be located in boxes with ample space surrounding them to allow access for maintenance and repair. Where practical, group remote control valves in close proximity, and protect each grouping with a manifold isolation valve as shown in details. Manifold Main Line (or Sub-Main Line) and all manifold components and isolation valves shall be at least as large as the largest diameter lateral served by the respective manifold.

2.10 REMOTE CONTROL VALVES

A. Remote control valves shall be as specified on the drawings. Remote control valves shall be located separately and individually in separate control boxes.

2.11 MANUAL CONTROL VALVES

A. Quick coupler valve shall be attached to the manifold sub-main line using a Lasco G175212 swing joint assembly with snap-lock outlet and brass stabilizer elbow. Quick coupler valve shall be placed within a Carson 10" round valve box. Top of quick coupler valve cover shall allow for complete installation of valve box lid, but also allow for insertion and operation of key. Base of quick coupler valve and top of quick coupler swing joint shall be encased in ¾" gravel. Contractor shall not place quick coupler valves further than 200 feet apart, to allow for spot watering or supplemental irrigation of new plant material. Quick coupler valve at POC shall not be eliminated or relocated.

2.12 LATERAL LINE PIPE

A. All lateral piping shall be Schedule 40 PVC, solvent weld, and bell end. Lateral pipe shall be buried with 12-18" of cover typically. Lateral pipe shall be ¾", 1", 1 ¼", 1 ½" or 2" in size as indicated on Construction Drawings.

2.13 LATERAL LINE FITTINGS

A. All lateral line fittings shall be S/40 PVC

2.14 Spray Sprinklers

A. Spray head sprinklers shall be as specified on the drawings. Nozzles shall be as specified on the drawings.

2.15 VALVE BOXES

A. Carson valve boxes shall be used on this project. Sizes are as directed in these Specifications, detail sheets or plan sheets. Valve boxes shall be centered over the control valve or element they cover. Valve box shall be sized large enough to allow ample room for services access, removal or replacement of valve or element. Valve box shall be set to flush to finish grade of topsoil or barked areas. Contractor shall provide extensions or stack additional valve boxes as necessary to bring valve box pit to proper grade.

2.16 IMPORT BACKFILL

A. All main line pipe, lateral line pipe and other irrigation elements shall be bedded and backfilled with clean soil, free of rocks 1" and larger. Contractor shall furnish and install additional backfill material as necessary due to rocky conditions. Trenches and other elements shall be compacted and/or water settled to eliminate settling. Debris from trenching operations un-usable for fill shall be removed from project and disposed of properly by Contractor.

2.17 OTHER PRODUCTS

A. Substitution of equivalent products is subject to the OAR's approval and must be designated as accepted in writing.

a. The Contractor shall provide materials to make the system complete and operational.

PART 3 - EXECUTION

3.1 PREPARATION

A. Contractor shall repair or replace work damaged by irrigation system installation. If damaged work is new, replacement or the original installer of that work shall perform repairs. The existing landscape of this Project shall remain in place. Contractor shall protect and work around existing plant material. Coordination of trench and valve locations shall be laid out the OAR prior to any excavation occurring. Plant material deemed damaged by the OAR shall be replaced with new plant material at Contractor's expense. Contractor shall not cut existing tree roots larger than 2" to install this Project. Route pipe, wire and irrigation elements around tree canopy drip line to minimize damage to tree roots. Contractor shall have no part of existing system used by other portions of site landscape without water for without water for more than 24 hours at a time.

3.2 TRENCHING AND 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. Wire under hardscape surfaces shall be placed continuously in conduit. Contractor shall be responsible to coordinate sleeving needs for conduit or sweeps elbows from exterior to interior of building.

E. Pedestal controllers shall be placed upon VIT-Strong Box Quick Pad as per manufacturer's recommendations. Controllers shall be oriented such that Owner's Representative maintenance personnel may access easily and perform field system tests efficiently.

F. Place Standard valve box at base of controller or nearby to allow for three to five feet of slack field control wire to be placed at each controller. This Contractor shall provide conduit access if needed for Electrical Contractor. Electrical supply and installation, as well as hook-up to controller shall be by this Contractor.

3.7 VALVES

A. Isolation valves, remote control valves, and quick coupler valves shall be installed according to manufacturer recommendation and Contract Specifications and Details.

B. Valve boxes shall be set over valves so that all parts of the valve can be reached for service.

C. Valve box and lid shall be set to be flush with finished grade. Only o ne remote control valve may be installed in a Carson 1419124 box. Place a minimum of 4" of ¾" washed gravel beneath valve box for drainage. Bottom of remote control valve shall be a minimum of 2" above gravel.

3.8 SPRINKLER HEADS

A. No sprinkler shall be located closer than 6" to walls, fences, or buildings.

B. Heads adjacent to walks, curbs. Or paths shall be located at grade and 2" away from hardscape.

C. Control valves shall be opened and fully flush lateral line pipe and swing joints prior to installation of sprinklers.

D. Spray heads shall be installed and flushed again prior to installation of nozzles.

E. Contractor shall be responsible for adjustment if necessary due to grade changes during landscape construction.

3.9 FIELD QUALITY CONTROL

A. Main line pipes shall not be backfilled or accepted until the system has been tested for 2 hours at 100 psi.

B. Main line pressure test shall include all pipe and components from the point of connection to the upstream side of remote control valves. Test shall include all manifold components under constant pressure. Piping may be tested in sections that can be isolated.

C. Contractor shall provide pressurized water pump to increase or boost pressure where existing static pressure is less than 100 psi.

D. Schedule testing with OAR 48 hours in advance for approval.

E. Leaks or defects shall promptly be repaired or rectified at the Contractors expense and retested until able to pass testing.

F. Grounding resistance at pedestal controller shall also be tested and shall not exceed 5 OHMs.

3.10 ADJUSTMENT

A. Sprinkler heads shall be adjusted to proper height when installed. Changes in grade or adjustment of head height after installation shall be considered a part of the original contract and at Contractor's expense.

B. Adjust all sprinkler heads for arc, radius, proper trim and distribution to cover all landscaped areas that are to be irrigated.

C. Adjust sprinklers so they do not water buildings, structures, or other hardscape features.

D. Adjust run times of station to meet needs of plant material the station services.

3.11 CLEANING

A. Contractor shall be responsible for cleanliness of jobsite. Work areas shall be swept cleanly and picker up daily.

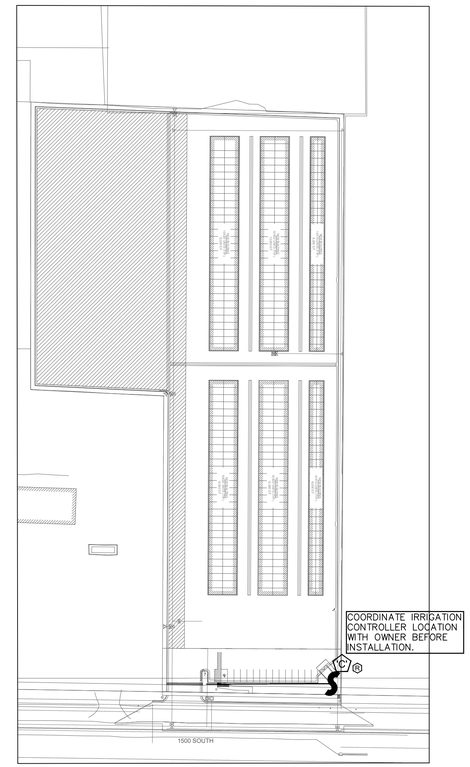
B. Open trenches or hazards shall be protected with yellow caution tape.

C. Contractor is responsible for removal and disposal offsite of trash and debris generated as a result of this Project.

D. OAR shall perform periodic as well as a final cleanliness inspection.

E. Contractor shall leave Project in at least a 'broom clean' condition.

END OF SECTION



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

Attachment: 2. Site Plan (Bishop Storage)

ISSUE DATE	PROJECT NUMBER
9/22/2020	UT20031

NO.	REVISION	DATE
1		
2		
3		
4		
5		
6		
7		

PLAN INFORMATION

811 BLUE STAKES OF UTAH
UTILITY NOTIFICATION CENTER, INC
1-800-662-4111
www.bluestakes.org

N

0' 50' 100' 200' 400'

GRAPHIC SCALE: 1" = 100'

PROJECT INFORMATION

AF STORAGE

16 WEST 1500 NORTH
AMERICAN FORK, UTAH

DEVELOPER / PROPERTY OWNER / CLIENT

Developer / Property Owner:
BISHOP HOLDING, LLC
MATT BISHOP
801-830-7745
SNAPTRUCKING@GMAIL.COM

Building Architect / Engineer:
BENCHMARK CIVIL
BENCHMARK ENGINEERING & LAND SURVEYING
9130 SOUTH STATE STREET SUITE #100
SANDY, UTAH 84070 (801) 542-7192
WWW.BENCHMARKCIVIL.COM

LANDSCAPE ARCHITECT / PLANNER

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

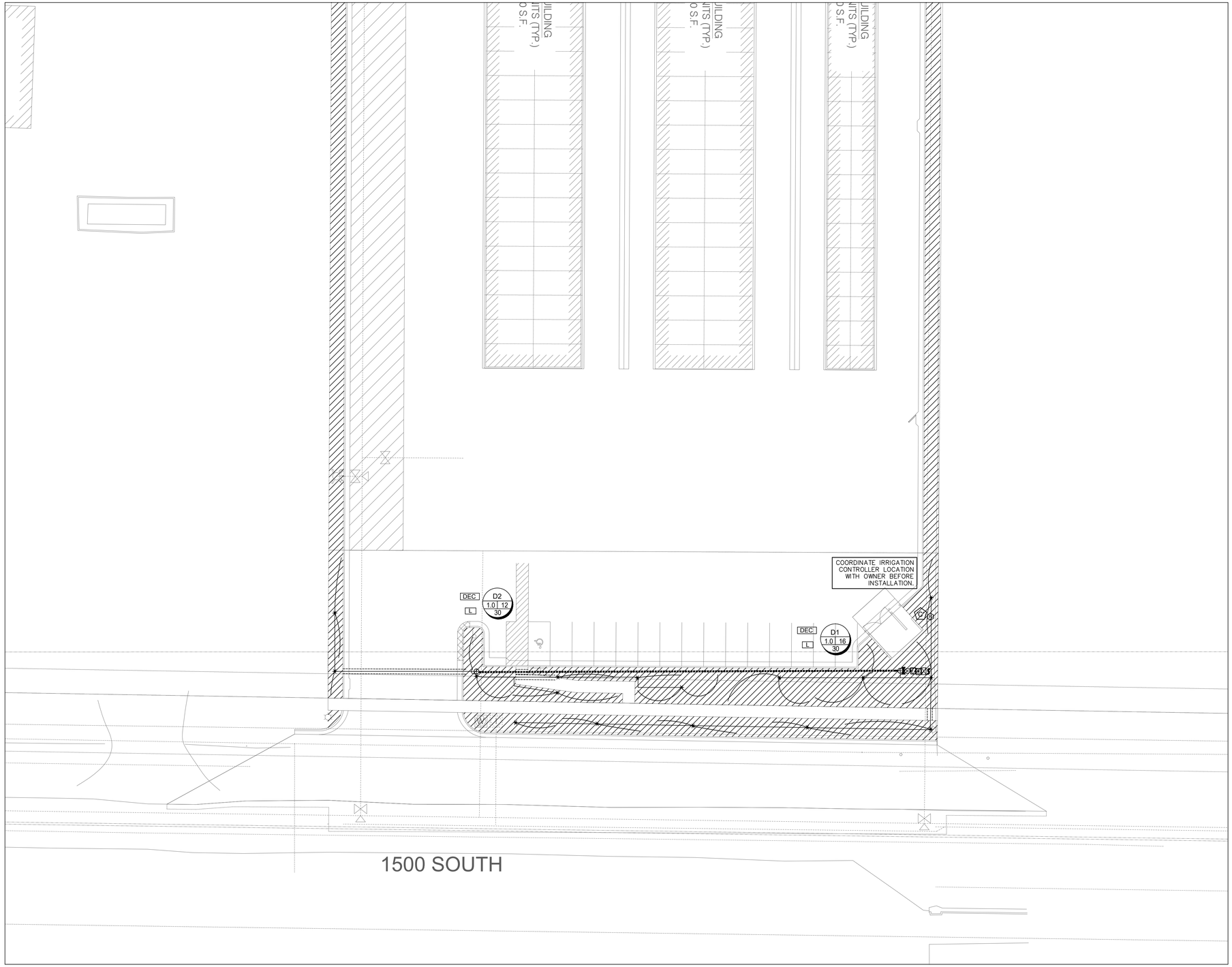
LICENSE STAMP

DRAWING INFO

PM:	KBA
DRAWN:	KBA
CHECKED:	JTA
PLOT DATE:	9/22/2020

IRRIGATION COVER SHEET

IR 100



IRRIGATION LEGEND

SYMBOL	MANUFACTURER–MODEL NUMBER	PAT.	RD.	PSI	GPM Q	T	H	TT	TQ	F
	RAINBIRD RD04-S-PRS POP UP SPRAY 5 SERIES	Q,T,H,F	5'	30	.10	.15	.20	na	na	.40
	RAINBIRD RD04-S-PRS POP UP SPRAY 8 U-SERIES	Q,T,H,F	8'	30	.26	.35	.52	na	na	1.05
	RAINBIRD RD04-S-PRS POP UP SPRAY 10 U-SERIES	Q,T,H,F	10'	30	.39	.53	.79	na	na	1.58
	RAINBIRD RD04-S-PRS POP UP SPRAY 12 U-SERIES	Q,T,H,TT,TQ,F	12'	30	.65	.87	1.30	1.74	1.95	2.60
	RAINBIRD RD04-S-PRS POP UP SPRAY 15 U-SERIES	Q,T,H,TT	15'	30	.92	1.23	1.85	2.48	2.78	3.70
	RAINBIRD RD04-S-PRS POP UP SPRAY 15 SST	SST	15'	30	1.21					
	RAINBIRD RD04-S-PRS POP UP SPRAY 15 EST	EST	15'	30	.61					
	RAINBIRD 5000 SERIES MPR NOZZLES	Q,T,H,F	varies	30	varies	varies	varies	na	na	varies
	RAINBIRD 8005 SERIES #8, #14, #26 NOZZLES	Q,T,H,F	65'	30	6.6	12.6	24.3	na	na	varies
C	CONTROLLER: RAINBIRD ESP-LXD CONTROLLER WITH LIMR REMOTE KIT, CONTRACTOR TO ADJUST LOCATION WITH OWNER PRIOR TO CONSTRUCTION.									
DEC	VALVE DECODER (AT ALL VALVE GROUPINGS) INSTALL PER MANUFACTURER'S SPEC.									
L	LIGHTNING ARRESTER (AT ALL VALVE GROUPINGS) INSTALL PER MANUFACTURER'S SPEC.									
	MASTER VALVE									
	FLOW SENSOR									
	RAINBIRD WR2-RC WIRELESS RAIN SHUT OFF DEVICE									
	POINT OF CONNECTION (SECONDARY WATER) SEE PLAN FOR SIZE									
	2" T SUPER AMIAD PLASTIC FILTER - INSTALL PER MANUFACTURE'S. RECOMMENDATIONS (130 MICRON)									
	QUICK COUPLER: RAINBIRD 44LRC INSTALL PER MANUFACTURER'S SPEC. 10" RND. VALVE BOX. SEE DETAIL									
	ISOLATION BALL VALVE - LINE SIZED INSTALL PER MANUFACTURER'S SPEC.									
	REMOTE CONTROL VALVE: RAINBIRD PESB-NP-PRS-D AUTOMATIC CONTROL VALVE (SIZE AS NOTED ON PLAN) JUMBO BOX-PURPLE LID									
	DRIP CONTROL ZONE KIT: RAINBIRD XCZ-(PER PLAN)-PRBR-COM MED FLOW (SIZE AS NOTED ON PLAN)									
	DRIP CONNECTION. PROVIDE DRIP IRRIGATION TO ALL TREES, SHRUBS AND PERENNIALS IN PLANTER AREAS									
	SUB-MAINLINE: SCHEDULE 40 PVC WITH SCHEDULE 80 FITTINGS, 1.5" DIAMETER 24" MIN. COVER									
	LATERAL LINE: SCHEDULE 40 PVC WITH SCH. 40 FITTINGS. SEE PIPE SIZING CHART									
	DRIP LINE: RAINBIRD XFSP-09-18-100 OR EQUIVALENT									
	CLASS 200 SLEEVE PER PLAN									
NOT SHOWN	WIRE CHASE. SIZE TO BE TWICE THE DIAMETER OF THE WIRE BUNDLE WITHIN. 1.1/4" DIAMETER MINIMUM									
NOT SHOWN	14 GAUGE SOLID COPPER SINGLE STRAND CONTROL WIRE. INSTALL PER MANUFACTURER'S SPEC. PROVIDE 2 WIRE LOOP SYSTEM.									

DRIP ZONE

TYPE	PART NUMBER	EMITTER FLOW	EMITTER SPACING	ROW SPACING	ROW SPACING
XFS DRIPLINE	XFSP-09-18	.9 GPH	18"	18"	18-21 IN.

TOTAL DRIP ZONE FLOW	20 GPM	TIME TO APPLY 1/4" OF WATER	23
MAX. LATERAL LENGTH OF TUBING	350 FT	REQUIRED NUMBER OF STAKES	500
TOTAL LENGTH OF ZONE DRIPLINE	2,000 FT (varies per plan)	NUMBER OF FLUSH POINTS	2
APPLICATION RATE	.64 IN. / HR	SUGGESTED HEADER & FOOTER PIPE SIZE	CLASS 200 1.25"

*NUMBERS MAY CHANGE DUE TO SIZE OF DRIP ZONE PER PLAN

90 Day Establishment Period Irrigation Schedule (April, May, June)

	Type	Sun	Mon	Tues	Wed	Thurs	Fri	Sat	Operating Pressure
Turf	Turf	15 min	15 min	15 min	15 min	15 min	15 min	15 min	30 psi
Shrubs	Shrubs	25 min	0	25 min	0	25 min	0	25 min	40 psi

Note: Begin irrigation 4:00 am, only 1 cycle per day.

Regular Irrigation Schedule (see Seasonal Differential Chart)

	Type	Sun	Mon	Tues	Wed	Thurs	Fri	Sat	Operating Pressure
Turf	Turf	15 min	15 min		15 min		15 min		30 psi
Shrubs	Shrubs	45 min		45 min		45 min		45 min	40 psi

Note: Begin irrigation 4:00 am, only 1 cycle per day.

Seasonal Differential

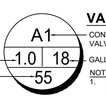
	April	May	June	July	August	Sept.	October
Turf	10 min	10 min	15 min	15 min	15 min	10 min	10 min
Shrubs	30 min	30 min	45 min	45 min	45 min	30 min	30 min

IRRIGATION NOTES

1. ALL CONNECTIONS ARE SECONDARY WATER AND SHOULD BE NOTED AS SUCH. THEREFORE ALL PARTS MUST MEET SECONDARY WATER STANDARDS.
2. ALL PIPE TO BE SCHEDULE 40 PVC PIPE. NO POLY PIPE SHALL BE INCLUDED. FITTINGS UP TO 1.1/2" MUST BE SCHEDULE 40 OR BETTER. FITTINGS LARGER THAN 1.1/2" MUST BE SCHEDULE 80 OR BETTER.
3. CONTRACTOR SHALL HAVE ALL UTILITIES BLUE STAKED PRIOR TO DIGGING. ANY DAMAGE TO THE UTILITIES SHALL BE REPAIRED AT THE EXPENSE OF THE CONTRACTOR WITH NO ADDITIONAL COST TO THE OWNER.
4. PLACE ALL IRRIGATION IN LANDSCAPE AREAS AND ON THE PROPERTY OF THE OWNER.
5. MODIFY LOCATION OF IRRIGATION COMPONENTS TO AVOID PLACING TREES, SHRUBS AND OTHER SITE ELEMENTS DIRECTLY OVER PIPE, PER PLANS. DO NOT LOCATE VALVE BOXES IN LAWN AREAS UNLESS DIRECTED TO BY LANDSCAPE ARCHITECT.
6. CONTRACTOR SHALL INSTALL A 1" THREADED TEE WITH 1" THREADED PLUG AT POINT OF CONNECTION IN ORDER TO BLOW OUT THE SYSTEM WITH AN AIR COMPRESSOR EACH FALL.
7. CONTRACTOR SHALL USE ONLY COMMERCIAL GRADE IRRIGATION PRODUCTS AND IS RESPONSIBLE FOR ENSURING ACCURATE COUNTS AND QUANTITIES OF ALL IRRIGATION MATERIALS FOR BIDDING AND INSTALLATION PURPOSES.
8. INSTALL DRIP IRRIGATION PER DETAILS. CONTRACTOR SHALL MAKE ADJUSTMENTS AS NECESSARY.
9. CONTRACTOR SHALL PROVIDE AND INSTALL SLEEVES FOR ALL PIPES AND WIRES UNDER PAVEMENT AND SIDEWALKS. SLEEVES SHALL BE 2 SIZES LARGER THAN PIPE INSIDE. ALL WIRE SHALL BE IN SEPARATE SLEEVES (NOT SHOWN). ALL CONTROL WIRE SHALL BE INSTALLED IN CLASS 200 PIPE. PLACE JUNCTION BOXES WHERE NECESSARY TO MINIMIZE LONG RUNS OR AT DIRECTIONAL CHANGES.
10. WATER LINES AND ELECTRICAL LINES MUST NOT SHARE CONDUITS. ALL WIRE CONNECTIONS MUST BE CONTAINED IN VALVE BOX WITH 3' OF EXTRA WIRE. WIRE TO BE CONNECTED TO MAIN LINE PIPE WHERE POSSIBLE WITH TAPE AT 25' INTERVALS. SLACK IN CONTROL WIRES REQUIRED AT EVERY CHANGE OF DIRECTION. WIRES MUST HAVE SEPARATE COLORS FOR COMMON, CONTROL AND SPARE. MINIMUM 1 SPARE WIRE FOR EVERY 5 VALVES. ALL CONTROL WIRES TO BE INSULATED 14 GAUGE COPPER. ALL SPARE WIRES MUST "HOME RUN" TO CONTROLLER AND SPARE WIRES AVAILABLE AT ALL VALVE MANIFOLDS AND CLUSTERS.
11. ALL SLEEVES INSTALLED SHALL BE DUCT TAPED TO PREVENT DIRT OR OTHER DEBRIS ENTERING PIPE. ALL SLEEVES SHALL BE IDENTIFIED BY WOOD OR PVC STAKES AND BE SPRAY PAINTED WITH MARKING PAINT. REMOVE STAKES ONCE IRRIGATION SYSTEM IS COMPLETE.
12. IRRIGATION SYSTEM MUST CONTAIN CHECK VALVES TO PREVENT LOW POINT DRAINAGE.
13. SPACE ALL SPRAY HEADS 2" AWAY FROM ANY HARDSCAPE.
14. CONTRACTOR SHALL MATCH PRECIPITATION RATES AS MUCH AS POSSIBLE FOR ALL LANDSCAPED AREAS. OVERHEAD IRRIGATION MUST HAVE A MINIMUM DU (DISTRIBUTION UNIFORMITY) OF 60%.
15. IRRIGATION CONTRACTOR SHALL PRESSURE TEST MAINLINE FOR LEAKS PRIOR TO BACKFILLING.
16. MAIN LINES SHALL BE 18" DEEP MIN. AND LATERAL LINES 12" DEEP MIN. NO ROCK GREATER THAN 1/2" DIAMETER SHALL BE ALLOWED IN TRENCHES. TRENCHING BACKFILL MATERIAL SHALL BE COMPACTED TO PROPER FINISHED GRADE.
17. ALL WORK SHALL BE IN ACCORDANCE WITH APPLICABLE CITY AND/OR COUNTY CODES. THE CONTRACTOR SHALL APPLY AND PAY FOR ALL NECESSARY PERMITS.
18. IRRIGATION INSTALLATION TO COMPLY WITH APPLICABLE CITY SPECIFICATIONS AND DRAWINGS.
19. ACTUAL INSTALLATION OF IRRIGATION SYSTEM MAY VARY SOMEWHAT FROM PLANS. THE CONTRACTOR IS RESPONSIBLE TO MAKE ADJUSTMENTS AS NEEDED TO ENSURE PROPER COVERAGE OF ALL LANDSCAPED AREAS.
20. CONTRACTOR SHALL INSTALL IRRIGATION SYSTEM WITH HEAD TO HEAD COVERAGE IN ALL TURF AREAS. USE VAN AND/OR U-SERIES NOZZLES AS NECESSARY TO PROVIDE PROPER COVERAGE AND TO KEEP WATER OFF OF BUILDINGS AND HARDSCAPES.
21. POWER TO CONTROLLER TO BE PROVIDED BY OWNER. OWNER TO SPECIFY EXACT LOCATION OF CONTROLLER. INSTALL PER MANUFACTURERS INSTRUCTIONS. CONTRACTOR SHALL INSTALL A RAIN SENSOR WITH CONTROLLER UNLESS OTHERWISE DIRECTED BY OWNER OR LA.
22. 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 PROVISION AND INSTALLATION OF A BACKFLOW PREVENTOR.
23. 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
- VALVE SIZE — 1.0
- 18 — GALLONS PER MINUTE
- PSI AT LAST HEAD IN ZONE — 55

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

ISSUE DATE	PROJECT NUMBER
9/22/2020	UT20031

NO.	REVISION	DATE
1		
2		
3		
4		
5		
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7		

PLAN INFORMATION

811 BLUE STAKES OF UTAH
UTILITY NOTIFICATION CENTER, INC
1-800-662-4111
www.bluestakes.org

N

0' 10' 20' 40' 80'
GRAPHIC SCALE: 1" = 20'

PROJECT INFORMATION

AF STORAGE
16 WEST 1500 NORTH
AMERICAN FORK, UTAH

DEVELOPER / PROPERTY OWNER / CLIENT

Developer / Property Owner:
BISHOP HOLDING, LLC
MATT BISHOP
801-830-7745
SNAPTRUCKING@GMAIL.COM

Building Architect / Engineer:
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SANDY, UTAH 84070 (801) 542-7192
WWW.BENCHMARKCIVIL.COM

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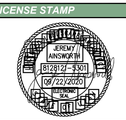
PKJ DESIGN GROUP
Landscape Architecture Planning & Visualization
3450 N. TRIUMPH BLVD. SUITE 102
LEHI, UTAH 84043 (801) 960-2698
www.pkjdesigngroup.com

LICENSE STAMP



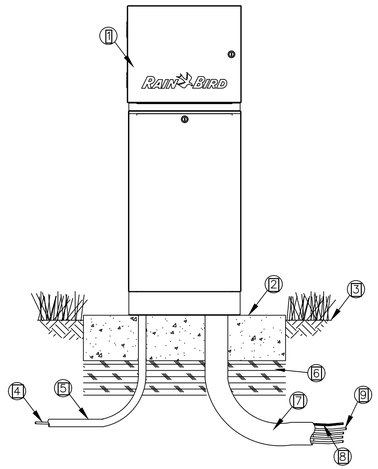
DRAWING INFO

PM:	KBA
DRAWN:	KBA
CHECKED:	JTA
PLOT DATE:	9/22/2020

IRRIGATION PLAN

IR 101

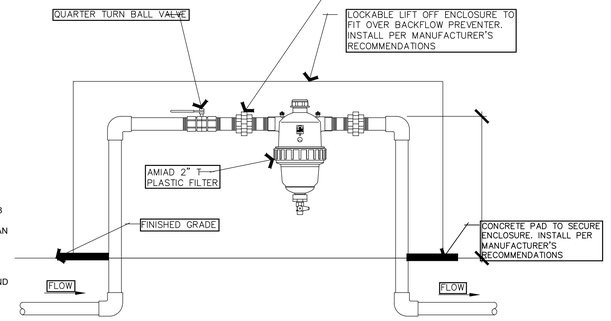
Attachment: 2. Site Plan (Bishop Storage)



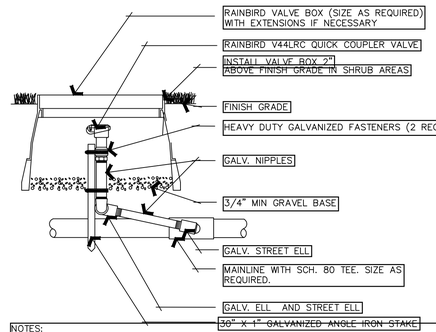
1. IRRIGATION CONTROLLER: RAIN BIRD ESP-LXMEF CONTROLLER WITH FLOW SMART MODULE IN LXMM METAL CABINET AND LXMMPED METAL PEDESTAL. INSTALL CONTROLLER, CABINET AND PEDESTAL PER MANUFACTURER'S RECOMMENDATIONS.
2. CONCRETE PAD: 6-INCH MINIMUM THICKNESS
3. FINISH GRADE
4. POWER SUPPLY WIRE
5. 1-INCH SCH 40 PVC CONDUIT, FITTINGS AND SWEEP ELL FOR POWER SUPPLY
6. COMPACTED SUBGRADE
7. 3-INCH SCH 40 PVC CONDUIT, FITTINGS AND SWEEP ELL FOR STATION WIRES
8. FLOW SENSOR WIRE (PE 39, 89 OR 54) TO FLOW SENSOR
9. MASTER VALVE AND REMOTE CONTROL VALVE WIRES

NOTES:
1. ESP-LXMEF CONTROLLER IS AVAILABLE IN 8- OR 12-STATION BASE MODELS. ADDITIONAL MODULES IN 4-, 8- AND 12-STATION VERSIONS MAY BE ADDED TO BRING THE CONTROLLER UP TO 48 STATIONS MAXIMUM.
2. FOR EASE OF INSTALLATION INTO A CONTROLLER WITH MORE THAN 24 STATIONS, INSTALL A JUNCTION BOX AT THE BASE OF CONTROLLER AND TRANSITION LARGER VALVE AND COMMON WIRES FROM FIELD TO 18 AWG MULTI CONDUCTOR WIRE TO BE USED IN CONTROLLER.
3. PROVIDE PROPER GROUNDING COMPONENTS TO ACHIEVE GROUND RESISTANCE OF 10 OHMS OR LESS.

