UNAPPROVED MINUTES
01.18.2023

AMERICAN FORK CITY

PLANNING COMMISSION REGULAR SESSION

February 08, 2023

The American Fork City Planning Commission met in a regular session on February 08, 2023 at the American Fork City Hall, 31 North Church Street, commencing at 7:00 p.m.

Commissioners Present: Christine Anderson, Chris Christiansen, David Bird, Jenny Peay, Rodney Martin, Harold Dudley, Bruce Frandsen

Absent:

Staff Present:

Patrick O'Brien	Development Services Director
Travis Van Ekelenburg	Senior Planner
Cody Opperman	Planner 1
JJ Hsu	Engineer
Susan Goebel-Canning	Public Works Director
Melissa White	Admin Assistant

Others Present: Susan Goebel-Canning, Bon Kirkpatrick, Nan Kirkpatrick

REGULAR SESSION

Christine Anderson led the "Pledge of Allegiance"

Roll Call

COMMON CONSENT AGENDA

1. **Minutes of the January 18, 2022 Planning Commission Regular Session.**

Jenny Peay motioned to approve the minutes. David Bird seconded the motion.

Christine Anderson	**AYE**
Chris Christiansen	**AYE**
Jenny Peay	**AYE**
Harold Dudley	**AYE**
Rodney Martin	**AYE**
David Bird	**AYE**

ACTION ITEMS

1. **Election of Planning Commission Chairperson.**

Chris Christiansen motioned to approve Christine Anderson as the new Planning Commission Chairperson for 2023.

Jenny Peay seconded the motion. Voting was as follows:

Christine Anderson	**AYE**
Chris Christiansen	**AYE**
Jenny Peay	**AYE**
Harold Dudley	**AYE**
Rodney Martin	**AYE**
David Bird	**AYE**

The motion passed

Chairwoman Anderson expressed her gratitude and love of serving on the commission and accepted the nomination.

Bruce Frandsen entered the meeting.

2. **Election of Planning Commission Vice Chairperson.**

The Commissioners held a brief discussion and determined the best candidate for Vice Chairperson would be a member who had the experience and time allowance

to fill the role. It was agreed that all members of the Commission would qualify for the role, but ultimately Mr. Christiansen was the best candidate at this time. Mr. Christiansen stated that he feels honored to fill the role and has the capacity to do so at this time.

Harold Dudley motioned to approve Chris Christiansen as the new Planning Commission Vice Chairperson.

David Bird seconded the motion. Voting was as follows:

Christine Anderson	**AYE**
Chris Christiansen	**AYE**
Bruce Frandsen	**AYE**
Jenny Peay	**AYE**
Harold Dudley	**AYE**
Rodney Martin	**AYE**
David Bird	**AYE**

The motion passed

3. **Recommendation on a proposed zone change for property located at approximately 96 N 350 W, from the R3-7500 Residential zone to the CC-2 (Central Commercial) Zone.**

Travis Van Ekelenburg reviewed the background information for action item number 3: The applicant is applying for a zoning change for property located at approximately 96 N 350 W, from the R3-7500 Residential zone to the CC-2 (Central Commercial) zone. All parcels consist of 0.77 acres and the R3-7500 zoning would be replaced by the Central Commercial zoning (CC-2).

The proposed commercial zoning does not coincide with the current Land Use Map, resulting in a land use amendment to be done as well. The surrounding land uses of the area are all residential high density, general commercial, and design commercial. The surrounding zoning types are R3-7500, R4-7500, and CC-2.
The proposed zone change looks to leapfrog over another property to change the current zoning designation to CC-2. Additionally, the applicant is proposing to change the zoning of 350 West Street to achieve this zoning change but has not followed staff's recommendations and instructions to submit a land use map

amendment to support the zone change. Due to the leapfrogging, or spotted zoning, over the adjacent property staff and legal counsel does not recommend approval for the application of the zoning change to the CC-2 zone.

ADDITIONAL PROJECT CONDITIONS:
Approximately 14 additional feet from this parcel along the frontage of 350 W shall be dedicated to the City at no cost to the City as a condition of this zone map amendment. Right-of-way dedication for 350 W shall be shown on a subdivision plat that is submitted to the city for review within 60 days of the approved zone change or shall be deeded to the city by deed within 60 days of the approved zone change.

Mr. Dudley stated his understanding that there would be work by staff to put forth a land use map amendment in congruence with the zone change. He noted that the report states the zone change is not congruent with the land use, and he wanted to clarify why the land use map was not initiated.

Mr. O'Brien stated that the land use amendment request would need to come from the applicant. Mr. Sowby was informed of the process via email communication on January 5th 2023, and at this time the city has not received a land use amendment application. Mr. O'Brien reiterated that a zone change and land use amendment would be appropriate if neighboring properties were also changing, but as it is currently it would create an island. Based on discussions with the city's legal counsel, it is the staff's opinion that without it being congruent, it does fall into spot zoning.

Mr. Van Ekelenburg stated that the staff offers the opportunity for applicants to meet with the staff and are available to answer questions throughout the process. He confirmed that no changes have been made to the application and it remained the same as what was presented at the November 02, 2022, Planning Commission meeting.

Mr. O'Brien stated staff had discussed the zone change with the property owners between the proposal and the existing CC-2 zone as requested by the Planning Commission to see if they were interested in coming on board as part of the multi-unit zoning change. Mr. Van Ekelenburg noted that the property owners, Nan and Bob Kirkpatrick, had met with staff and were at the meeting to discuss their opinion on the zone change.

Mr. Steve Sowby represents the applicants and he stated that they chose not to make the land use map amendment application because they do not have the authority to do it as they do not own the property where the amendment would occur. He stated that he spoke with city staff and was told neither the city staff nor Mr. Sowby's team could not initiate the land use map amendment. Staff clarified that the applicant could not apply to change another property owners land use but this did not prohibit an application to change the land use of their property.

Mr. O'Brien stated that for a zone change to remain in conformity with the city's land use plan, a land use amendment would be required for the same properties that are undergoing a zone change request; from a staff perspective it's difficult to recommend a zone change for approval if the underlying land use does not conform. He gave a hypothetical example of a property having residential land use and commercial zoning; they do not sit well with one another.

Mr. Dudley asked Mr. Sowby what made him feel he could not apply for a land use map amendment. Mr. Sowby stated they did not initiate the application because it was his team's understanding that they would be unable to apply for a land use map amendment or a zone change on behalf of the Kirkpatrick's property.

Mr. Sowby restated his findings from the November 02, 2022, Planning Commission meeting that fifteen other areas in the city have a stem, half street annexation, four areas in the CC-2 with spot zoning, and eight areas in the adjoining GC-2 zone that are already islands. Because of these areas, he does not feel his team is out of bounds in asking for the zone change as he has seen it done in the city before. He stated that it was his feeling that the city could recommend bringing in the parcel to the south [the Kirkpatrick's property] with a city-initiated land use amendment, similar to a city-initiated annexation. He also noted that there is a building on the northern parcel against 350 West that is already compatible with the CC-2 zone and they are trying to put the building in the right zone.

Nan Kirkpatrick stated that they currently own and reside on the property south of the proposed zone change, from 300 West through to 350 West. She asked the Commission to deny changing the zone from Residential to Commercial. Mr. Martin asked if there was any particular reason for their request of denial and if it affected the Kirkpatricks' financially or in any other way. Mrs. Kirkpatrick stated that their experience with the commercial property to the south, Good Earth, has been difficult as they have dealt with daily unintentional and intentional litter from the commercial property. She again asked that the Commission deny the zone change. She stated her

understanding that while their property was not in the discussion, it did have an impact on the discussion. Mr. Dudley asked if they were opposed to the land use changing. Mrs. Kirkpatrick clarified that they do not want the land use to change from residential to commercial.

Chairwoman Anderson questioned what the impact would be from a land use change on a property.

Mr. O'Brien stated that the land will inform what the future use can be and will impact the long-range vision for a community. As best as possible, it is best to plan the underlying land use range to be what is wanted for the future zoning for a property. There are situations where the current zoning may not match the land use, but the land use is meant to signify what the future use should be. Changing land use would signify what is wanted in the area in the future. If the land use in an area were changed to commercial, anyone could request to change the zoning as the land use signified the future intention.

Mr. Dudley and Mr. Martin clarified where the Kirkpatrick's property was located on the presentation map, as well as a few other properties. The Commission thanked the Kirkpatricks' for their time and thoughts on the matter.

Mr. John Heiner stated that it was his team's understanding from staff that without the Kirkpatrick's participation, the staff was not willing to support the change in the land use amendment which is why they did not move forward with an application. He stated that the property has been used for commercial for years, and when Mr. Dustin Pyne purchased the property, it was his understanding that it would not be an issue to change the zoning to commercial. Mr. Heiner stated that his team attempted to reach out to the Kirkpatrick's many times without success. In his experience land use proposals are started by the city and staff. He stated his surprise that there was a suggestion from staff for a land use amendment from Main Street to Pacific Drive as he feels that change would not be made in his lifetime.

Mr. O'Brien refuted Mr. Heiner's point and clarified that staff did not make the recommendation of a land use change from Main to Pacific Drive. He stated the subdivision north of the properties in question would be the furthest staff would consider. Mr. Dudley clarified that the suggestion to amend the land from Main Street to Pacific Drive was suggested by a City Council member in attendance at the November 02, 2022, Planning Commission meeting.

Mr. Heiner stated the property has been a commercial property for years. Somewhere along the way the city approved that, and although the zone did not change, it has been used for commercial development for years. He can appreciate that the Kirkpatricks' would be concerned, especially their experience with Good Earth. He asked for the Commissions support and approval.

Mr. Dustin Pyne thanked the Kirkpatrick's and stated his hope to be a good neighbor and his hopes to be a positive influence in the community in American Fork. The background of the studio on the property is that it operated as a ballet studio. It is a 5,000 square foot building with two studios, one on the first floor and one in the basement. The Kirkpatrick's gave a brief history of the property and stated that Joseph and Jacqueline Colledge bought it from the Fagens, and the Fagens used to own the home that Tim Miskimen now lives in. Prior to the dance studio being built, it was all horse property. The Colledge's built the dance studio in the 80's.

Mrs. Kirkpatrick stated her opinion that the dance studio creates issues in the area such as inadequate parking when there are large events at the studio. She does not feel it is realistic to add more businesses to the area.

Mr. Dudley asked Mr. Pyne what his plans were for the property if the zone change goes through. Mr. Martin asked if the zone change was approved if the main change would be to provide correct parking for the existing building. Mr, Pyne stated there would be additional parking and two new additional buildings put in. One would be a storage garage for the theater company, and one would be an offsite office for his Chick-fil-a business that would include a few additional units to help pay the mortgage with businesses such as insurance agencies. He feels the office buildings would be an improvement to the area and he hopes to clean up the property and make it more usable. The office units will be one level as there is not enough parking spaces to support multi-level units. Mr. Heiner stated that with large warehouse space and small office units, there will not be a lot of traffic produced in the area.

Mr. Sowby stated that if the Commission gave a favorable recommendation his team would be happy to apply for a land use amendment.

Mr. Pyne asked if there is a legal non-compliance, could the contingent properties not be considered spot zoning? Mr. O'Brien stated it would be legally non-conforming with the existing zoning. This means they wouldn't be able to change the structure without needing to meet existing zoning. Staff would need to research if it is a legal non-conforming use, or if it is an illegal use.

Ms. Peay stated that she would be interested to know if the dance studio was approved with a conditional use permit and if that is the reason it was approved as-is. She also noted that even if American Fork City deemed that lot as a non-conforming lot, it doesn't mean that it gives priority or precedence that would say the city would continue to do so.

Chairwoman Anderson asked if the Commission has the ability to recommend approval on a lot that is connected only by a road.

Mr. O'Brien stated that he had consulted with the city attorney and her answer was no. She is looking at it from a more legal and technical perspective, which is why he consulted with her to get an answer he could not provide, and because of that, staff went with her recommendation of no.

Mr. Martin asked if there were examples of spot zoning that had been referenced earlier in the meeting. Mr. O'Brien stated that it would not be considered spot zoning where there is CC-2 and GC-2 core areas that are supposed to be centrally located in other areas. They are not necessarily three or four lots that are consolidated together, but multiple blocks. There is a CC-2 zone on the west end and the east end of the CC-1 zone. Similarly, there are GC-2 zones scattered throughout the city in strategic locations because it's meant to supportive to commercial. He feels the zone change is leapfrogging a property to get additional units, and the zones Mr. Sowby referenced were strategically located masses of development throughout the community that the council and previous Planning Commission members would have done at different points in time. Mr. Van Ekelenburg noted that when a property is rezoned, it is for that specific property and should not be leapfrogged, or cherry-stemmed, to one down the street.

Mr. Fransen asked Mr. Sowby if he had examples of cherry-stemming for zone changes. Mr. Sowby stated he had given two examples in the November 02, 2022, Planning Commission meeting. He stated that one could look at a map and see fifteen locations where it had happened.

Chairwoman Anderson stated that she is in favor of the idea of allowing surrounding areas of the C-2 zone to switch to commercial. In this case, she does not like the fact that it connects with a roadway and it also overlooks the rights of the current residents. She is not ready to recommend approval.

Mr. Christiansen stated his opinion that the changes should be made strategically as the Commission looks at the plat map and the overall general plan, and not make changes for specific projects.

Mr. Bird stated he agreed with Chairwoman Anderson regarding the rights of the Kirkpatrick's, but also feels it was important to respect the rights of Mr. Pyne. He respects Mr. Pyne's project and thinks it would be a good asset to the community.

Mr. Christiansen noted that Mr. Pyne's rights stemmed from when he purchased the property and what rights existed at that point in time. He has rights to residential but not commercial. He may have non-conforming rights to the building, be he cannot change his rights at will.

Mr. Martin noted that more of these situations are going to arise as the years go by and American Fork grows. It is his opinion that the commercial zone will extend north and south of Main Street in the coming years. He feels the rezoning will happen regardless, even if it is not perfect. It is his opinion that people will not be building houses right next to Main Street and the Commission should make decisions to improve the properties in that area.

Mr. Pyne stated his understanding of doing due diligence when buying a property. He stated he would not have bought the property if he knew he would be held up in meetings. He did his due diligence and felt comfortable moving forward with the purchase of the property. He stated his inability to be able to do high density housing with the current zoning as they do not have the frontage. He stated that he is not in the farming business, and he may need to sell the property which may result in a monetary loss. He would like to see American Fork move forward and progress and feels that changing the zone to commercial would be a positive move for the community.

Ms. Peay asked Mr. O'Brien for clarification on the procedure for a land use map amendment. Mr. O'Brien stated that when an application for a land use map amendment or zone change is received it goes through a review process and is then added to the next available Planning Commission agenda. Land use and zoning changes are statutorily required to have a public hearing and with that comes a 10-day state required public notice. We follow the State noticing requirements as outlined in LUDMA, but also within our own code. The city attorney advised a land use amendment before the zone change. Surrounding property owners were notified

of this zone change. Ms. Peay stated that the property owners should be notified of a land use map amendment should it be initiated.

Chairwoman Anderson stated that there may have been planning practices in the past that do not need to be repeated. She believes that the CC-2 zone will need to expand and voiced her favor of that change. She stated she is uncomfortable with setting a precedent that properties can be skipped, or leapfrogged, to expand on the other side of properties and would like to see the expansion go radially.

Mr. O'Brien stated his opinion that expansions should be Planning Commission or City Council driven and not applicant driven to ensure all expansions are well thought out.

Mr. Dudley stated his belief that the city needs to move forward in situations like this and look at expanding its general commercial north and south along Main Street as appropriate. He felt that the project had not progressed since the meeting on November 02, 2022, and questioned why the city had not initiated a land use amendment.

Mr. O'Brien clarified that the City Council would need to initiate a full-scale land use amendment on behalf of the city. Mr. Sowby reiterated that his team did not initiate the land use amendment for their property due to the roadblocks discussed earlier in the meeting.

Mr. Christiansen stated that the Planning Commission was the recommending body for the land use amendment. He suggested that the Planning Commission deny this and send it to the City Council to give them the ability to address the issue with an interest in expanding the land use. Mr. Heiner stated that there needs to be a method to address the challenges that arise in circumstances like this, or properties may continue to sit without development.

Mr. Franson agreed with Mr. Christiansen and stated that the City Council needs to take a deep look at the land use along Main Street as he believes commercial will continue to grow. He feels that this is an opportune time to put this issue in front of the City Council as it has not been addressed in this way for many years.

Mr. Martin asked what can be done as a recommending body to ensure that the City Council will consider changing the land use to the north and south of Main Street.

Mr. O'Brien stated that this discussion would help address the issue. Ms. Peay clarified that the Commission was only approving the rezoning.

Mr. Martin stated that he feels Mr. Pyne's project could help the City Council understand the issue that the city is facing and what they will be facing in the near future. Mr. Pyne stated he is a trailblazer. He stated he has no issue going to Mayor Frost and the council members and explaining what his experience has been trying to get through this committee. He felt it would be easier to be able to go to with an approval and tell them what it took to get to this point. He stated his opinion that the process is difficult and there could be steps to make the process easier.

Chairwoman Anderson stated her hopes that the discussion would help the city to see that there is a problem that needs to be addressed, and that it could lead to growth. She felt a good move by the city would be to change the underlying land use in areas like this so that it would allow for future change to commercial, as commercial expands, without changing the zoning of residents who do not want to be in commercial.

Harold Dudley motioned to recommend approval of the Zone Change to Central Commercial (CC-2) Zone, for the properties located in the area of 96 N 350 W, subject to any findings, conditions, and modifications found in the Staff Report, or recommended by the Fire Marshall

David seconded the motion. Voting was as follows:

Christine Anderson	**NAY**
Chris Christiansen	**NAY**
Bruce Frandsen	**AYE**
Jenny Peay	**NAY**
Harold Dudley	**AYE**
Rodney Martin	**AYE**
David Bird	**AYE**

The motion was approved

4. **Recommendation on an ordinance creating section 17.5.136 of the American Fork City Municipal Code relating to rock crushing and providing an effective date for the ordinance**

Travis Van Ekelenburg reviewed the background information for action item number 4: Rock crushing provides basic road and building material by reducing the size and changing the classification of the material. This process, while important, has the potential to emit small dust particles which degrade air quality and can pose risk to those who are in the affected area.

Ms. Susan Goebel-Canning stated that she did not believe that there were any specifics on the code that existed other than that American Fork City did not want to have any rock crushing activities in city limits. There are proposed parameters that allow a certain limited amount of rock crushing to occur. Public Works collects concrete and asphalt throughout the year while they are repairing roads. They have stockpiled it and rock crushed it, and there are protocols that will water and keep the dust particles down. From there they asked how they could allow others that meet a certain criteria to also fall into that category within the PF or Industrial zones. There were parameters set up to allow them to do the rock crushing activities safely.

Mr. Christiansen questioned if the city has consulted the Utah State Code as there was a section that addressed this specifically. Ms. Goebel-Canning stated that they had consulted with the state and that they do have an exemption permit and they said that they wanted this to meet this exemption.

Mr. Bird asked if the rock crushing was happening anywhere specific in the city or if it was addressing future needs. Ms. Goebel-Canning stated that in the past it has been done by Art Dye Park during the winter months. In the future the stockpile may move to a PF or Industrial zone.

Mr. Christiansen stated Utah code 17-41-402 (6)(a) that addresses regulating and changing this as a restriction:

17-41-402 (6)(a) A county, city, or town may not:

(a) Adopt, enact, or amend and existing land use regulation, ordinance, or regulation that would prohibit, restrict, regulate, or otherwise limit critical infrastructure materials operations, including vested critical infrastructure materials operations as defined in Section 10-9a-901 or 17-27a-1001

Mr. Christiansen stated a municipality is not allowed to regulate critical infrastructure materials, which are produced when rocks are crushed. Mr.

Christiansen wanted to make sure the city had looked at the code and addressed that specifically. Mr. O'Brien clarified that based on the state code, the city code could not be amended.

Mr. Christiansen stated that he would abstain from the vote as he has a conflict of interest. He asked that staff review the code to ensure the state code was addressed before the code text amendment was adopted.

Rodney Martin motioned to table the proposed code text amendment of the American Fork Municipal Code, creating Section 17.5.136, relating to the rock crushing, and providing an effective date for the ordinance, and instruct the staff to consult the State Code to see where they may better clarify what they are trying to accomplish to ensure the city is in conformity with the State Code.

Jenny Peay seconded the motion. Voting was as follows:

Christine Anderson	**AYE**
Chris Christiansen	**AYE**
Bruce Frandsen	**AYE**
Jenny Peay	**AYE**
Harold Dudley	**AYE**
Rodney Martin	**AYE**
David Bird	**AYE**

The motion was tabled

5. **Review and action on a Site Plan application for the DBN Tax Project, located at 34 West 100 North, in the Central Commercial (CC-1) Zone.**

Patrick O'Brien reviewed the background information for action item number 5: The applicant is applying for a Site Plan approval for DBN Tax Project, for a new commercial development in the CC-1 Zone, located in the area 34 W 100 N. The proposal consists of 1 lot intended for commercial development. The entire development parcel consists of approximately 0.47 acres.
Due to the development being in the CC-1 zone, the Planning Commission is the approval body for the Site Plan.
Action was previously taken on this, and the project was recommended to be tabled.

The issues previously raised have not been addressed.
PROJECT CONDITIONS OF APPROVAL:

1. Outstanding DRC comments still need to be addressed.

Mr. O'Brien stated that the applicant has not resubmitted new plans, and when meetings were set up to discuss their project, the applicant did not show up to the meetings. All previous staff comments still stand. The Planning Commission is the approving body and if they deny the project, the applicant can appeal to the City Council. Mr. O'Brien feels that the items that need resolved can be addressed with the applicant. He stated that there are no variances allowed in the CC-1 zone, although there are certain exceptions that exist in the fire code that would have helped the applicant meet the Fire Marshall's requirements.

Mr. Hsu reviewed the outstanding comments to be addressed:

1. Per Sec 17.12.214 Nonconforming building or structure. A building, or structure, or portion thereof which does not conform with the current setback, height or other zoning regulations applicable to the structure, but which legally existed before the effective date of the now controlling regulations.
2. Per Sec 17.1.502 Nonconforming Uses May Be Extended Within Same Building – Limitations Nonconforming uses within a building may be extended through the same building in which said nonconforming use is located provided: That no structural alteration of the building is proposed or made for the purpose of the extension. For purposes of this code, the addition of a solar energy device to a building shall not be construed as a structural alteration. That such increase or extension is required to comply with an order to improve issued by a health or safety official acting in his official capacity.
3. Per sec 17.4.401 CC-1 Zone- "D-Special provisions"
4. Per American Fork Sensitive Lands- groundwater monitoring station maybe required
5. Per 15.01.1900- commercial driveway is 26 ft
6. Per 15.01.1850 Commercial access spacing for minor collector road is 150'.
7. Per American Fork storm water technical manual - Retain storm water on-site Require providing existing and proposed grades at property lines

8. Per 17.12.214, 17.1.502, and 17.4.401. This access needs to be closed. If the West Lane could not meet the city code.
9. If want to access the West Lane, they need to meet the following: 1. Dead end streets, per code 15.01.100 shall be a cul-de-sac. 2. Additional 45 ft of ROW along the West Lane needs to be provided.

Rodney Martin motioned to table action on the Site Plan application for the DBN Tax Project, located at 34 W 100 N, in the Central Commercial (CC-1) Zone, and instruct the developer to work with staff to solve the issues that have been brought up and instruct staff to not put this item on the agenda until such a time as those concerns have been resolved.

Bruce Frandsen seconded the motion. Voting was as follows:

Christine Anderson	**AYE**
Chris Christiansen	**AYE**
Bruce Frandsen	**AYE**
Jenny Peay	**AYE**
Harold Dudley	**AYE**
Rodney Martin	**AYE**
David Bird	**AYE**

The motion was tabled

OTHER BUSINESS

Upcoming Projects

Mr. O'Brien stated that the city code 1-17 will be fully rewritten with a priority of chapters 15 and 17. The staff will set up consultations to solicit feedback from the Planning Commission on how to address problematic issues. The code rewrite will be taken on by Cherelyn Egner's law office.

A new staff member will be introduced at the next meeting.

Mr. O'Brien thanked Mr. George Schade for all of his help with the IT work over the past year and a quarter.

An in-house Planning Commission training will be coming up in the Summer to train on the state code and state requirements.

Mr. David Bird was appointed as a full voting member by Mayor Frost recently, so there are two alternate roles available for the Planning Commission.

The staff welcomes feedback, recommendations, and questions from the Commissioners.

ADJOURNMENT

Harold Dudley motioned to adjourn the meeting. Chris Christiansen seconded the motion.

Meeting adjourned at 8:51

Melissa White

Administrative Assistant II

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

AMERICAN FORK CITY
NOTICE OF PUBLIC HEARING
&
PLANNING COMMISSION REGULAR SESSION
February 22nd, 2023
7:00 p.m.

Notice is hereby given that the American Fork City Planning Commission will meet in regular session on February 22nd, 2023 at the American Fork City Hall, 31 North Church Street, commencing at 7:00 p.m. The agenda shall be as follows:

REGULAR SESSION

Pledge of Allegiance

Roll call

COMMON CONSENT AGENDA

(Common Consent is that class of Commission 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 February 8th 2023, Planning Commission minutes.

PUBLIC HEARINGS

1. Public hearing and recommendation on a proposed code text amendment of the American Fork Municipal Code amending Section 17.5.105 titled Area of Accessory Building, to amend language related to structure size, and to clarify language related to the approval procedure to be followed.

2. Public hearing and recommendation on a proposed code text amendment of the American Fork Municipal Code creating subsection 17.6.101 (E) of the American Fork City Municipal Code relating to expiration of site plan approvals.

3. Public hearing and recommendation on a proposed code text amendment of the American Fork Municipal Code amending Section 17.4.608 Sec. 6 Part E titled Lot Plans, to amend language related to minimum densities in the Transit Oriented Development zone.

4. Public hearing and recommendation on a proposed Annexation Agreement for the Shelley and Aston properties, located in the area of 535 N 300 W, and 215 W 300 N, American Fork, UT, 84003

5. Public hearing and recommendation on a proposed Land Use Map Amendment at approximately 6595 N 6000 W, on approximately 8.15 acres; changing the Land Use Map from the Design Industrial designation to PI-1 (Planned Industrial) Land Use designation.

ACTION ITEMS

1. Review and action on a Site Plan for Cost-U-Less Carpet, located in the area of 64 North 900 West, in the General Commercial (GC-2) Zone.

2. Review and action on a Preliminary Plan for Axcess Accident Center, located in the area of 64 East 150 North, in the Central Commercial (CC-1) Zone.

3. Review and action on a Final Plat for Axcess Accident Center, located in the area of 64 East 150 North, in the Central Commercial (CC-1) Zone.

4. Review and action on a Site Plan for Axcess Accident Center, located in the area of 64 East 150 North, in the Central Commercial (CC-1) Zone.

5. Review and action on an Amended Final Plat for Standard Plumbing, located in the area of 552 East 620 South, in the Planned Commercial (GC-2) Zone.

6. Review and action on a Site Plan for Standard Plumbing, located in the area of 552 East 620 South, in the Planned Commercial (GC-2) Zone.

7. Review and action on a Site Plan application for a pylon sign for Deer Park, located at 70 East 1100 S, in the Planned Industrial (PI-1) Zone.

8. Review and action on an application for an accessory structure in excess of 1,000 square feet, located in the area of 145 West 640 North in the Residential (R1-9000) Zone.

OTHER BUSINESS

1. Upcoming Projects

ADJOURNMENT

Dated this 8th day of February, 2023

Patrick O'Brien

Development Services Director

*The order of agenda items may change at the discretion of the Planning Commission Chairman

AMERICAN FORK CITY **MEETING DATE:** February 22nd, 2023

PLANNING COMMISSION

AGENDA TOPIC:

Public hearing and recommendation on a proposed code text amendment of the American Fork Municipal Code amending Section 17.5.105 titled Area of Accessory Building, to amend language related to structure size, and to clarify language related to the approval procedure to be followed.

BACKGROUND:

The code text amendment looks to amend the language of size to an accessory structure. Rather than an accessory structure being two times the size of the footprint (foundation) of the primary structure, it will now be decreased to an area the size of the footprint (foundation) of the primary structure. Adding in the language for RA-1 and RA-5 agricultural zones, there may be an accessory building larger than the footprint (foundation) of the primary structure if it is related to agricultural activity. Additionally, if the area of the accessory structure is 1000 square feet or greater it will be reviewed and submitted as a site plan and follow the requirements of Section 17.6.101 as well as the original three factors that planning commission has been reviewing accessory structures under. One change to the original three factors is that the applicant will need to provide an agreement to be recorded on the property that provides neither the accessory building nor any portion thereof will be used or converted for use as living or sleeping quarters or for the conduct of a business.

POTENTIAL MOTIONS – CODE TEXT AMENDMENT:

APPROVAL

Madame Chairwoman, I move to recommend approval for the proposed code text amendment of the American Fork Municipal Code, amending Section 17.5.105, relating to the area of accessory buildings.

DENIAL

Madame Chairwoman, I move to recommend denial for the proposed code text amendment of the American Fork Municipal Code, amending Section 17.5.105, relating to the area of accessory buildings.

TABLE

Madame Chairwoman, I move to table action on the proposed code text amendment of the American Fork Municipal Code, amending Section 17.5.105, relating to the area of accessory buildings, and instruct staff/developer to……

ORDINANCE NO. 2023 - ___ - ___

AN ORDINANCE AMENDING SECTION 17.5.105 OF THE AMERICAN FORK CITY MUNICIPAL CODE RELATING TO AREA OF ACCESSORY STRUCTURES.

WHEREAS, American Fork City seeks to promote the health, safety, morals, convenience, order, prosperity, and general welfare of American Fork City;

WHEREAS, the American Fork City Council finds it in the best interest of the City to clarify the process of approval related to area of accessory structures;

WHEREAS, the American Fork City Council finds that the adoption of this ordinance would promote the health, safety and welfare of the City and its residents.

NOW THEREFORE, be it ordained by the city council of American Fork, Utah, that:

PART I
TEXT OF ORDINANCE

SECTION 1.

Section 17.5.105 of the Municipal Code of American Fork City, relating to Area of Accessory Structures, shall read as follows:

Sec 17.5.105 Area Of Accessory Buildings

Accessory buildings shall not be larger than an area ~~two times~~ the size of the footprint (foundation) of the primary structure; or cover more than twenty-five percent of the total rear yard area of a lot, whichever is less. Accessory structures for agricultural purposes within the RA-1 and RA-5 Residential Agricultural zones are permitted to be in excess of the size or footprint restriction, but must be constructed in a style and of materials that would identify its use as a separate style of accessory structure that cannot be used for another purpose.

All accessory buildings shall be of a character which is consistent and compatible with the bulk, height, style and construction materials of existing dwellings in the immediate vicinity. There shall be no signage on any portion of the accessory building and the area surrounding the accessory building shall be landscaped.

Approval Procedure:

Accessory structures less than one thousand square feet shall require a building permit only. An accessory building containing a building footprint of one thousand square feet or larger shall require approval of the planning commission through the submission of a site plan, and shall follow the requirements of Section 17.6.101. In addition to the site plan review, an accessory structure is also subject to the following findings:

(1) the accessory building will be incidental to the primary use of the parcel,

(2) the applicant has provided ~~adequate assurance~~ an agreement to be recorded on the property that provides neither the accessory building nor any portion thereof will be used or converted for use as living or sleeping quarters (see Section 17.5.106) or for the conduct of a business (except when located in a commercial zone permitting such activity), and

(3) the bulk, height, style and construction material of the accessory structure is compatible with dwellings in the immediate vicinity and will not result in an undue negative impact upon adjacent properties.

PART II
CONFLICTING ORDINANCES, SEVERABILITY, AND ADOPTION

SECTION 1. Conflicting Provisions. Whenever the provisions of this Ordinance conflict with the provisions of any other ordinance, resolution, or part thereof, the more stringent shall prevail.

SECTION 2. Provisions Severable. This Ordinance and the various sections, clauses and paragraphs are hereby declared to be severable. If any part, sentence, clause, or phrase is adjudged to be unconstitutional or invalid, it is hereby declared that the remainder of the ordinance shall not be affected thereby.
This amended ordinance shall take effect immediately upon its passage and publication as prescribed by law.

Passed by the American Fork City Council this ____ day of _____, 2023.

_____
Bradley J. Frost
American Fork City Mayor

ATTEST:

_____
Terilyn Lurker
City Recorder

AMERICAN FORK CITY **MEETING DATE:** February 22nd, 2023

PLANNING COMMISSION

AGENDA TOPIC:

Public hearing and recommendation on a proposed code text amendment of the American Fork Municipal Code creating subsection 17.6.101 (E) of the American Fork City Municipal Code relating to expiration of site plan approvals.

BACKGROUND:

The code text amendment looks to amend Section 17.6.101 to create subsection "E." Subsection "E" will provide a two-year expiration date to site plans and will provide a 12 month extension following an extension fee.

POTENTIAL MOTIONS – CODE TEXT AMENDMENT:

APPROVAL

Madame Chairwoman, I move to recommend approval for the proposed code text amendment of the American Fork Municipal Code creating subsection 17.6.101 (E) of the American Fork City Municipal Code relating to expiration of site plan approvals.

DENIAL

Madame Chairwoman, I move to recommend denial for the proposed code text amendment of the American Fork Municipal Code creating subsection 17.6.101 (E) of the American Fork City Municipal Code relating to expiration of site plan approvals.

TABLE

Madame Chairwoman, I move to table action on the proposed code text amendment of the American Fork Municipal Code creating subsection 17.6.101 (E) of the American Fork City Municipal Code relating to expiration of site plan approvals, and instruct staff/developer to……

ORDINANCE NO. 2023 - ___ - ___

AN ORDINANCE CREATING SUBSECTION 17.6.101 (E) OF THE AMERICAN FORK CITY MUNICIPAL CODE RELATING TO EXPIRATIONOF SITE PLAN APPROVALS.

WHEREAS, American Fork City seeks to promote the health, safety, morals, convenience, order, prosperity, and general welfare of American Fork City;

WHEREAS, the American Fork City Council finds it in the best interest of the City to clarify the expiration of site plan approvals;

WHEREAS, the American Fork City Council finds that the adoption of this ordinance would promote the health, safety and welfare of the City and its residents.

NOW THEREFORE, be it ordained by the city council of American Fork, Utah, that:

PART I
TEXT OF ORDINANCE

SECTION 1. Subsection 17.6.101(E) of the Municipal Code of American Fork City, relating to Expiration of Site Plan Approvals, shall read as follows:

E. Expiration of Site plan approval. A site plan approval issued pursuant to this section shall expire and have no further force or effect if the building, activity, construction, or occupancy authorized by the approval is not commenced within two (2) years of the date of the approval. A twelve (12) month extension may be approved by the land use authority subject to payment of an extension fee equal to one-half of the current filing fee.

PART II
CONFLICTING ORDINANCES, SEVERABILITY, AND ADOPTION

SECTION 1. Conflicting Provisions. Whenever the provisions of this Ordinance conflict with the provisions of any other ordinance, resolution, or part thereof, the more stringent shall prevail.

SECTION 2. Provisions Severable. This Ordinance and the various sections, clauses and paragraphs are hereby declared to be severable. If any part, sentence, clause, or phrase is adjudged to be unconstitutional or invalid, it is hereby declared that the remainder of the ordinance shall not be affected thereby.
This amended ordinance shall take effect immediately upon its passage and publication as prescribed by law.

Passed by the American Fork City Council this ____ day of _____, 2023.

_____
Bradley J. Frost
American Fork City Mayor

ATTEST:

_____
Terilyn Lurker
City Recorder

AMERICAN FORK CITY **MEETING DATE:** February 22nd, 2023

PLANNING COMMISSION

AGENDA TOPIC:

Public hearing and recommendation on a proposed code text amendment of the American Fork Municipal Code amending Section 17.4.608 Sec. 6 Part E titled Lot Plans, to amend language related to minimum densities in the Transit Oriented Development zone.

BACKGROUND:

The code text amendment looks to amend Section 17.4.608 Section 6 Part E to create a minimum density requirement for projects located in the Transit Core-Mixed Use Core of the TOD zone. The minimum density requirement shall be 55 units per gross acre.

POTENTIAL MOTIONS – CODE TEXT AMENDMENT:

APPROVAL

Madame Chairwoman, I move to recommend approval for the proposed code text amendment of the American Fork Municipal Code amending Section 17.4.608 Sec. 6 Part E titled Lot Plans, to amend language related to minimum densities in the Transit Oriented Development zone.

DENIAL

Madame Chairwoman, I move to recommend denial for the proposed code text amendment of the American Fork Municipal Code amending Section 17.4.608 Sec. 6 Part E titled Lot Plans, to amend language related to minimum densities in the Transit Oriented Development zone.

TABLE

Madame Chairwoman, I move to table action on the proposed code text amendment of the American Fork Municipal Code amending Section 17.4.608 Sec. 6 Part E titled Lot Plans, to amend language related to minimum densities in the Transit Oriented Development zone, and instruct staff/developer to……

ORDINANCE NO. 2023 - ___ - ___

AN ORDINANCE AMENDING SECTION 17.4.608 SEC. 6 (E) OF THE AMERICAN FORK CITY MUNICIPAL CODE RELATING TO LOT PLANS.

WHEREAS, American Fork City seeks to promote the health, safety, morals, convenience, order, prosperity, and general welfare of American Fork City;

WHEREAS, the American Fork City Council finds it in the best interest of the City to amend the municipal code related to Lot Plans;

WHEREAS, the American Fork City Council finds that the adoption of this ordinance would promote the health, safety and welfare of the City and its residents.

NOW THEREFORE, be it ordained by the city council of American Fork, Utah, that:

PART I
TEXT OF ORDINANCE

SECTION 1. Section 17.4.608 Sec. 6 (E) of the Municipal Code of American Fork City, relating to Lot Plans, shall read as follows:

Section 6 – Lot Plans

E. **Building Use Standards**

1. Density

a. The maximum density of each lot is calculated in terms of *development units* (DU) per gross lot area where one development unit (DU) equals one residential unit or 1,100 square feet of non-residential. Gross lot area is calculated as the net lot area plus the area of adjacent thoroughfares, *alleys* and passages between lot lines and centerlines.

b. Maximum density is limited to the following ratios per each lot type except where a minimum density must be achieved as set forth in c. below:

LT-1	**LT-2**	**LT-3**	**LT-4**	**LT-5**	**LT-6**	**LT-7**	**LT-8**	**LT-9**
2 DU's per gross acre	4 DU's per gross acre	8 DU's per gross acre	14 DU's per gross acre	20 DU's per gross acre	30 DU's per gross acre	42 DU's per gross acre	50 DU's per gross acre	65 DU's per gross acre

c. Where a project is located in the Transit Core-Mixed Use Core, a project must achieve a minimum density of 55 units per gross acre.

d. Maximum density of each lot may not be less than one DU. Fractional remainders are rounded downwards in one-half unit increments.

PART II
CONFLICTING ORDINANCES, SEVERABILITY, AND ADOPTION

SECTION 1. Conflicting Provisions. Whenever the provisions of this Ordinance conflict with the provisions of any other ordinance, resolution, or part thereof, the more stringent shall prevail.

SECTION 2. Provisions Severable. This Ordinance and the various sections, clauses and paragraphs are hereby declared to be severable. If any part, sentence, clause, or phrase is adjudged to be unconstitutional or invalid, it is hereby declared that the remainder of the ordinance shall not be affected thereby.
This amended ordinance shall take effect immediately upon its passage and publication as prescribed by law.

Passed by the American Fork City Council this ____ day of _____, 2023.

_____
Bradley J. Frost
American Fork City Mayor

ATTEST:

_____
Terilyn Lurker
City Recorder

AMERICAN FORK CITY
PLANNING COMMISSION

MEETING DATE: February 22nd, 2023

AGENDA TOPIC:

Public hearing and recommendation on a proposed Annexation Agreement for the Shelley and Aston properties, located in the area of 830 E 30 N, American Fork, UT, 84003

BACKGROUND INFORMATION		
Location:		830 E 30 N
Applicants:		Laura and Jesse Shelley, Debra and Michael Aston
Existing Land Use:		Residential Low Density
Proposed Land Use:		N/A
Surrounding Land Use:	North	Residential Low Density
	South	Residential Low Density
	East	Residential Low Density
	West	Residential Low Density
Existing Zoning:		Unincorporated Territory
Proposed Zoning:		R1-9000
Surrounding Zoning:	North	R1-9000
	South	Unincorporated Territory
	East	R1-9000
	West	RA-1

BACKGROUND:

The applicant is requesting to annex into American Fork City from Utah County Territory. There are two parcels requesting to be annexed in and both parcels equal out to be approximately 1.07 acres. The land use designation is Residential Low Density and the surrounding zones around the two parcels are R1-9000 and RA-1. If the annexation is approved the zoning designation for the two parcels will be the R1-9000 Residential Zone.

Project Map:

<u>POTENTIAL MOTIONS – Site Plan</u>

APPROVAL

Madame Chairwoman, I move that we recommend approval for the proposed Annexation Agreement for the Shelley and Aston properties, located in the area of 830 E 30 N, American Fork, UT, 84003, subject to any conditions found in the Staff Report, or recommended by the Fire Marshal.

DENIAL

Madame Chairwoman, I move that we recommend denial for the proposed Annexation Agreement for the Shelley and Aston properties, located in the area of 830 E 30 N, American Fork, UT, 84003.

TABLE

Madame Chairwoman, I move that we table action on the proposed Annexation Agreement for the Shelley and Aston properties, located in the area of 830 E 30 N, American Fork, UT, 84003, and instruct the developer/staff to _____.

ANNEXATION AGREEMENT
(Shelley Annexation)

This Agreement, made and entered into this ___ day of _____, 2023, by and between City of American Fork, Utah, a Utah Municipal Corporation (he after referred to as "City") and Laura & Jesse Shelley, and Debra & Michael Aston, (hereafter collectively referred to as "Applicant"), is based on the following:

RECITALS

WHEREAS, Applicant is the owner of certain parcels of privately-owned real property constituting the entirety of the Shelley and Aston Family Annexation Area, which annexation is located within the unincorporated territory of Utah County, contiguous to the corporate boundary of the City, and is within the City's proposed expansion area;

WHEREAS, a "Petition for Annexation" (Attachment 1), together with a plat (Attachment 2) have been prepared by the Applicant and show the real property proposed for annexation (hereafter referred to as "Annexation Area");

WHEREAS, in accordance with the provisions of UCA 10-2-402, the American Fork City Council has heretofore adopted Resolution No. 2022-09-32 R, accepting the Petition for Annexation;

WHEREAS, notice of hearing regarding the proposed annexation has been published and the public hearing thereon held;

WHEREAS, the City Council has determined that annexation of the Annexation Area is in the best interest of the City and has indicated an intent to: (1) enact an ordinance of annexation relating thereto, subject to the prior execution of this Agreement, and (2) authorize the recording of the annexation plat at the office of the Utah County Recorder, subject to the terms and conditions of this Agreement.

TERMS AND CONDITIONS

NOW THEREFORE, based on the above recitals and in consideration of the annexation of the Annexation Area to the City, the parties covenant and agree as follows:

SECTION 1 - Applicability of Agreement: The real property to which the terms of this Agreement apply shall be the parcels of private property within the Annexation Area, identified on Attachment 2. Attachment 2 is hereby made part of this Agreement.

SECTION 2 - Annexation a benefit to Applicant: Applicant and City acknowledge that the City is not required to approve the annexation and that the terms and conditions of annexation, as set forth herein, are reasonable and entered into freely and voluntarily. Further, Applicant hereby acknowledges and agrees that the benefit received from annexation of the property is equal to or greater than the requirements and conditions of annexation as set forth in this Agreement and the conditions of the development as set forth herein and under the terms of the City's Development Code and Impact Fee Ordinance does not constitute a taking as defined pursuant to the terms of UCA 10-9a-103(6), 1953, as amended.

SECTION 3 - Authority of Applicant: Applicant hereby affirms that it is the current owner of the total private land area within the Annexation Area and has complete authority to enter into this Agreement and bind the property hereto.

SECTION 4 - Compatibility with Land Use Plan and Initial Zone Classification: The Land Use Element of the General Plan shows the Annexation Area classified as Residential Low Density. Therefore, the zone classification attached to the parcel shall be R1-9000. A map illustrating the zone classification has been prepared by the City and is made part of this agreement (Attachment 3).

SECTION 5 - Right-of-way to be Conveyed: The City's Transportation Element of the General Plan (the "Transportation Master Plan") provides for the development of a local street. A portion of the street needs to be dedicated to the City to meet local road requirements. This portion will match the northernly limits of existing parcels on 30 North to East and West of the parcels to be annexed.

As a condition of annexation, Applicants hereby agrees to convey to the City the rights-of-way ("ROWs") necessary to match the existing Local Street as shown on the dedication map prepared by the Applicant and approved by the City Attachment 4a and 4b.

Applicant shall have no obligation to construct any improvements to the ROWs unless and until any improvement or development occurs within the Annexation Area, subject to the provisions as outlined in the American Fork City Development Code Section 17.5.126 (Minimum Level of Improvements Required).

SECTION 6 - Conveyance of Water Right: American Fork City Code 17.1.400, Conveyance of Water, requires conveyance of water shares/rights at the time of annexation unless the City determines that there is good and sufficient reason to delay the time of the conveyance. City and Applicant acknowledge and agree that the parties are unable to determine

the quantity of shares/rights required for the Annexation Area at the present time and therefore, the City authorizes a delay in the time of conveyance of water shares/rights until the time of development. A Water Delay Agreement is hereby entered into by the parties and is incorporated into this Agreement as Attachment 5a and 5b.

SECTION 7 - Open Ditches to be Piped: Applicant acknowledges that it is its burden in full to pipe any and all gravity irrigation conveyances (ditches), to the standards of the City and to the standards of the applicable irrigation company or private ditch easement holders as part of any forthcoming development project.

SECTION 8 - Property Taxes and Rollback Taxes to be Paid on any Right-of-Way Dedicated to City: Applicant agrees to pay any outstanding property taxes on the Annexation Area including any and all rollback taxes if the subject area is classified as "Greenbelt" with the Utah County Tax Assessor, for any areas identified as ROW to be dedicated to City. Proof of payment of these taxes shall be required prior to recording of this Agreement.

SECTION 9 - Impact Fees: No impact fees are required to be paid at this time as a condition of annexation. However, nothing in this Agreement constitutes a waiver of any obligation that Applicant or any successor may have for the payment of impact fees required as a condition of development of the Annexation Area or any portion thereof. Applicant acknowledges that no development approval or building permit shall be issued until all applicable fees required by City ordinance have been paid at the amount then in effect.

SECTION 10 - Default: 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.

SECTION 11 - Notice: Any notice to be given hereunder shall be given by certified mail, return receipt requested, addressed as follows:

a. If to the City, to the City of American Fork, 51 East Main Street, American Fork Utah, 84003.

b. If to Applicant, to Laura & Jesse Shelley, 535 N 300 W, American Fork, UT, 84003, and; Debra & Michael Aston 215 W 300 N, American Fork, UT, 84003

SECTION 12 - Entire Agreement: This Agreement constitutes the entire agreement between the parties and may be changed only in writing signed by all parties.

SECTION 13 — 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 enforceability of the remaining provisions hereof.

SECTION 14 - 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.

IN WITNESS WHEREOF, the parties have signed this agreement on the date first mentioned above.

AMERICAN FORK CITY

_____ _____

Bradley J. Frost, Mayor

ATTEST:

City Recorder

ATTACHMENT 1

Notice of Intent to File an Annexation Petition

Pursuant to Utah Code Ann. §10-2-403(2), notice is hereby given that the person or persons identified below intend to file an annexation petition with American Fork City. The area proposed for annexation is commonly described as the Shelley/Aston Annexation and consists of 1.07 acres at approximately 830 E. 36 N. Further, an accurate map of the area that is proposed to be annexed is attached to this notice.

Person or persons intending to file annexation petition:

Contact Petitioner:

Name: Laura and Jesse Shelley

Address: 535 N. 300 W. American Fork, UT 84003

Phone Number: (801) 319-8353

Email: laurashelley81@gmail.com

Petitioner:

Name: Debra and Michael Aston

Address: 215 W. 300 N. American Fork, UT 84003

Phone Number: (801) 372-4957

Email: _____

Petitioner:

Name: _____

Address: _____

Phone Number: _____

Email: _____

RECEIVED
Date: 7-21-22
American Fork City
Recorder's Office

- This notice of intent must also be sent to affected entities.
- The petitioner(s) must submit a written request to the county to mail the required notice and pay the county the estimated cost of mailing the required notice. Please see attached letter from Utah County.

Intent to Annex Impact Statement

To Whom It May Concern:

We would like to make a request to annex the following parcels of land into American Fork City:
Serial Number: 130580369 (owned by Jesse and Laura Shelley)
Serial Number: 130580366 (owned by Michael and Debra Aston)

Both of these parcels are considered to be an unapproved division of land. We are requesting annexation, and the recording of a subdivision plat to remedy the unapproved divisions and permit the construction of two single family dwellings.

These parcels are currently zoned through Utah County as TR-5: Transitional Agriculture Zone. We would like to annex into American Fork City so that both parcels can be zoned for residential low-density housing.

As of the 2020 Census, American Fork City had a population of 31,636. The annexation of these properties would add a total of 8 individuals (5 in the Shelley home and 3 in the Aston home), all of whom are currently residing in American Fork City.

The American Fork City General plan does have this area of land listed as Residential low-density housing, so the annexation of these properties is in compliance with the American Fork General Plan.

The topography is basically level with no significant vegetation.

After annexation, both lots will need to hook into the city Sewer, Water, and Pressurized Irrigation. We would also be interested in hooking into City provided utility lines and services as soon as possible.

Thank you for your consideration.

Jesse and Laura Shelley
Michael and Debra Aston

ATTACHMENT 2

Boundary Description

A PARCEL OF LAND LOCATED IN THE NORTHEAST ¼ OF SECTION 24, TOWNSHIP 5 SOUTH, RANGE 1 EAST, SALT LAKE & MERIDIAN, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT ON THE SECTION LINE THAT IS N.89°45'24"W. 399.46 FEET FROM THE NORTHEAST CORNER OF SAID SECTION 24;
THENCE S.0°35'09"E. 205.51 FEET ALONG THE FRAUGHTON ADDITION; THENCE N.89°35'55"W. 138.83 FEET; THENCE N.0°35'57"E. 1.63 FEET; THENCE N.89°23'55"W. 91.74 FEET TO THE RED LEAF ANNEXATION; THENCE N.0°35'57"E. 202.90 FEET ALONG SAID ANNEXATION TO THE BRIARWOOD ADDITION; THENCE S.89°45'24"E. 226.32 FEET ALONG THE SECTION LINE AND SAID ADDITION TO THE POINT OF BEGINNING.

CONTAINING 46,703.5 S.F. OR 1.07 ACRES OF LAND

ATTACHMENT 3

Note: Area shown in grey is the proposed area of properties considered for annexation. These properties are to be designated as Residential Low Density on the Land Use Map, and as R1-9000 on the Zoning Map.

ATTACHMENT 4a

[illegible]
Sanctuary Park
City of [illegible]
Street
American Park, [illegible]

WARRANTY DEED

(JOINT TENANTS)
American Park

Affecting Tax ID No:
13:[illegible]
Project: [illegible]

[illegible] and [illegible], as Joint Tenants with Full Rights of Survivorship, Grantors, hereby CONVEY AND WARRANT to AMERICAN FORK CITY, at 51 East Main Street, American Fork, Utah [illegible], Grantee, for the sum of Ten ($10) Dollars, and other good and valuable considerations, the following described parcel of land in Utah County, State of Utah, [illegible], to-wit:

A parcel of land for the [illegible] of public [illegible] and [illegible] [illegible] along [illegible] North Street, being part of an entire tract of property, situate in the Northeast Quarter of Section 24, Township 5 South, Range 1 East, Salt Lake Base and Meridian. The boundaries of said parcel of land are described as follows:

COMM 89 DEG 45' 24" W 369.45 FT FR NE COR. SEC. 24, T5S, R1E, SL B&M.; S 0 DEG 35' 0" E 10.00 FT; N 89 DEG 45' 24" W 112.70 FT; N 0 DEG 35' 28" E 18.00 FT; S 89 DEG 45' 24" E 112.53 FT TO BEG. AREA 0.026 AC.

WITNESS, the hands of said Grantors, this 9th day of January, A.D. 20 23

Debra Aston

Debra Aston
Type or print name of grantor

Michael Aston
Type or print name of grantor

State of UTAH)
) SS.
County of UTAH)

On the date first above written personally appeared before me, DEBRA ASTON, who, being by me duly sworn, says that she is the OWNER of 51 E MAIN ST AMERICAN FORK, UT 84003, a corporation, and that the within and foregoing instrument was signed in behalf of said corporation by authority of NOTARY and said WRITING

acknowledged to me that said corporation executed the same.

WITNESS my hand and official stamp the date in this certificate first above written:

Notary Public

MITCH HAWKINS
Notary Public - State of Utah
Comm. No. 720478
My Commission Expires on
Sep 14, 2025

ATTACHMENT 4b

WHEN RECORDED, MAIL TO:
American Fork City
51 East Main Street
American Fork, Utah 84003

WARRANTY DEED
(JOINT TENANTS)
American Fork

Affecting Tax ID No:
13:058:6349

Project: Shelley/Matus Annexation

James and Laura Shelley as Joint Tenants with Full Rights of Survivorship, Grantors, hereby CONVEY AND WARRANT to AMERICAN FORK CITY, at 51 East Main Street, American Fork, Utah 84003, Grantee, for the sum of Ten ($10) Dollars, and other good and valuable considerations, the following described parcel of land in Utah County, State of Utah, as Public Right-of-Way, to wit:

A parcel of land for the installation of public sidewalk and park strip improvements along 30 North Street, being part of an entire tract of property, situate in the Northeast Quarter of Section 24, Township 5 South, Range 1 East, Salt Lake Base and Meridian. The boundaries of said parcel of land are described as follows:

COM N 89 DEG 48' 23" W 512.25 FT FR NE COR. SEC. 24, T5S, R1E, SLB&M; S 0 DEG 18' 28" W 18.00 FT; N 89 DEG 48' 23" W 112.70 FT; N 0 DEG 41' 40" E 18.00 FT; S 89 DEG 48' 23" E 112.85 FT TO BEG. AREA 0.008 AC.

WITNESS, the hands of said Grantors this 6th day of January, A.D. 2022

Laura Shelley

Laura Shelley
Type or print name of grantor

Jesse Shelley

Jesse Shelley
Type or print name of grantor

State of Utah)
) SS.
County of Utah)

JENNY LJ BROWN
Notary Public - State of Utah
Comm. No. 717925
My Commission Expires on
Jul 13, 2025

On the date first above written personally appeared before me, Laura Shelley and Jesse Shelley" who, being by me duly sworn, says that he is the owner of Parcel #13:058:0369, a corporation, and that the within and foregoing instrument was signed in behalf of said corporation by authority of Trust and said Writing

acknowledged to me that said corporation executed the same.

WITNESS my hand and official stamp the date in this certificate first above written:

Notary Public

ATTACHMENT 5a

WATER DELAY AGREEMENT FOR ANNEXATION

This Water Delay Agreement for Annexation ("**Agreement**") is entered into as of the 9th day of January, 20 23 ("**Effective Date**"), by and between DEBRA ASTON ("**Owner**"), and AMERICAN FORK CITY, a municipal corporation and political subdivision of the State of Utah ("**City**").

RECITALS

WHEREAS Owner is the owner of Parcel Nos. 13-058-0316 Lf ("**Property**"), which are located outside of the City's current municipal boundaries; and

WHEREAS Owner has filed with the City a request to have the Property annexed into the City ("**Annexation Request**"); and

WHEREAS Section 17.1.400(C) of the City Code requires the conveyance of title to water rights concurrently with final action by the City Council on an annexation, except under pursuant to certain findings, terms, and conditions; and

WHEREAS City and Owner desire to enter into this Agreement as part of the findings, terms, and conditions required under Section 17.1.400(C) of the City Code.

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. Determination of City Council. The City Council, with the recommendation of the City Planning Commission, has determined that there is good and sufficient reason to delay the time of conveyance of water rights and/or water shares beyond the time of the City Council's final action on the Annexation Request. This determination was made in the City Council meeting held on _____, 20___. The basis and reasoning for the City Council's determination are included within the recording, minutes, and other documentation from said City Council meeting.

2. Water Rights/Shares. The specific water rights and/or water shares that may be conveyed to the City, and that pursuant to the terms and conditions of this Agreement are hereby committed to the City, which commitment is irrevocable by Owner and may be released by the City only as provided in this Agreement ("**Committed Water**"), are identified in Exhibit A of this Agreement.

3. Conveyance of Committed Water. Prior to the City's approval of any development on the Property that will require the delivery of water, the City will determine the amount of water rights/shares required for dedication and conveyance to the City in order to meet the water requirements of the development. Owner will convey clear title to the required amount of the Committed Water to the City. If the amount of water necessary for the development is less than the

total amount of the Committed Water, the City will release the commitment provided in paragraph 2 above as to the unnecessary portion of the Committed Water. If the amount of water necessary for the development is more than the total amount of the Committed Water, Owner shall supply additional acceptable water rights/shares to the City to meet the dedication requirements. If the Committed Water consists of any water rights, the conveyance shall be by Warranty Deed and an accompanying Water Rights Deed Addendum. If the Committed Water consists of any water shares, the conveyance shall be by assignment, endorsement, and delivery of the appropriate share certificates. Owner acknowledges that under the Article XI, Section 6 of the Utah Constitution, City is prohibited from selling to Owner any portion of the Committed Water once it has been conveyed to the City.

4. Change Application. If any of the Committed Water consists of water rights, an express prerequisite for conveyance shall be the filing and approval of an Application for Permanent Change of Water ("Change Application") with the Utah Division of Water Rights ("Division") to convert the water rights into municipal use. Prior to submitting the Change Application, the water rights shall be conveyed to the City's water company or water trust therefor, if appropriate, for consideration. The City's water company and City shall prepare and execute the Change Application, with the full cooperation and support of Owner. The water rights will be deemed conveyed to the company or to the City under the paragraph upon the occurrence of an Order approving the Change Application that is acceptable to the City and any conditions that are part of the Change Application, or other approval of the Order. Owner shall be responsible for all costs associated with the Change Application, including but not limited to the City's attorney fees, application fees, and recording fees.

5. Water Conveyed to City. Owner shall convey unencumbered title to the Committed Water to the City. If the Committed Water consists of water rights, Owner will obtain water rights title insurance policy for the water rights. Owner shall be responsible for all costs associated with the water rights title insurance, including but not limited to premiums, endorsements, and recording fees. Owner shall be responsible for all costs associated with the subdivision improvements and conditions of the Development, other than the company water share insurance policy that is acceptable to the City. A water rights title insurance policy that is acceptable to the City is an express condition to the acceptability of the water rights for dedication and conveyance to the City. If the Committed Water consists of water shares, the City will obtain written confirmation of joint ownership and current payment of all assessments from the respective water company/companies. Owner shall be responsible for all costs associated with obtaining the written confirmation. From the date of this Agreement until the Committed Water is conveyed to the City, Owner shall not sell or otherwise dispose of the Committed Water, nor shall Owner allow any liens or encumbrances upon the Committed Water that would prevent Owner from conveying unencumbered title to the Committed Water to the City.

6. Cessation of Owner's Use. Upon conveyance of the Committed Water to the City, Owner shall immediately cease any and all use of the Committed Water.

7. 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 discharge to any successor or assign of Owner, and that the use of the term "Owner" in this contract includes Owner's successors or assigns.

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

9. Entire Agreement. This Agreement represents the entire agreement between the parties and supersedes all prior agreements and understandings concerning the commitment and conveyance of water rights for the Property. This Agreement shall not be amended, modified, or terminated except by written instrument signed by all parties.

10. 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.

11. Third Party Beneficiaries. This Agreement is not intended to and shall not create any rights in any person or entity not a party to this Agreement.

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

13. 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.

14. 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 this Agreement shall remain in full force and effect.

15. Authority of Parties. The parties signing this Agreement agreement warrant that they have full authority to do so and that their respective or entity has authorized and obtained whatever authorities and approvals are necessary to enter into this Agreement.

16. Counterparts. This Agreement may be executed in multiple counterparts, all of which taken together shall comprise one agreement.

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

AMERICAN FORK CITY

_____ Attest: _____

Heading J. Brown, Mayor Shelley Cardona, City Recorder

[illegible])
:ss
COUNTY OF _____)

[illegible]

_____
NOTARY PUBLIC

[OWNER]

Debra Aston

JEFFREY BROWN
Notary Public - State of Utah
Comm. No. 715004
My Commission Expires on
Nov 5, 2024

STATE OF UTAH)
:ss
COUNTY OF Utah)

On the 9th day of January, 2022 Debra Aston personally appeared before me and duly acknowledged that he/she executed this Water Delay Agreement for the purposes stated therein.