A ESP-LXME CONTROLLER IN METAL PEDESTAL
NOT TO SCALE — PKJ DESIGN GROUP

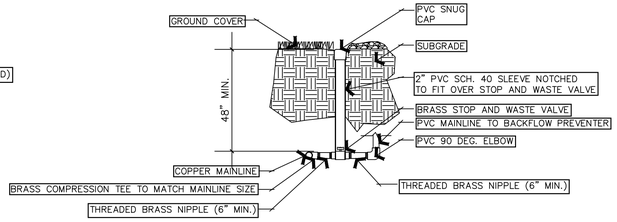


B 2" PLASTIC FILTER DETAIL
NOT TO SCALE — PKJ DESIGN GROUP



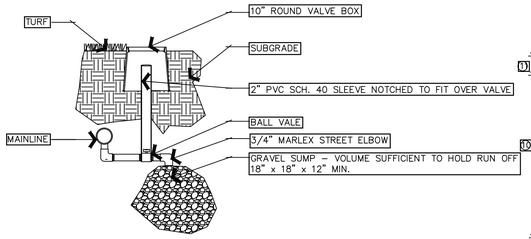
NOTES:
1. FLUSH ALL PIPING PRIOR TO INSTALLING VALVE.
2. WRAP ALL THREADS WITH TEFLON TAPE. 1 1/2 TO 2 WRAPS MAXIMUM.
3. COMPACT SOILS AROUND VALVE BOX TO 80% OF ORIGINAL DRY DENSITY.
4. INSTALL GEOFABRIC UNDER VALVE BOXES AND TAPE TO PIPE NIPPLES AND VALVE BOX.
5. BOX COLOR - GREEN IN TURF AND TAN IN PLANTER AREAS.
6. IRRIGATION SYSTEM TO BE BLOWN OUT WITH AIR COMPRESSOR THROUGH QUICK COUPLERS BEFORE FREEZING TEMPERATURES OCCUR, TYP.

C RAINBIRD QUICK COUPLER
NOT TO SCALE — PKJ DESIGN GROUP



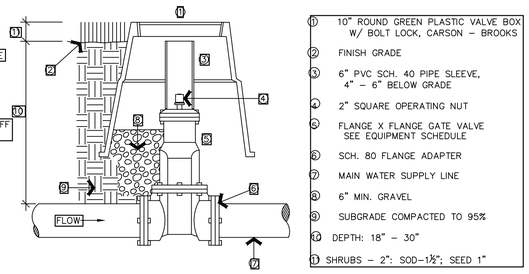
NOTES:
1. ALL PVC NIPPLES AND ELBOWS TO BE SCH. 40 UNLESS OTHERWISE NOTED.
2. PROVIDE VALVE KEY TO OWNER

D STOP AND WASTE VALVE ASSEMBLY
NOT TO SCALE — PKJ DESIGN GROUP



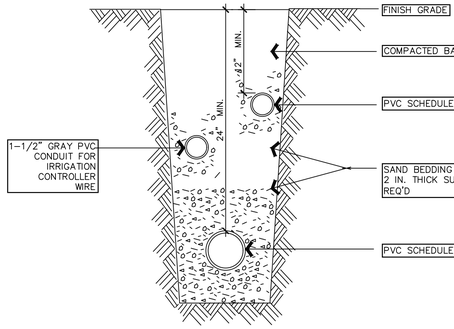
NOTES:
1. ALL PVC NIPPLES AND ELBOWS TO BE SCH. 80 UNLESS OTHERWISE NOTED.
2. PROVIDE VALVE KEY TO OWNER

E MANUAL DRAIN ASSEMBLY
NOT TO SCALE — PKJ DESIGN GROUP

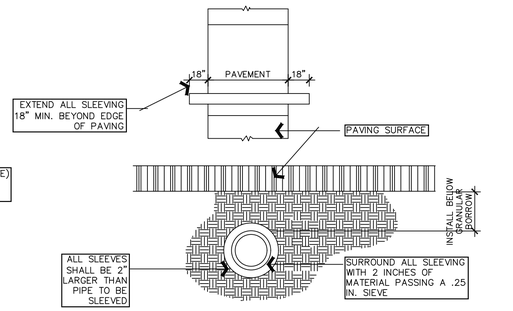


1. 10" ROUND GREEN PLASTIC VALVE BOX W/ BOLT LOCK, CARSON - BROOKS
2. FINISH GRADE
3. 6" PVC SCH. 40 PIPE SLEEVE, 4" - 6" BELOW GRADE
4. 2" SQUARE OPERATING NUT
5. FLANGE X FLANGE GATE VALVE SEE EQUIPMENT SCHEDULE
6. SCH. 80 FLANGE ADAPTER
7. MAIN WATER SUPPLY LINE
8. 6" MIN. GRAVEL
9. SUBGRADE COMPACTED TO 95%
10. DEPTH: 18" - 30"
11. SHRUBS - 2": SOD-1½"; SEED 1"

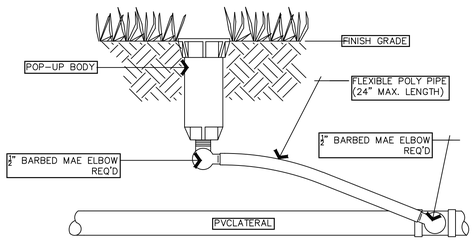
F GATE VALVE ASSEMBLY
NOT TO SCALE — PKJ DESIGN GROUP



G TRENCHING DETAIL
NOT TO SCALE — PKJ DESIGN GROUP

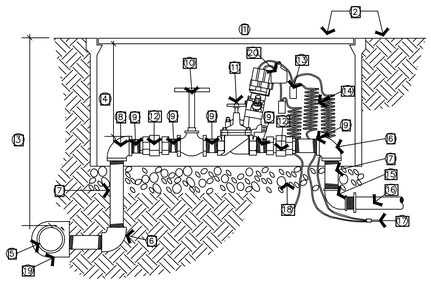


H TYPICAL SLEEVING
NOT TO SCALE — PKJ DESIGN GROUP



NOTES:
1. INSTALL SPRAY AND ROTARY HEADS PER THIS DETAIL.
2. INSTALL 2" AWAY FROM HARDSCAPES.

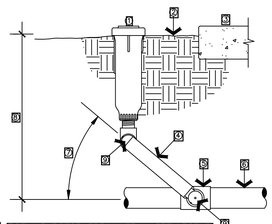
I SPRAY HEAD DETAIL
NOT TO SCALE — PKJ DESIGN GROUP



1. CARSON-BROOKS 1419-12 STANDARD OR 1220-12 JUMBO VALVE BOX WITH STAINLESS STEEL BOLTS (BOLT DOWN LID).
2. INSTALL AT GRADE
3. 30" MAX. DEPTH
4. 10"-14"
5. MAIN WATER SUPPLY LINE
6. PVC SCH. 80 ELBOW
7. PVC SCH. 80 NIPPLE; LENGTH AS REQUIRED (TYP.)
8. PVC SCH. 80 ELL SAME SIZE AS VALVE
9. SCH. 80 NIPPLE, SIZE AS NECESSARY
10. MILWAUKEE BRAND OR APPROVED AMERICAN-MADE BRASS GATE VALVE W/ NON RISING STEM (LINE SIZE)
11. ELECTRIC CONTROL VALVE - SEE EQUIPMENT SCHEDULE
12. PVC SCH. 80 UNION
13. WATER TIGHT CONNECTORS (3M DBY ONLY)
14. PROVIDE 36" EXPANSION LOOP AT EACH WIRE CONNECTOR IN BOX
15. SCH. 80 ELBOW WITH SCH. 80 NIPPLE INTO SxT BUSHING TO LATERAL
16. LATERAL LINE
17. CONTROL WIRES
18. 6" MINIMUM DEPTH OF WASHED 3/4" GRAVEL
19. PVC SCH. 80 TEE SxSxS WITH SCH. 80 SxT BUSHING OR DOUBLE STRAP SADDLE.
20. ID TAG: RAINBIRD VID SERIES OR APPROVED EQUAL

NOTES:
1. ONE REMOTE CONTROL VALVE PER BOX .
2. ALL FITTINGS AND PIPE IN MANIFOLD SHALL BE THREADED SCH. 80 PVC USING TEFLON TAPE AND #5 RECTOR SEAL.

J CONTROL VALVE ASSEMBLY
NOT TO SCALE — PKJ DESIGN GROUP



1. POP-UP ROTOR SPRINKLER - SEE LEGEND
2. FINISH GRADE
3. NOTE: ALL ROTOR HEADS TO BE PLACED 2" CLEAR OF ALL HARDSCAPE SURFACES
4. SCH. 80 THREADED NIPPLE
5. PVC SCH. 40 SxSxT TEE (OR ELL)
6. PVC LATERAL LINE, SIZE AS NOTED ON PLAN
7. SWING JOINT ARM INSTALLED AT ANGLE BETWEEN 30 AND 45 DRG. OF LATERAL PIPE, USE MALE THREAD MODEL
8. DEPTH - SEE NOTES & TRENCH DETAIL
9. MARLEX STREET ELL'S (3)

I POP UP ROTOR DETAIL
NOT TO SCALE — PKJ DESIGN GROUP

ISSUE DATE	PROJECT NUMBER
9/22/2020	UT20031

NO.	REVISION	DATE
1		
2		
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PLAN INFORMATION

811 BLUE STAKES OF UTAH
UTILITY NOTIFICATION CENTER, INC
1-800-662-4111
www.bluestakes.org

PROJECT INFORMATION

AF STORAGE
16 WEST 1500 NORTH
AMERICAN FORK, UTAH

DEVELOPER / PROPERTY OWNER / CLIENT

Developer / Property Owner:
BISHOP HOLDING, LLC
MATT BISHOP
801-830-7745
SNAPTRUCKING@GMAIL.COM

Building Architect / Engineer:
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9130 SOUTH STATE STREET SUITE #100
SANDY, UTAH 84070 (801) 542-7192
WWW.BENCHMARKCIVIL.COM

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PKJ DESIGN GROUP
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3450 N. TRIUMPH BLVD. SUITE 102
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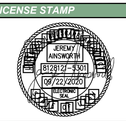
www.pkjdesigngroup.com

LICENSE STAMP



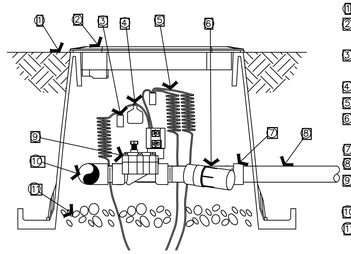
DRAWING INFO

PM:	KBA
DRAWN:	KBA
CHECKED:	JTA
PLOT DATE:	9/22/2020

IRRIGATION DETAILS

IR 501

Attachment: 2. Site Plan (Bishop Storage)

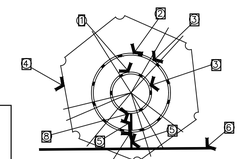


1. FINISH GRADE
2. STANDARD VALVE BOX WITH COVER:
   RAIN BIRD VB–STD
3. WATERPROOF CONNECTION:
   RAIN BIRD DB SERIES
4. VALVE ID TAG
5. 30–INCH LINEAR LENGTH OF WIRE, COILED
6. PRESSURE REGULATING FILTER:
   RAIN BIRD PRF–100–RBY (INCLUDED IN XCZ–100–PRF KIT)
7. PVC SCH 40 FEMALE ADAPTOR
8. LATERAL PIPE
9. REMOTE CONTROL VALVE:
   RAIN BIRD 100–DV (INCLUDED IN XCZ–100–PRF KIT)
10. PVC SCH 40 TEE OR ELL TO MANIFOLD
11. 3–INCH MINIMUM DEPTH OF 3/4–INCH WASHED GRAVEL

L DRIP CONTROL VALVE ASSEMBLY

NOT TO SCALE

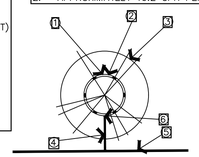
PKJ DESIGN GROUP



NOTES:
1. LAYOUT DRIPLINE SO EMITTERS ARE IN TRIANGULAR PATTERN AS SHOWN
2. APPROXIMATELY 16.2 GPH PER TREE

TREE

1. 8' RADIUS
2. 16' RADIUS
3. RAIN BIRD XFS–09–18–100 OR EQUIVALENT
4. TREE (DECIDUOUS OR EVERGREEN)
5. RAIN BIRD XT–700 TUBING OR EQUIVALENT AS APPROVED BY ARCHITECT
6. LATERAL LINE
7. 4–WAY BARBED TEE
8. BARBED TEE



NOTE:
1. APPROXIMATELY 5.4 GPH PER SHRUB

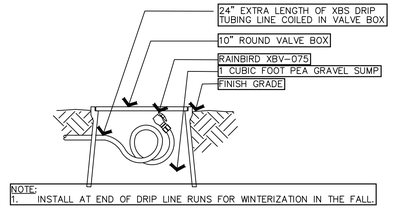
SHRUB

1. 12" RADIUS
2. RAIN BIRD XFS–09–18–100 OR EQUIVALENT
3. SHRUB
4. RAIN BIRD XT–700 TUBING OR EQUIVALENT AS APPROVED BY ARCHITECT
5. LATERAL LINE
6. BARBED TEE

M DRIP IRRIGATION - IN LINE EMITTERS

NOT TO SCALE

PKJ DESIGN GROUP

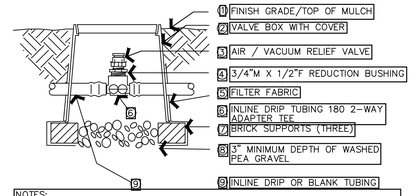


NOTE:
1. INSTALL AT END OF DRIP LINE RUNS FOR WINTERIZATION IN THE FALL.

N FLUSH CAP BOX

NOT TO SCALE

PKJ DESIGN GROUP



1. FINISH GRADE/TOP OF MULCH
2. VALVE BOX WITH COVER
3. AIR / VACUUM RELIEF VALVE
4. 3/4"M X 1/2"F REDUCTION BUSHING
5. FILTER FABRIC
6. INLINE DRIP TUBING 180 2–WAY ADAPTER TEE
7. BRICK SUPPORTS (THREE)
8. 3" MINIMUM DEPTH OF WASHED PEA GRAVEL
9. INLINE DRIP OR BLANK TUBING

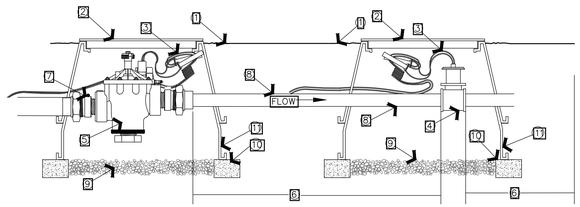
NOTES:
1. SECURE ALL BARB FITTINGS WITH A STAINLESS STEEL PINCH CLAMP.
2. INSTALL A AIR/VACUUM RELIEF VALVE AT HIGH POINTS WITHIN DRIP ZONE.
3. INSTALL FILTER FABRIC AROUND EXTERIOR OF VALVE BOX. USE DUCT TAPE TO SECURE FABRIC TO PIPE AND VALVE BOX.

O DRIP AIR/VACUUM RELIEF VALVE ASSEMBLY

NOT TO SCALE

PKJ DESIGN GROUP

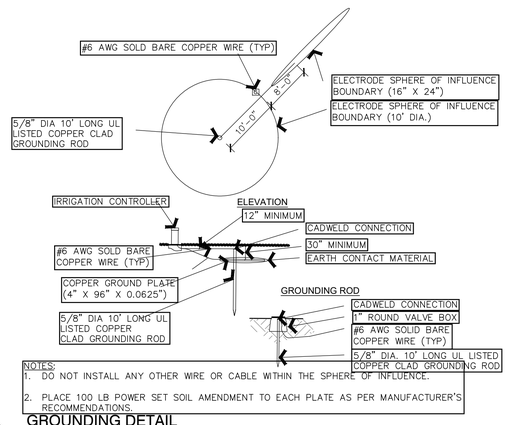
1. FINISH GRADE
2. GREEN VALVE BOX AND COVER
3. CONTROL WIRES WITH 12" MIN. SERVICE COIL AND WATERPROOF WIRE SPLICE CONNECTORS –
4. FLOW SENSOR PER IRRIGATION LEGEND
5. RAIN BIRD PESB SERIES MASTER VALVE
6. STRAIGHT PIPE REQUIRED: MINIMUM 10x PIPE DIAMETER UPSTREAM & MINIMUM 5x PIPE DIAMETER DOWNSTREAM
7. UNIONS
8. PVC MAINLINE – LENGTH AS REQUIRED
9. 6" DEPTH OF WASHED ¾" GRAVEL
10. CONTINUOUS BRICK SUPPORTS
11. VALVE BOX EXTENSIONS REQUIRED



P MASTER VALVE & FLOW SENSOR

NOT TO SCALE

PKJ DESIGN GROUP

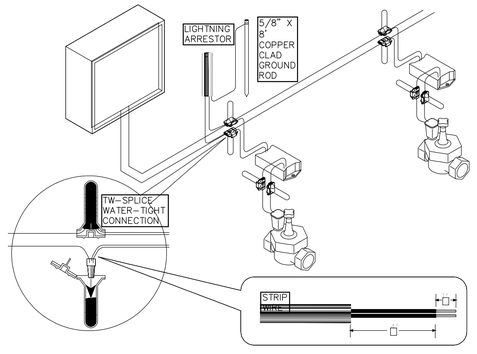


NOTES:
1. DO NOT INSTALL ANY OTHER WIRE OR CABLE WITHIN THE SPHERE OF INFLUENCE.
2. PLACE 100 LB POWER SET SOIL AMENDMENT TO EACH PLATE AS PER MANUFACTURER'S RECOMMENDATIONS.

Q GROUNDING DETAIL

NOT TO SCALE

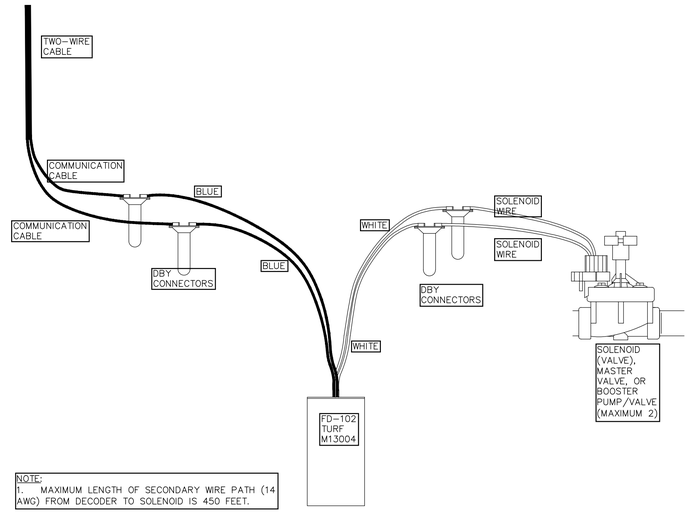
PKJ DESIGN GROUP



R 2-WIRE CONNECTION

NOT TO SCALE

PKJ DESIGN GROUP



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

S DECODER WIRING

NOT TO SCALE

PKJ DESIGN GROUP

ISSUE DATE	PROJECT NUMBER
9/22/2020	UT20031

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

AF STORAGE
16 WEST 1500 NORTH
AMERICAN FORK, UTAH

DEVELOPER / PROPERTY OWNER / CLIENT

Developer / Property Owner:
BISHOP HOLDING, LLC
MATT BISHOP
801-830-7745
SNAPTRUCKING@GMAIL.COM

Building Architect / Engineer:
BENCHMARK ENGINEERING & LAND SURVEYING
9130 SOUTH STATE STREET SUITE #100
SANDY, UTAH 84070 (801) 542-7192
WWW.BENCHMARKCIVIL.COM

LANDSCAPE ARCHITECT / PLANNER

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

LICENSE STAMP

JEREMY ANDERSEN 812821-5301 09/23/2020 REGISTERED LANDSCAPE ARCHITECT STATE OF UTAH

PM:	KBA
DRAWN:	KBA
CHECKED:	JTA
PLOT DATE:	9/22/2020

IR 502

AMERICAN FORK CITY
PLANNING COMMISSION

MEETING DATE: October 7, 2020
STAFF PRESENTATION: Adam Olsen

AGENDA TOPIC: Hearing, review and action on a commercial site plan for Bishop Storage, located at 16 West 1500 South, in the PI-1 Planned Industrial zone.

ACTION REQUESTED: Recommendation of approval to City Council.

BACKGROUND INFORMATION					
Location:		16 W. 1500 S.			
Applicants:		Matt Bishop			
Existing Land Use:		Agriculture			
Proposed Land Use:		Commercial			
Surrounding Land Use:	North	Agriculture			
	South	Vacant			
	East	Agriculture			
	West	Commercial			
Existing Zoning:		PI-1 (Planned Industrial)			
Proposed Zoning:		N/A			
Surrounding Zoning:	North	PI-1			
	South	M-1 (Marina)			
	East	Residential Agriculture 5 (Utah County)			
	West	M-1 (Marina)			
Land Use Plan Designation:		Design Industrial			
Zoning within density range?		x	Yes		No

Background

****The Planning Commission tabled this item at their September 16, 2020 meeting in order for the applicant to revise plans per the City Fire Marshal. The plans have been revised and reviewed and are again placed before the Planning Commission for consideration. The items previously brought forth by Planning have also been addressed.**

Bishop Storage is proposed at approximately 16 W. 1500 South. Access will be off of 1500 South. Included in the packet materials are renderings of the proposed units. Planning staff has requested complete landscape plans, which to date (9-10) have not been received. Should complete plans be received, staff will forward them to the Planning Commission. If they are not received by the meeting date, Planning staff recommends the item be tabled.

Attachment: 3. Staff Report (Bishop Storage)

Consistency with the Land Use Plan:

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

FINDINGS OF FACT

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

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

POTENTIAL MOTIONS

APPROVAL

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

DENIAL

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

TABLE

Mr. Chairman, I move that we table action on the commercial site plan for Bishop Storage pending submission of complete landscape plans.

Attachment: 3. Staff Report (Bishop Storage)

AMERICAN FORK CITY ENGINEERING DIVISION
STAFF REPORT

Planning Commission Meeting Date: 10/7/2020

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

Project Name: Matt Bishop Storage

Project Address: 16 West 1500 South

Developer / Applicant's Name: Matt Bishop

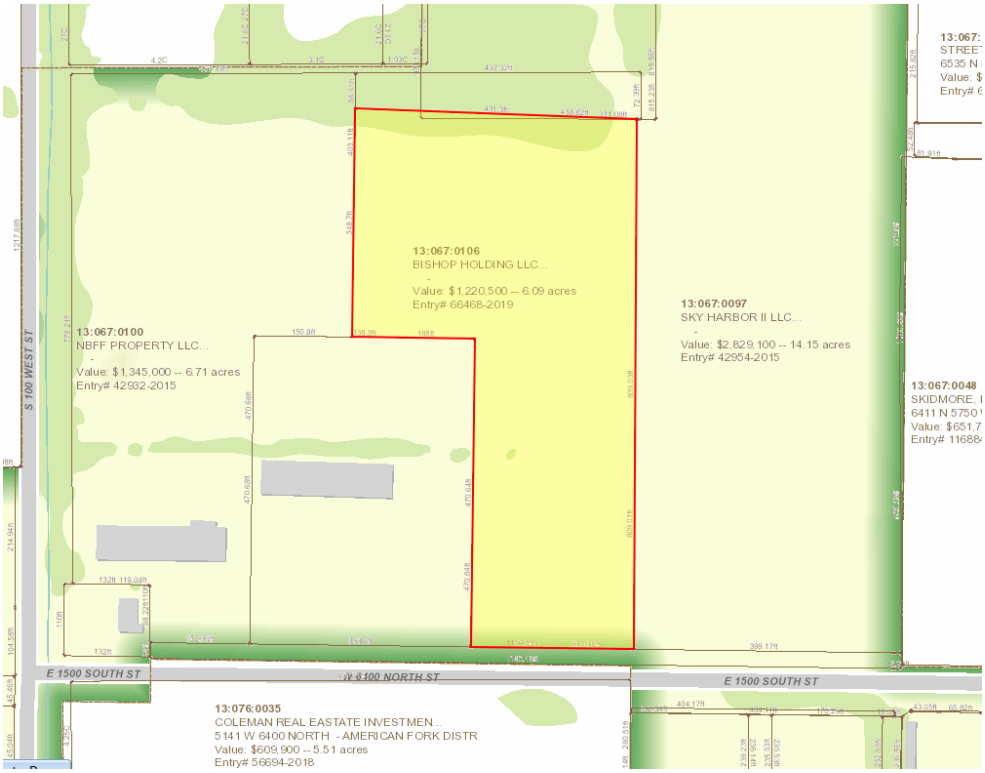
Type of Application:

- ☐ 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 10/7/2020 Engineering Division Staff Report for the City Land Use Authority shall be addressed on all final project documents.

Project Map:



Attachment: 3. Staff Report (Bishop Storage)

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).

Attachment: 3. Staff Report (Bishop Storage)

Mr. Olsen explained that this item was tabled in August in order for the applicant to speak to his neighbor and inquire about expanding the zone change request to include the neighbor's property, in order to eliminate an island of R1-7,500. The neighbor has agreed to be included as part of the request and the application is back before the Planning Commission for consideration. The map has been updated to include the neighboring property.

The applicant proposes to change the zone on his property from R1-7,500 to R2-7,500. The underlying land use map designates the area as "medium density residential" and a change to the R2-7,500 is supported by the underlying land use designation. Single-family and duplex uses are allowed in the R2-7,500 zone. The applicant would like the ability to convert his single-family use to a duplex use; provided his property meets the parameters for duplex use.

Public Hearing Opened

Public Hearing Closed

moved to recommend approval of the zone map amendment.

seconded the motion. Voting was as follows:

Chairman Woffinden	**Aye**
Chris Christiansen	**Aye**
Christine Anderson	**Aye**
Ryan Hunter	**Aye**
Rod Brocious	**Aye**
Harold Dudley	**Aye**

The motion passed.

6. Hearing, review and action on a commercial site plan for Bishop Storage, located at 16 West 1500 South in the PI-1 Planned Industrial zone

Mr. Olsen indicated that the Planning Commission tabled this item at their September 16, 2020 meeting in order for the applicant to revise plans per the City Fire Marshal. The plans have been

Attachment: 4. Minutes (Bishop Storage)

revised and reviewed and are again placed before the Planning Commission for consideration. The items previously brought forth by Planning have also been addressed. Bishop Storage is proposed at approximately 16 W. 1500 South. Access will be off 1500 South. Included in the packet materials are renderings of the proposed units.

Mr. Ben Hunter

Public Hearing Opened

Public Hearing Closed

Moved to approve the commercial site plan for Bishop Storage, with the findings and conditions listed in the staff report and subject to any findings, conditions and modifications listed in the Engineering report.

Seconded the motion. Voting was as follows:

Chairman Woffinden	**Aye**
Chris Christiansen	**Aye**
Christine Anderson	**Aye**
Ryan Hunter	**Aye**
Rod Brocious	**Aye**
Harold Dudley	**Aye**

The motion passed.

Attachment: 4. Minutes (Bishop Storage)

7. Other Business

There was no other business to discuss.

8. Site Plan Committee Report

Mr. Knobloch reviewed the upcoming Planning Commission items. The next meeting will be held on Wednesday, October 21.

REQUEST FOR COUNCIL ACTION
CITY OF AMERICAN FORK
OCTOBER 27, 2020

Department Planning **Director Approval** *Adam Olsen*

AGENDA ITEM Review and action on the final plat of Timp Hollow Plat D subdivision, located in the area of 1030 North 1150 East in the R1-12,000 Residential zone.

SUMMARY RECOMMENDATION The planning commission recommended approval of the final plat of Timp Hollow Plat D subdivision with one dissenting vote as stated in the attached minutes of the October 7, 2020 planning commission meeting.

BACKGROUND The applicant proposes a 17-lot Phase D for the single-family Timp Hollow Project; Plats A and B were approved in 2017, and Plat C in 2018. The planning commission discussion focused on the inwardly oriented homes closest to 1100 North which result in a wall along 1100 North with attendant negative impacts on traffic speeds and neighborhood aesthetics. For further analysis, please refer to the attached final plat, staff report and planning commission minutes.

BUDGET IMPACT No direct budgetary impact is anticipated as part of this final plat approval.

SUGGESTED MOTION I move to approve the final plat of Timp Hollow Plat D subdivision, located in the area of 1030 North 1150 East in the R1-12,000 Residential zone and to authorize the mayor and city council to sign the plat and accept the dedications with instructions to the city recorder to withhold recording of the plat subject to:

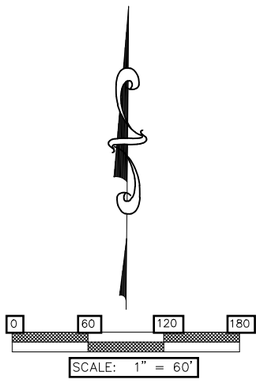
- All conditions identified in the public record associated with the October 7, 2020 planning commission meeting.

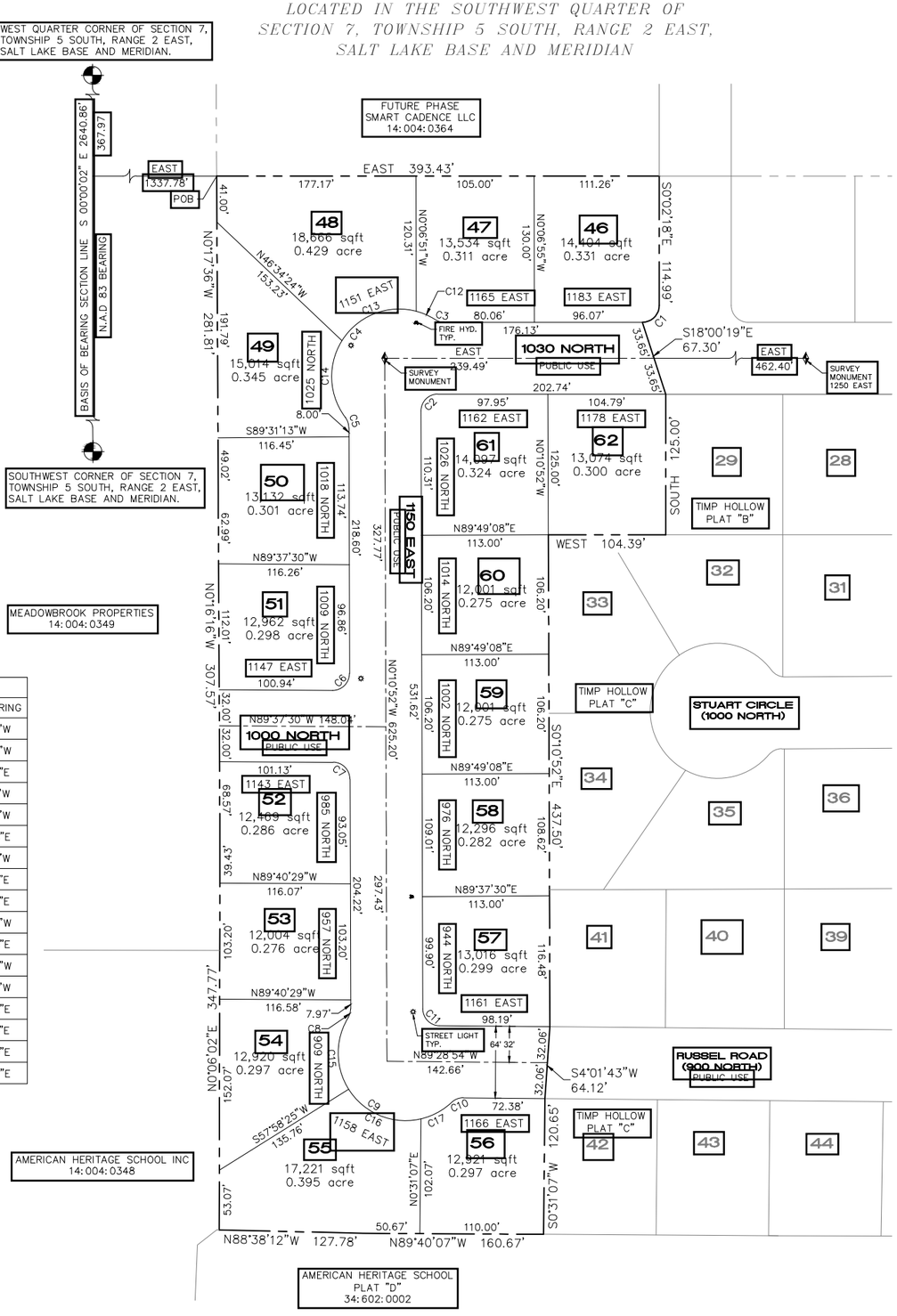
SUPPORTING DOCUMENTS

1. Plat (PDF)
2. Staff Report (PDF)
3. Minutes (PDF)

TIMP HOLLOW PLAT "D"

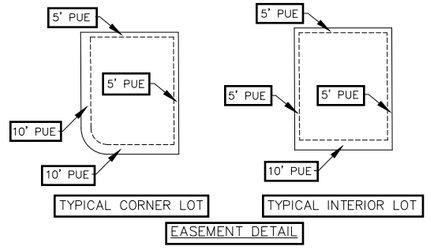
LOCATED IN THE SOUTHWEST QUARTER OF SECTION 7, TOWNSHIP 5 SOUTH, RANGE 2 EAST, SALT LAKE BASE AND MERIDIAN





Curve Table					
CURVE	LENGTH	RADIUS	DELTA	CHORD	CHORD BEARING
C1	23.57	15.00	90°02'18"	21.22	S44°58'51"W
C2	23.61	15.00	90°10'52"	21.25	S44°54'34"W
C3	8.47	15.00	32°21'34"	8.36	S73°49'13"E
C4	167.25	60.00	159°42'44"	118.12	S42°30'11"W
C5	9.73	15.00	37°10'19"	9.56	N18°46'01"W
C6	23.71	15.00	90°33'22"	21.32	N45°05'49"E
C7	23.42	15.00	89°26'38"	21.11	N44°54'11"W
C8	8.31	15.00	31°45'16"	8.21	N15°41'46"E
C9	172.32	60.00	164°33'24"	118.91	S50°42'18"E
C10	11.39	15.00	43°30'06"	11.12	S68°46'03"W
C11	23.38	15.00	89°18'02"	21.08	S44°49'53"E
C12	18.54	60.00	17°42'19"	18.47	N66°29'36"W
C13	75.81	60.00	72°23'48"	70.87	S68°27'21"W
C14	72.90	60.00	69°36'37"	68.49	S02°32'52"E
C15	66.97	60.00	63°57'16"	63.55	S00°24'14"E
C16	73.94	60.00	70°36'14"	69.35	S67°40'59"E
C17	31.41	60.00	29°59'54"	31.06	N62°00'57"E

VICINITY MAP



NOTES:
1. ALL PUBLIC STREETS TO BE DEDICATED TO AMERICAN FORK CITY.
2. HISTORICAL DEPTH OF HIGH WATER TABLE AND ELEVATION OF LOWEST FLOOR SLAB (MINIMUM 3 FEET ABOVE WATER LEVEL MEASURED DURING SPRING SEASON).
3. OFF-SET NAILS TO BE PLACED ON THE BACK OF THE CURB AND 5/8"x24" REBAR WITH THE TRANE ENGINEERING CAP TO BE PLACED AT ALL REAR CORNERS PRIOR TO ANY OCCUPANCY.
4. BUILDING PERMITS WILL NOT BE ISSUED FOR ANY HOME UNTIL
   1- ASPHALT PAVING IS INSTALLED
   2- FIRE HYDRANTS ARE INSTALLED, APPROVED BY THE FIRE MARSHALL AND CHARGED WITH CULINARY WATER.
5. PARK-STRIP ALONG PUBLIC RIGHT OF WAY TO BE MAINTAINED BY HOME OWNER.
6. FLOOD ZONE X FEMA FLOOD ZONE COMMUNITY PANEL NUMBER 49049C0169F
7. BENCHMARK IS WEST QUARTER CORNER OF SECTION 7, TOWNSHIP 5 SOUTH, RANGE 2 EAST, SALT LAKE BASE AND MERIDIAN. ELEVATION: 4786.29
8. ZONING IS R1-12000

DEVELOPER
CADENCE HOMES
3400 NORTH ASHTON BLVD.
SUITE #180 LEHI, UT 84043
PHONE (801) 768-0500

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

SURVEYOR'S CERTIFICATE

I, Travis Trane do hereby certify that I am a Professional Land Surveyor, and that I hold a license in accordance with Title 58, Chapter 22, Professional Engineers and Land Surveyors Licensing Act, Utah Code annotated, 1953 as amended, certificate number 5153741. I further certify that by authority of the owners, I have made a survey of the tract of land shown on this plat and described below, have subdivided said tract of land into lots, streets and easements, and have prepared a survey of the property, said plat is accurate, and said survey was made in accordance with section 17-23-17, Utah Code annotated, 1953, as amended, and has verified all measurements, and that monuments have been placed as shown on the plat. I further certify that existing right of way, easement, canal or record for underground utility facilities, as accurately described on this plat, and for that this plat is true and correct.

BOUNDARY DESCRIPTION

Commencing at a point which is South 00°00'02" East 367.97 feet along the section line a East 1337.78 feet from the West Quarter Corner of Section 7, Township 5 South, Range 2 East, Salt Lake Base and Meridian: thence East 393.43 feet; thence along Timp Hollow Plat "B" the following four courses 1) South 00°02'18" East 114.99 feet; 2) Southwesterly 23.57 feet along the arc of a 15.00 radius curve to the right, through a central angle 90°02'18", the chord of which bears South 44°58'51" West 21.22 feet; 3) South 18°00'19" East 67.30 feet; 4) South 125.00 feet; thence along Timp Hollow Plat "C" the following four courses 1) West 104.39 feet; 2) South 00°10'52" East 437.50 feet; 3) South 04°01'43" West 64.12 fee 4) South 00°31'07" West 120.65 feet; thence along American Heritage School Plat "D" the following two courses 1) North 89°40'07" West 160.67 feet; 2) North 88°38'12" West 127.78 feet; thence North 00°06'02" East 347.77 feet; thence North 00°16'16" West 307.57 feet; thence North 00°17'36" West 281.81 feet to the point of beginning.
Parcel contains: 307,012 sq.ft or 7.048 acres more or less.

Number of lots = 17

Basis of bearing: The line between the West Quarter Corner and the Southwest Corner of Section 7, Township 5 South, Range 2 East, Salt Lake Base and meridian which bears South 00°00'02" East. (N.A.D. 83 BEARINGS)

DATE

SURVEYOR (See Seal Below)

OWNER'S DEDICATION

Known all men by these present that we, all of the undersigned owners of all of the property described in the surveyor's certificate herein and shown on this map, have caused the same to be subdivided into lots, blocks, streets and easements and do hereby dedicate the streets and other public areas as indicated hereon for perpetual use of the public.

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

ACKNOWLEDGEMENT

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

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

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

NOTARY PUBLIC SIGNATURE

ACCEPTANCE BY LEGISLATIVE BODY

THE _____ OF _____ COUNTY OF UTAH APPROVES THIS SUBDIVISION AND HEREBY ACCEPTS THE DEDICATION OF STREETS, EASEMENTS AND OTHER PARCELS OF LAND INTENDED FOR PUBLIC PURPOSES FOR THE PERPETUAL USE OF THE PUBLIC THIS _____ DAY OF _____, 20__

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

PLANNING COMMISSION APPROVAL

APPROVED THIS _____ DAY OF _____ 20_____.
BY THE AMERICAN FORK CITY PLANNING COMMISSION.

PLANNER
PLANNING COMMISSION CHAIRMAN

PLAT "D"

TIMP HOLLOW

A RESIDENTIAL SUBDIVISION

RECORDING INFORMATION

AMERICAN FORK CITY, UTAH COUNTY, UTAH
SCALE: 1" = 60 FEET

SURVEYOR SEAL

CLERK-RECORDED SEAL

SEWER AND WATER AUTHORITY APPROVAL

APPROVED BY THE SEWER AND WATER AUTHORITY ON THIS ___DAY OF _____,2020

PUBLIC WORKS DIRECTOR

Attachment: 1. Plat (Timp Hollow Plat D)

AMERICAN FORK CITY
PLANNING COMMISSION

MEETING DATE: October 7, 2020
STAFF PRESENTATION: Adam Olsen

AGENDA TOPIC: Hearing, review and action on the preliminary and final plat for Timp Hollow Plat D, consisting of 17 lots, located in the area of 1030 North 1150 East in the R1-12,000 Residential zone.

ACTIONS REQUESTED: Recommendation of approval of the final plat.

BACKGROUND INFORMATION					
Location:		1030 North 1150 East			
Applicants:		Ryan Bybee/Cadence Homes			
Existing Land Use:		Vacant			
Proposed Land Use:		Residential			
Surrounding Land Use:	North	Residential			
	South	American Heritage School			
	East	Residential			
	West	Agriculture			
Existing Zoning:		R1-12,000			
Proposed Zoning:		N/A			
Surrounding Zoning:	North	R1-12,000			
	South	R1-15,000			
	East	R1-12,000			
	West	R1-9,000			
Land Use Plan Designation:		Low Density Residential			
Zoning within density range?		x	Yes		No

Attachment: 2. Staff Report (Timp Hollow Plat D)

Background

Timp Hollow preliminary plan was approved on January 18, 2017. Plat A was approved in February 2017. Plat B was approved in June 2017. Plat C was approved in 2018. The applicant has returned with Plat D, consisting of 17 lots and located west of Plats B and C. Due to elapsed time, Plat D is being processed as a preliminary and final plat, since the original preliminary plan is now expired. However, Plat D is consistent with the originally approved preliminary plan from 2017.

This area was annexed into the City under the "Smart Annexation". At the time of annexation, the property was given the R1-12,000 zone designation. A corridor for the Temple View Trail has been provided through the development.

Consistency with the Land Use Plan:

The Land Use Plan designates this area as “Low Density Residential” (3 du/ac). The proposed subdivision is consistent with the Land Use Plan designation.

Section 17.8.211 of the Development Code

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

a. The final plat (Plat D) conforms with the terms of the preliminary plan approval.

   Plat D conforms with the terms of the preliminary plan approval.

b. The final plat complies with all City requirements and standards relating to Subdivisions.

   This criterion has been met.

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

   Engineering will address concerns, if any, at the time of the Planning Commission Meeting.

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

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

e. The water rights conveyance documents have been provided.

   Water rights conveyance shall be satisfied prior to plat recordation.

FINDINGS OF FACT/CONDITION OF APPROVAL

After reviewing the application for final plat approval, the following findings of fact and condition of approval are offered for consideration:

1. Timp Hollow Plat D complies with Section 17.8.101 (Intent) of Chapter 17.8 (Subdivisions).

2. Timp Hollow Plat D meets the criteria as found in Section 17.8.211 of the Development Code.

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

Attachment: 2. Staff Report (Timp Hollow Plat D)

POTENTIAL MOTIONS

APPROVAL

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

DENIAL

Mr. Chairman, I move that we deny the preliminary plan of Timp Hollow Plat D. (If the preliminary plan is denied, there cannot be action given on the final plat.)

TABLE

Mr. Chairman, I move that we table action on the preliminary and final plat of Timp Hollow Plat D.

Attachment: 2. Staff Report (Timp Hollow Plat D)

AMERICAN FORK CITY ENGINEERING DIVISION
STAFF REPORT

Planning Commission Meeting Date: 10/7/2020

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

Project Name: Timp Hollow Plat D

Project Address: 1030 North 1150 East

Developer / Applicant's Name: Ryan Bybee, Cadence Homes

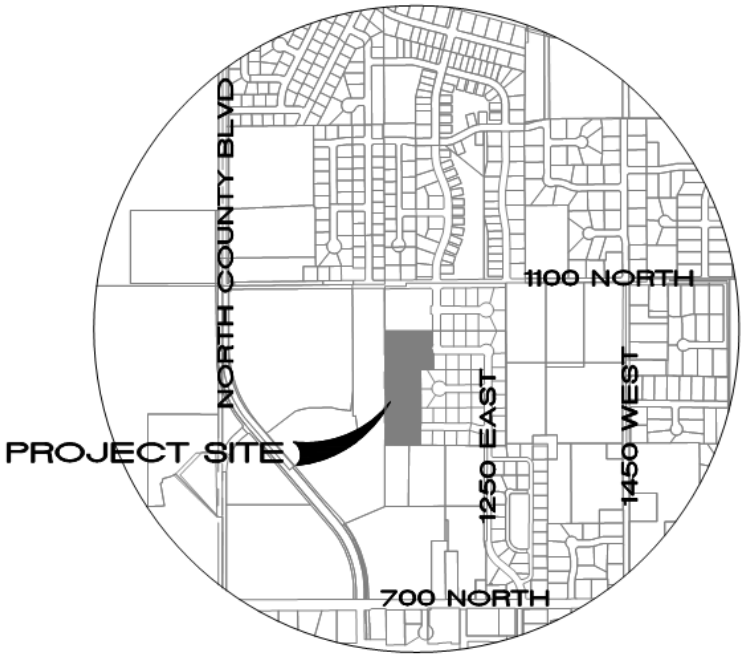
Type of Application:

- ☒ 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 10/7/2020 Engineering Division Staff Report for the City Land Use Authority shall be addressed on all final project documents.

Project Map:



VICINITY MAP

Attachment: 2. Staff Report (Timp Hollow Plat D)

STANDARD CONDITIONS OF APPROVAL

Standard Conditions of Approval:

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

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

Plan Modifications Required:

1.

Attachment: 2. Staff Report (Timp Hollow Plat D)

4. Hearing, review and action on the preliminary and final plat for Timp Hollow Plat D subdivision, located in the area of 1030 North 1150 East in the R1-12,000 Residential zone

Mr. Olsen said that the Timp Hollow preliminary plan was approved on January 18, 2017. Plat A was approved in February 2017. Plat B was approved in June 2017. Plat C was approved in 2018. The applicant has returned with Plat D, consisting of 17 lots and located west of Plats B and C. Due to elapsed time, Plat D is being processed as a preliminary and final plat since the original preliminary plan is now expired. However, Plat D is consistent with the originally approved preliminary plan from 2017.

This area was annexed into the City under the "Smart Annexation". At the time of annexation, the property was given the R1-12,000 zone designation. A corridor for the Temple View Trail has been provided through the development.

Mr. Ben Hunter said that this plat meets all standards and specifications and the Engineering Division recommends approval.

Ms. Anderson lives in the neighborhood to the north, and is concerned about how this joins with that subdivision to the north. She said there is a wall along 1100 North between the homes and the street that has lessened the feeling of neighborhood and increased traffic speeds. She wishes that the neighborhoods could be joined without a wall and the plan being considered today eliminates that option, there is only room for one row of homes with their backs to 1100 North instead of facing it.

Mr. Olsen said that the original plan did show a slightly different orientation, Ms. Anderson is correct.

Chairman Woffinden added that commissioners can't put a restriction on the wall now, it isn't part of the motion on front of the commission.

Public Hearing Opened

Public Hearing Closed

Mr. Ryan Hunter moved to approve the preliminary plan and final plat for Timp Hollow Plat D, with the findings and conditions listed in the staff report and subject to any findings, conditions, and modifications listed in the engineering report.

Mr. Chris Christiansen seconded the motion. Voting was as follows:

Chairman Woffinden	**Aye**
Chris Christiansen	**Aye**

Attachment: 3. Minutes (Timp Hollow Plat D)

Christine Anderson	**Nay**
Ryan Hunter	**Aye**
Rod Brocious	**Aye**
Harold Dudley	**Aye**

The motion passed.

5. Hearing, review and action on the Rawlings Zone Map Amendment from the R1-7,500 to R2-7,500 Residential zone located at 165 East 300 North

Mr. Olsen explained that this item was tabled in August in order for the applicant to speak to his neighbor and inquire about expanding the zone change request to include the neighbor's property, in order to eliminate an island of R1-7,500. The neighbor has agreed to be included as part of the request and the application is back before the Planning Commission for consideration. The map has been updated to include the neighboring property.

The applicant proposes to change the zone on his property from R1-7,500 to R2-7,500. The underlying land use map designates the area as "medium density residential" and a change to the R2-7,500 is supported by the underlying land use designation. Single-family and duplex uses are allowed in the R2-7,500 zone. The applicant would like the ability to convert his single-family use to a duplex use; provided his property meets the parameters for duplex use.

Mr. Ben Hunter indicated that the Engineering Division doesn't have any concerns.

Public Hearing Opened

Public Hearing Closed

Mr. Ryan Hunter moved to recommend approval of the zone map amendment.

Ms. Christine Anderson seconded the motion. Voting was as follows:

Chairman Woffinden	**Aye**
Chris Christiansen	**Aye**
Christine Anderson	**Aye**
Ryan Hunter	**Aye**
Rod Brocious	**Aye**
Harold Dudley	**Aye**

The motion passed.

Mr. Ryan Hunter thanks staff and applicant for going to the additional effort to avoid leaving an island in the middle of a different zone.

Attachment: 3. Minutes (Timp Hollow Plat D)

REQUEST FOR COUNCIL ACTION
CITY OF AMERICAN FORK
OCTOBER 27, 2020

Department Public Works **Director Approval** *Scott Sensanbaugher*

AGENDA ITEM Review and action on a resolution approving an interlocal agreement with Cedar Hills, Highland, and Pleasant Grove regarding the Mill Ditch Pipeline Enclosure project.