Jeffrey Brown
NOTARY PUBLIC

[illegible]

[illegible]

EXHIBIT A

Description of Water Rights and/or Water Shares Committed to the City

American Fork Irrigation Company Share [illegible]
[illegible] Mutual Fire Ditch Area

Approved as to form by City Attorney [illegible]

ATTACHMENT 5

WATER DELAY AGREEMENT FOR ANNEXATION

This Water Delay Agreement for Annexation ("Agreement") is entered into as of the 13th day of December, 2022 ("Effective Date"), by and between Jesse and Laura Shelley ("Owner"), and AMERICAN FORK CITY, a municipal corporation and political subdivision of the State of Utah ("City").

RECITALS

WHEREAS Owner is the owner of the Utah Tax ID [illegible] ("Property"), which is in and contains the City's current municipal boundaries, and

WHEREAS Owner has filed with the City a request to have the Property annexed into the City ("Annexation Request"), and

WHEREAS Section 17.1.400(C) of the City Code requires the conveyance of title to water rights commonly with filed notice by the City Council recommendation, recognizing pursuant to specific findings, terms, and conditions; and

WHEREAS City and Owner desire to enter into this Agreement as part of the findings, terms, and conditions required under Section 17.1.400(C) of the City Code.

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. Determination of City Council. The City Council, with the recommendation of the City Planning Commission, has determined that there is good and sufficient reason to delay the time of conveyance of water rights under water shares beyond the time of the City Council's final action on the Annexation Request. This determination was made in the City Council meeting held on _____, 20__. The basis and reasoning for the City Council's determination are included within the recording, minutes, and other documentation from said City Council meeting.

2. Water Rights/Shares. The specific water rights and/or water shares that may be conveyed to the City, and that pursuant to the terms and conditions of this Agreement are hereby committed to the City, which commitment is irrevocable by Owner and may be released by the City only as provided in this Agreement ("Committed Water"), are identified in Exhibit A of this Agreement.

3. Conveyance of Committed Water. Prior to the City's approval of any development on the Property that will require the delivery of water, the City will determine the amount of water rights/shares required for dedication and conveyance to the City in order to meet the water requirements of the development. Owner will convey clear title to the required amount of the Committed Water to the City. If the amount of water necessary for the development is less than the

b

total amount of the Committed Water, the City will release the commitment provided in paragraph 3 above as to the proportionate portion of the Committed Water. If Developer of water rights for the development is more than the total amount of the Committed Water, Owner shall acquire additional acceptable water rights/shares to the City to meet the dedication requirements. If the Committed Water portion of any water rights, the conveyance shall be by Warranty Deed and an accompanying Water Rights Quit Claim Deed. If the Committed Water consists of unit water shares, the conveyance shall be by endorsement, endorsement and delivery of the appropriate share certificates. Without acknowledgment under Article XII, Section 6 of the Utah Constitution, City acknowledges that retaining ownership of the Committed Water does not in fact constitute a sale in the City.

4. Change Application. If any of the Committed Water consists of water rights, an application prepared by Owner and shall be the filing and approval of an application for Permanent Change of Water ("Change Application") with the Utah Division of Water Rights ("Division") to transfer the water rights/shares to be delivered from the City's wells. Prior to filing of the Change Application, the water rights shall be reviewed by the City's water attorney to assure that the water rights are suitable for diversion. The City's water attorney shall also prepare and provide the Change Application, with the full exhibits and support of Owner. The water rights will be deemed acceptable for conversion to the City under this paragraph upon the issuance of an Order approving the Change Application not acceptable to the City and upon payment of all applicable deadlines for engineer fees, recordation and for appeals of the Order. Owner shall be responsible for all costs associated with the Change Application, including but not limited to the City's attorney fees, engineer's fees and recordation fees.

5. Title to Committed Water. Owner shall convey unencumbered title to the Committed Water to the City. If the Committed Water includes water rights, the City will obtain a non-profit diversion policy for the water rights. Owner shall be responsible for all costs associated with the non-profit diversion, including but not limited to the policy premium and recording fees. Owner shall be responsible for withdrawal, relocation and permitting of the Utah Department of Wildlife for the purpose of obtaining the non-profit policy that is acceptable to the City. A "non-profit" diversion policy shall be acceptable to the City if such policy provides for the non-profit diversion of the water rights dedicated and conveyed to the City. If the Committed Water consists of unit shares, the City will obtain a "Shareholder Agreement" and accompanying documentation from the regulated water company/irrigation company. Owner shall be responsible for all costs associated with obtaining the agreement and documents. Upon the date of this Agreement and the Change Application, Owner shall be responsible for all costs associated with the Change Application, including but not limited to the City's attorney fees, engineer's fees and recordation fees.

6. Ownership of Owner's City. Upon conveyance of the Committed Water to the City, Owner shall immediately cease the use and all rights to the Committed Water.

7. Successors and Assigns. Subject to the terms of this Agreement, Owner shall have no right to assign its rights, duties, and obligations. Owner's rights and duties shall be binding on the heirs, assigns, and successors of Owner, and shall be deemed to be a "Owner" for purposes of this Agreement.

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

9. Entire Agreement. This Agreement represents the entire agreement between the parties and supersedes all prior agreements and understandings concerning the commitment and conveyance of water rights for the Property. This Agreement shall not be amended, modified, or terminated except by written instrument signed by all parties.

10. 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.

11. Trust Fund Restriction. This agreement is not intended to and shall not create any rights in any person or entity with a party to this Agreement.

12. Attorney Fees. In a proceeding relating out of this Agreement, the prevailing party shall be entitled to reduced reasonable attorney fees.

13. Entire Agreement. 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, or either party may reasonably deem necessary or appropriate in order to carry out the intent and purpose of this Agreement.

14. 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.

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

16. Counterparts. This Agreement may be executed in multiple counterparts, all of which when taken as a full complete Agreement.

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

AMERICAN FORK CITY

_____ Attest: _____

Bradley J. Frost, Mayor Perilyn Lurker, City Recorder

STATE OF UTAH)
ss
COUNTY OF _____)

[illegible]

[illegible]

[illegible]

Laura Shelley Jesse Shelley

STATE OF UTAH)
ss
COUNTY OF Utah)

On the 6 day of January, 2023, Laura and Jesse Shelley personally appeared before me and duly acknowledged that he/she executed this Water Delay Agreement for the purposes stated therein.

JENNY LU BREME
Notary Public - State of Utah
Comm. No. 717925
My Commission Expires on
Jun 13, 2025

NOTARY PUBLIC

Approved as to form by City's attorney 7/11/2018

EXHIBIT A

Description of Water Rights and/or Water Shares Committed to the City

American Fork Irrigation Company Share 19737

AMERICAN FORK CITY PLANNING COMMISSION **MEETING DATE:** February 22nd, 2023

AGENDA TOPIC:

Public hearing and recommendation on a proposed Land Use Map Amendment at approximately 6595 N 6000 W, on approximately 8.15 acres; changing the Land Use Map from the Residential Low-Density designation to Design Industrial Land Use designation.

BACKGROUND INFORMATION		
Location:		6595 N 6000 W
Applicants:		Lake House Properties LLC, Ryan Salter
Existing Land Use:		Residential Low Density
Proposed Land Use:		Professional Office
Surrounding Land Use:	North	Residential Low Density
	South	Residential Low Density
	East	Residential Very-Low Density, Design Industrial
	West	Residential Low Density
Existing Zoning:		Unincorporated Territory
Proposed Zoning:		TBD
Surrounding Zoning:	North	PR-2.0
	South	PR-2.0
	East	PI-1, Unincorporated Territory
	West	PR-2.0

BACKGROUND:

The applicant is applying for a land use map amendment for the property located at approximately 6595 N 6000 W from the Residential Low-Density designation to the Design Industrial designation. There is one parcel with this request that consists of 8.15 acres in total.

The proposed Design Industrial Land Use designation is being requested prior to an annexation for this property. 100 West has been determined to be the dividing line between the Design Industrial Land Use on the east of Boat Harbor Road and the Low-Density Residential Land Use for residential development on the west side of Boat Harbor Road. Staff recommends denial of this Land Use Map Amendment to preserve the future residential land use to the west of Boat arbor Road.

STAFF RECOMMENDATION:

Staff is recommending DENIAL of the Land Use Designation change request.

<u>POTENTIAL MOTIONS – Land Use Map Amendment</u>

APPROVAL

Madame Chairwoman, I move that we recommend approval of the Land Use Map Amendment to Design Industrial, for the property located in the area of 6595 N 6000 W, subject to any findings, conditions, and modifications found in the Staff Report, or recommended by the Fire Marshal.

DENIAL

Madame Chairwoman, I move that we deny the Land Use Map Amendment to Design Industrial, for the property located in the area of 6595 N 6000 W.

TABLE

Madame Chairwoman, I move that we table action on the Land Use Map Amendment to Design Industrial, for the property located in the area of 6595 N 6000 W and instruct the developer/staff to _____.

Figure 1. Land Use Types.

Figure 2. Zoning Types.

Next Step

Approved
Proceed to Planning Commission
2/22/23

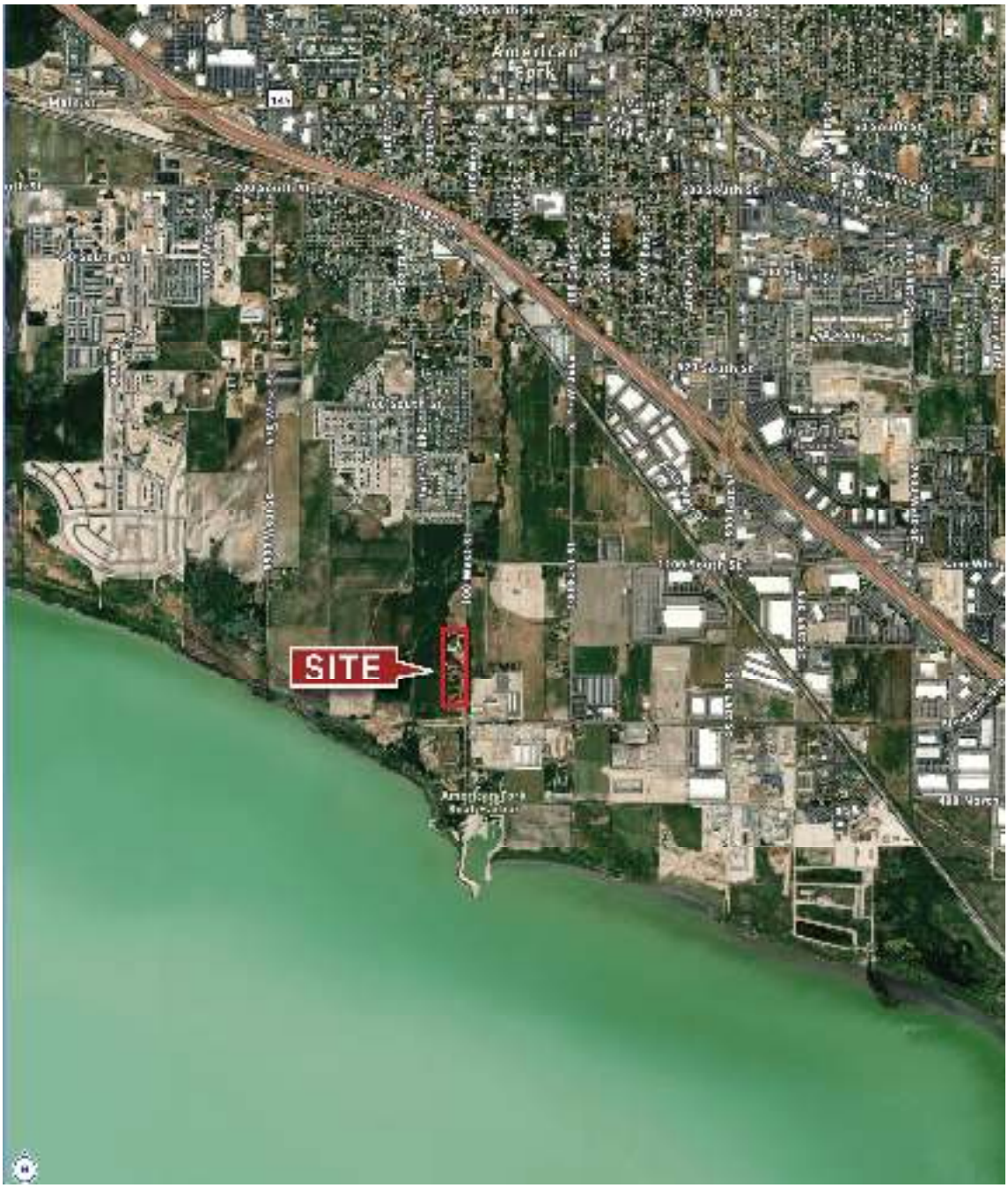
General Plan Amendment Request

American Fork City
Development Review
Committee

PLANNING AND ZONING REVIEWED
TVANEKELENBURG
2/9/23

Location: 6595 N 6000 W, American Fork, UT 84003
Size: 8.147176
Property Owner: Lake House Properties, LLC
Parcel Number: 13:064:0007

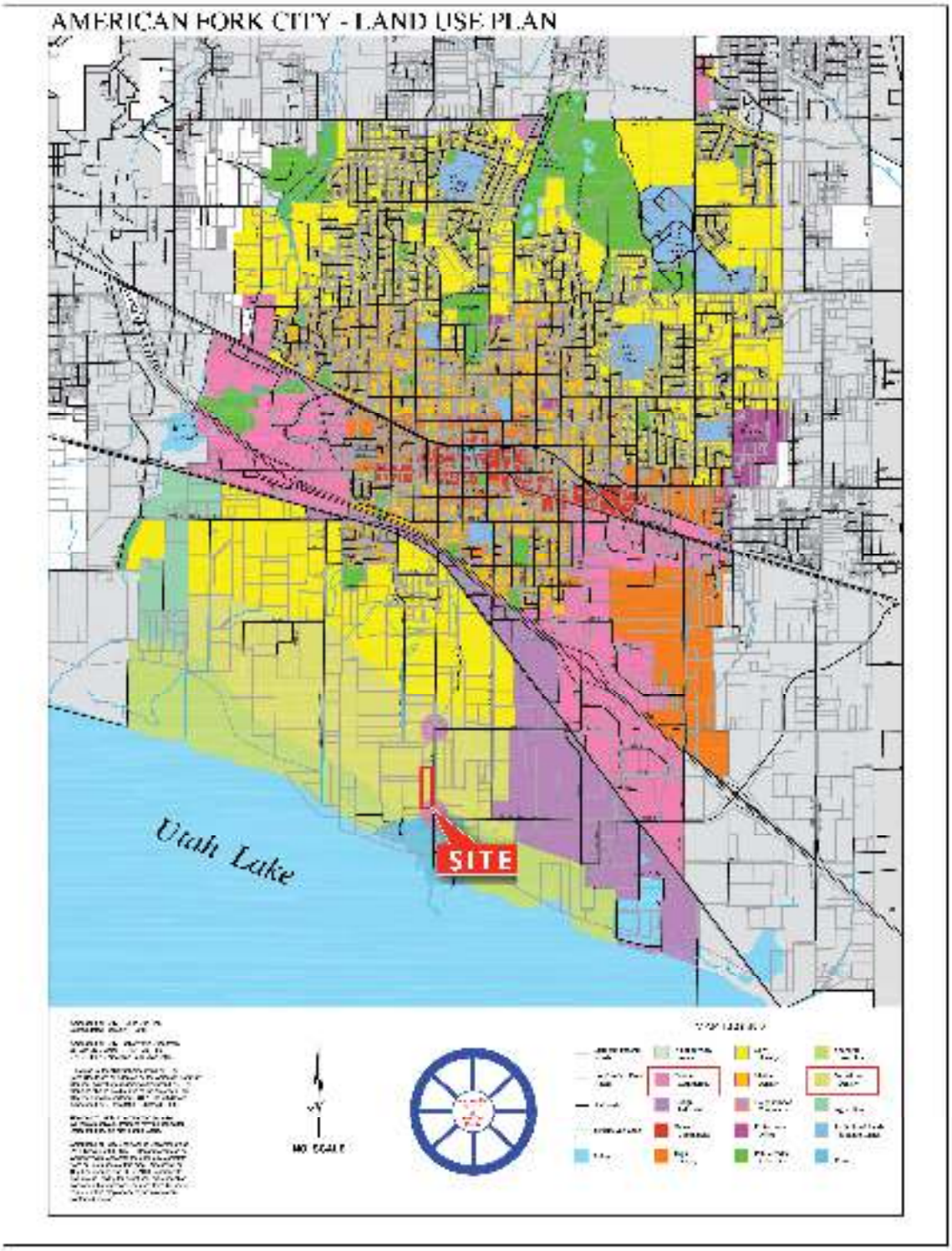
Map of Location



General Plan Information

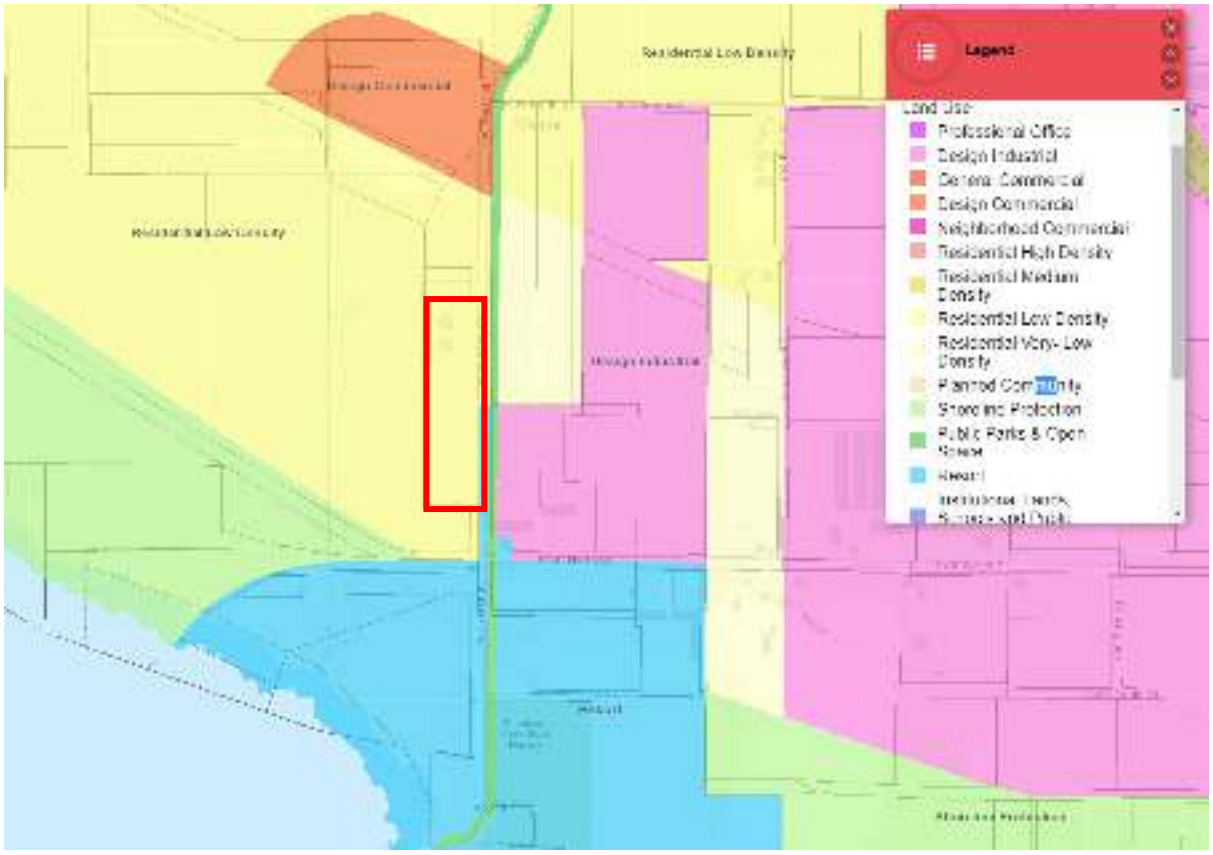
Property is part of the “Residential Low Density” section of the General Plan. The property is currently in the county and is looking to be incorporated into the city of American Fork.

American Fork Land Use Plan



Utah Lake
MAP LEGEND
State and Federal Roads
Local and/or Paved Roads
Railroads
Streams & Canals
Lakes
Neighbor City Areas
Design Commercial
Design Industrial
General Commercial
High Density
Low Density
Medium Density
Neighborhood Commercial
Professional Office
Public Parks & Facilities
Shoreline Protection
Very Low Density
Agriculture
Institutional Lands & School Lands
Resort

American Fork Zoning Map and Area



Since 2011, this location has been the home of Ascend Recovery. Here is a link to our website: https://ascendrecovery.com/. We would like to request that our business be grandfathered into city and be allowed to continue to operate our business after the annexation has occurred. This request would need to include a residential treatment center/group home license for 16 adults. This is the current licensure for the property now under the county guidelines. The property has been used in this way since 2011.

Request for General Plan Amendment

It is requested that the general plan for this area be changed from "Residential Low Density" to "PI-1'.

1. Currently, the property is along 100 West in American Fork. Land to the East of our property is zoned PI-1. To the south the general plan shows M-1. There is a power line corridor and the proposed alignment for the Vineyard Connector to the north. To the south of the property is M1. The lot to the west is planned to be low density residential. Allowing a general plan amendment to change to PI-1 and then to extend the PI-1 zone to include this parcel would be consistent with the surrounding uses on three sides and give a resource to the city and the community by allowing commercial uses on a major corridor.

2. This property is in a commercially viable location that can service the growing needs of the community. The city has planned for 100 West to be a 100' ROW. This property has direct access onto 100 West which is master planned for heavy volumes of traffic. Changing the property to be classified as a PI-1 would be more consistent with the heavier traffic that will be created with this new highway and take advantage of the commercial opportunities that will arise from future traffic patterns. It will provide a buffer between the major traffic corridor and the low residential zone.

3. The subject property is located across the street from existing PI-1 zoning and to the south from the general plan M1-1 zoning. In that these zones are already in direct proximity to the subject property allowing the subject property would not alter the existing character of the existing street abutting the property or the character of the neighborhood.

AMERICAN FORK CITY
PLANNING COMMISSION

MEETING DATE: February 22nd, 2023

AGENDA TOPIC:

Review and action on the Site Plan for Cost-U-Less Carpet, located in the area of 64 North 900 West, in the General Commercial (GC-2) Zone.

BACKGROUND INFORMATION		
Location:		64 N 900 W
Applicants:		Robbie Gibbons, Five Degrees Design
Existing Land Use:		Design Commercial
Proposed Land Use:		N/A
Surrounding Land Use:	North	Design Commercial
	South	Design Commercial
	East	Major Transportation Facilities
	West	Design Commercial
Existing Zoning:		GC-2
Proposed Zoning:		N/A
Surrounding Zoning:	North	GC-2
	South	GC-2
	East	PF
	West	GC-2

BACKGROUND:

The applicant is applying for a Site Plan approval for Cost-U-Less Carpet, for a new commercial development in the GC-2 Zone, located in the area 64 N 900 W. The proposal consists of 1 lot intended for commercial development. The entire development parcel consists of approximately 0.35 acres.

The required number of parking stalls for the development is 15, but the applicant has requested and provided 14 for the development. The applicant has provided a parking study and based of the study the Planning Commission may recommend to the City Council an increase or decrease to the number of off-street parking spaces herein specified upon a finding, made following a study on the matter, that the use characteristics of the proposed use warrant adjustment.

Sec 17.6.101 Administrative Site Plan Review

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

1. Planning commission to approve. The planning commission, acting in an administrative capacity, shall have the function, duty and power to approve or disapprove a project plan and to attach such modifications or conditions as may be deemed appropriate to improve the layout, to ensure that the project will not pose any detrimental effect to persons or property, or to protect the health, safety, and general welfare of the citizens of the city.
2. Application required. Application for site plan approval shall be submitted on forms provided by the city and shall be accompanied by maps and drawings showing the following:
    1. The location of all existing and proposed buildings and structures on the site, with full dimensions showing the distance between buildings and distances from buildings to adjacent property lines.
    2. The location of all parking spaces, driveways, and points of vehicular ingress and egress.
    3. A landscaping plan showing the location, types, and initial sizes of all planting materials to be used together with the location of fences, walls, hedges, and decorative materials.
    4. Preliminary elevations of main buildings showing the general appearance and types of external materials to be used.
    5. The locations of solid waste receptacles and trash pick-up areas.
3. Appeals permitted. Any person aggrieved by a determination of the planning commission may request a hearing before the city council who shall have the authority to reverse, affirm or modify any decision of said commission. Any such appeal shall be filed within ten days of the determination of the planning commission.
4. Issuance of a permit. A building permit shall not be issued for any building or structure or external alterations thereto until the provisions of this section have been complied with. Any construction not in conformance with an approved site plan shall be considered a violation of this code. Any building permit issued shall ensure that development is undertaken and completed in conformity with the plans as approved.

PROJECT MAP:

PROJECT CONDITIONS OF APPROVAL:

1. City Council approval for the reduction of parking spaces allowed on site to 14 rather than the required 15.
2. Resolve all Fire Marshall comments on the plan set.
3. Remove landscaping features and provide all weather maintainable surface for fire department and fire fighting access, as well as maintain the area open and unobstructed where it is mentioned by the Fire Marshall in the plan set.
4. When landscaping features are removed, provide the required amount shrubs, trees, and species diversity for the site mentioned in Section 17.5.121 (C) of American Fork City Municipal Code.
5. Provide dumpster enclosure elevations that match the enclosure shown on the plan set.

FINDINGS OF FACT:

- The site plan application meets the requirements mentioned in Section 17.6.101 of American Fork City Municipal Code.
- Before permits are issued, all conditions of approval must be met.

- The applicant has provided a parking study for a request for parking reductions for the overall site. Section 17.5.133 (D) mentions that adjustments are permitted:
    - The planning commission may recommend to the city council an increase or decrease to the number of off-street parking spaces herein specified upon a finding, made following a study on the matter, that the use characteristics of the proposed use warrant adjustment. Provided, however, no reduction in the parking requirement shall be permitted based on the projected demand of the initial occupant of a new retail, office or similar use for which a subsequent change in tenancy to another user is probable.
    - After receiving a recommendation (positive or negative) from planning commission regarding the number of off-street parking spaces, the city council shall have the authority to increase or decrease the number of off-street parking spaces herein specified upon a finding, made following a study on the matter, that the use characteristics of the proposed use warrant adjustment. Provided, however, no reduction in the parking requirement shall be permitted based on the projected demand of the initial occupant of a new retail, office or similar use for which a subsequent change in tenancy to another user is probable.

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 Plan Review Comments:** All plans and documents shall comply with all the Technical Review Committee comments and the City Engineer's final review.
8. **Commercial Structure:** Record an Owner Acknowledgment and Utility Liability Indemnification if the proposed building is a multi-unit commercial structure served by a single utility service.
9. **Sensitive Lands:** Record all applicable documents required for compliance with the City's Sensitive Lands Ordinance.
10. **Utility Notification Form:** Submit a Subdivision Utility Notification Form.
11. **Professional Verification:** Submit final stamped construction documentation by all appropriate professionals.
12. **Fees:** Payment of all development, inspection, recording, streetlight, and other project related fees.
13. **Mylar:** Submit a Mylar. All plats will receive final verification of all formats, notes, conveyances, and other items contained on the plat by City staff (recorder, legal, engineer, GIS, planning).

STAFF RECOMMENDATION:

The Site Plan application meets the requirements of Section 17.6.101 and staff recommends APPROVING the application WITH CONDITIONS.

<u>POTENTIAL MOTIONS – Site Plan</u>

APPROVAL

Madame Chairwoman, I move that we recommend approval on the Site Plan for Cost-U-Less Carpet, in the GC-2 Zone, located in the area 64 N 900 W, subject to any conditions found in the Staff Report, or recommended by the Fire Marshal.

DENIAL

Madame Chairwoman, I move that we deny the Site Plan for Cost-U-Less Carpet, in the GC-2 Zone, located in the area 64 N 900 W.

TABLE

Madame Chairwoman, I move that we table action on the Site Plan for Cost-U-Less Carpet, in the GC-2 Zone, located in the area 64 N 900 W, and instruct the developer/staff to _____.

SYMBOLS LEGEND

- INTERIOR ELEVATION
- BUILDING ELEVATION
- BUILDING SECTION
- WALL SECTION
- DETAIL CALLOUT
- CALLOUT
- KEYNOTE
- DOOR TAG
- WALL TYPE
- ROOM TAG
- GLASS TYPE
- ELEVATION MARKER
- WINDOW TYPE
- CENTER LINE
- GRID
- NORTH ARROW
- CEILING TYPE
- FINISHES

MATERIAL LEGEND

- CONCRETE
- MASONRY
- STEEL
- BATT INSULATION
- RIGID INSULATION
- FINISH GRADE WOOD / HARDWOOD
- PLYWOOD
- SPRAY FOAM INSULATION
- DEMOLITION, SHOWN VIA HIDDEN LINE
- WOOD STUD

FIVE DEGREES DESIGN

COST U LESS RETAIL

Next Step

Approved with Conditions Proceed to Planning Commission on February 22nd, 2023.

PERMIT SET

64 NORTH 900 WEST
AMERICAN FORK, UT 84003

9 SEPTEMBER 2022

DRAWING INDEX

GENERAL INFORMATION
G000 COVER SHEET
G001 GENERAL INFORMATION - FLOOR AREAS
G002 WALL TYPES

CIVIL
C0.00 COVER SHEET
C0.01 GENERAL NOTES, LEGEND, AND ABBREVIATIONS
C0.10 DEMOLITION PLAN
C1.01 HORIZONTAL CONTROL PLAN
C2.01 GRADING AND DRAINAGE PLAN
C2.10 EROSION CONTROL PLAN
C4.01 SITE UTILITY PLAN
C5.01 CIVIL DETAILS
C5.02 CIVIL DETAILS

LANDSCAPE
LS1.1 PLANTING PLAN
LS2.1 IRRIGATION PLAN
LS3.1 PLANTING DETAILS
LS4.1 IRRIGATION DETAILS
LS4.2 IRRIGATION DETAILS

ARCHITECTURAL SITE
AS101 ARCHITECTURAL SITE PLAN
AS501 TYPICAL ARCHITECTURAL SITE DETAILS

ARCHITECTURAL
AE101 MAIN LEVEL FLOOR PLAN
AE131 MAIN LEVEL DIMENSIONING PLAN
AE151 MAIN LEVEL REFLECTED CEILING PLAN
AE171 MAIN LEVEL FINISH PLAN
AE191 ROOF DRAINAGE PLAN
AE201 EXTERIOR ELEVATIONS
AE202 EXTERIOR ELEVATIONS
AE251 INTERIOR ELEVATIONS
AE252 INTERIOR ELEVATIONS
AE253 INTERIOR ELEVATIONS
AE254 INTERIOR ELEVATIONS
AE301 BUILDING SECTIONS
AE302 BUILDING SECTIONS
AE401 ENLARGED FLOOR PLANS
AE551 MILLWORK DETAILS
AE601 DOOR SCHEDULE AND DETAILS
AE602 DOOR TYPES
AE603 WINDOW TYPES
AE604 WINDOW TYPES
AE605 WINDOW TYPES
AE701 TYPICAL AND MISCELLANEOUS DETAILS

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FIVE DEGREES DESIGN
3651 NORTH 100 EAST, STE 225
PROVO, UTAH 84604
801.960.9381
architect@fivedegreesdesign.com

DATE: 9 SEPTEMBER 2022
PROJECT #: 20-028
DRAWN BY: MRF
CHECKED BY: BCH

REVISIONS

CONSULTANTS

CIVIL
McNEIL ENGINEERING
8610 SOUTH SANDY PARKWAY, SUITE 200
SANDY, UTAH 84070
801.255.7700

LANDSCAPE
IN SITE DESIGN GROUP
17 NORTH 460 WEST
AMERICAN FORK, UTAH 84003
801.756.5043
jessica@isdgllc.com

STRUCTURAL
BHB STRUCTURAL
2766 SOUTH MAIN STREET
SALT LAKE CITY, UTAH 84115
801.355.5656
bhb@bhbengineers.com

MECHANICAL & PLUMBING
RENEGADE DESIGN, LLC
18660 E. AUGA VISTA
BLACK CANYON CITY, ARIZONA 85324
623.374.9192
hvac-engineering@cox.net

ELECTRICAL
BREINHOLT POWER ENGINEERING
805 SOUTH 1430 WEST
LEHI, UTAH 84043
801.367.5180
kyle@breinholteng.com

PROJECT

COST U LESS RETAIL

PERMIT SET

ADDRESS:
64 NORTH 900 WEST
AMERICAN FORK, UT 84003

ARCHITECTURAL

COVER SHEET

G000

DIMENSION NOTES

1. ALL PLAN DIMENSIONS, UNLESS OTHERWISE NOTED, ARE TO:
   A. COLUMN GRID ON CENTERLINES.
   B. THE OUTER FACE OF CONCRETE OR MASONRY.
   C. THE OUTER FACE OF WALL STUDS.
2. DOOR LOCATIONS NOT DIMENSIONED ARE:
   A. JAMB FACE 4" FROM FACE OF STUD.
   B. CENTERLINE OF DOOR ON CENTERLINE OF ROOM OR CORRIDOR.
3. NOTED DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALE DIMENSIONS; DETAILS OVER SMALLER SCALE DRAWINGS.
4. "FLOOR LINE" REFERS TO TOP OF CONCRETE SLABS. FOR DEPRESSED FLOORS AND CURBS, SEE STRUCTURAL DRAWINGS.
5. VERIFY ALL ROUGH-IN, CONCRETE PAD, OR PLATFORM DIMENSIONS FOR EQUIPMENT PROVIDED IN THIS PROJECT, OR BY OTHERS.
6. FINISHED FLOOR ELEVATIONS ARE TO TOP OF CONCRETE OR GYPCRETE, UNLESS NOTED OTHERWISE.
7. CEILING HEIGHT DIMENSIONS ARE TO FINISHED SURFACES, UNLESS NOTED OTHERWISE.

Parking is still short 1 stall of what is required, parking study has been provided for a request to decrease the requirement. The requirement is 15 stalls, the plans show 14.

American Fork City
Technical Review Committee

Planning and Zoning
Reviewed
COpperman 01/25/2023

See comments on page LS1.1 and AS501

Fire Department
Reviewed
M. Sacco 01/23/2023

Comments to address are found on drawings G001 and LS1.1

Engineering Division
Reviewed
jmortimer 01/26/2023

Comment to address is on Sheet C5.01 regarding Concrete Pavement Section detail clarification

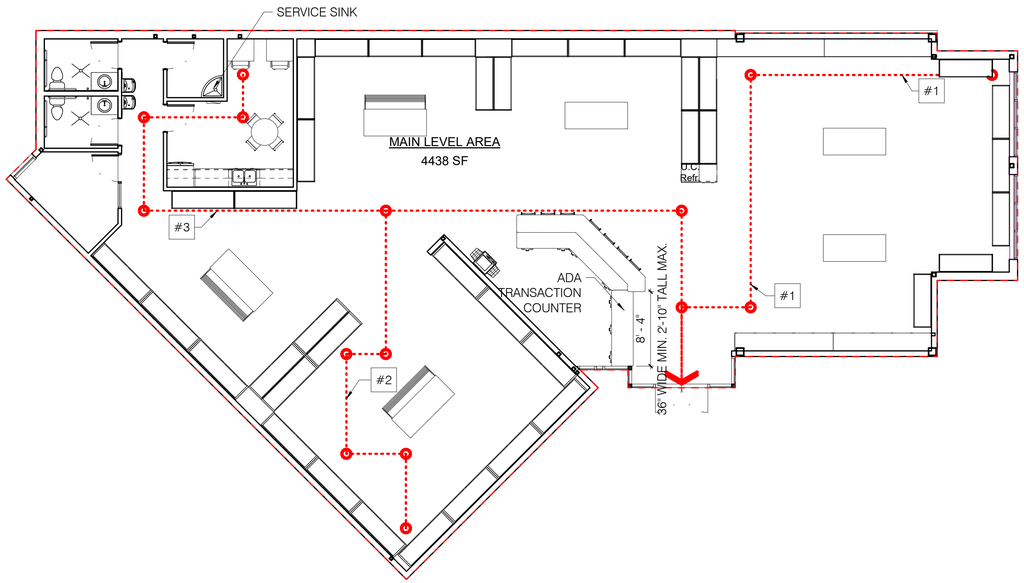
BIDDING INFORMATION

THESE DOCUMENTS ARE INTENDED FOR PROJECT NEGOTIATION BETWEEN A SINGLE GENERAL CONTRACTOR AND OWNER. THESE DOCUMENTS ARE NOT INTENDED TO BE USED FOR COMPETITIVE BIDDING BY MULTIPLE GENERAL CONTRACTORS.

IF THE OWNER ISSUES THESE DOCUMENTS FOR COMPETITIVE BIDDING BY MULTIPLE GENERAL CONTRACTORS, THE OWNER SHALL BE RESPONSIBLE TO PROVIDE PRODUCT AND MATERIAL SELECTIONS AND CONSTRUCTION METHODS DIRECTION TO ALL GENERAL CONTRACTORS. SUCH REQUESTS TO THE ARCHITECT WILL BE REFERRED TO THE OWNER.

THE ARCHITECT WILL CLARIFY INFORMATION WITHIN THESE DOCUMENTS FOR A SINGLE OWNER-SELECTED GENERAL CONTRACTOR ONLY. REQUESTS FOR CLARIFICATION SHALL BE DIRECTED TO FIVE DEGREES DESIGN BY THE GENERAL CONTRACTOR. CALLS FROM SUBCONTRACTORS WILL BE REFERRED TO THE GENERAL CONTRACTOR.

10/20/2022 8:46:06 AM Y:\5D Projects\2020\20-028 Carpet Diem Cost U Less\03 Drawings\02 Revit\Carpet Diem V13.rvt



B1
G001
MAIN LEVEL
SCALE: 1/8" = 1'-0"

DESIGN CRITERIA

TENANT BUILT-OUT AREA:	4,438 SQUARE FEET
EXISTING CONSTRUCTION TYPE:	V-B
ALLOWABLE AREA:	9,000 SF (IBC TABLE 506.2) (B, NS)
SPRINKLED:	NO
BUILDING CODES:	2018 INTERNATIONAL BUILDING CODE 2018 INTERNATIONAL EXISTING BUILDING CODE 2018 INTERNATIONAL MECHANICAL CODE 2018 INTERNATIONAL PLUMBING CODE 2018 INTERNATIONAL FIRE CODE 2018 INTERNATIONAL FUEL GAS CODE 2018 INTERNATIONAL ENERGY CONSERVATION CODE ANSI 117.1 - 2009 2017 NATIONAL ELECTRIC CODE
OCCUPANCY GROUP:	B OCCUPANCY IBC 304.1
OCCUPAND LOAD:	4,520 SF / 150 = 31 TOTAL OCCUPANTS
PLUMBING FIXTUES:	31 TOTAL OCCUPANTS - 31/2 = 16 MALE OCCUPANTS AND 16 FEMALE OCCUPANTS; THERFORE 1 ADA RESTROOM REQUIRED PER GENDER ONE SERVICE SINK REQUIRED, ONE SERVICE SINK PROVIDED ONE HI-LOW COMBO DRINKING FOUNTAIN PROVIDED
OTHER REQUIREMENTS:	PROVIDE FIRE EXTINGUISHERS AS PER IBC 906.3. EXTINGUISHERS TO BE 2-A 10-B MINIMUM.

EGRESS PATH	
EGRESS PATH NAME	EGRESS PATH TOTAL DISTANCE
EGRESS PATH #1	69' - 6"
EGRESS PATH #2	99' - 0"
EGRESS PATH #3	106' - 0"

EXIT ACCESS TRAVEL DISTANCE: B OCCUPANCY = 200'-0"
(IBC TABLE 1006.2.1)

This number should be 100ft maximum, given occupant load is greater than 30 and the building only has one mean of egress and is not protected with automatic fire sprinklers. See IBC and IFC Table 1006.2.1

COMMON PATH OF EGRESS TRAVEL DISTANCE: B OCCUPANCY =
OL ≤30 = 100' -0"
OL ≥30 = 75' -0"

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CHECKED BY:	BCH

REVISIONS

PROJECT

COST U LESS RETAIL

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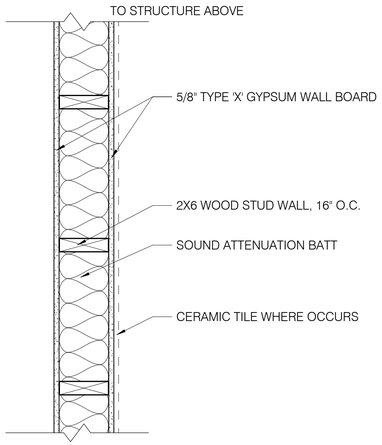
ADDRESS:
64 NORTH 900 WEST
AMERICAN FORK, UT 84003

ARCHITECTURAL

GENERAL INFORMATION - FLOOR AREAS

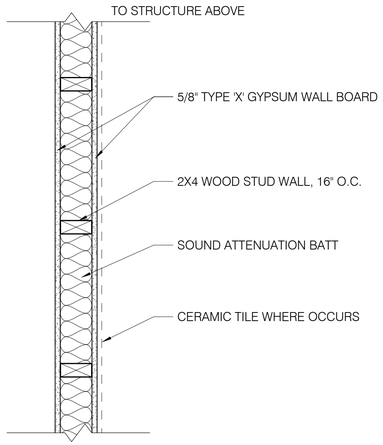
G001

10/20/2022 8:46:07 AM Y:\SD Projects\2020\20-028 Carpet Diem Cost U Less\03 Drawings\02 Rev#\Carpet Diem V13.rvt



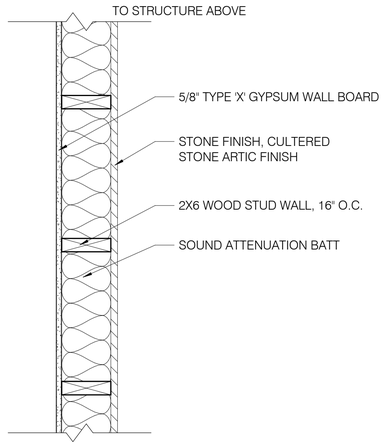
INTERIOR WALL TYPE 'A1'

SCALE: 1-1/2" = 1'-0" SHOWN IN PLAN VIEW



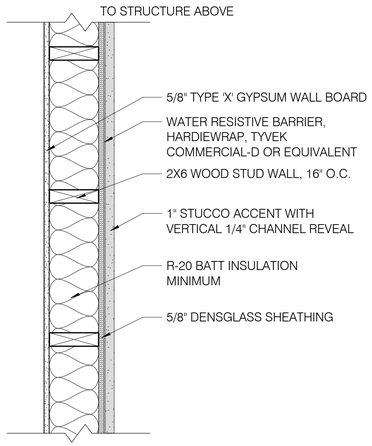
INTERIOR WALL TYPE 'B1'

SCALE: 1-1/2" = 1'-0" SHOWN IN PLAN VIEW



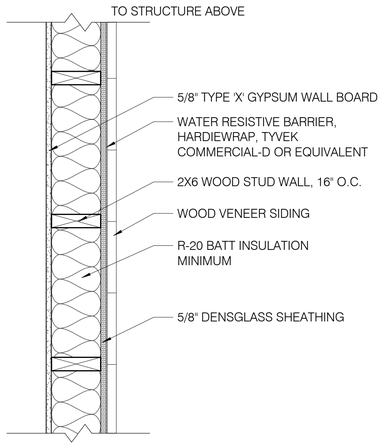
INTERIOR WALL TYPE 'C1'

SCALE: 1-1/2" = 1'-0" SHOWN IN PLAN VIEW



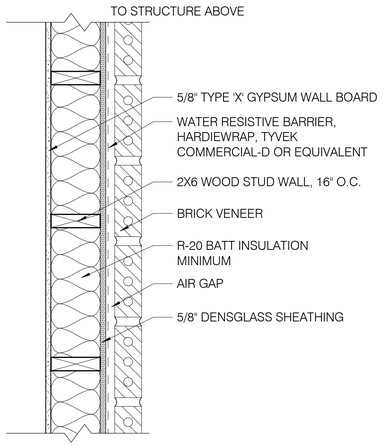
EXTERIOR WALL TYPE 'A'

SCALE: 1-1/2" = 1'-0" SHOWN IN PLAN VIEW



EXTERIOR WALL TYPE 'B'

SCALE: 1-1/2" = 1'-0" SHOWN IN PLAN VIEW



EXTERIOR WALL TYPE 'C'

SCALE: 1-1/2" = 1'-0" SHOWN IN PLAN VIEW

FIVE DEGREES DESIGN
3651 NORTH 100 EAST, STE 225
PROVO, UTAH 84604
801.960.9381
architect@fivedegreesdesign.com

DATE:	9 SEPTEMBER 2022
PROJECT #:	20-028
DRAWN BY:	MRF
CHECKED BY:	BCH

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64 NORTH 900 WEST
AMERICAN FORK, UT 84003

ARCHITECTURAL

WALL TYPES

G002

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CARPET DIEM
CONSTRUCTION PLANS

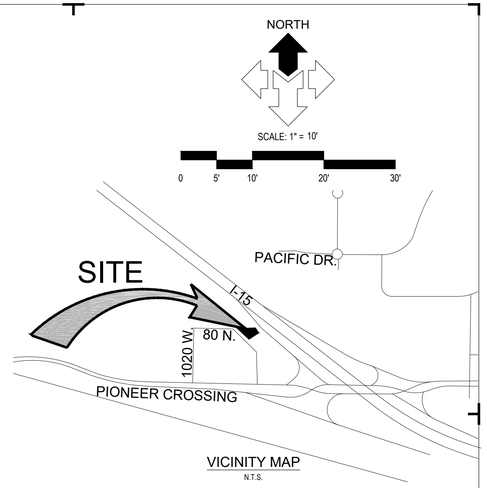
64 N 900 W

AMERICAN FORK, UTAH 84003

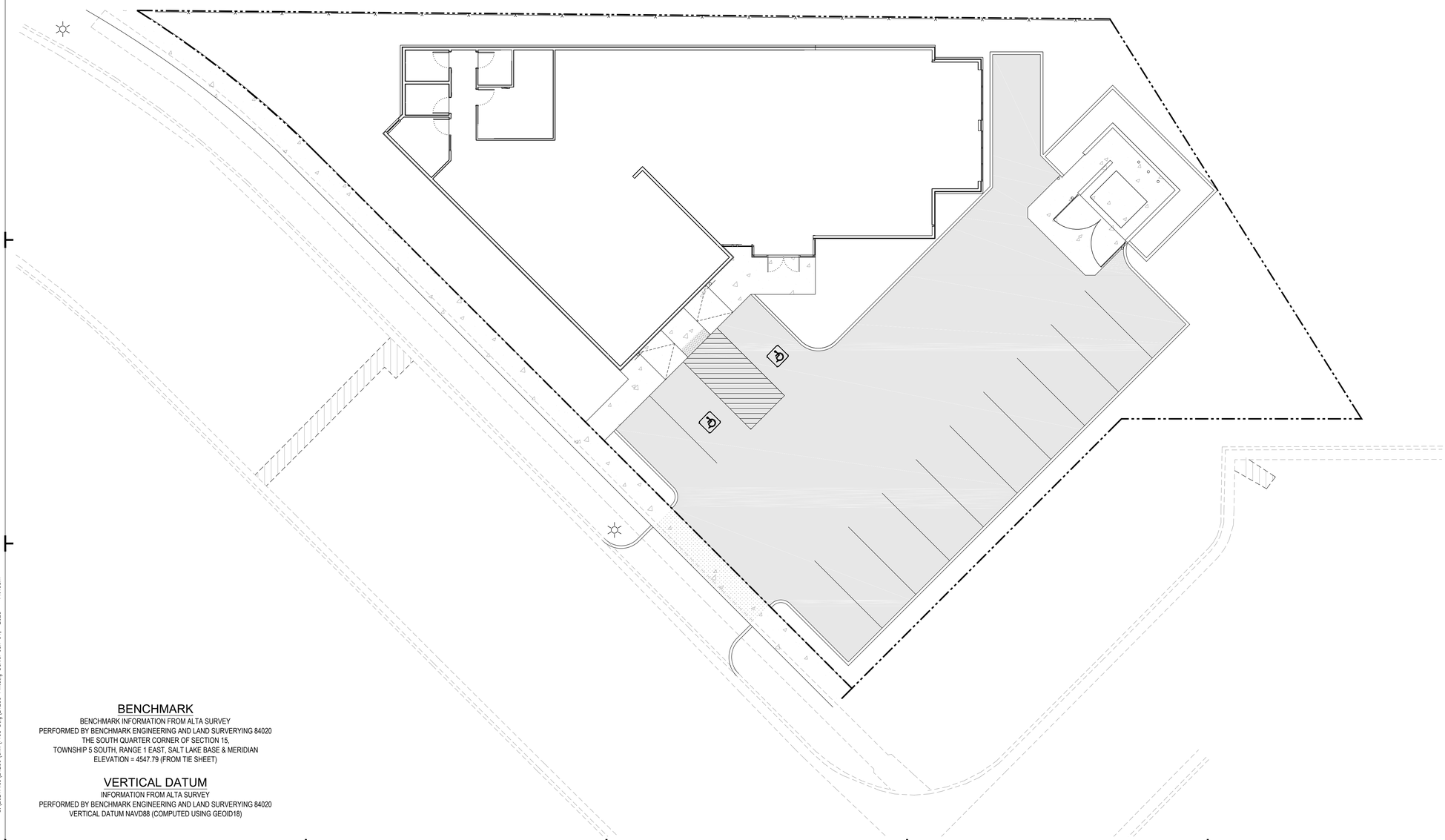
SOUTHWEST QUARTER OF SECTION 15

TOWNSHIP 5 SOUTH, RANGE 1 EAST, SALT LAKE BASE & MERIDIAN

AREA OF MINIMAL FLOOD HAZARD
FLOOD ZONE X
FIRM MAP #49049C0164F
EFFECTIVE DATE JUNE 19, 2020



VICINITY MAP
N.T.S.



DRAWING INDEX

SHEET	DESCRIPTION
C0.00	CIVIL COVER SHEET
C0.01	GENERAL NOTES, LEGEND AND ABBREVIATIONS
C0.10	DEMOLITION PLAN
C1.01	HORIZONTAL CONTROL PLAN
C2.01	GRADING AND DRAINAGE PLAN
C2.10	EROSION CONTROL PLAN
C4.01	SITE UTILITY PLAN
C5.01	CIVIL DETAILS
C5.02	CIVIL DETAILS

ALL WORK AND MATERIALS FOR WATER MUST CONFORM TO AMERICAN FORK CITY STANDARDS AND SPECIFICATIONS

ALL WORK AND MATERIALS FOR SEWER MUST CONFORM TO AMERICAN FORK CITY STANDARDS AND SPECIFICATIONS

ALL WORK AND MATERIALS MUST CONFORM TO APWA STANDARDS AND SPECIFICATIONS

DEVELOPER & OWNER

OWNER: AF RAG INVESTMENTS
DEVELOPER: AF RAG INVESTMENTS
CONTACT: ROBBIE GIBBONS
12382 S GATEWAY PARK PLACE SUITE 13800
DRAPER, UTAH 84020
PHONE: (801) 673-7100

BENCHMARK

BENCHMARK INFORMATION FROM ALTA SURVEY
PERFORMED BY BENCHMARK ENGINEERING AND LAND SURVERYING 84020
THE SOUTH QUARTER CORNER OF SECTION 15,
TOWNSHIP 5 SOUTH, RANGE 1 EAST, SALT LAKE BASE & MERIDIAN
ELEVATION = 4547.79 (FROM TIE SHEET)

VERTICAL DATUM

INFORMATION FROM ALTA SURVEY
PERFORMED BY BENCHMARK ENGINEERING AND LAND SURVERYING 84020
VERTICAL DATUM NAVD88 (COMPUTED USING GEOID18)

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Structural Engineering • Land Surveying & HDS

S:\2021Files\21299\Civil\Proof Dwg\21299 Plot.dwg Daniel Jan 04, 2023 - 11:40am

GENERAL NOTES

1.1 COMPLIANCE
1. ALL WORK TO CONFORM TO GOVERNING MUNICIPALITY'S STANDARDS, SPECIFICATIONS AND REQUIREMENTS.
2. ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THESE CONTRACT DOCUMENTS AND THE MOST RECENT, ADOPTED EDITIONS OF THE FOLLOWING: INTERNATIONAL BUILDING CODE (IBC), THE INTERNATIONAL PLUMBING CODE, STATE DRINKING WATER REGULATIONS, APWA MANUAL OF STANDARD PLANS AND SPECIFICATIONS, ADA ACCESSIBILITY GUIDELINES.
3. ALL CONSTRUCTION SHALL BE AS SHOWN ON THESE PLANS. ANY REVISIONS MUST HAVE PRIOR WRITTEN APPROVAL.

1.2 PERMITTING AND INSPECTIONS
1. PRIOR TO STARTING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING SURE THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED THOROUGHLY REVIEWED PLANS AND OTHER DOCUMENTS APPROVED BY ALL OF THE PERMITTING AUTHORITIES.
2. CONTRACTOR IS RESPONSIBLE FOR SCHEDULING AND NOTIFYING ARCHITECT/ENGINEER OR INSPECTING AUTHORITY 48 HOURS IN ADVANCE OF COVERING UP ANY PHASE OF CONSTRUCTION REQUIRING OBSERVATION.
3. ANY WORK IN THE PUBLIC RIGHT-OF-WAY WILL REQUIRE PERMITS FROM THE APPROPRIATE, CITY, COUNTY OR STATE AGENCY CONTROLLING THE ROAD AND WITH APPROPRIATE INSPECTIONS.

1.3 COORDINATION & VERIFICATION
1. ALL DIMENSIONS, GRADES & UTILITY DESIGNS SHOWN ON THE PLANS SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY ARCHITECT/ENGINEER OF ANY DISCREPANCIES PRIOR TO PROCEEDING WITH CONSTRUCTION FOR NECESSARY PLAN OR GRADE CHANGES. NO EXTRA COMPENSATION SHALL BE PAID TO THE CONTRACTOR FOR WORK HAVING TO BE REDONE DUE TO DIMENSIONS OR GRADES SHOWN INCORRECTLY ON THESE PLANS, IF NOT VERIFIED AND NOTIFICATION OF CONFLICTS HAVE NOT BEEN BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER.
2. CONTRACTOR MUST VERIFY ALL EXISTING CONDITIONS BEFORE BIDDING AND BRING UP ANY QUESTIONS BEFORE HAND. NO ALLOWANCE WILL BE MADE FOR DISCREPANCIES OR OMISSIONS THAT CAN BE EASILY OBSERVED.
3. CONTRACTOR TO COORDINATE WITH ALL OTHER DISCIPLINES, INCLUDING BUT NOT LIMITED TO: LANDSCAPE PLANS, SITE ELECTRICAL SITE LIGHTING PLANS AND ELECTRICAL SERVICE TO THE BUILDING(S), MECHANICAL PLANS FOR LOCATION OF SERVICES TO THE BUILDING(S), INCLUDING FIRE PROTECTION, ARCHITECTURAL SITE PLAN FOR DIMENSIONS, ACCESSIBLE ROUTES, ETC., NOT SHOWN ON CIVIL PLANS.
4. CONTRACTOR IS TO COORDINATE LOCATION OF NEW TELEPHONE SERVICE, GAS SERVICE, CABLE, ETC. TO BUILDING WITH THE APPROPRIATE UTILITY COMPANY. FOR TELEPHONE, CONTRACTOR TO FURNISH CONDUIT, PLYWOOD BACKBOARD, AND GROUND WIRE, AS REQUIRED.

1.4 SAFETY AND PROTECTION
1. CONTRACTOR IS SOLELY RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION,
2. CONTRACTOR IS RESPONSIBLE FOR THE SAFETY OF THE PROJECT AND SHALL MEET ALL OSHA REQUIREMENTS.
3. CONTRACTOR IS RESPONSIBLE FOR CONFORMING TO LOCAL AND FEDERAL CODES GOVERNING SHORING AND BRACING OF EXCAVATIONS AND TRENCHES, AND FOR THE PROTECTION OF WORKERS AND PUBLIC.
4. CONTRACTOR SHALL TAKE ALL MEASURES NECESSARY TO PROTECT ALL EXISTING PUBLIC AND PRIVATE PROPERTY, ROADWAYS, AND UTILITY IMPROVEMENTS. DAMAGE TO EXISTING IMPROVEMENTS CAUSED BY THE CONTRACTOR MUST BE REPAIRED BY THE CONTRACTOR AT HIS/HER EXPENSE TO THE SATISFACTION OF THE OWNER OF SAID IMPROVEMENTS.
5. CONTRACTOR IS REQUIRED TO KEEP ALL CONSTRUCTION ACTIVITIES WITHIN THE APPROVED PROJECT LIMITS. THIS INCLUDES, BUT IS NOT LIMITED TO, VEHICLE AND EQUIPMENT STAGING, MATERIAL STORAGE AND LIMITS OF TRENCH EXCAVATION.
6. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN PERMISSION AND/OR EASEMENTS FROM THE APPROPRIATE GOVERNMENT AGENCY AND/OR INDIVIDUAL PROPERTY OWNER(S) FOR WORK OR STAGING OUTSIDE OF THE PROJECT LIMITS.
7. CONTRACTOR SHALL PROVIDE BARRICADES, SIGNS, FLASHERS, OTHER EQUIPMENT AND FLAG PERSONS NECESSARY TO INSURE THE SAFETY OF WORKERS AND VISITORS. ALL CONSTRUCTION SIGNING, BARRICADING, AND TRAFFIC DELINEATION SHALL CONFORM TO THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", LATEST EDITION.
8. CONTRACTOR SHALL COMPLY WITH LOCAL NOISE ORDINANCE STANDARDS.
9. CONTRACTOR IS RESPONSIBLE FOR DUST CONTROL ACCORDING TO GOVERNING AGENCY STANDARDS.
10. CONTRACTOR SHALL TAKE ALL NECESSARY AND PROPER PRECAUTIONS TO PROTECT ADJACENT PROPERTIES FROM ANY AND ALL DAMAGE THAT MAY OCCUR FROM STORM WATER RUNOFF AND/OR DEPOSITION OF DEBRIS RESULTING FROM ANY AND ALL WORK IN CONNECTION WITH CONSTRUCTION. SUBMIT A STORM WATER POLLUTION PREVENTION PLAN, IF REQUIRED.
11. WORK IN PUBLIC STREETS, ONCE BEGUN, SHALL BE PROSECUTED TO COMPLETION WITHOUT DELAY AS TO PROVIDE MINIMUM INCONVENIENCE TO ADJACENT PROPERTY OWNERS AND TO THE TRAVELING PUBLIC.
12. CONTRACTOR SHALL PROVIDE ALL NECESSARY HORIZONTAL AND VERTICAL TRANSITIONS BETWEEN NEW CONSTRUCTION AND EXISTING SURFACES TO PROVIDE FOR PROPER DRAINAGE AND FOR INGRESS AND EGRESS TO NEW CONSTRUCTION.
13. NATURAL VEGETATION AND SOIL COVER SHALL NOT BE DISTURBED PRIOR TO ACTUAL CONSTRUCTION OF A REQUIRED FACILITY OR IMPROVEMENT. MASS CLEARING OF THE SITE IN ANTICIPATION OF CONSTRUCTION SHALL BE AVOIDED. CONSTRUCTION TRAFFIC SHALL BE LIMITED TO ONE APPROACH TO THE SITE. THE APPROACH SHALL BE DESIGNATED BY THE OWNER OR GOVERNING AGENCY.
14. THE CONTRACTOR SHALL TAKE REASONABLE MEASURE TO PROTECT EXISTING IMPROVEMENTS FROM DAMAGE AND ALL SUCH IMPROVEMENTS DAMAGED BY THE CONTRACTOR'S OPERATION SHALL BE REPAIRED OR RECONSTRUCTED TO THE ENGINEER/OWNER'S SATISFACTION AT THE EXPENSE OF THE CONTRACTOR.

1.5 MATERIALS
1. SITE CONCRETE SHALL BE A MINIMUM 6.5 BAG MIX, 4000 P.S.I. @ 28 DAYS, 4" MAXIMUM SLUMP WITH 5 + OR - 1% AIR ENTRAINMENT, UNLESS SPECIFIED OTHERWISE. -SEE SPECIFICATION
   A. SLABS-ON-GRADE WILL BE TYPICALLY SCORED (1/4 THE DEPTH) AT INTERVALS NOT TO EXCEED THEIR WIDTH OR 12 TIMES THEIR DEPTH, WHICHEVER IS LESS. SCORING WILL BE PLACED TO PREVENT RANDOM CRACKING. FULL DEPTH EXPANSION JOINTS WILL BE PLACED AGAINST ANY OBJECT DEEMED TO BE FIXED, CHANGES IN DIRECTION AND AT EQUAL INTERVALS NOT TO EXCEED 50 FEET.
   B. CONCRETE WATERWAYS, CURBWALLS, MOWSTRIPS, CURB AND GUTTER, ETC. WILL TYPICALLY BE SCORED (1/4 THE DEPTH AT INTERVALS NOT TO EXCEED 10 FEET AND HAVE FULL DEPTH EXPANSION JOINTS AT EQUAL SPACING NOT TO EXCEED 50 FEET.
   C. UNLESS OTHERWISE NOTED, ALL SLABS-ON-GRADE WILL HAVE A MINIMUM 8" TURNED-DOWN EDGE TO HELP CONTROL FROST HEAVE.
   D. UNLESS OTHERWISE NOTED, ALL ON-GRADE CONCRETE WILL BE PLACED ON A MINIMUM 4" GRAVEL BASE OVER A WELL COMPACTED (90%) SUBGRADE.
   E. ALL EXPOSED SURFACES WILL HAVE A TEXTURED FINISH, RUBBED OR BROOMED. ANY "PLASTERING" OF NEW CONCRETE WILL BE DONE WHILE IT IS STILL "GREEN".
   F. ALL JOINTS (CONTROL, CONSTRUCTION OR EXPANSION JOINTS, ETC.) WILL BE SEALED WITH A ONE PART POLYURETHANE SEALANT (SEE SPECIFICATION).
2. ASPHALTIC CONCRETE PAVEMENT SHALL BE A MINIMUM 3" OVER 8" OF COMPACTED (95%) ROAD BASE OVER PROPERLY PREPARED AND COMPACTED (90%) SUBGRADE, UNLESS NOTED OTHERWISE. -SEE SPECIFICATIONS, AND DETAIL "D1" SHEET C5.01
   A. ASPHALT COMPACTION SHALL BE A MINIMUM 96% (MARSHALL DESIGN).
   B. SURFACE COARSE SHALL BE ½ " MINUS. MIX DESIGN TO BE SUBMITTED FOR APPROVAL AT LEAST TWO WEEKS PRIOR TO ANTICIPATED PAVING SCHEDULE.
   C. AC PAVEMENT TO BE A ½" ABOVE LIP OF ALL GUTTER AFTER COMPACTION.
   D. THICKNESSES OVER 3" WILL BE LAID IN TWO LIFTS WITH THE FIRST LIFT BEING AN APPROVED 3/4" MINUS DESIGN.

1.6 GRADING / SOILS
1. SITE GRADING SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE RECOMMENDATIONS SET FORTH IN THE SOILS REPORT, WHICH BY REFERENCE ARE A PART OF THE REQUIRED CONSTRUCTION DOCUMENTS AND IN CASE OF CONFLICT SHALL TAKE PRECEDENCE, UNLESS SPECIFICALLY NOTED OTHERWISE ON THE PLANS, OR IN THE SPECIFICATIONS. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCY BETWEEN THE SOILS REPORT AND THESE PLANS AND SPECIFICATIONS.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING AND REPLACING ALL SOFT, YIELDING OR UNSUITABLE MATERIALS AND REPLACING WITH SUITABLE MATERIALS AS SPECIFIED IN THE SOILS REPORT.
3. ALL EXCAVATED OR FILLED AREAS SHALL BE COMPACTED TO 95% OF MODIFIED PROCTOR MAXIMUM DENSITY PER ASTM TEST D-1557, EXCEPT UNDER BUILDING FOUNDATIONS WHERE IT SHALL BE 98% MIN. OF MAXIMUM DENSITY. MOISTURE CONTENT AT TIME OF PLACEMENT SHALL NOT EXCEED 2% ABOVE NOR 3% BELOW OPTIMUM.
4. CONTRACTOR SHALL SUBMIT A COMPACTION REPORT PREPARED BY A QUALIFIED REGISTERED SOILS ENGINEER, VERIFYING THAT ALL FILLED AREAS AND SUBGRADE AREAS WITH THE BUILDING PAD AREA AND AREAS TO BE PAVED, HAVE BEEN COMPACTED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE RECOMMENDATIONS SET FORTH IN THE SOILS REPORT.
5. SITE CLEARING SHALL INCLUDE THE LOCATING AND REMOVAL OF ALL UNDERGROUND TANKS, PIPES, VALVES, ETC.
6. ALL EXISTING VALVES, MANHOLES, ETC. SHALL BE RAISED OR LOWERED TO GRADE AS REQUIRED.

GENERAL NOTES: CONTINUED

1.7 UTILITIES
1. THE LOCATIONS OF UNDERGROUND FACILITIES SHOWN ON THESE PLANS ARE BASED ON FIELD SURVEYS AND LOCAL UTILITY COMPANY RECORDS. IT SHALL BE THE CONTRACTOR'S FULL RESPONSIBILITY TO CONTACT THE VARIOUS UTILITY COMPANIES EITHER DIRECT OR THROUGH BLUE STAKE TO LOCATE THEIR FACILITIES PRIOR TO STARTING CONSTRUCTION.
2. CONTRACTOR TO VERIFY BY POTHOLING BOTH THE VERTICAL AND HORIZONTAL LOCATION OF ALL EXISTING UTILITIES PRIOR TO INSTALLING ANY NEW LINES. NO ADDITIONAL COMPENSATION SHALL BE PAID TO THE CONTRACTOR FOR DAMAGE AND REPAIR TO THESE FACILITIES CAUSED BY HIS WORK FORCE.
3. CONTRACTOR MUST START AT LOW END OF ALL NEW GRAVITY UTILITY LINES. MECHANICAL SUB-CONTRACTOR MUST BE PROVIDED CIVIL SITE DRAWINGS FOR COORDINATION AND TO CHECK THE FLOW FROM THE LOWEST POINT IN BUILDING TO THE FIELD VERIFIED CONNECTION AT THE EXISTING MAIN. NO EXTRA COMPENSATION IS TO BE PAID TO THE CONTRACTOR FOR WORK HAVING TO BE REDONE DUE TO FAILURE TO COMPLY WITH THESE REQUIREMENTS.
4. CONTRACTOR IS TO VERIFY LOCATION, DEPTH, SIZE, TYPE, AND OUTSIDE DIAMETERS OF UTILITIES IN THE FIELD BY POTHOLING A MINIMUM OF 300 FEET AHEAD, PIPELINE CONSTRUCTION TO AVOID CONFLICTS WITH DESIGNED PIPELINE GRADE AND ALIGNMENT. EXISTING UTILITY INFORMATION SHOWN ON PLANS OR OBTAINED FROM UTILITY COMPANIES OR BLUE STAKED MUST BE ASSUMED AS APPROXIMATE, REQUIRING FIELD VERIFICATION.
5. CULINARY WATER AND FIRE SERVICE LINES TO BE CONSTRUCTED IN ACCORDANCE WITH LOCAL GOVERNING MUNICIPALITY STANDARDS AND SPECIFICATIONS.
6. SANITARY SEWER MAINS AND LATERALS TO BE CONSTRUCTED IN ACCORDANCE WITH LOCAL GOVERNING MUNICIPALITY SEWER DISTRICT STANDARDS AND SPECIFICATIONS.
7. STORM SEWER TO BE CONSTRUCTED IN ACCORDANCE WITH THE GOVERNING MUNICIPALITY STANDARDS AND SPECIFICATIONS.
8. ALL STORM DRAIN AND IRRIGATION CONDUITS SHALL BE INSTALLED WITH WATER TIGHT JOINTS AND CONNECTIONS.
9. ALL STORM DRAIN PIPE PENETRATIONS INTO BOXES SHALL BE CONSTRUCTED WITH WATER TIGHT SEALS ON THE OUTSIDE AND GROUTED SMOOTH WITH A NON-SHRINK GROUT ON THE INSIDE. CONDUITS SHALL BE CUT OFF FLUSH WITH THE INSIDE OF THE BOX.
10. NO CHANGE IN THE DESIGN OF UTILITIES AS SHOWN WILL BE MADE BY THE CONTRACTOR WITHOUT THE WRITTEN APPROVAL OF THE GOVERNING MUNICIPALITY, OR OTHER AUTHORITY HAVING JURISDICTION OVER THAT UTILITY.
11. ALL STORM DRAIN CONDUITS AND BOXES SHALL BE CLEAN AND FREE OF ROCKS, DIRT, AND CONSTRUCTION DEBRIS PRIOR TO FINAL INSPECTION.

1.8 SURVEY CONTROL
1. CONTRACTOR MUST PROVIDE A REGISTERED LAND SURVEYOR OR PERSONS UNDER THE SUPERVISION OF A REGISTERED LAND SURVEYOR TO SET STAKES FOR THE ALIGNMENT AND GRADE OF EACH MAIN AND/OR FACILITY AS SHOWN ON THE PLANS. THE STAKES SHALL BE MARKED WITH THE HORIZONTAL LOCATION (STATION) AND VERTICAL LOCATION (GRADE) WITH CUTS AND/OR FILLS TO THE APPROVED GRADE OF THE MAIN AND OR FACILITY AS SHOWN ON THE PLANS.
2. THE CONTRACTOR SHALL PROTECT ALL STAKES AND MARKERS FOR VERIFICATION PURPOSES.
3. CONTRACTOR WILL BE RESPONSIBLE FOR FURNISHING, MAINTAINING, OR RESTORING ALL MONUMENTS AND REFERENCE MARKS WITHIN THE PROJECT SITE.

1.9 AMERICAN DISABILITIES ACT
1. PEDESTRIAN / ADA ROUTES SHALL MEET THE FOLLOWING SPECIFICATIONS:
   *ROUTES SHALL HAVE A 2.08% (1:48) MAXIMUM CROSS SLOPE.
   *ROUTES SHALL HAVE A 5.00% (1:20) MAXIMUM RUNNING SLOPE.
   *RAMPS SHALL HAVE A 8.33% (1:12) MAXIMUM RUNNING SLOPE.
2. ADA PARKING STALLS AND ADJACENT ROUTES SHALL HAVE A 2.08% (1:48) MAXIMUM SURFACE SLOPE IN ANY DIRECTION.
3. THE CONTRACTOR SHALL ADHERE TO THE ABOVE SPECIFICATIONS. IN THE EVENT OF A DISCREPANCY IN THE CONSTRUCTION DOCUMENTS, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER PRIOR TO ANY CONSTRUCTION.

CITY CONTACTS

COMPANY	CONTACT	NUMBER
CULINARY WATER/PRESSURIZED IRRIGATION	JAY BREMS	(801)763-3060
SEWER/STORM WATER	ASHTON HARDY	(801)763-3060
CITY INSPECTOR	DEE HOWARD	(801)763-3060
SWPPP INSPECTOR	HARLAN NIELSON	(801)763-3060
AMERICAN FORK CITY FIRE MARSHAL	MAT SACCO	(801)763-3045
AF FIBER	KYLE PETERSON	(801)400-2933
AMERICAN FORK IRRIGATION COMPANY	ERNIE JOHN	(801)471-6576
CENTURY LINK	BILL WESTFALL	(435)623-4252
COMCAST	ELYSIA VALDEZ	(801)401-3017
DOMINION ENERGY	TRENT JOHNSON	(801)853-6548
RMP	TERIA WALKER	(801)756-1310
TIMPANOGOS SPECIAL SERVICE DISTRICT	DAVID BARLOW	(801)756-5231
MITCHELL HOLLOW IRRIGATION COMPANY	DALE JONES	(801)768-8150

LEGEND

NEW	EXISTING	
		MONUMENT LINE
		CENTER LINE
		SUBJECT PROPERTY LINE
		ADJACENT PROPERTY LINE
		EASEMENT LINE
		DITCH FLOWLINE
X	X	FENCE LINE
ATMS	atms	ATMS CABLE
TV	tv	CABLE TV LINE
C	c	COMMUNICATIONS LINE
FO	fo	FIBER-OPTIC CABLE
F	f	FIRE LINE
IRR	irr	IRRIGATION LINE
G	g	NATURAL GAS LINE
OHC	ohc	OVERHEAD COMMUNICATIONS
OHP	ohp	OVERHEAD POWER LINE
OHT	oht	OVERHEAD TELEPHONE LINE
OHTV	ohtv	OVERHEAD TELEVISION LINE
P	p	POWER LINE
P/C	p/c	POWER/COMMUNICATIONS LINE
P/T	p/t	POWER/TELEPHONE LINE
P/T/C	p/t/c	POWER/TELE/COMM LINE
RD	rd	ROOF DRAIN LINE
SW	sw	SECONDARY WATER LINE
S	s	SANITARY SEWER LINE
ST	st	STEAM LINE
SD	sd	STORM DRAIN LINE
T	t	TELEPHONE LINE
T/C	t/c	TELEPHONE/COMM LINE
UD	ud	UNDERDRAIN
UGC	ugc	UNDERGROUND COMMUNICATIONS
UGP	ugp	UNDERGROUND POWER LINE
UGT	ugt	UNDERGROUND TELEPHONE LINE
UGTV	ugtv	UNDERGROUND TELEVISION
W	w	WATER LINE
72	4572	CONTOUR LINE
		CURB & GUTTER (STD)
		CURB & GUTTER (OUTFALL)

NEW	EXISTING	
		SECTION CORNER (FOUND)
		SECTION CORNER (NOT FOUND)
		STREET MONUMENT
		BRASS CAP MONUMENT
		POWER POLE
		UTILITY POLE
GUY	GUY	GUY ANCHOR
TRANS	TRANS	POWER TRANSFORMER
		TRAFFIC SIGNAL CABINET
		LIGHT POLE
TR	TR	TELEPHONE RISER
T	T	TELEPHONE MANHOLE
		TRAFFIC SIGNAL BOX
W	W	WATER MANHOLE
		WATER VALVE
WM	WM	WATER METER
		FIRE HYDRANT
S	S	SANITARY SEWER MANHOLE
SSCO	SSCO	SANITARY SEWER CLEANOUT
SD	SD	STORM DRAIN MANHOLE
		STORM DRAIN CURB INLET
		STORM DRAIN CATCH BASIN
SD	SD	STORM DRAIN CLEANOUT
		STORM DRAIN COMBO BOX
MB	MB	MAILBOX
		SIGN
		FLOW DIRECTION
44.00 TOC	44.00 EX TOC	SPOT ELEVATION
		CONIFEROUS TREE
		DECIDUOUS TREE

ABBREVIATIONS

AC	ACRE	DIP	DUCTILE IRON PIPE	GM	GAS METER	PCC	POINT OF COMPOUND CURVE	T	TOWNSHIP
ADA	AMERICANS WITH DISABILITIES ACT	DTREE	DECIDUOUS TREE	GMH	GAS MANHOLE	PI	POINT OF INTERSECTION	TBC	TOP BACK OF CURB
ATMS	ADVANCED TRAFFIC MGMT. SYSTEM	DYL	DOUBLE YELLOW LINE	GUY	GUY WIRE	PM	PARKING METER	TELE	TELEPHONE
B&C	BAR & CAP	E	EAST	GV	GAS VALVE	PP	POWER POLE	TFC	TOP FACE OF CURB
BC	BUILDING CORNER	EB	ELECTRIC BOX	HDPE	HIGH DENSITY POLYETHYLENE	PRC	POINT OF REVERSE CURVE	TFG	TOP FINISH GRADE
BFG	BOTTOM FINISH GRADE	EGL	ENERGY GRADE LINE	HG	HEADGATE	PRK	PARKING STRIPE	TL	TREE LINE
BLUE	BLUE STAKED ELECTRIC	ELEV	ELEVATION	HGL	HYDRAULIC GRADE LINE	POC	POINT OF CONNECTION	TMH	TELEPHONE MANHOLE
BLUFO	BLUE STAKED FIBER OPTIC	EM	ELECTRIC METER	HP	HIGH POINT	PT	POINT OF TANGENCY	TOA	TOP OF ASPHALT
BLUG	BLUE STAKED NATURAL GAS	EMH	ELECTRIC MANHOLE	HW	HEADWALL or HIGH WATER	PWR	POWER	TOC	TOP OF CONCRETE
BLUIRR	BLUE STAKED IRRIGATION	EOA	EDGE OF ASPHALT	HWY	HIGHWAY	PVC	POLYVINYL CHLORIDE PIPE	TOF	TOP OF FOOTING
BLUSD	BLUE STAKED STORM DRAIN	EOC	EDGE OF CONCRETE	ICO	IRRIGATION CLEANOUT	R	RANGE	TOG	TOP OF GRATE
BLUSS	BLUE STAKED SANITARY SEWER	EOG	EDGE OF GRAVEL	ICV	IRRIGATION CONTROL VALVE	RCP	REINFORCED CONCRETE PIPE	TOE	TOE OF SLOPE
BLUT	BLUE STAKED TELEPHONE	EOL	EDGE OF LAWN	IE	INVERT ELEVATION	RD	ROOF DRAIN	TOP	TOP OF SLOPE or TOP OF PIPE
BLUW	BLUE STAKED WATER	EX or EXIST	EXISTING	IRR	IRRIGATION	REV	REVISION	TOW	TOP OF WALL
BM	BENCHMARK	F	FIRE	LF	LINEAR FEET	ROW	RIGHT-OF-WAY	TR	TELEPHONE RISER
BOF	BOTTOM OF FOOTING	FC	FOUNDATION CORNER	LIP	LIP OF GUTTER	RR	RAILROAD	TV	TELEVISION
BOB	BOTTOM OF BOX	FD	FOUND or FOUNDATION DRAIN	LP	LOW POINT or LIGHT POLE	S	SOUTH	TW	FINISH GRADE AT TOP OF WALL
BOL	BOLLARD	FDC	FIRE DEPT. CONNECTION	MAX	MAXIMUM	SAD	SEE ARCHITECTURAL DRAWINGS	TRANS	TRANSFORMER
BOT	BOTTOM	FDMN	FOUND MONUMENT	MIN	MINIMUM	SD	STORM DRAIN	TSP	TRAFFIC SIGNAL POLE
BOV	BLOW-OFF VALVE	FDSC	FOUND SECTION CORNER	MON	MONUMENT	SDCB	STORM DRAIN CATCH BASIN	TSB	TRAFFIC SIGNAL BOX
BOW	BACK OF WALK	FFE	FINISHED FLOOR ELEVATION	MP	METAL PIPE	SDCO	STORM DRAIN CLEOUNOUT BOX	UD	UNDERDRAIN
BW	FINISH GRADE AT BOTTOM OF WALL	FG	FINISHED GRADE	MW	MONITORING WELL	SDMH	STORM DRAIN MANHOLE	UGC	UNDERGROUND COMMUNICATIONS
℄	CENTERLINE	FH	FIRE HYDRANT	N	NORTH	SEC	SECTION	UGP	UNDERGROUND POWER
CATV	CABLE TELEVISION	FL	FLOW LINE	NG	NATURAL GROUND	SPECS	SPECIFICATIONS	UGT	UNDERGROUND TELEPHONE
CBR	CONCRETE BARRIER	FNC	FENCE	NGRET	NG AT RETAINING WALL	SLB&M	SALT LAKE BASE & MERIDIAN	UGTV	UNDERGROUND TELEVISION
CC	CURB CUT	FNCCL	CHAIN LINK FENCE	NR	NAIL & RIBBON	SQ	SQUARE	U.N.O.	UNLESS NOTED OTHERWISE
COL	COLUMN	FNCIRN	IRON FENCE	NW	NAIL & WASHER	SQFT	SQUARE FEET	UP	UTILITY POLE
COMM	COMMUNICATIONS	FNCVYL	VINYL FENCE	NTS	NOT TO SCALE	SQYD	SQUARE YARD	VCP	VITRIFIED CLAY PIPE
CONC	CONCRETE	FNCWD	WOOD FENCE	OG	ORIGINAL GROUND	SS	SANITARY SEWER	VP	VERTICAL PIPE
CONST	CONSTRUCTION	FNCWR	WIRE FENCE	OH	OVERHANG	SSCO	SANITARY SEWER CLEANOUT	W	WEST or WATER
CMP	CORRUGATED METAL PIPE	FO	FIBER OPTIC	OHC	OVERHEAD COMMUNICATIONS	SSMH	SANITARY SEWER MANHOLE	WM	WATER METER
CP	CONTROL POINT	FOW	FRONT OF WALK	OHP	OVERHEAD POWER	ST	STEAM	WMH	WATER MANHOLE
CTREE	CONIFEROUS TREE	FT	FEET	OHT	OVERHEAD TELEPHONE	STA	STATION	WS	WATER SURFACE
CUFT	CUBIC FOOT	G	NATURAL GAS	OHTV	OVERHEAD TELEVISION	STD	STANDARD	WTR	WATER
CUYD	CUBIC YARD	GAR	GARAGE	₱	PROPERTY LINE	STM	STORM	WV	WATER VALVE
DEL	DELINEATOR	GB	GRADE BREAK	PB	POWER BOX	SYL	SOLID YELLOW LINE	WW	WATERWAY
DIA or Ø	DIAMETER	GL	GROUND LIGHT	PC	POINT OF CURVATURE	SWL	SOLID WHITE LINE		

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PROFESSIONAL ENGINEER No. 375419-2202 ROBERT J. POIRIER 01-04-2023 STATE OF UTAH

CARPET DIEM

64 N 900 W
AMERICAN FORK, UTAH 84003
SW QUARTER OF SECTION 15

REVISIONS

REV	DATE	DESCRIPTION

PROJECT NO:	21299
DRAWN BY:	DJC
CHECKED BY:	RJP
DATE:	01/04/23

GENERAL NOTES, LEGEND AND ABBREVIATIONS

C0.01

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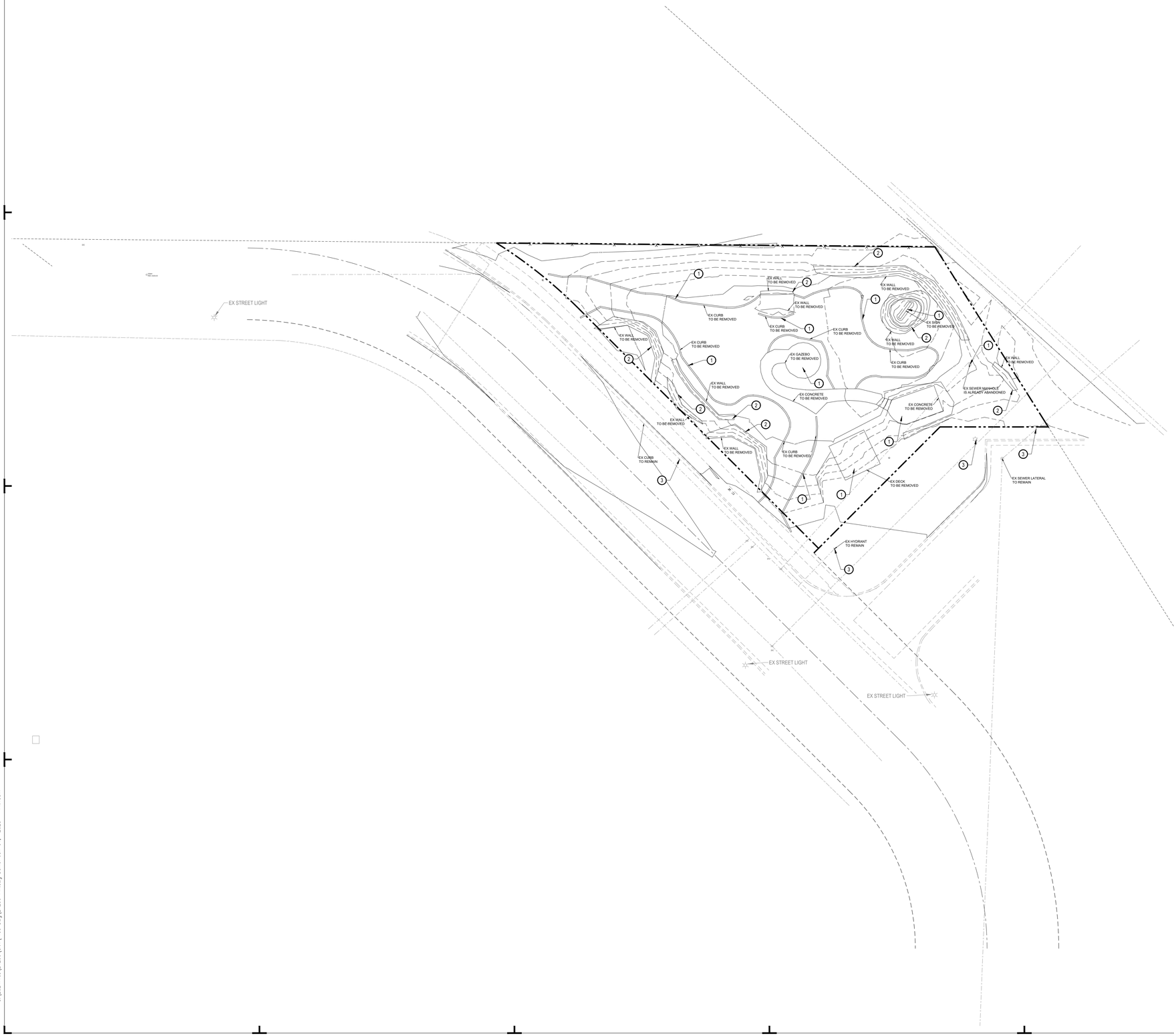

NORTH

SCALE: 1" = 20'

0 10' 20' 40' 60'

GENERAL NOTES:

ALL WORK TO COMPLY WITH GOVERNING AGENCY'S STANDARDS AND SPECIFICATIONS.

COORDINATE WITH GOVERNING AGENCY PRIOR TO DEMOLITION OF ANY PUBLIC UTILITY.

UTILITY TYPE	PROVIDER
WATER	WATER
STORM	STORM
COMMUNICATIONS	COMCAST
COMMUNICATIONS	CENTURY LINK
COMMUNICATIONS	INTEGRA
SANITARY SEWER	SANITARY SEWER
NATURAL GAS	DOMINION ENERGY
POWER	ROCKY MOUNTAIN POWER

KEYED NOTES:

DEMOLISH AND/OR REMOVE THE FOLLOWING PER THE SPECIFICATIONS GIVEN OR REFERENCED AND THE DETAILS NOTED AND AS SHOWN ON THE CONSTRUCTION DRAWINGS:

1. EXISTING SITE FEATURES (FENCES, GATES, BOLLARDS, GRAVEL DRIVEWAYS, IRRIGATION GATES, CONCRETE DITCHES, WHEEL STOPS, LANDSCAPING, GROUND LIGHTING, IRRIGATION, MOWSTRIPS, ETC.) TO BE REMOVED/DEMOLISHED AND PROPERLY DISPOSED OF.
2. EXISTING WALL, INCLUDING FOOTINGS TO BE REMOVED/DEMOLISHED AND PROPERLY DISPOSED OF.
3. EXISTING ITEMS TO REMAIN.

NOTICE!

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION, PROTECTION, AND RESTORATION OF ALL BURIED OR ABOVE GROUND UTILITIES, SHOWN OR NOT SHOWN ON THE PLANS.

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PROJECT NO:	21299
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DEMOLITION PLAN

C0.10

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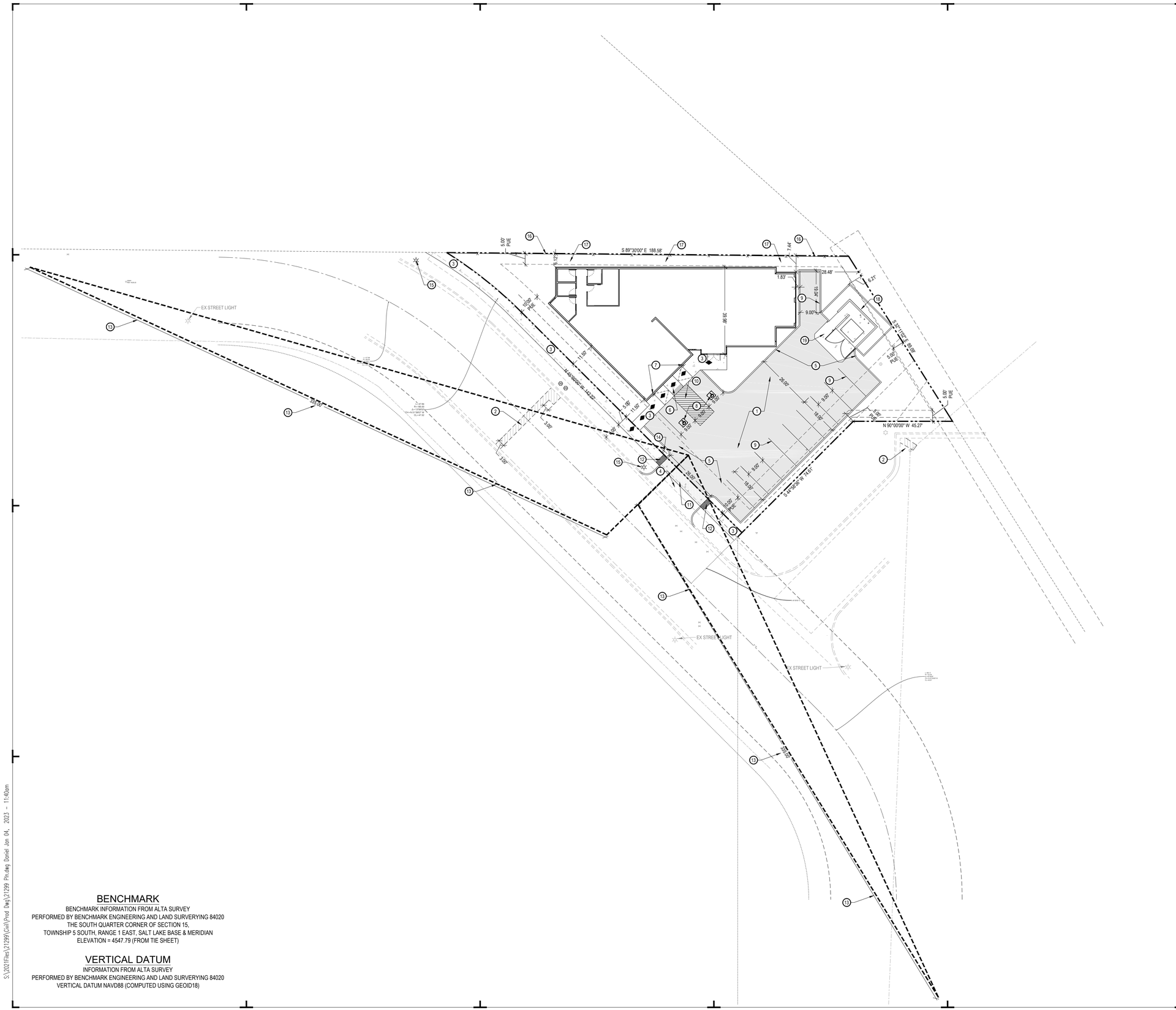

BENCHMARK

BENCHMARK INFORMATION FROM ALTA SURVEY
PERFORMED BY BENCHMARK ENGINEERING AND LAND SURVERYING 84020
THE SOUTH QUARTER CORNER OF SECTION 15,
TOWNSHIP 5 SOUTH, RANGE 1 EAST, SALT LAKE BASE & MERIDIAN
ELEVATION = 4547.79 (FROM TIE SHEET)

VERTICAL DATUM

INFORMATION FROM ALTA SURVEY
PERFORMED BY BENCHMARK ENGINEERING AND LAND SURVERYING 84020
VERTICAL DATUM NAVD88 (COMPUTED USING GEOID18)

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NORTH

SCALE: 1" = 20'

0 10' 20' 40' 60'

DESCRIPTION	AREA	%
HARDSCAPE	5,530 SQFT	37%
LANDSCAPE	4,865 SQFT	33%
BUILDINGS	4,503 SQFT	30%
NEW TOTAL WITH ADJUSTED FRONT ROW LINE	14,898 SQFT	100%
AREA OUTSIDE ADJUSTED FRONT ROW LINE	532 SQFT	
OLD LOT TOTAL	15,430 SQFT	

GENERAL NOTES:

ALL DIMENSIONS ARE TO THE FACE OF CURB, UNLESS OTHERWISE NOTED.

SEE ARCHITECTURAL SITE PLAN FOR ADDITIONAL INFORMATION.

SEE LANDSCAPE PLANS FOR IRRIGATION AND PLANTING.

ALL WORK TO COMPLY WITH GOVERNING AGENCY'S STANDARDS AND SPECIFICATIONS.

ALL IMPROVEMENTS MUST COMPLY WITH ADA STANDARDS AND RECOMMENDATIONS.

NOTIFY CITY ENGINEER IF RUTTING/PUMPING OCCURS DURING CONSTRUCTION ACTIVITIES.

KEYED NOTES:

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

1. STANDARD DUTY ASPHALT PAVEMENT WITH GRANULAR BASE PER DETAIL 'D1', SHEET C5.01.
2. ASPHALT T-PATCH, PER APWA PLAN NO. 255.
3. CONCRETE SIDEWALK, PER APWA PLAN NO. 231.
4. CONCRETE OPEN DRIVE APPROACH, PER APWA PLAN NO. 225.
5. CONCRETE CURB WALL. SEE DETAIL 'C2', SHEET C5.01.
6. ADA RAMP WITH DETECTABLE WARNING SURFACE. SEE APWA PLAN NO. 236.3, FOR RAMP DETAIL AND APWA PLAN NO. 238 FOR DETECTABLE WARNING SURFACE DETAIL.
7. ADA PARKING SIGN. SEE DETAIL 'D6', SHEET C5.01.
8. PAINTED ADA SYMBOL. SEE DETAIL 'D5', SHEET C5.01.
9. 4" WIDE SOLID YELLOW PARKING STALL STRIPE LINES.
10. 4" WIDE SOLID YELLOW PEDESTRIAN STRIPE LINES.
11. 8" THICK CONCRETE SIDEWALK AT DRIVE APPROACH, PER APWA PLAN NO. 231.
12. ADA DETECTABLE WARNING SURFACE.
13. 30 MPH DESIGN SPPED SIGHT TRIANGLE PER AMERICAN FORK STANDARDS CODE 15.01.1910 TABLE 10 REQUIRES INTERSECTION SIGHT DISTANCE FOR PASSENGER CARS TO BE DESIGNED AT 335'.
14. STOP SIGN PER AMERICAN FORK CITY STANDARDS AND SPECIFICATIONS.
15. STREET LAMP PER AMERICAN FORK CITY STANDARDS & SPECIFICATIONS.
16. INSTALL NEW 6' PRIVACY FENCE.
17. PROVIDED ALL WEATHER MAINTAINABLE SURFACE FOR FIRE DEPARTMENT AND FIRE FIGHTING ACCESS, AS WELL AS MAINTAINING THE AREA OPEN AND UNOBSTRUCTED.
18. DUMPSTER ENCLOSURE, TO BE PER CITY STANDARD FIGURE 17.5.121.B, SEE SHEET C5.01. ADDITIONALLY SEE ARCHITECTURAL AND LANDSCAPE PLANS FOR DETAILS.
19. CONCRETE PAVEMENT WITH GRANULAR BASE PER DETAIL 'D2', SHEET C5.01.

◆ ◆ ◆ ACCESSIBLE ROUTE WITH MAXIMUM 1:48 CROSS-SLOPE AND MAXIMUM 1:20 RUNNING-SLOPE.

Blue Stakes of UTAH 811 BlueStakes.org

NOTICE!

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION, PROTECTION, AND RESTORATION OF ALL BURIED OR ABOVE GROUND UTILITIES, SHOWN OR NOT SHOWN ON THE PLANS.

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HORIZONTAL CONTROL PLAN

C1.01

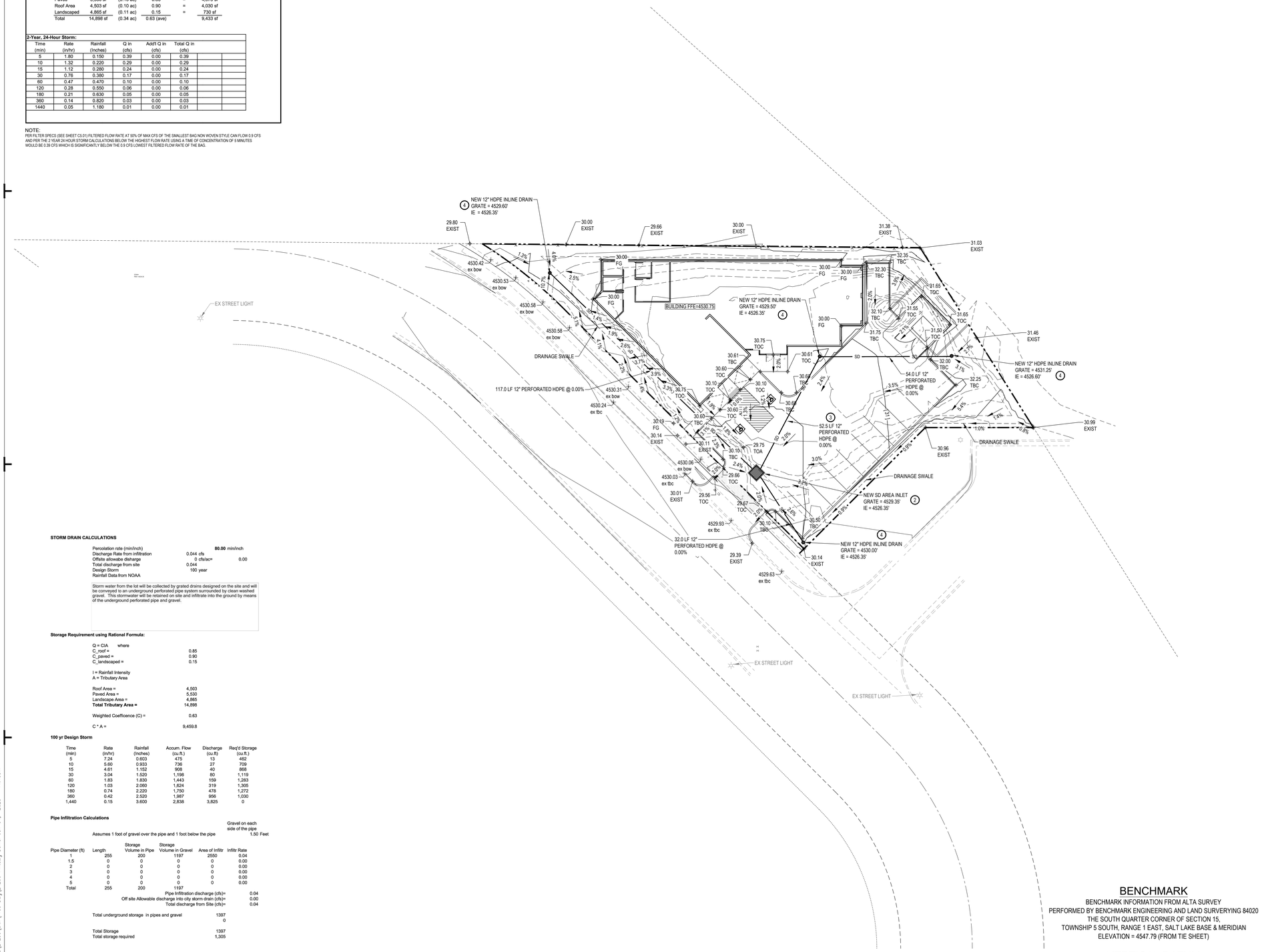
Mcnell Engineering 8610 S. Sandy Pkwy, Sandy, UT	STORM RUNOFF **CALCULATION SHEET** Project No. 21299	Title : Carpet Diem Scope : Site Drainage Design **Detention Facilities** Engineer : RJP Check: RJP Authority : American Fo Rev. No.: 1

Area Identification	(A)		Runoff Coefficient (C)		(C*A)
Paved	5,530 sf	(0.13 ac)	0.85	=	4,673 sf
Roof Area	4,503 sf	(0.10 ac)	0.90	=	4,030 sf
Landscaped	4,865 sf	(0.11 ac)	0.15	=	730 sf
Total	14,898 sf	(0.34 ac)	0.63 (ave)		9,433 sf

2-Year, 24-Hour Storm:

Time (min)	Rate (in/hr)	Rainfall (inches)	Q in (cfs)	Add'l Q in (cfs)	Total Q in (cfs)
5	1.80	0.150	0.39	0.00	0.39
10	1.32	0.220	0.29	0.00	0.29
15	1.12	0.280	0.24	0.00	0.24
30	0.76	0.380	0.17	0.00	0.17
60	0.47	0.470	0.10	0.00	0.10
120	0.28	0.550	0.06	0.00	0.06
180	0.21	0.630	0.05	0.00	0.05
360	0.14	0.820	0.03	0.00	0.03
1440	0.05	1.180	0.01	0.00	0.01

NOTE:
PER FILTER SPECS (SEE SHEET C5.01) FILTERED FLOW RATE AT 50% OF MAX CFS OF THE SMALLEST BAG NON WOVEN STYLE CAN FLOW 0.9 CFS AND PER THE 2 YEAR 24 HOUR STORM CALCULATIONS BELOW THE HIGHEST FLOW RATE USING A TIME OF CONCENTRATION OF 5 MINUTES WOULD BE 0.39 CFS WHICH IS SIGNIFICANTLY BELOW THE 0.9 CFS LOWEST FILTERED FLOW RATE OF THE BAG.



STORM DRAIN CALCULATIONS

Percolation rate (min/inch)		**80.00** min/inch
Discharge Rate from infiltration	0.044 cfs	
Offsite allowabe disharge	0 cfs/ac=	0.00
Total discharge from site	0.044	
Design Storm	100 year	
Rainfall Data from NOAA		

Storm water from the lot will be collected by grated drains designed on the site and will be conveyed to an underground perforated pipe system surrounded by clean washed gravel. This stormwater will be retained on site and infiltrate into the ground by means of the underground perforated pipe and gravel.

Storage Requirement using Rational Formula:

Q = C/A where	
C_roof =	0.85
C_paved =	0.90
C_landscaped =	0.15
I = Rainfall Intensity	
A = Tributary Area	
Roof Area =	4,503
Paved Area =	5,530
Landscape Area =	4,865
Total Tributary Area =	14,898
Weighted Coefficence (C) =	0.63
C * A =	9,459.8

100 yr Design Storm

Time (min)	Rate (in/hr)	Rainfall (inches)	Accum. Flow (cu.ft.)	Discharge (cu.ft)	Req'd Storage (cu.ft.)
5	7.24	0.603	475	13	462
10	5.60	0.933	736	27	709
15	4.61	1.152	908	40	868
30	3.04	1.520	1,198	80	1,119
60	1.83	1.830	1,443	159	1,283
120	1.03	2.060	1,624	319	1,305
180	0.74	2.220	1,750	478	1,272
360	0.42	2.520	1,987	956	1,030
1,440	0.15	3.600	2,838	3,825	0

Pipe Infiltration Calculations

Assumes 1 foot of gravel over the pipe and 1 foot below the pipe — Gravel on each side of the pipe: 1.50 Feet

Pipe Diameter (ft)	Length	Storage Volume in Pipe	Storage Volume in Gravel	Area of Infiltr	Infiltr Rate
1	255	200	1197	2550	0.04
1.5	0	0	0	0	0.00
2	0	0	0	0	0.00
3	0	0	0	0	0.00
4	0	0	0	0	0.00
5	0	0	0	0	0.00
Total	255	200	1197		

Pipe Infiltration discharge (cfs)=	0.04
Off site Allowable discharge into city storm drain (cfs)=	0.00
Total discharge from Site (cfs)=	0.04
Total underground storage in pipes and gravel	1397
	0
Total Storage	1397
Total storage required	1,305

NOTE:
STORAGE VOLUME IN CLEAN 2" WASHED GRAVEL (PER DETAIL ON SHEET C5.01)
ASSUMES A 40% VOID RATIO.

S:\2021Files\21299\Civil\Prod Dwg\21299 Pin.dwg Dated: Jan 04, 2023 - 11:40am

NORTH

SCALE: 1" = 20'

0 10' 20' 40' 60'

GENERAL NOTES:

SITE GRADING SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE RECOMMENDATIONS SET FORTH IN THE SOILS REPORT (IF AVAILABLE). THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING AND REPLACING ALL SOFT, YIELDING OR UNSUITABLE MATERIALS AND REPLACING WITH SUITABLE MATERIALS AS SPECIFIED IN THE SOILS REPORT. ALL EXCAVATED OR FILLED AREAS SHALL BE COMPACTED TO 95% OF MODIFIED PROCTOR MAXIMUM DENSITY PER ASTM TEST D-1557 EXCEPT UNDER BUILDING FOUNDATION WHERE IT SHALL BE 98% MIN. OF MAXIMUM DENSITY. MOISTURE CONTENT AT TIME OF PLACEMENT SHALL NOT EXCEED 2% ABOVE NOR 3% BELOW OPTIMUM. CONTRACTOR SHALL SUBMIT A COMPACTION REPORT PREPARED BY A QUALIFIED REGISTERED SOILS ENGINEER, VERIFYING THAT ALL FILLED AREAS AND SUBGRADE AREAS WITHIN THE BUILDING PAD AREA AND AREAS TO BE PAVED, HAVE BEEN COMPACTED IN ACCORDANCE WITH THESE PLANS & SPECS AND THE RECOMMENDATIONS SET FORTH IN THE SOILS REPORT.

THE CONTRACTOR IS TO USE BEST MANAGEMENT PRACTICES FOR PROVIDING EROSION CONTROL FOR CONSTRUCTION OF THIS PROJECT. SPECIFIC DETAILS SHOWN ON SHEET C2.10 SHALL BE USED IN COMBINATION WITH OTHER ACCEPTED LOCAL PRACTICES.

EXISTING UNDERGROUND UTILITIES AND IMPROVEMENTS ARE SHOWN IN THEIR APPROXIMATE LOCATIONS BASED UPON RECORD INFORMATION AVAILABLE AT THE TIME OF PREPARATION OF PLANS. LOCATIONS MAY NOT HAVE BEEN VERIFIED IN THE FIELD AND NO GUARANTEE IS MADE AS TO ACCURACY OR COMPLETENESS OF THE INFORMATION SHOWN. IT SHALL BE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE EXISTENCE AND LOCATION OF THOSE UTILITIES SHOWN ON THESE PLANS OR INDICATED IN THE FIELD BY LOCATING SERVICES. ANY ADDITIONAL COSTS INCURRED AS A RESULT OF CONTRACTOR'S FAILURE TO VERIFY LOCATIONS OF EXISTING UTILITIES PRIOR TO BEGINNING OF CONSTRUCTION IN THEIR VICINITY SHALL BE BORNE BY THE CONTRACTOR AND ASSUMED INCLUDED IN THE CONTRACT.

ALL ELEVATIONS SHOWN AT TOP AND BOTTOM OF WALL(S), IF ANY, ARE ELEVATIONS AT FINISH GRADE, UNLESS OTHERWISE NOTED.

MINIMUM STORM DRAIN COVER IS 24"

KEYED NOTES:

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

1. GRADE SITE TO ELEVATIONS AND CONTOURS SHOWN ON PLAN.
2. STORM DRAIN AREA INLET BOX WITH BICYCLE SAFE GRATE AND FLEXSTORM PC+ FILTER AND BASKET INSTALLED. SEE DETAIL 'C1', SHEET C5.01 FOR INLET BOX, AND FLEXSTORM INLET FILTER BASKET DETAILS ON SHEET C5.01. FILTERED FLOW RATE SUFFICIENT TO HANDLE 2-YEAR STORM EVENT.
3. 12" DIAMETER PERFORATED HDPE STORM DRAIN LINE WITH GRAVEL SURROUNDING PIPE. SEE DETAIL 'D3', SHEET C5.01 FOR PERFORATED PIPE RETENTION SYSTEM.
4. HDPE INLINE DRAIN. SEE DETAIL 'A1', SHEET C5.01. INSTALL FLEXSTORM PC+ FILTER AND BASKET SEE FLEXSTORM INLET FILTER BASKET DETAILS ON SHEET C5.01. FILTERED FLOW RATE SUFFICIENT TO HANDLE 2-YEAR STORM EVENT.

BENCHMARK

BENCHMARK INFORMATION FROM ALTA SURVEY
PERFORMED BY BENCHMARK ENGINEERING AND LAND SURVERYING 84020
THE SOUTH QUARTER CORNER OF SECTION 15,
TOWNSHIP 5 SOUTH, RANGE 1 EAST, SALT LAKE BASE & MERIDIAN
ELEVATION = 4547.79 (FROM TIE SHEET)

VERTICAL DATUM

INFORMATION FROM ALTA SURVEY
PERFORMED BY BENCHMARK ENGINEERING AND LAND SURVERYING 84020
VERTICAL DATUM NAVD88 (COMPUTED USING GEOID18)

COMMON GRADING ABBREVIATIONS:

SEE SHEET C0.01 FOR ADDITIONAL ABBREVIATIONS

- BFE	BASEMENT FLOOR ELEVATION
- BW	FINISH GRADE AT BOTTOM OF WALL
- EX or EXIST	EXISTING
- EOA	EDGE OF ASPHALT
- EOC	EDGE OF CONCRETE
- FFE	FINISH FLOOR ELEVATION
- FG	FINISH GRADE
- FL	FLOW LINE
- GB	GRADE BREAK
- HP	HIGH POINT
- LP	LOW POINT
- NG	NATURAL GROUND
- SDCB	STORM DRAIN CATCH BASIN
- SDCO	STORM DRAIN CLEANOUT BOX
- SDDB	STORM DRAIN DRAIN BASIN
- SDMH	STORM DRAIN MANHOLE
- TBC	TOP BACK OF CURB
- TOA	TOP OF ASPHALT
- TOC	TOP OF CONCRETE
- TOG	TOP OF GRATE
- TOW	TOP OF WALL
- TW	FINISH GRADE AT TOP OF WALL
- WW	WATERWAY

Blue Stakes of UTAH811 BlueStakes.org

NOTICE!

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION, PROTECTION, AND RESTORATION OF ALL BURIED OR ABOVE GROUND UTILITIES, SHOWN OR NOT SHOWN ON THE PLANS.

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PROFESSIONAL ENGINEER
No. 7594802-2202
ROBERT J. POIRIER
01-04-2023
STATE OF UTAH

CARPET DIEM

64 N 900 W
AMERICAN FORK, UTAH 84003
SW QUARTER OF SECTION 15

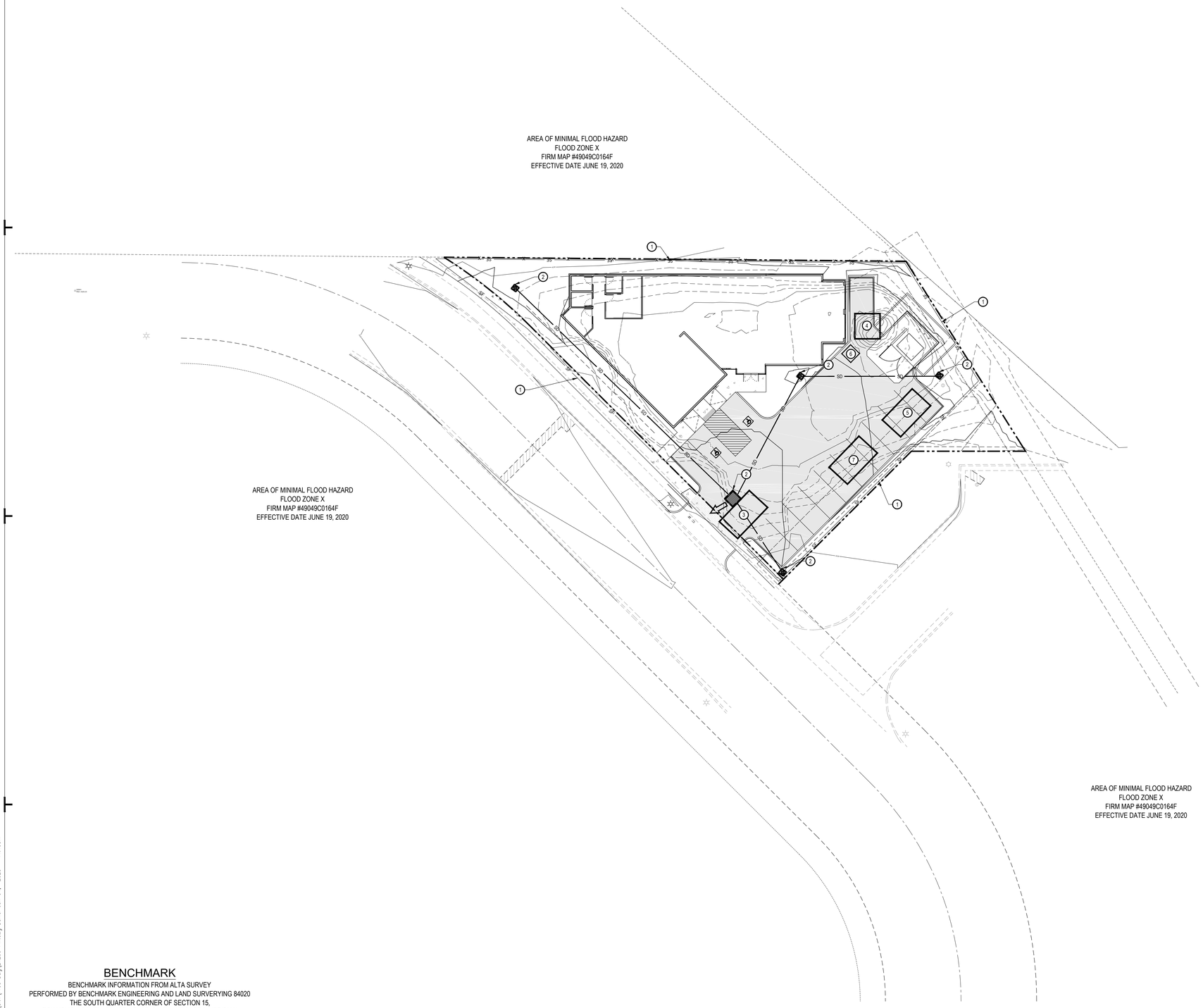
REVISIONS

REV	DATE	DESCRIPTION

PROJECT NO:	21299
DRAWN BY:	DJC
CHECKED BY:	RJP
DATE:	01/04/23

GRADING AND DRAINAGE PLAN

C2.01



BENCHMARK

BENCHMARK INFORMATION FROM ALTA SURVEY
PERFORMED BY BENCHMARK ENGINEERING AND LAND SURVERYING 84020
THE SOUTH QUARTER CORNER OF SECTION 15,
TOWNSHIP 5 SOUTH, RANGE 1 EAST, SALT LAKE BASE & MERIDIAN
ELEVATION = 4547.79 (FROM TIE SHEET)

VERTICAL DATUM

INFORMATION FROM ALTA SURVEY
PERFORMED BY BENCHMARK ENGINEERING AND LAND SURVERYING 84020
VERTICAL DATUM NAVD88 (COMPUTED USING GEOID18)

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NORTH

SCALE: 1" = 20'

0 10' 20' 40' 60'

GENERAL NOTES:

THE CONTRACTOR IS TO USE BEST MANAGEMENT PRACTICES FOR PROVIDING EROSION CONTROL FOR CONSTRUCTION OF THIS PROJECT. SPECIFIC DETAILS REFERRED TO ON THIS SHEET SHALL BE USED IN COMBINATION WITH OTHER ACCEPTED LOCAL PRACTICES.

ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE LOCAL AGENCY'S EROSION CONTROL STANDARDS AND SPECIFICATIONS AND ALL WORK SHALL BE SUBJECT TO INSPECTION BY THE AGENCY HAVING JURISDICTION. ALSO INSPECTORS WILL HAVE THE RIGHT TO CHANGE THE FACILITIES AS NEEDED.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFYING THE LOCATIONS OF ALL EXISTING UTILITIES. IF CONFLICTS OCCUR, THE CONTRACTOR SHALL NOTIFY THE ENGINEER PRIOR TO CONSTRUCTION TO DETERMINE IF ANY FIELD ADJUSTMENTS SHOULD BE MADE.

THE CONTRACTOR SHALL PROVIDE ADEQUATE DUST CONTROL.

WHEN GRADING OPERATIONS HAVE BEEN COMPLETED AND THE DISTURBED GROUND SHALL BE LEFT "OPEN" FOR 30 DAYS OR MORE THE AREA SHALL BE FURROWED PARALLEL TO THE CONTOURS OF THE AREA.

THE CONTRACTOR SHALL MODIFY EROSION CONTROL MEASURES TO ACCOMMODATE PROJECT PLANNING.

NOTIFY THE CITY ENGINEER IF RUTTING / PUMPING OCCURS DURING CONSTRUCTION ACTIVITIES.

MAINTENANCE:

THE OWNER'S REPRESENTATIVE SHALL MAKE ROUTINE CHECKS ON ALL EROSION CONTROL MEASURES TO DETERMINE IF REPAIRS OR SEDIMENT REMOVAL IS NECESSARY. DUE TO CONDITIONS THAT MAY ARISE IN THE FIELD, ADDITIONAL CONTROL MAY BE DETERMINED TO BE NECESSARY.

SILT FENCE BARRIERS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT THE LEAST DAILY DURING PROLONGED RAINFALL.

CLOSE ATTENTION SHALL BE PAID TO THE REPAIR OF DAMAGED SILT FENCES, END RUNS, AND UNDERCUTTING BENEATH SILT FENCING.

NECESSARY REPAIRS TO BARRIERS OR REPLACEMENT OF SILT FENCING SHALL BE ACCOMPLISHED PROMPTLY.

SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH RAINFALL. THEY MUST BE REMOVED WHEN THE LEVEL OF DEPOSITION REACHES APPROXIMATELY ONE-HALF THE HEIGHT OF THE BARRIER.

KEYED NOTES:

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

1. SILT FENCE AS SHOWN ON PLAN. SEE DETAIL 'C3', SHEET C5.02.
2. INLET PROTECTION AROUND EXISTING OR NEW STORM DRAIN CATCH BASINS OR CURB INLETS. SEE DETAIL 'A1', SHEET C5.02.
3. TEMPORARY CONSTRUCTION ENTRANCE. SEE DETAIL 'C1', SHEET C5.02. LOCATION SHOWN IS SUGGESTIVE. CONTRACTOR TO RELOCATE AS NEEDED.
4. CONCRETE WASHOUT AREA. CREATE A MIN. 10'X10' AREA WITH A 1' HIGH BERM. LINE AREA WITH PLASTIC. DISCARD WASTE IN DUMPSTER WHEN FULL AND LEGALLY DISPOSE OF. SEE DETAIL 'A3', SHEET C5.02. LOCATION SHOWN IS SUGGESTIVE. CONTRACTOR TO RELOCATE AS NEEDED.
5. CONSTRUCTION DUMPSTER. CHECK LEVEL DAILY, LEGALLY DISPOSE OF WASTE AS NEEDED. LOCATION SHOWN IS SUGGESTIVE. CONTRACTOR TO RELOCATE AS NEEDED.
6. PORTABLE CONSTRUCTION TOILET. TOILET TO BE PROPERLY SECURED TO PREVENT TIPPING. BUILD 6" BERM AROUND TOILET TO CONTAIN ANY SPILLS OR LEAKAGE. CHECK LEVEL DAILY, LEGALLY DISPOSE OF WASTE AS NEEDED. SEE DETAIL 'A5', SHEET C5.02. LOCATION SHOWN IS SUGGESTIVE. CONTRACTOR TO RELOCATE AS NEEDED.
7. MATERIAL STORAGE AND STOCK PILE AREA. SEE DETAIL 'C5', SHEET C5.02. LOCATION SHOWN IS SUGGESTIVE. CONTRACTOR TO RELOCATE AS NEEDED.

FLOW PATH OF 100-YEAR STORM EVENT.

NOTICE!

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION, PROTECTION, AND RESTORATION OF ALL BURIED OR ABOVE GROUND UTILITIES, SHOWN OR NOT SHOWN ON THE PLANS.

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Structural Engineering • Land Surveying & HDS

PROFESSIONAL ENGINEER
No. 375419-2202
ROBERT J. POIRIER
01-04-2023
STATE OF UTAH

CARPET DIEM

64 N 900 W
AMERICAN FORK, UTAH 84003
SW QUARTER OF SECTION 15

REVISIONS

REV	DATE	DESCRIPTION

PROJECT NO:	21299
DRAWN BY:	DJC
CHECKED BY:	RJP
DATE:	01/04/23

EROSION CONTROL PLAN

C2.10

NORTH

SCALE: 1" = 20'

0 10' 20' 40' 60'

GENERAL NOTES:

CONTRACTOR IS TO COORDINATE ALL SITE UTILITIES WITH PLUMBING DRAWINGS.

ALL NEW WATER CONSTRUCTION TO BE DONE IN ACCORDANCE WITH LOCAL GOVERNING MUNICIPALITY STANDARDS & SPECIFICATIONS.

ALL NEW SANITARY SEWER CONSTRUCTION TO BE DONE IN ACCORDANCE WITH LOCAL GOVERNING MUNICIPALITY STANDARDS & SPECIFICATIONS.