SUMMARY RECOMMENDATION
Staff would recommend approval of the resolution and interlocal agreement

BACKGROUND
As part of phase two of the spring line replacement, through the Cedar Hills golf course, American Fork, Cedar Hills, Highland, and Pleasant Grove are entering into an interlocal agreement that clarifies easements and access on properties or infrastructure for each of the municipalities. American Fork City's water line will be replaced and moved with the project that pipes Pleasant Grove City's ditch. This agreement will secure an easement for our new water line alignment. This agreement must be in place for Pleasant Grove to receive the grant funding to pipe their ditch. Construction is expected to happen this winter. This agreement has been reviewed by City staff and legal

BUDGET IMPACT
NA

SUGGESTED MOTION
I move to adopt the resolution and authorize the City to sign the interlocal agreement with Cedar Hills, Highland, and Pleasant Grove Cities.

SUPPORTING DOCUMENTS

Interlocal Agreements - AF Cedar Hills Highland and Pleasant Grove (PDF)
Four City INTERLOCAL COOPERATION AGREEMENT (10-16-2020) (PDF)

RESOLUTION NO. _____

WHEREAS, American Fork City desires to enter into an Interlocal Cooperation Agreement by and between American Fork City, Cedar Hills, Highland, and Pleasant Grove regarding the Mill Ditch Pipeline Enclosure project.

NOW, THEREFORE, the City Council of American Fork resolves to enter into an Interlocal Cooperation Agreement by and between American Fork City, Cedar Hills, Highland, and Pleasant Grove regarding the Mill Ditch Pipeline Enclosure project.

PASSED BY THE CITY COUNCIL OF AMERICAN FORK, UTAH, THIS 27th DAY OF OCTOBER, 2020.

Bradley J. Frost, Mayor

ATTEST:

Terilyn Lurker, City Recorder

Attachment: Interlocal Agreements - AF Cedar Hills Highland and Pleasant Grove (Resolution for Interlocal Agreement with Cedar Hills,

INTERLOCAL COOPERATION AGREEMENT BETWEEN AMERICAN FORK CITY, CEDAR HILLS CITY, HIGHLAND CITY, AND PLEASANT GROVE CITY REGARDING THE MILL DITCH PIPELINE ENCLOSURE PROJECT.

This Interlocal Agreement entered into this _____ Day of _____, 2020, by and between American Fork City, a municipal corporation, hereinafter "American Fork", Cedar Hills City, a municipal corporation, hereinafter "Cedar Hills", Highland City, a municipal corporation, hereinafter "Highland", Pleasant Grove City, a municipal corporation, hereinafter "Pleasant Grove", all of which are political subdivisions of the State of Utah.

WITNESSETH:

WHEREAS, pursuant to the provisions of the Interlocal Cooperation Act ("Act"), Title 11, Chapter 13, Utah Code Annotated, 1953 as amended, public agencies, including political subdivisions of the State of Utah as therein defined, are authorized to enter into written agreements with one another for joint or cooperative action; and

WHEREAS, pursuant to the Act, the parties desire to work together through joint and cooperative action that will benefit the residents of all Parties and,

WHEREAS, the parties to this Agreement are public agencies as defined in the Act; and

RECITALS

WHEREAS, Pleasant Grove Irrigation Company "PGIC" owns and operates a primarily open irrigation ditch from the American Fork River diversion at the mouth of American Fork Canyon down to an existing 30 - inch pipe near 4416 W Redwood Road in Cedar Hills (see attached figure). The first approximately 3000 feet is unlined while the last approximately 3000 feet is concrete lined. The ditch is within Highland and Cedar Hills municipal boundaries and on property owned by Highland, Cedar Hills, PGIC, two private properties, and "The Highlands" subdivision common space.

Attachment: Four City INTERLOCAL COOPERATION AGREEMENT (10-16-2020) (Resolution for Interlocal Agreement with Cedar Hills, Highland,

WHEREAS, Highland and Cedar Hills each have a turnout on the irrigation ditch in order to obtain water from PGIC based on their share of ownership in the company.

WHEREAS, easements for the access, operation and maintenance of the ditch have been a combination of written and prescriptive in nature.

WHEREAS, PGIC owns and maintains the water rights for the flow in the ditch.

WHEREAS, Pleasant Grove would like to pipe the PGIC ditch in agreement with PGIC to conserve irrigation water lost to seepage and evaporation

WHEREAS, PGIC cannot be a signatory to this interlocal agreements as a private company, PG and PGIC will enter into an agreement whereby PG will obtain the funding to pipe the Mill Ditch and will receive certain benefits by so doing, but acknowledge such benefits will not diminish or negatively impact the water shares of other shareholders of PGIC, including Cedar Hills and American Fork, as well as Highland residents. Part of the project provided by PG for PGIC is obtaining the necessary easements and agreements for construction and ongoing maintenance of the project. Whiles PGIC is the primary entity responsible for owning and maintaining the piped ditch, PG has interest in, participates in, and supports PGIC as the majority shareholder in the company.

WHEREAS, American Fork owns and operates culinary water pipelines, tanks, and a chlorine station in the same area. The American Fork infrastructure is within Highland and Cedar Hills municipal boundaries and on property owned by Cedar Hills and Utah State Division of Natural Resources.

WHEREAS, easements for the access, operation and maintenance of the American Fork infrastructure have been a combination of written and prescriptive in nature.

Attachment: Four City INTERLOCAL COOPERATION AGREEMENT (10-16-2020) (Resolution for Interlocal Agreement with Cedar Hills, Highland,

WHEREAS, American Fork City would like to replace their culinary waterline from the mouth of American Fork Canyon to their concrete storage tanks which runs through a portion of the Cedar Hills golf course.

WHEREAS, Cedar Hills owns, operates, and maintains a golf course, culinary water, and pressurized irrigation infrastructure in the area. The Cedar Hills infrastructure is within Highland and Cedar Hills municipal boundaries and on property owned by Cedar Hills, PGIC, and Utah State Division of Natural Resources.

WHEREAS, easements for the access, operation and maintenance of the Cedar Hills infrastructure have been a combination of written and prescriptive in nature (see attached figure).

WHEREAS, Cedar Hills golf course would like to maintain an open ditch/water feature adjacent to their northeastern most green.

WHEREAS, Highland owns property over which Cedar Hills, American Fork, and PGIC have historically accessed their infrastructure and or property.

WHEREAS, Cedar Hills owns property over which Highland, American Fork, and PGIC have historically accessed their infrastructure and or property.

WHEREAS, PGIC owns property over and through which Cedar Hills operates water pipelines and golf course infrastructure.

WHEREAS, Cedar Hills, American Fork, and Highland jointly own and maintain the American Fork Debris Basin over which all parties have historically accessed their infrastructure and or property.

WHEREAS, American Fork and Cedar Hills have additional culinary and pressurized irrigation infrastructure in the area that are not the subject of this agreement and have their own easements and agreements in place for their operation and maintenance.

WHEREAS, Highland owns and operates a walking/biking trail through the area which is subject to its own easements and agreements.

WHEREAS, All easements and agreements between American Fork, Cedar Hills, and Utah State Division of Natural Resources, who is not a Party to this Agreement, are not subject to the terms of this Agreement.

NOW, THEREFORE, the parties do mutually agree, pursuant to the terms and provisions of the Act, as follows:

1. Easements. Cedar Hills agrees to convey to American Fork, Pleasant Grove, and PGIC easements and rights-of-way through property over which Cedar Hills has the legal ability to grant an easement for the construction, operation and maintenance of a culinary water transmission pipeline with associated appurtenances (to American Fork) and an irrigation pipeline with associated appurtenances (to PGIC, and Pleasant Grove) from SR-92 to the American Fork Culinary Upper Tanks for the culinary line and through phase II for the irrigation pipeline. The easement, during the course of construction, shall be up to fifty (50) feet wide along the general pipe alignment shown in Exhibit A, attached or the maximum amount, up to fifty (50) feet, that Cedar Hills has the legal ability to grant an easement. The final easement shall be up to forty (40) feet wide for the purposes of operating and maintaining the pipelines. The easement shall be developed, approved and executed prior to construction. If necessary due to potential changes during construction, a final easement shall be modified after construction of the pipelines. Upon execution of the final easement detailed above, each Party and PGIC,[1] shall release, vacate, and abandon all rights to and interest in any previously existing easement, whether written or

[1] Understanding that PGIC is not a Party to this Agreement, however it has represented that it will, by separate agreement, release, vacate, and abandon all rights to and interest in any previously existing easement(s), whether written or prescriptive in nature, related to the Mill Ditch and any prior Mill Ditch easement agreement.

Attachment: Four City INTERLOCAL COOPERATION AGREEMENT (10-16-2020) (Resolution for Interlocal Agreement with Cedar Hills, Highland,

Attachment: Four City INTERLOCAL COOPERATION AGREEMENT (10-16-2020) (Resolution for Interlocal Agreement with Cedar Hills, Highland,

prescriptive in nature, related to the Mill Ditch and any prior Mill Ditch easement agreement. Further, American Fork will release, vacate, and abandon all rights to and interest in its existing culinary water line shown in Exhibit A and related easement(s) thereto. The final easement will replace these easements and facilities in their entirety. If other utilities need to be placed within five (5) feet horizontal and one (1) foot vertical of the pipeline, Cedar Hills will first obtain approval from American Fork and Pleasant Grove to do so. Approval to place utilities within the designated area of the easement will not be unreasonably withheld. American Fork and Pleasant Grove agree to calendar/schedule with Cedar Hills and Highland when normal work needs to be performed within the easement and to meet Highland's trail, or Cedar Hills' golf course repair standards, as applicable. All parties shall give reasonable notice and provide reasonable access for emergency repairs and maintenance. All areas impacted by construction shall be returned to their pre-disturbance condition or a mutually agreeable condition. All effort will be taken to minimize disruption to the Highland trail and Cedar Hills golf course and associated facilities.

2. Access Easements. All parties agree to grant each other access rights to each other to construct, operate and maintain their respective infrastructure and or property within the area. Access routes shall follow those shown in the attached figure. All parties agree to protect and preserve other parties' infrastructure within the area when conducting operation and maintenance activities. Except in exigent or emergency circumstances, a party conducting operation and maintenance activities shall notify the party that owns the easement or other access right at least 48 hours prior to beginning work. In the event of exigent or emergency circumstances, or if the operation and maintenance activities cause damage to any existing conveyance, pipe, or other facility, the party conducting the work shall notify the proper party as soon as reasonably possible.

3. Initial Construction. Pleasant Grove and American Fork agree to limit initial installation construction activities to time periods that minimize disruptions to Cedar Hills Golf

Course and Highland's trail. Construction shall be limited to between Nov 1, 2020 and March 15, 2021 for all critical areas unless special permission is obtained. Construction would be finalized prior to April 15, 2021, unless a mutually agreed upon extension is granted.

4. Irrigation Share Access. Pleasant Grove and PGIC agrees to install and maintain existing or equivalent irrigation turnouts to Highland and Cedar Hills for shares owned and maintained in PGIC unless agreements are reached to modify those turnouts. Pleasant Grove agrees to allow other irrigation company shares to be delivered to their respective turnout(s) through Pleasant Grove and PGIC piping as long as capacity is available and others can be protected from damage as a result of extra water in the facilities. A separate agreement will be necessary in order to deliver other water through this facility establishing the terms of said delivery.

5. Effective Date; Duration. This Agreement shall become effective and shall enter into force, within the meaning of the Act, upon the submission of this Agreement to, and the approval and execution thereof by Resolution of the governing bodies of each of the parties to this Agreement. The term of this Agreement shall be from the effective date hereof until fifty years from the date of execution. This Agreement shall not become effective until it has been reviewed and approved as to form and compatibility with the laws of the State of Utah by the attorneys representing the respective Parties.

6. Administration of Agreement. The parties to this Agreement do not contemplate nor intend to establish a separate legal entity under the terms of this Interlocal Cooperation Agreement. The parties hereto agree that, pursuant to Section 11-13-207, Utah Code Annotated, 1953 as amended, Pleasant Grove City, shall act as the administrator responsible for the administration of this Agreement. The parties further agree that this Agreement does not anticipate nor provide for any organizational changes in the parties.

Attachment: Four City INTERLOCAL COOPERATION AGREEMENT (10-16-2020) (Resolution for Interlocal Agreement with Cedar Hills, Highland,

7. Indemnification. The Parties are governmental entities and subject to the Governmental Immunity Act of Utah, Utah Code Ann. § 63G-7-101, et seq. ("GIAU"). Subject to the provisions of the GIAU, each Party agrees to indemnify and hold harmless the other party, its agents, officers and employees from and against any and all actions, claims, lawsuits, proceedings, liability, damages, losses and expenses (including attorney's fees and costs) arising out of or resulting from the performance of this Agreement to the extent the same are caused by any negligent or wrongful act or omission of that party, its officers, agents or employees. Nothing in this Agreement shall be deemed a waiver of any rights, statutory limitations on liability, or defenses applicable to the Parties under the GIAU.

8. Filing of Interlocal Cooperation Agreement. Executed copies of this Agreement shall be placed on file with the official keeper of records of the Parties, and shall remain on file for public inspection during the term of this Agreement.

9. Adoption Requirements. This Agreement shall be (a) approved by Resolution of the governing body of each of the parties, (b) executed by a duly authorized official of each of the parties (c) submitted to and approved by an Authorized Attorney of each of the parties, as required by Section 11-13-202.5, Utah Code Annotated, 1953 as amended, and (d) filed in the official records of each party.

10. Amendments. This Agreement may not be amended, changed, modified or altered except by an instrument in writing which shall be (a) approved by Resolution of the governing body of each of the parties, (b) executed by a duly authorized official of each of the parties, (c) submitted to and approved by an Authorized Attorney of each of the parties, as required by Section 11-13-205.5, Utah Code Annotated, 1953 as amended, and (d) filed in the official records of each party.

Attachment: Four City INTERLOCAL COOPERATION AGREEMENT (10-16-2020) (Resolution for Interlocal Agreement with Cedar Hills, Highland,

11. Severability. If any term or provision of the Agreement or the application thereof shall to any extent be invalid or unenforceable, the remainder of this Agreement, or the application of such term or provision to circumstances other than those with respect to which it is invalid or unenforceable, shall not be affected thereby, and shall be enforced to the extent permitted by law. To the extent permitted by applicable law, the parties hereby waive any provision of law which would render any of the terms of this Agreement unenforceable.

12. No Presumption. Should any provision of this Agreement require judicial interpretation, the Court interpreting or construing the same shall not apply a presumption that the terms hereof shall be more strictly construed against the party, by reason of the rule of construction that a document is to be construed more strictly against the person who himself or through his agents prepared the same, it being acknowledged that each of the parties have participated in the preparation hereof.

13. Headings. Headings herein are for convenience of reference only and shall not be considered any interpretation of the Agreement.

14. Binding Agreement. This Agreement shall be binding upon the heirs, successors, administrators, and assigns of each of the parties hereto.

15. Notices. All notices, demands and other communications required or permitted to be given hereunder shall be in writing and shall be deemed to have been properly given if delivered by hand or by certified mail, return receipt requested, postage paid, to the parties at their addresses first above written, or at such other addresses as may be designated by notice given hereunder.

16. Assignment. The parties to this Agreement shall not assign this Agreement, or any part hereof, without the prior written consent of all other parties to this Agreement. No assignment shall relieve the original parties from any liability hereunder.

Attachment: Four City INTERLOCAL COOPERATION AGREEMENT (10-16-2020) (Resolution for Interlocal Agreement with Cedar Hills, Highland,

17. Governing Law. All questions with respect to the construction of this Agreement, and the rights and liability of the parties hereto, shall be governed by the laws of the State of Utah.

Attachment: Four City INTERLOCAL COOPERATION AGREEMENT (10-16-2020) (Resolution for Interlocal Agreement with Cedar Hills, Highland,

SIGNED AND DATED THIS _____DAY OF _____, 2020.

CITY OF CEDAR HILLS

_____MAYOR

ATTEST:

_____
CITY RECORDER

APPROVED AS TO FORM:

_____
CITY ATTORNEY

AMERICAN FORK CITY

_____MAYOR

ATTEST:

_____
CITY RECORDER

APPROVED AS TO FORM:

_____
CITY ATTORNEY

SIGNED AND DATED THIS _____DAY OF _____, 2020.

Attachment: Four City INTERLOCAL COOPERATION AGREEMENT (10-16-2020) (Resolution for Interlocal Agreement with Cedar Hills, Highland,

PLEASANT GROVE CITY

_____MAYOR

ATTEST:

_____
CITY RECORDER

APPROVED AS TO FORM:

_____
CITY ATTORNEY

HIGHLAND CITY

_____MAYOR

ATTEST:

_____
CITY RECORDER

APPROVED AS TO FORM:

_____
CITY ATTORNEY

SIGNED AND DATED THIS _____DAY OF _____, 2020.

Attachment: Four City INTERLOCAL COOPERATION AGREEMENT (10-16-2020) (Resolution for Interlocal Agreement with Cedar Hills, Highland,

REQUEST FOR COUNCIL ACTION
CITY OF AMERICAN FORK
OCTOBER 27, 2020

Department Public Works **Director Approval** *Scott Sensanbaugher*

AGENDA ITEM Review and action on a software license and maintenance agreement with Azteca Systems LLC. for Cityworks Asset Management Software.

SUMMARY RECOMMENDATION Staff recommends approval of the software licensing agreement with Azteca Systems, LLC for the Cityworks Asset Management Software in the amount of $17,500.

BACKGROUND Cityworks from Azteca Systems, LLC is the selected software for the citizen reporting, work management and asset management. Staff from the Public Works Department has reviewed several software offerings and selected Cityworks as the best alternative for citizen engagement, integration with city mapping software, and functionality for work management and asset management.

BUDGET IMPACT Within Approved Budget

SUGGESTED MOTION Move to approve the software licensing agreement with Azteca Systems, LLC for the Cityworks Asset Management Software in the amount of $17,500. And authorize staff to execute the agreement.

SUPPORTING DOCUMENTS

American Fork UT - Cityworks License Agreement_10_21_20 (PDF)

Azteca Systems, LLC, 11075 South State, Suite 24, Sandy, UT 84070
• TEL 801.523.2751 • FAX 801.523.3734 •
www.cityworks.com

CITYWORKS®
SOFTWARE LICENSE AND MAINTENANCE AGREEMENT

This Software License and Maintenance Agreement ("Agreement") is made by and between Azteca Systems, LLC ("Azteca Systems" or "Azteca") a Delaware limited liability company, with a place of business set forth on Addendum #1 below, and the **City of American Fork, Utah**, (hereinafter referred to as "Licensee" or "Customer"), using certain of Azteca Systems Licensed Products. This Software License and Maintenance Agreement is effective upon the date of signature by Licensee below (the "Effective Date").

Azteca Systems Products are licensed under the terms and conditions of this Agreement. This Agreement, when executed by the Licensee and Azteca Systems, as licensor of the Software, or the Online Services, and Documentation licensed under this Agreement, will supersede any previous agreements.

This Agreement includes (i) this Software License and Maintenance Agreement, (ii) Addendum #1 – Product Licensing, (iii) Addendum #2 – Standard Maintenance and Support, and (iv) Addendum #3 – Third-Party Contractor Acknowledgment.

This Agreement may be executed in duplicate by the Parties. An executed Agreement, modification, amendment, or separate signature page shall constitute a duplicate if it is transmitted through electronic means, such as fax or email, and reflects the signing of the document by any Party. Duplicates are valid and binding even if an original paper document bearing each Party's original signature is not delivered.

ARTICLE 1—DEFINITIONS

1.1 **Definitions**. The terms used are defined as follows:

a. "Agreement" means this Software License and Maintenance Agreement between Azteca Systems and Licensee, inclusive of all schedules, exhibits, attachments, addenda, and other documents incorporated by reference.
b. "Authorization Code(s)" means any key, authorization number, enablement code, login credential, activation code, token, account username and password, or other mechanism required for use of a Product.
c. "Authorized User" or "User" shall mean: (i) a direct user of the Licensed Products, including but not limited to Licensee's employees; (ii) Licensee's consultants who have agreed to maintain the Licensed Property in confidence and use it only for the benefit of Licensee, or (iii) members of the public gaining access to, and only limited use of, the Licensed Products via the Software's public web portal (if applicable). Other than limited use of the Products through the software's web portal, the public is not considered an authorized user.
d. "Beta" means any alpha, beta, or other prerelease version of a Product.
e. "Client Data" means the data provided or inputted by or on behalf of Licensee, including personally identifiable information, for use with the Software.
f. "Cloud Services" means both Azteca Systems Managed Cloud Services and Online Services.
g. "Covered Software" shall mean the particular Cityworks Software, scripts, interfaces and custom code identified in Addendum #1.
h. "Concurrent Use License" means that Licensee may install and use the Software on computer(s) on a network, but the number of simultaneous users (logins) may not exceed the number of licenses required.
i. "Testing Server License" means a license that authorizes Licensee to install and use the Software on a server in Licensee's internal use to provide testing License rights prior to deployment.
j. "Documentation" means all user reference documentation that is supplied to the Licensee by Azteca Systems pursuant to this Agreement for aiding or enabling the use of the Software and is deemed to include any Azteca Systems-provided revisions thereof.
k. "Internal Use" means use of the Licensed Products by employees of Licensee in Licensee's internal operations but does not include access of the Licensed Products by or use of the Licensed Products in the provisions of services to Licensee's clients or customers. Internal Use also includes use of the Licensed Products by contractors of Licensee, including contractors providing outsourcing or hosting services, as long as Licensee assumes full responsibility for the compliance with this Agreement in such use. Use of the Licensed Products (or any part thereof) for the benefit of others, whether by means of a software as a

Attachment: American Fork UT - Cityworks License Agreement_10_21_20 (Azteca Systems LLC. - Cityworks Software License Agreement)

service offering, service bureau application, application service provider, outsourcing, or other means of providing service to any third party shall not be considered Internal Use.

l. "Licensed Products" or "Products" shall mean the portion of the Cityworks Software and the Documentation to which Licensee has purchased a License as identified in Addendum #1 attached hereto. Licensed Products shall include any updates or upgrades to the Licensed Products that Azteca Systems may at its discretion deliver to Licensee. Products includes but is not limited to Software and Documentation licensed under the terms of this Agreement.

m. "Login" means a license that allows Licensee to permit a single authorized named end user to use the Software, Data, and Documentation installed on a server and accessed from a computer device.

n. "Malicious Code" means software viruses; worm time bombs; Trojan horses; or any other computer code, files, denial of service, or programs designed to interrupt, destroy, or limit the functionality of any computer software, hardware, or telecommunications equipment.

o. "Named User(s) is Licensee's employee, agent, consultant, or contractor to whom Licensee has assigned a unique, secure login credential (identity) enabling access to a Product that requires such identity in order to access identity-managed capabilities within a Product or subscription to Online Services for Licensee's exclusive benefit.

p. "Online Services" means the commercially available, internet-based asset management system that Azteca Systems provides (commonly known as Cityworks Online), including applications and associated APIs, for storing, managing, publishing, and using maps, data, and other information. Online services exclude Data and Content.

q. "Online Services Subscription" means a limited-term subscription conveying the right for one or more named users to access and use Online Services.

r. "Ordering Document(s)" means a sales quotation, purchase order, or other document identifying the Products that Licensee orders.

s. "Preview" means any alpha, beta, or prerelease Product.

t. "Product(s)" means Software and Documentation licensed under the terms of this Agreement.

u. "Sample(s)" means sample code, sample applications, sample add-ons, or sample extensions of Products.

v. "Server" means each single instance of an operating system, whether physically installed on a computer or within a virtualized environment.

w. "Software" or "Cityworks Software" means all or any portion of Azteca Systems proprietary software technology, excluding data, accessed or downloaded from an Azteca Systems (Cityworks) authorized website or delivered on any media in any format including backups, documentation, updates, upgrades, and service packs. Without limitation, the Software is deemed to include any alpha, beta, prerelease or restricted version(s), or final commercial release(s), provided in source, object, or executable code format(s), inclusive of backups, updates, service packs, sample code, or merged copies permitted hereunder or subsequently supplied under this Agreement. Unless otherwise indicated by the context herein, the term Software is also deemed to include its associated Documentation.

x. "Standard Maintenance" or "Maintenance Addendum" shall mean the Standard Software Maintenance & Support Addendum #2.

y. "Term License" means a license or access provided for use of a Product for a limited time period ("Term") or on a subscription or maintenance basis as specified herein.

ARTICLE 2—INTELLECTUAL PROPERTY RIGHTS AND RESERVATION OF OWNERSHIP

All Azteca Systems Offerings are the copyrighted works of Azteca Systems. Azteca Systems or its licensors own the Products and all copies, which are protected by United States and applicable international laws, treaties, and conventions regarding intellectual property and proprietary rights, including trade secrets. This Agreement does not transfer ownership rights of any description in the software, materials, products, or services to Licensee or any third party. Licensee agrees to use reasonable means to protect Products from unauthorized use, reproduction, distribution, or publication. All rights not specifically granted in this Agreement are reserved to Azteca Systems and its licensor(s). Azteca Systems does not acquire any rights in Customer Content under this Agreement other than as needed to provide Azteca Offerings and Services to Customer.

ARTICLE 3—GRANT OF LICENSE

3.1 **Grant of License**. Subject to the terms of this Agreement, Azteca Systems grants to Licensee a personal, nonexclusive, nontransferable license solely to use the Products as set forth in Addendum #1 – Product Licensing (i)

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for which the applicable license fees have been paid; (ii) for Licensee's own internal use; (iii) in accordance with this Agreement and the configuration ordered by Licensee or as authorized by Azteca Systems; and (iv) for the applicable Term or until terminated in accordance with Article 5. License types may include, but are not limited to Login, Workgroup, Departmental, ELA (Enterprise License) licenses. Licensee may allow Third-Party Contractors to access and use the licensed Software, provided Licensee and Third-Party Contractor agree to and are bound by the terms set forth in Addendum 3. In addition to the Scope of Use in Article 4, Addendum #1 – Product Licensing which applies to specific Products, Addendum #2 – Standard Maintenance and Support, and Addendum #3 – Third-Party Contractor Acknowledgment (if applicable) collectively, are incorporated by reference into this Agreement.

a. *Software.* Use and license for specific Software products are set forth in Addendum #1– Product Licensing, which is incorporated by reference.
b. *Maintenance.* Maintenance terms are set forth in Section 9.11 below and in Addendum #2 – Standard Maintenance and Support, which terms are incorporated by reference.
c. *Third Party Contractor.* Terms of use for Third-Party Contractor software usage (if applicable) are set forth in Addendum #3 – Third-Party Contractor Acknowledgment, which is incorporated by reference.