CONTRACTOR SHALL FIELD VERIFY LOCATIONS AND INVERT ELEVATIONS OF EXISTING MANHOLES AND OTHER UTILITIES BEFORE STAKING OR CONSTRUCTING ANY SEWER LINES.

FOUR FEET OF COVER IS REQUIRED OVER ALL SEWER LINES.

MAINTAIN A MINIMUM OF 48 INCHES OF COVER ON ALL WATER LINES.

CONTRACTOR IS TO COORDINATE LOCATION AND DESIGN OF NEW COMMUNICATION / DATA FACILITIES TO BUILDING WITH UTILITY PROVIDER.

CONTRACTOR IS TO COORDINATE LOCATION AND DESIGN OF NEW NATURAL GAS FACILITIES TO BUILDING WITH DOMINION ENERGY AND MECHANICAL PLANS.

LOCATION OF ALL UNDERGROUND UTILITIES SHOWN ARE APPROXIMATE LOCATIONS. CONTRACTOR IS TO VERIFY CONNECTION POINTS WITH EXISTING UTILITIES. CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE CAUSED TO EXISTING UTILITIES AND UTILITY STRUCTURE THAT ARE TO REMAIN.

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

UTILITY PROVIDERS:
- WATER: AMERICAN FORK CITY
- SEWER: AMERICAN FORK CITY
- NATURAL GAS: DOMINION ENERGY
- ELECTRICAL POWER: POWER PROVIDER
- TELEPHONE: CENTURY LINK

KEYED NOTES:

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

1. CONNECT NEW 1-1/2" TYPE 'K' COPPER WATER SERVICE LINE TO EXISTING WATER MAIN, PER APWA PLAN NO. 552.
2. 1-1/2" WATER SERVICE METER SET, PER APWA PLANS NO. 522 & 505.
3. 1-1/2" IRRIGATION SERVICE METER SET, PER APWA PLANS NO. 522 & 505.
4. 1-1/2" TYPE 'K' COPPER WATER SERVICE LINE, PER APWA PLAN NO. 541.
5. 6" PVC SDR-35 SANITARY SEWER LATERAL, INCLUDING ALL FITTINGS. CLEANOUTS AT 75-FOOT MAXIMUM SPACING WITH A CLEANOUT AT A MAXIMUM OF 5' FROM THE FOUNDATION. SEE APWA PLANS NO. 381 & 382 FOR TRENCHING. SEE APWA PLAN NO. 431 FOR CLEANOUTS. MUST CONFORM TO ASTM D3034.
6. SANITARY SEWER CLEANOUT, PER APWA PLAN NO. 431.

NOTICE!

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION, PROTECTION, AND RESTORATION OF ALL BURIED OR ABOVE GROUND UTILITIES, SHOWN OR NOT SHOWN ON THE PLANS.

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PROFESSIONAL ENGINEER No. 375419-2202 ROBERT J. POIRIER 01-04-2023 STATE OF UTAH

CARPET DIEM

64 N 900 W
AMERICAN FORK, UTAH 84003
SW QUARTER OF SECTION 15

REVISIONS

REV	DATE	DESCRIPTION

PROJECT NO:	21299
DRAWN BY:	DJC
CHECKED BY:	RJP
DATE:	01/04/23

SITE UTILITY PLAN

C4.01

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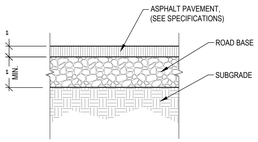
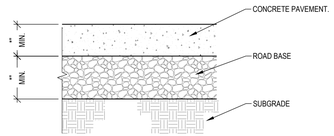


	(STANDARD DUTY) PARKING AREAS	(HEAVY DUTY) ROADWAY AREAS
ASPHALT	3"	3"
BASE COURSE	7"	10"

NOTE:
REFER TO GEOTECHNICAL REPORT CMP PROJECT NO. 14908 DATED AUGUST 11, 2020 BY CMT ENGINEERING LABROTORIES.

ASPHALTIC PAVEMENT SECTION (D1)

SCALE: N.T.S.

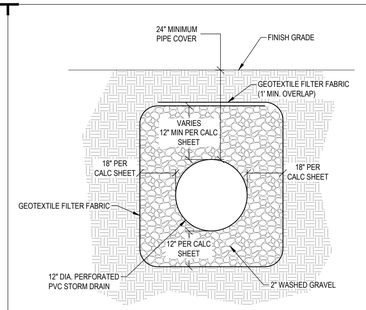


	STANDARD	HEAVY
CONCRETE	6"	"
ROAD BASE	4"	"

NOTE:
REFER TO SOILS REPORT FOR PROJECT SECTION SOILS REPORT OVERIDES.

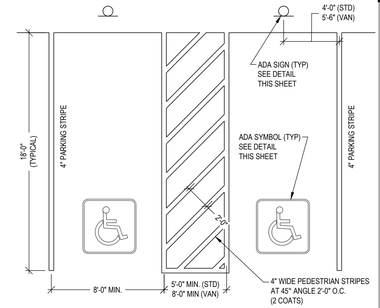
CONCRETE PAVEMENT SECTION (D2)

SCALE: N.T.S.



PERFORATED PIPE RETENTION SYSTEM (D3)

SCALE: N.T.S.



NOTE:
CROSS SLOPES WITHIN ADA PARKING STALLS AND ACCESSIBLE ROUTES NOT TO EXCEED 1:48 SLOPE.

ADA PARKING DETAIL (D4)

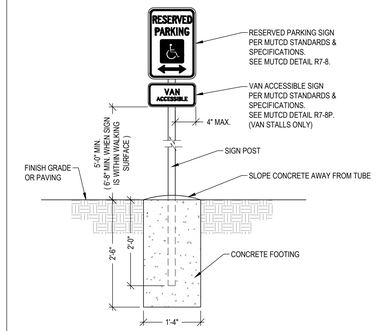
SCALE: N.T.S.

PAINTED EMBLEM
ON ASPHALT PAVING
TYP. AT ALL ADA
PARKING STALLS PER CITY
REQUIREMENTS. (2 COATS)

NOTE:
SEE SPECIFICATIONS FOR PAINT
TYPE AND COLOR. (2 COATS)

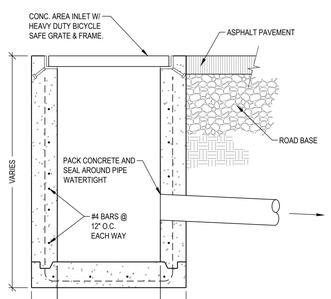
PAINTED ADA SYMBOL (D5)

SCALE: N.T.S.



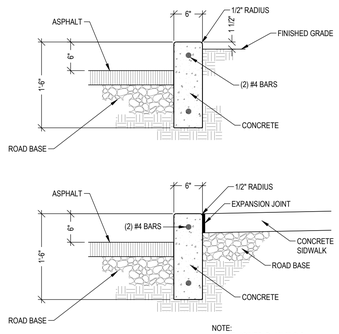
ADA PARKING SIGN (D6)

SCALE: N.T.S.



AREA INLET (C1)

SCALE: N.T.S.



NOTE:
CONST. JOINTS @ 10'-0" O.C.
EXPANSION JOINTS @ 50'-0" O.C.

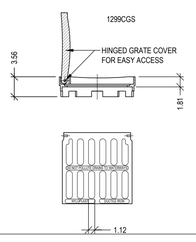
CURB WALL DETAIL (C2)

SCALE: N.T.S.

If there is specific information within the soils report that is applicable to the concrete pavement section include the section in the plan details and identify where the different section applies to the site.

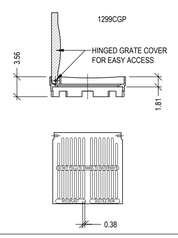
NYLOPLAST 12" GRATES/COVERS

STANDARD GRATE MEETS H-20 LOAD RATING.
PEDESTRIAN GRATE MEETS H-10 LOAD RATING.
QUALITY: MATERIALS SHALL CONFORM TO ASTM A536 GRADE 70-50-05 & A48-CLASS 30B.
MATERIAL: DUCTILE IRON GRATE W/CAST IRON FRAME.
PAINT: CASTINGS ARE FURNISHED WITH A BLACK PAINT.
LOCKING DEVICE AVAILABLE UPON REQUEST.



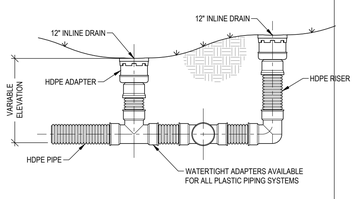
STANDARD GRATE

APPROX. DRAIN AREA = 60.62 SQ. IN.
APPROX. WEIGHT WITH FRAME = 40.68 LBS.

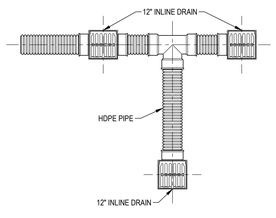


PEDESTRIAN GRATE

APPROX. DRAIN AREA = 50.60 SQ. IN.
APPROX. WEIGHT WITH FRAME = 35.04 LBS.



SECTION VIEW

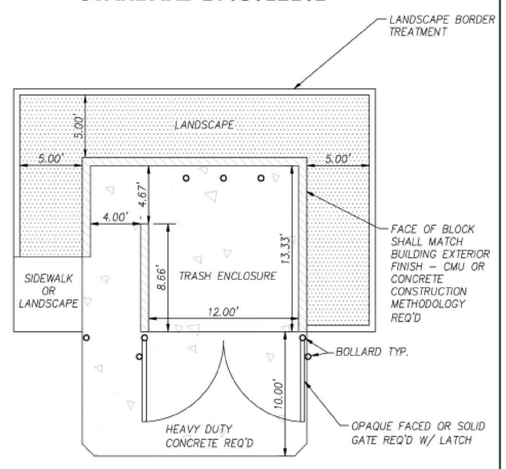


PLAN VIEW

HDPE INLINE DRAIN DETAIL (A1)

SCALE: N.T.S.

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.

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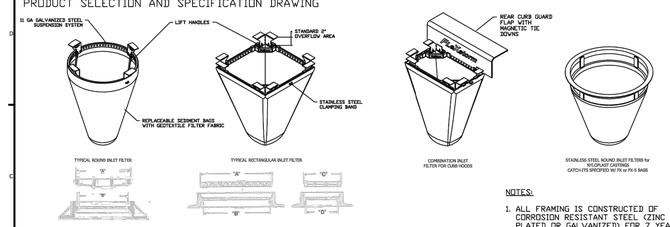
DATE: NOV. 18, 2010

AMERICAN FORK — 1853 —

FLEXSTORM CATCH-IT FILTERS FOR TEMPORARY INLET PROTECTION PRODUCT SELECTION AND SPECIFICATION DRAWING



1. INDENTIFY YOUR FRAME STYLE AND SIZE

STYLE	FRAME STYLE AND SIZE	Frame P/N:
ROUND	Small Round (up to 20.0" dia grates (A) dim)	6ZSRD
	Med Round (20.1" - 28.0" dia grates (A) up to 25" dia openings (B))	6ZMRD
	Large Round (26.1" - 35.0" dia grates (A) up to 30" openings (B))	6ZLRD
	XL Round (30.1" dia - 39" dia grates (A) up to 37" dia openings (B))	6ZXLRD
RECT/ SQUARE	Small Rect / Square (up to 16" (B) x 30" (D) openings or 60" perimeter)	6ZSSQ
	Med Rect / Square (up to 24" (B) x 24" (D) openings or 96" perimeter)	6ZMSQ
	Large Rect / Square (up to 36" (B) x 24" (D) openings or 120" perimeter)	6ZLSQ
	XL Rect / Square (side by side 2pc set to fit up to 48" (B) x 30" (D) openings)	6ZXLSQ
COMBO INLETS	Small Rect / Square (ref Rect sizing; shipped with Magnetic Curb Flaps)	6ZSCB
	Med Rect / Square (ref Rect sizing; shipped with Magnetic Curb Flaps)	6ZMCB
	Large Rect / Square (ref Rect sizing; shipped with Magnetic Curb Flaps)	6ZLCB
	XL Rect / Square (ref Rect sizing; shipped with Magnetic Curb Flaps)	6ZXLCB
NYLOPLAST	12" diameter Nyloplast castings (Stainless Steel Framing standard)	6Z12NY
	15" diameter Nyloplast castings (Stainless Steel Framing standard)	6Z15NY
	18"diameter Nyloplast castings (Stainless Steel Framing standard)	6Z18NY
	24" diameter Nyloplast castings (Stainless Steel Framing standard)	6Z24NY
	30" diameter Nyloplast castings (Stainless Steel Framing standard)	6Z30NY

SPECIFICATIONS FOR STANDARD BAGS BY NOMINAL SIZE

Nominal Bag Size	Solids Storage (CuFt)	Filtered Flow Rate at 50% Max (CFS) FX (Woven)	II. (NonWoven)
Small	1.0	1.2	0.9
Medium	2.1	1.7	1.3
Large	3.8	2.7	1.9
XL	4.2	3.6	2.6

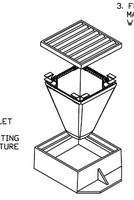
2. SELECT YOUR BAG PART NUMBER

FLEXSTORM FILTER BAGS	12" depth / STD Bag P/N	12" depth / Short Bag P/N	Clean Water Flow Rate (GPM/SqFt)	Min A.O.S. (US Sieve)
FX: Standard Woven Bag	FX	FX-S	200	40
II.: 1007 Non-Woven Bag	II.	II.-S	145	70

3. CREATE YOUR FLEXSTORM INLET FILTER PART NUMBER

Frame P/N from Step 1. Filter Bag P/N from Step 2.

INSTALLATION:
1. REMOVE GRATE
2. DROP FLEXSTORM INLET FILTER ONTO LOAD BEARING LIP OF CASTING OR CONCRETE STRUCTURE
3. REPLACE GRATE



FLEXSTORM INLET FILTERS™
CATCH IT
ALL PRODUCTS MANUFACTURED BY INLET & PIPE PROTECTION, INC
A DIVISION OF ADS, INC.
WWW.INLETFILTERS.COM
(866) 297-8655 PH
(630) 355-3477 FX
INFO@INLETFILTERS.COM

SIZE	DWG NO	REV
C	FLEXSTORM_CATCH_IT	A
SCALE	SHEET 1 OF 1	

NOTE:
PER FILTER SPECS FILTERED FLOW RATE AT 50% OF MAX CFS OF THE SMALLEST BAG NON WOVEN STYLE CAN FLOW 0.9 CFS AND PER THE 2 YEAR 24 HOUR STORM CALCULATIONS BELOW THE HIGHEST FLOW RATE USING A TIME OF CONCENTRATION OF 5 MINUTES WOULD BE 0.39 CFS WHICH IS SIGNIFICANTLY BELOW THE 0.9 CFS LOWEST FILTERED FLOW RATE OF THE BAG.

Mcneil Engineering 9610 S. Sandy Pkwy, Sandy, UT	STORM RUNOFF **CALCULATION SHEET** Project No. 21299	Title : Carpet Diem; Scope : Site Drainage Design; Detention Facilities; Engineer : RJP; Check: RJP; Authority : American Fo; Rev. No.: 1

Area Identification	(A)		Runoff Coefficient (C)		(C*A)
Paved	5,530 sf	(0.13 ac)	0.85	=	4,673 sf
Roof Area	4,503 sf	(0.10 ac)	0.90	=	4,030 sf
Landscaped	4,865 sf	(0.11 ac)	0.15	=	730 sf
Total	14,898 sf	(0.34 ac)	0.63 (ave)		9,433 sf

2-Year, 24-Hour Storm:

Time (min)	Rate (in/hr)	Rainfall (Inches)	Q in (cfs)	Add'l Q in (cfs)	Total Q in (cfs)
5	1.80	0.150	0.39	0.00	0.39
10	1.32	0.220	0.29	0.00	0.29
15	1.12	0.280	0.24	0.00	0.24
30	0.76	0.380	0.17	0.00	0.17
60	0.47	0.470	0.10	0.00	0.10
120	0.28	0.550	0.06	0.00	0.06
180	0.21	0.630	0.05	0.00	0.05
360	0.14	0.820	0.03	0.00	0.03
1440	0.05	1.180	0.01	0.00	0.01

McNEIL ENGINEERING™
Economic and Sustainable Designs, Professionals You Know and Trust
8610 South Sandy Parkway, Suite 200 Sandy, Utah 84070 801.355.7700 mcneilengineering.com
Civil Engineering • Consulting & Landscape Architecture
Structural Engineering • Land Surveying & HDS

PROFESSIONAL ENGINEER No. 375419-2202 ROBERT J. POIRIER 01-04-2023 STATE OF UTAH

CARPET DIEM

64 N 900 W
AMERICAN FORK, UTAH 84003
SW QUARTER OF SECTION 15

REVISIONS

REV	DATE	DESCRIPTION

PROJECT NO:	21299
DRAWN BY:	DJC
CHECKED BY:	RJP
DATE:	01/04/23

CIVIL DETAILS

C5.01

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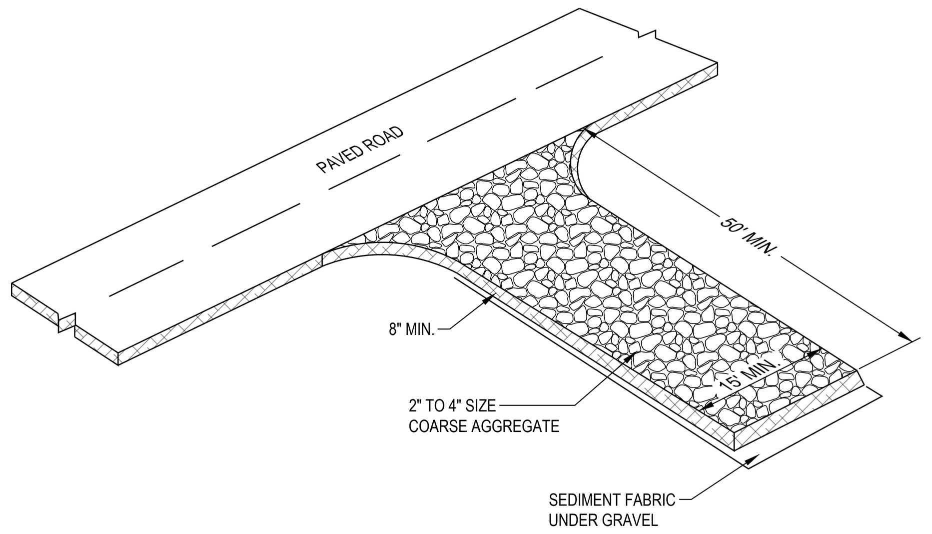


DESCRIPTION:
A STABILIZED PAD OF CRUSHED STONE LOCATED WHERE CONSTRUCTION TRAFFIC ENTERS OR LEAVES THE SITE FROM OR TO PAVED SURFACE.

APPLICATIONS:
AT ANY POINT OF INGRESS OR EGRESS AT A CONSTRUCTION SITE WHERE ADJACENT TRAVELED WAY IS PAVED. GENERALLY APPLIES TO SITES OVER 2 ACRES UNLESS SPECIAL CONDITIONS EXIST.

INSTALLATION/APPLICATION CRITERIA:
- CLEAR GRUB AREA AND GRADE TO PROVIDE MAXIMUM SLOPE OF 2%.
- COMPACT SUB GRADE AND PLACE FILTER FABRIC IF DESIRED (RECOMMENDED FOR ENTRANCES TO REMAIN FOR MORE THAN 3 MONTHS.
- PLACE COARSE AGGREGATE, 1 TO 2-1/2 INCHES IN SIZE, TO A MINIMUM DEPTH OF 8 INCHES.

LIMITATIONS:
- REQUIRES PERIODIC TOP DRESSING WITH ADDITIONAL STONES.
- SHOULD BE USED IN CONJUNCTION WITH STREET SWEEPING ON ADJACENT PUBLIC RIGHT-OF-WAY.

MAINTENANCE:
- INSPECT DAILY FOR LOSS OF GRAVEL OR SEDIMENT BUILDUP.
- INSPECT ADJACENT ROADWAY FOR SEDIMENT DEPOSIT AND CLEAN BY SWEEPING OR SHOVELING.
- REPAIR ENTRANCE AND REPLACE GRAVEL AS REQUIRED TO MAINTAIN CONTROL IN GOOD WORKING CONDITION.
- EXPAND STABILIZED AREA AS REQUIRED TO ACCOMMODATE TRAFFIC AND PREVENT EROSION AT DRIVEWAYS.

OBJECTIVES
- HOUSEKEEPING PRACTICES
- CONTAIN WASTE
- MINIMIZE DISTURBED AREA
- STABILIZE DISTURBED AREA
- PROTECT SLOPES/CHANNELS
- CONTROL SITE PERIMETER
- CONTROL INTERNAL EROSION

TARGETED POLLUTANTS
- SEDIMENT
- NUTRIENTS
- TOXIC MATERIALS
- OIL & GREASE
- FLOATABLE MATERIALS
- OTHER WASTE

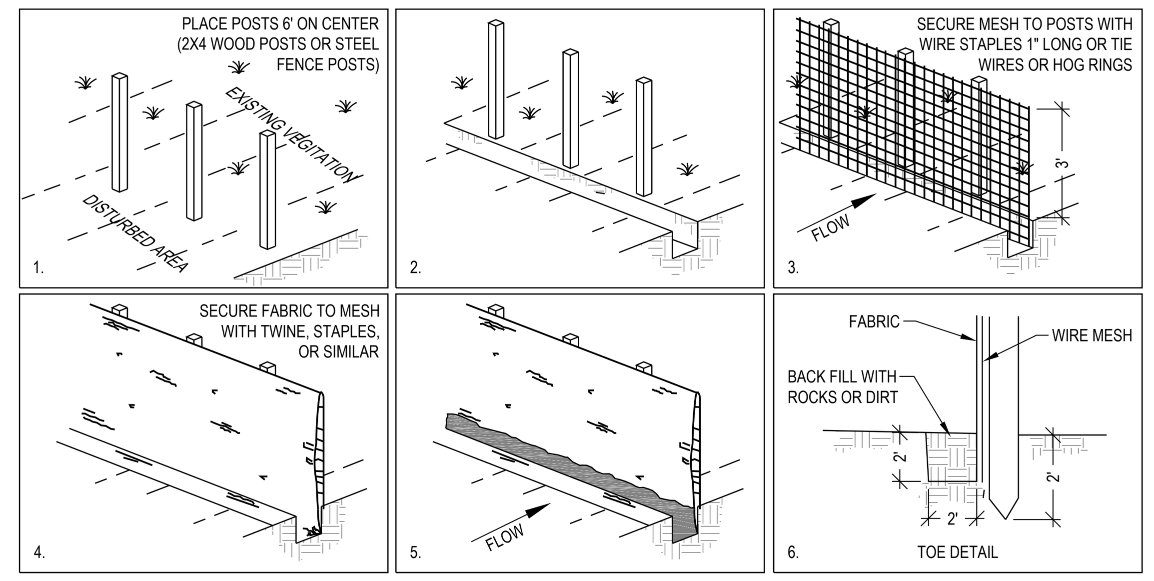
- HIGH IMPACT
- MEDIUM IMPACT
- LOW OR UNKNOWN IMPACT

IMPLEMENTATION REQUIREMENTS
- CAPITAL COSTS
- O & M COSTS
- MAINTENANCE
- TRAINING

HIGH MEDIUM LOW

STABILIZED CONSTRUCTION ENTRANCE (C1)

SCALE: N.T.S.



DESCRIPTION:
A TEMPORARY SEDIMENT BARRIER CONSISTING OF ENTRENCHED FILTER FABRIC STRETCHED ACROSS AND SECURED TO SUPPORTING POSTS.

APPLICATIONS:
- PERIMETER CONTROL: PLACE BARRIER AT DOWNGRADE LIMITS OF DISTURBANCE.
- SEDIMENT BARRIER: PLACE BARRIER AT TOE OF SLOPE OR SOIL STOCKPILE.
- PROTECTION OF EXISTING WATERWAYS: PLACE BARRIER AT TOP OF STREAM BANK
- INLET PROTECTION: PLACE FENCE SURROUNDING CATCH BASINS

INSTALLATION/APPLICATION CRITERIA:
- PLACE POSTS 6 FEET APART ON CENTER ALONG CONTOUR (OR USE PRE-ASSEMBLED UNIT) AND DRIVE 2 FEET MINIMUM INTO GROUND. EXCAVATE AN ANCHOR TRENCH IMMEDIATELY UPGRADIENT OF POSTS
- SECURE WIRE MESH (14 GAGE MIN. WITH 6 INCH OPENINGS) TO UPSLOPE SIDE OF POSTS. ATTACH WITH HEAVY DUTY 1 INCH LONG WIRE STAPLES, TIE WIRES OR HOG RINGS.
- CUT FABRIC TO REQUIRED WIDTH, UNROLL ALONG LENGTH OF BARRIER AND DRAPE OVER BARRIER. SECURE FABRIC TO MESH WITH TWINE, STAPLES, OR SIMILAR, WITH TRAILING EDGE EXTENDING INTO ANCHOR TRENCH.
- BACKFILL OVER FILTER FABRIC TO ANCHOR.

LIMITATIONS:
- RECOMMENDED MAXIMUM DRAINAGE AREA OF 0.5 ACRE PER 100 FEET OF FENCE.
- RECOMMENDED MAXIMUM UPGRADIENT SLOPE LENGTH OF 150 FEET.
- RECOMMENDED MAXIMUM UPHILL GRADE OF 2:1 (50%).
- RECOMMENDED MAXIMUM FLOW RATE OF 0.5 CFS.
- PONDING SHOULD NOT BE ALLOWED BEHIND FENCE.

MAINTENANCE:
- INSPECT IMMEDIATELY AFTER ANY RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL.
- LOOK FOR RUNOFF BYPASSING ENDS OF BARRIERS OR UNDERCUTTING BARRIERS.
- REPAIR OR REPLACE DAMAGED AREAS OF THE BARRIER AND REMOVE ACCUMULATED SEDIMENT.
- REANCHOR FENCE AS NECESSARY TO PREVENT SHORTCUTTING.
- REMOVE ACCUMULATED SEDIMENT WHEN IT REACHES 1/2 THE HEIGHT OF THE FENCE.

OBJECTIVES
- HOUSEKEEPING PRACTICES
- CONTAIN WASTE
- MINIMIZE DISTURBED AREA
- STABILIZE DISTURBED AREA
- PROTECT SLOPES/CHANNELS
- CONTROL SITE PERIMETER
- CONTROL INTERNAL EROSION

TARGETED POLLUTANTS
- SEDIMENT
- NUTRIENTS
- TOXIC MATERIALS
- OIL & GREASE
- FLOATABLE MATERIALS
- OTHER WASTE

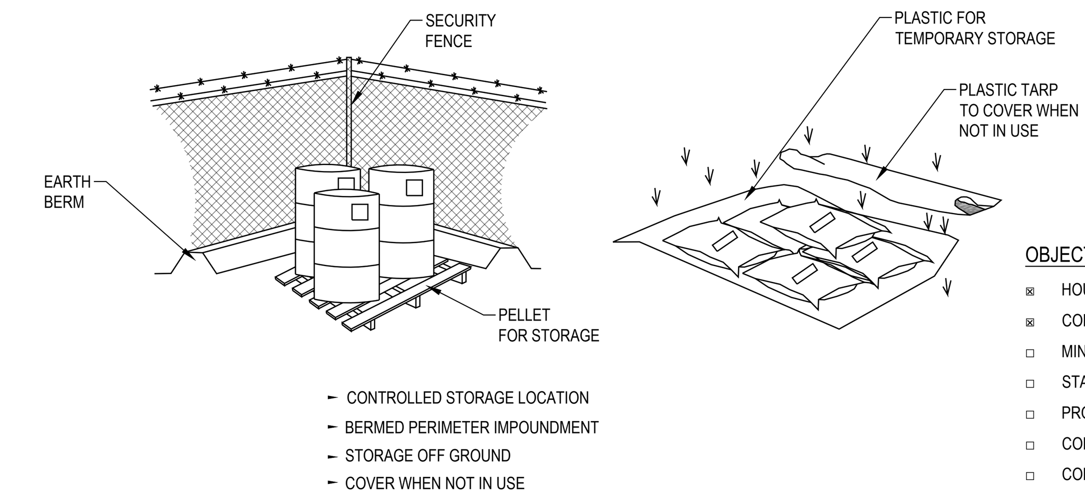
- HIGH IMPACT
- MEDIUM IMPACT
- LOW OR UNKNOWN IMPACT

IMPLEMENTATION REQUIREMENTS
- CAPITAL COSTS
- O & M COSTS
- MAINTENANCE
- TRAINING

HIGH MEDIUM LOW

SILT FENCE (C3)

SCALE: N.T.S.



- CONTROLLED STORAGE LOCATION
- BERMED PERIMETER IMPOUNDMENT
- STORAGE OFF GROUND
- COVER WHEN NOT IN USE

DESCRIPTION:
CONTROLLED STORAGE OF ON-SITE MATERIALS.

APPLICATIONS:
- 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 MATERIAL 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.

OBJECTIVES
- HOUSEKEEPING PRACTICES
- CONTAIN WASTE
- MINIMIZE DISTURBED AREA
- STABILIZE DISTURBED AREA
- PROTECT SLOPES/CHANNELS
- CONTROL SITE PERIMETER
- CONTROL INTERNAL EROSION

TARGETED POLLUTANTS
- SEDIMENT
- NUTRIENTS
- TOXIC MATERIALS
- OIL & GREASE
- FLOATABLE MATERIALS
- OTHER WASTE

- HIGH IMPACT
- MEDIUM IMPACT
- LOW OR UNKNOWN IMPACT

IMPLEMENTATION REQUIREMENTS
- CAPITAL COSTS
- O & M COSTS
- MAINTENANCE
- TRAINING

HIGH MEDIUM LOW

MATERIALS STORAGE (C5)

SCALE: N.T.S.

FILTERSOCK SPECIFICATION:

FILTREXX FILTERSOCK INSTALLATION AND MAINTENANCE

1.0 DESCRIPTION:
THIS WORK SHALL CONSIST OF FURNISHING, INSTALLING, MAINTAINING AND DISPERSING (IF NEEDED) A WATER PERMEABLE COMPOST FILTER SOCK (FILTREXX FILTERSOCK) TO CONTAIN SOIL EROSION AND SEDIMENT BY REMOVING SOIL PARTICLES FROM WATER MOVING OFF SITE INTO ADJACENT WATERWAYS OR STORM WATER DRAINAGE SYSTEMS. FILTERSOCKS WILL BE USED AS A FORM OF INLET PROTECTION FOR OPERATIONAL STORM DRAINAGE SYSTEMS.

2.0 COMPOST PRODUCTS USED TO FILL FILTREXX FILTERSOCKS
1. COMPOST: COMPOST USED FOR FILTREXX FILTERSOCKS SHALL BE WEED FREE AND DERIVED FROM A WELL-DECOMPOSED SOURCE OF ORGANIC MATTER. THE COMPOST SHALL BE PRODUCED USING AN AEROBIC COMPOSTING PROCESS MEETING CFR 503 REGULATIONS, INCLUDING TIME AND TEMPERATURE DATA INDICATING EFFECTIVE WEED SEED, PATHOGEN AND INSECT LARVAE KILL. THE COMPOST SHALL BE FREE OF ANY REFUSE, CONTAMINANTS OR OTHER MATERIALS TOXIC TO PLANT GROWTH. NON-COMPOSTED PRODUCTS WILL NOT BE ACCEPTED. TEST METHODS FOR THE ITEMS BELOW SHOULD FOLLOW USCC TMECC GUIDELINES FOR LABORATORY PROCEDURES:

A. PH - 5.0-8.0 IN ACCORDANCE WITH TMECC 04.11-A, "ELECTROMETRIC PH DETERMINATIONS FOR COMPOST"
B. PARTICLE SIZE - 99% PASSING A 1" SIEVE, 90% PASSING A 1/2" SIEVE AND A MINIMUM OF 70% GREATER THAN THE 3/8" SIEVE. A TOTAL OF 98 % SHALL NOT EXCEED 3 INCHES IN LENGTH, IN ACCORDANCE WITH TMECC 02.02-B, "SAMPLE SIEVING FOR AGGREGATE SIZE CLASSIFICATION"
C. MOISTURE CONTENT OF LESS THAN 60% IN ACCORDANCE WITH STANDARDIZED TEST METHODS FOR MOISTURE DETERMINATION.
D. MATERIAL SHALL BE RELATIVELY FREE (<1% BY DRY WEIGHT) OF INERT OR FOREIGN MAN MADE MATERIALS.
E. A SAMPLE SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO BEING USED AND MUST COMPLY WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS.

3.0 CONSTRUCTION AND INSTALLATION OF FILTREXX FILTERSOCKS:
1. FILTREXX FILTERSOCKS WILL BE USED AS A FORM OF INLET PROTECTION ON CONSTRUCTION SITES WHICH REQUIRE PROTECTION AGAINST SEDIMENT LADEN WATER AFTER STORM DRAINS BECOME OPERATIONAL.
2. FILTREXX FILTERSOCKS WILL BE PLACED AT LOCATIONS INDICATED ON PLANS AS DIRECTED BY THE ENGINEER. FILTERSOCKS SHOULD BE INSTALLED IN A PATTERN THAT ALLOWS COMPLETE PROTECTION OF THE INLET AREA
3. INSTALLATION OF FILTREXX FILTERSOCKS WILL ENSURE A MINIMAL OVERLAP OF AT LEAST ONE FOOT ON EITHER SIDE OF THE OPENING BEING PROTECTED. THE FILTERSOCKS WILL BE ANCHORED TO THE SOIL BEHIND THE CURB USING STAPLES, STAKES OR OTHER DEVICES CAPABLE OF HOLDING THE FILTERSOCK IN PLACE.
4. STANDARD SIZES OF FILTERSOCKS FOR INLET PROTECTION WILL BE 8" DIAMETER PRODUCTS. IN SEVERE FLOW SITUATIONS, LARGER FILTERSOCKS MAY BE RECOMMENDED BY THE ENGINEER.
5. FILTERSOCKS SHALL BE CONSTRUCTED OF A WOVEN MATERIAL AND FILLED WITH A COMPOST PRODUCT THAT PASSES THE CRITERIA LISTED IN SECTION 2.
6. IF THE FILTERSOCKS BECOME CLOGGED WITH DEBRIS AND SEDIMENT, THEY SHALL BE MAINTAINED SO AS TO ASSURE A PROPER DRAINAGE AND WATER FLOW INTO THE STORM DRAIN. IN SEVERE STORM EVENTS, OVERFLOW OF THE FILTERSOCK MAY BE ACCEPTABLE IN ORDER TO KEEP THE AREA FROM FLOODING.
7. THE FILTERSOCKS SHALL BE POSITIONED SO AS TO PROVIDE COMPLETE PHYSICAL BARRIER TO THE DRAIN ITSELF, ALLOWING SEDIMENT TO COLLECT ON THE OUTSIDE OF THE FILTERSOCKS. SEE BELOW SCHEMATIC FOR FILTREXX FILTERSOCK INSTALLATION.
8. FOR AREAS WHERE FILTERSOCKS ARE TO BE LEFT AS A PERMANENT PART OF THE LANDSCAPE, FILTERSOCKS MAY BE SEEDED DURING TIME OF MANUFACTURE TO CREATE A LIVING SOCK. FOR SEEDING OPTIONS, THE ENGINEER MAY SIMPLY REPLACE ALL LANGUAGE ABOVE WITH "LIVING FILTREXX FILTERSOCKS"

4.0 MAINTENANCE:
1. THE CONTRACTOR SHALL MAINTAIN FILTREXX FILTERSOCKS IN A FUNCTIONAL CONDITION AT ALL TIMES AND IT SHALL BE ROUTINELY INSPECTED.
2. WHERE THE FILTERSOCK REQUIRES REPAIR, IT WILL BE ROUTINELY REPAIRED.
3. THE CONTRACTOR SHALL REMOVE SEDIMENTS COLLECTED AT THE BASE OF THE FILTERSOCK WHEN THEY REACH 1/3 OF THE EXPOSED HEIGHT OF THE FILTERSOCK, OR AS DIRECTED BY THE ENGINEER.
4. THE FILTREXX FILTERSOCK WILL BE DISPERSED ON SITE WHEN NO LONGER REQUIRED, AS DETERMINED BY THE ENGINEER. THE NETTING MATERIAL WILL BE DISPOSED OF IN NORMAL TRASH CONTAINERS OR REMOVED BY THE CONTRACTOR.
5. REGULAR MAINTENANCE INCLUDES LIFTING THE FILTREXX FILTERSOCKS AND CLEANING UNDER THEM AS SEDIMENT COLLECTS.

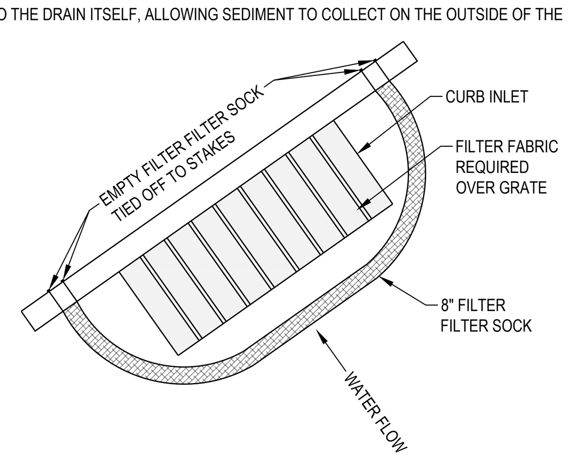
5.0 METHOD OF MEASUREMENT:
BID ITEMS SHALL SHOW MEASUREMENT AS `FILTREXX FILTERSOCK' PER LINEAR FOOT, INSTALLED OR PER INLET, AS SPECIFIED BY THE ENGINEER.

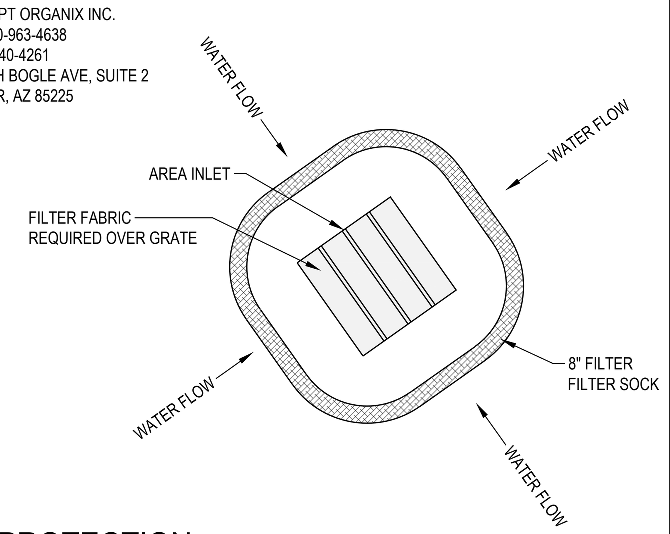
6.0 PERFORMANCE:
1. CONTRACTOR IS RESPONSIBLE FOR ESTABLISHING A WORKING EROSION CONTROL SYSTEM AND MAY, WITH APPROVAL OF THE ENGINEER, WORK OUTSIDE THE MINIMUM CONSTRUCTION REQUIREMENTS AS NEEDED.
2. WHERE THE FILTERSOCK DETERIORATES OR FAILS, IT WILL BE REPAIRED OR REPLACED WITH A MORE EFFECTIVE ALTERNATIVE.
3. CONTRACTOR IS REQUIRED TO BE A CERTIFIED FILTREXX INSTALLER AS DETERMINED BY FILTREXX INTERNATIONAL, LLC (440-926-8041 OR VISIT WEBSITE AT FILTREXX.COM). CERTIFICATION SHALL BE CONSIDERED CURRENT IF APPROPRIATE IDENTIFICATION IS SHOWN DURING TIME OF BID OR AT TIME OF APPLICATION.

7.0 APPLICATION GUIDELINES:
1. FILTREXX FILTERSOCKS SHALL EITHER BE MADE ON SITE OR DELIVERED TO THE JOBSITE USING A 3 MIL TUBULAR HDPE KNITTED MESH NETTING MATERIAL, FILLED WITH COMPOST PASSING THE ABOVE SPECIFICATIONS FOR COMPOST PRODUCTS AS OUTLINED IN 2.0.
2. FILTREXX FILTERSOCKS NETTING MATERIALS ARE AVAILABLE ONLY FROM FILTREXX INTERNATIONAL, LLC AND ARE THE ONLY CERTIFIED MESH MATERIALS ACCEPTED IN CREATING FILTREXX PRODUCTS ON SITE OR AS DELIVERED TO THE JOB SITE. STANDARD FILTREXX COLOR CODING SYSTEMS INCLUDE YELLOW AND BLACK STRIPED MESH NETTING WITH 3/8" MESH OPENINGS FOR INLET PROTECTION. OTHER COLORS ARE ONLY ACCEPTABLE AS APPROVED BY BOTH THE ENGINEER AND FILTREXX INTERNATIONAL, LLC.
3. CONTRACTOR IS REQUIRED TO BE A CERTIFIED FILTREXX INSTALLER AS DETERMINED BY FILTREXX INTERNATIONAL, LLC (440-926-8041 OR VISIT WEBSITE AT FILTREXX.COM). CERTIFICATION SHALL BE CONSIDERED CURRENT IF APPROPRIATE IDENTIFICATION IS SHOWN DURING TIME OF BID OR AT TIME OF APPLICATION.

8.0 AVAILABLE VENDORS FILTREXX FILTERSOCKS MAY BE PURCHASED FROM THE FOLLOWING CERTIFIED FILTREXX INSTALLERS:

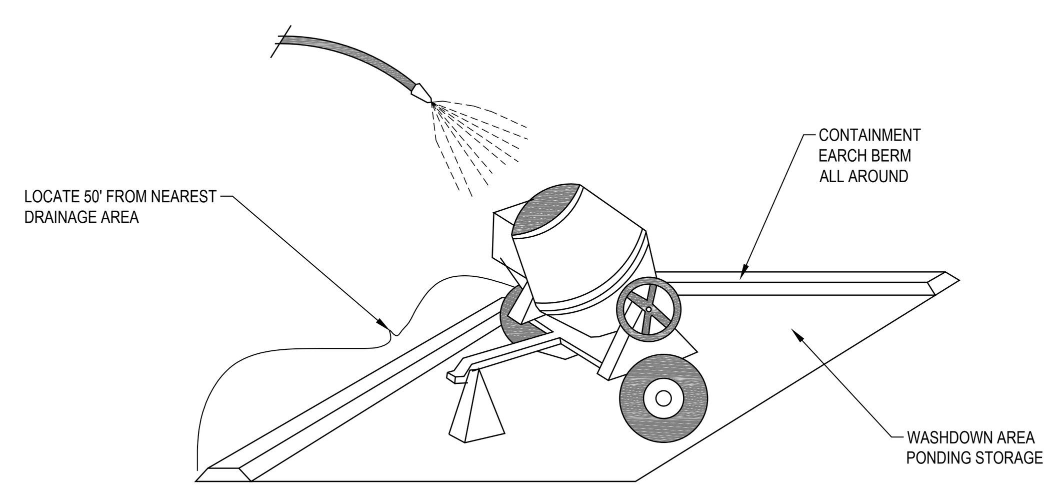
WINDSWEPT ORGANIX INC.
WORK: 480-963-4638
FAX: 408-940-4261
850 SOUTH BOGLE AVE, SUITE 2
CHANDLER, AZ 85225





SEDIMENT BARRIER / FILTER SOCK PROTECTION (A1)

SCALE: N.T.S. © REPLENISH



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 T ENSURE THAT CONCRETE WASTES ARE BEING PROPERLY MANAGED.
- IF USING A TEMPORARY PIT, DISPOSE HARDENED CONCRETE ON A REGULAR BASIS.

OBJECTIVES
- HOUSEKEEPING PRACTICES
- CONTAIN WASTE
- MINIMIZE DISTURBED AREA
- STABILIZE DISTURBED AREA
- PROTECT SLOPES/CHANNELS
- CONTROL SITE PERIMETER
- CONTROL INTERNAL EROSION

TARGETED POLLUTANTS
- SEDIMENT
- NUTRIENTS
- TOXIC MATERIALS
- OIL & GREASE
- FLOATABLE MATERIALS
- OTHER WASTE

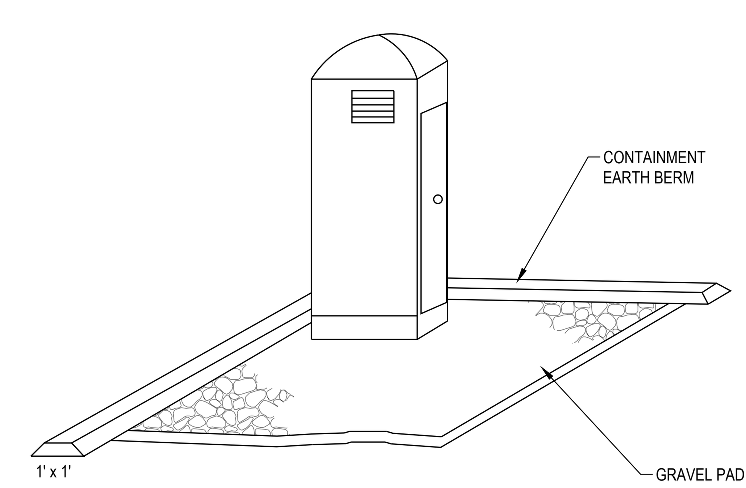
- HIGH IMPACT
- MEDIUM IMPACT
- LOW OR UNKNOWN IMPACT

IMPLEMENTATION REQUIREMENTS
- CAPITAL COSTS
- O & M COSTS
- MAINTENANCE
- TRAINING

HIGH MEDIUM LOW

CONCRETE WASTE MANAGEMENT (A3)

SCALE: N.T.S.



DESCRIPTION:
TEMPORARY ON-SITE SANITARY FACILITIES FOR CONSTRUCTION PERSONNEL.

APPLICATIONS:
- ALL SITES WITH NO PERMANENT SANITARY FACILITIES OR WHERE PERMANENT FACILITY IS TO 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.

OBJECTIVES
- HOUSEKEEPING PRACTICES
- CONTAIN WASTE
- MINIMIZE DISTURBED AREA
- STABILIZE DISTURBED AREA
- PROTECT SLOPES/CHANNELS
- CONTROL SITE PERIMETER
- CONTROL INTERNAL EROSION

TARGETED POLLUTANTS
- SEDIMENT
- NUTRIENTS
- TOXIC MATERIALS
- OIL & GREASE
- FLOATABLE MATERIALS
- OTHER WASTE

- HIGH IMPACT
- MEDIUM IMPACT
- LOW OR UNKNOWN IMPACT

IMPLEMENTATION REQUIREMENTS
- CAPITAL COSTS
- O & M COSTS
- MAINTENANCE
- TRAINING

HIGH MEDIUM LOW

PORTABLE TOILETS (A5)

SCALE: N.T.S.

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PROFESSIONAL ENGINEER No. 375493-2202 ROBERT J. POIRIER 01-04-2023 STATE OF UTAH

CARPET DIEM
64 N 900 W
AMERICAN FORK, UTAH 84003
SW QUARTER OF SECTION 15

REVISIONS

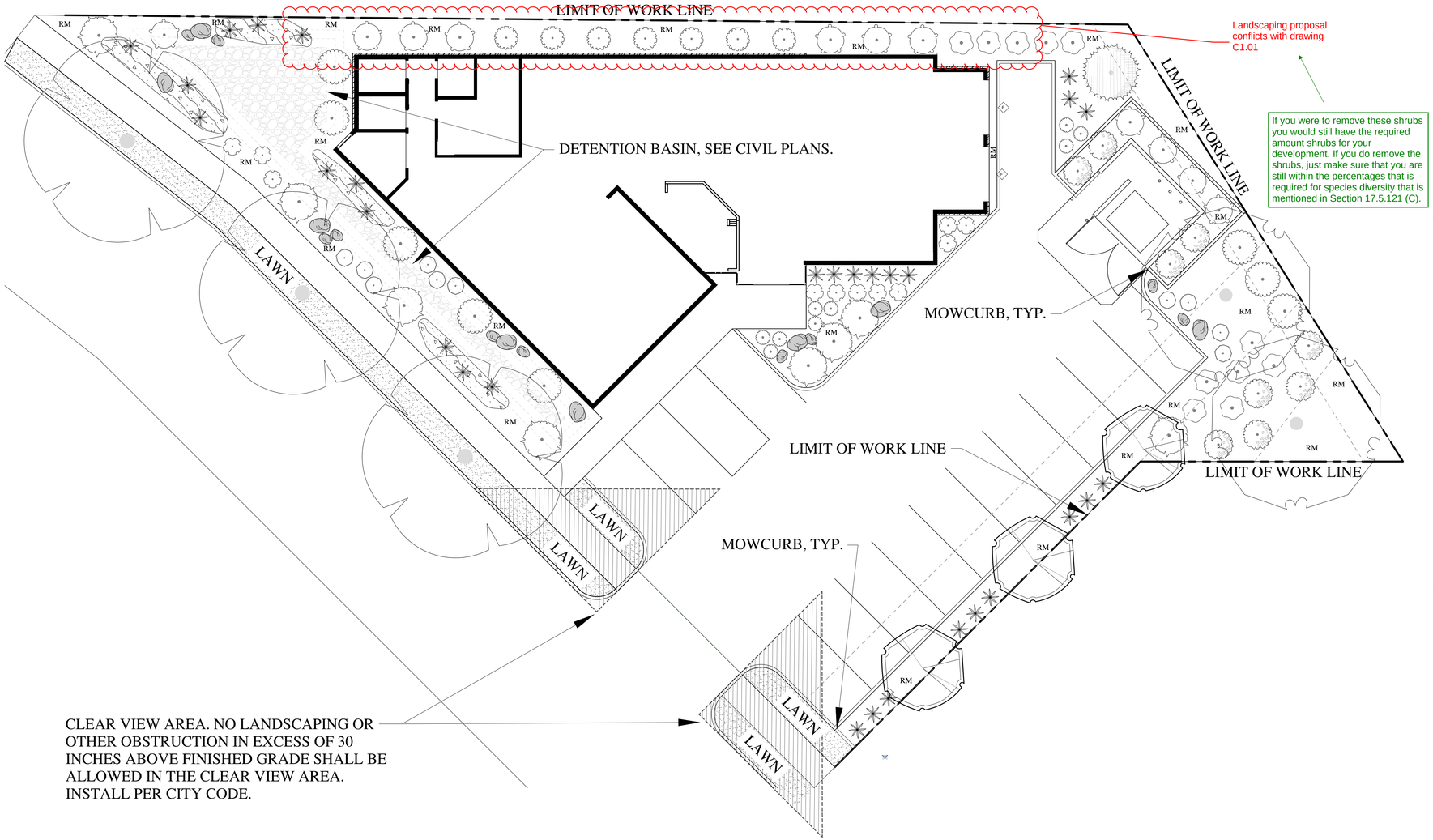
REV	DATE	DESCRIPTION

PROJECT NO: 21299
DRAWN BY: DJC
CHECKED BY: RJP
DATE: 01/04/23

CIVIL DETAILS

C5.02

S:\2021Files\21299\Civil\Prod Dwg\21299 Pln.dwg Daniel Jan 04, 2023 - 11:40am



If you were to remove these shrubs you would still have the required amount shrubs for your development. If you do remove the shrubs, just make sure that you are still within the percentages that is required for species diversity that is mentioned in Section 17.5.121 (C).

SOD LAYING NOTES

1. LAY SOD WITHIN 24 HOURS OF BEING LIFTED.
2. LAY SOD IN ROWS WITH JOINTS STAGGERED. BUTT SECTIONS CLOSELY WITHOUT OVERLAPPING OR LEAVING GAPS BETWEEN SECTIONS. CUT OUT IRREGULAR OR THIN SECTIONS WITH A SHARP KNIFE.
3. LAY SOD FLUSH WITH ADJOINING EXISTING SODDED OR PAVED SURFACES.
4. AFTER SODDING HAS BEEN COMPLETED, ROLL HORIZONTAL SURFACE AREAS IN TWO DIRECTIONS PERPENDICULAR TO EACH OTHER WITH A 150 POUND SOD ROLLER. REPAIR AND RE-ROLL AREAS WITH DEPRESSIONS, LUMPS OR OTHER IRREGULARITIES. HEAVY ROLLING TO CORRECT IRREGULARITIES IN GRADE IS NOT PERMITTED.
5. WATER ALL SODDED AREAS IMMEDIATELY AFTER SOD LAYING TO OBTAIN MOISTURE PENETRATION THROUGH SOD INTO TOP 4" OF TOPSOIL.
6. PROVIDE ADEQUATE PROTECTION OF SODDED AREAS AGAINST TRESPASSING, EROSION AND DAMAGE OF ANY KIND. REMOVE THIS PROTECTION AFTER SODDED AREAS HAVE BEEN ACCEPTED BY THE OWNER.
7. REPLACE DAMAGED AREAS AT NO ADDITIONAL COST TO OWNER.

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.
2. PLANT MATERIAL TO BE INSTALLED PER PLANT LEGEND. ANY SUBSTITUTIONS TO BE APPROVED BY OWNER AND/OR LANDSCAPE ARCHITECT. INCLUDE TREE STAKING AS PART OF BASE BID.
3. NEW AUTOMATIC UNDERGROUND IRRIGATION SYSTEM TO BE INSTALLED PRIOR TO LANDSCAPE INSTALLATION TO ENSURE PROPER WATERING OF ALL LANDSCAPE AREAS. REFER TO IRRIGATION PLANS FOR SPECIFICS.
4. CONSULT WITH THE OWNER ON WHICH SOIL TO PROVIDE PRIOR TO BIDDING: TOPSOIL TO BE INSTALLED AT THE FOLLOWING DEPTHS: 4" IMPORTED SANDY LOAM TOPSOIL IN ALL NEW LAWN AREAS OR 4" OF AMENDED ON-SITE TOPSOIL PER SOILS REPORT THAT PROVIDES ADEQUATE GROWING CONDITIONS. 12" IMPORTED SANDY LOAM TOPSOIL IN ALL NEW PLANTER AREAS OR 12" OF AMENDED ON-SITE TOPSOIL PER A SOILS REPORT THAT PROVIDES ADEQUATE GROWING CONDITIONS.
5. PLANT PIT BACKFILL MIX SHALL BE 75% SANDY LOAM TOPSOIL WITH 25% SOIL PREP FROM MILLER COMPANIES OR OWNER APPROVED EQUAL. OR 75% AMENDED ON-SITE TOPSOIL WITH 25% SOIL PREP FROM MILLER COMPANIES OR OWNER APPROVED EQUAL.
6. PLANTER BEDS TO BE EXCAVATED AS NECESSARY IN ORDER TO ALLOW FOR TOPSOIL, AMENDMENTS AND MULCH. FINISHED GRADE OF PLANTER AREAS SHALL BE APPROX. 1" BELOW TOP OF CURB, SIDEWALK, OR OTHER PAVED AREA.
7. DEWITT 5 OZ. WEED BARRIER FABRIC TO BE INSTALLED IN ALL ROCK MULCH AREAS.
8. SEE INERT LANDSCAPE MATERIALS LEGEND BELOW FOR DECORATIVE CRUSHED ROCK TYPES AND SIZES.
9. INSTALL PRE-EMERGENT HERBICIDE TO THE TOP OF THE FABRIC AFTER INSTALLING PLANTS AND PRIOR TO INSTALLING OF ROCK MULCH. AFTER INSTALLATION OF ROCK MULCH THE CONTRACTOR SHALL EVENLY BROADCAST A SECOND APPLICATION OF SLOW-RELEASE PRE-EMERGENT HERBICIDE. APPLY PRE-EMERGENT HERBICIDE PER MANUFACTURERS RECOMMENDATIONS.
10. IF HIGH WINDS ARE FREQUENT ON SITE, ALL TREES TO BE STAKED AT TIME OF PLANTING. SEE DETAILS FOR SPECIFICS. REMOVE STAKING WHEN TREE IS ESTABLISHED. THIS GENERALLY OCCURS WITHIN THE FIRST YEAR.
11. SEE ARCHITECT AND CIVIL PLANS FOR ALL BUILDING AND SITE INFORMATION.

INERT LANDSCAPE MATERIALS

SYMBOL	DESCRIPTION	QTY	SIZE
	LANDSCAPE BOULDERS TO MATCH DECORATIVE ROCK. SUBMIT SAMPLE TO OWNER FOR APPROVAL PRIOR TO DELIVERY. BOULDERS SHALL BE INSTALLED AT THE VARIOUS SIZES AS NOTED.	30% 40% 30%	2'X2'X2' 3'X3'X3' 3'X4'X4'
RM	3" DEPTH OF 3/4"-1" DECORATIVE CRUSHED ROCK IN PROPOSED PLANTER AREAS . SUBMIT A SAMPLE OF ROCK TO THE OWNER FOR APPROVAL AFTER AWARD OF CONTRACT. SEE DETAIL: LS3.1/ 9 & 10 • **COLOR AND TYPE**: ANGULAR IN SHAPE. GRAYS, BROWNS, BUFFS IN COLOR. COLOR SHALL COMPLIMENT THE BUILDING ARCHITECTURE. (NO LIMESTONE) • INSTALL DEWITT 5 OZ. WEED BARRIER FABRIC UNDER ROCK. • ROCK SHALL BE SCREENED AND **DOUBLE WASHED** SO AS TO BE FREE OF ALL DIRT, SOIL, ORGANIC MATTER OR OTHER MATERIALS.	PER PLANS	3/4" - 1"
	• 6" DEPTH OF 2"-4" DECORATIVE CRUSHED ROCK IN PROPOSED PLANTER AREAS . SUBMIT A SAMPLE OF ROCK TO THE OWNER FOR APPROVAL AFTER AWARD OF CONTRACT. SEE DETAIL: LS3.1/ 9 & 10 • **COLOR AND TYPE**: ANGULAR IN SHAPE. GRAYS, BROWNS, BUFFS IN COLOR. COLOR SHALL COMPLIMENT THE BUILDING ARCHITECTURE. (NO LIMESTONE) • INSTALL DEWITT 5 OZ. WEED BARRIER FABRIC UNDER ROCK. • ROCK SHALL BE SCREENED AND **DOUBLE WASHED** SO AS TO BE FREE OF ALL DIRT, SOIL, ORGANIC MATTER OR OTHER MATERIALS.	PER PLANS	2" - 4"

DECIDUOUS TREE LEGEND

SYMBOL	BOTANICAL NAME/COMMON NAME	SIZE	QTY
	ACER PLATANOIDES 'CRIMSON SENTRY' CRIMSON SENTRY M APLE	2" CAL	3
	AESCULUS GLABRA OHIO BUCKEYE	2" CAL	2
	FAGUS SYLVATICA 'ASPLENIFOLIA' CUTLEAF EUROPEAN BEECH	2" CAL	3

EVERGREEN TREE LEGEND

SYMBOL	BOTANICAL NAME/COMMON NAME	SIZE	QTY
	CEDRUS ATLANTICA 'FASTIGIATA' COLUMNAR ATLAS CEDAR	6' TALL	1

DECIDUOUS SHRUB LEGEND

SYMBOL	BOTANICAL NAME/COMMON NAME	SIZE	QTY
	ARONIA MELANOCARPA "MORTON' TM IROQUOIS BEAUTY BLACK CHOKEBERRY	5 GAL	11
	BUDDLEIA LO & BEHOLD 'BLUE CHIP' DWARF BUTTERFLY BUSH	5 GAL	9
	BUDDLEIA LO & BEHOLD 'PURPLE HAZE' BUTTERFLY BUSH	5 GAL	9
	SPIRAEA X BUMALDA 'FIRE LIGHT" GOLD SPIREA	5 GAL	11
	SYMPHORICARPOS ALBUS COMMON WHITE SNOWBERRY	5 GAL	8
	SYRINGA PATULA 'KLMONE' TM DREAM CLOUD KOREAN LILAC	5 GAL	11
	VIBURNUM OPULUS 'NANUM' DWARF EUROPEAN CRANBERRYBUSH	5 GAL	10

EVERGREEN SHRUB LEGEND

SYMBOL	BOTANICAL NAME/COMMON NAME	SIZE	QTY
	JUNIPERUS HORIZONTALIS 'WILTONII' BLUE RUG JUNIPER	5 GAL	8
	TAXUS X MEDIA 'HICKSII' HICKS ANGLO-JAPANESE YEW	5 GAL	7

PERENNIAL/ GRASS LEGEND

SYMBOL	BOTANICAL NAME/COMMON NAME	SIZE	QTY
	CALAMAGROSTIS X ACUTIFLORA 'HELLO SPRING' HELLO SPRING FEATHER REED GRASS	1 GAL	30
	FRAGARIA VIRGINIANA VIRGINIA STRAWBERRY	FLAT 18" O.C.	176 S.F.
	KENTUCKY BLUE GRASS BLEND MINIMUM 3 VARIETIES	------	PER PLANS

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N

10' 0 10' 20' 30'

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Landscape Architecture Land Planning
17 North 470 West American Fork, Utah 84003
801-756-5043 www.in-sitedesigngroup.com
architects@in-sitedesigngroup.com

CONSULTANTS:

STAMP: LICENSED LANDSCAPE ARCHITECT # 4884514 Cory B. Whiting STATE OF UTAH

PROJECT:

COST U LESS
CARPET DIEM
64 N 900 W AMERICAN FORK, UT 84003

PRELIMINARY PLAN - NOT FOR CONSTRUCTION

SHEET TITLE:

PLANTING PLAN

DRAWN BY: JLH
CHECKED: DGW
DATE: 1-3-23
REVISIONS:
JOB NO. 21-161

SHEET: LS1.1

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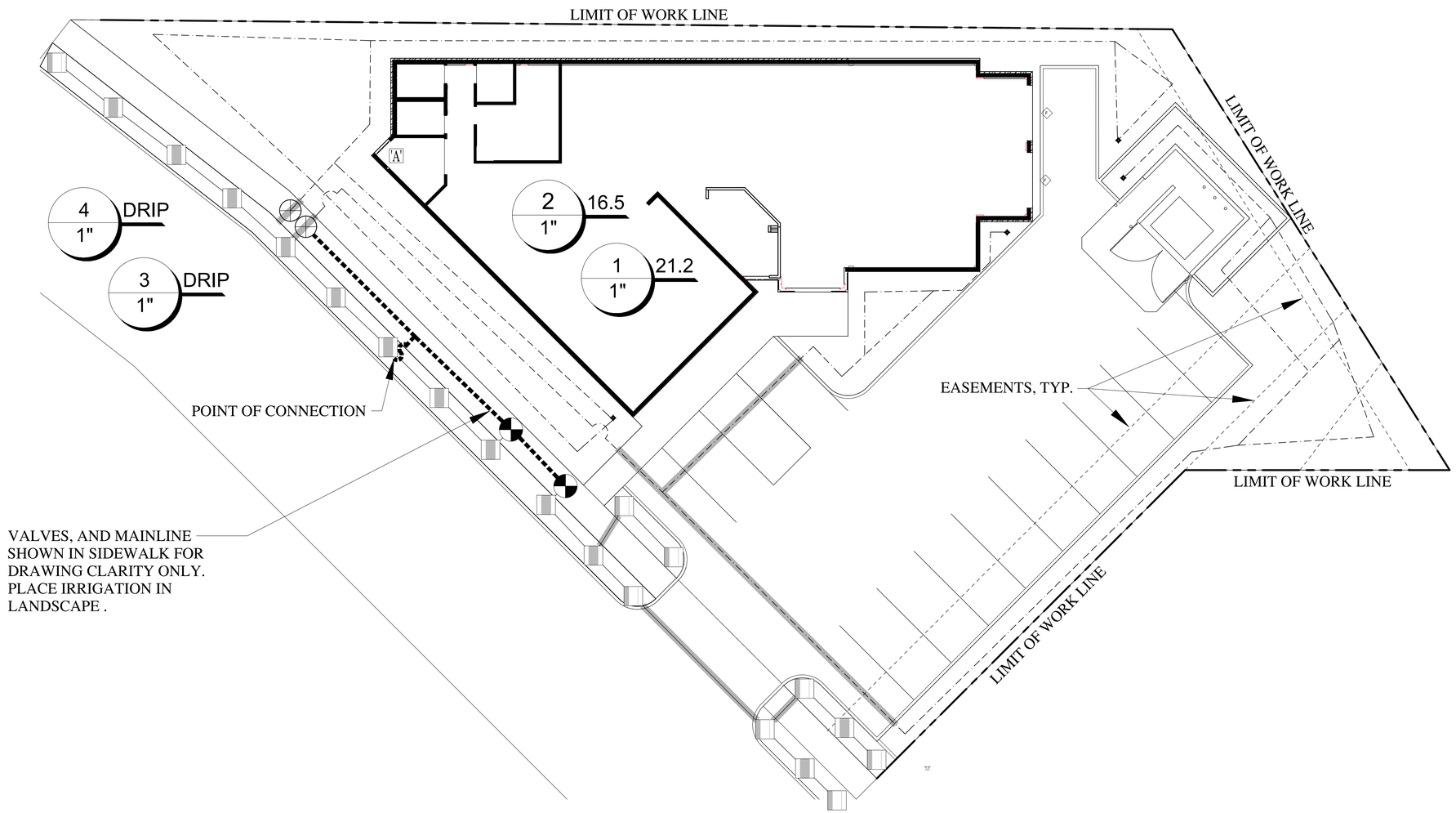
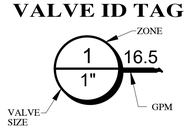


IRRIGATION LEGEND

SYMBOL	MANUFACTURER-MODEL NUMBER	PAT.	RD.	PSI	GPM Q	GPM T	GPM H	GPM TT	GPM TQ	GPM F	DRIP GPH	DETAILS	REMARKS
NOT SHOWN	GPH INC. GPSCV2M DRIP EMITTER	F	--	30	--	--	--	--	--	--	2.0	15-19	SEE IRRIGATION DETAILS
NOT SHOWN	RAINBIRD PC-05 EMITTER WITH DIFFUSER CAP	F	--	30	--	--	--	--	--	--	5.0	15-19	SEE IRRIGATION DETAILS
NOT SHOWN	DRIPLINE: NETAFIM TLCV26-18	F	--	30	--	--	--	--	--	--	.26/18"	15-19	SEE IRRIGATION DETAILS
	RAIN BIRD R-VAN-STRIP 1804-SAM-P45	H, & F	--	45	--	--	.24	--	--	.48	--	9	ADJUST ARC AS NEEDED
'A'	RAINBIRD CONTROLLER, MODEL #ESPLXBASIC. CONTRACTOR TO COORDINATE WITH TRADES TO RUN CONDUIT AND SLEEVING FOR WIRING TO VALVES. SIZE CONTROLLER AS NECESSARY. PLACE CONTROLLER IN WEATHER RESISTANT CABINET											1	COORDINATE EXACT LOCATION WITH OWNER.
	RAIN BIRD PEB-PRS-D AUTOMATIC CONTROL VALVE (SIZE AS NOTED ON PLAN). INSTALL PRS-D OPTION PER IF REQ. PER SPECS/DETAILS.											13	JUMBO VALVE BOX
	DRIP CONTROL ZONE KIT: RAINBIRD XCZ-100-PRB COM											14	JUMBO VALVE BOX
	1" POINT OF CONNECTION											2	SEE IRRIGATION DETAILS
	1 1/4" SCH. 40 MAINLINE											6-8	SEE IRRIGATION DETAILS
	LATERAL LINE: PVC SCH. 40 (SIZE PER PLAN)											6-8	SEE IRRIGATION DETAILS
	DRIP LATERAL: PVC SCH 40, OR STICKY-STRIP PVC HOSE BY GPH. CONTRACTOR SHALL SIZE PIPE PER DETAILS AND SPECS.											15-19	SEE IRRIGATION DETAILS
	1" RAINBIRD QUICK COUPLER VALVE, MODEL #44LNP. FOR IRRIGATION SYSTEM BLOWOUT. ALL GALVANIZED FITTINGS & PIPE.											4	SEE IRRIGATION DETAILS
NOT SHOWN	14 GAUGE SINGLE STRAND SOLID COPPER CONTROL WIRE											6-8	
	SLEEVE (SIZE TO BE A MIN. OF TWICE THE DIAMETER OF THE MAIN, LATERAL)											8	COORDINATE WITH ALL TRADES
NOT SHOWN	WIRE CHASE. SIZE TO BE TWICE THE DIAMETER OF THE WIRE BUNDLE WITHIN, 1" DIA. WC IS THE MINIMUM SIZED ALLOWED.											6-8	COORDINATE WITH ALL TRADES
◆	FLUSH VALVE: 1/2" PVC BALL VALVE. INSTALL AT END OF ALL DRIP LINES IN 10" ROUND VALVE BOX											20	REFERENCE DETAILS

VALVE ID TAG



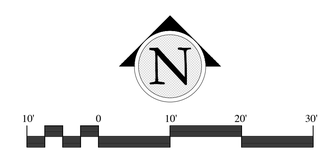
DRIP EMITTER LEGEND

PLANT TYPE	EMITTER QTY	EMITTER TYPE
PERENNIALS	1	XB-20 (2GPH)
SHRUBS	2	XB-20 (2GPH)
TREES (w/out Shrubs)	3	PC-05 (5GPH)
TREES (w/ Shrubs)	2	PC-05 (5GPH)

NOTE:
1. EMITTERS LISTED ARE AVAILABLE FROM RAINBIRD.
2. ALL EMITTERS TO BE VISIBLE ABOVE FINISHED GRADE OF ROCK MULCH. CONTRACTOR MAY INSTALL A POPUP FLAG SPRAY BODY ON DRIP ZONE LINE TO HELP IDENTIFY WHEN ZONE IS RUNNING.
3. IF DRIP LINE IS USED INSTEAD OF EMITTERS CONTRACTOR TO USE TUBING STAPLES AND PLACE ON TOP OF FABRIC PRIOR TO PLACING ROCK.

IRRIGATION NOTES

1. ALL WORK SHALL BE IN ACCORDANCE WITH APPLICABLE CITY AND/OR COUNTY CODES. THE CONTRACTOR SHALL APPLY AND PAY FOR ALL NECESSARY PERMITS.
2. CONTRACTOR SHALL HAVE ALL UTILITIES BLUE STAKED BEFORE DIGGING. ANY DAMAGE TO THE UTILITIES SHALL BE REPAIRED AT THE EXPENSE OF CONTRACTOR WITH NO EXTRA COST TO THE OWNER.
3. PROVIDE AN AS-BUILT, REPRODUCIBLE DRAWING TO OWNER SHOWING ALL IRRIGATION COMPONENTS. PROVIDE INSTRUCTIONS TO MAINTENANCE PERSONNEL FOR WINTERIZATION. IRRIGATION SYSTEM TO BE BLOWN OUT WITH AN AIR COMPRESSOR EACH FALL.
4. CONTRACTOR SHALL ONLY USE COMMERCIAL GRADE PRODUCTS AND IS RESPONSIBLE FOR ENSURING ACCURATE COUNTS AND QUANTITIES OF ALL IRRIGATION MATERIALS FOR BIDDING AND INSTALLATION PURPOSES.
5. LANDSCAPE CONTRACTOR (L.C.) SHALL PROVIDE AND INSTALL SLEEVES FOR ALL PIPES AND WIRES UNDER PAVEMENT AND SIDEWALKS. SLEEVES FOR PIPING SHALL BE 2 SIZES LARGER THAN PIPE INSIDE. ALL WIRE SHALL BE IN SEPARATE GRAY ELECTRICAL SLEEVES/CONDUIT (NOT SHOWN).
6. 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.
7. MAIN LINE SHALL BE 1-1/4" (UNLESS OTHERWISE DIRECTED). LATERAL LINES SHALL BE AT LEAST 3/4" UNLESS NOTED ON PLAN. PIPES SHALL CARRY NO MORE THAN THE FOLLOWING: 1/2" MAX. 4 GPM, 3/4" PIPE MAX. 8 GPM, 1" PIPE MAX. 13 GPM, 1-1/4" PIPE MAX 23 GPM. ADJUST LOCATION OF MAINLINE AND LATERAL LINES AS NECESSARY IN ORDER TO AVOID PLACING BOULDERS, TREES AND SHRUBS DIRECTLY OVER MAINLINE AND LATERAL LINES. ALL DRIP ZONE PIPING SLEEVED UNDER ROADWAYS OR SIDEWALKS SHALL USE PVC LATERAL LINE.
8. MAIN LINES SHALL BE 18" DEEP MIN. AND LATERAL LINES 12" DEEP MIN. NO ROCK GREATER THAN 3/4" DIAMETER SHALL BE ALLOWED IN TRENCHES. RUN WIRING IN MAINLINE TRENCH WHERE REASONABLE. TAPE WIRE TO MAINLINE AT 10' INTERVALS.
9. PLACE PIPES, VALVE BOXES AND ALL OTHER SPRINKLER CONSTRUCTION IN LANDSCAPE AREAS. ALL PIPES SHALL BE ON PROPERTY OF OWNER. MODIFY LOCATION OF VALVE BOXES AS NECESSARY IN ORDER TO AVOID TREES AND SHRUBS PER PLANTING PLAN. DO NOT LOCATE VALVE BOXES IN LAWN AREAS IF POSSIBLE.
10. CONTRACTOR SHALL PRESSURE TEST MAINLINE FOR LEAKS PRIOR TO BACKFILLING.
11. ACTUAL INSTALLATION OF IRRIGATION SYSTEM MAY VARY SOMEWHAT FROM PLANS. CONTRACTOR IS RESPONSIBLE TO MAKE NECESSARY ADJUSTMENTS TO ENSURE PROPER COVERAGE OF ALL LANDSCAPED AREAS.
12. VALVE BOXES SHALL BE INSTALLED SQUARED TO AND 6" MIN. AWAY FROM WALKS AND WALLS.
13. DRIP LINES OFF OF SCH 40 SUPPLY LINES SHALL BE FLEXIBLE TUBING. FOR DRIP AREAS REQUIRING 0-4 GPM USE 1/2" TUBING. FOR DRIP AREAS REQUIRING 4-8GPM USE 3/4" TUBING. CONTRACTOR TO VERIFY PLANT QUANTITIES ON EACH DRIP LINE AND SIZE PIPE ACCORDINGLY.
14. POWER TO CONTROLLER TO BE PROVIDED BY ELECTRICAL CONTRACTOR. OWNER TO SPECIFY EXACT LOCATION OF CONTROLLER. IF MOUNTED OUTSIDE, CONTROLLER TO BE MOUNTED IN WEATHERPROOF LOCKING WALL MOUNTED CABINET PER MANUFACTURERS INSTRUCTIONS. LANDSCAPE CONTRACTOR SHALL ENSURE THE CONTROLLER IS GROUNDED PER LOCAL CODE AND PER MANUFACTURER SPEC.
15. IF THE STATIC PRESSURE AT THE POINT OF CONNECTION EXCEEDS 100 PSI, INSTALL A BRASS PRESSURE REDUCER IN-LINE WITH THE RPZ PER MANUFACTURER SPECS. INSTALL THE RPZ AND PRESSURE REDUCER IN A LOCKING METAL CABINET. ADJUST PRESSURE AS REQUIRED FOR NORMAL OPERATION OF THE IRRIGATION SYSTEM. OWNER TO ENSURE RPZ IS WINTERIZED ONCE TEMPERATURE NEAR 33°.
16. CONTRACTOR TO VERIFY WATER PRESSURE ON SITE BEFORE IRRIGATION INSTALLATION. IF STATIC PSI IS LOWER THAT 70 PSI NOTIFY LANDSCAPE ARCHITECT AS A SYSTEM REDESIGN MAY BE NECESSARY.



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17 North 470 West American Fork, Utah 84003
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PRELIMINARY PLAN - NOT FOR CONSTRUCTION

SHEET TITLE:

IRRIGATION PLAN

DRAWN BY: JLH
CHECKED: DGW
DATE: 1-3-23
REVISIONS:
JOB NO. 21-161

SHEET: LS2.1

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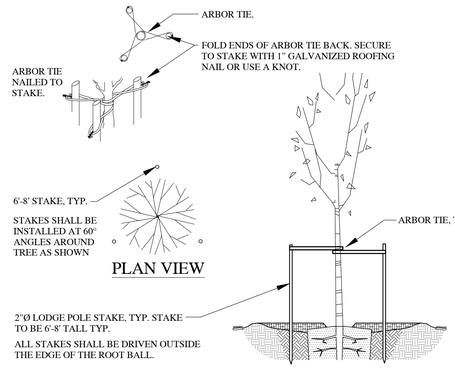
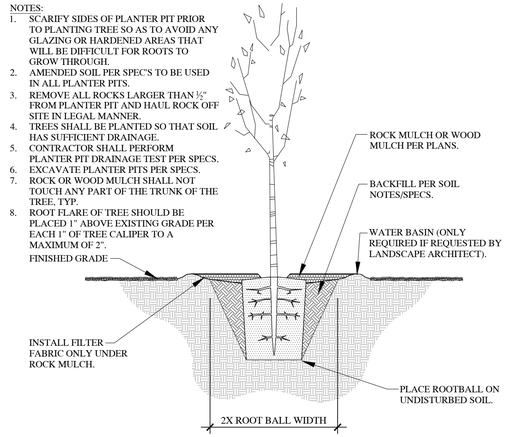


NOTES: IF TREE STAKING IS REQUIRED, THE FOLLOWING IS RECOMMENDED:
1. ALLOW FOR SOME TRUNK MOVEMENT. ATTACH ARBOR TIE TO TREE AND STAKE.
2. REMOVE ALL WRAPPING MATERIAL FROM ROOTBALL PRIOR TO PLANTING.
3. INSTALL THREE STAKES PER TREE, SPACED EVENLY AROUND THE TRUNK
4. REMOVE ALL STAKING AS SOON AS THE TREE IS STABLE.
5. CONTRACTOR SHALL PROVIDE TREE STAKING AS PART OF THE BASE BID.
6. CONTRACTOR TO REMOVE NURSERY TREE STAKE FROM ROOTBALL AT TIME OF PLANTING (TYP.).

1 TREE STAKING

SCALE: NTS

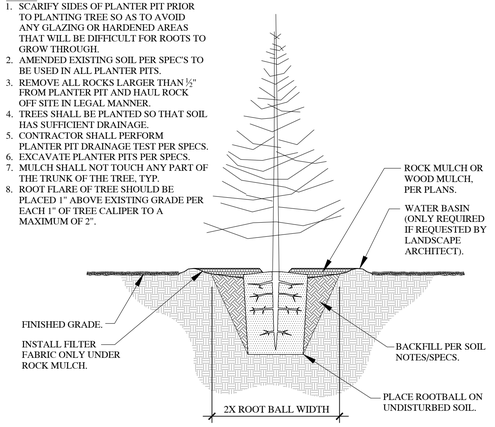
NOTES:
1. SCARIFY SIDES OF PLANTER PIT PRIOR TO PLANTING TREE SO AS TO AVOID ANY GLAZING OR HARDENED AREAS THAT WILL BE DIFFICULT FOR ROOTS TO GROW THROUGH.
2. AMENDED SOIL PER SPEC'S TO BE USED IN ALL PLANTER PITS.
3. REMOVE ALL ROCKS LARGER THAN ½" FROM PLANTER PIT AND HAUL ROCK OFF SITE IN LEGAL MANNER.
4. TREES SHALL BE PLANTED SO THAT SOIL HAS SUFFICIENT DRAINAGE.
5. CONTRACTOR SHALL PERFORM PLANTER PIT DRAINAGE TEST PER SPECS.
6. EXCAVATE PLANTER PITS PER SPECS.
7. ROCK OR WOOD MULCH SHALL NOT TOUCH ANY PART OF THE TRUNK OF THE TREE, TYP.
8. ROOT FLARE OF TREE SHOULD BE PLACED 1" ABOVE EXISTING GRADE PER EACH 1" OF TREE CALIPER TO A MAXIMUM OF 2".



2 DECIDUOUS TREE PLANTING

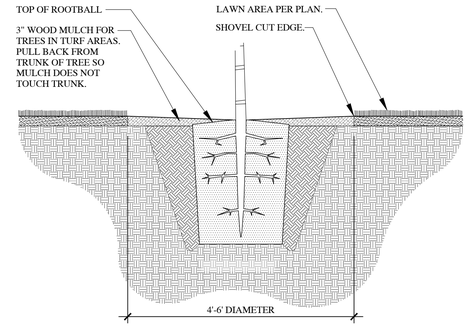
SCALE: NTS

NOTES:
1. SCARIFY SIDES OF PLANTER PIT PRIOR TO PLANTING TREE SO AS TO AVOID ANY GLAZING OR HARDENED AREAS THAT WILL BE DIFFICULT FOR ROOTS TO GROW THROUGH.
2. AMENDED EXISTING SOIL PER SPEC'S TO BE USED IN ALL PLANTER PITS.
3. REMOVE ALL ROCKS LARGER THAN ½" FROM PLANTER PIT AND HAUL ROCK OFF SITE IN LEGAL MANNER.
4. TREES SHALL BE PLANTED SO THAT SOIL HAS SUFFICIENT DRAINAGE.
5. CONTRACTOR SHALL PERFORM PLANTER PIT DRAINAGE TEST PER SPECS.
6. EXCAVATE PLANTER PITS PER SPECS.
7. MULCH SHALL NOT TOUCH ANY PART OF THE TRUNK OF THE TREE, TYP.
8. ROOT FLARE OF TREE SHOULD BE PLACED 1" ABOVE EXISTING GRADE PER EACH 1" OF TREE CALIPER TO A MAXIMUM OF 2".



3 EVERGREEN PLANTING

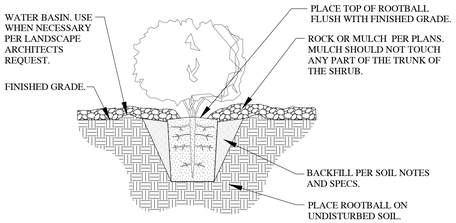
SCALE: NTS



NOTES:
1. DO NOT INSTALL WEED FABRIC UNDER WOOD MULCH.
2. TREE WELL FOR SMALL FLOWERING TREES SHALL BE 4'-0".
3. TREE WELL FOR LARGE SHADE TREES OR EVERGREENS SHALL BE 6'-0" UNLESS OTHERWISE NOTED.
4. AS TREES MATURE TREE WELL WILL NEED TO EXPAND.

4 TREE WELL IN TURF AREA

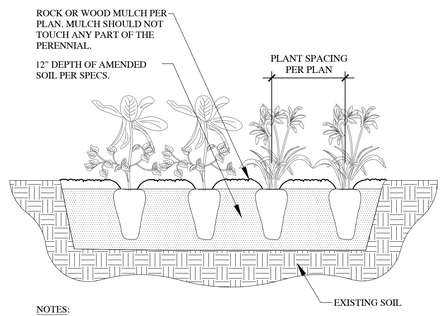
SCALE: NTS



NOTES:
1. SCARIFY SIDES OF PLANTER PIT PRIOR TO PLANTING SHRUB/GRASS SO AS TO AVOID ANY GLAZING OR HARDENED AREAS THAT WILL BE DIFFICULT FOR ROOTS TO GROW THROUGH.
2. IMPORTED & AMENDED TOPSOIL PER SPEC'S TO BE USED IN ALL PLANTER PITS.
3. REMOVE ALL COMPACTED, CLAY OR ROCKY SOILS FROM PIT AND HAUL OFF SITE IN A LEGAL MANNER.
4. CONTRACTOR SHALL PERFORM PLANTER PIT DRAINAGE TEST PER SPECS.
5. EXCAVATE PLANTER PITS PER SPECS.

5 SHRUB & ORNAMENTAL GRASS PLANTING

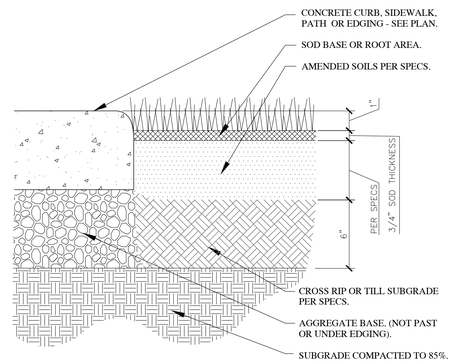
SCALE: NTS



NOTES:
1. SCARIFY SIDES OF PLANTER PIT PRIOR TO PLANTING PERENNIALS SO AS TO AVOID ANY GLAZING OR HARDENED AREAS THAT WILL BE DIFFICULT FOR ROOTS TO GROW THROUGH.
2. REMOVE ALL COMPACTED, CLAY OR ROCKY SOILS FROM PIT AND HAUL OFF SITE IN LEGAL MANNER.
3. CONTRACTOR SHALL PERFORM PLANTER PIT DRAINAGE TEST PER SPECS.
4. EXCAVATE PLANTER PITS PER SPECS.

6 PERENNIAL PLANTING

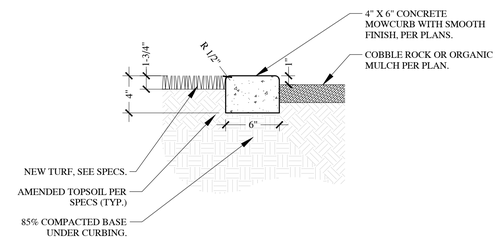
SCALE: NTS



NOTES:
1. ENSURE FINISH GRADE IS 1" BELOW TOP OF CURB, WALK, OR EDGING. CONSULT WITH OWNER FOR PROPER DEPTH.
2. SEE SOD SPEC'S FOR ADDITIONAL INFORMATION ON SODDING AND SEEDING REQUIREMENTS
3. EDGING OF SOD TO BE SHOVEL CUT WHEN NOT NEXT TO CONCRETE SIDEWALK OR PATH.
4. TURF IS THE MOST HEALTHY AND WATER EFFICIENT WHEN MOWED AT A MIN. HEIGHT OF 2½" - 3".

7 SOD LAYING AND EDGE

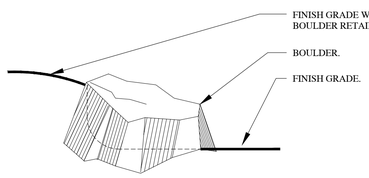
SCALE: NTS



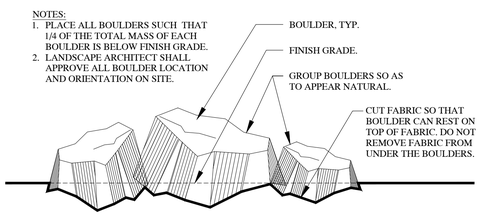
NOTES:
1. PROVIDE CONTROL JOINT IN MOWCURB AT 10' INTERVALS.

8 6" MOW CURB

1" = 1'-0"

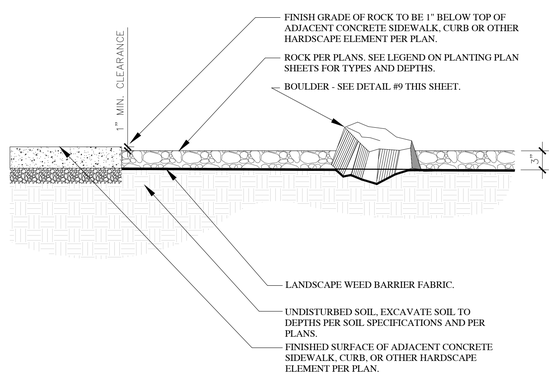


NOTES:
1. PLACE ALL BOULDERS SUCH THAT 1/4 OF THE TOTAL MASS OF EACH BOULDER IS BELOW FINISH GRADE.
2. LANDSCAPE ARCHITECT SHALL APPROVE ALL BOULDER LOCATION AND ORIENTATION ON SITE.



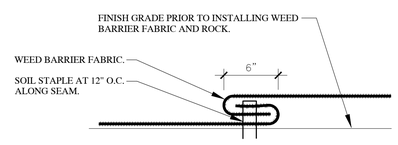
9 BOULDER PLACEMENT

SCALE: NTS



NOTES:
1. ROCK SHALL BE SCREENED & DOUBLE WASHED AND BE FREE OF DEBRIS PRIOR TO INSTALLATION. IF ROCK SUPPLIER DOES NOT HAVE A WASH PLANT, THE LANDSCAPE CONTRACTOR SHALL STILL BE RESPONSIBLE FOR DOUBLE WASHING ALL ROCK AND BOULDERS PRIOR TO INSTALLATION.
2. INSTALL PRE-EMERGENT HERBICIDE TO THE TOP OF THE FABRIC AFTER INSTALLING PLANTS AND PRIOR TO INSTALLING MULCH. AFTER INSTALLATION OF THE MULCH THE CONTRACTOR SHALL EVENLY BROADCAST A SECOND APPLICATION OF SLOW-RELEASE PRE-EMERGENT HERBICIDE. APPLY PRE-EMERGENT HERBICIDE PER MANUFACTURERS RECOMMENDATIONS.
3. KEEP TOP OF ROCK 1"-1½" BELOW ADJACENT WALKS AND CURBS. DO NOT ALLOW ROCK TO TOUCH THE TRUNK OF ANY PLANT. INSTALL ROCK AFTER INSTALLATION OF WEED BARRIER FABRIC AND PLANT MATERIAL.
4. CONTRACTOR TO ENSURE THAT TOP OF WEED BARRIER FABRIC IS FREE OF SOILS AND DEBRIS PRIOR TO PLACING ROCK.
5. SEE LANDSCAPE PLANS FOR ROCK TYPE AND DEPTH.

WEED FABRIC NOTE:
INSTALL 6" SOIL STAPLE IN WEED BARRIER FABRIC AT 5' O.C. TRIANGULAR SPACING. INSTALL 6" SOIL STAPLE AT 12" O.C. ALONG ALL WEED BARRIER FABRIC SEAMS. OVERLAP FABRIC MIN. OF 6" AT ALL SEAMS AS SHOWN BELOW. INSTALL SOIL STAPLE 6' O.C. ALONG EDGES & 2 AT EACH CORNER.



10 ROCK AND WEED BARRIER FABRIC WITH BOULDER

SCALE: NTS

In Site DESIGN GROUP
Landscape Architecture Land Planning
17 North 470 West American Fork, Utah 84003
801-756-5043 www.in-sitedesigngroup.com
architects@in-sitedesigngroup.com

CONSULTANTS:

STAMP: LICENSED LANDSCAPE ARCHITECT # 4884514 Cory B. Whiting STATE OF UTAH

PROJECT:

COST U LESS
CARPET DIEM
64 N 900 W AMERICAN FORK, UT 84003
PRELIMINARY PLAN - NOT FOR CONSTRUCTION

SHEET TITLE:

PLANTING DETAILS

DRAWN BY:	JLH
CHECKED:	DGW
DATE:	1-3-23
REVISIONS:	
JOB NO.	21-161

SHEET: LS3.1

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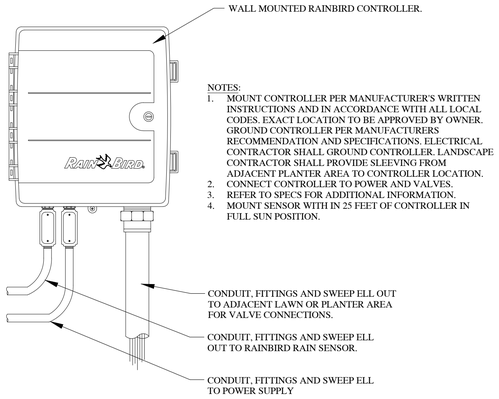
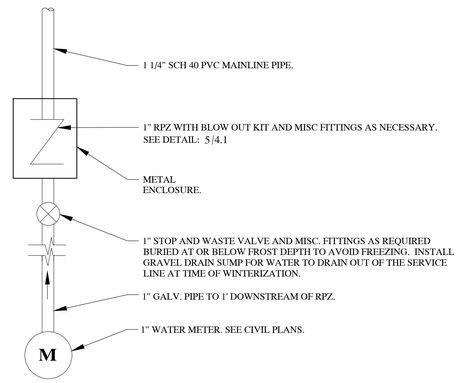


NOTES:
1. MOUNT CONTROLLER PER MANUFACTURER'S WRITTEN INSTRUCTIONS AND IN ACCORDANCE WITH ALL LOCAL CODES. EXACT LOCATION TO BE APPROVED BY OWNER. GROUND CONTROLLER PER MANUFACTURERS RECOMMENDATION AND SPECIFICATIONS. ELECTRICAL CONTRACTOR SHALL GROUND CONTROLLER. LANDSCAPE CONTRACTOR SHALL PROVIDE SLEEVING FROM ADJACENT PLANTER AREA TO CONTROLLER LOCATION.
2. CONNECT CONTROLLER TO POWER AND VALVES.
3. REFER TO SPECS FOR ADDITIONAL INFORMATION.
4. MOUNT SENSOR WITH IN 25 FEET OF CONTROLLER IN FULL SUN POSITION.

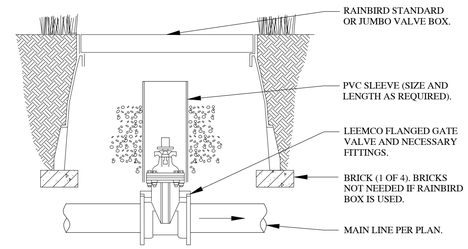
1 CONTROLLER WITH SENSOR

SCALE: NTS



2 1" POINT OF CONNECTION

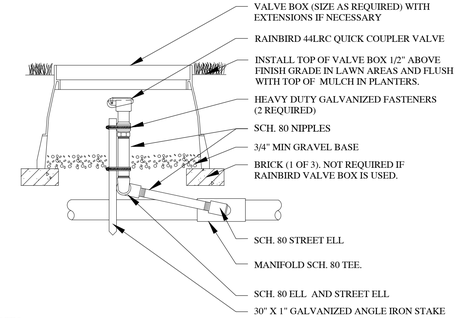
SCALE: NTS



NOTES:
1. PROVIDE OWNER WITH (2) OPERATING KEYS.
2. INSTALL FLANGE X BELL ADAPTER TO CONNECT PVC PIPE TO LEEMCO VALVE.
3. LINE SIZE ISOLATION VALVES AND FITTING.

3 MAINLINE GATE VALVE

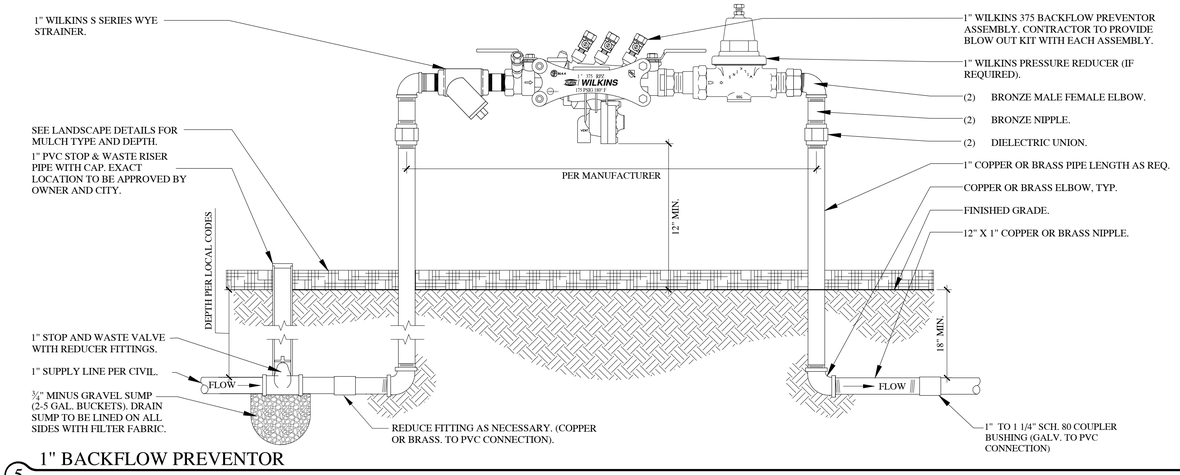
SCALE: NTS



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 THE RPZ AND QUICK COUPLERS BEFORE FREEZING TEMPERATURES OCCUR, TYP.
7. SCH 80 PVC TEE OR ELL'S CAN BE USED ON ALL QUICK COUPLERS EXCEPT AT POINT OF CONNECTION (IF QUICK COUPLER(S) ARE INSTALLED AT THE POINT OF CONNECTION). ALL QUICK COUPLER FITTINGS AND NIPPLES AT P.O.C. QUICK COUPLER(S) TO BE GALVANIZED.

4 QUICK COUPLER VALVE

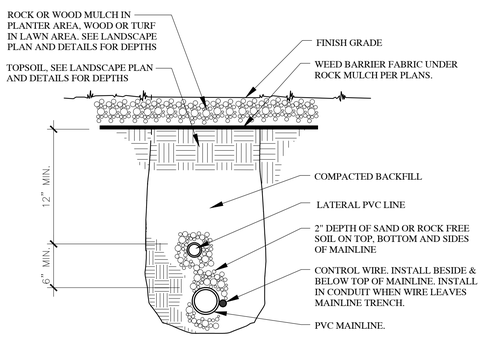
SCALE: NTS



BACKFLOW PREVENTOR NOTES:

1. EQUIPMENT TO BE INSTALLED AT A MINIMUM OF 24" FROM ANY STRUCTURES OR HARDSCAPING.
2. WHEN UNIT IS NEXT TO STRUCTURE (i.e. WALL BUILDING, ETC.) MOUNT TEST COCKS ON SIDE AWAY FROM STRUCTURE.
3. PROVIDE OWNER WITH COMPLETE WRITTEN INSTRUCTIONS ON HOW TO DRAIN ENTIRE BACKFLOW UNIT TO PREVENT FREEZING. CONTRACTOR TO PROVIDE BLOW OUT KIT FROM MANUFACTURER.
4. CONTRACTOR SHALL PROVIDE ALL MATERIALS NECESSARY FOR PROPER RPZ INSTALLATION.
5. INSTALL METAL INCLOSURE OVER RPZ. OWNER TO SPECIFY EXACT TYPE.
6. RPZ TO BE WINTERIZED AS NECESSARY TO PREVENT FREEZING. INSULATION IS REQUIRED TO PREVENT RPZ FROM FREEZING TEMPERATURES BEFORE SYSTEM IS BLOWN OUT FOR THE SEASON. CONTRACTOR SHALL INSTALL INSULATION BLANKET FOR RPZ.
7. WHERE CORROSION IS POSSIBLE, USE A DIELECTRIC UNION WHEREVER A COPPER-BASED METAL (COPPER, BRASS, BRONZE) IS JOINED TO AN IRON-BASED METAL (IRON, GALVANIZED STEEL, STAINLESS STEEL).

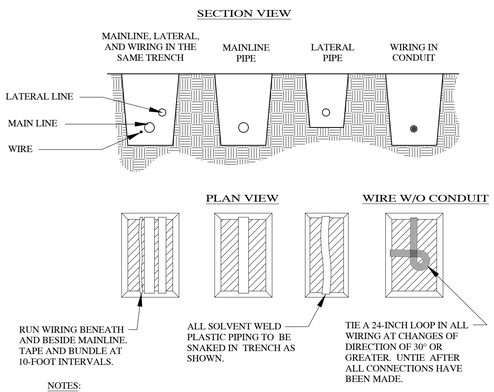
5 1" BACKFLOW PREVENTOR



NOTES:
1. PROVIDE SLACK IN CONTROL WIRES AT ALL CHANGES IN DIRECTION.
2. MAINLINE DEPTH SHALL BE 18" DEEP EXCEPT UNDER ASPHALT & CONCRETE PAVING AND AT P.O.C. SHALL BE MIN OF 24" & MAX OF 30". INSTALL ADDITIONAL FITTINGS & RESTRAINTS AS REQUIRED.
3. MAINLINE AND LATERAL LINES SHALL BE KEPT MIN. 12" FROM ALL SIDEWALKS AND CURBS.

6 TRENCH SECTION

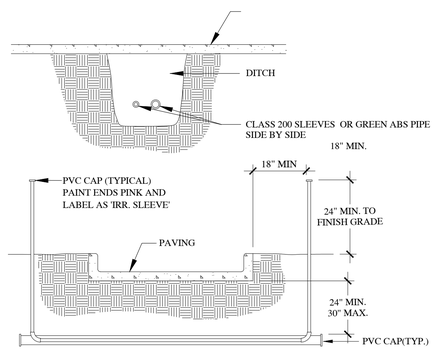
SCALE: NTS



NOTES:
1. SLEEVE BELOW ALL HARDSCAPE ELEMENTS (WITH CLASS 200 OR SCH. 40 OR SCH. 80 PER SPECS.) TWICE THE DIAMETER OF THE PIPE OR WIRE BUNDLE WITHIN.
2. FOR PIPE AND WIRE BURIAL DEPTHS, SEE NOTES AND SPECS.
3. NO LINE VOLTAGE WIRING SHALL BE ALLOWED IN IRRIGATION TRENCHES.

7 PIPE, WIRE, AND TRENCH

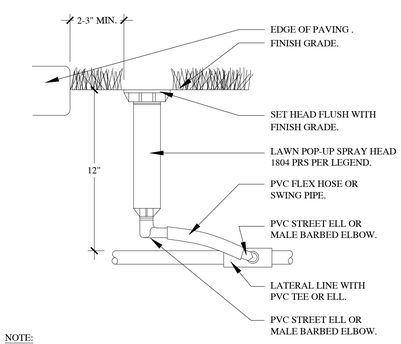
SCALE: NTS



NOTE:
1. WHERE THERE IS MORE THAN ONE SLEEVE, EXTEND THE SMALLER SLEEVE TO 24-INCHES MINIMUM ABOVE FINISH GRADE.
2. 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.

8 SLEEVING

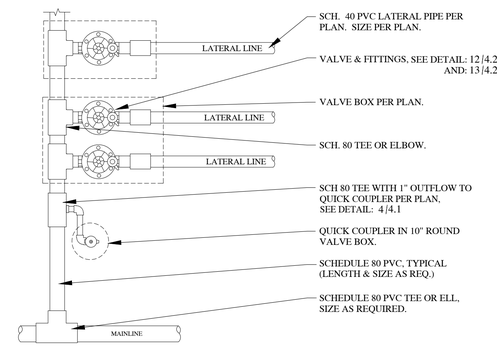
SCALE: NTS



NOTE:
1. USE VAN OR HE VAN NOZZLES AS NEEDED TO KEEP WATER OFF SIDEWALK AND BUILDING.
2. LATERAL LINES SHALL BE KEPT MIN. 12" FROM ALL SIDEWALKS AND CURBS.
3. INSTALL SAM FEATURE FOR SLOPED LAWN AREAS WHERE LOW HEAD DRAINAGE MAY OCCUR.

9 POP-UP SPRAY

SCALE: NTS



NOTES:
1. ALL VALVE MANIFOLD PIPING AND FITTINGS TO BE SCH. 80 FITTINGS, UNLESS THERE IS A DRIP ZONE ALL BY ITSELF IN WHICH CASE THE PIPING SHALL BE SIZED PER THE FLOW OF THE DRIP ZONE.
2. MODIFY MANIFOLD AS NECESSARY DEPENDING ON HOW MANY VALVES ARE IN A CLUSTER.
3. MODIFY AS REQUIRED DEPENDING ON WHETHER THE VALVES ARE PARALLEL OR PERPENDICULAR TO MAINLINE.

10 VALVE MANIFOLD

SCALE: NTS

In Site DESIGN GROUP
Landscape Architecture Land Planning
17 North 470 West American Fork, Utah 84003
801-756-5043 www.in-sitedesigngroup.com
architects@in-sitedesigngroup.com

CONSULTANTS:

STAMP:

LICENSED LANDSCAPE ARCHITECT # 4884514 Cory B. Whiting STATE OF UTAH

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COST U LESS
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64 N 900 W AMERICAN FORK, UT 84003

PRELIMINARY PLAN - NOT FOR CONSTRUCTION

SHEET TITLE:

IRRIGATION DETAILS

DRAWN BY:	JLH
CHECKED:	DGW
DATE:	1-3-23
REVISIONS:	
JOB NO.	21-161

SHEET:

LS4.1

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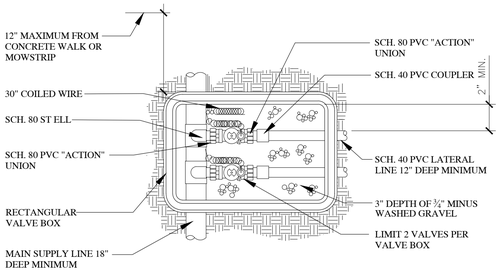
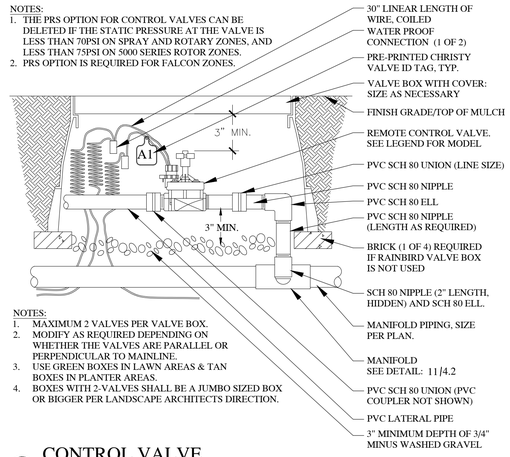


NOTE:
1. ADD PRE-PRINTED CHRISTY I.D. TAGS TO ALL NEW CONTROL VALVES AND CONTROL ZONE KITS. COORDINATE AND LABEL ALL CONTROL WIRE AT CONTROLLER WITH EACH VALVE IN THE FIELD, TYP.

12 VALVE ASSEMBLY

SCALE: NTS

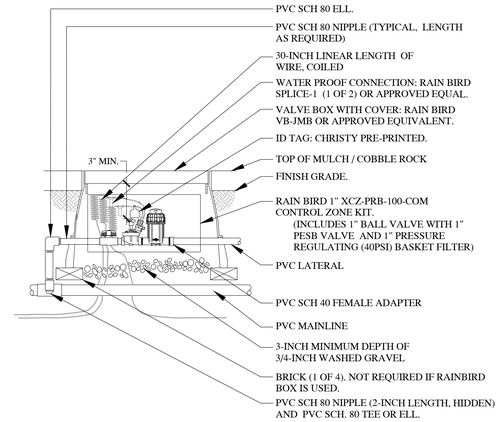
NOTES:
1. THE PRS OPTION FOR CONTROL VALVES CAN BE DELETED IF THE STATIC PRESSURE AT THE VALVE IS LESS THAN 70PSI ON SPRAY AND ROTARY ZONES, AND LESS THAN 75PSI ON 5000 SERIES ROTOR ZONES.
2. PRS OPTION IS REQUIRED FOR FALCON ZONES.



NOTES:
1. MAXIMUM 2 VALVES PER VALVE BOX.
2. MODIFY AS REQUIRED DEPENDING ON WHETHER THE VALVES ARE PARALLEL OR PERPENDICULAR TO MAINLINE.
3. USE GREEN BOXES IN LAWN AREAS & TAN BOXES IN PLANTER AREAS.
4. BOXES WITH 2-VALVES SHALL BE A JUMBO SIZED BOX OR BIGGER PER LANDSCAPE ARCHITECTS DIRECTION.

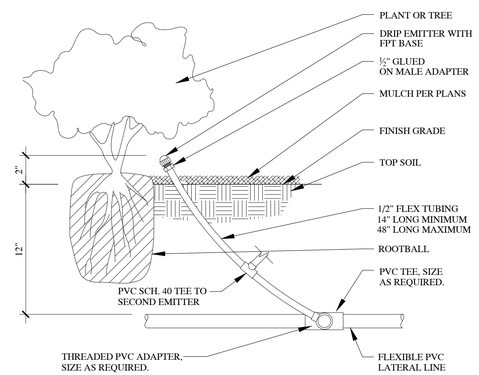
13 CONTROL VALVE

SCALE: NTS



14 1" DRIP CONTROL ZONE KIT

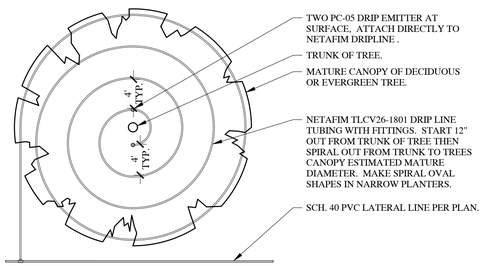
SCALE: NTS



NOTE:
1. FOR LAYOUT OF MULTIPLE SHRUBS, CONTRACTOR SHALL USE TEE'S AS NECESSARY. FOR LAYOUT INFORMATION, SEE DETAIL:19/4.2

15 DRIP EMITTER

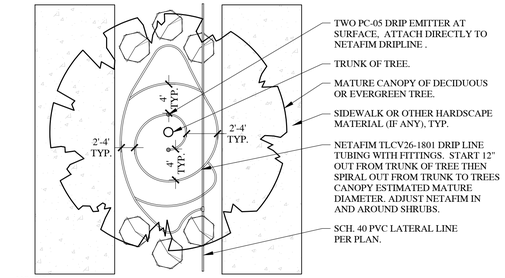
SCALE: NTS



NOTES:
1. LAYOUT SHOWN IS TYPICAL. ON SITE MODIFICATIONS WILL BE REQUIRED DUE TO VARYING SIZE OF PLANTER ISLANDS. CONSULT WITH LANDSCAPE ARCHITECT ON-SITE PRIOR TO INSTALLATION TO DETERMINE HOW MUCH DRIP NEEDS TO BE INSTALLED AND WHAT CONFIGURATION IS APPROPRIATE.
2. INSTALL NETAFIM DRIP TUBING UNDER WEED BARRIER FABRIC. USE THIS DETAIL FOR ALL TREES PLANTED IN COBBLE ROCK AREAS. CONTRACTOR SHALL BE CAREFUL NOT TO DAMAGE OR PINCH TUBING WHEN PLACING COBBLE ROCK AND BOULDERS.
3. TREES PLANTED IN LAWN AREAS WILL NOT BE WATERED BY DRIP BUT WILL BE WATERED BY THE LAWN SPRINKLERS.
4. THIS DETAIL IS FOR DESIGN INTENT ONLY AND IS NOT TO SCALE. CONTRACTOR MUST INSTALL DRIP LINE PER THIS DETAIL OUT TO THE DRIPLINE OF THE TREES MATURE SIZE.
5. FOR LINEAR PLANTERS WITH TREES, INSTALL NETAFIM IN STRAIGHT LINES RATHER THAN A CIRCULAR PATTERN AROUND THE TREE.
6. INSTALL A FLUSH VALVE (NOT SHOWN) AT THE END OF ALL DRIP LINES, PER PLAN.

16 TREE DRIP WITHOUT PLANTS UNDER FULL CANOPY

1" = 1'-0"



NOTES:
1. LAYOUT SHOWN IS TYPICAL. ON SITE MODIFICATIONS WILL BE REQUIRED DUE TO VARYING SIZE OF PLANTER ISLANDS. CONSULT WITH LANDSCAPE ARCHITECT ON-SITE PRIOR TO INSTALLATION TO DETERMINE HOW MUCH DRIP NEEDS TO BE INSTALLED AND WHAT CONFIGURATION IS APPROPRIATE.
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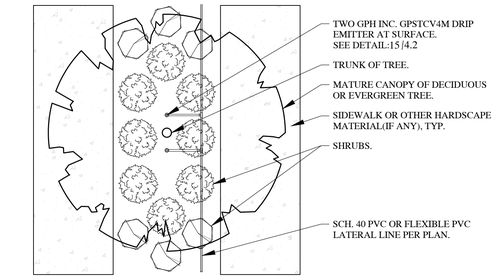
4. THIS DETAIL IS FOR DESIGN INTENT ONLY AND IS NOT TO SCALE. CONTRACTOR MUST INSTALL DRIP LINE PER THIS DETAIL OUT TO THE DRIPLINE OF THE TREES MATURE SIZE.
5. FOR LINEAR PLANTERS WITH TREES, INSTALL NETAFIM IN STRAIGHT LINES RATHER THAN A CIRCULAR PATTERN AROUND THE TREE.
6. INSTALL A FLUSH VALVE (NOT SHOWN) AT THE END OF ALL DRIP LINES, PER PLAN.

17 TREE DRIP WITH PARTIAL PLANTING UNDER CANOPY

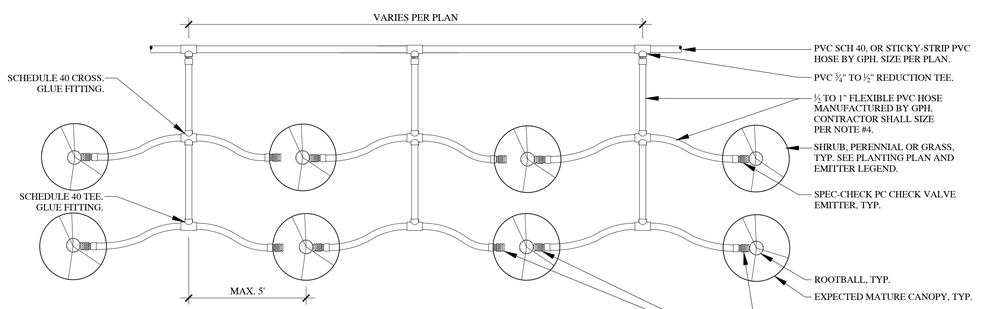
1" = 1'-0"



NOTES:
1. LAYOUT SHOWN IS TYPICAL. ON SITE MODIFICATIONS WILL BE REQUIRED DUE TO VARYING SIZE OF PLANTER ISLANDS. CONSULT WITH LANDSCAPE ARCHITECT ON-SITE PRIOR TO INSTALLATION TO DETERMINE HOW MUCH DRIP NEEDS TO BE INSTALLED AND WHAT CONFIGURATION IS APPROPRIATE.
2. INSTALL NETAFIM DRIP TUBING UNDER WEED BARRIER FABRIC. USE THIS DETAIL FOR ALL TREES PLANTED IN COBBLE ROCK AREAS. CONTRACTOR SHALL BE CAREFUL NOT TO DAMAGE OR PINCH TUBING WHEN PLACING COBBLE ROCK AND BOULDERS.
3. TREES PLANTED IN LAWN AREAS WILL NOT BE WATERED BY DRIP BUT WILL BE WATERED BY THE LAWN SPRINKLERS.
4. THIS DETAIL IS FOR DESIGN INTENT ONLY AND IS NOT TO SCALE. CONTRACTOR MUST INSTALL DRIP LINE PER THIS DETAIL OUT TO THE DRIPLINE OF THE TREES MATURE SIZE.
5. FOR LINEAR PLANTERS WITH TREES, INSTALL NETAFIM IN STRAIGHT LINES RATHER THAN A CIRCULAR PATTERN AROUND THE TREE.
6. INSTALL A FLUSH VALVE (NOT SHOWN) AT THE END OF ALL DRIP LINES, PER PLAN.

18 TREE DRIP WITH FULL PLANTING UNDER CANOPY

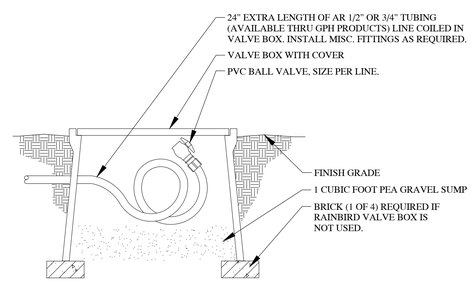
1" = 1'-0"



NOTES:
1. EMITTER SPACING SHALL BE BASED ON PLANT SPACING. INSTALL ALL IRRIGATION USING THE COMPONENTS DESCRIBED ABOVE.
2. IRRIGATION EQUIPMENT SHALL BE COMPLETELY INSTALLED PRIOR TO PLANT LAYOUTS.
3. ADJUST IRRIGATION SPACING TO ACCOMMODATE FINAL PLANT LAYOUT.
4. 1/2" PVC FLEX HOSE SHALL NOT EXCEED 4GPM, 3/4" PVC FLEX HOSE SHALL NOT EXCEED 8GPM AND 1" PVC FLEX HOSE SHALL NOT EXCEED 13GPM.
5. AT OWNERS DISCRETION, A LESS EXPENSIVE DRIP SYSTEM MAY BE INSTALLED. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS, SUBMITTAL CUT SHEETS AND POTENTIAL COST SAVINGS TO OWNER. HOWEVER, THE OWNER AND LANDSCAPE ARCHITECT MUST APPROVE ALL CHANGES IN MATERIALS AND CONSTRUCTION PRACTICES IF DIFFERENT FROM THE PLAN.
6. SMALL EVERGREEN TREES MAY NEED FEWER EMITTERS. CONSULT WITH THE LANDSCAPE ARCHITECT ON-SITE PRIOR TO INSTALLING IRRIGATION TO DETERMINE QUANTITY OF EMITTERS.
7. SEE IRRIGATION SHEET FOR DRIP EMITTER LEGEND.
8. USE IPS WELDON 795 GLUE AND P70 PRIMER PER GPH INC. SPECIFICATIONS.
9. DO NOT INSTALL PIPE, FITTINGS, OR GLUE IN TEMPERATURES BELOW 40 DEGREES. SEE MANUFACTURER SPECIFICATIONS FROM MORE INFORMATION.