3.2 **Delivery**. Unless otherwise agreed, Azteca Systems shall provide an electronic link to make available to Licensee the Licensed Products by electronic download and a license key to activate the Licensed Products.

ARTICLE 4—SOFTWARE AND ONLINE SERVICES

4.1 Software Terms of Use

a. For Products delivered to Licensee, Licensee may:

1. Install, access, and store Products on electronic storage device(s);
2. Make archival copies and routine computer backups;
3. Install and use a newer version of Software concurrently with the version to be replaced during a reasonable transition period not to exceed 6 months, provided that the deployment of either version does not exceed the Licensee's licensed quantity; thereafter, Licensee shall not use more Software in the aggregate than Licensee's total licensed quantity; and
4. Move the Software in the licensed configuration to a replacement server.

b. Licensee may use, copy, or prepare derivative works of Documentation supplied in digital format and thereafter reproduce, display, and redistribute the customized documentation only for Licensee's own internal use. Portions of Documentation supplied in digital format merged with other software and printed or digital documentation are subject to this Agreement. Licensee shall include the following copyright attribution notice acknowledging the proprietary rights of Azteca Systems and its licensors: "Portions of this document include intellectual property of Azteca and its licensors and are used herein under license. Copyright © [*Licensee will insert the actual copyright date(s) from the source materials*] Azteca Systems, LLC. and its licensors. All rights reserved."

c. *Consultant or Contractor Access.* Subject to Section 3.1 and Addendum #3, Azteca Systems grants Licensee the right to permit Licensee's Third-Party Consultants or Contractors to use the Products exclusively and solely for Licensee's benefit. Licensee must comply with terms and provisions of Addendum #3 and provide a copy to Azteca Systems. Licensee shall be solely responsible for compliance by Third-Party Consultants and Contractors with this Agreement and shall ensure that the Third-Party Consultant or Contractor discontinues Product use upon completion of work for Licensee. Access to or use of Products by Third-Party Consultants or Contractors not exclusively for Licensee's benefit is prohibited.

4.2 Online Services Terms of Use

a. **Use of Online Services** is also subject to the Cloud Services Terms found in Addendum #2.
b. **Modification of Online Services**. Azteca Systems may change Online Services and associated APIs at any time, subject to 30 days' notice of material changes and 90 days' notice for deprecations. If any modification, discontinuation, or deprecation of Online Services causes a material, adverse impact to Customer's operations, Azteca Systems may, at its discretion, attempt to repair, correct, or provide a

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workaround for Online Services. If a viable solution is not commercially reasonable, Customer may cancel its subscription to Online Services, and Azteca Systems will issue a prorated refund.

4.3 **Named User Licenses**. Except as expressly set forth in this Agreement, the following terms apply to Software and Online Services for which Customer acquires Named User Licenses.

a. **Named Users**.

1. Named User login credentials are for designated users only and may not be shared with other individuals.
2. Customer may reassign a Named User License to another user if the former user no longer requires access to the Software or Online Services.
3. Customer may not add third parties as Named Users, other than third parties included within the definition of Named Users.

4.4 **Limited-Use Programs**.

a. **Trial, Evaluation, and Beta Programs**. Products acquired under a trial, evaluation, or beta program are licensed for evaluation and testing purposes only and not for commercial use. Any such use is at Customer's own risk and the Products do not qualify for Maintenance. If Customer does not convert to a purchased license or subscription prior to the expiration of the trial, evaluation, or beta license, Customer may lose any Customer Content and customizations made during the license term. If Customer does not wish to purchase a license or subscription, Customer should export such Customer Content before the license expires.

b. **Educational Programs**. Licensee agrees to use Products provided under an educational program solely for educational purposes during the educational use Term. Licensee shall not use Products for any Administrative Use unless Customer has acquired an Administrative Use license. "Administrative Use" means administrative activities that are not directly related to instruction or education, such as asset mapping, facilities management, demographic analysis, routing, campus safety, and accessibility analysis. Customer shall not use Products for revenue-generating or for-profit purposes.

c. **Other Azteca Systems Emergency or Limited-Use Programs**. If Licensee acquires Products under any limited-use program not listed above, Licensee's use of the Products may be subject to the terms set forth in the applicable launching page, letter, or enrollment form or as described on Azteca's website in addition to the nonconflicting terms of this Agreement.

4.5 **Uses Not Permitted**. Except to the extent that applicable law prohibits or overrides these restrictions, or as provided herein, Licensee shall not:

a. Sell, rent, lease, sublicense, lend, assign, or time-share Licensed Software or Products;
b. Permit persons other than Authorized Users to access or use the Licensed Products (or any part thereof);
c. Act as a service bureau or Commercial ASP;
d. Use Software, Data, or Documentation for a site or service and operate the site or service for profit or generate revenue through direct or indirect methods (e.g., advertising or by charging for access to the site or service);
e. Redistribute Software, Data, or Online Services to third parties, in whole or in part, including, but not limited to, extensions, components, or APIs;
f. Distribute Authorization Codes to third parties;
g. Reverse engineer, decompile, or disassemble Products;
h. Make any attempt to circumvent the technological measure(s) that controls access to or use of Licensed Products;
i. Upload or transmit content or otherwise use Products in violation of third-party rights, including intellectual property rights, privacy rights, nondiscrimination laws, or any other applicable law or government regulation;
j. Remove or obscure any Azteca Systems (or its licensors') patent, copyright, trademark, proprietary rights notices, and/or legends contained in or affixed to any Product, Product output, metadata file, or online and/or hard-copy attribution page of any Data or Documentation delivered hereunder;
k. Unbundle or independently use the individual or component parts of Software or Online Services;
l. Incorporate any portion of the Software into a product or service that competes with the Software;

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m. Publish the results of benchmark tests run on Software without the prior written permission of Azteca Systems; or
n. Use, incorporate, modify, distribute, provide access to, or combine any computer code provided with the Software in a manner that would subject such code or any part of the Software to open source license terms, which includes any license terms that require computer code to be (i) disclosed in source code form to third parties, (ii) licensed to third parties for the purpose of making derivative works, or (iii) redistributable to third parties at no charge.

ARTICLE 5—AZTECA SYSTEMS MANAGED CLOUD SERVICES

5.1 **Definitions**. The following are supplemental definitions provided in Article 1.

a. "Azteca Managed Cloud Services" means the hardware, Software, Data, network platform that Azteca Systems or its third-party supplier provides as part of Azteca Managed Cloud Services.
b. "Hosting" means the business of housing and making accessible Licensee Content via the internet.

5.2 **Provision of Azteca Managed Cloud Services.**

a. **General Terms**. Use of Azteca Systems Managed Cloud Services is subject to the Cloud Services terms found in Addendum #2 of this Agreement.
b. **Requirements Planning**. It is Customer's responsibility to plan for and address with Azteca Systems changes to Customer's requirements, such as the need for additional capacity, the update of an application or dataset, or increased level of system availability.
c. **Compensation and Expenses**. Azteca Systems will invoice Customer annually for the Azteca Systems Managed Cloud Services to be provided the upcoming year. Customer will pay invoices within 30 days of receipt. Customer is responsible for any shipping or temporary storage costs incurred during the delivery of Customer Content to Azteca Systems or removal of Customer Content from the Azteca Systems Managed Cloud Services environment.
d. **Risk of Loss**. Risk of loss for all Customer Content shall at all times remain with Customer, and it is Customer's sole responsibility to maintain regular backups of Customer Content.
e. **Personally Identifiable Information**. Prior to providing any Customer Content under this Agreement, Customer shall notify Azteca Systems if Customer Content includes personally identifiable information.
f. **Public Software**. Customer may not use, and may not authorize its end users or contractors to combine or use any Azteca Systems Offerings with any software (including any underlying dependencies), documentation, or other material distributed under an open source or other similar licensing or distribution model that requires as a condition of such model that any component of the Azteca Systems Offering to be (i) disclosed or distributed in source code form, (ii) made available free of charge to third parties, or (iii) modifiable without restriction by third parties.
g. **Monitoring**. Licensee will provide information and other materials related to its Licensee Content as reasonably requested by Azteca Systems or its Hosting partner to verify Azteca's or Licensee's compliance with this Agreement. Azteca Systems or its Hosting partner, as applicable, may browse, index, or otherwise monitor the external interfaces of any Licensee Content solely for the purpose of verifying compliance with this Agreement.

ARTICLE 6—TERM AND TERMINATION

6.1. The initial term of this Agreement will begin on the Effective Date, or upon such latter dates set forth in Addendum #1, and in each case provided a valid purchase authorization is issued. This Agreement may then be renewed annually by payment of the then current maintenance fees for the next annual maintenance period as set forth in Addendum #1.

6.2. Either party may terminate this Agreement or any Product license for a material breach that is not cured within thirty (30) days of written notice to the breaching party, except that termination shall be deemed to have immediate effect for a material breach that is impossible to cure.

6.3. **Termination by Licensee**. In the event that either funding from Licensee or other sources is withdrawn, reduced, or limited, or the authority of Licensee to perform any of its duties is withdrawn, reduced, or limited in any way after the Effective Date of this Agreement, Licensee may terminate subsequent Term Maintenance Periods by

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giving Azteca Systems thirty (30) days' written notice prior to the end of the current Term Maintenance Period. The effective date of such termination will be the start of the subsequent Term.

6.4. **Termination by Azteca Systems**. Azteca Systems may terminate this Software License and Maintenance Agreement and/or any license granted hereunder if:

a. Licensee violates its obligations under this Software License and Maintenance Agreement and fails to cure the breach within thirty (30) days after Azteca Systems' written notification, provided however, that no cure period prior to termination will be required as noted in section 6.2.
b. Licensee ceases to do business in the ordinary course, or becomes insolvent, enters bankruptcy, reorganization, composition or other similar proceedings under applicable laws, whether voluntary or involuntary, or admits in writing its inability to pay its debts, or makes or attempts to make an assignment for the benefit of creditors. Such termination shall be effective upon notice to such party or as soon thereafter as is permitted by applicable law.

6.5. Upon termination of the License and Maintenance Agreement, all Product licenses granted hereunder terminate as well. Upon termination of a License or the Software License and Maintenance Agreement, Licensee will (i) stop accessing and using affected Product(s); (ii) clear any client-side data cache derived from Online Services; and (iii) uninstall, remove, and destroy all copies of affected Product(s) in Licensee's possession or control, including any modified or merged portions thereof, in any form, and execute and deliver evidence of such actions to Azteca Systems.

6.6. If this Agreement is terminated per section 6.3, the Licensee is only liable for payment required by the terms of this Agreement for license, maintenance, and support services rendered or products and software received and accepted prior to the effective date of termination.

6.7. If this Agreement is terminated per section 6.3 or 6.4, Licensee shall then return to Azteca Systems all of the Software, related modules, related updates, and any whole or partial copies, codes, modifications, and merged portions in any form. Azteca will then, for no additional charge to Licensee and at Licensee's option, either grant a license to the Licensee for a period of one (1) year, which will allow Licensee to retain the ability to access records and data contained in the Software, or allow Licensee to create digital copies of all files needed by the Licensee for the same period. If Licensee needs to retain access to records or data for a period longer than one (1) year, in order to transfer data to another system, Azteca will consider reasonable requests to extend beyond one (1) year.

6.8. If Licensee has an Online Services Subscription, Managed Cloud Services, or Online Services Product, then upon termination per section 6.3 or 6.4, Azteca Systems will provide Licensee the ability for 30 days to download, backup, or otherwise archive all Licensee Data.

6.9. The parties hereby agree that all provisions which operate to protect the intellectual rights of Azteca Systems shall remain in force should breach or termination of any kind occur.

ARTICLE 7—LIMITED WARRANTIES AND DISCLAIMERS

7.1 **Limited Warranties**. Except as otherwise provided in this Article 7, Azteca Systems warrants for a period of ninety (90) days from the date Azteca Systems issues the Authorization Code enabling use of Software and that the unmodified Software will substantially conform to the published Documentation under normal use and service.

7.2 **Special Disclaimer**. **Third-Party Content; Data; Samples; hot fixes; patches; updates; Online Services provided at no charge; and trial, evaluation, and beta Products are delivered "as is" and without warranty of any kind.**

7.3 **Disclaimers**.

a. **Internet Disclaimer**. Neither party will be liable for damages under any theory of law related to the performance or discontinuance of operation of the internet or to regulation of the internet that might restrict or prohibit the operation of Cloud Services.

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b. **Third-Party Websites; Third-Party Content**. Azteca Systems is not responsible for any third-party website or third-party content that appears in or is referenced by Azteca Systems Products or Azteca Systems websites, including www.cityworks.com and www.mycityworks.com. Providing links to third-party websites and resources does not imply an endorsement, affiliation, or sponsorship of any kind.

7.4 **General Disclaimer**. **Except for the express limited warranties set forth in this Agreement, Azteca Systems disclaims all other warranties or conditions of any kind, whether express or implied, including, but not limited to, warranties or conditions of merchantability, fitness for a particular purpose, or non-infringement of intellectual property rights. Azteca Systems is not responsible for any nonconformities with Specifications or loss, deletion, modification, or disclosure of Licensee Content caused by Licensee's modification of any Azteca Systems Product or Service other than as specified in the Documentation. Azteca Systems does not warrant that Products and Services hereunder or Licensee's operation of the same, will be uninterrupted, error free, fault-tolerant, or fail-safe or that all nonconformities can or will be corrected. Products are not designed, manufactured, or intended for use in environments or applications that may lead to death, personal injury, or physical property/environmental damage. Licensee should not follow any suggestions or instructions that appear to be hazardous, unsafe, or illegal. Any such use shall be at Licensee's own risk and cost.**

7.5 **Exclusive Remedy**. Licensee's exclusive remedy and Azteca Systems' entire liability for breach of the limited warranties set forth in this Section shall be limited to replace any defective media; (i) repair, correct, or provide a workaround for the applicable Products or Services and subject to the Azteca Systems Maintenance Services and Support Addendum; or (ii) at Azteca Systems election, terminate Licensee's right to use and refund the fees paid for Azteca Systems Products or Services that do not meet Azteca Systems limited warranties, provided that Licensee uninstalls, removes, and destroys all copies of Software or Documentation; ceases using the Software or Online Services; and executes and delivers evidence of such actions to Azteca Systems.

ARTICLE 8—LIMITATION OF LIABILITY

8.1 **Disclaimer of Liability. Neither Licensee, Azteca Systems, nor any Azteca Systems distributor or third party licensor will be liable for any indirect, special, incidental, or consequential damages; lost profits; lost sales; loss of goodwill; costs of procurement of substitute goods or services; or damages exceeding the applicable license fees paid for the current Term support period, or current Subscription fees, or Services fees actually paid to Azteca Systems for the Azteca Systems Products or Services giving rise to the cause of action**.

8.2 The limitations and exclusions of liability in the preceding paragraph do not apply to Licensee's infringement, misuse, or misappropriation of Azteca Systems or Azteca Systems licensors' intellectual property rights, either party's indemnification obligations, gross negligence, willful misconduct, or violations of the Export Compliance clause of this Agreement or any applicable law or regulation.

8.3 **Applicability of Disclaimers and Limitations**. Azteca Systems (or its authorized distributor if any) has set its fees and entered into this Agreement in reliance on the disclaimers and limitations in this Agreement; the fees reflect an allocation of risk that is an essential basis of the bargain between the parties. **These limitations will apply whether or not a party is aware of the possibility of any damage and notwithstanding any failure of essential purpose of any exclusive, limited remedy.**

8.4 The foregoing warranties, limitations, and exclusions may be invalid in some jurisdictions and apply only to the extent permitted by applicable law or regulation in Licensee's jurisdiction. Licensee may have additional rights under law that may not be waived or disclaimed. Azteca Systems does not seek to limit Licensee's warranty or remedies to any extent not permitted by law.

ARTICLE 9—INDEMNIFICATIONS

9.1 **Definitions**. The following definitions supplement the definitions provide in Article 1:

a. "Claim" means any claim, action, or demand by a third party.
b. "Indemnitees" means Customer and its directors, officers, and employees.

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c. "Infringement Claim(s)" means any Claim alleging that Customer's use of or access to any Azteca Systems Products or Services infringes a patent, copyright, trademark, or trade secret.
d. "Loss(es)" means expenditure, damage award, settlement amount, cost, or expense, including awarded attorney's fees.

9.2 **Infringement Indemnity**.
a. Azteca Systems will defend, hold all indemnitees harmless from and against any Loss arising out of an Infringement Claim.
b. If Azteca Systems determines that an Infringement Claim is valid, Azteca Systems may, at its expense, either (i) obtain rights for Customer to continue using the Azteca Systems Products or Services or (ii) modify the Azteca Systems Products or Services while maintaining substantially similar functionality. If neither alternative is commercially reasonable, Azteca Systems may terminate Licensee's right to use the Azteca Systems Products or Services and will refund any unused portion of fees paid for Term Licenses, Subscriptions, and Maintenance.
c. Azteca Systems has no obligation to defend an Infringement Claim or to indemnify Customer to the extent the Infringement Claim arises out of (i) the combination or integration of Azteca Systems Products or Services with a product, process, or system or element not supplied by Azteca Systems or specified by Azteca Systems in its Documentation, (ii) alteration of Azteca Systems Products or Services by anyone other than Azteca Systems or its subcontractors, (iii) compliance with Licensee's specifications, or (iv) use of Products or Services after Azteca Systems either provides a modified version to avoid infringement or terminates Licensee's right to use the Products or Services.

9.3 **General Indemnity**. Azteca Systems will defend and hold all Indemnitees harmless from, and indemnify any Loss arising out of, any Claim for bodily injury, death, or tangible or real property damage brought against any of the Indemnitees to the extent arising from any negligent act or omission or willful misconduct by Azteca Systems or its directors, officers, employees, or agents performing Services while on Customer's site.

9.4 **Conditions for Indemnification**. As conditions for indemnification, Indemnitee will (i) promptly notify Azteca Systems in writing of the Claim, (ii) provide all available documents describing the Claim, (iii) give Azteca Systems sole control of the defense of any action and negotiation related to the defense or settlement of any Infringement Claim, and (iv) reasonably cooperate in the defense of the Infringement Claim at Azteca Systems request and expense.

9.5 **This section sets forth the entire obligation of Azteca Systems, its authorized distributor (if any), and its third-party licensors (if any) regarding any Claim for which Azteca Systems must indemnify Licensee**.

ARTICLE 10—GENERAL PROVISIONS

10.1 **Export Control Regulations**. Licensee expressly acknowledges and agrees that Licensee shall not export, re-export, import, transfer, or release Products, in whole or in part, to (i) any US embargoed country, (ii) any person on the US Treasury Department's list of Specially Designated Nationals, (iii) any person or entity on the US Commerce Department's Denied Persons List, Entity List, or Unverified List, or (iv) any person or entity or into any country where such export, re-export, or import violates any US, local, or other applicable import/export control laws or regulations including, but not limited to, the terms of any import/export license or license exemption and any amendments and supplemental additions to those import/export laws as they may occur from time to time.

10.2 **Taxes and Fees, Shipping Charges**. License and Subscription fees quoted to Licensee are exclusive of any and all taxes or fees, including, but not limited to, sales tax, use tax, value-added tax (VAT), customs, duties, or tariffs, and shipping and handling charges.

10.3 **No Implied Waivers**. The failure of either party to enforce any provision of this Agreement shall not be deemed a waiver of the provisions or of the right of such party thereafter to enforce that or any other provision.

10.4 **Severability**. The parties agree that if any provision of this Agreement is held to be unenforceable for any reason, such provision shall be reformed only to the extent necessary to make the intent of the language enforceable.

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10.5 **Successor and Assigns**. Licensee shall not assign, sublicense, or transfer Licensee's rights or delegate Licensee's obligations under this Agreement without Azteca Systems' prior written consent, and any attempt to do so without consent shall be void. This Agreement shall be binding on the respective successors and assigns of the parties to this Agreement. Notwithstanding, a government contractor under contract to the government to deliver Products may assign this Agreement and Products acquired for delivery to its government customer upon written notice to Azteca Systems, provided the government customer assents to the terms of this Agreement.

10.6 **Survival of Terms**. The provisions of Articles 2, 6, 7, 8, 9 and 10 of this Agreement, and the provisions of section 4.1 of Addendum #2, shall survive the expiration or termination of this Software License and Maintenance Agreement.

10.7 **US Government Licensee**. The Products are commercial items, developed at private expense, provided to Licensee under this Agreement. If Licensee is a US government entity or US government contractor, Azteca Systems licenses Products to Licensee in accordance with this Agreement under FAR Subparts 12.211/12.212 or DFARS Subpart 227.7202. Azteca Systems Data and Online Services are licensed under the same subpart 227.7202 policy as commercial computer software for acquisitions made under DFARS. The commercial license rights in this Agreement strictly govern Licensee's use, reproduction, or disclosure of Products. Azteca Systems Software source code is unpublished, and all rights to Products are reserved by Azteca Systems and its licensors. Licensee may transfer Software to any licensed government procuring agency facility to which computer(s) on which Software is installed are transferred. If any court, arbitrator, or board holds that Licensee has greater rights to any portion of Products under applicable public procurement law, such rights shall extend only to the portions affected.

10.8 **Governing Law**. This Agreement is not subject to the United Nations Convention on Contracts for the International Sale of Goods.

- **Government Entities**. If Licensee is a government entity, the applicable laws of the Licensee's jurisdiction govern this Agreement.
- **Nongovernment Entities**. US federal law and the law of the State of Utah exclusively govern this Agreement, excluding their respective choice of law principles.

10.9 **Dispute Resolution**. The parties will use the following dispute resolution process:

- **Equitable Relief**. Either party will have the right to seek an injunction, specific performance, or other equitable relief in any court of competent jurisdiction without the requirement of posting a bond or proving injury as a condition for relief.
- **US Government Agencies**. This Agreement is subject to the Contract Disputes Act of 1978, as amended (41 USC 601-613).
- **Other Government Entities**. Azteca Systems will comply with mandatory dispute resolutions under applicable law.
- **Negotiation and Litigation**. The parties will attempt negotiation in good faith and a spirit of mutual cooperation. Except as noted above, any dispute not resolved through negotiation in good faith shall be resolved by a court of competent jurisdiction in the state of Utah. If Customer is outside the United States, the Rules of Arbitration of the International Chamber of Commerce will govern the proceedings. The parties will select a single arbitrator in accordance with the applicable arbitration rules. The language of the arbitration will be English. Arbitration will be at an agreed-upon location. Either party will, at the request of the other, make available documents or witnesses relevant to the major aspects of the dispute.

10.10 **Maintenance**. Maintenance for qualifying Software consists of updates (provided on a when-and-if available basis) and other benefits, such as access to technical support, which are provided during the Term. Maintenance is specified as set forth in Addendum #2.

10.11 **Audit**. Upon Azteca System's written request, Licensee shall certify in a signed writing that its use of the Licensed Product is in full compliance with the terms of this Agreement (including any restrictions herein). Azteca Systems, or its authorized representative, may, upon prior reasonable notice of at least ten (10) days, inspect and audit Licensee's records and use of the Licensed Products to confirm compliance with this Agreement. All such inspections and audits will be conducted during regular business hours and in a manner that does unreasonably interfere with ordinary business activities. Licensee shall be responsible for any audit costs only in the event that

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such audit reveals that Licensee's use is not in accordance with the permitted uses under this Agreement, and for unpaid license fees.

10.12 **Feedback**. Azteca Systems may freely use any feedback, suggestions, or requests for Product improvements that Licensee provides to Azteca Systems. Regardless of the source of any feedback or suggestions, any improvements to Software or Products, and any related intellectual property, are owned by Azteca Systems.

10.13 **Patents**. Licensee may not seek, and may not permit any other user to seek, a patent or similar right worldwide that is based on or incorporates any Azteca Systems technology or services. This express prohibition on patenting shall not apply to Licensee's software and technology except to the extent that Azteca Systems technology or services, or any portion thereof, are a part of any claim or preferred embodiment in a patent application or a similar application.

10.14 **Force Majeure**. A party will not be liable for any failure of or delay in the performance of this Agreement for the period that such failure or delay is due to causes beyond the party's reasonable control. Such causes may include, but are not limited to, acts of God, war, strikes, labor disputes, cyber-attacks, laws, regulations, government orders, or any other force majeure event.

10.15 **Independent Contractor**. Azteca Systems is and at all times will be an independent contractor. Nothing in this Agreement creates an employer/employee, principal/agent, or joint venture relationship between Azteca Systems and the Licensee. No party has any authority to enter into contracts on behalf of another party or otherwise act on behalf of another party.

10.16 **Entire Agreement**. This Agreement, including its incorporated documents, addendums, and exhibits constitutes the sole and entire agreement of the parties as to the subject matter set forth herein and supersedes any previous license agreements, understandings, and arrangements between the parties relating to such subject matter. Additional or conflicting terms set forth in any purchase orders, invoices, or other standard form documents exchanged during the ordering process, other than product descriptions, quantities, pricing, and delivery instructions, are void and of no effect. Any modification(s) or amendment(s) to this Agreement must be in writing and signed by each party or as otherwise provided in Addendum #1.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed and made effective by their respective authorized representatives.

AZTECA SYSTEMS, LLC	**CITY OF AMERICAN FORK, UT** – (LICENSEE)
By: _____	By: _____
Name: Brian L. Haslam	Name: _____
Title: President - CEO	Title: _____
Date: ____/____/____	Date: ____/____/____

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ADDENDUM #1

PRODUCT LICENSING

1. **Licensed Software:**

Server AMS Custom Cityworks Online Enterprise License Agreement (ELA), Includes Unlimited Quantities of the Identified Products:
Office
Respond
Mobile Native Apps (for iOS/Android)

--Includes the following Add-ons:
Cityworks Analytics for AMS
eURL (Enterprise URL)
Workload
Web Hooks
CCTV Interface for PACP
Pavement Management
Citizen Engagement API
Local Government Templates (LGT)
Use of Cityworks AMS Application Programming Interfaces (APIs) with commercially available Cityworks-centric applications that are
licensed and maintained by authorized Cityworks partners

Annual fee herein is based on a 25,001 - 50,000 population range.

ELA pricing herein for CWOL assumes no hosting logins are added over and above the current 50 Server AMS hosting Logins. Additional hosting logins can be added for an additional fee.

Additional Software Products & Licenses & Annual Renewals: Additional Software Products & Licenses may be added to this Agreement as well as annual renewals of this Agreement with either an acknowledgement of an official Cityworks quote signed by Licensee and additional fees, if necessary or applicable being paid, or receipt of Purchase Order from Licensee in response to an official Cityworks quote and additional fees, if applicable, being paid.