19 GPH DRIP EMITTER PLAN VIEW

SCALE: NTS



20 DRIP LINE FLUSH CAP

SCALE: NTS

In Site DESIGN GROUP
Landscape Architecture Land Planning
17 North 470 West American Fork, Utah 84003
801-756-5043 www.in-sitedesigngroup.com
architects@in-sitedesigngroup.com

CONSULTANTS:

STAMP:

LICENSED LANDSCAPE ARCHITECT # 4884514 Cory B. Whiting STATE OF UTAH

PROJECT:

COST U LESS
CARPET DIEM
64 N 900 W AMERICAN FORK, UT 84003

PRELIMINARY PLAN - NOT FOR CONSTRUCTION

SHEET TITLE:

IRRIGATION DETAILS

DRAWN BY:	JLH
CHECKED:	DGW
DATE:	1-3-23
REVISIONS:	
JOB NO.	21-161

SHEET:

LS4.2

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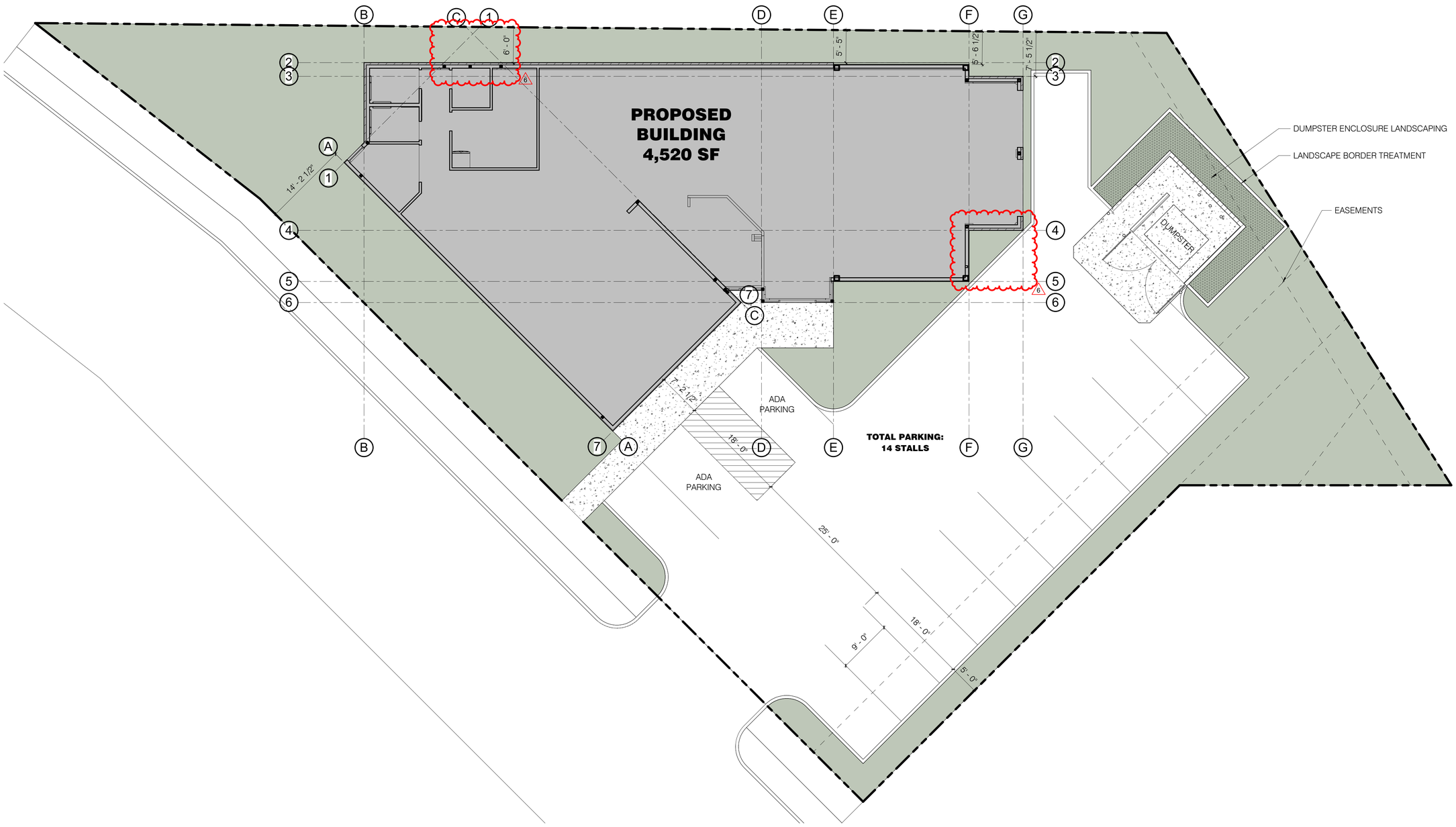


D1
AS101
ARCHITECTURAL SITE PLAN
SCALE: 1/8" = 1'-0"

FIVE DEGREES DESIGN
3651 NORTH 100 EAST, STE 225
PROVO, UTAH 84604
801.960.9381
architect@fivedegreesdesign.com

DATE:	9 SEPTEMBER 2022
PROJECT #:	20-028
DRAWN BY:	MRF
CHECKED BY:	BCH

REVISIONS
6 ADDENDUM #1 7/1/22

PROJECT

COST U LESS RETAIL

PERMIT SET

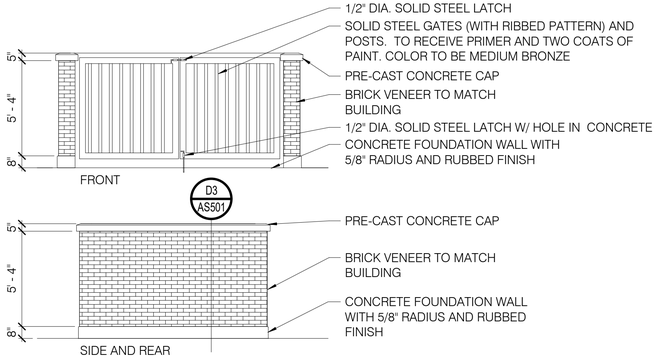
ADDRESS:
64 NORTH 900 WEST
AMERICAN FORK, UT 84003

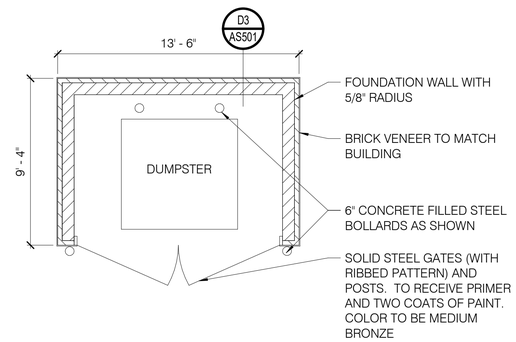
ARCHITECTURAL

ARCHITECTURAL SITE PLAN

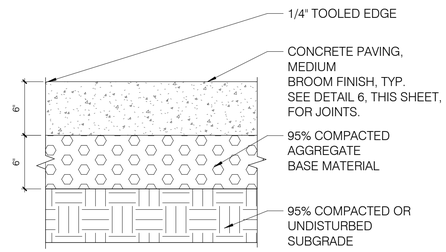
AS101

1/4/2023 1:01:08 PM Y:\5D Projects\2020\20-028 Carpet Diem Cost U Less\03 Drawings\02 Revit\Carpet Diem V15.rvt

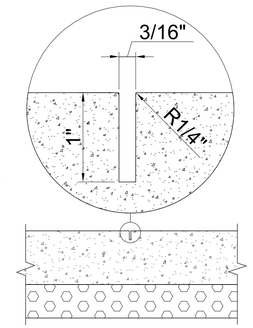




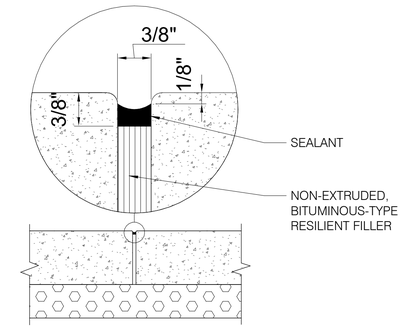
B1 AS501 *DUMPSTER ENCLOSURE PLAN*
SCALE: 1/4" = 1'-0"



CONCRETE PAVEMENT



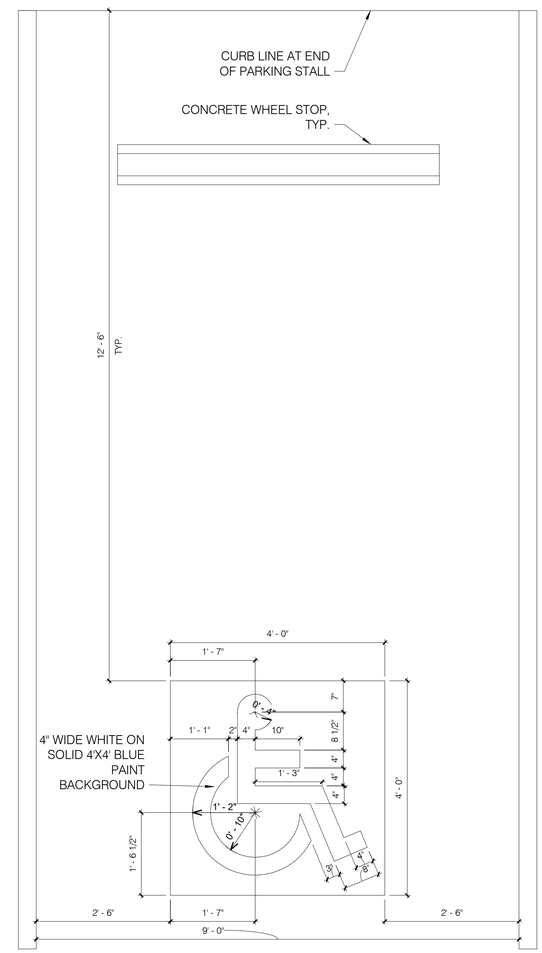
TOOLED JOINT W/ ENLARGED DETAIL



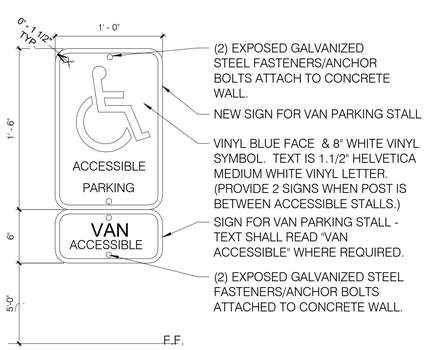
EXPANSION JOINT W/ ENLARGED DETAIL

B3 AS501 *CEMENT CONCRETE PAVEMENT - DETAILS*
SCALE: 1 1/2" = 1'-0"

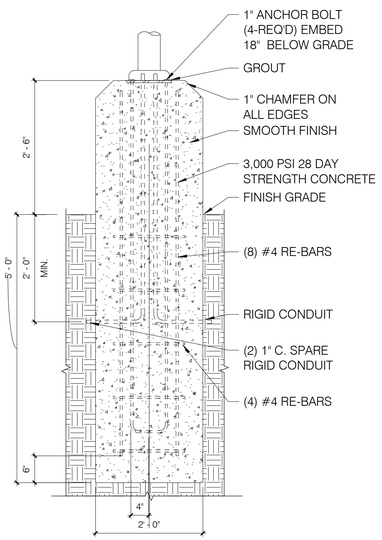
These elevations are inconsistent with the dumpster enclosures that you show on your plans. Please provide an elevation plan consistent with what you show on the rest of the plan set. City standard can be found in Section 17.5.121 Figure B.



D4 AS501 *UNIVERSAL SYMBOL - FOR PARKING STALLS*
SCALE: 3/4" = 1'-0"

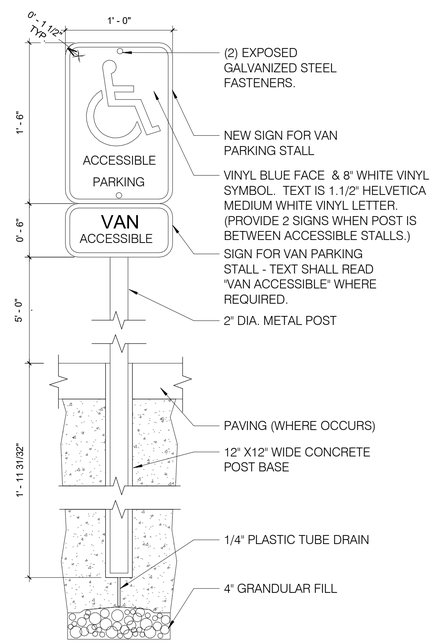


D1 AS501 *ACCESSIBLE PARKING SIGN*
SCALE: 1 1/2" = 1'-0"



NOTE:
1. BOND GROUND CONDUCTOR TO POLE.
2. PLUG CONDUIT TO PREVENT WATER INFILTRATION.

D2 AS501 *POLE BASE DETAIL - 2*
SCALE: 3/4" = 1'-0"



D3 AS501 *ACCESSIBLE PARKING SIGN*
SCALE: 1 1/2" = 1'-0"

FIVE DEGREES DESIGN
1457 EAST 840 NORTH
OREM, UTAH 84097
801.850.4583
chris@fivedegreesdesign.com

DATE: 9 SEPTEMBER 2022
PROJECT #: 20-028
DRAWN BY: RDW
CHECKED BY: BCH

REVISIONS

STATE OF UTAH CHRISTOPHER B. HANSEN 9846051 02/21/2019 LICENSED ARCHITECT

PROJECT

COST U LESS RETAIL

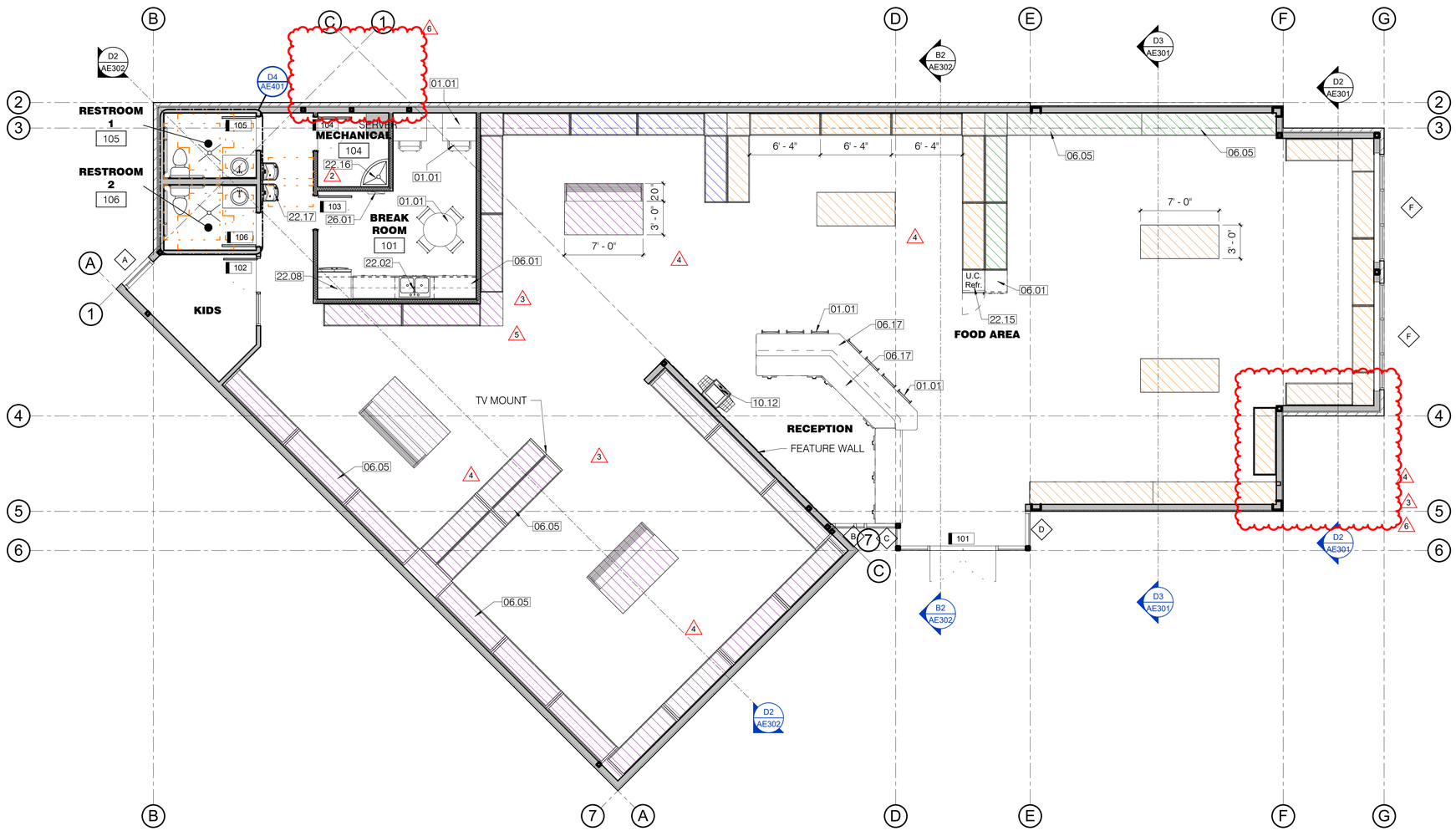
ADDRESS:
64 NORTH 900 WEST
AMERICAN FORK, UT 84003

ARCHITECTURAL

TYPICAL ARCHITECTURAL SITE DETAILS

AS501

10/20/2022 8:46:06 AM Y:\5D Projects\2020\20-028 Carpet Diem Cost U Less\03 Drawings\02 Revit\Carpet Diem V13.rvt



D1 AE101 MAIN LEVEL FLOOR PLAN
SCALE: 3/16" = 1'-0"

KEYNOTES

01.01	OWNER FURNISHED FURNITURE.
06.01	GRANITE COUNTER TOP.
06.05	MILLWORK, VERIFY SPECIES AND STAIN/PAINT WITH OWNER. COORDINATE FINAL DESIGN WITH OWNER.
06.17	DAL TILE MERCER GRAY VELVET NQ52 SOLID SURFACE COUNTERTOP.
10.12	OWNER PROVIDED PRINTER.
22.02	ADA COMPLIANT SINK.
22.08	FRENCH DOOR REFRIGERATOR, VERIFY MODEL WITH OWNER.
22.15	UNDERCOUNTER REFRIGERATOR, VERIFY MODEL WITH OWNER.
22.16	SERVICE SINK.
22.17	COMBO HI/LOW DRINKING FOUNTAIN.
26.01	ELECTRICAL PANEL.

COLOR LEGEND

- HARD SURFACE DISPLAY
- TILE
- CARPET
- STOCKWALL

GENERAL NOTES

A. GENERAL CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS PRIOR TO CONSTRUCTION. REPORT ANY SIGNIFICANT DISCREPANCIES TO THE ARCHITECT.
B. COORDINATE INSTALLATIONS OF ALL "AFTER CONTRACT" ASSEMBLIES WITH OWNER PRIOR TO CONSTRUCTION OF ADJOINING OR RELATED STRUCTURES.
C. PROVIDE 18" MINIMUM CLEAR FLOOR SPACE AT PULL SIDE OF ALL DOORS. PROVIDE 12" MINIMUM CLEAR FLOOR SPACE AT PUSH SIDE OF ALL DOORS.
D. DIMENSIONS ARE TO FACE OF STUD TO FACE OF STUD.
E. ALL COLORS SELECTIONS AND FINISH MATERIALS AND STYLES SHALL BE COORDINATED WITH OWNER.
F. LOCATE DOOR JAMBS 4" FROM WALLS U.N.O.
G. SEE SHEET AE151 FOR REFLECTED CEILING PLAN.
H. SEE SHEET AE171 FOR FINISH INFORMATION.
I. SEE AE601 FOR DOOR AND WINDOW INFORMATION.
J. GENERAL CONTRACTOR SHALL REVIEW AND APPROVE ALL APPLIANCES WITH OWNER PRIOR TO PURCHASING EQUIPMENT AND FABRICATING MILLWORK.
K. SEE GI002 FOR WALL TYPES.
L. PROVIDE BACKING FOR WALL MOUNTED ITEMS AND EQUIPMENT.
M. DO NOT SCALE DRAWINGS.

FIVE DEGREES DESIGN
3651 NORTH 100 EAST, STE 225
PROVO, UTAH 84604
801.960.9381
architect@fivedegreesdesign.com

DATE:	9 SEPTEMBER 2022
PROJECT #:	20-028
DRAWN BY:	MRF
CHECKED BY:	BCH

REVISIONS

2	RFI #2	07/06/21
3	OWNER CHANGES	09/13/21
4	OWNER CHANGES	10/26/21
5	CITY REVIEW 1	01/24/22
6	ADDENDUM #1	7/1/22

PROJECT

COST U LESS RETAIL

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ADDRESS:
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ARCHITECTURAL

MAIN LEVEL FLOOR PLAN

AE101

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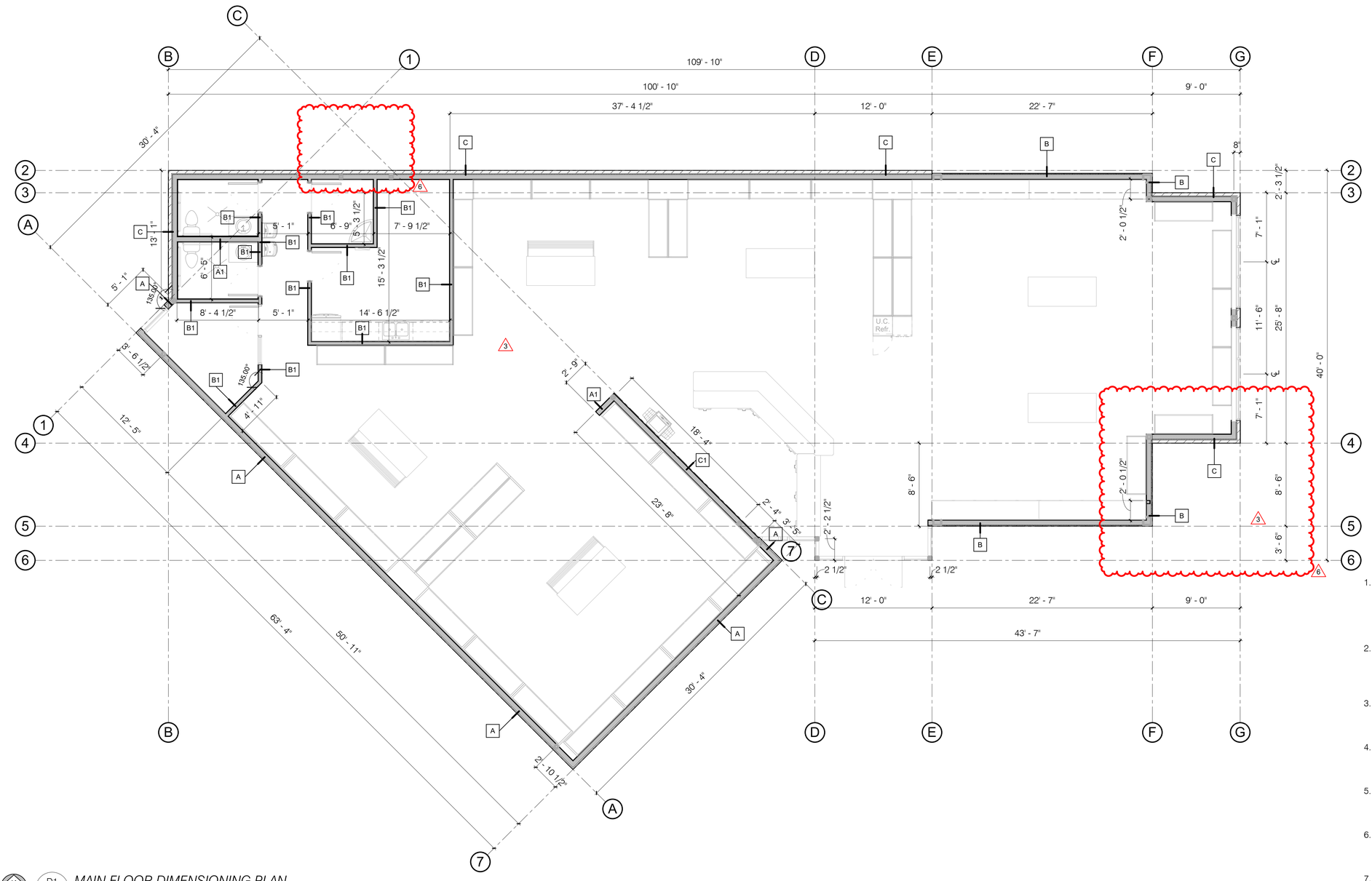

D1
AE131

MAIN FLOOR DIMENSIONING PLAN

SCALE: 3/16" = 1'-0"

DIMENSION NOTES

1. ALL PLAN DIMENSIONS, UNLESS OTHERWISE NOTED, ARE TO:
   A. COLUMN GRID ON CENTERLINES.
   B. THE OUTER FACE OF CONCRETE OR MASONRY.
   C. THE OUTER FACE OF WALL STUDS.
2. DOOR LOCATIONS NOT DIMENSIONED ARE:
   A. JAMB FACE 4" FROM FACE OF STUD.
   B. CENTERLINE OF DOOR ON CENTERLINE OF ROOM OR CORRIDOR.
3. NOTED DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALE DIMENSIONS; DETAILS OVER SMALLER SCALE DRAWINGS.
4. "FLOOR LINE" REFERS TO TOP OF CONCRETE SLABS. FOR DEPRESSED FLOORS AND CURBS, SEE STRUCTURAL DRAWINGS.
5. VERIFY ALL ROUGH-IN, CONCRETE PAD, OR PLATFORM DIMENSIONS FOR EQUIPMENT PROVIDED IN THIS PROJECT, OR BY OTHERS.
6. FINISHED FLOOR ELEVATIONS ARE TO TOP OF CONCRETE OR GYPCRETE, UNLESS NOTED OTHERWISE.
7. CEILING HEIGHT DIMENSIONS ARE TO FINISHED SURFACES, UNLESS NOTED OTHERWISE.

FIVE DEGREES DESIGN
3651 NORTH 100 EAST, STE 225
PROVO, UTAH 84604
801.960.9381
architect@fivedegreesdesign.com

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PROJECT #:	20-028
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CHECKED BY:	BCH

REVISIONS

3	OWNER CHANGES	09/13/21
6	ADDENDUM #1	7/1/22

PROJECT

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ARCHITECTURAL

MAIN LEVEL DIMENSIONING PLAN

AE131

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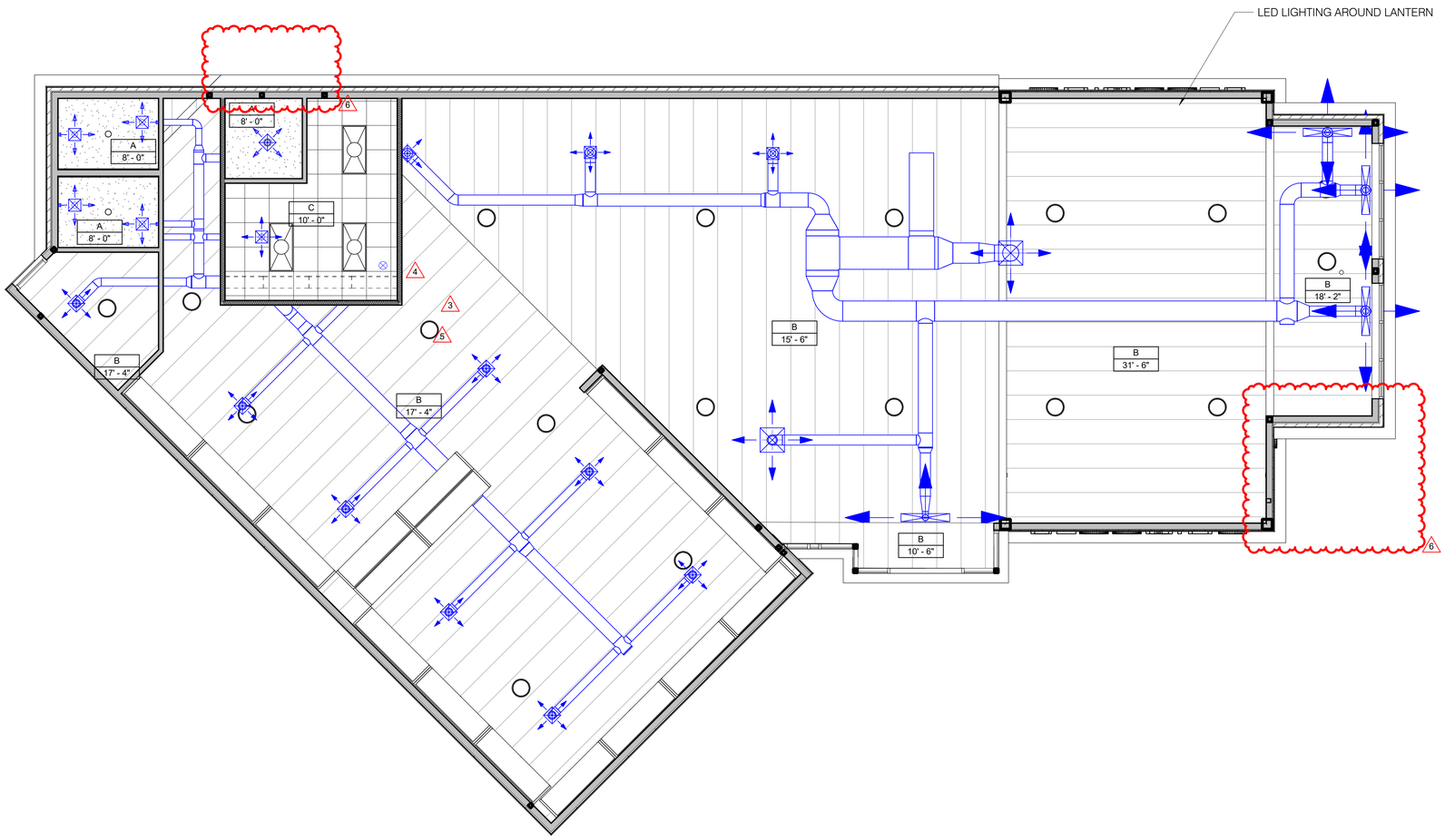

D1
AE151
MAIN LEVEL RCP
SCALE: 3/16" = 1'-0"

CEILING LEGEND

A		PAINTED 5/8" TYPE 'X' GYPSUM CEILING BOARD. SMOOTH FINISH.
B		PAINTED EXPOSED STRUCTURE, 24" O.C.
B		2X2 ACT

ELECTRICAL SYMBOLS LEGEND

⊘	RECESSED CAN LIGHT FIXTURE
○	HIGH BAY LIGHT FIXTURE

FIVE DEGREES DESIGN
3651 NORTH 100 EAST, STE 225
PROVO, UTAH 84604
801.960.9381
architect@fivedegreesdesign.com

DATE:	9 SEPTEMBER 2022
PROJECT #:	20-028
DRAWN BY:	MRF
CHECKED BY:	BCH

REVISIONS

3	OWNER CHANGES	09/13/21
4	OWNER CHANGES	10/26/21
5	CITY REVIEW 1	01/24/22
6	ADDENDUM #1	7/1/22

PROJECT

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ADDRESS:
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AMERICAN FORK, UT 84003

ARCHITECTURAL

MAIN LEVEL REFLECTED CEILING PLAN

AE151

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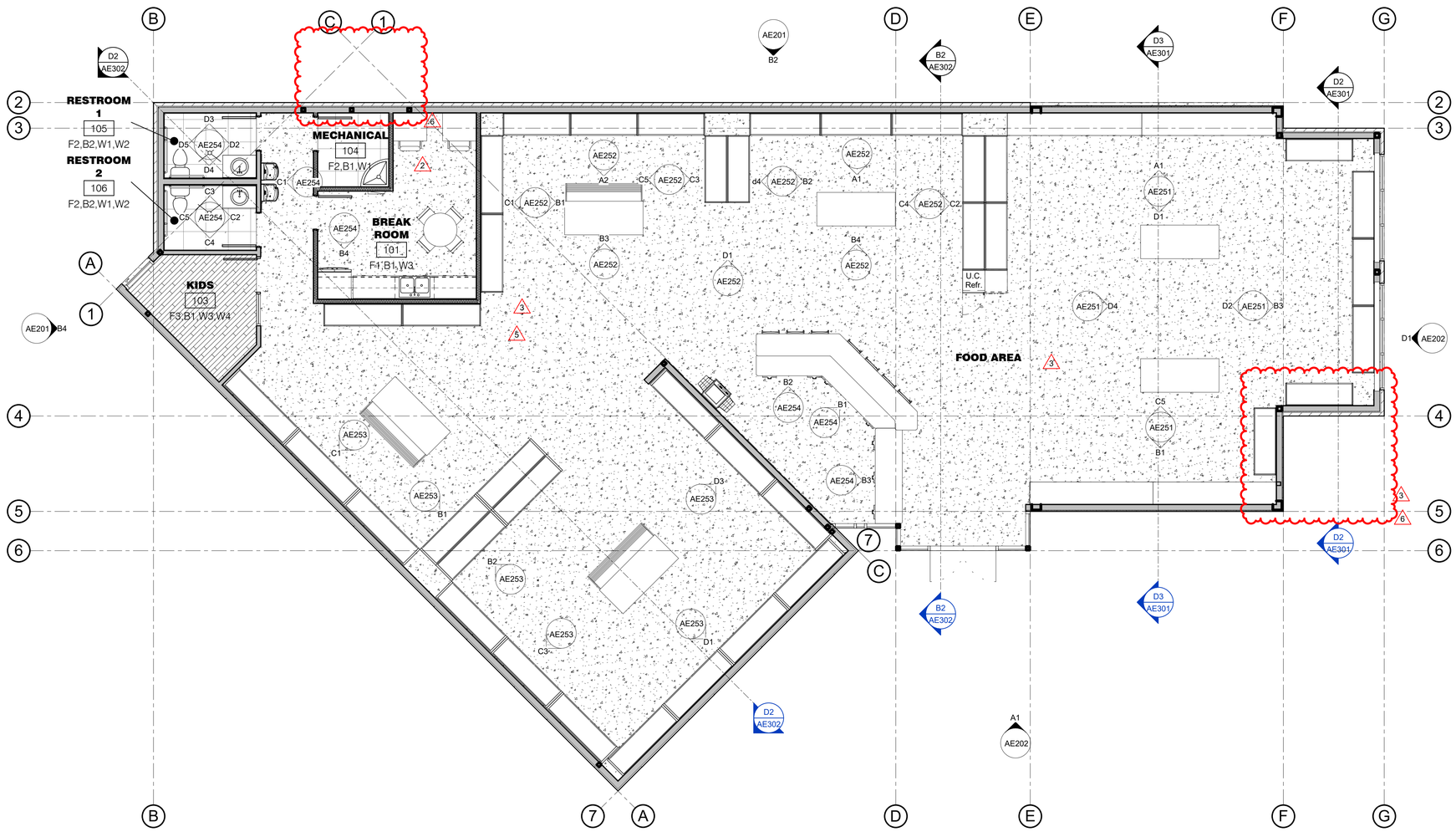

D1 AE171 MAIN LEVEL FINISH PLAN
SCALE: 3/16" = 1'-0"

FLOOR FINISH LEGEND

F1	SEALED CONCRETE SLAB
F2	24" X 24" DAL TILE ELITE GRAY - HM05
F3	CORETEC RAVENSWOOD OAK 2091 A - VV488-2091A

BASE

B1 6" WOOD BASE, PAINTED WHITE
B2 6" PORCELAIN TILE BASE
B3 NO BASE

WALL

W1 PAINTED GYPSUM WALL BOARD, SHERWIN WILLIAMS SW 7649
W2 24" X 24" DAL TILE - HM05
W3 MDC VERTEX PALEST SILVER WALLPAPER OVER GYPSUM WALL BOARD - BBVT07
W4 CUSTOM BLEND OF 3 TILES FROM MODERN TILE. VERIFY WITH OWNER.

CEILING

SEE SHEET AE151 FOR CEILING FINISHES

FIVE DEGREES DESIGN
3651 NORTH 100 EAST, STE 225
PROVO, UTAH 84604
801.960.9381
architect@fivedegreesdesign.com

DATE: 9 SEPTEMBER 2022
PROJECT #: 20-028
DRAWN BY: MRF
CHECKED BY: BCH

REVISIONS

2 RFI #2 07/06/21
3 OWNER CHANGES 09/13/21
5 CITY REVIEW 1 01/24/22
6 ADDENDUM #1 7/1/22

PROJECT

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64 NORTH 900 WEST
AMERICAN FORK, UT 84003

ARCHITECTURAL

MAIN LEVEL FINISH PLAN

AE171

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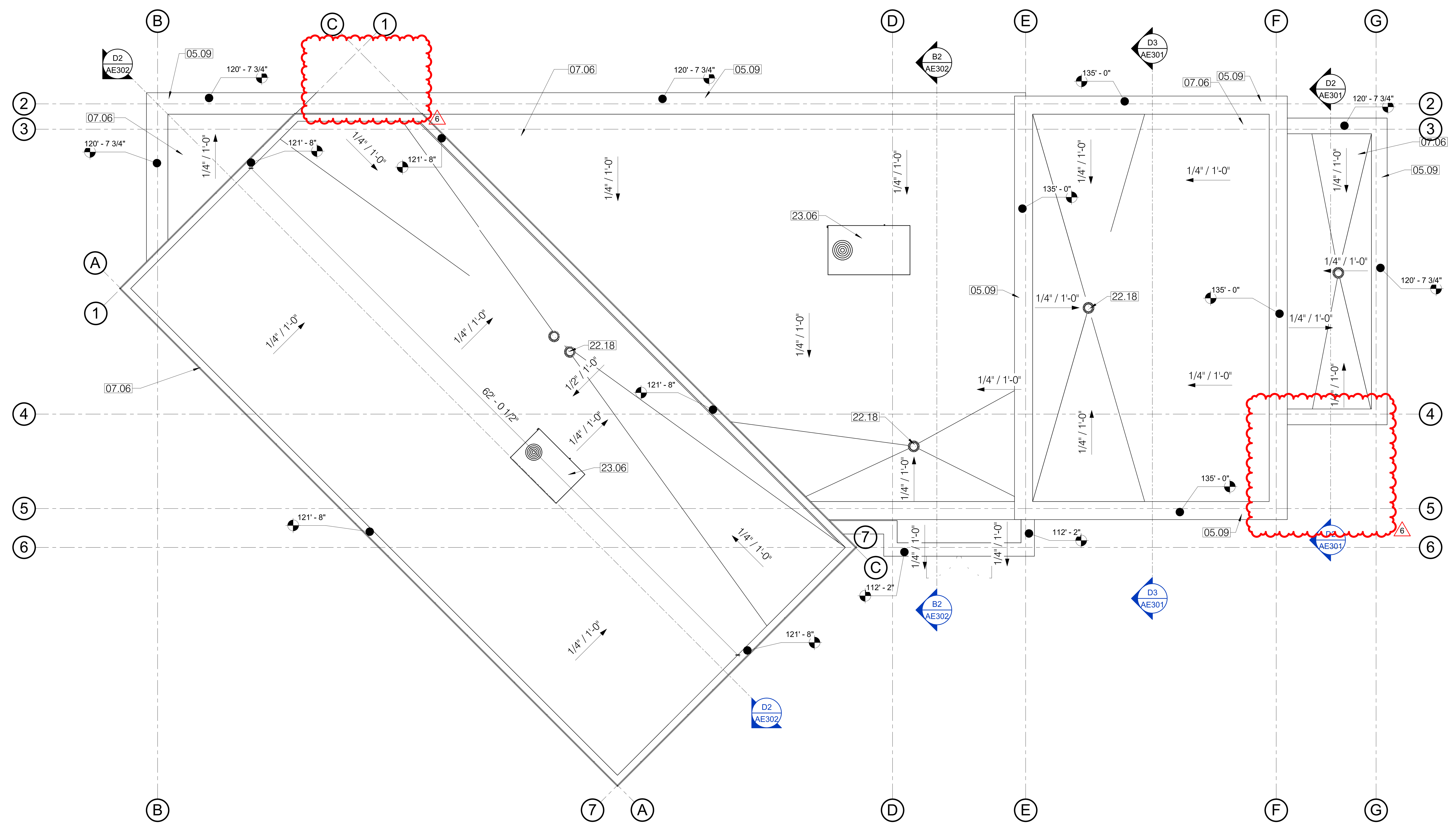
KEYNOTES

05.09 PRE-FINISHED METAL CAP.

07.06 60 MIL TPO ROOF MEMBRANE, WHITE, OVER R-25 POLYISOCYANURATE INSULATION, OVER PROTECTION BOARD, OVER ROOF SHEATHING. FULLY ADHERED TO ALL VERTICAL SURFACES AND UNDER METAL CAP.

22.18 ROOF DRAIN.

1 23.06 MECHANICAL ROOF TOP UNIT. SEE MECHANICAL DRAWINGS.



D1 AE191 ROOF DRAINAGE PLAN

SCALE: 3/16" = 1'-0"

GENERAL NOTES

A. GENERAL CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS PRIOR TO CONSTRUCTION. REPORT ANY SIGNIFICANT DISCREPANCIES TO THE ARCHITECT.

B. COORDINATE INSTALLATIONS OF ALL "AFTER CONTRACT" ASSEMBLIES WITH OWNER PRIOR TO CONSTRUCTION OF ADJOINING OR RELATED STRUCTURES.

C. ROOFING TO BE CLASS 'C' MINIMUM.

D. MINIMUM ROOF SLOPE TO BE 1/4" PER FOOT.

E. TIE PRIMARY ROOF DRAINS INTO SITE STORM DRAINAGE SYSTEM. TIE SECONDARY ROOF DRAINS THROUGH BRASS SCUPPER.

F. ALL MECHANICAL UNITS AND ROOF PENETRATIONS MAY NOT BE SHOWN. REFER TO ENGINEERING SHEETS FOR ALL REQUIRED MECHANICAL UNITS AND ROOF PENETRATIONS. PROVIDE FLASHING, CRICKETS, AND REGLETS AT EACH UNIT. CRICKETS TO SLOPE 1/4" PER FOOT MINIMUM. SEE TYPICAL ROOF DETAILS ON SHEET AE501.

G. SLEEPER INSTALLATION NOT PERMITTED AT MECHANICAL UNITS. PROVIDE FULL MECHANICAL CURB DETAILING.

H. MECHANICAL CURB HEIGHTS TO BE 8" MINIMUM ABOVE NEAREST HORIZONTAL OR SLOPED SURFACE.

I. INSTALL ALL ICE AND WATER SHIELD ON TOP OF METAL DRIP EDGES AT EAVES.

J. PROVIDE METAL FLASHING AND COUNTER FLASHING AS REQUIRED TO PROVIDE WATERPROOF BUILDING. NO PLASTIC FLASHING ALLOWED.

K. SINGLE-PLY ROOFING MEMBRANE TO RUN CONTINUOUSLY OVER TOP OF PARAPET WALL.

L. SEE ENGINEERING SHEETS FOR ADDITIONAL REQUIREMENTS.

M. DO NOT SCALE DRAWINGS.

FIVE DEGREES DESIGN

3651 NORTH 100 EAST, STE 225
PROVO, UTAH 84604
801.960.9381
architect@fivedegreesdesign.com

DATE: 9 SEPTEMBER 2022
PROJECT #: 20-028
DRAWN BY: MRF
CHECKED BY: BCH

REVISIONS
1 RFI #1 06/29/21
6 ADDENDUM #1 7/1/22

PROJECT

COST U LESS RETAIL

PERMIT SET

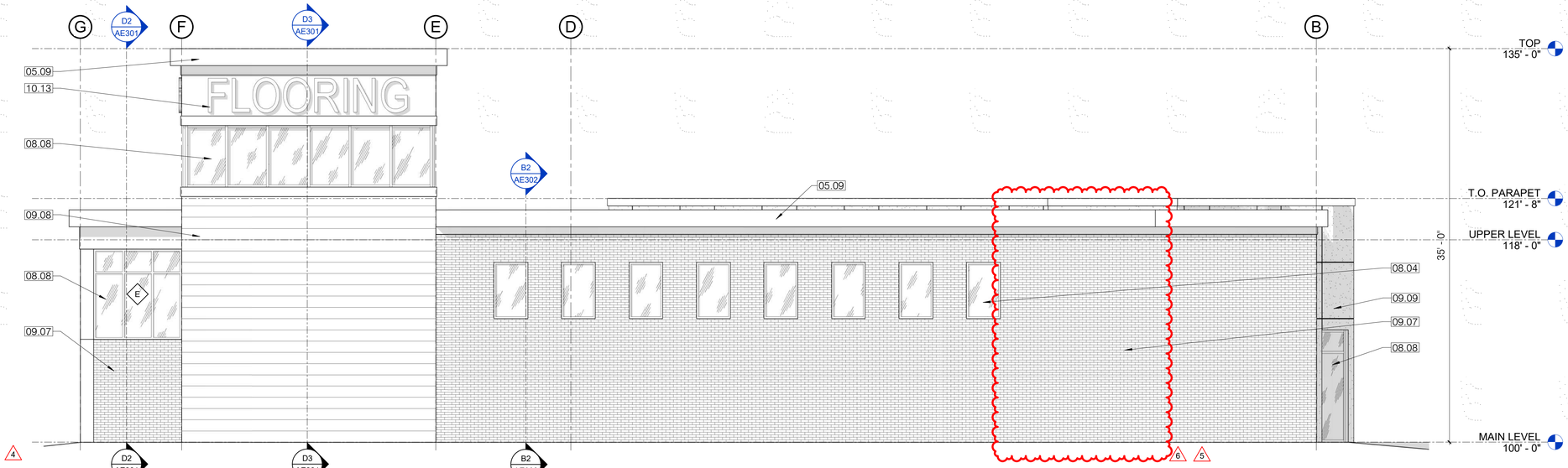
ADDRESS:
64 NORTH 900 WEST
AMERICAN FORK, UT 84003

ARCHITECTURAL

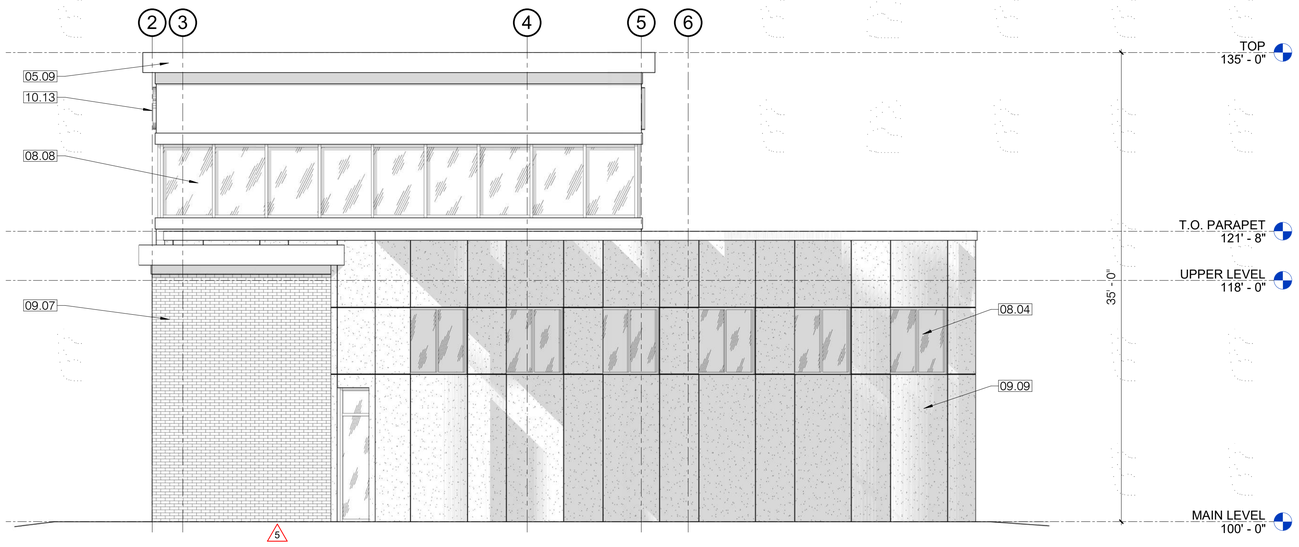
ROOF DRAINAGE PLAN

AE191

10/20/2022 8:45:27 AM Y:\5D Projects\2020\20-028 Carpet Diem Cost U Less\03 Drawings\02 Revit\Carpet Diem V13.rvt



B2 AE201 *NORTH ELEVATION*
SCALE: 3/16" = 1'-0"



B4 AE201 *WEST ELEVATION*
SCALE: 3/16" = 1'-0"

KEYNOTES

05.09 PRE-FINISHED METAL CAP.
08.04 LUXURY VINYL WINDOW, COLOR AND STYLE SELECTED BY OWNER.
08.08 PRE-FINISHED ALUMINUM WINDOW SYSTEM. SEE WINDOW TYPES.
09.07 FULL SIZE BRICK VENEER. SEE WALL TYPES.
09.08 WOOD VENEER SIDING. SEE WALL TYPES.
09.09 HARD COAT STUCCO SYSTEM. SEE WALL TYPES. SHERWIN WILLIAMS SW 7066.
10.13 TENANT SIGNAGE. PROVIDE POWER.
23.06 MECHANICAL ROOF TOP UNIT. SEE MECHANICAL DRAWINGS. 1

GENERAL NOTES

A. GENERAL CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS PRIOR TO CONSTRUCTION. REPORT ANY SIGNIFICANT DISCREPANCIES TO THE ARCHITECT.
B. COORDINATE INSTALLATIONS OF ALL "AFTER CONTRACT" ASSEMBLIES WITH OWNER PRIOR TO CONSTRUCTION OF ADJOINING OR RELATED STRUCTURES.
C. ROOFING TO BE CLASS 'C' MINIMUM.
D. TIE PRIMARY ROOF DRAINS INTO SITE STORM DRAINAGE SYSTEM. TIE SECONDARY ROOF DRAINS THROUGH BRASS SCUPPER.
E. EXPOSED CONCRETE FOUNDATION WALLS TO RECEIVE RUBBED FINISH. ALL ROOF PENETRATIONS MAY NOT BE SHOWN. REFER TO ENGINEERING SHEETS FOR ALL REQUIRED PENETRATIONS AND DETAILING.
F. SEE MECHANICAL SHEETS FOR BATHROOM EXHAUST, CLOTHES DRYER VENTS, AND OTHER PENETRATIONS IN EXTERIOR WALLS AND ROOF.
G. SEE PLUMBING SHEETS FOR GAS METER AND SECONDARY ROOF DRAINAGE BRASS SCUPPER LOCATIONS ALONG EXTERIOR WALLS.
H. SEE ELECTRICAL SHEETS FOR ELECTRICAL METER, GEAR, AND EXTERIOR LIGHT FIXTURE LOCATIONS.
I. SEE AE601 FOR DOOR AND WINDOW INFORMATION.
J. PROVIDE PRE-FINISHED CUT ALUMINUM NUMBERS AND LETTERS ON THE FRONT EXTERIOR OF THE BUILDING INDICATING THE BUILDING ADDRESS ASSIGNED BY THE CITY IN ACCORDANCE WITH CURRENT CITY ORDINANCE. COLOR OF NUMBERS AND LETTERS TO CONTRAST SIGNIFICANTLY WITH BACKGROUND COLOR OF EXTERIOR WALL. THE ADDRESS MUST BE PERMANENTLY FASTENED TO THE EXTERIOR OF THE BUILDING PRIOR TO OCCUPANCY.
K. THE OWNER IS RESPONSIBLE TO OBTAIN A SEPARATE PERMIT FOR ANY EXTERIOR SIGNS IN ACCORDANCE WITH THE CURRENT CITY SIGN ORDINANCE.
L. PER DCMC SECTION 9-22-040(I) WINDOWS NEXT TO PEDESTRIANT WALKWAYS SHALL BE TRANSPARENT.
M. PER DCMC SECTION 9-22-040(D) ROOF MOUNTED MECHANICAL EQUIPMENT SHALL BE SCREENED.
N. DO NOT SCALE DRAWINGS.

FIVE DEGREES DESIGN
3651 NORTH 100 EAST, STE 225
PROVO, UTAH 84604
801.960.9381
architect@fivedegreesdesign.com

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DRAWN BY: MRF
CHECKED BY: BCH

REVISIONS
1 RFI #1 06/29/21
4 OWNER CHANGES 10/26/21
5 CITY REVIEW 1 01/24/22
6 ADDENDUM #1 7/1/22

PROJECT

COST U LESS RETAIL

PERMIT SET

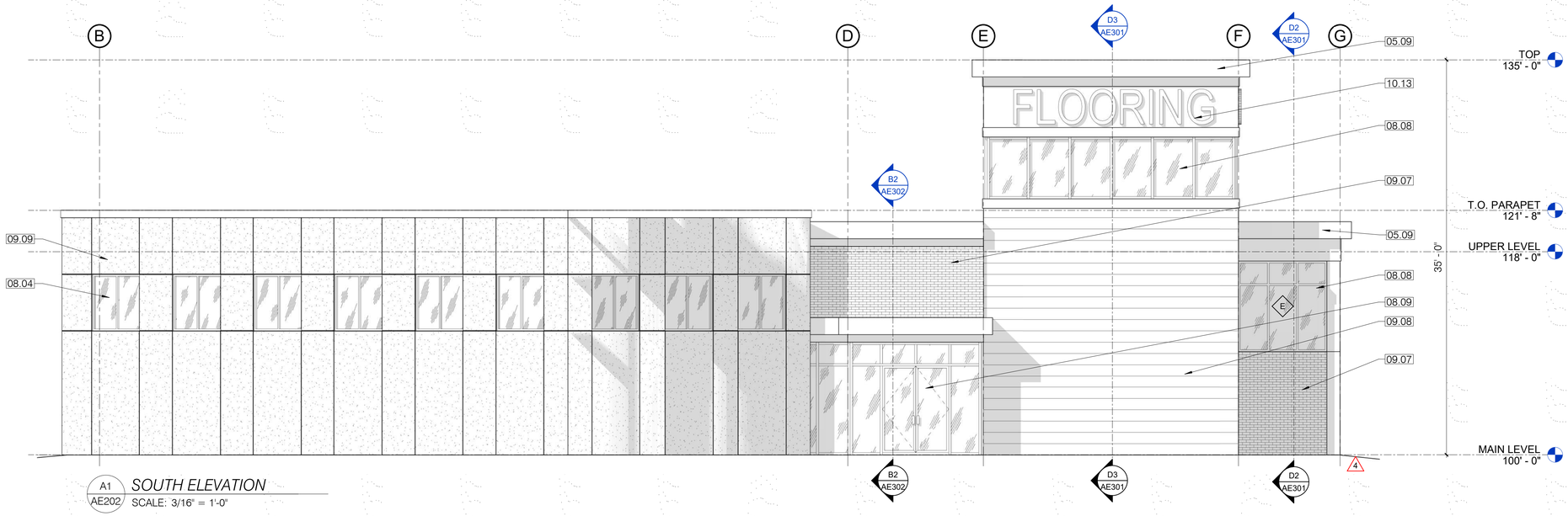
ADDRESS:
64 NORTH 900 WEST
AMERICAN FORK, UT 84003

ARCHITECTURAL

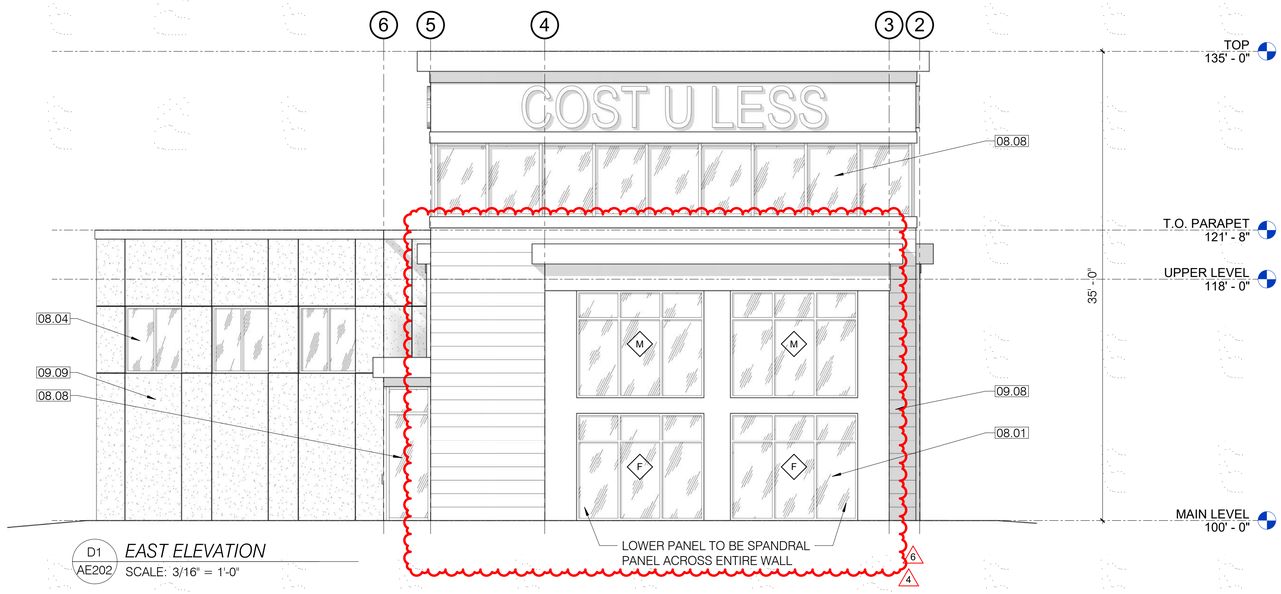
EXTERIOR ELEVATIONS

AE201

10/20/2022 8:45:34 AM Y:\5D Projects\2020\20-028 Carpet Diem Cost U Less\03 Drawings\02 Revit\Carpet Diem V13.rvt



A1 AE202 *SOUTH ELEVATION*
SCALE: 3/16" = 1'-0"



D1 AE202 *EAST ELEVATION*
SCALE: 3/16" = 1'-0"

KEYNOTES

05.09 PRE-FINISHED METAL CAP.
08.01 STAIN-GRADE WOOD DOOR PANEL.
08.04 LUXURY VINYL WINDOW, COLOR AND STYLE SELECTED BY OWNER.
08.08 PRE-FINISHED ALUMINUM WINDOW SYSTEM. SEE WINDOW TYPES.
08.09 PRE-FINISHED ALUMINUM ENTRY SYSTEM. SEE DOOR TYPES.
09.07 FULL SIZE BRICK VENEER. SEE WALL TYPES.
09.08 WOOD VENEER SIDING. SEE WALL TYPES.
09.09 HARD COAT STUCCO SYSTEM. SEE WALL TYPES. SHERWIN WILLIAMS SW 7066.
10.13 TENANT SIGNAGE. PROVIDE POWER.
23.06 MECHANICAL ROOF TOP UNIT. SEE MECHANICAL DRAWINGS. 1

GENERAL NOTES

A. GENERAL CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS PRIOR TO CONSTRUCTION. REPORT ANY SIGNIFICANT DISCREPANCIES TO THE ARCHITECT.
B. COORDINATE INSTALLATIONS OF ALL "AFTER CONTRACT" ASSEMBLIES WITH OWNER PRIOR TO CONSTRUCTION OF ADJOINING OR RELATED STRUCTURES.
C. ROOFING TO BE CLASS 'C' MINIMUM.
D. TIE PRIMARY ROOF DRAINS INTO SITE STORM DRAINAGE SYSTEM. TIE SECONDARY ROOF DRAINS THROUGH BRASS SCUPPER.
E. EXPOSED CONCRETE FOUNDATION WALLS TO RECEIVE RUBBED FINISH. ALL ROOF PENETRATIONS MAY NOT BE SHOWN. REFER TO ENGINEERING SHEETS FOR ALL REQUIRED PENETRATIONS AND DETAILING.
F. SEE MECHANICAL SHEETS FOR BATHROOM EXHAUST, CLOTHES DRYER VENTS, AND OTHER PENETRATIONS IN EXTERIOR WALLS AND ROOF.
G. SEE PLUMBING SHEETS FOR GAS METER AND SECONDARY ROOF DRAINAGE BRASS SCUPPER LOCATIONS ALONG EXTERIOR WALLS.
H. SEE ELECTRICAL SHEETS FOR ELECTRICAL METER, GEAR, AND EXTERIOR LIGHT FIXTURE LOCATIONS.
I. SEE AE601 FOR DOOR AND WINDOW INFORMATION.
J. PROVIDE PRE-FINISHED CUT ALUMINUM NUMBERS AND LETTERS ON THE FRONT EXTERIOR OF THE BUILDING INDICATING THE BUILDING ADDRESS ASSIGNED BY THE CITY IN ACCORDANCE WITH CURRENT CITY ORDINANCE. COLOR OF NUMBERS AND LETTERS TO CONTRAST SIGNIFICANTLY WITH BACKGROUND COLOR OF EXTERIOR WALL. THE ADDRESS MUST BE PERMANENTLY FASTENED TO THE EXTERIOR OF THE BUILDING PRIOR TO OCCUPANCY.
K. THE OWNER IS RESPONSIBLE TO OBTAIN A SEPARATE PERMIT FOR ANY EXTERIOR SIGNS IN ACCORDANCE WITH THE CURRENT CITY SIGN ORDINANCE.
L. PER DCMC SECTION 9-22-040(I) WINDOWS NEXT TO PEDESTRIANT WALKWAYS SHALL BE TRANSPARENT.
M. PER DCMC SECTION 9-22-040(D) ROOF MOUNTED MECHANICAL EQUIPMENT SHALL BE SCREENED.
N. DO NOT SCALE DRAWINGS.

FIVE DEGREES DESIGN
3651 NORTH 100 EAST, STE 225
PROVO, UTAH 84604
801.960.9381
architect@fivedegreesdesign.com

DATE:	9 SEPTEMBER 2022
PROJECT #:	20-028
DRAWN BY:	MRF
CHECKED BY:	BCH

REVISIONS

1	RFI #1	06/29/21
4	OWNER CHANGES	10/26/21
6	ADDENDUM #1	7/1/22

PROJECT

COST U LESS RETAIL

PERMIT SET

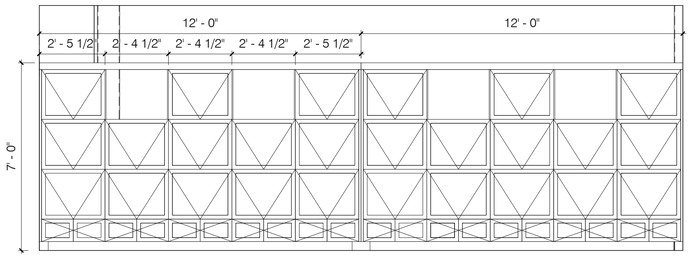
ADDRESS:
64 NORTH 900 WEST
AMERICAN FORK, UT 84003

ARCHITECTURAL

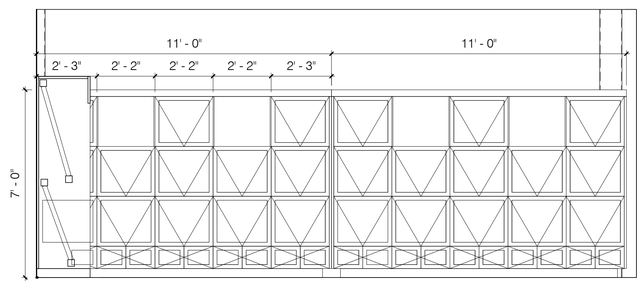
EXTERIOR ELEVATIONS

AE202

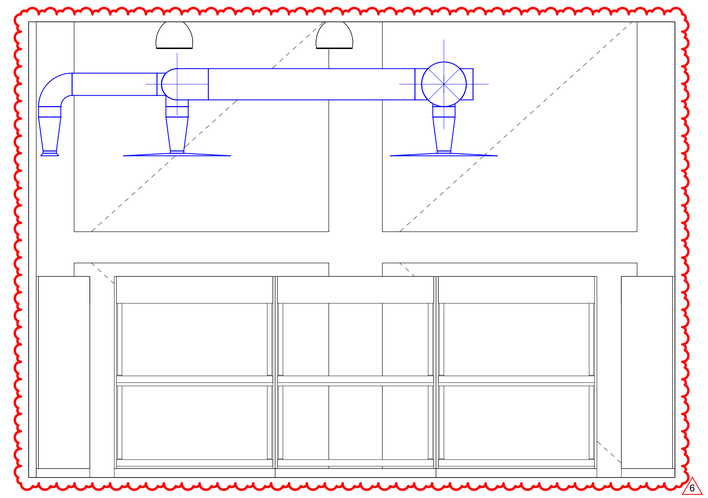
10/20/2022 8:45:41 AM Y:\5D Projects\2020\20-028 Carpet Diem Cost U Less\03 Drawings\02 Revit\Carpet Diem V13.rvt



A1 AE251 *NORTH STOCKWALL ELEVATION*
SCALE: 3/8" = 1'-0"

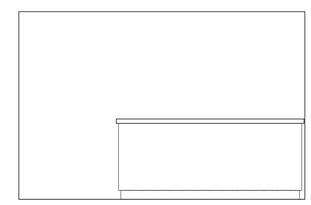


B1 AE251 *SOUTH STOCKWALL ELEVATION*
SCALE: 3/8" = 1'-0"

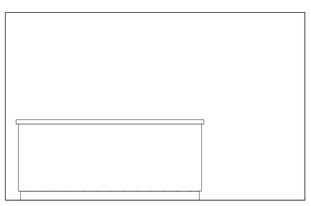


B3 AE251 *EAST STOCKWALL ELEVATION*
SCALE: 3/8" = 1'-0"

KEYNOTES



C5 AE251 *SOUTH STOCKWALL COUNTER ELEVATION*
SCALE: 3/8" = 1'-0"



D1 AE251 *NORTH STOCKWALL COUNTER ELEVATION*
SCALE: 3/8" = 1'-0"

D2 AE251 *EAST STOCKWALL COUNTER ELEVATION*
SCALE: 3/8" = 1'-0"

D4 AE251 *WEST STOCKWALL COUNTER ELEVATION*
SCALE: 3/8" = 1'-0"

FIVE DEGREES DESIGN
3651 NORTH 100 EAST, STE 225
PROVO, UTAH 84604
801.960.9381
architect@fivedegreesdesign.com

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CHECKED BY:	BCH

REVISIONS
6 ADDENDUM #1 7/1/22

PROJECT

COST U LESS RETAIL

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ADDRESS:
64 NORTH 900 WEST
AMERICAN FORK, UT 84003

ARCHITECTURAL

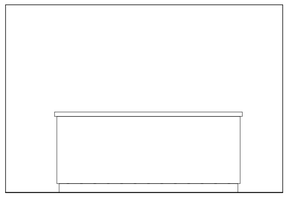
INTERIOR ELEVATIONS

AE251

10/20/2022 8:45:42 AM Y:\5D Projects\2020\20-028 Carpet Diem Cost U Less\03 Drawings\02 Revit\Carpet Diem V13.rvt

KEYNOTES

06.01 GRANITE COUNTER TOP.
22.15 UNDERCOUNTER REFRIGERATOR, VERIFY MODEL WITH OWNER.



A1 AE252 NYLON NORTH COUNTER ELEVATION 1
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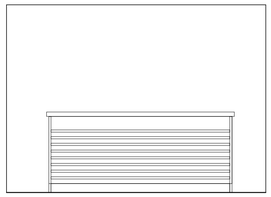

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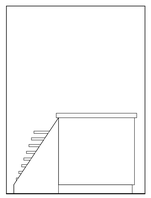

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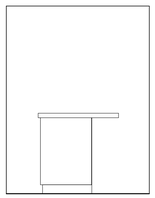

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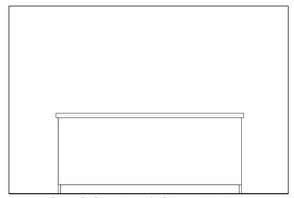

B3 AE252 NYLON SOUTH COUNTER ELEVATION 2
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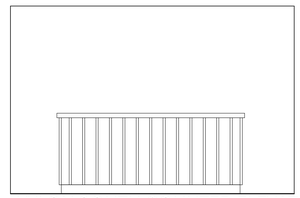

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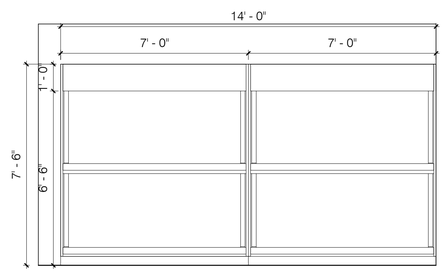

C1 AE252 NYLON WEST ELEVATION 2
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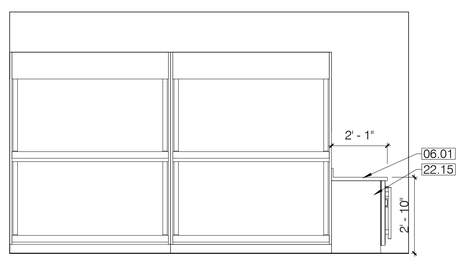

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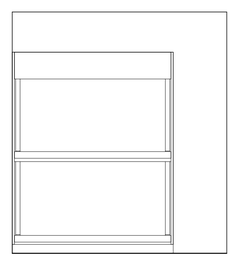

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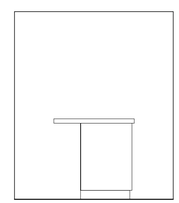

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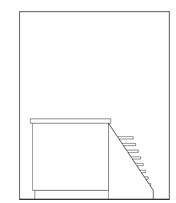

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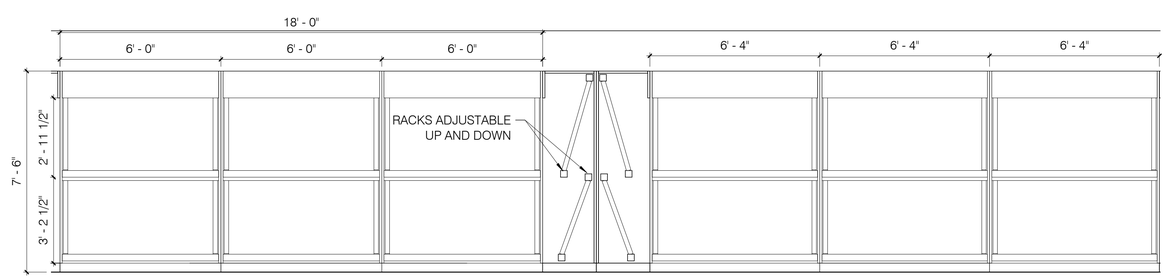
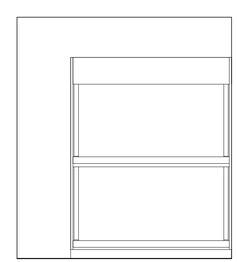


D1 AE252 NYLON NORTH ELEVATION
SCALE: 3/8" = 1'-0"



d4 AE252 NYLON WEST ELEVATION 1
SCALE: 3/8" = 1'-0"

FIVE DEGREES DESIGN
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PROVO, UTAH 84604
801.960.9381
architect@fivedegreesdesign.com

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CHECKED BY:	BCH

REVISIONS

PROJECT

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ARCHITECTURAL

INTERIOR ELEVATIONS

AE252

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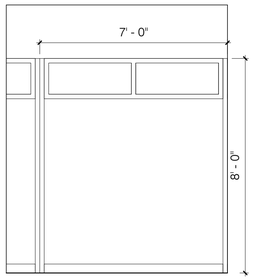
KEYNOTES



B1 AE253 *LVT SOUTHEAST ELEVATION*
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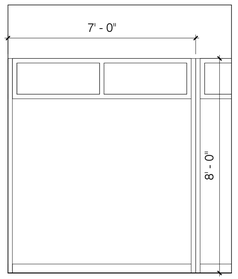
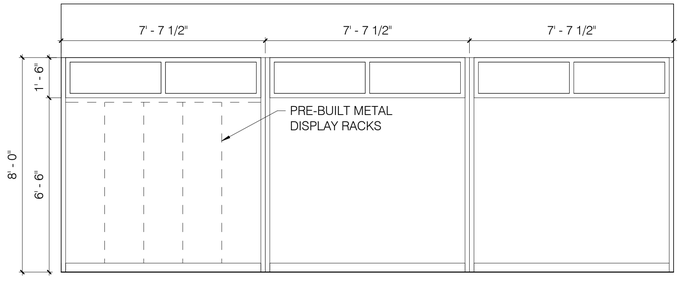


B2 AE253 *HARDWOOD NORTHWEST ELEVATION*
SCALE: 3/8" = 1'-0"



C1 AE253 *LVT SOUTHWEST ELEVATION*
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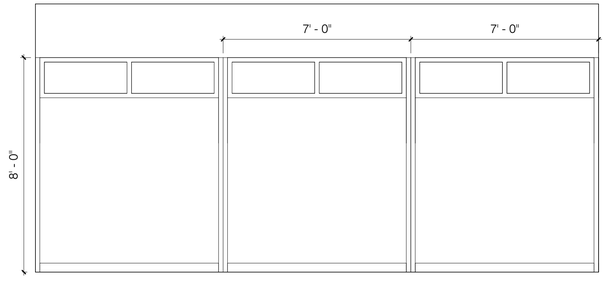

C3 AE253 *HARDWOOD SOUTHWEST ELEVATION*
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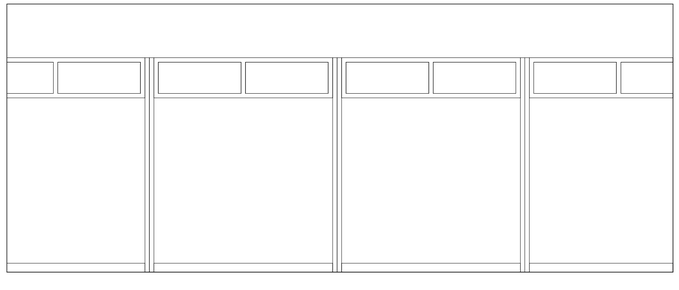
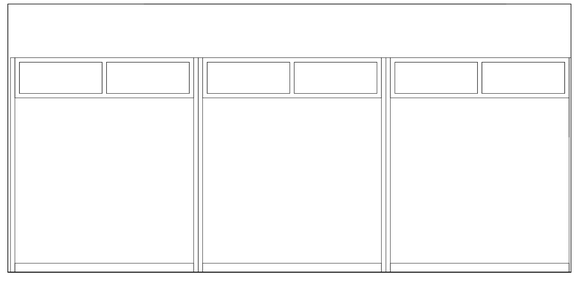


D1 AE253 *TILE SOUTHEAST ELEVATION*
SCALE: 3/8" = 1'-0"



D3 AE253 *TILE NORTHEAST ELEVATION*
SCALE: 3/8" = 1'-0"

FIVE DEGREES DESIGN
3651 NORTH 100 EAST, STE 225
PROVO, UTAH 84604
801.960.9381
architect@fivedegreesdesign.com

DATE:	9 SEPTEMBER 2022
PROJECT #:	20-028
DRAWN BY:	MRF
CHECKED BY:	BCH

REVISIONS

PROJECT

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ARCHITECTURAL

INTERIOR ELEVATIONS

AE253

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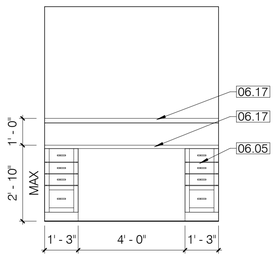

B1 AE254 *RECEPTION NORTHEAST*
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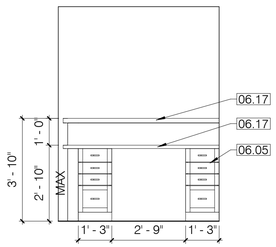

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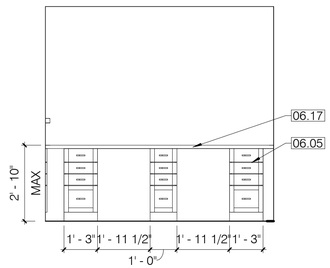

B3 AE254 *RECEPTION WEST*
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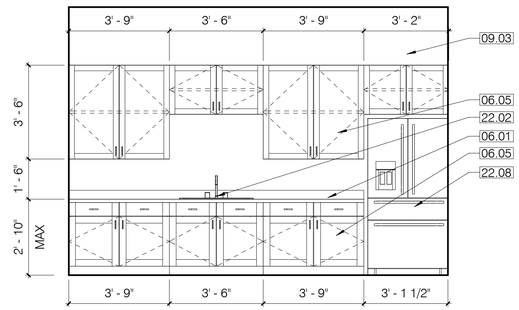
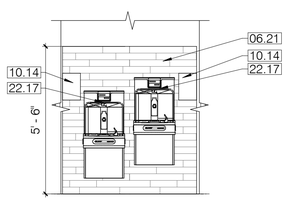


B4 AE254 *BREAKROOM*
SCALE: 3/8" = 1'-0"

5

3



C1 AE254 *DRINKING FOUNTAINS*
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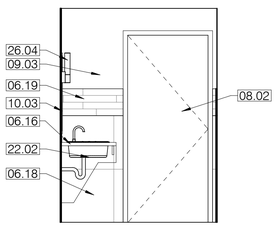
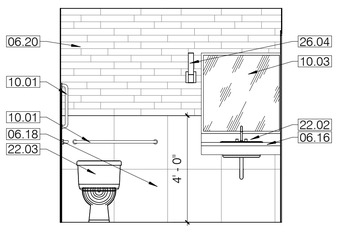
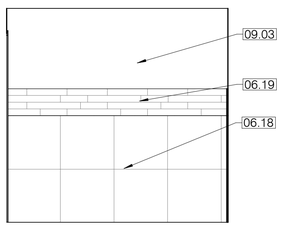


C2 AE254 *RESTROOM 2 EAST ELEVATION*
SCALE: 3/8" = 1'-0"



C3 AE254 *RESTROOM 2 NORTH ELEVATION*
SCALE: 3/8" = 1'-0"



C4 AE254 *RESTROOM 2 SOUTH ELEVATION*
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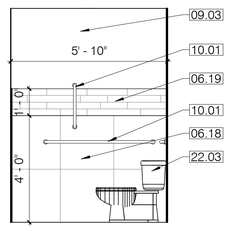
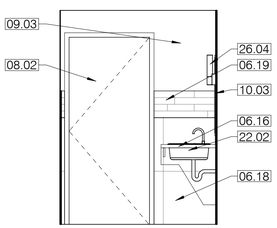


C5 AE254 *RESTROOM 2 WEST ELEVATION*
SCALE: 3/8" = 1'-0"



D2 AE254 *RESTROOM 1 EAST ELEVATION*
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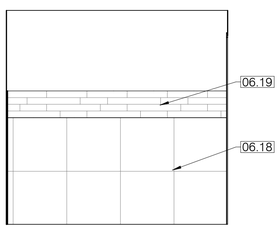

D3 AE254 *RESTROOM 1 NORTH ELEVATION*
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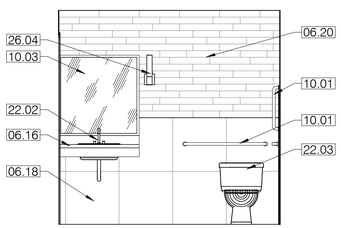

D4 AE254 *RESTROOM 1 SOUTH ELEVATION*
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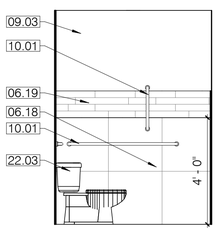

D5 AE254 *RESTROOM 1 WEST ELEVATION*
SCALE: 3/8" = 1'-0"

KEYNOTES

06.01 GRANITE COUNTER TOP.
06.05 MILLWORK, VERIFY SPECIES AND STAIN/PAINT WITH OWNER. COORDINATE FINAL DESIGN WITH OWNER.
06.16 ARIZONA TILE ABSOLUTE WHITE SOLID SURFACE COUNTERTOP.
06.17 DAL TILE MERCER GRAY VELVET NQ52 SOLID SURFACE COUNTERTOP.
06.18 DAL TILE 24" X 24" WALL TILE - HM05. 48" TALL A.F.F.
06.19 DAL TILE 12" TALL TILE ACCENT - MATTE WHITE - RV05.
06.20 DAL TILE ACCENT - MATTE WHITE - RV05.
06.21 DAL TILE GRAPHITE STONE TILE. MIX OF STRIPES, STRIPES TRANSITION, AND LISO XL FLAT PROFILES. VERIFY WITH OWNER.
08.02 PAINT-GRADE WOOD DOOR PANEL.
09.03 PAINTED GYPSUM WALL BOARD. SHERWIN WILLIAMS SW 7649.
10.01 ADA COMPLIANT GRAB BARS. PROVIDE BLOCKING AS REQUIRED.
10.03 SQUARE-EDGE MIRROR, 36" TALL BY LENGTH OF VANITY. MANUFACTURER: MIRROR IMAGE HOME. BLACK NICKEL FINISH.
10.14 ADA RESTROOM SIGN.
22.02 ADA COMPLIANT SINK.
22.03 ADA COMPLIANT TOILET. FLUSH VALVE MOUNTED OPPOSITE OF SIDE WALL.
22.08 FRENCH DOOR REFRIGERATOR, VERIFY MODEL WITH OWNER.
22.17 COMBO HI/LOW DRINKING FOUNTAIN.
26.04 BANDA 13 BATH SCONCE FROM CIRCO LIGHTING - CHROME FINISH - 700BCBND13C-LED930.

FIVE DEGREES DESIGN
3651 NORTH 100 EAST, STE 225
PROVO, UTAH 84604
801.960.9381
architect@fivedegreesdesign.com

DATE:	9 SEPTEMBER 2022
PROJECT #:	20-028
DRAWN BY:	MRF
CHECKED BY:	BCH

REVISIONS
3 OWNER CHANGES 09/13/21
5 CITY REVIEW 1 01/24/22

PROJECT

COST U LESS RETAIL

PERMIT SET

ADDRESS:
64 NORTH 900 WEST
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ARCHITECTURAL

INTERIOR ELEVATIONS

AE254

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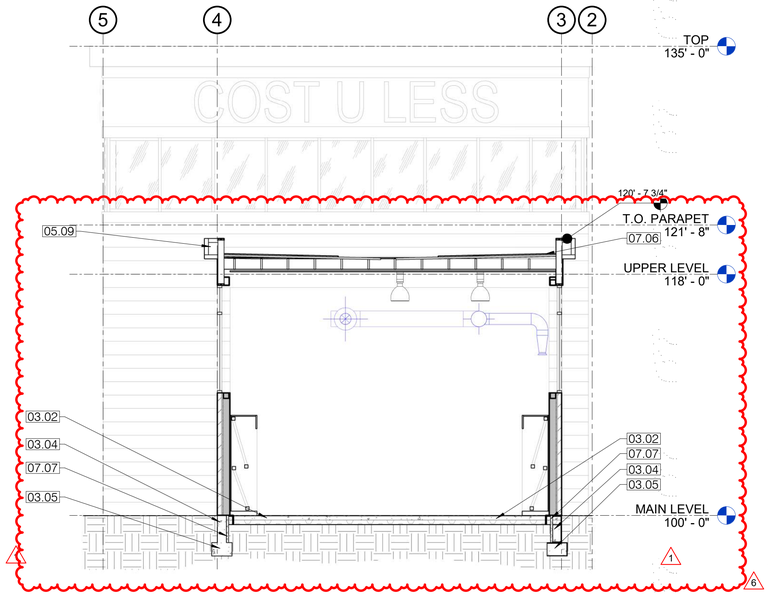
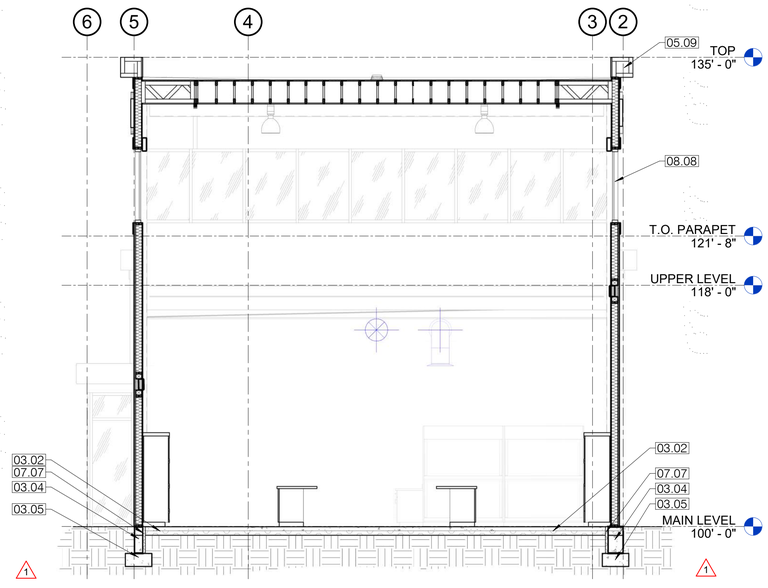


D2 AE301 *BUILDING SECTION 1*

SCALE: 3/16" = 1'-0"



D3 AE301 *BUILDING SECTION 2*

SCALE: 3/16" = 1'-0"

KEYNOTES

03.02 CONCRETE SLAB ON GRADE OVER 4" FREE DRAINING GRAVEL OVER 6 MIL VAPOR RETARDER. SEE STRUCTURAL DRAWINGS FOR SLAB SIZE AND REINFORCING.

03.04 CONCRETE FOUNDATION WALL.

03.05 CONCRETE FOOTING.

05.09 PRE-FINISHED METAL CAP.

07.06 60 MIL TPO ROOF MEMBRANE, WHITE, OVER R-25 POLYISOCYANURATE INSULATION, OVER PROTECTION BOARD, OVER ROOF SHEATHING. FULLY ADHERED TO ALL VERTICAL SURFACES AND UNDER METAL CAP.

07.07 2" RIGID INSULATION.

08.08 PRE-FINISHED ALUMINUM WINDOW SYSTEM. SEE WINDOW TYPES.

FIVE DEGREES DESIGN

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CHECKED BY:	BCH

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1 RFI #1	06/29/21
6 ADDENDUM #1	7/1/22

PROJECT

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ARCHITECTURAL

BUILDING SECTIONS

AE301

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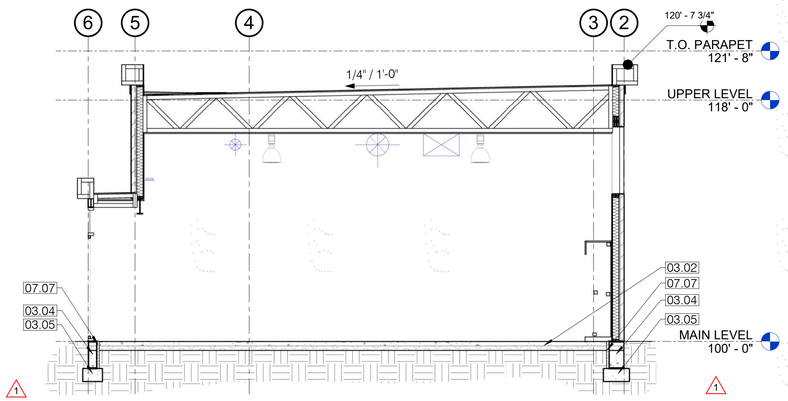
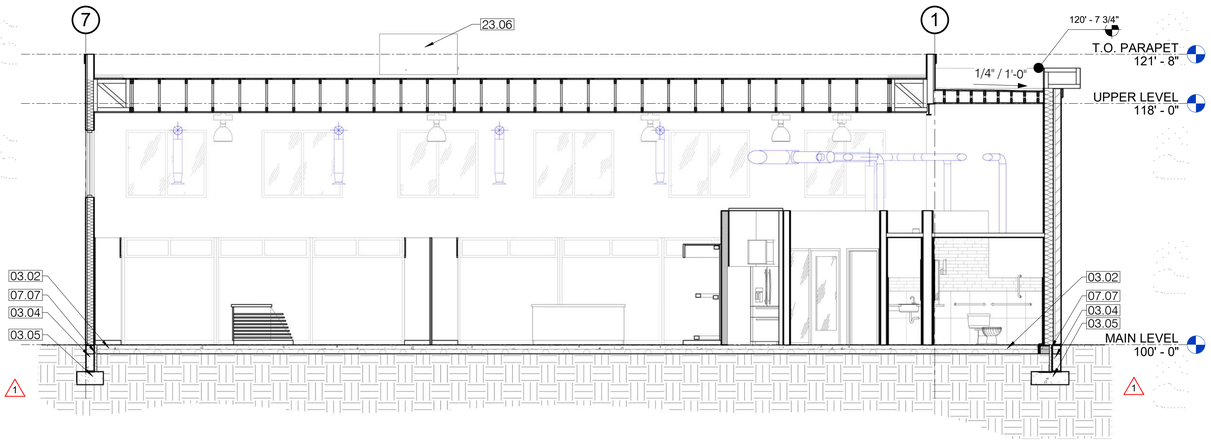


B2 AE302 *BUILDING SECTION 3*

SCALE: 3/16" = 1'-0"



D2 AE302 *BUILDING SECTION 4*

SCALE: 3/16" = 1'-0"

KEYNOTES

03.02	CONCRETE SLAB ON GRADE OVER 4" FREE DRAINING GRAVEL OVER 6 MIL VAPOR RETARDER. SEE STRUCTURAL DRAWINGS FOR SLAB SIZE AND REINFORCING.
03.04	CONCRETE FOUNDATION WALL.
03.05	CONCRETE FOOTING.
07.07	2" RIGID INSULATION.
23.06	MECHANICAL ROOF TOP UNIT. SEE MECHANICAL DRAWINGS.

1

FIVE DEGREES DESIGN

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801.960.9381
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1 RFI #1 06/29/21

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BUILDING SECTIONS

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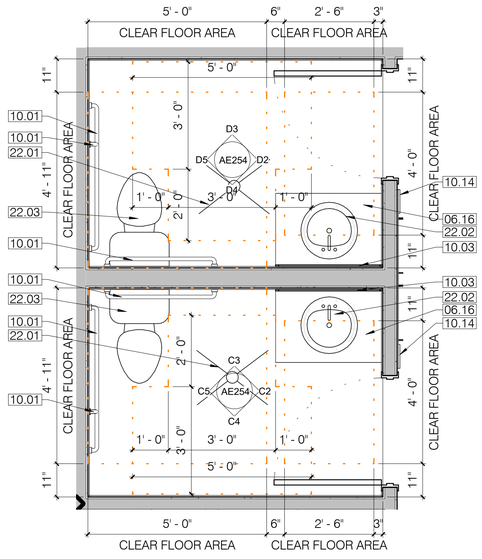
KEYNOTES

06.16	ARIZONA TILE ABSOLUTE WHITE SOLID SURFACE COUNTERTOP.
10.01	ADA COMPLIANT GRAB BARS. PROVIDE BLOCKING AS REQUIRED.
10.03	SQUARE-EDGE MIRROR, 36" TALL BY LENGTH OF VANITY. MANUFACTURER: MIRROR IMAGE HOME. BLACK NICKEL FINISH.
10.14	ADA RESTROOM SIGN.
22.01	FLOOR DRAIN. SLOPE FLOOR FOR POSITIVE DRAINAGE.
22.02	ADA COMPLIANT SINK.
22.03	ADA COMPLIANT TOILET. FLUSH VALVE MOUNTED OPPOSITE OF SIDE WALL.



D4 / AE401 *ENLARGED RESTROOMS PLAN*

SCALE: 1/2" = 1'-0"

GENERAL NOTES

A. GENERAL CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS PRIOR TO CONSTRUCTION. REPORT ANY SIGNIFICANT DISCREPANCIES TO THE ARCHITECT.
B. COORDINATE INSTALLATIONS OF ALL "AFTER CONTRACT" ASSEMBLIES WITH OWNER PRIOR TO CONSTRUCTION OF ADJOINING OR RELATED STRUCTURES.
C. PROVIDE 18" MINIMUM CLEAR FLOOR SPACE AT PULL SIDE OF ALL DOORS. PROVIDE 12" MINIMUM CLEAR FLOOR SPACE AT PUSH SIDE OF ALL DOORS.
D. DIMENSIONS ARE TO FACE OF STUD TO FACE OF STUD.
E. ALL COLORS SELECTIONS AND FINISH MATERIALS AND STYLES SHALL BE COORDINATED WITH OWNER.
F. LOCATE DOOR JAMBS 4" FROM WALLS U.N.O.
G. SEE SHEET AE151 FOR REFLECTED CEILING PLAN.
H. SEE SHEET AE171 FOR FINISH INFORMATION.
I. SEE AE601 FOR DOOR AND WINDOW INFORMATION.
J. GENERAL CONTRACTOR SHALL REVIEW AND APPROVE ALL APPLIANCES WITH OWNER PRIOR TO PURCHASING EQUIPMENT AND FABRICATING MILLWORK.
K. SEE GI002 FOR WALL TYPES.
L. PROVIDE BACKING FOR WALL MOUNTED ITEMS AND EQUIPMENT.
M. DO NOT SCALE DRAWINGS.

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3651 NORTH 100 EAST, STE 225
PROVO, UTAH 84604
801.960.9381
architect@fivedegreesdesign.com

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ENLARGED FLOOR PLANS

AE401

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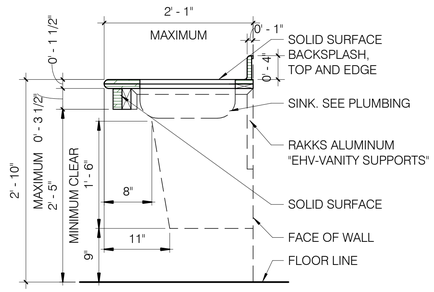
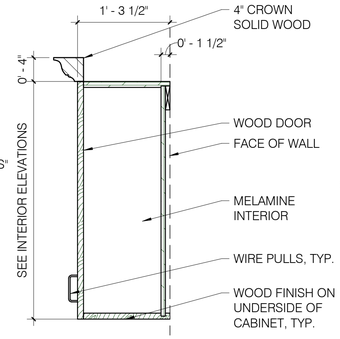
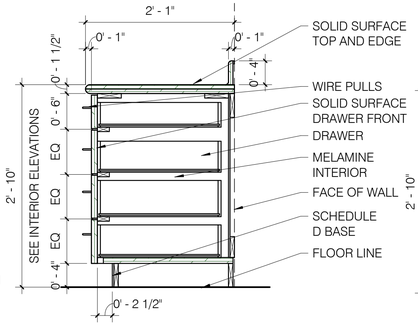


NOTE: WRAP ANY EXPOSED PIPING BELOW VANITY TOP AS REQUIRED BY ICC/ANSI A117.1/2003

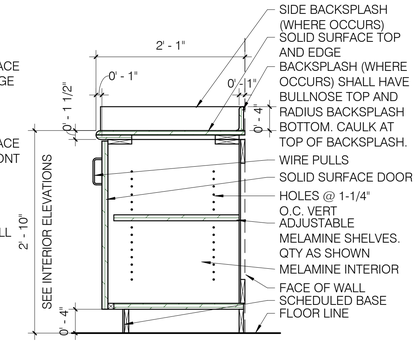
A1 / AE551 *RESTROOM COUNTER*
SCALE: 1" = 1'-0"



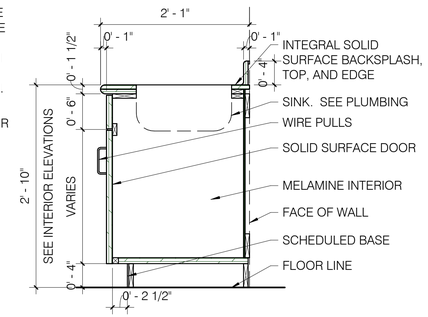
A2 / AE551 *UPPER CABINET*
SCALE: 1" = 1'-0"



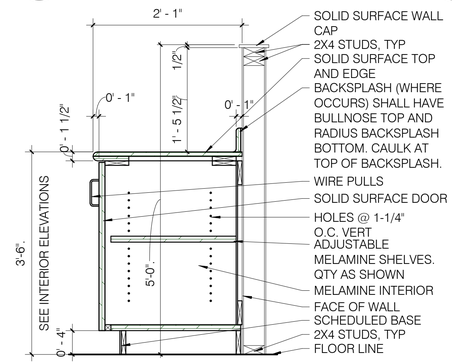
A3 / AE551 *BASE CABINET W/ DRAWERS*
SCALE: 1" = 1'-0"



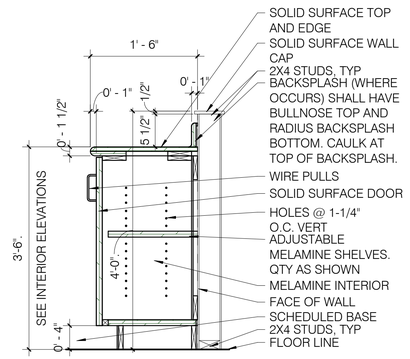
A4 / AE551 *CABINET W/ SHELF*
SCALE: 1" = 1'-0"



A5 / AE551 *CABINET W/ SINK*
SCALE: 1" = 1'-0"



B4 / AE551 *CABINET W/SHELF 2*
SCALE: 1" = 1'-0"



B5 / AE551 *CABINET W/SHELF 3*
SCALE: 1" = 1'-0"

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3651 NORTH 100 EAST, STE 225
PROVO, UTAH 84604
801.960.9381
architect@fivedegreesdesign.com

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MILLWORK DETAILS

AE551

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DOOR HARDWARE SCHEDULE

GROUP #1 (DOUBLE EXIT DOOR)

1 SET CYLINDERS AS REQUIRED BY DOOR MANUFACTURER

BALANCE OF HARDWARE BY PRE-FINISHED ALUMINUM ENTRY MANUFACTURER AS FOLLOWS:

1	RHR PANIC EXIT DEVICE	9800, GRADE 1	US26D	CR
1	LHR PANIC EXIT DEVICE	9800, GRADE 1	US26D	CR
1	KEYED REMOVABLE MULLION	822 X KMC	US26D	PR
2	CONTINUOUS HINGES	780-224HD	CL	HAGER ROTON
2	CLOSERS	4040XP-EDA, 100 SWING	AL	LCN
2	OVERHEAD STOPS	11022	US26D	RW
1	GASKETING	PK55	BL	PM
2	SWEEPS	315CN	BL	PM
2	THRESHOLDS	254A	AL	PM

GROUP #2 (ENTRY DOOR)

3	HINGES	TA2714 4 1/2 X 4 1/2	US26D	MC
1	ENTRY LOCK SET	PIONEER SERIES, SL SHAPE, GRADE 2	US26D	CR
1	WALL STOP	409	US32D	RW
1	GASKETING	PK55	BL	PM

GROUP #3 (EXIT DOOR)

1 SET CYLINDERS AS REQUIRED BY DOOR MANUFACTURER

BALANCE OF HARDWARE BY PRE-FINISHED ALUMINUM ENTRY MANUFACTURER AS FOLLOWS:

1	PANIC EXIT DEVICE	9800, GRADE 1	US26D	CR
1	CONTINUOUS HINGE	780-224HD	CL	HAGER ROTON
1	CLOSER	4040XP-EDA, 100 SWING	AL	LCN
1	OVERHEAD STOP	11022	US26D	RW
1	GASKETING	PK55	BL	PM
1	SWEEP	315CN	BL	PM
1	THRESHOLD	254A	AL	PM

GROUP #4 (INTERIOR NON-LOCKING)

3	HINGES	TA2714 4 1/2 X 4 1/2	US26D	MC
1	CLOSER	900 SERIES, 180 SWING	AL	CR
1	PUSH PLATE	8200 6" x 16"	US26D	IV
1	PULL AND PLATE	8302-0 4" x 16"	US26D	IV
1	WALL STOP	409	US32D	RW
1	KICKPLATE	K1050 10" x 2" LDW	US32D	RW
1	GASKETING	PK55	BL	PM

GROUP #5 (RESTROOM)

3	HINGES	TA2714 4 1/2 X 4 1/2	US26D	MC
1	CLOSER	900 SERIES, 180 SWING	AL	CR
1	LOCK SET	PIONEER SERIES, SL SHAPE, GRADE 2	US26D	CR
1	WALL STOP	409	US32D	RW
1	GASKETING	PK55	BL	PM
1	SWEEP	315CN	BL	PM

GROUP #6

3	HINGES	TA2714 4 1/2 X 4 1/2	US26D	MC
1	CLASSROOM LOCK SET	PIONEER SERIES, SL SHAPE, GRADE 2	US26D	CR
1	WALL STOP	409	US32D	RW
1	GASKETING	PK55	BL	PM

GROUP #7 (STORAGE)

3	HINGES	TA2714 4 1/2 X 4 1/2	US26D	MC
1	CLOSER	900 SERIES, 100 SWING	AL	CR
1	STORAGE LOCK SET	PIONEER SERIES, SL SHAPE, GRADE 2	US26D	CR
1	OVERHEAD HOLD OPEN	11012	US26D	RW
1	KICKPLATE	K1050 10" x 2" LDW	US32D	RW

GROUP #8 (DOUBLE STORAGE)

6	HINGES	TA2714 4 1/2 X 4 1/2	US26D	MC
2	CLOSER	900 SERIES, 100 SWING	AL	CR
2	STORAGE LOCK SET	PIONEER SERIES, SL SHAPE, GRADE 2	US26D	CR
2	OVERHEAD HOLD OPEN	11012	US26D	RW
2	KICKPLATE	K1050 10" x 2" LDW	US32D	RW

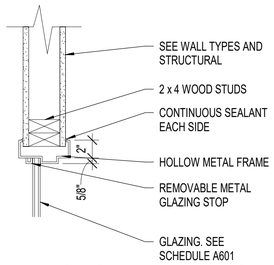
1

DOOR SCHEDULE

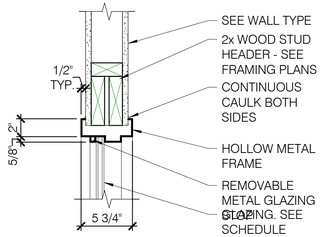
MARK	TYPE MARK	WIDTH	HEIGHT	HARDWARE GROUP	FRAME MATERIAL	COMMENTS
101	A	5' - 10 1/2"	7' - 8 1/4"	1	ALUM	
102	B	3' - 0"	7' - 0"	4	ALUM	
103	C	3' - 0"	7' - 0"	4	HM	
104	C	3' - 0"	7' - 0"	7	HM	
105	C	3' - 0"	7' - 0"	5	HM	
106	C	3' - 0"	7' - 0"	5	HM	

1

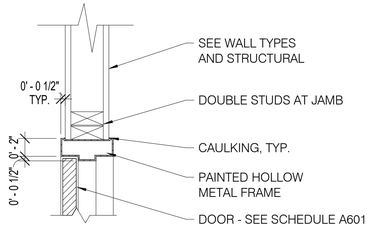
3



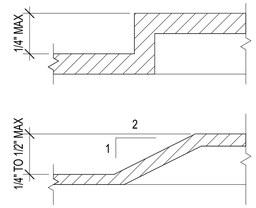
B2 AE601 *HOLLOW METAL WINDOW JAMB DETAIL*
SCALE: 1 1/2" = 1'-0"



B3 AE601 *WINDOW HEAD DETAIL*
SCALE: 1 1/2" = 1'-0"



B4 AE601 *DOOR JAMB DETAIL*
SCALE: 1 1/2" = 1'-0"



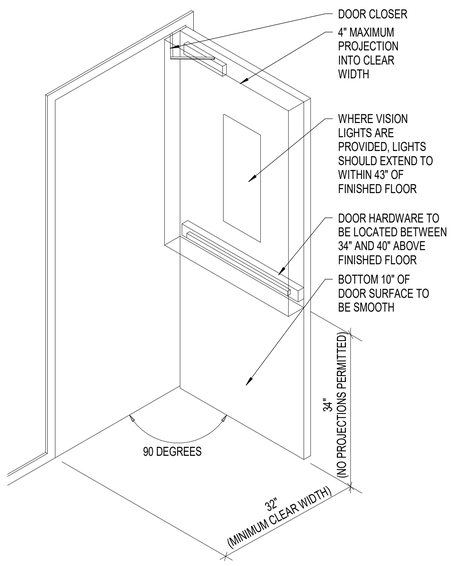
NOTE: CHANGES IN LEVEL GREATER THAN 1/2" MUST BE RAMPED WITH 1:12 MAXIMUM SLOPE. CHANGES IN LEVEL IN CLEAR FLOOR SPACE, MANEUVERING CLEARANCES, WHEELCHAIR TURNING SPACE AND ACCESS AISLES ARE PROHIBITED.

B5 AE601 *CHANGES IN LEVEL*
SCALE: 1/4" = 1'-0"

GLAZING LEGEND

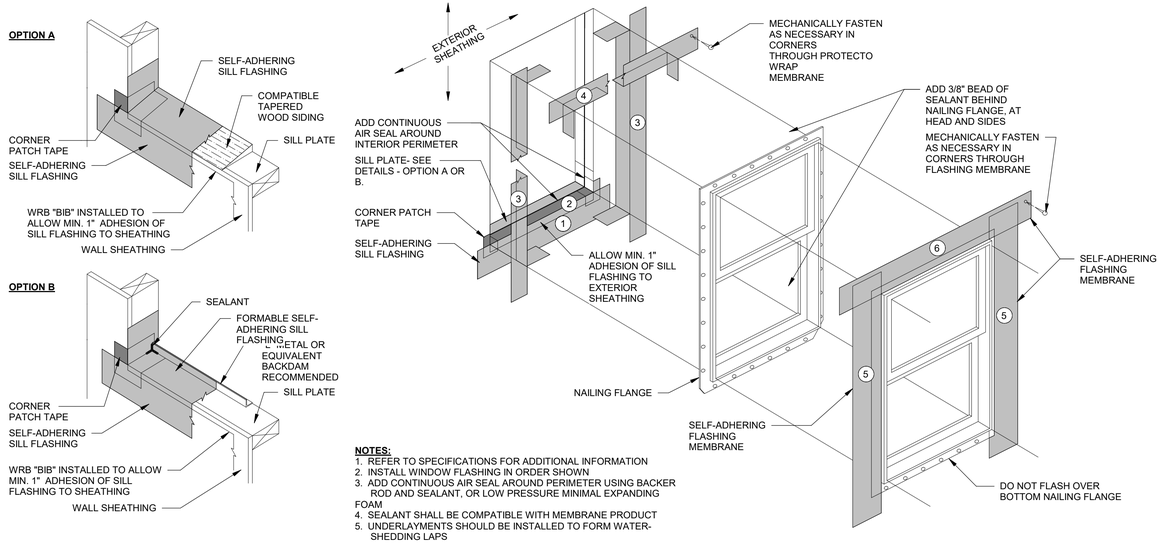
1 3/4" INSULATED, CLEAR LOW-E GLAZING SYSTEM. U-VALUE = 0.35 OR BETTER. SOLAR HEAT GAIN COEFFICIENT = 0.30 OR BETTER.

2 3/4" INSULATED TEMPERED, CLEAR LOW-E GLAZING SYSTEM. U-VALUE = 0.35 OR BETTER. SOLAR HEAT GAIN COEFFICIENT = 0.30 OR BETTER.



NOTE: HARDWARE TO BE OPERATED WITH ONE HAND, WITHOUT TIGHT GRASPING, PINCHING OR TWISTING OF THE WRIST. THRESHOLDS ARE LIMITED TO 1/2" MAXIMUM HEIGHT. INTERIOR DOORS, OTHER THAN FIRE DOORS, SHOULD BE ABLE TO BE OPERATED WITH 5 POUNDS OF FORCE. EXTERIOR DOOR AND FIRE DOORS ARE REGULATED BY THE AUTHORITY HAVING JURISDICTION. REFER TO ANSI STANDARD A117.1 FOR APPROACH REQUIREMENTS.

D1 AE601 *ACCESSIBLE DOOR*
SCALE: 1/4" = 1'-0"



NOTES:
1. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION
2. INSTALL WINDOW FLASHING IN ORDER SHOWN
3. ADD CONTINUOUS AIR SEAL AROUND PERIMETER USING BACKER ROD AND SEALANT, OR LOW PRESSURE MINIMAL EXPANDING FOAM
4. SEALANT SHALL BE COMPATIBLE WITH MEMBRANE PRODUCT
5. UNDERLAYMENTS SHOULD BE INSTALLED TO FORM WATER-SHEDDING LAPS

D2 AE601 *TYPICAL WINDOW FLASHING*
SCALE: 3/4" = 1'-0"

GENERAL NOTES

A. THE CONTRACTOR IS TO VERIFY THE DIMENSIONS OF ALL OPENINGS PRIOR TO THE FABRICATION OF ALL DOORS AND FRAMES.
B. DUE TO MULTIPLE USE, SOME OF THE DETAILS REFERRED TO ON THE DOOR SCHEDULE ARE REVERSED OR TURNED FROM THE DIRECTION SHOWN ON THE FLOOR PLANS. THE INTENT OF THE DETAILS IS TO BE FOLLOWED. CONSULT THE ARCHITECT WHEN QUESTIONS ARISE.
C. ALL EXIT ACCESS DOORS AND EXIT DOORS SHALL BE OPENABLE FROM THE INSIDE WITHOUT THE USE OF A KEY, SPECIAL KNOWLEDGE, OR EFFORT. USE OF MANUAL FLUSH BOLTS, EDGE BOLTS, TOP OR BOTTOM BOLTS, ETC., IS PROHIBITED.
D. DOOR CLOSERS SHALL BE ADJUSTED SO THAT FROM AN OPEN POSITION OF 90 DEGREES, THE TIME REQUIRED TO MOVE THE DOOR TO AN OPEN POSITION OF 12 DEGREES WILL BE 5 SECONDS MINIMUM.
E. THE BOTTOM 10" OF ALL DOORS EXCEPT AUTOMATIC DOORS, POWER ASSISTED DOORS, AND SLIDING DOORS SHALL HAVE A SMOOTH UNINTERRUPTED SURFACE TO ALLOW THE DOOR TO BE OPENED BY A WHEELCHAIR FOOTREST WITHOUT CREATING A TRAP OR HAZARDOUS CONDITION. WHEN NARROW STILE AND RAIL DOORS ARE USED, A 10" MINIMUM, SMOOTH PANEL, EXTENDING THE FULL WIDTH OF THE DOOR, SHALL BE INSTALLED ON THE PUSH SIDE(S) OF THE DOOR WHICH ALLOW THE DOOR TO BE OPENED BY A WHEEL CHAIR FOOTREST WITHOUT CREATING A TRAP OR HAZARDOUS CONDITION. CAVITIES CREATED BY KICK PLATES SHALL BE CAPPED.
F. ALL DOOR LOCKSETS AND PANIC DEVICES SHALL BE ADA COMPLIANT LEVER TYPE.
G. CAULK HEAD, JAMBS, AND SILLS OF ALL DOORS AND WINDOWS WITH SEALANT CONTINUOUSLY APPLIED TO BOTH SIDES OF THE FRAMES.
H. COORDINATE KEYING TYPE AND SCHEDULE WITH OWNER.
I. ALL DOOR CLOSURES TO BE SET IN ACCORDANCE WITH THE ADA REDUCED OPENING FORCE REQUIREMENTS.
J. ACCESS CONTROL SYSTEMS TO COMPLY WITH IBC 1008 1.9.8.

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PROVO, UTAH 84604
801.960.9381
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1 RFI #1	06/29/21
3 OWNER CHANGES	09/13/21

PROJECT

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DOOR SCHEDULE AND DETAILS

AE601

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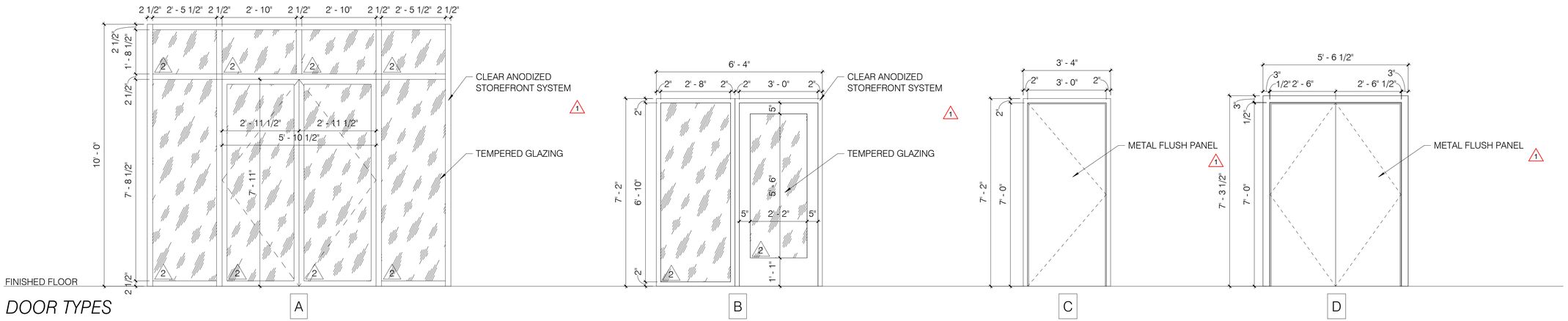

DOOR TYPES

GLAZING LEGEND

1. 3/4" INSULATED, CLEAR LOW-E GLAZING SYSTEM. U-VALUE = 0.35 OR BETTER. SOLAR HEAT GAIN COEFFICIENT = 0.30 OR BETTER.

2. 3/4" INSULATED TEMPERED, CLEAR LOW-E GLAZING SYSTEM. U-VALUE = 0.35 OR BETTER. SOLAR HEAT GAIN COEFFICIENT = 0.30 OR BETTER.

FIVE DEGREES DESIGN
3651 NORTH 100 EAST, STE 225
PROVO, UTAH 84604
801.960.9381
architect@fivedegreesdesign.com

DATE: 9 SEPTEMBER 2022
PROJECT #: 20-028
DRAWN BY: MRF
CHECKED BY: BCH

REVISIONS

PROJECT

COST U LESS RETAIL

PERMIT SET

ADDRESS:
64 NORTH 900 WEST
AMERICAN FORK, UT 84003

ARCHITECTURAL

DOOR TYPES

AE602

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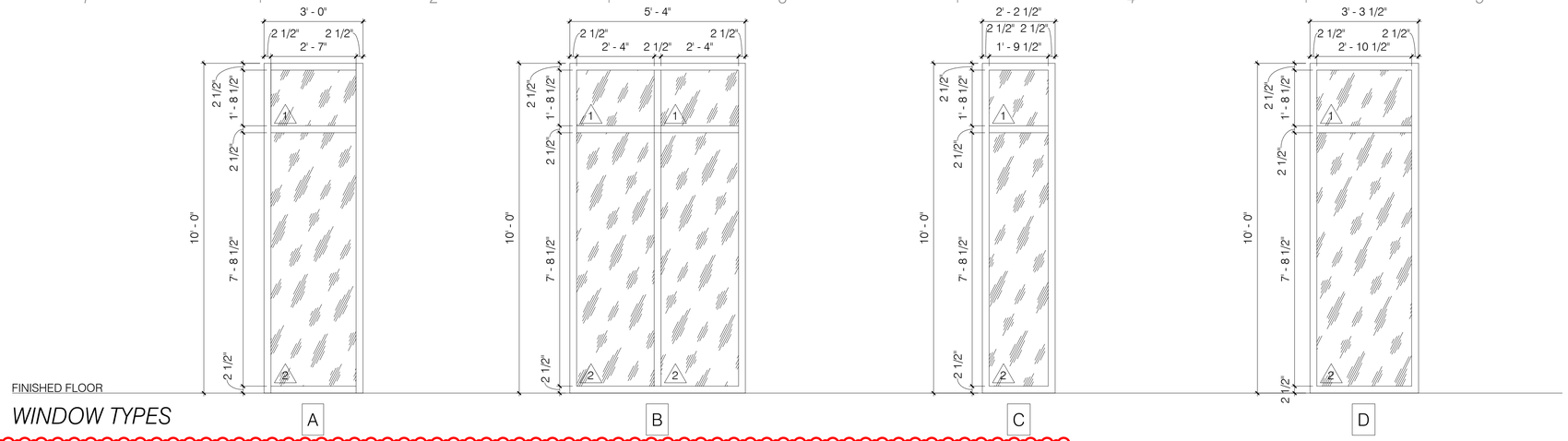
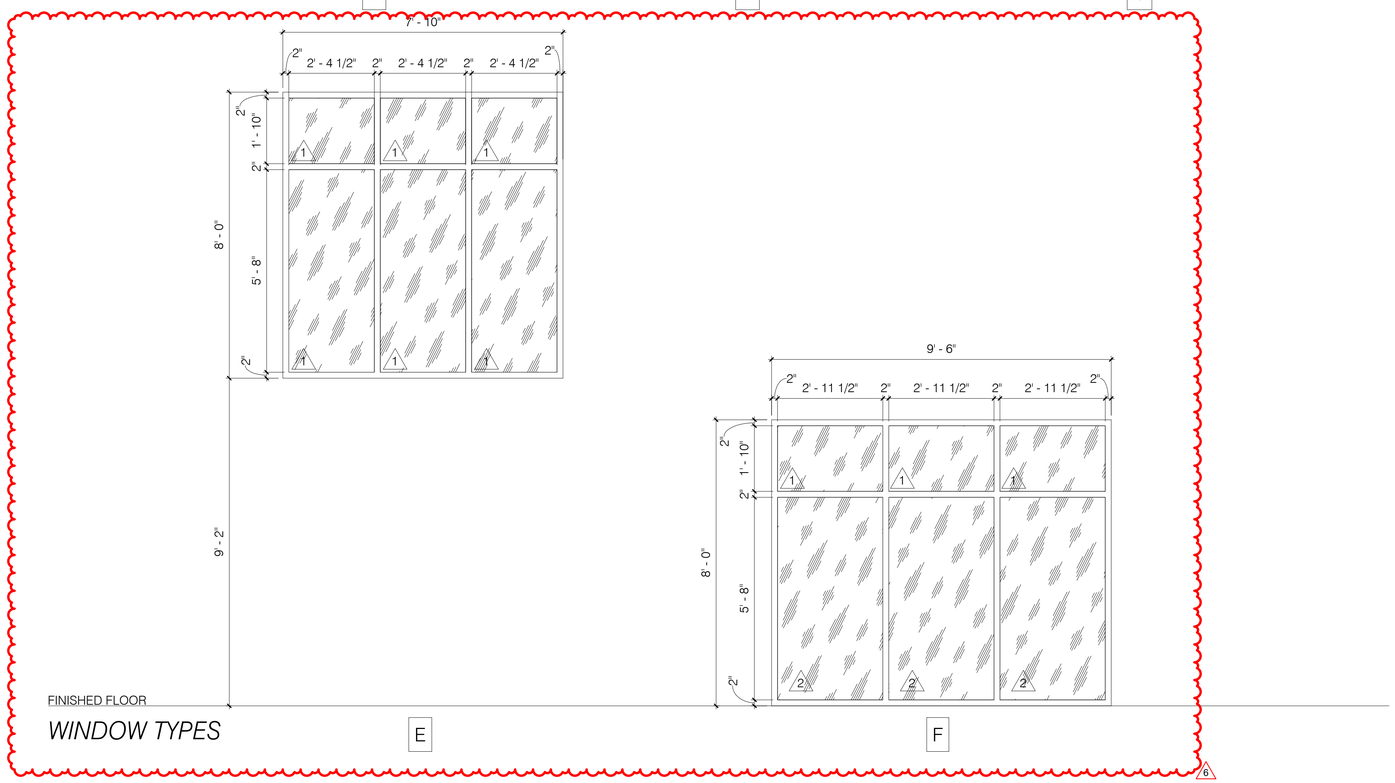


WINDOW TYPES



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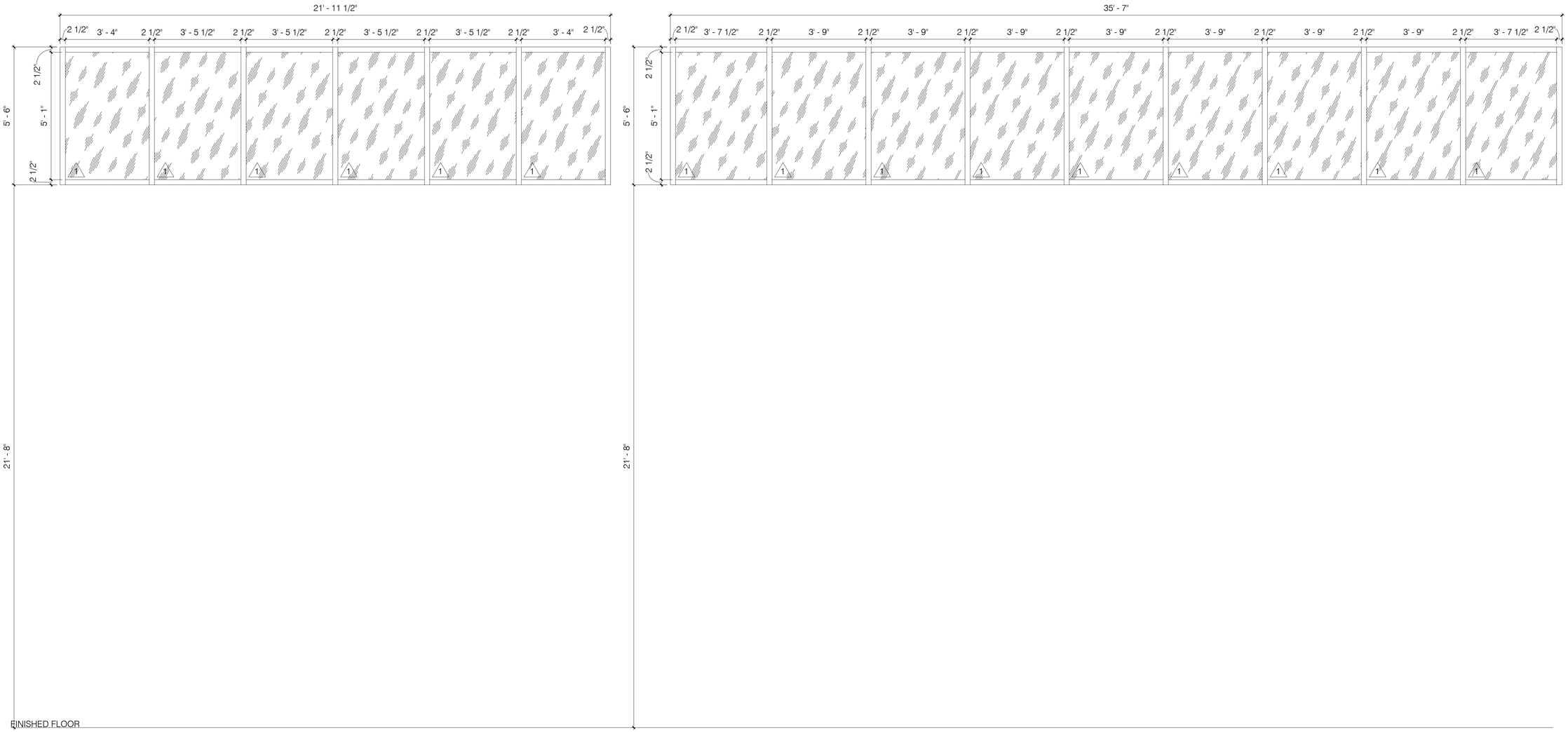

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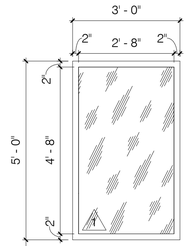
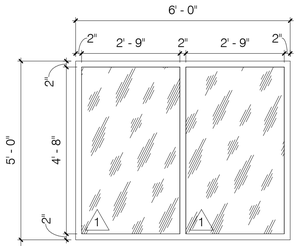


FINISHED FLOOR

WINDOW TYPES

J



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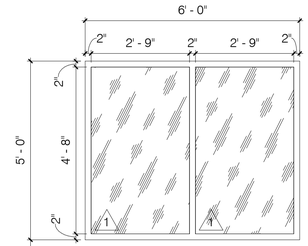

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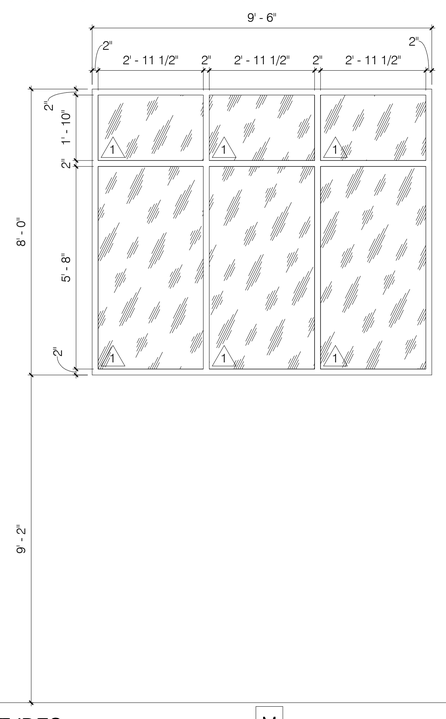

FINISHED FLOOR

WINDOW TYPES

M

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WINDOW TYPES

AE605

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SUSPENDED CEILING SYSTEM NOTES:

1- SUSPENDED CEILING SYSTEMS SHALL BE INSTALLED IN COMPLIANCE WITH IBC, ASCE 7, AND CISCA 3-4.

2- ALL CEILINGS ARE TO HAVE VERTICAL COMPRESSION STRUTS, SEISMIC BRACING, HANGERS, ETC., AS REQUIRED BY IBC, ASCE 7, AND CISCA 3-4.

3- HEAVY DUTY T-BAR GRID SYSTEM REQUIRED. WITH OF PERIMETER SUPPORTING CLOSURE ANGLE TO BE 2" MINIMUM. ATTACH ONE END OF THE CEILING GRID TO THE CLOSURE ANGLE IN EACH DIRECTION. THE OTHER END IN EACH HORIZONTAL DIRECTION SHALL HAVE 3/4" CLEARANCE FROM THE WALL AND SHALL REST UPON AND BE FREE TO SLIDE ON THE CLOSURE ANGLE.

4- SPLAY WIRES AS REQUIRED BY IBC, ASCE 7, AND CISCA 3-4. ALL SPLAY WIRES ARE TO BE IN LINE WITH ATTACHED COMPONENT AND ARE TO BE TIED TIGHT AT EACH END WITH A MINIMUM OF 3 TURNS IN 1-1/2" OF RUN.