2. **Notices & Licensee Information: Until or unless otherwise modified, all notices relevant to this agreement shall be sent to the following address:**

Azteca Systems, LLC 11075 South State, Suite 24 Sandy, Utah 84070	**City of American Fork** 51 E. Main St. American Fork, UT 84003
	Attn: Scott Sensanbaugher
	E-mail: ssensanbaugher@afcity.net
	Phone: 801.763.3000

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3. **Effective Date of Software (Date Software made available)**

MM/DD/YYYY
11/15/2020

4. **Schedule of Payments and/or Fees under Agreement**

Annual Period	Date From/To (mm/dd/yyyy)	Amount
Period 1	**11/15/2020 – 11/14/2021**	**$17,500.00**
Period 2	**11/15/2021 – 11/14/2022**	**$27,500.00**
Period 3	**11/15/2022 – 11/14/2023**	**$40,000.00**
Period 4	**11/15/2023 – 11/14/2024**	**$45,000.00**

5. **Additional Items (If Any):**

Cityworks Online (CWOL) – is a Cityworks Online services subscription for the right to access and use the Online Services for the products identified hereinabove. CWOL is a highly scalable software-as-a-service (SaaS) offering. It is hosted on Azteca Systems' servers and completely scaled, managed, updated, backed up, and maintained by Azteca Systems. Because Azteca Systems controls the update schedule, users are not responsible for upgrading, managing, or patching the system themselves.

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ADDENDUM #2
STANDARD MAINTENANCE AND SUPPORT

Standard Maintenance and Support Addendum provisions are between the Licensee and Azteca Systems, LLC ("Azteca Systems" or "Azteca"). Maintenance and support are provided subject to the terms and conditions of the signed Software License and Maintenance Agreement and which is incorporated by reference.

1. **MAINTENANCE & SUPPORT**: Azteca Systems will provide maintenance and support services to Licensee for qualifying Products during the applicable Term for such Products provided the applicable license and maintenance fees have been paid for the times and periods and amounts specified in Addendum #1. Maintenance and Support services consist of the following benefits: maintenance items (provided on a when-and-if available basis) which may include subsequent version releases of the licensed software, service packs, upgrades and updates, and technical support.

1.1. Azteca Systems will ensure upward compatibility for the licensed software applications within a reasonable timeframe for minor Esri® ArcGIS and Cityworks supported database revisions. Azteca Systems will not ensure upward compatibility for licensed software applications when there are major Esri ArcGIS revisions (for example, from rev 10.x to rev 11.x), however Azteca Systems will make all reasonable efforts to provide upward compatibility.

1.2. Azteca Systems shall, without additional charge (except as allowed for in paragraph 3.4), during the term of this Agreement provide the following:

a. **Software Updates**. Software Updates includes upgrades and service packs which are a collection of files that enhance or correct the licensed software, and which will be available for Licensee to download during the Maintenance Term/Period. Updates and upgrades may also include new versions;
b. Provide Telephone Support, Email Support, Web Support, during normal business hours, 8 AM to 5 PM Mountain Time, Monday through Friday (excepting Holidays) and after hour emergency support line, and other benefits deemed appropriate by Azteca Systems (as set forth in Section 2 below); and
c. Implement and maintain a means of secure, remote direct network access (VPN, Web-access, etc.) to the Licensee's systems in order to perform thorough remote diagnostics.

1.3 The following items, among others, however, are specifically excluded as support services under this Addendum:

a. Support for applying or installing upgrades and service packs;
b. Assistance with questions related to third-party software, computer hardware, networking, and other similar items that are not provided by Azteca;
c. Assistance with computer operating system questions not directly pertinent to the licensed software;
d. Licensee Data debugging and/or correcting;
e. Services necessitated as a result of any cause other than authorized ordinary and proper use by the Licensee of the licensed software, including but not limited to neglect, abuse, unauthorized modifications, and/or unauthorized updates;
f. Consulting regarding customizations created to function with the licensed software unless the customization is identified and listed as licensed software in Addendum #1;
g. Assistance with applications which are not part of a standard life cycle, such as preview, beta, or candidate releases; and
h. Questions such as configuration, implementation, and walk-throughs.

1.4 Support Periods are renewable unless terminated as provided in Section 3 below.

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1.5. Technical support provided pursuant these maintenance provisions shall be performed in a professional and workmanlike manner. Azteca Systems will use commercially reasonable efforts to provide corrections to a technical issue or provide a workaround, but Azteca Systems cannot guarantee that all technical issues can be fixed or resolved.

1.6. **Authorized Callers**. Licensee may designate a limited number of authorized callers per software product listed in Addendum #1. Licensee may replace Authorized Callers at any time by notifying Azteca Systems Support services. Authorized callers may be designated in this Addendum #2 or by email. Azteca may limit the total number of authorized callers as may be reasonably necessary and may request an updated list of authorized callers.

1.7. **Cityworks Online Support and Customer Portal**. Azteca has created a self-help support website center for Authorized Callers to submit technical issues, chat with technical specialists, track technical support incidents through the 'MyCityworks' portal, and view technical articles, updated product documentation, blogs, links to forums, and technology announcements. The support and care website can be found at http://www.mycityworks.com.

1.8. **Additional Support Items**.

a. On a when-and-if available basis, updates to the licensed software (Addendum #1) means subsequent releases of the program which Azteca generally makes available to its customers who are under an active Software License and Maintenance Agreement for which fees have been paid for the relevant support period.

b. Occasionally, Azteca changes the name of its licensed software as part of its ongoing process to improve and increase the functionality of the software. In the event the software licensed or listed in Addendum #1 changes in name, and/or improvements are made, Azteca will provide software with functionality that is similar to or with substantially the same or greater functionality of the originally licensed software, provided all current license or maintenance fees have been paid.

c. Updates may not always include any release, option, or future program that Azteca licenses separately. Updates are provided on a when-and-if available basis as determined by Azteca Systems. Azteca Systems is under no obligation to develop any future programs or functionality. Any updates made available will made available to you for download. Customer is responsible for copying, downloading, and installing the updates.

2. PROCEDURES FOR ACCESSING SUPPORT

2.1. All problem categories from routine, non-critical and critical, that occur during normal business hours shall procedurally occur as follows: 1) Licensee's system administration staff as first line of support, and then 2) Azteca Systems staff as the second line of support. Azteca Systems will make all reasonable efforts to acknowledge all requests for support during normal business hours within four (4) hours.

2.2. Prior to calling Azteca Systems for support services, the Licensee will first attempt to isolate any problems that occur within the Licensee's System. The Licensee will try to reduce the problem down to a specific software or system component. If it is determined that the problem is the Cityworks Software component, Licensee will first try and resolve the problem without Azteca Systems' involvement. If Licensee cannot resolve the problem or isolate the problem, Licensee may contact Azteca Systems via telephone, chat, or self-service portal. In each case, Cityworks technical support will log the information and provide an answer to the question, a resolution to the problem, or submit a verified bug to the development group. Any support request that is not quickly resolved will be assigned to a technical support representative. Phone calls and chat requests are accepted during normal business hours as outlined on the Contact Support page of MyCityworks.com. Voicemails and requests submitted via the self-service portal outside of the posted business hours will be responded to on a first come, first served basis the next business day.

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2.3. For critical problems that occur outside of Azteca Systems' normal business hours (8 AM to 5 PM, Mountain Time) and cannot be isolated and resolved by the Licensee, Azteca Systems will provide an after-hours phone number or pager number that will forward the call to the currently assigned Azteca Systems support representative. Azteca Systems will make all reasonable efforts to acknowledge and respond to the request for support for critical problems that occur outside of normal business hours within four (4) hours of receipt of the call from a designated and authorized Licensee representative. Critical problems are defined as problems that cause several users to be unable to perform their duties. For routine and non-critical problems, Licensee will submit support requests during normal business hours as outlined in 2.2 above.

2.4. After a Technical Support Incident is logged, Azteca Systems will use commercially reasonable efforts to provide corrections to a technical issue or provide a work around. While it is Azteca's goal to provide an acceptable solution to technical issues, Azteca cannot guarantee that all technical issues can be fixed or resolved.

2.5. Azteca will use all reasonable efforts to utilize remote support-type services. However, in the event Licensee and Azteca Systems agree it becomes necessary for Azteca Systems to be on-site to provide support for the covered Software, the parties by mutual negotiation, shall develop a separate agreement that will govern the terms and conditions for any on-site work or services.

3. CHARGES/FEES

3.1. License, Maintenance, and Support Services herein are included in the payment of annual fees as set forth in Addendum #1 and shall be paid by Licensee. The annual fee for each twelve (12) month period is set forth in Addendum #1 and shall be paid prior to the start for each License and Maintenance Period unless otherwise specified. The annual fee for successive Terms/Periods (twelve-month periods) commencing upon the anniversary of the first maintenance period, shall become due prior to the end of the preceding paid-up Maintenance Period.

3.2. Upon sixty (60) days written notice, the fee for the License and Maintenance Periods listed in Addendum #1 subsequent to year one (1) of the Maintenance Period, may be adjusted by Azteca Systems to reflect increases in costs of providing the services; provided, however, that the fee shall not increase by more than the CPI from the previous annual fee. "CPI" shall mean for all Urban Consumers, the U.S. City Average, for all items, 1982-84=100 (the "CPI-U"), as published by the Bureau of Labor Statistics, U.S. Department of Labor. Azteca Systems will notify Licensee of the new pricing no later than sixty (60) days prior to the annual renewal date of the year preceding the year for which such adjusted pricing applies.

3.3. **Maintenance Expiration**. Azteca Systems will send Licensee a notice of expiration approximately sixty (60) days before the Maintenance term expires. If Azteca Systems does not receive a purchase order prior to the expiration date, Azteca will send the notification to Licensee upon expiration of the Maintenance term. All other Maintenance benefits and Support services will end with the expiration of the Maintenance term.

3.4. **Reinstatement Fee for Lapsed Maintenance**. Azteca Systems will reinstate Maintenance if Licensee sends a purchase order or payment within thirty (30) days of the expiration date. If Licensee does not renew Maintenance within thirty (30) days of the expiration date but at a later date wants to reinstate Maintenance, Maintenance fees will include the Maintenance fees that Licensee would have paid since the expiration date.

4. MANAGED CLOUD AND ONLINE SERVICES

4.1. **Prohibited Uses**. Licensee shall not provide Customer Content or otherwise access or use Cloud Services in a manner that:

a. Creates or transmits spam, spoofings, phishing emails, or offensive or defamatory material; or stalks or makes threats of physical harm;

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b. Stores or transmits any Malicious Code;

c. Violates any law or regulation;

d. Infringes or misappropriates the rights of any third party;

e. Probes, scans, or tests the vulnerability of Cloud Services or breaches any security or authentication measures used by Cloud Services without written approval from Azteca Systems product security officer; or

f. Benchmarks the availability, performance, or functionality of Cloud Services for competitive purposes.

4.2. **Service Interruption**. System failures or other events beyond Azteca's reasonable control may interrupt Customer's access to Cloud Services. Azteca Systems may not be able to provide advance notice of such interruptions.

4.3. **Licensee Content**.

a. Licensee grants Azteca Systems and its subcontractors a nonexclusive, nontransferable, worldwide right to host, run, modify, and reproduce Licensee Content as needed to provide Cloud Services to Licensee. Azteca Systems will not access, use, or disclose Customer Content without Customer's written permission except as reasonably necessary to support Customer's use of Cloud Services. Except for the limited rights granted to Azteca Systems under this Agreement, Customer retains all its rights, title, and interest in the Customer Content.

b. If Customer accesses Cloud Services with an application provided by a third party, Azteca Systems may disclose Customer Content to such third party as necessary to enable interoperation between the application, Cloud Services, and Customer Content.

c. Azteca Systems may disclose Customer Content if required to do so by law or regulation or by order of a court or other government body, in which case Azteca Systems will reasonably attempt to limit the scope of disclosure.

d. When Customer's use of Cloud Services ends, Azteca Systems will either:

   1. Make Customer Content available to Customer for download for a period of thirty (30) days unless Customer requests a shorter window of availability or Azteca Systems is legally prohibited from doing so; or

   2. Download all Customer Content in Azteca Systems' possession to a medium of Customer's choosing and deliver such Customer Content to Customer.

Azteca Systems will have no further obligations to store or return Customer Content at the conclusion of the Cloud Services.

4.4. **Removal of Customer Content**. Azteca Systems may remove or delete Customer Content if there is reason to believe that uploading Customer Content to or using it with Cloud Services materially violates this Agreement. If reasonable under these circumstances, Azteca Systems will notify Customer before removing Customer Content. Azteca Systems will respond to any Digital Millennium Copyright Act takedown notices in accordance with Azteca Systems copyright policy, available at www.cityworks.com/legal.

4.5. **Service Suspension**. Azteca Systems may suspend access to Cloud or Online Services (i) if Customer materially breaches this Agreement and fails to timely cure the breach, (ii) if Azteca Systems reasonably believes that Customer's use of Cloud Services will subject Azteca Systems to immediate liability or adversely affect the integrity, functionality, or usability of the Cloud Services, (iii) for scheduled maintenance, (iv) to enjoin a threat or attack on Cloud Services, or (v) if Cloud Services become prohibited by law or regulated to a degree that continuing to provide them would impose a commercial hardship. When feasible, Azteca Systems will notify Customer of any Cloud Services suspension beforehand and give Customer reasonable opportunity to take remedial action.

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Azteca Systems is not responsible for any damages, liabilities, or losses that may result from any interruption or suspension of Cloud Services or removal of Customer's content as described above.

4.6. **Notice to Azteca Systems**. Licensee will promptly notify Azteca Systems if Customer becomes aware of any unauthorized use of Customer's subscription or any other breach of security regarding Cloud Services.

5. **MISCELLANEOUS**

5.1. **Data Confidentiality Statement**. Azteca Systems will take reasonable measures to ensure that any Licensee data and/or confidential information provided to Azteca Systems is not inappropriately accessed or distributed to any third-party. Data provided to Azteca Systems by the Licensee may be loaded onto Azteca Systems servers or employee computers for the purpose of testing the Cityworks Software, database structure, or database values, and related Esri® software to resolve database or software performance issues, software enhancements, and software defects. At no time will the data be distributed to individuals or organizations who are not Azteca Systems employees without first receiving written approval from Licensee. If requested by the Licensee, and once the testing has been completed, Azteca Systems will delete all data provided by the Licensee.

5.2. **No Implied Waivers**. No failure or delay by Azteca Systems or Licensee in enforcing any right or remedy under this Agreement shall be construed as a waiver of any future or other exercise of such right or remedy by Azteca Systems.

5.3. Azteca Systems will use commercially reasonable efforts to ensure that Azteca Systems Products and Offerings will not transmit any Malicious Code to Licensee. Azteca Systems is not responsible for Malicious Code that Licensee introduces to Azteca Systems Products or Offerings or that is introduced through Third-Party Content. Malicious Code means software viruses; worms, time bombs, Trojan horses; or any other computer code, files, denial of service, or programs designed to interrupt, destroy, or limit the functionality of any computer software, hardware, or telecommunications equipment.

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ADDENDUM #3

THIRD-PARTY CONSULTANT/CONTRACTOR ACKNOWLEDGMENT

If Licensee engages any third party or contractor (Third Party) and desires to grant access to use the Licensed Software, the access may be granted subject to the following terms conditions and provisions:

1. Access and use of the Licensed Products by Third Party is solely for Licensee's benefit;

2. Third Party (or, if applicable, its employee) shall be considered the Authorized User for purposes of the applicable license type, and all use shall be in accordance with the terms and conditions of the Cityworks Software License and Maintenance Agreement with Licensee;

3. Before accessing the Licensed Products, Third Party agrees that (i) the software shall be used solely in accordance with the terms of this Agreement, and (ii) said contractor shall be liable to Azteca Systems for any breach by it of this Agreement;

4. Licensee hereby agrees and acknowledges that Licensee will be responsible for all use by Third Party with respect to the use of the Licensed Products;

5. Upon expiration or termination of this Agreement, the rights of usage of Third Party shall immediately terminated;

6. Use of the Products by Third Party will be governed by the terms of this Agreement, and will require that Licensee purchase the appropriate license for each user utilized by Third Party; and

7. Licensee will ensure that Third-Party Contractor agrees to comply with and does comply with the terms of this Agreement on the same basis as the terms apply to Licensee.

The rights granted under Third-Party Contractor Addendum, do not modify the license or increase the number of licenses granted under this Agreement. Third Party, by their signature below, acknowledges that it has a copy of the License Agreement and agrees to the terms herein. Licensee shall provide a signed copy of this Addendum to Azteca Systems at contracts@cityworks.com.

Third Party (Print):_____ **Licensee**: **City of American Fork, UT**

By: _____
Third Party/Contractor Authorized Signature

Title: _____

Date: _____

Third Party Information

Address City, State, Zip	
Contact Name	
Phone Number	
Email	

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REQUEST FOR COUNCIL ACTION
CITY OF AMERICAN FORK
OCTOBER 27, 2020

Department Public Works **Director Approval** *Scott Sensanbaugher*

AGENDA ITEM Review and action on a contract for Centricity GIS to provide professional consulting services for the configuration and implementation of Cityworks Asset Management Software.

SUMMARY RECOMMENDATION Staff recommends approval of the contract with Centricity GIS for configuration and implementation of the Cityworks Asset Management Software in the amount of $32,500.

BACKGROUND Cityworks is the selected software for the citizen reporting, work management and asset management. This is a complex software with the ability to configure specifically to the city's mapping systems, policies, and procedures. Centricity GIS has performed over 50 unique Cityworks implementations over the past 17 years and is uniquely qualified to provide this service to American Fork City.

BUDGET IMPACT Within Approved Budget

SUGGESTED MOTION Move to approve the contract with Centricity GIS for configuration and implementation of the Cityworks Asset Management Software in the amount of $32,500 and authorize staff to execute the contract documents.

SUPPORTING DOCUMENTS

Centricity Consulting Agreement (DOCX)
American Fork Proposal AMS_092420 (PDF)

MASTER SERVICES AGREEMENT FOR ON-CALL CONSULTING SERVICES

Consulting Services

This Master Services Agreement (hereinafter referred to as "Agreement") is entered into this _____ day of _____, 2020 by and between **Centricity GIS**, with its principal place of business at **10659 N Sahalee St, Cedar Hills, UT 84062** (hereinafter referred to as "Consultant"), and American Fork City, a municipal corporation with its principal place of business at 51 East Main Street, American Fork, Utah 84003 (hereinafter referred to as "City") (collectively referred to herein as the "Parties").

RECITALS

WHEREAS, City desires to contract with Consultant for certain professional Consulting services for multiple projects, each project scope of services and payment of services being separately identified and agreed to in respective Project Task Orders;

WHEREAS, Consultant has the necessary expertise and experience to perform the said Consulting services for City and Consultant and is properly qualified and licensed in the State of Utah;

NOW THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties hereto agree as follows:

AGREEMENT

1. Term; Termination.

a. The term of this Agreement shall be two (2) years from the Effective date of this contract.

b. Notwithstanding anything contrary contained herein, City may terminate this Agreement at any time by giving Consultant thirty (30) day written notice in accordance with the notice provisions set forth herein. Upon receipt of such notice, Consultant shall cease all work undertaken hereunder, except as may be necessary to provide for an orderly transition of such work.

c. Consultant may terminate this Agreement at any time with thirty (30) day written notice to City in accordance with the notice provisions set forth herein. Upon termination by Consultant, City shall not be obligated to make payment on any Project Task Order not completed, in full, by Consultant.

d. Upon termination of this Agreement, Consultant shall provide a final invoice to City, showing all costs incurred but unpaid, and the City shall pay such costs, as shown therein. Consultant shall forthwith deliver all files, reports, and other materials concerning services provided, maintained or controlled by Consultant at the time of such termination, subject to all applicable federal and state law.

Attachment: Centricity Consulting Agreement (Centricity GIS Cityworks Implementation Contract)

2. Scope of Services.

The scope of services pursuant to this Agreement shall be limited to professional and technical consulting services. Specific Services shall be as set forth in the Project Task Orders.

3. Project Task Order.

City may issue to Consultant a Project Task Order in the form attached to this Agreement as Exhibit "A." Subject to the terms of this Agreement and the terms of the Project Task Order, Consultant shall render to City the requested professional and technical consulting services set forth in the Project Task Order. In conjunction therewith, City shall provide to Consultant all necessary information and documentation for Consultant to perform the services. A Project Task Order shall include the scope of the work requested, a schedule for completion, and the cost of said work. All Project Task Orders shall be signed by both Parties to this Agreement. Multiple Project Task Orders may be entered into hereto.

4. Compensation.

In consideration of the services provided to City by Consultant, City shall pay Consultant for services rendered in accordance with the Project Task Order and the approved fee structure attached hereto as Exhibit "B" (hereinafter referred to as "Fee Schedule"), if applicable. Minimum amount of guarantee under this contract is $0.00. Maximum dollar amount of task orders available is $200,000.00 over the contract period.

5. Invoice; Payment.

a. For services rendered hereunder, Consultant shall invoice City monthly for services provided in accordance with the approved Project Task Order and Fee Schedule. Consultant shall submit monthly invoices to City showing the work completed and the amount of compensation due. Consultant shall submit invoices for work done in a timely manner. City shall not be required to pay for work that is invoiced more than 120 days after it was performed.

b. Payment of undisputed amounts shall be due and payable thirty (30) days after the City's receipt of the invoice.

c. In the event amounts are not paid in full within thirty (30) days of City's receipt of the invoice, City agrees to pay interest at the rate of one and one-half percent (1.5%) per month on any and all unpaid balance of services, costs, and expenses.

d. City consents to Consultant's immediate withdrawal and termination of this Agreement should the account become more than thirty (30) days delinquent. Further, in the event of default, Consultant may pursue any and all remedies available at law or in equity.

e. In the event an amount is disputed, City shall notify Consultant in writing of its dispute within thirty (30) days. The parties shall make a good faith effort to resolve the disputed amount. If correspondence does not resolve the dispute, the parties or their respective representatives shall meet in person on at least one occasion and attempt to resolve the matter prior to pursuing litigation.

Attachment: Centricity Consulting Agreement (Centricity GIS Cityworks Implementation Contract)

6. Relationship of Parties.

Consultant, its agents, and employees shall be an independent contractor performing professional and technical Consulting services for the City. Nothing contained in this Agreement shall be construed to create a relationship of employer and employee, master and servant, principal and agent, or partners or co-venturers between City and Consultant. As independent contractors, Consultant, its agents, and employees shall not qualify for or receive any employee benefits from the City, including but not limited to, leave, retirement, insurance, bonding, use of City vehicles, or any other benefits afforded to City employees.

7. Employees and Subcontractors.

Consultant shall be solely responsible for the payment of wages, salary or benefits to any and all employees or contractors retained by Consultant in the performance of the services under this Agreement. Consultant agrees to indemnify, defend and hold harmless City from any and all claims that may arise from the Consultant's relationship to its employees and subcontractors.

8. Standard of Performance; Licenses.

Consultant agrees and represents that it has the personnel, experience, and knowledge necessary to qualify it for the particular duties to be performed under this Agreement. Consultant shall perform the work described herein in accordance with the standard of care required for the performance of Consulting services. Further, Consultant shall maintain all required licenses, including without limitation, all necessary professional and business licenses, throughout the term of this Agreement. Consultant shall require and ensure that all of Consultant's employees and subcontractors maintain all required licenses, including without limitation, all necessary professional and business licenses.

9. Professional Liability Insurance.

Consultant shall maintain professional liability insurance, at its own expense, to protect City from any negligent acts, errors, or omissions on the part of Consultant. Notwithstanding the existence of professional liability insurance, the total aggregate of Consultant's liability to all parties related to this Agreement shall not exceed one million dollars ($1,000,000).

10. Time is of the Essence; Liquidated Damages.

City and Consultant agree that time is of the essences and that, in the case of Consultant's failure to complete the Project Task Order within the time specified and agreed upon, City will be damaged thereby; and because it is difficult to definitely ascertain and prove the amount of such damages, it is hereby agreed that the amount of such damages shall be the liquidated sum of One Hundred Dollars ($100.00) per calendar day for each day's delay in completing the Project Task Order in excess of the number of working days prescribed; and Consultant hereby agrees that said sum shall be deducted from amounts due the Consultant under the Agreement or, if no amount is due, Consultant hereby

Attachment: Centricity Consulting Agreement (Centricity GIS Cityworks Implementation Contract)

agrees to pay to City as liquidated damages such total sum as shall be due for such delay, computed as aforesaid.

11. Notice.

All notices under this Agreement will be in writing and will be deemed to have been duly given if delivered personally or by a nationally recognized courier service or mailed by registered or certified national mail service, return receipt requested, postage prepaid, to the Parties at the addresses set forth below. All notices under this Agreement that are addressed as provided in this Section. If delivered personally or by nationally recognized courier service, notice will be deemed given upon delivery. If delivered by mail in the manner described above, notice will be deemed given on the date received by the recipient as reflected in the return receipt. All notices shall be directed to the Parties hereto as follows:

CITY:

American Fork City
Attn: David Bunker
51 East Main Street
American Fork, Utah 84003
Phone: (801) 763-3000
Email: DBunker@afcity.net

With a copy to (which shall not constitute notice):

American Fork City Public Works
Attn: Scott Sensanbaugher
275 East 200 North
American Fork, Utah 84003
Phone: (801) 763-3060
Email: SSensanbaugher@afcity.net

CONSULTANT:

Centricity GIS
Attn: Brandon Wright
10659 N Sahalee St
Cedar Hills, UT 84062
Phone: 801-376-8160
Email: bwright@CentricityGIS.com

12. Ownership.

All work, work product and deliverables produced under this Agreement shall remain the exclusive property and shall inure to the benefit of City as work for hire. Consultant shall not use, sell, disclose or obtain any other compensation for such work for hire. In addition, Consultant may not, with regard to all work, work product, deliverables or work

Attachment: Centricity Consulting Agreement (Centricity GIS Cityworks Implementation Contract)

for hire required by this Agreement, apply for in its name or otherwise, any copyright, patent or other property right and acknowledges that any such property right created or developed remains the exclusive right of City.

13. Waiver.

Unless otherwise indicated herein, failure by any party to insist upon the strict performance of any covenant, duty, agreement, or condition of this Agreement, or to exercise any right or remedy consequent upon a breach thereof, shall not constitute a waiver of any such breach of any other covenant, agreement, term, or condition. Any party, by notice delivered in the manner provided in this Agreement, may, but shall be under no obligation to waive any of its rights and any conditions to its obligation hereunder, or any duty, obligation, or covenant of any other party. No waiver shall affect or alter the remainder of this Agreement, but each and every covenant, agreement, term, and condition shall continue in full force with respect to any other then existing or subsequently occurring breach. To be effective a waiver must be signed by both parties hereto.

14. Compliance with Laws and Policies.

In the performance of their obligations hereunder, the parties shall obey and abide by all applicable laws, rules and regulations, and with all applicable ordinances, policies and procedures. Both parties shall abide by all applicable federal and state laws, rules, regulations, and executive orders pertaining to equal employment opportunity; pursuant thereto, shall assure that no person shall, on the grounds of race, color, national origin, sex, age, or disability, be excluded from employment with, participation in, be denied the benefits of or be otherwise subjected to discrimination under, any program or activity performed under this Agreement; and to promptly take appropriate steps to correct any deficiency that may be found to occur in compliance with such laws and rules.

15. Rights and Remedies.

The rights and remedies of any of the parties hereto shall not be exclusive. In general, the respective rights and obligations hereunder shall be enforceable by specific performance, injunction, or other equitable remedy, but nothing herein contained is intended to or shall limit or affect any rights at law or by statute or otherwise of any party aggrieved as against the other party for a breach or threatened breach of any provisions hereof, it being the intention of this Paragraph to make clear the agreement of the parties that the respective rights and obligations of the parties hereunder shall be enforceable in equity as well as to law or otherwise.

16. Entire Agreement.

This Agreement and the exhibits attached hereto constitute the entire agreement between the Parties on the Subject matter covered herein and this Agreement supersedes any and all prior agreements between the Parties related to the services. The Parties represent and acknowledge that they have not relied on any statements or promises of any kind other than those specifically set forth in this Agreement.

Attachment: Centricity Consulting Agreement (Centricity GIS Cityworks Implementation Contract)

17. Amendments.

This Agreement may only be amended in writing signed by each of the Parties hereto. If, as the result of legislative action or rule-making, any of the provisions of this Agreement becomes inconsistent with Utah law, the Parties will promptly meet to negotiate in good faith such amendments as may be necessary to comply with Utah law.

18. Force Majeure.

Neither City nor Consultant shall be liable for any delay in the performance of this Agreement, nor for any other breach, nor for any loss or damage arising from uncontrollable forces such as fire, theft, storm, war, or any other force majeure that could not have been reasonably avoided by exercise of due diligence.

19. Section Headings.

The headings contained in this Agreement are for reference purposes only and shall not in any way affect the meaning or interpretation of this Agreement.

20. Severability.

In any provision of this Agreement shall be held or deemed to be, or shall in fact be, invalid, inoperative or unenforceable to any extent, the remainder of this Agreement shall not be impaired and shall be enforced to the fullest extent permitted by law.

21. Counterparts.

This Agreement may be executed in one or more counterparts, each of which when so executed shall be deemed an original, but all of which together shall constitute one instrument.

22. Choice of Law.

The interpretation of this Agreement and any claim or controversy arising out of or related to this Agreement shall be governed by the laws of the State of Utah. Jurisdiction and venue for the enforcement of this Agreement shall be found exclusively in the courts of Utah County, State of Utah. Each of the parties irrevocably submits to the exclusive jurisdiction of such courts in any proceeding, waives any objection it may now or hereafter have to venue or to convenience of forum, agrees that all claims in respect of any proceeding shall be heard and determined only in any such court and agrees not to bring any proceeding arising out of or relating to this Agreement in any other court

23. Confidentiality.

Any confidential information provided to or developed by the Consultant in the performance of this Agreement shall be kept confidential and shall not be revealed or

Attachment: Centricity Consulting Agreement (Centricity GIS Cityworks Implementation Contract)

made available to any person by the Consultant without the prior written approval of the City. This provision shall survive any termination of this Agreement.

24. Assignment.

This Agreement may not be assigned by either party without the written consent of the other party. If consent to an assignment is obtained, this Agreement is binding on the successors and assigns of the Parties to this Agreement.

25. Attorney Fees; Costs.

In the event either party seeks to enforce the terms hereof in a lawsuit or other proceeding, the prevailing party shall be entitled to an award of the costs incurred, including reasonable attorney fees.

26. Authority.

The individual(s) executing this Agreement on behalf of, or as a representative for a corporation or other person, firm, partnership or government entity, represents and warrants that he or she is duly authorized to execute and deliver this Agreement on behalf of the corporation, person, firm, partnership or government entity and that this Agreement is binding upon the entity in accordance with its terms.

[Signature Page Follows]

Attachment: Centricity Consulting Agreement (Centricity GIS Cityworks Implementation Contract)

IN WITNESS WHEREOF, the Parties have duly executed this Agreement as of the Effective Date.

AMERICAN FORK CITY

_____
David Bunker
City Administrator

Date: _____

_____
By:
Its:

Date: _____

Attest:

_____
Recorder

AMERICAN FORK CITY

Date:_____, 20_____.

_____
Scott Sensanbaugher
Director of Public Works

Approved-as-to-form by Cherylyn Egner, attorney for American Fork City

Attachment: Centricity Consulting Agreement (Centricity GIS Cityworks Implementation Contract)

EXHIBIT A
Project Task Order No. ____

On this ____ day of _____, 2020, American Fork City (hereinafter referred to as "City") hereby requests **Centricity GIS** (hereinafter referred to as "Consultant") to perform the consulting services requested herein under the terms of the existing Master Services Agreement dated _____ _____, 2020.

Scope of Services Requested: _Consultant services associated with Cityworks AMS Implementation Services per the Centricity GIS Proposal dated September 25, 2020 (See Exhibit B

Required Documentation from Consultant: (See Exhibit B)

Schedule:

Deadlines for this Project Task Order shall be as follows:

- (See Exhibit B)
-
-
-

Attachment: Centricity Consulting Agreement (Centricity GIS Cityworks Implementation Contract)

Compensation:

Costs and fees associated with this Project Task Order shall be as follows (check one):

- ☒ Lump sum of $32,500 (including costs);
- ☐ Hourly rate and costs as set forth in the Fee Schedule, Exhibit B of the Master Services Agreement, not to exceed $_____ without written consent; or
- ☐ Hourly rate and costs as set forth in the Fee Schedule, Exhibit B of the Master Services Agreement.

IN WITNESS WHEREOF, the Parties have duly executed this Agreement as of the Effective Date.

AMERICAN FORK CITY	_____
_____	_____
City Consultant	By: Its:
Date: _____	Date: _____

Attachment: Centricity Consulting Agreement (Centricity GIS Cityworks Implementation Contract)

Exhibit B

Centricity GIS Asset Management Services

Proposal:

Cityworks AMS Implementation Services

September 25, 2020

Attachment: Centricity Consulting Agreement (Centricity GIS Cityworks Implementation Contract)

Centricity GIS
ASSET MANAGEMENT SERVICES

PROPOSAL

Cityworks AMS Implementation Services

Prepared for:

American Fork City
51 East Main Street
American Fork, UT 84003

September 25, 2020

Attachment: American Fork Proposal AMS_092420 (Centricity GIS Cityworks Implementation Contract)

CONTACT:

Brandon Wright
801-376-8160
bwright@centricitygis.com

Cityworks Partner Network

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Attachment: American Fork Proposal AMS_092420 (Centricity GIS Cityworks Implementation Contract)

About Centricity GIS

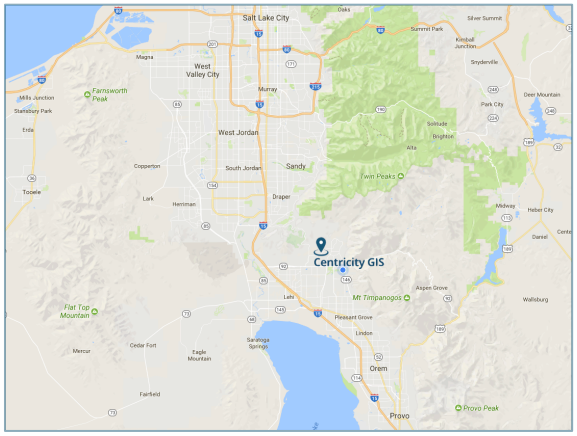
Introduction

Centricity GIS, LLC is a GIS Consulting company offering implementation, data, and application development services. Our founder, Brandon Wright, has 15 years of experience in GIS, Asset Management, and systems integration. All of our technical staff have at least 5 years of expertise in their discipline.

In addition to providing services for specific projects, we are also able to augment an agency's staff by providing resources such as programmers, analysts, and technicians on site.

Centricity GIS is a Cityworks Business Partner specializing in CMMS and GIS services for public agencies such as Cities, Counties, and Water Agencies. As a partner, we specialize in the implementation of Cityworks and ESRI technologies. From out of the box using Esri's ArcGIS for Local Government solutions to custom PLL implementations, we can help agencies realize their return on investment as quickly as possible.

We are located in Cedar Hills, Utah, about 30 minutes from Cityworks headquarters.



Experience.

Centricity GIS is a full-service, multidisciplinary asset management and permitting system consulting firm. We provide consulting services to municipal governments and private and public utilities.

Our project team will use tried and true implementation strategies that focus on your business processes and workflows, system requirements and training.

Centricity GIS has performed over 50 unique Cityworks implementations over nearly 17 years in the Asset Management and Permitting Industry. The flexibility and power of the Cityworks platform correlates with our extensive knowledge in system design and implementation.

Our business process knowledge in permitting allows us to be efficient and effective during all of the phases of implementation.

Centricity GIS has in house developers that focus on core Cityworks integrations and development tools. We have a history of integrating with Cityworks for many types of systems including:

- Customer Account Information
- Financial Systems
- Utility Billing
- SCADA
- AVL
- Citizen Reporting

Attachment: American Fork Proposal AMS_092420 (Centricity GIS Cityworks Implementation Contract)

Cover Pages/Executive Summary

September 25, 2020

Subject: Cityworks AMS Implementation

American Fork:

This proposal is for providing implementation services for the Cityworks AMS solution. The Cityworks solution is wholly unique because it is the only system that completely leverages your GIS parcel records throughout your work process. In other words, we will use your map data as the system of record, rather than try to sync your GIS records with your asset management database.

Centricity GIS is a Cityworks Business Partner and is based in Cedar Hills, Utah. I previously worked for Cityworks and have over 17 years of experience in completing Cityworks implementation projects.

This proposal includes the following services:

- Workflow Review Meetings (Onsite)
- Initial Cityworks AMS Database Configuration
    - Service Requests, Work Orders, Inspections Setup
    - Employees, Materials & Equipment
- Review of Configured Database (Onsite)
- Admin User Training (Onsite)
- End User Training (Onsite)
- Rollout Support
- Ad-Hoc Support
- Centricity Citizen Reporter (Citizen Service Requests submittals to City)
- CCTV Interface for Cityworks

Hourly rates for Centricity GIS (Ad-Hoc) are $150/hour, billed monthly on the 1st business day following month end.

We are very excited about this opportunity. Please let me know if you have any questions or concerns regarding this proposal.

Sincerely,

Brandon Wright
Founder | President
801-376-8160

Attachment: American Fork Proposal AMS_092420 (Centricity GIS Cityworks Implementation Contract)

Approach and Methodology

A. Introduction

This scope of work identifies the tasks required for the successful improvement of the City's current Cityworks implementation. Centricity GIS understands that the following requirements have been identified by the City, and will be included in implementation:

- Workflow Review Meetings (Onsite)
- Initial Cityworks AMS Database Configuration
  - Service Requests, Work Orders, Inspections Setup
  - Employees, Materials & Equipment
- Review of Configured Database (Onsite)
- Admin User Training (Onsite)
- End User Training (Onsite)
- Rollout Support
- Ad-Hoc Support
- CCTV Interface for Cityworks
- Centricity Citizen Reporter (Submitting requests to the City online)
- Data Migration Discovery

The following tasks are included in this scope of work:

Task 1: Workflow Review Meeting (Onsite - 2 Days)

Meet with City staff to review workflows that will be created and configured in the Cityworks AMS Application

Tasks:

1. Meet with City staff to review and understand the City workflows for Cityworks AMS for: **Water/PI, Sewer, Roads, Building Maintenance and Parks.**
2. Get documentation from City that will provide the basis for the AMS configuration.
   a. Print Documents
   b. Reports
   c. Diagrams, Etc.

Deliverable Milestones

a. Meeting Notes

Attachment: American Fork Proposal AMS_092420 (Centricity GIS Cityworks Implementation Contract)

TASK 2: INITIAL CITYWORKS DATABASE CONFIGURATION

Configuration of Cityworks system and database.

Tasks:

1. Cityworks Database Configuration for:
    a. Water/PI
    b. Sewer
    c. Roads
    d. Building Maintenance
    e. Parks
2. Workflows
    a. Service Requests
    b. Work Orders
    c. Inspections
    d. Employees, Material, Equipment
    e. Tasks
3. Reports
4. GIS Integration
5. Field Module Setup

Deliverable Milestones:

a. Configured Database

TASK 3: REVIEW OF CONFIGURED DATABASE (ONSITE)

Meet with City staff to review workflows and Cityworks setup that has been configured.

Tasks:

1. Database Review
2. Workflow changes and configuration changes as needed

Deliverable Milestones:

a. Meeting Notes
b. Configuration changes

Attachment: American Fork Proposal AMS_092420 (Centricity GIS Cityworks Implementation Contract)

TASK 4: ADMIN TRAINING (ONSITE – 1 DAYS)

Centricity GIS will provide onsite training for the primary, or "Administrator" users of Cityworks. The City will provide the training facility and computers necessary for staff use.

Following the training of Administrator users, Centricity GIS will conduct a "Train-the-Trainer" style session with key department staff. The purpose of this training is to provide knowledge and steps necessary to train all other field personnel who will use the system.

Training will occur over 1 day

Deliverable Milestones:

a. Admin and User Training completed
b. Copy of training material used in training session delivered in digital format (PDF)
c. Go-live

TASK 5: END USER TRAINING (ONSITE – 3 DAYS)

Centricity GIS will provide onsite training for the primary, or "End Users" of Cityworks. The City will provide the training facility and computers necessary for staff use.

The purpose of this training is to provide knowledge and steps necessary to train all other field personnel who will use the system.

Training will occur over 3 days

Deliverable Milestones:

a. User Training completed
b. Copy of training material used in training session delivered in digital format (PDF)
c. Go-live

Attachment: American Fork Proposal AMS_092420 (Centricity GIS Cityworks Implementation Contract)

TASK 6: ROLLOUT SUPPORT (ONSITE - 2 DAYS)

After the configuration, installation and training phases have concluded, we will provide Onsite rollout support.

1. Determine with department manager/champion what data/inboxes need to be displayed.
2. Build Dashboards – Build end user and management inboxes/dashboards
3. Cityworks Reconfiguration that needs completed based on Work Flow Meetings and Admin training.
4. Configuration of Mobile Apps.

Deliverable Milestones:

a. Onsite Roll Out Support

TASK 7: DISCUSSION ON DATA MIGRATION (DISCOVERY)

Meeting and Discuss if Data Migration should be done, and if so what data points/types should be migrated into Cityworks.

1. Determine if Data Migration is necessary
2. If determined what data should be migrated into Cityworks

Deliverable Milestones:

a. Plan to migrate or not migrate data into Cityworks

Attachment: American Fork Proposal AMS_092420 (Centricity GIS Cityworks Implementation Contract)

TASK 8: CCTV INTERFACE FOR CITYWORKS

Setup and Configuration of the CCTV Interface for Cityworks.

1. City must have the correct and applicable PACP database for population of the appropriate data from the CCTV interface
2. Connection of Cityworks to the PACP database using the CCTV Interface for Cityworks

Deliverable Milestones:

a. Setup of CCTV Interface for Cityworks

TASK 9: AD-HOC SUPPORT

After the configuration, installation and training phases have concluded, we will provide troubleshooting and support services. **Used as needed up to 40 hours.**

1. Determine with department manager/champion what data/inboxes need to be displayed.
2. Build Inboxes – Build end user and management inboxes
3. Cityworks Reconfiguration that needs completed based on Work Flow Meetings and Admin training.
4. Configuration of Mobile Apps (if applicable licenses from Cityworks apply)
5. Crystal Report Development
6. Dashboards and KPI's

Deliverable Milestones:

a. Support as needed at negotiate rate

Attachment: American Fork Proposal AMS_092420 (Centricity GIS Cityworks Implementation Contract)

TASK 10: CENTRICITY CITIZEN REPORTER

Setup and configuration for Centricity Citizen Reporter Application. Online portal for Citizens to submit Service Requests to the City.

Prerequisite – Requires the Cityworks CE API license.

1. Setup and Configuration of Centricity Citizen Reporter

Deliverable Milestones:

a. Setup and Configuration of Centricity Citizen Reporter Application.
b. No Charge for First year of service.
c. $3,500/Yr Service Fee after first year.

Attachment: American Fork Proposal AMS_092420 (Centricity GIS Cityworks Implementation Contract)

Firm Description & Project Organization

Centricity GIS, LLC is a multi-service organization providing specialized services in Field Asset Surveying, Geographic Information Systems (GIS) and application software services. CENTRICITY GIS provides professional services including consulting, training, staffing and technical support.

We continue to set the standard for high quality GIS Centric and Cityworks implementation projects, especially in utility industry for Water, Sewer, Storm, Gas and Electric backed by staff with a wide range of industry and technical experience having over 15 years of experience in GIS and 25 years in Cityworks implementation.

CENTRICITY GIS is a Dun & Bradstreet verified business (DUNS 08-085-9425).

Partners:

- Cityworks Business Partner Network
- ESRI Silver Partner

Attachment: American Fork Proposal AMS_092420 (Centricity GIS Cityworks Implementation Contract)

Management

Mr. Brandon Wright, founder of Centricity GIS, LLC, graduated with a B.S. degree in Business Information Systems from the University of Colorado, USA. He has over 16 years of professional experience in Cityworks and GIS within the Asset Management industry and has successfully completed over 50 Cityworks related projects. Most of his project experience is in implementing Cityworks systems with government agencies throughout United States. His core competency is in implementing Cityworks Asset Management solutions for government agencies (Water, Wastewater, Parks & Rec, etc).

Mr. Wright manages the strategic planning, business development and company operations for CENTRICITY GIS. He also serves as client liaison officer on all the projects by overseeing scope, schedule, budget and time frame.

Specialties: Asset Management, Data Conversion, and Project Implementation.

PROJECT MANAGEMENT APPROACH:

The CENTRICITY GIS President and Project Manager will attend progress meetings with the City team to provide status updates for on-going tasks. CENTRICITY GIS will also submit monthly progress reports and invoices, accompanied with a detailed delivery report.

Deliverables

- Monthly progress report
- Monthly invoice with detailed delivery report

Software Skills

GIS Software: ArcGIS Desktop, ArcGIS Online, ArcGIS Server, ArcGIS Pro

Asset Management Software: Cityworks PLL and AMS

Databases: Access, SQL Server, Oracle, Geodatabase

Reporting Tools: Crystal Reports, SQL Server Reporting Services

Attachment: American Fork Proposal AMS_092420 (Centricity GIS Cityworks Implementation Contract)

Qualifications and Past Performance

The following table shows the combined project experience of our team.

- Centricity GIS Reference Sites

Client	Implementation	Support	PLL	AMS	Reporting	Integrations
Moses Lake, WA	✓	✓	✓	✓	✓	✓
West Valley City, UT	✓	✓	✓	✓	✓	✓
Park City, UT	✓	✓		✓	✓	
Herriman, UT	✓	✓	✓	✓	✓	✓
Saratoga Springs, UT	✓	✓	✓	✓	✓	
Rancho Palos Verdes, CA	✓	✓		✓	✓	
Las Gallinas Valley Sanitary District, CA		✓		✓		
Redlands, CA	✓	✓	✓	✓	✓	✓
Cook County, IL	✓	✓	✓	✓	✓	
DDOT, Washington, DC	✓	✓		✓	✓	
Apex, NC	✓	✓		✓	✓	
Houston, TX	✓	✓		✓	✓	
Ruidoso, NM	✓	✓		✓	✓	

Attachment: American Fork Proposal AMS_092420 (Centricity GIS Cityworks Implementation Contract)

EDUCATION

Bachelor of Science Degree, Business Information Systems, University of Colorado

Brandon Wright
Founder/Project Oversight

Mr. Wright has over 10 years of experience providing Asset Management and GIS services to public agencies. Mr. Wright has been responsible for directing asset management projects and addressing logistical and technical concerns. Prior to working at Centricity GIS, Mr. Wright worked Cityworks for 10 years.

Services include database development/administration and maintenance, map creation, needs assessment, implementation and integration. Integration services include integrating GIS databases (SQL Server or Oracle) with other systems such as Asset Management Systems, Customer Billing, Document Management and Work Orders. He also provides system training, and general IT consulting services.

Summary of Skills

- Expertise using ESRI's ArcGIS software products, ArcGIS Desktop 10.x, ArcGIS Server, ArcGIS Online
- Experience in administration of Cityworks AMS & PLL
- Cityworks PLL Administration Training
- Expertise in Mapping, GIS Data Modeling, Systems Integration, Needs Assessments
- Over 10 years of Project Management experience
- Database experience with SQL Server, Oracle, and Microsoft Access

Representative Projects

- Moses Lake, Washington, Cityworks and PLL Implementation
- Rancho Palos Verdes, Cityworks Implementation
- Vista Irrigation District, Cityworks Implementation
- San Mateo, Cityworks Implementation
- Cook County, IL, Cityworks and PLL Implementation
- Saratoga Spring, UT, Cityworks and PLL Implementation
- Houston, TX, Cityworks Implementation/Expansion
- DDOT (Washington, D.C.), Cityworks Implementation/Expansion
- Columbia, SC, Cityworks Implementation/Expansion
- Lafayette, LA, Cityworks Implementation
- El Paso, TX, Cityworks Implementation/Expansion
- Apex, NC, Cityworks Implementation

Attachment: American Fork Proposal AMS_092420 (Centricity GIS Cityworks Implementation Contract)

EDUCATION

MA Degree, Public Administration, University of North Carolina – Chapel Hill

BA Degree, Political Science, Brigham Young University - Idaho

Daniel Widenhouse
Product/Project Manager

Mr. Widenhouse has over 7 years of experience providing Asset Management and GIS services to public agencies. Mr. Widenhouse has been responsible for overseeing and directing asset management and permitting projects. Prior to working at Centricity GIS, Mr. Widenhouse has worked for several public agencies including City of Saratoga Springs, UT and Rexburg, ID and administered their PLL and AMS systems.

His experience includes PLL and AMS Administration, Cityworks Suite of products. Database development/administration and maintenance, map creation, needs assessment, implementation and integration. Project Management skills. Document Management and Work Orders. He also provides system training, and general IT consulting services.

Summary of Skills

- Expertise using ESRI's ArcGIS software products, ArcGIS Desktop 10.x, ArcGIS Server, ArcGIS Online
- Experience in administration of Cityworks AMS & PLL
- Cityworks PLL Administration
- Database experience with SQL Server, Oracle, and Microsoft Access

Representative Projects

- Saratoga Spring, UT, Cityworks and PLL Implementation
  - Implemented Cityworks PLL across Building, Planning, Capital Facilities, and Engineering departments. Built over 150 workflows, 70 case template types, and over 400 task types.
  - Implemented Cityworks AMS across Water, Sewer, Streets, and Parks departments.
  - Trained users on Office, Fields, and Mobile modes.
  - Trained admin users in Designer and PLL Admin.
  - Developed over 50 Crystal Reports for analytics and reporting needs.
  - Integrated Cityworks with CitySourced
- City of Redlands, CA , Cityworks and PLL Implementation
  - Created over 10 checklists for application review workflows in Cityworks PLL.
  - Wrote technical training materials for basic and admin users.
- City of Moses Lake, WA , Cityworks and PLL Implementation
  - Wrote Crystal reports for reporting to supervisors.
  - Developed PLL workflows and case types for the City.

Attachment: American Fork Proposal AMS_092420 (Centricity GIS Cityworks Implementation Contract)

Project Implementation Schedule

The schedule to complete this project is below.

We are prepared to begin work on this project upon your Authorization to Proceed and will coordinate with you, as required.

Task	Description	Month 1	Month 2	Month 3	Month 4
1	Workflow Review (Kickoff) Meeting				
2	Initial Cityworks AMS Configuration				
3	Database Review Meeting				
4	Admin User Training				
5	End User Training				
6	Rollout Support				
7	Data Migration Discovery Meeting				
8	CCTV Interface for Cityworks				
9	Post-Installation Support (Up to 40 hrs)				40 Hrs
10	Centricity Citizen Reporter				

Notes:

Task 9 will start once all deliverables are accepted under the scope of work and will continue until all hours are used.

- Final Schedule will be determined based on optional tasks selected.

Attachment: American Fork Proposal AMS_092420 (Centricity GIS Cityworks Implementation Contract)

Fee/Cost Proposal

Task	Description	Total Cost
1	**Workflow Review Meetings (2 Days Onsite)**	$ 3,000
	Workflow Meetings Meeting Notes	
2	**Initial Cityworks Database Configuration**	$ 19,000
	All groups as outlines in details section	
3	**Database Review (Onsite)**	$ 1,500
	Meeting Notes and Action Items	
4	**Admin User Training (1 Day Onsite)**	$ 1,500
	Onsite Administrator Training for City Admins	
5	**End User Training (3 Days Onsite)**	$ 4,500
	Onsite End User Training for City Users	
6	**Rollout Support (2 Days Onsite)**	$ 3,000
	Onsite Support for End Users when system goes live	
7	**Data Migration Discovery Meeting**	$ No Fee
	Meeting to discuss/discover data migration strategy	
8	**CCTV Interface for Cityworks**	$ Included
	(see items in Line 8)	
9	**Ad-Hoc Support (up to 40 hours)**	$ Included
	(see items in Line 8)	
10	**Centricity Citizen Reporter Application***	$ Included (Year 1)

	• Ability for Citizens to submit Service Requests Online to the City.
	• SAAS Product
	  ○ First year of Service Included in Implementation
	  ○ **Yearly service fee of $3,500 after first year.**	

	Training and Onsite Visits (Core Implementation)	**$ 32,500**

** Centricity Citizen Reporter Application is a SAAS offering. Hosted in Centricity GIS Azure Cloud environment and connects to Cityworks via Cityworks API's. First year of service for the City is included in the Implementation costs. **Year 2 and beyond is a $3,500 annual service fee.**

Attachment: American Fork Proposal AMS_092420 (Centricity GIS Cityworks Implementation Contract)

REQUEST FOR COUNCIL ACTION
CITY OF AMERICAN FORK
OCTOBER 27, 2020

Department Public Works **Director Approval** *Scott Sensanbaugher*

AGENDA ITEM Review and action of a reimbursement agreement for White Horse Developers, LLC for off-site sewer system improvements various roadways.

SUMMARY RECOMMENDATION White Horse Developers, LLC proposes a Reimbursement Agreement for system improvements along various roadways of the recently approved Dixie Farms Plat A and Lakeshore Landing Block 5 Plat I developments.

BACKGROUND The City Council approved the Dixie Farms Plat A and Lakeshore Landing Block 5 Plat I development at the May 26, 2020 and June 30, 2020 regular session meeting, respectively. White Horse Developers has been working closely with the City's Public Works Department on a plan for the upsizing of the underground utilities along the various roadways in compliance with the approved Master Plans.

A Reimbursement Agreement was drafted by the developer and reviewed by the City Attorney's office. The agreement outlines the parameters for the construction cost of the sewer improvements along the various roadways.

The system improvement impact fees reimbursement adds up to $363,366.00 for sewer improvements.

BUDGET IMPACT An amount no greater than $363,366.00 for the upsizing of the public improvements along various roadways, which will be applied as sewer impact fee reimbursements.

SUGGESTED MOTION Move to approve the Reimbursement Agreement for White Horse Developers, LLC for $363,366.00.

SUPPORTING DOCUMENTS

Reimbursement Agreement - White Horse Developers for Offsite Sewer (PDF)

REIMBURSEMENT AGREEMENT

This Reimbursement Agreement ("*Agreement*") is entered into as of this 27 day of October, 2020, by and between White Horse Developers with its principal offices located at 520 South 850 Eat, Ste. A-4, Lehi, UT 84043 ("*Developer*") and American Fork City, a municipal corporation and political subdivision of the State of Utah with its principal offices located at 51 East Main Street, American Fork, Utah 84003 ("*City*").

RECITALS

WHEREAS, Developer constructed public infrastructure on certain parcels of property located in American Fork, Utah County, Utah, which consist of approximately 2.99 acres and is further described in Exhibit A attached hereto (the "*Property*").

WHEREAS, the parties have learned that there are certain mutually beneficial, cooperative and cost-cutting ways their respective properties can assist in the development of the other;

WHEREAS, pursuant to Section 13.80.030 of the American Fork Code of Ordinances and in compliance with Section 11-36a-402 of the Utah Code Annotated, the parties desire to provide for certain "system improvements," as that term defined in Section 11-36a-102 of the Utah Code Annotated, in conjunction with the development of the Property by Developer;

NOW, THEREFORE, in consideration of the mutual covenants contained herein, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the City and Developer hereby agree as follows:

AGREEMENT

1. Sanitary Sewer Line. Developer is proposing to install sanitary sewer lines through its project at the required minimum size as required by City codes and standards. The City seeks to have the pipe within development upsized to a 15, 18, and 24 inch pipe to accommodate additional off-site uses. Each upsized pipe is a system improvement. The lengths of pipe, associated materials and costs are set forth, and agreed to as shown, in the attached Exhibit B.

2. System Improvements Reimbursement. The public improvements described above are each a System Improvement and collectively the "System Improvements." The City agrees to reimburse Developer for the System Improvements in an amount equal to the actual costs of the System Improvements, not to exceed the amounts set forth in Exhibit B.

3. Time of Reimbursement. The City shall provide to Developer a single reimbursement payment within thirty days of completion of all system improvements for the Project. Completion shall mean completion of construction, inspection and acceptance by the City Council.

Attachment: Reimbursement Agreement - White Horse Developers for Offsite Sewer (Reimbursement Agreement for White Horse Developers,

4. Choice of Law. This Agreement shall be governed by, and construed in accordance with, the laws of the State of Utah.

5. Entire Agreement. This Agreement constitutes the entire agreement between the parties regarding the subject matter hereof and supersedes all prior understandings, written or oral, regarding the subject matter hereof.

6. Modification. This Agreement may only be modified or altered by a writing signed by both parties.

7. Attorney Fees. In the event either party seeks to enforce the terms hereof in a lawsuit or other proceeding, the prevailing party shall be entitled to an award of the costs incurred, including reasonable attorney fees.

8. Execution. This Agreement may be executed in multiple original counterparts, each of which shall be deemed to be an original and all of which, taken together, shall constitute one and the same Agreement.

9. Severability. The provisions of this Agreement shall be deemed to be severable, and if any provision of this Agreement is determined to be invalid or unenforceable by any court of competent jurisdiction, such invalidity or unenforceability shall not affect or limit the validity or unenforceability of the remaining provisions hereof.

10. Third-Party Beneficiary Interests. Nothing contained in this Agreement is intended to benefit any person or entity other than the parties to this Agreement and/or their respective successors and assigns; and no representation or warranty is intended for the benefit of, or to be relied upon by, any person or entity which is not a party to this Agreement and/or their respective successors and assigns.

11. Binding Effect. This Agreement shall inure to the benefit of, and be binding upon, the parties hereto and their respective heirs, representatives, officers, agents, employees, members, successors and assigns.

Attachment: Reimbursement Agreement - White Horse Developers for Offsite Sewer (Reimbursement Agreement for White Horse Developers,

WHEREFORE, the parties have executed the foregoing to be effective on the date appearing above.

WHITE HORSE DEVELOPER, LLC

_____
By: Grant Lefgren
Its: Member

AMERICAN FORK CITY

_____
Bradley J. Frost
Mayor, American Fork City

ATTEST:

_____
City Recorder

Approved as to content:

_____
City Engineer

Attachment: Reimbursement Agreement - White Horse Developers for Offsite Sewer (Reimbursement Agreement for White Horse Developers,

EXHIBIT A
Parcel Legal Description

A 25-foot-wide sewer line easement with 12.50 feet on each side of the following described centerline.

Beginning at a point which is S 89°52'20" W 2749.69 feet along the section line and South 3238.38 feet from the Southeast Corner of Section 22, Township 5 South, Range 1 East, Salt Lake Base and Meridian.

Thence N 04°22'19" E 389.33 feet; Thence N 73°05'32" E 181.49 feet; Thence N 57°32'26" E 290.94 feet; Thence N 19°33'41" W 135.31 feet; Thence N 09°33'27" W 110.15 feet; Thence N 01°33'05" E 340.74 feet; Thence N 01°33'05" E 168.42 feet; Thence N 01°33'05" E 351.64 feet; Thence N 17°16'38" E 154.18 feet; Thence N 11°09'36" W 400.00 feet; Thence N 24°52'00" E 400.00 feet; Thence N 65°08'00" W 259.34 feet; Thence N 65°08'00" W 400.00 feet; Thence N 65°08'00" W 400.00 feet; Thence N 65°08'00" W 262.07 feet; Thence N 00°00'08" E 298.41 feet; Thence N 00°00'26" W 211.12 feet; Thence N 00°00'10" E 311.53 feet; Thence N 89°00'52" W 153.48 feet; Thence N 01°03’29” E 28.46 feet; Thence North 88°56’31” W 14.55 feet more or less to an existing property line.

Contains: 130,181 Sq. Ft. (or 2.99 Acres)

(Basis of Bearing is South 89°52’20” West between the Southeast Corner and South Quarter Corner of Section 22, Township 5 South, Range 1 East, Salt Lake Base and Meridian)

Attachment: Reimbursement Agreement - White Horse Developers for Offsite Sewer (Reimbursement Agreement for White Horse Developers,

Dixie A Sewer to 1100 W - White Horse				
Description	**Quantity**	**UM**	**Unit Bid Price**	**Total Bid Price**
SEWER				
Connect to Existing	1	EACH	$ 8,500.00	$ 8,500.00
TSSD Metering Manhole	1	EACH	$ 150,000.00	$ 150,000.00
24" Sewer	383	LF	$ 105.00	$ 40,215.00
18" Sewer	473	LF	$ 84.00	$ 39,732.00
15" Sewer	4,375	LF	$ 79.00	$ 345,625.00
Upsized Sewer MH (5' Dia) due to pipe increase	12	EACH	$ 4,900.00	$ 58,800.00
Sewer MH (5' Dia)	7	EACH	$ 4,900.00	$ 34,300.00
Sewer Trench Backfill	14,415	CY	$ 20.00	$ 288,300.00
Dewatering	1	LS	$ 25,000.00	$ 25,000.00
Sewer Testing	1	LS	$ 13,000.00	$ 13,000.00
			TOTAL	**$ 1,003,472.00**

Minimum Standard				
Description	**Quantity**	**UM**	**Unit Bid Price**	**Total Bid Price**
Sewer				
Connect to Existing	1	EACH	$ 8,500.00	$ 8,500.00
TSSD Metering Manhole	0	EACH	$ 150,000.00	$ -
10" Sewer	383	LF	$ 46.00	$ 17,618.00
10" Sewer	473	LF	$ 46.00	$ 21,758.00
10" Sewer	4,375	LF	$ 46.00	$ 201,250.00
Upsized Sewer MH (4' Dia) due to pipe increase	12	EACH	$ 4,100.00	$ 49,200.00
Sewer MH (5' Dia)	7	EACH	$ 4,900.00	$ 34,300.00
Sewer Trench Backfill	13,849	CY	$ 20.00	$ 276,980.00
Dewatering	1	LS	$ 17,500.00	$ 17,500.00
Sewer Testing	1	LS	$ 13,000.00	$ 13,000.00
			TOTAL	**$ 640,106.00**

Reimbursement Agreement	
Description	**Total**
Sewer	
Connect to Existing	$ -
TSSD Metering Manhole	$ 150,000.00
24" Sewer	$ 22,597.00
18" Sewer	$ 17,974.00
15" Sewer	$ 144,375.00
Upsized Sewer MH (5' Dia) due to pipe increase	$ 9,600.00
Sewer Trench Backfill	$ 11,320.00
Dewatering	$ 7,500.00
Sewer Testing	$ -
TOTAL	**$ 363,366.00**

Attachment: Reimbursement Agreement - White Horse Developers for Offsite Sewer (Reimbursement Agreement for White Horse Developers,

REQUEST FOR COUNCIL ACTION
CITY OF AMERICAN FORK
OCTOBER 27, 2020

Department Public Works **Director Approval** *Scott Sensanbaugher*

AGENDA ITEM Review and action on a connector's agreement (a/k/a pioneering agreement) for White Horse Developers, LLC. for off-site system improvements along various roadways to serve the recently approved Rockwell Ranch development.

SUMMARY RECOMMENDATION White Horse Developers proposes a Pioneering Agreement for offsite system improvements along various roadways of the recently approved Rockwell Ranch development.

BACKGROUND The City Council approved the Rockwell Ranch Block 1 Phase 1 and Rockwell Ranch Block 1 Phase 2 final plats at the August 11, 2020 and August 25, 2020 regular session meetings, respectively. White Horse Developers has been working closely with the City's Public Works Department on a plan for the underground utilities along various roadways in compliance with the approved Master Plans.

A Pioneering Agreement was drafted by appropriate City personnel. The agreement outlines the parameters for the construction costs of the underground utilities improvements along various roadways and allocates pro-rated construction costs to the adjacent properties based on their frontage along the various roadways.

The total cost for the system improvements adds up to $640,106.00.

BUDGET IMPACT No budget impact as all costs will be allocated to the property owners.

SUGGESTED MOTION Move to approve the Pioneering Agreement for White Horse Developer, LLC for $640,106.00.

SUPPORTING DOCUMENTS

Pioneering Agreement - White Horse Developers for Offsite Sewer(PDF)

PIONEERING AGREEMENT

This Pioneering Agreement (hereinafter referred to as "Agreement") is entered into as of this 27 day of October 2020, by and between White Horse Developers, a Limit Liability Company with its principal offices located at 520 South 850 East, Ste. A-4, Lehi, UT 84043 (hereinafter referred to as "Developer") and American Fork City, a municipal corporation and political subdivision of the State of Utah with its principal offices located at 51 East Main Street, American Fork, Utah 84003 (hereinafter referred to as the "City").

RECITALS

WHEREAS, Developer constructed public infrastructure on certain parcels of property located in American Fork, Utah County, Utah, consisting of 2.99 acres and further described in Exhibit A attached hereto (hereinafter referred to as the "Property");

WHEREAS, Developer has obtained approvals from the City to develop the Property into a residential subdivision commonly known as Rockwell Ranch. However, development of the Property is subject to the installation of offsite sewer improvements (the "Project Improvements") identified on Exhibit B attached hereto.

WHEREAS, the Project Improvements will provide direct benefit to other developers and owners of surrounding properties (the "Benefited Properties") when they develop their properties. The Benefited Properties are identified by tax parcel number and owner in Exhibit C attached hereto.

WHEREAS, Developer desires to be reimbursed for a proportionate share of the costs associated with the design, construction and installation of the Project Improvements as the Benefitted Properties connect and/or utilize the improvements;

WHEREAS, City is willing to administer reimbursement payments from the owners of the Benefitted Properties in accordance with the terms and provisions of this Agreement; and

WHEREAS, this Agreement is entered into to ensure the orderly development of real property within City limits, while maintaining and enhancing property values.

NOW THEREFORE, in consideration of the mutual covenants contained herein, the parties hereto contract, covenant, and agree as follows:

AGREEMENT

1. Necessity of Improvements. Developer expressly acknowledges that the Project Improvements are necessary for development of Rockwell Ranch, and are lawful conditions precedent for the approval and development of Rockwell Ranch.

2. Developer's Obligation. Developer shall install the Project Improvements at Developer's cost and expense including all costs and expenses associated with engineering, planning, surveying, design, materials, labor, easements, property, construction costs, and bonding

Attachment: Pioneering Agreement - White Horse Developers for Offsite Sewer (Pioneering Agreement for White Horse Developers, LLC for

relating to the Project Improvements, in accordance with the construction plans approved by the City for the development of Rockwell Ranch and/or required by City ordinances and regulations (the "Pioneering Costs"). Pioneering Costs shall bear no interest from the date hereof to date of payment.

3. Approval, Inspection, and Acceptance. Developer and its assigns shall install the Project Improvements and post applicable bonds and improvement completion assurances in accordance with City ordinances to guarantee the installation of the Project Improvements according to City ordinances, regulations, and standards. The Project Improvements shall be approved by the City and inspections shall be conducted by the City to ensure that the Project Improvements are constructed per City standards. Upon completion, Developer shall deliver to City a set of as-built plans of the Project Improvements (in both paper and electronic format) with the verified actual amount of the Pioneering Costs of the Project Improvements. Upon successful completion of the Project Improvements and acceptance in writing by the City, Developer shall also provide an Improvement Warranty in accordance with City ordinances to ensure that the Project Improvements remain in good condition and free from defects for a period of one (1) year. Upon successful completion, approval by the City, and posting of an Improvement Warranty by Developer, the City shall accept, own, operate, and maintain the Project Improvements. Developer shall dedicate to the City ownership of all facilities, easements, and property necessary to properly operate and maintain the Project Improvements and shall not retain any ownership interest therein, unless City ordinances, agreements, or regulations provide otherwise.

4. Collection of Pioneering Costs. The City will require owners of the Benefitted Properties that develop their land or apply for building permits to pay to the City their proportionate share of the Pioneering Costs of the Project Improvements prior to granting development or subdivision approval or issuing building permits. The proportionate share shall be determined by the City based upon consideration of the street frontage, parcel size, and other relevant factors of each respective Benefitted Property. In no event shall City be liable for failure to make collection; it being understood and agreed that City will use its best efforts to make such collection.

5. Distribution of Pioneering Costs Received. The funds collected shall be paid by the City to the Developer within 60 days of collection, unless the payment is made under protest by the owner of the Benefitted Property or the payment is the subject of a lawsuit (filed or threatened), complaint, advisory opinion, or appeal. In such a case, the City will retain the funds until such time as the matter is resolved. When the matter is resolved, the City shall disburse the funds to Developer within 60 days. Nothing in this Agreement shall preclude Developer from arranging for up-front financial contributions for the Project Improvements from the owners of the Benefitted Properties.

6. Duration of Pioneering Costs for all improvements. If a development application is made after 10 years from the date hereof, there shall be no required payment of Pioneering Costs related to streets as a pre-condition of development approval or issuance of a building permit.

Attachment: Pioneering Agreement - White Horse Developers for Offsite Sewer (Pioneering Agreement for White Horse Developers, LLC for

7. Full Compensation. The Developer hereby agrees it shall not be entitled to any reimbursement, compensation, incentive, or other payment from the City related to the Project Improvements. Nothing in this Agreement, however, shall preclude Developer from obtaining reimbursements or impact fee credits for "system improvements" or oversized public improvements requested or required by the City in relation to the Project. If the City requires Developer to upsize or extend any of the Project Improvements, the parties may negotiate a separate reimbursement agreement to be submitted to City Council for approval. Such upsizing costs, however, are not part of this Agreement.

8. Choice of law. This Agreement shall be interpreted and enforced under the laws of the State of Utah. Venue for any legal action brought on this Agreement shall lie with the Fourth Judicial District Court for Utah County, Utah.

9. Authority. Each individual executing this Agreement hereby represents and warrants that he or she has been duly authorized to sign this Agreement in the capacity and for the entities identified.

10. Recitals and Exhibits Incorporated. Each recital set forth above, and each exhibit attached to and referred to in this Agreement, is hereby incorporated by reference.

11. Counterparts and Severability. In the event that any provision of this Agreement shall be held invalid and unenforceable, such provision shall be severable from, and such invalidity and unenforceability shall not be construed to have any effect on, the remaining provisions of this Agreement. This Agreement may be executed in one or more counterparts, each of which shall be deemed an original, but all of which shall constitute one and the same instrument.

12. Entire Agreement. This Agreement constitutes and comprises the entire understanding of the parties hereto, and supersedes any previous written or oral communication or representation related to the subject matter hereof

13. Amendment. This Agreement may only be amended by written instrument signed by both parties hereto.

Attachment: Pioneering Agreement - White Horse Developers for Offsite Sewer (Pioneering Agreement for White Horse Developers, LLC for

IN WITNESS WHEREOF, the parties have executed this Agreement as of the day and year first above written.

AMERICAN FORK CITY

_____
Bradley J. Frost, Mayor

Attest:

_____
Terilyn Lurker, Recorder

DATED this ____ day of _____, 2020.

WHITE HORSE DEVELOPERS, LLC

By: _____
Name: Grant Lefgren
Its: Member

State of Utah

County of _____

On the _____ day of _____, 2020, personally appeared before me Grant Lefgren, of White Horse Developers, LLC, whose identity has been proven on the basis of satisfactory evidence, and after being duly sworn acknowledges that he had authority to execute the foregoing Pioneering Agreement, for the purposes stated therein, and did so of his own voluntary act.

_____
Notary

Attachment: Pioneering Agreement - White Horse Developers for Offsite Sewer (Pioneering Agreement for White Horse Developers, LLC for

EXHIBIT A
Parcel Legal Description

A 25-foot-wide sewer line easement with 12.50 feet on each side of the following described centerline.

Beginning at a point which is S 89°52'20" W 2749.69 feet along the section line and South 3238.38 feet from the Southeast Corner of Section 22, Township 5 South, Range 1 East, Salt Lake Base and Meridian.

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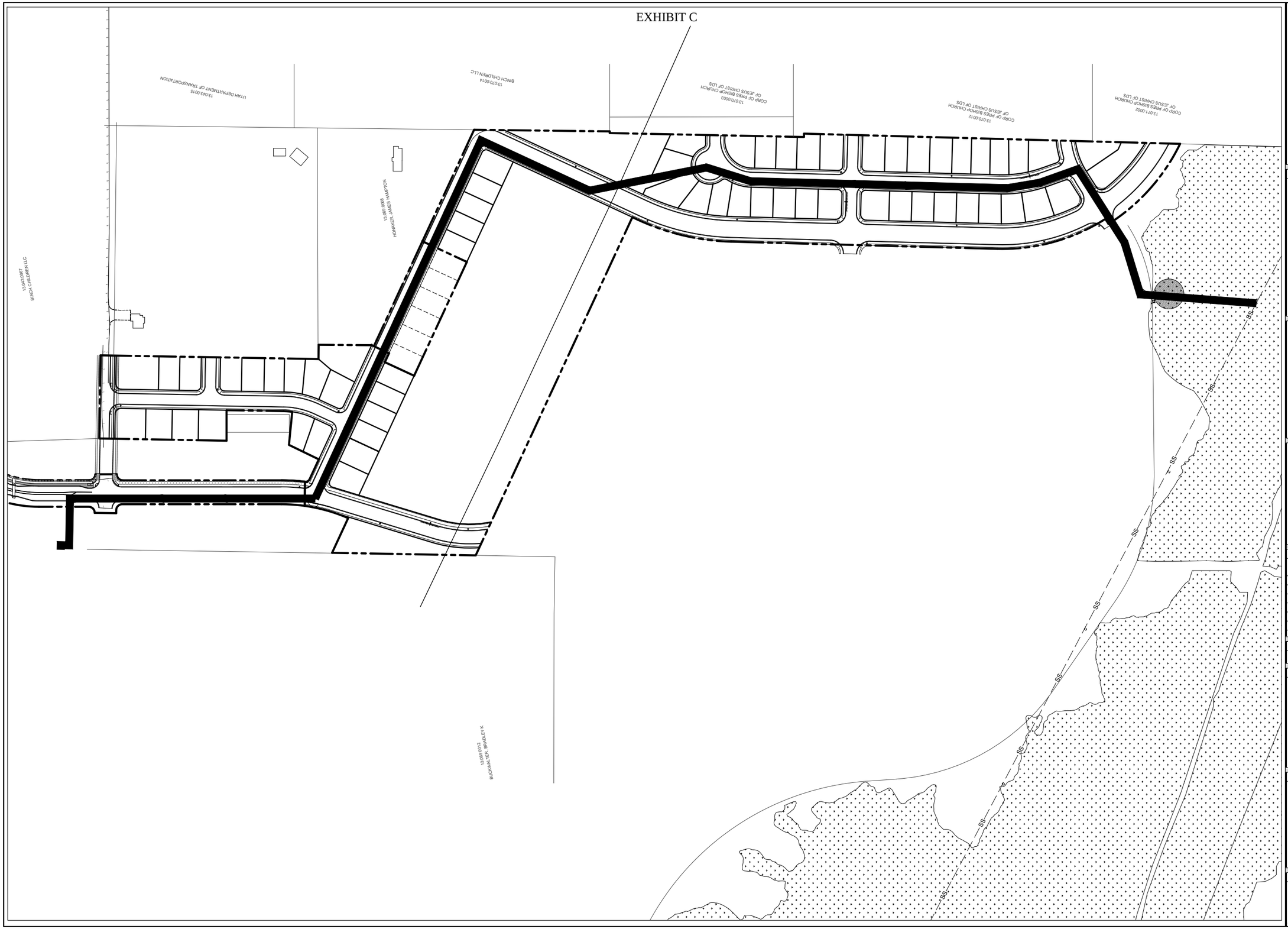
18" Sewer	473	LF	$ 84.00	$ 39,732.00
15" Sewer	4,375	LF	$ 79.00	$ 345,625.00
Upsized Sewer MH (5' Dia) due to pipe increase	12	EACH	$ 4,900.00	$ 58,800.00
Sewer MH (5' Dia)	7	EACH	$ 4,900.00	$ 34,300.00
Sewer Trench Backfill	14,415	CY	$ 20.00	$ 288,300.00
Dewatering	1	LS	$ 25,000.00	$ 25,000.00
Sewer Testing	1	LS	$ 13,000.00	$ 13,000.00
			TOTAL	**$ 1,003,472.00**

Minimum Standard (Pioneering)				
Description	**Quantity**	**UM**	**Unit Bid Price**	**Total Bid Price**
Sewer				
Connect to Existing	1	EACH	$ 8,500.00	$ 8,500.00
TSSD Metering Manhole	0	EACH	$ 150,000.00	$ -
10" Sewer	383	LF	$ 46.00	$ 17,618.00
10" Sewer	473	LF	$ 46.00	$ 21,758.00
10" Sewer	4,375	LF	$ 46.00	$ 201,250.00
Upsized Sewer MH (4' Dia) due to pipe increase	12	EACH	$ 4,100.00	$ 49,200.00
Sewer MH (5' Dia)	7	EACH	$ 4,900.00	$ 34,300.00
Sewer Trench Backfill	13,849	CY	$ 20.00	$ 276,980.00
Dewatering	1	LS	$ 17,500.00	$ 17,500.00
Sewer Testing	1	LS	$ 13,000.00	$ 13,000.00
			TOTAL	**$ 640,106.00**

PARCEL	**LF**	**PRICE/LF**	**TOTAL/PARCEL**
Parcel 35:280:0006 (AF PD LLC)	152	$ 122.06	$ 18,553.80
Parcel 35:280:0006 (AF PD LLC)	161	$ 61.03	$ 9,826.19
Parcel 35:280:0006 (AF PD LLC)	161	$ 61.03	$ 9,826.19
Parcel 35:280:0007 (AF PD LLC)	703	$ 61.03	$ 42,905.66
Parcel 35:280:0008 (AF PD LLC)	703	$ 61.03	$ 42,905.66
Parcel 13:069:0013 (Left Turn)	276	$ 122.06	$ 33,689.79
Parcel 13:068:0011 (Left Turn)	259	$ 122.06	$ 31,614.69
Parcel 13:069:0017 (Left Turn)	267	$ 122.06	$ 32,591.21
Parcel 13:069:0018 (Left Turn)	1,642	$ 122.06	$ 200,429.83
Parcel 13:069:0014 (Left Turn)	1,784	$ 122.06	$ 217,762.99
TOTAL	**5,244**		**$ 640,106.00**

Attachment: Pioneering Agreement - White Horse Developers for Offsite Sewer (Pioneering Agreement for White Horse Developers, LLC for

EXHIBIT C



ARDERO
520 South 850 East
Suite A1
Lehi, UT 84043
(385) 484-6337

DEVELOPMENT

900 WEST ROADWAY
PHASE 1.2B

0 75 150 300 450
SCALE: 1"= 150'

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

REVISIONS			SEAL
NO.	DATE	DESCRIPTION	THIS DOCUMENT IS INCOMPLETE AND IS RELEASED TEMPORARILY FOR INTERIM REVIEW ONLY. IT IS NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
1			KENNETH R. BERG P.E.
2			SERIAL NO. 343602
3			DATE: 11/07/2019
4			
5			
6			
7			

ACTION	DATE
FINAL PLAN	11/07/2019

PROJECT

900 WEST ROADWAY
PHASE 1.2B

DESCRIPTION

FINAL PLAN

- NOT FOR -
- CONSTRUCTION -

SHEET NAME	SHEET NUMBER
SEWER EASEMENT	C1

Attachment: Pioneering Agreement - White Horse Developers for Offsite Sewer (Pioneering Agreement for White Horse Developers, LLC for