5- ANCHOR WIRES ONLY TO STRUCTURAL MEMBERS, NOT TO ROOF DECK OR BRIDGING. WIRES SHALL NOT ATTACH TO OR BEND AROUND INTERFERING MATERIAL OR EQUIPMENT, NOT SHALL THEY BE LESS THAN 6" TO ANY UNBRACED HORIZONTAL PIPING OR DUCTWORK. A TRAPEZE OR SIMILAR DEVICE SHALL BE USED WHERE OBSTRUCTIONS OCCUR.

6- SUPPORT ALL RUNNERS AT 8" MAXIMUM FROM WALL OR CEILING DISCONTINUITY.

7- FOUR-WAY DIAGONAL BRACING AND COMPRESSION STRUTS 12'-0" O.C. (144 SQUARE FEET) EACH WAY.

8- PROVIDE CEILING HORIZONTAL RESTRAINT TO THE STRUCTURE ABOVE FOR CEILING AREAS GREATER THAN 1,000 SQUARE FEET TO MINIMIZE DIAPHRAGM LOADS.

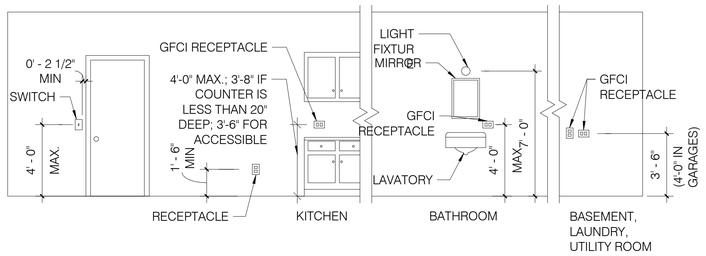
9- PROVIDE SEISMIC SEPARATION JOINTS OR FULL HEIGHT PARTITIONS FOR CEILING AREAS GREATER THAN 2,500 SQUARE FEET.

10- CHANGES IN CEILING PLANE ELEVATION SHALL BE PROVIDED WITH POSITIVE BRACING.

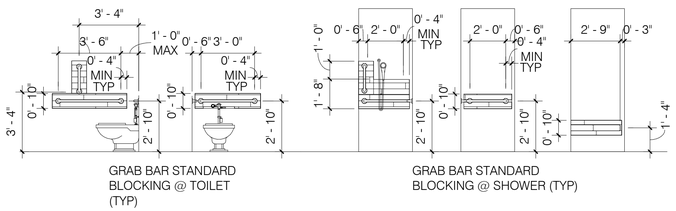
11- CABLE TRAYS AND ELECTRICAL CONDUITS SHALL BE SUPPORTED AND BRACED INDEPENDENT FROM THE SUSPENDED CEILING SYSTEM.

12- PROVIDE 2" OVERSIZE RINGS, SLEEVES OR ADAPTERS THROUGH THE CEILING TILE TO ALLOW FOR FREE MOVEMENT FOR AT LEAST 1" MOVEMENT IN ALL DIRECTIONS FOR FIRE SPRINKLER HEADS AND OTHER SIMILAR PENETRATIONS.

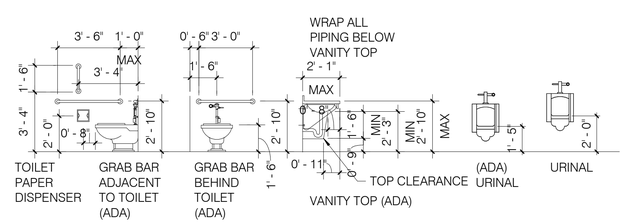
13- SPECIAL INSPECTION REQUIRED OF SUSPENDED CEILING SYSTEMS.



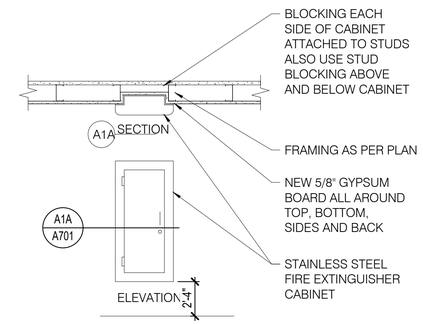
A1 AE701 *TYPICAL ACCESSORY HEIGHTS*
SCALE: 1/4" = 1'-0"



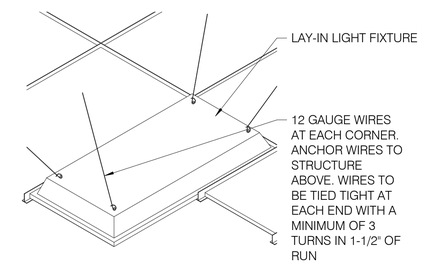
B1 AE701 *TYPICAL BLOCKING DETAILS*
SCALE: 1/4" = 1'-0"



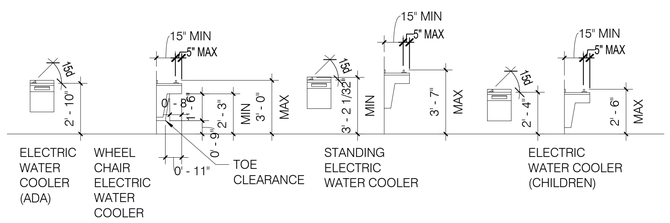
B3 AE701 *TYPICAL ACCESSORY HEIGHTS*
SCALE: 1/4" = 1'-0"



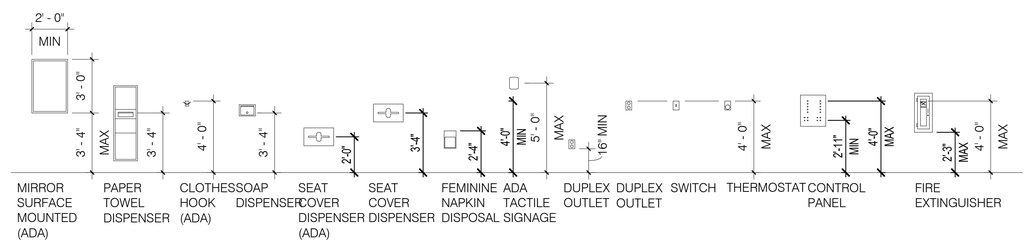
B4 AE701 *SEMI RECESSED FIRE EXTINGUISHER*
SCALE: 3/4" = 1'-0"



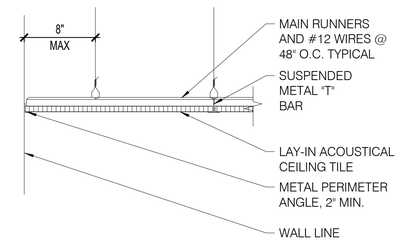
B5 AE701 *SEISMIC LIGHT DETAIL*
SCALE: 1 1/2" = 1'-0"



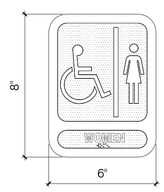
C1 AE701 *TYPICAL ACCESSORY HEIGHTS*
SCALE: 1/4" = 1'-0"



C3 AE701 *TYPICAL ACCESSORY HEIGHTS*
SCALE: 1/4" = 1'-0"

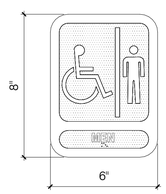


C5 AE701 *ACOUSTICAL CEILING DETAIL*
SCALE: 1 1/2" = 1'-0"



NOTE: ADA COMPLIANT SIGN WITH RADIUS CORNER AND RADIUS BORDER. RAISED COPY AND BRAILLE. "MP" WITH BACKGROUND COLOR TO BE SELECTED BY ARCHITECT.

D1 AE701 *ADA WOMEN SIGN*
SCALE: 3" = 1'-0"



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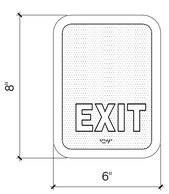
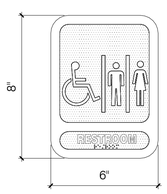
D2 AE701 *ADA MEN SIGN*
SCALE: 3" = 1'-0"



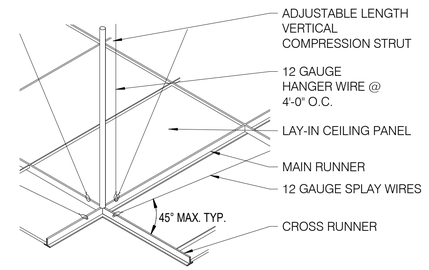
NOTE: ADA COMPLIANT SIGN WITH RADIUS CORNER AND RADIUS BORDER. RAISED COPY AND BRAILLE. "MP" WITH BACKGROUND COLOR TO BE SELECTED BY ARCHITECT.

D3 AE701 *ADA EXIT SIGN*
SCALE: 3" = 1'-0"



NOTE: ADA COMPLIANT SIGN WITH RADIUS CORNER AND RADIUS BORDER. RAISED COPY AND BRAILLE. "MP" WITH BACKGROUND COLOR TO BE SELECTED BY ARCHITECT.

D4 AE701 *ADA RESTROOM SIGN*
SCALE: 3" = 1'-0"



D5 AE701 *SEISMIC CEILING DETAIL*
SCALE: 1 1/2" = 1'-0"

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TYPICAL AND MISCELLANEOUS DETAILS

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GENERAL STRUCTURAL NOTES

GENERAL

1. The structural notes are intended to complement the project specifications. Specific notes and details in the drawings shall govern over the structural notes and typical details.
2. Typical details and sections shall apply where specific details are not shown.
3. The structural drawings are not all-inclusive and do not contain all dimensions, elevations, openings, mechanical shafts and penetrations needed to build the structure. The contractor shall coordinate these items with the Architectural, Mechanical and Electrical drawings.
4. The contractor shall verify all site conditions and dimensions. If actual conditions differ from those shown in the contract drawings, the contractor shall immediately notify the architect/engineer before proceeding with the fabrication or construction of any affected elements.
5. Omissions or conflicts between the contract drawings and/or specifications shall be brought to the attention of the architect/engineer before proceeding with any work involved. In case of conflict, follow the most stringent requirement as directed by the architect/engineer at no additional cost to the owner.
6. The contractor shall submit a written request to the architect/engineer before proceeding with any changes, substitutions or modifications. Any work done by the contractor before receiving written approval will be at the contractor's risk.
7. The contractor shall coordinate with all trades any items that are to be integrated into the structural system such as openings, penetrations, mechanical and electrical equipment, etc. Sizes and locations of mechanical and other equipment that differs from those shown on the contract drawings shall be reported to the architect/engineer.
8. The contractor shall provide adequate shoring and bracing as required for the chosen method of erection. Shoring and bracing shall remain in place until final connections for the permanent members are completed. The building shall not be considered stable until all connections are completed. Walls shall not be considered self-supporting and shall be braced until the roof system is completed.
9. Site observations by BHB Consulting Engineers' field representative shall not be construed as approval of construction procedures nor special inspection.
10. Detailing and shop drawing production for structural elements will require information (including dimensions) contained in the architectural, structural and/or other consultants' drawings. The structural drawings shall be used in conjunction with the architectural and other consultant's drawings. Some dimensions and elements such as elevations, depressions, slopes, mechanical housekeeping pads, etc. are not shown in the structural drawings. All dimensions shown on structural drawings shall be verified by contractor with architectural, mechanical and electrical drawings.
11. Contractor shall review shop drawings for compliance with contract documents, and stamp shop drawings with review stamp prior to submission to architect for review. Review of shop drawings by BHB Consulting Engineers is for general compliance only and is not intended for approval. The shop drawing review shall not relieve the contractor from the responsibility of completing the project according to the contract documents. Fabrication shall not begin until shop drawings review process is complete. Shop drawings made from reproductions of the contract drawings will be rejected unless the contractor signs a release agreement prior to the shop drawings being reviewed.
12. Only an authorized representative of BHB Consulting Engineers may make changes to these contract drawings. BHB Consulting Engineers shall not be held responsible or liable for any claims arising directly or indirectly from changes made without written authorization by an authorized representative of BHB Consulting Engineers.
13. Bidding, pricing or construction done prior to receiving final building permits from the authorities having jurisdiction is at the contractor's own risk. Changes to the drawings may be required as part of the plan check process. BHB Consulting Engineers will not be held liable for, nor compensate for, changes to these drawings before final jurisdiction approval is obtained.

BASIS OF DESIGN

1. Governing Code — International Building Code 2018
   a. Risk Category — II
2. Snow Loads
   a. Ground Snow Load — P_g = 31 psf
   b. Snow Importance Factor — I_s = 1.0
   c. Snow Exposure Coefficient — C_e = 1.0
   d. Thermal Exposure Coefficient — C_t = 1.0
   e. Roof Snow Load — $P_f = 0.7 * C_e * C_t * I_s * P_g$ = 22 psf plus Snow Drift
3. Rain Loads
   a. Rain Intensity — i = 1.5 in/hr
4. Seismic Loads
   a. Seismic Importance Factor, I_e — 1.0
   b. Seismic Design Category — D
   c. Site Specific Ground Motion Hazard Analysis — Not Required per exceptions in section 11.4.8 of ASCE 7
   d. Mapped Spectral Acceleration — S_s = 1.249g; S_1 = 0.453g
   e. Soil Site Class — D
   f. Soil Site Coefficients — F_a = 1.00; F_v = 1.85
   g. 5% Damped Design Spectral Response Acceleration — $S_{DS} = 2/3 * F_a * S_S$ = 0.833g; $S_{D1} = 2/3 * F_v * S_1$ = 0.558g
   h. Seismic-Force-Resisting System — Light Framed Wood Sheathed Shear Walls
   i. Response Modification Coefficient — R = 6.5
   j. System Over-strength Factor — Ω_0 = 3
   k. Deflection Amplification Factor — C_d = 4
   l. Seismic-Force-Resisting System — Steel Ordinary Moment Frames
   m. Response Modification Coefficient — R = 3.5
   n. System Over-strength Factor — Ω_0 = 3
   o. Deflection Amplification Factor — C_d = 3
   p. Redundancy Factors — ρ_x = 1.0; ρ_y = 1.0
   q. Seismic Response Coefficient — $Cs = S_{DS} * I_e / R$; $Cs = S_{D1} * I_e / (R*T)$
   r. W — Dead Loads of Structure
   s. Base Shear — $Vx = C_S * W$; $Vy = C_S * W$
   t. Analysis Procedure — Equivalent Lateral Force (Static)
5. Wind Loads
   a. Basic Wind Velocity (3 Second Gust) — 102 mph
   b. Exposure Type — C
   c. Internal Pressure Coefficient, GCpi — +/-0.18
   d. Topographic Factor, Kzt — 1.0
   e. Ground Elevation Factor, Ke — 1.0
   f. Components and Cladding Wind Force Table (psf, Strength Design)

Wall Zone	Effective Wind Area for Component (sq ft.)				
	10 sq ft.	20 sq ft.	50 sq ft.	100 sq ft.	500 sq ft.
4	22.8	22.7	22.4	21.8	17.5
5	28.1	27.8	27.2	26.2	17.5

FOUNDATION

1. Soils Report
   a. Author: — CMT Engineering Laboratories
   b. Dated: — August 11, 2020
   c. Project No: — 14908
2. Soil Bearing Pressure — 2,000 psf, on Compacted Structural Fill.
3. Frost Protection — 30" minimum to bottom of footing. Contractor shall field verify that the footing elevations and final grades indicated on the plans will provide the minimum frost protection. The contractor shall notify the architect/engineer if there are any locations where the minimum frost protection might not be achieved prior to placing concrete.
4. Lateral Soil Pressure Fluid Equivalent Density:
   a. Active — 35 pcf (retaining walls)
   b. At Rest — 44 pcf (rigid foundation walls)
   c. Passive — 425 pcf
5. Coefficient of Friction — 0.3

EARTHWORK

1. All footings shall bear on a minimum of 2'-0" of compacted structural fill extending down to suitable natural material. See detail 13/S501.
2. Excavations up to about 15 feet may occur at the site to remove existing non-engineered fill soils, see soils report. For bidding purposes only, the contractor shall include in the bid a unit cost per cubic yard as an "ADD" and a "DEDUCT" where soil removal and replacement varies from the assumed value indicated above.

CONCRETE

1. Materials, unless noted otherwise:
   a. Normal weight aggregates — ASTM C 33
      i. Combined aggregate gradation for slabs on grade and other designated concrete shall be 8% - 18% for large top size aggregates (1.1/2") or 8% - 22% for smaller top size aggregates (1" or 3/4") retained on each sieve below the top size and above the No. 100. The range for the No. 30 and No.50 sieves shall be 8% - 15% retained in each. To avoid gap gradation the following shall occur:
         1. The percent retained on two adjacent sieves shall not fall below 5%.
         2. The percent retained on three adjacent sieves shall not fall below 8%.
         3. When the percent retained on two adjacent sieves is less than 8%, the total retained on either of these sieves and the adjacent outside sieve shall be at least 13%. See ACI 302 Section 5.4.3.3 for more information.
      ii. Maximum Aggregate Size shall not be larger than:
         1. 3.1/2" or 1/5 the narrowest dimension of the forms
         2. 1/3 the depth of the slab
         3. 3/4 the minimum clear spacing between bars
   b. Reinforcing Steel — ASTM 615 Grade 60 (Fy = 60 ksi); Use Grade 40 (Fy = 40 ksi) for field bent dowels with spacings indicated reduced by 1/3.
   c. Deformed Bar Anchors (DBA) — ASTM A496
   d. Headed Stud Anchors (HSA) — ASTM A108
   e. Anchor Rods
      Typical, uno — ASTM F1554, Grade 36, with ASTM A563 heavy hex nuts and hardened washers Grade A
   f. Admixtures:
      i. Air-entraining admixtures shall comply with ASTM C 260 (when used).
      ii. Calcium chloride shall not be added to the concrete mix.
      iii. Water-reducing admixture shall comply with ASTM C 494/C 494M, Type A (when used)
      iv. Retarding admixture shall comply with ASTM C 494/C 494M, Type B (when used).
      v. Water-reducing and retarding admixture shall comply with ASTM C 494/C 494M, Type D (when used).
      vi. High-range, water-reducing admixture shall comply with ASTM C 494/C 494M, Type F (when used).
      vii. High-range, water-reducing and retarding admixture shall comply with ASTM C 494/C 494M Type G (when used).
      viii. Admixture manufacturer shall have ISO 9001 Quality Certification. To ensure compatibility all admixtures shall be from the same manufacturer.
   g. Type I/II cement complying with ASTM C-150 shall be used for all concrete. Cement source shall remain the same for the entire job.
   h. The water/cementitious materials ratios shall meet the requirements of Table 19.3.2.1 of ACI 318-14.
   i. Cementitious Materials – Limit percentage, by weight, of cementitious materials other than portland cement as follows:
      i. Fly Ash - ASTM C618, Class C or F – 35% maximum cementitious content.
      ii. Slag Cement – ASTM C989, Grade 100 or 120 – 50% maximum cementitious content.
      iii. A minimum of 20% of cement shall be replaced with fly ash, slag cement, or a combination of the two. In combination, the maximum replacement shall be 50%, with fly ash not exceeding 25%.
   j. Provide air entraining as recommended by Table 19.3.3.1 of ACI 318-14. Concrete that extends above grade and is exposed to freezing and thawing while moist shall be air-entrained. Concrete in unconditioned spaces shall be considered site concrete.
   k. No aluminum conduit or product containing aluminum or any other material injurious to concrete shall be embedded in concrete.
2. Compressive strengths of concrete at 28 days shall meet the follow performance requirements (see ACI-318-14; Chapter 19):
   a. Footings & Interior Foundation Walls — Strength: 3,000 psi; Classification: F0, S0, W0, C0
   b. Exterior Foundation Walls — Strength: 3,500 psi; Classification: F1, S0, W0, C0
   c. Interior Slabs on Grade — Strength: 3,000 psi; Classification: F0, S0, W0, C0
   d. All Site Concrete with Reinforcement — Strength: 5,000 psi; Classification: F3, S0, W1, C2
   e. All Site Concrete without Reinforcement — Strength: 4,500 psi; Classification: F3, S0, W1, C2
3. Reinforcement for concrete slabs on grade:
   a. 4" thick concrete slab on grade. Reinforce slab with #3 bars at 24" o.c. each way with 1.1/2" max cover below the top surface of the concrete.
4. Only one grade or type of concrete shall be poured on the site at any given time.
5. The contractor shall be responsible for the design, detailing, care, placement and removal of all formwork and shores.
   a. Supporting forms and shoring shall not be removed until structural members have acquired sufficient strength to safely support their own weight and any construction load to which they may be subjected. In no case, however, shall forms and shoring be removed in less than 24 hours after concrete placement.
6. Reinforcement shall have the following concrete cover:

	Clear Cover
a. Cast-in-place Concrete	
i. Cast against and permanently exposed to earth	3"
ii. Formed concrete exposed to earth or weather:	
#6 thru #18 bars	2"
#5 and smaller bars	1.1/2"
iii. Concrete not exposed to weather or in contact with ground:	
Slabs, Walls and their piers, Joists; #11 bars and smaller	3/4"
Beams, Columns: Primary Reinf., Ties, Stirrups, Spirals	1.1/2"

7. Detailing:
   a. At joints, provide reinforcing dowels to match the member reinforcing, unless noted otherwise.
   b. At all discontinuous control or construction slab on grade joints, provide 2 - #4 x 48".
   c. Corner Bars: Provide corner bars at intersecting wall corners using the same bar size and spacing as the horizontal wall reinforcing. Corner bars shall lap the horizontal reinforcing with the required lap splice length. See detail 4/S501.
   d. All vertical reinforcing shall be doweled to footings, or to the structure below with the same size and spacing as the vertical reinforcing for the element above. Dowels extending into footings shall terminate with a 90-degree standard hook and shall extend to within 4" of the bottom of the footing. Footing dowels (#8 bars and smaller) with hooks need not extend more than 20" into footings.
   e. Horizontal wall reinforcing shall terminate at ends of walls and openings into the far end of the jamb column with a 90-degree standard hook. Horizontal wall reinforcing shall be continuous through construction and control joints.
   f. See detail 8/S501 for reinforcing around miscellaneous openings (8" to 36" wide). For openings wider than 36", contact the engineer. All recesses that interrupt reinforcing shall be reinforced the same as an opening.
8. Construction Joints, Control (Contraction) Joints:
   a. Construction joints in all horizontal and vertical construction joints including between top of footing and foundation walls shall be intentionally roughened to a full amplitude of approximately 1/4". The laitance on the concrete (thin, flaky layer of hardened, weakened hydrated cement) shall be mechanically removed from the surface after the concrete has achieved final set. Construction joints in slabs on grade shall not exceed a distance of 125'-0" o.c. in any direction.
   b. Control joints shall be installed in slabs on grade so the length to width ratio of the slab is no more than 1.25:1. Control joints shall be completed as soon as final set is achieved and it is okay to operate the cutter on the slab. Final set is typically achieved within the first 4 to 12 hours after the slab has been finished in an area (depending on weather conditions and concrete hydration rate; 4 hours in hot weather to 12 hours in cold weather). For early entry saw cutting, joints should be cut within the first 1 to 4 hours (depending on weather conditions and concrete hydration rate; 1 hour for hot weather and 4 hours for cold weather). Where saw cut joints cannot be cut along the entire projected length of the joint, a 90-degree hand grinder or other tool shall be used to complete the joint. Control joints may be installed by:
      i. Saw cut a depth of 1/4 the thickness of the slab (1.1/4" ± for early entry saws) minimum.
      ii. Tooled joints a depth of 1/4 the thickness of the slab
9. Construction
   a. Use chairs or other support devices recommended by the CRSI to support and tie reinforcement bars prior to placing concrete. Reinforcing steel for slabs on grade shall be adequately supported. Support reinforcing steel of slabs on grade with precast concrete units. Lifting the reinforcing off the grade during placement of concrete is not permitted.
   b. Concrete to be mechanically consolidated during placement per ACI standards.
   c. Contractor shall coordinate placement of all openings, curbs, dowels, sleeves, conduits, bolts, inserts and other embedded items prior to concrete placement.
   d. All embeds, anchors and dowels shall be securely tied to formwork or to adjacent reinforcing prior to the placement of concrete.
   e. No pipes, ducts, sleeves, etc shall be placed in structural concrete unless specifically detailed or approved by the structural engineer. Penetrations through walls when approved shall be built into the wall prior to concrete placement. Penetrations will not be allowed in footings or grade beams unless detailed. Piping shall be routed around footings and grade beams and unless detailed. Footings shall be stepped to avoid piping.
   f. Reinforcing Bars shall not be welded. Do not substitute reinforcing bars for DBAs or HSAs.

POST-INSTALLED ANCHORS

1. General Post-Installed Anchor Notes
   a. Do not install adhesive anchors in concrete if less than 21 days old; do not install mechanical anchors, screw anchor or powder actuated anchors in concrete less than 7 days old. Contractor must obtain written approval from the engineer to install prior to these time periods. Do not apply full load to anchors until concrete has reached 28-day compression strength.
   b. Anchors or adhesives specified in details shall be provided; alternative anchors or adhesives may be used if the contractor provides calculations demonstrating that the alternative can achieve the performance values of the specified product. These calculations, along with an ICC-ES ESR or IAPMO-UES ER approval for use in cracked concrete and compliant with the specified codes herein, must be submitted to the structural engineer prior to use.
   c. Follow all the manufacturer's recommendations and certification testing reports for anchor installation. See specific anchors below for more information.
   d. No anchor shall be installed within 1.5 anchor rod diameters of an abandoned hole that has been filled with non-shrink grout; increase distance to 3 anchor rod diameters when the abandoned hole has not been filled.

BHB STRUCTURAL
2766 South Main Street
Salt Lake City, Utah 84115
801-355-5656
bhb@bhbengineers.com

FIVE DEGREES DESIGN
1457 EAST 840 NORTH
OREM, UTAH 84097
801.850.4583
chris@fivedegreesdesign.com

DATE:	01 JUNE 2021
PROJECT #:	210345
DRAWN BY:	MP
CHECKED BY:	AP

REVISIONS

PROFESSIONAL ENGINEER No. 11102949 ALEXANDER PIKET STATE OF UTAH
09/08/2022

PROJECT

COST U LESS CONCEPT PLAN

ADDRESS:
64 NORTH 900 WEST
AMERICAN FORK, UT 84003

GENERAL STRUCTURAL NOTES

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GENERAL STRUCTURAL NOTES

2. Adhesive Anchors
   a. For anchors in concrete, the adhesives shall be divided into two groups: Standard Adhesives and High Strength Adhesives. Standard adhesives can be used in general applications when details reference the "Standard Adhesive Embedment Schedule" on sheet S601. High Strength adhesive groups will be specified for the particular application in the drawings and details. When a High Strength Adhesive is specified, the contractor has the option to use any of the adhesives in the High Strength group. When a Standard Adhesive is specified, the contractor has the option to use any of the adhesives in either group. See below for the acceptable adhesives in each group.
      i. Standard Adhesive Group for anchors in concrete includes the following adhesives:
         1. SET-XP (ICC-ES ESR-2508) by Simpson Strong-Tie
         2. Pure 50+ (ICC-ES ESR-3576) by Dewalt
         3. AC100+ Gold (ICC-ES ESR-2582) by Dewalt
         4. HIT-RE 100 (ICC-ES ESR-3829) by Hilti, Inc.
      ii. High Strength Adhesive Group for anchors in concrete includes the following adhesives:
         1. SET-3G (ICC-ES ESR-4057) by Simpson Strong-Tie
         2. Pure 110+ (ICC-ES ESR-3298) by Dewalt
         3. AC200+ (ICC-ES ESR-4027) by Dewalt
         4. HIT-RE 500-V3 (ICC-ES ESR-3814) by Hilti Inc.
         5. HIT-HY 200 (ICC-ES ESR-3187) by Hilti Inc.
   b. Adhesive shall be within the manufacturer's recommended life time and prior to expiration date. Do not use adhesive that has not been stored per manufacturer's recommendations or may have experienced freeze thaw cycles or extreme heat.
   c. Do not install adhesive anchor in wet or damp hole unless product is approved for such conditions without strength reduction. Do not install adhesive anchors if concrete temperature is below 50-degree F unless adhesive is approved for lower temperature without strength reduction. Refer to manufacturer's published installation instructions.
   d. Follow all the manufacturer's recommendations and certification testing reports regarding hole cleaning prior to adhesive installation. All holes shall be drilled with ANSI standard bits designed for concrete. Diamond core drilled holes are not allowed unless indicated in specific details or approved by the structural engineer prior to use.

3. Mechanical Anchors
   a. For concrete, the mechanical anchor shall be Kwik Bolt TZ (ICC-ES ESR-1917) by Hilti Inc., Strong-Bolt 2 (ICC-ES ESR-3037) by Simpson Strong-Tie Inc. or Power-Stud+ SD2 (ICC-ES ESR-2502) by Dewalt.

4. Screw Anchors
   a. For concrete, the screw anchors shall be Titen HD (ICC-ES ESR-2713 for concrete only) by Simpson Strong-Tie, or Screw-Bolt + (ICC-ER ESR-3889 for concrete only) by DeWalt or Kwik HUS-EZ (ICC-ES ESR-3027 for concrete only) by Hilti Inc.

5. Powder Actuated Fasteners
   a. For fasteners driven into steel (except at metal decks), concrete. or concrete over metal deck, the fastener shall be X-U P8 TH Universal Knurled Shank Fastener (ICC-ES ESR-2269) by Hilti Inc., PDPA (ICC-ES ESR-2138) by Simpson Strong-Tie Inc. or 8mm Head Spiral CSI Drive Pin (ICC-ES ESR-2024) by Dewalt.

MASONRY VENEER

1. Masonry veneer shall be attached to steel stud and wood stud walls with *Dur-O-Wal* D/A 213 seismic veneer anchors or *Hohmann & Barnard* DW-10 or DW-10HS seismic veneer anchors (or equal) spaced at 16" o.c. Veneer anchors shall be attached to studs with #10 corrosion resistant self-drilling screws. Attach the veneer to the anchors with *Dur-O-Wal* Seismic Steel Pintles or *Hohmann & Barnard* 3/16" Ø Byna-Tie with Seismiclips (or equal) spaced at a maximum of 16" o.c. in both directions. Anchor ties shall engage to a galvanized No. 9 gauge horizontal joint reinforcement wire in the veneer, which shall be continuous and shall be placed at 16" o.c. maximum at the center of the veneer. At walls with rigid insulation use Hohmann & Barnard X-SEAL S.I.S. veneer anchors.

2. Other methods of attachment may be used after written acceptance by the architect and structural engineer.

3. Steel Lintels: Provide steel angle lintels at all openings through the masonry veneer. Provide 1" of bearing for each foot of width of opening with a minimum bearing of 6". See the "Veneer Lintel Schedule" on sheet S-601 for size. Steel lintel angles shall be galvanized at all exterior conditions where exposed to weather.

STRUCTURAL STEEL

1. Material:
   a. Wide Flange Sections — ASTM A992 (50 ksi)
   b. All Thread Rods, Other Shapes & Plates — ASTM A36 (36 ksi)
   c. Square or Rectangular HSS — ASTM A500 (50 ksi) Grade C or ASTM A1085 (50ksi)
   d. Deformed Bar Anchors (DBA) — ASTM A496
   e. Headed Stud Anchors (HSA) — ASTM A108
   f. Non-Metallic Shrinkage Resistant Grout — ASTM C 1107
   g. Anchor Rods Typical, uno — ASTM F1554, Grade 36, with ASTM A563 heavy hex nuts and ASTM F436 hardened washers Grade A
   h. Bolted Connections: — ASTM F3125 Grade A325 with ASTM A563 nuts and ASTM F436 hardened washers.

2. Fabrication and construction shall comply with the latest edition of the following Codes and Standards:
   a. American Institute of Steel Construction (AISC), "Specification for the Design, Fabrication and Erection of Structural Steel for Buildings," with "Commentary".
   b. AISC "Code of Standard Practice" excluding the following: Section 3.2, Section 4.4, Section 4.4.1,
   c. AISC "Specification for Structural Joints Using High-Strength Bolts"
   d. American Welding Society (AWS), Structural Welding Code (specific items do not apply when they conflict with the AISC requirements).
   e. AISC "Seismic Provision for Structural Steel Buildings"- ANSI/AISC 341

3. Welding
   a. Field weld flags that have been put in these documents are for suggestion only. The contractor has the option to substitute shop welding for field welding or vice versa. The steel fabrication and steel erection drawings must clearly distinguish between shop welds and field welds prior to any work being performed.
   b. Steel fabricators shall indicate the shop welds that are excluded from their bids. Steel erectors shall indicate the field welds that are excluded from their bids. It is the responsibility of the contractor to coordinate shop welding and field welding with the appropriate subcontractors.
   c. All welding and cutting shall be performed by AWS certified welders.
   d. Use E-70 XX (58 ksi yield, 70 ksi tensile) unless noted otherwise.
   e. All intersecting steel shapes which are not bolted shall be connected by a fillet weld all around, unless noted otherwise. Where fillet weld sizes are not shown they shall be 1/16" less than the thinnest of the connected parts for thicknesses 1/4" and larger. Fillet welds on plates less than 1/4" shall be of the same size as the thinnest of the connected part.
   f. Reinforcing Bars: Do not weld rebar. Do not substitute reinforcing bars for deformed bar anchors (DBAs), machine bolts, or headed stud anchors (HSAs).
   g. Do not weld anchor bolts, including "tack" welds.
   h. Headed Stud Anchors (HSAs) welding and deformed bar anchor welding shall conform to the manufacturer's specifications.

4. Bolted Connections:
   a. Use bolts for steel to steel connections, as noted herein or as noted on the drawings. Bolts shall be used in connections for simple span framing and beam (or girder) to bearing plate connections. Tighten bolts to a snug tight condition. At connections of beams marked as 'SRE' on the drawings, bolts shall be pretensioned per AISC 360 and tightened by the turn of the nut, calibrated wrench, or direct tension indicator method. Alternate fastener designs as defined by AISC shall be submitted to the engineer for review and acceptability prior to installation. See sheet S601.
   b. Use hardened washers beneath the turned element of all bolts or nuts. Use hardened beveled washers, to compensate for the lack of parallelism, where the outer face of the bolted parts has a slope greater than one in twenty with respect to the plane normal to the bolt axis. At oversized holes hardened washers or plates shall conform with ASTM F-436 and shall completely cover the slot after installation.
   c. Where a steel to steel beam connection is not shown, provide a standard AISC framed connection for one half the total uniform load capacity of the beam for the span and steel specified.
   d. Bolts, nuts and washers shall not be reused.

5. Steel Lintels: Provide steel angle lintels at all openings through masonry veneer. Provide 1" of bearing for each foot of width of opening with a minimum bearing of 6". See the "Veneer Lintel Schedule" on sheet S601 for size. Steel lintel angles shall be galvanized at all exterior conditions where exposed to weather.

6. Provide baseplate anchor rod connections to concrete elements that correlate with ACI 117. Circular or square washers are acceptable:

ANCHOR ROD DIAMETER	HOLE DIAMETER	WASHER SIZE	WASHER THICKNESS (MIN)
3/4"	1.5/16"	2"	1/4"
7/8"	1.9/16"	2.1/2"	5/16"
1"	1.7/8"	3"	3/8"
1.1/4"	2.1/8"	3.1/2"	1/2"
1.1/2"	2.3/8"	4"	1/2"
1.3/4"	2.7/8"	4.1/2"	5/8"
2"	3.1/4"	5"	3/4"
2.1/2"	3.3/4"	5.1/2"	7/8"

7. Provide full-depth web-stiffener plates at each side of all beams at all bearing points. Stiffener plates shall be the thickness called out below unless noted otherwise and shall be welded both sides with fillet welds all around:

FLANGE WIDTH	STIFFENER THICKNESS	WELD SIZE
Less than 8.1/4"	1/4"	3/16"
8.1/4" to 12.1/4"	3/8"	1/4"
12.1/4" to 16.1/2"	1/2"	5/16"
16.1/2" to 20.3/4"	5/8"	3/8"

WOOD

1. Materials:
   a. Dimensional Lumber
      i. All dimensional lumber shall be #2 Douglas Fir-Larch or better unless noted otherwise.
   b. Engineered Lumber
      i. Engineered lumber shall be provided by manufacturer of the products specified on these structural drawings. If an alternative manufacturer is proposed, the contractor shall submit a revised engineered lumber list, prior to construction, that includes the following information:
         1. Specified lumber product as indicated on these structural drawings
         2. Proposed substitution lumber product
         3. Documentation that includes a comparison of the section properties and material strengths of the proposed substitution lumber product compared to that of the specified lumber product.
      ii. Laminated Veneer Lumber (LVL) shall be Micro-Lam 1.9E by Trus-Joist Corporation, Versa-Lam 2.0E Boise Cascade Corporation, RedLam 2.0E by RedBuilt, SolidStart LVL 2.0E by LP Corporation or RigidLam 2.0E by Roseburg or an approved equal.
      iii. Rimboard shall be TimberStrand LSL Rim Board by Trus-Joist Corporation, Versa-Rim by Boise Cascade Corporation, SolidStart LSL by LP Corporation, LSL or LVL Rim Board by RedBuilt or OSB RigidRim RimBoard by Roseburg (Rimboard shall be 1.1/8" thick, minimum), Rimboard LSL by RedBuilt or an approved equal.
      iv. All required blocking bridging and bracing shall be provided by joist manufacturer and installed by contractor. All penetrations through the joists shall be done per manufacturers' recommendations and requirements.
   c. Sheathing
      i. Wood sheathing shall meet the minimum performance criteria given in APA PRP-108, Performance Standards and Policies for Structural-Use Panels, Form E445, Voluntary Product Standard PS 1 & PS 2 and Performance Standard for Wood-Based Structural-Use Panels, Form S350, and Structural Plywood, Form H860. Panels shall be unsanded plywood or oriented strand board (OSB) and shall be interior grade with exterior glue and have the minimum following thickness and span rating indicated in the "Sheathing Schedule at Roof and Floor" on sheet S602.
   d. Fasteners
      i. General framing and carpentry shall be connected as per "Minimum Nailing Schedule" on sheet S602 unless noted otherwise.
      ii. All fasteners, including nails, for preservative-treated and fire retardant-treated wood shall be hot-dipped zinc-coated galvanized steel or stainless steel.
      iii. Bolts for general wood to wood connections shall be ASTM A307A or A36 with ASTM A563A hex nuts and ATSM F844 washers, Grade A, unless noted otherwise.
   e. Framing connectors:
      i. All framing anchors, connectors, post caps, hold downs, column bases, joist hangers, etc. shall be provided by Simpson Strong-Tie as indicated on these plans. If the contractor elects to substitute for another manufacturer, the contractor shall submit a revised connector list, prior to construction, that includes the following information:
         1. Specified connector indicated on these plans
         2. Requested substitution connector
         3. Allowable capacity of the requested substitution connector

2. All wood (with the exception of engineered lumber) in contact with concrete, masonry or soil shall be pressure treated.

3. At floor framing, provide approved bridging at 8'-0" o.c. maximum between joist end supports for dimensional lumber members with a nominal depth-to-thickness ratio exceeding 6 to 1. Bridging shall consist of not less than full-depth solid blocking, 1" x 3" diagonal lumber with double nailing at each end, equivalent metal bracing or equal rigidity, or other approved bridging.

4. Built-up beams and columns shall be constructed as per "Built-up Wood Member Detail" on sheet S511 unless noted otherwise.

5. All walls shall have a minimum of two top plates. Splices in top plates shall be staggered a minimum of 4 ft from the nearest splice in adjoining top plate.

PRE-FABRICATED METAL PLATE WOOD TRUSSES

1. The Pre-fabricated metal plate wood trusses shall be designed, signed, and sealed by a Professional Engineer registered in the same state as the project location. They shall be designed to support the concentrated and other distributed loads as shown on the framing plans in addition to the following uniform loads:
   a. Dead Load (Top Chord)= 10 psf
   b. Dead Load (Bottom Chord)= 10 psf
   c. Snow Load (Top Chord)= 22 psf
   42 psf Total Load
   Coordinate the design with all mechanical equipment, fire sprinkling systems and hanging walls supported by the trusses. Provide extra trusses where required.

2. Design all wood trusses and bearing attachments for wind uplift. Assume a dead load of 8 psf to resist uplift.

3. Where the parapet is required to be built into the truss profile, design the parapet for an ultimate wind load of 50 psf in either direction.

4. Refer to architectural drawings for truss profile. Detailing and shop drawing production for prefab metal plate wood trusses will require information (including dimensions) contained in the architectural, structural and/or other consultants' drawings. The structural drawings shall be used in conjunction with the architectural and other consultant's drawings. Some dimensions and elements such as elevation and slopes are not shown in the structural drawings. All dimensions shown on structural drawings shall be verified by contractor with architectural drawings. Coordinate roof slope with architectural roof plan, sections and elevations.

5. All truss-to-truss connections shall be designed and provided by the truss manufacturer.

6. Design, handling, erection, and permanent bracing of metal plate connected wood trusses shall be in accordance with ANSI/TPI-1, National Design Standard for Metal Plated Connected Wood Truss Construction.

7. Steel Connector Plates: All steel gusset plates shall be galvanized and shall be approved by the "Research Committee for the International Code Council". Submit a copy of the ICC Report for the connector plate used. Values established by this committee must be indicated on the shop drawings.
   a. Stress increases for steel connector plate values for duration of load are not allowed.
   b. The minimum size for any connector shall be 8 square inches (not required at truss blocking).
   c. All steel gusset plates shall be located on the joint as the stresses require and shall provide a minimum bite of 2.1/2" length on all tension members (not required at truss blocking).
   d. All steel plate dimensions shall be increased by 10% above that required by analysis.
   e. Plates shall be pressed or rolled into member to obtain full penetration without crushing the outer surfaces of wood.

8. No wane, knots, skips, or other defects shall occur in the plated contact area or scarfed area of web members. Plates shall be centered with one required each side of wood truss

9. The trusses shall be handled and stored in a manner to prevent moisture from being absorbed by the wood.

10. Requirements for truss stability and erection shall comply with the Truss Plate Institute publications entitled "Commentary and Recommendations for Bracing Wood Trusses" and "Commentary and Recommendations for Handling and Erecting Wood Trusses." The contractor shall have copies of these publications on site and shall be familiar with their contents.

11. Shop Drawings: Complete calculations and shop drawings indicating all member forces, stresses, duration factors, lumber grades, dimensions, truss to truss connections, steel truss plate sizes and locations shall be submitted and reviewed by the engineer before fabrication. Each connector shall be dimensioned on the shop drawings as to its exact location at the joint.

BHB STRUCTURAL
2766 South Main Street
Salt Lake City, Utah 84115
801-355-5656
bhb@bhbengineers.com

FIVE DEGREES DESIGN
1457 EAST 840 NORTH
OREM, UTAH 84097
801.850.4583
chris@fivedegreesdesign.com

DATE:	01 JUNE 2021
PROJECT #:	210345
DRAWN BY:	MP
CHECKED BY:	AP

REVISIONS

PROFESSIONAL ENGINEER No. 11102949 ALEXANDER PIKET STATE OF UTAH

09/08/2022

PROJECT

COST U LESS CONCEPT PLAN

ADDRESS:
64 NORTH 900 WEST
AMERICAN FORK, UT 84003

GENERAL STRUCTURAL NOTES

S002

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REQUIREMENTS FOR SPECIAL INSPECTION, MATERIAL TESTING, AND STRUCTURAL OBSERVATION

STATEMENT OF SPECIAL INSPECTION AND QUALITY ASSURANCE

Special inspection and quality assurance (including structural testing), as required by section 1704 and 1705 of the 2018 IBC, shall be provided by an independent agency employed by the owner for the items in this section and other areas of the approved construction documents, unless waived by the building official.	
The names and credentials of the Special Inspectors to be used shall be submitted to the Building Official for approval.	
Responsibilities of the Special Inspector	
	Special Inspector shall review all work listed in the special inspection schedules herein for conformance with the approved construction plans, specifications and 2018 IBC.
	Testing and inspection reports shall be sent on a weekly basis to the architect, engineer, building official and contractor for review. All items not in compliance shall be brought to the immediate attention of the contractor for correction, and if uncorrected, to the architect, engineer and building official.
	Once corrections have been made by the contractor, the special inspector shall submit a final signed report to the building official stating that the work requiring special inspection was, to the best of the special inspector's knowledge, in conformance with the approved construction plans, specifications and 2018 IBC.
Responsibilities of the Contractor	
	The contractor shall submit a written statement of responsibility to the owner and the building official prior to the commencement of work in accordance with 2018 IBC section 1704.4. This statement shall indicate that the contractor will coordinate and cooperate with the required inspections contained herein.
	The contractor shall notify the designated special inspector that work is ready for inspection at least 24 hours before said inspection is required.
	All work requiring special inspection shall remain open and accessible until it has been observed by the special inspector and deemed acceptable through inspection report.
	Special inspection during fabrication is not required if the fabricator is registered and approved by the authority having jurisdiction to perform such work without special inspection. Upon completion of fabrication, the approved fabricator shall submit a certificate of compliance for submittal to the building official.
	The contractor shall be responsible for their own quality control including materials, fabrication, erection, etc.

SOILS CONSTRUCTION INSPECTIONS

Soils (2018 IBC Section 1705.6)

ITEM FOR VERIFICATION & INSPECTION	INSPECTION FREQUENCY		COMMENTS
	CONTINUOUS	PERIODIC	
Site Preparation	-	X	Verify that the site has been prepared in accordance with the soils report prior to placement of prepared fill.
Fill Material	X	-	Verify that the material being used, the maximum lift thickness and the in-place dry density of the compacted fill material comply with the soils report during placement and compaction of the fill material during placement and compaction.
Continuous Footing Backfill: at least one test for each 40 linear feet or less of wall length, but no fewer than 2 tests.	-	X	At each compacted backfill layer.
Spot Footing Backfill: Minimum of one compaction test for each lift for each spot footing.	-	X	At each compacted backfill layer.

CONCRETE CONSTRUCTION INSPECTIONS

Concrete (2018 IBC Section 1705.3, Table 1705.3, and Section 1705.12) The following concrete elements require special inspection:

All concrete footings, all concrete walls, including foundation walls, interior concrete slab-on-grade and concrete piers.

ITEM FOR VERIFICATION & INSPECTION	INSPECTION FREQUENCY		COMMENTS
	CONTINUOUS	PERIODIC	
Protection of concrete during cold and hot weather	-	X	
Verify materials used including use of the required mix design	-	X	Verify mix design meets strength and exposure requirements listed on General Structural Notes
Formwork	-	X	Verify shape, location and member dimensions
Bolts installed in concrete	X	-	Inspection of anchors or embeds cast in concrete is required when allowable loads have been increased or where strength design is used. Prior to and during concrete placement.
Embeds and Inserts installed in concrete	X	-	Prior to and during concrete placement.
Concrete reinforcing steel placement	-	X	Verify that reinforcing is of specified type, grade and size; that it is free of oil, dirt and rust; that it is located and spaced properly; that hooks, bends, ties, stirrups and supplemental reinforcement are placed correctly; that lap lengths, stagger and offsets are provided; and that all mechanical connections are installed per the manufacturer's instructions and/or evaluation report.
Concrete placement and samples	X	-	Cylinders, slump, temperature and air-entrainment shall be done for every 150 cubic yards or each day's production if the day's production is less than 150 cubic yards nor less than once for each 5000 sq. ft of surface area for slabs and walls.

STEEL BOLTED CONSTRUCTION INSPECTIONS

Where special inspections are listed under "Random Basis", special inspection of elements and items shall be performed on a random basis. Operations need not be delayed pending these inspections. Where special inspection items are listed under "Every Element", special inspection shall be performed for each element, joint, or member, as applicable based on the task listed below.

High Strength bolted connections (2018 IBC section 1705.2.1, section 1705.12.1 and section 1705.13.1 and AISC 360-16 Chapter N and AISC 341-16 Chapter J)

ITEM FOR VERIFICATION & INSPECTION	INSPECTION PLAN		COMMENTS
	Every Element	Random Basis	
Inspection Tasks Prior to Bolting			
Manufacturer's certifications available for fastener materials	X	-	
Fasteners	-	X	Marked in accordance with ASTM requirements
Proper fasteners selected for the joint detail	-	X	Including grade, type, bolt length if threads are to be excluded from shear plane.
Proper bolting procedure selected for joint detail	-	X	
Connecting elements	-	X	Including the appropriate faying surface condition and hole preparation, if specified, meet applicable requirements
Pre-installation verification testing by installation personnel observed and documented for fastener assemblies and methods used	-	X*	Not required if only snug-tight joints are specified per [Section N5.6(1) of AISC 360-16]) Special Inspector shall document the work has been performed in accordance with the contract documents, either in the shop or field, including noncompliant work and whether that work has been satisfactorily repaired.
Proper storage	-	X	Storage provided for bolts, nuts, washers and other fastener components
Inspection Tasks During Bolting			
Fastener assemblies, of suitable condition	-	X	Verify that fasteners placed in all holes and washers (if required) are positioned as required.
Joint	-	X	Verify that joint brought to the snug-tight condition (min) unless noted otherwise.
Fastener component	-	X	Verify that fastener component not turned by the wrench prevented from rotating
Pretensioned Fasteners	-	X	Verify that pretensioned fasteners are pretensioned in accordance with the RCSC *Specification*, progressing systematically from the most rigid point toward the free edges (Not required if only snug-tight joints are specified per [Section N5.6(1) of AISC 360-16]; Not required for pretensioned joints using turn-of-the-nut method with match-marking, direct-tension-indicators or twist-off type tension control bolt methods)
Inspection Tasks After Bolting			
Document acceptance or rejection of each bolted connection	X*	-	Special Inspector shall document the work has been performed in accordance with the contract documents, either in the shop or field, including noncompliant work and whether that work has been satisfactorily repaired.

*Required for elements designated in these structural drawings as "Seismic Resisting Elements – SRE".

STEEL WELDED CONSTRUCTION INSPECTIONS

Definition of Terms

Where special inspections are listed under "Random Basis", special inspection of elements and items shall be performed on a random basis. Operations need not be delayed pending these inspections. Where special inspection items are listed under "Every Element", special inspection shall be performed for each element, joint, or member, as applicable based on the task listed below.

Structural Welding (2018 IBC section 1705.2 and section 1705.12.1 and section 1705.13.1 and AISC 360-16 Chapter N and AISC 341-16 Chapter J)

ITEM FOR VERIFICATION & INSPECTION	INSPECTION PLAN		COMMENTS
	Every Element	Random Basis	
Inspection Tasks Prior to Welding			
Welding procedures specifications and manufacturer certifications for welding consumables shall be available	X	-	Welding procedures shall be submitted to the Engineer of Record for review.
Material identification (type/grade)	-	X	
Welder identification system	-	X	Verify there is a system in place to identify the welder who has welded a joint or member.
Fit-up of groove welds	X*	X	Including joint geometry, joint preparation, dimensions, cleanliness, tacking and backing type and fit.
Configuration and finish of access holes	-	X	
Fit-up of fillet welds	X*	X	Including alignment, gaps at root, dimensions, cleanliness and tacking.
Check welding equipment	-	X	
SRE Welds and Demand Critical Welds	X	-	Provide manufacturer's certifications that the filler metal meets the supplemental notch toughness requirements, as indicated in these documents. When the filler metal manufacturer does not supply such supplemental certifications, the fabricator or erector, shall have the necessary testing performed and provide the applicable test reports to the Engineer of Record for review.

*Required for elements designated in these structural drawings as "Seismic Resisting Elements – SRE". May be reduced from 'Every Element' to 'Random Basis' after ten satisfactory welds have been completed. Subsequently, the inspector may change the requirements from 'Random Basis' to 'Every Element' and vice versa at their discretion.

Inspection Tasks During Welding			
Use of qualified welders	-	X	
Control and handling of welding consumables	-	X	Including packaging and exposure control
Cracked tack welds	-	X	Verify no welding over cracked tack welds.
Environmental conditions	-	X	Including wind speed within limits and precipitation and temperature
WPS followed	-	X	Including settings on welding equipment, travel speed, selected welding materials, shielding gas type/flow rate, preheat applied, interpass temperature (min./max.) maintained, proper position (F, V, H, OH)
Welding techniques	-	X	Including interpass and final cleaning, each pass within profile limitations, each pass meets quality requirements
Inspection Tasks After Welding			
Welds cleaned	-	X	
Size, length and location of welds	X	-	
Welds meet visual acceptance criteria	X**	-	Including crack prohibition, weld/base-metal fusion, crater cross section, weld profiles, weld size, undercut and porosity.
Arc strikes, k-area, weld access holes for flanges greater than 2", backing removed and weld tabs removed (if required), repair activities	X**	-	When welding of doubler plates, continuity plates, or stiffeners has been performed in the k-area, visually inspect the web k-area for cracks within 3" of the weld.
Ultrasonic testing (UT) for complete-joint-penetration (CJP) groove welds, partial penetration groove welds when used in column splices, and welds subject to fatigue	-	X	Perform UT on 10% of welds subject to transversely applied tension loading in butt, T- and corner joints, in material 5/16" thick or greater. For materials less than 5/16" thick, ultrasonic testing is not required. The UT rate must be increased to 100% if the rejection rate exceeds 5% of the welds tested. See Sections N5.5d and N5.5f for more information.
Placement of reinforcing or contouring fillet welds	X**	-	
Ultrasonic testing (UT) for base metal thicker than 1.1/2", loaded in tension in the through-thickness direction in T- and corner-joints where the connected material is greater than 3/4" and contains CJP groove welds	X**	-	Provide UT for discontinuities found within t/ 4 of the steel surface shall be accepted or rejected based on criteria of A.W.S. D1.1/D1.1M Table 6.2 where 't' is the thickness of the part subjected to tension load. All deficient welds shall be corrected and tested at no additional cost to the owner.
Document acceptance or rejection of each welded joint or member	X**	-	

** Required for elements designated in these structural drawings as "Seismic Resisting Elements – SRE". All welding inspections and nondestructive testing shall satisfy the requirements above and AWS D1.8/D1.8M. The Inspector shall document the work has been performed in accordance with the contract documents, either in the shop or field, including noncompliant work and whether that work has been satisfactorily repaired.

WOOD CONSTRUCTION INSPECTIONS

ITEM FOR VERIFICATION & INSPECTION	INSPECTION FREQUENCY		COMMENTS
	CONTINUOUS	PERIODIC	
Prefabricated metal plate wood trusses (2018 IBC Sections 1704.2.5, 1705.5.2, 1705.11.1, and 1705.12.2)			
Shop fabrication of trusses	-	X	Verify that detailed fabrication and quality control procedures exist that provide a basis of inspection control of the workmanship and the fabricator's ability to conform to approved construction documents and referenced standards.
Wood trusses with overall heights or 60 inches or greater and/or wood trusses clear spanning 60 feet or greater	-	X	Verify temporary (during construction) and permanent restraint/bracing of truss members is in accordance with the approved truss submittal package.
Wood diaphragms and shear walls (2018 IBC Sections 1705.5, 1705.11.1 and 1705.12.2)			
All wood diaphragms and shear walls with sheathing fastener spacing at panel edges is equal to or less than 4" o.c.	-	X	Verify wood panel sheathing, grade, thickness and nominal size of framing members, adjoining panel edges, nailing, bolting, anchoring (including hold downs) and other fastening of components within the lateral force resisting system.

POST-INSTALLED ANCHOR INSPECTIONS

ITEM FOR VERIFICATION & INSPECTION	INSPECTION FREQUENCY		COMMENTS
	CONTINUOUS	PERIODIC	
Post-Installed Anchors and Reinforcing Bars (2018 IBC Section 1705.1.1)			
Adhesive Anchors and Reinforcing Bars	X	-	Special inspection shall be performed per manufacturer's requirements and approved ICC-ES reports noted in POST-INSTALLED ANCHOR section of the General Structural Notes prior to installation of epoxy and anchor rod. If the anchor is not installed in a horizontal, upwardly inclined or overhead orientation meant to resist sustained tension loads, special inspection may be reduced to a periodic frequency.
Mechanical Anchors and Screw Anchors	-	X	Special inspection shall be provided per manufacturer's requirements and approved ICC-ES reports noted in POST-INSTALLED ANCHOR section of the General Structural Notes prior to installation of mechanical or screw anchor.

BHB STRUCTURAL
2766 South Main Street
Salt Lake City, Utah 84115
801-355-5656
bhb@bhbengineers.com

FIVE DEGREES DESIGN
1457 EAST 840 NORTH
OREM, UTAH 84097
801.850.4583
chris@fivedegreesdesign.com

DATE: 01 JUNE 2021
PROJECT #: 210345
DRAWN BY: MP
CHECKED BY: AP

REVISIONS

PROFESSIONAL ENGINEER No. 11702949 ALEXANDER PIKET STATE OF UTAH
09/08/2022

PROJECT

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ADDRESS:
64 NORTH 900 WEST
AMERICAN FORK, UT 84003

SPECIAL INSPECTIONS

S003

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REQUIREMENTS FOR SPECIAL INSPECTION, MATERIAL TESTING, AND STRUCTURAL OBSERVATION

NON-STRUCTURAL COMPONENT CONSTRUCTION INSPECTIONS

Architectural Components located in Seismic Design Categories C, D, E and F (2018 IBC Sections 1705.12.5 and 1705.12.7)

ITEM FOR VERIFICATION & INSPECTION	INSPECTION FREQUENCY		COMMENTS
	CONTINUOUS	PERIODIC	
Exterior cladding, and exterior veneer	-	X	Verify attachments of exterior metal clad fastening systems, drift clips, veneer support angles and attachments, and all masonry, stone or rain screen seismic attachments.
Erection and fastening of interior and exterior nonbearing walls	-	X	Verify appropriate materials, fasteners and attachment at commencement of work and at completion. (Not required if <30 feet or for interior walls < 15 psf.)

Mechanical and Electrical Components located in Seismic Design Categories C, D, E and F (2018 IBC Sections 1705.12.4 and 1705.12.6)

ITEM FOR VERIFICATION & INSPECTION	INSPECTION FREQUENCY		COMMENTS
	CONTINUOUS	PERIODIC	
Anchorage of emergency or standby power systems	-	X	Verify that anchorage complies with approved construction documents.
Designated seismic systems	-	X	Verify that manufacturer's certificate of compliance conforms to the requirements of Section 13.2 of ASCE 7-16. Verify that the label, anchorage or mounting conforms to the manufacturer's certificate of compliance.

STRUCTURAL OBSERVATION PROGRAM

If structural observations are required, they shall be done by the Engineer of Record or an approved subordinate at the stages of construction listed in the Construction Notification Phases section of these notes. At the conclusion of the project, the designated structural observer shall submit to the building official a written statement that the site visits have been made and identify any reported deficiencies that to the best of the structural observer's knowledge have not been resolved (See IBC 2018 1704.6).

STRUCTURAL OBSERVATION PROGRAM REQUIRED BY CODE:	YES	NO
		X

CONSTRUCTION MILESTONE SCHEDULE

CONTRACTOR TO NOTIFY ENGINEER AT THE FOLLOWING CONSTRUCTION PHASES:	
CONCRETE	
Footings, stem walls and piers	Prior to pouring concrete
STEEL	
Roof framing	After substantial portion of framing is erected
MASONRY	
Masonry walls	Prior to pouring grout
WOOD	
Wall framing	After substantial portion of framing is completed
Roof framing	After substantial portion of framing is completed
Wood shear walls	After substantial portion of framing is completed and prior to covering either side of shear walls
Wood roof sheathing	After substantial portion of framing is completed and prior to roofing

DEFERRED SUBMITTALS

For the purposes of this section, deferred submittals are defined as per section 107.3.4.1 of the IBC 2018. Submittal documents for deferred submittal items shall be submitted to the engineer, architect and building official for their review for general conformance with the design of the building.

DEFERRED STRUCTURAL SUBMITTALS FOR THIS PROJECT ARE

Prefabricated metal plate wood trusses

BHB STRUCTURAL
2766 South Main Street
Salt Lake City, Utah 84115
801-355-5656
bhb@bhbengineers.com

FIVE DEGREES DESIGN
1457 EAST 840 NORTH
OREM, UTAH 84097
801.850.4583
chris@fivedegreesdesign.com

DATE: 01 JUNE 2021
PROJECT #: 210345
DRAWN BY: MP
CHECKED BY: AP

REVISIONS

PROFESSIONAL ENGINEER
No. 11102949
ALEXANDER PIKET
STATE OF UTAH

09/08/2022

PROJECT

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ADDRESS:
64 NORTH 900 WEST
AMERICAN FORK, UT 84003

STRUCTURAL

SPECIAL INSPECTIONS

S004

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LEGENDS AND ABBREVIATIONS

LEGEND OF MARKS AND ABBREVIATIONS

AB	ANCHOR BOLT(S)
ABV	ABOVE
ALT	ALTERNATE
APPROX	APPROXIMATE
ARCH	ARCHITECT(URAL)
BLDG	BUILDING
BLW	BELOW
BM	BEAM
B.N.	BOUNDARY NAILING
BOT	BOTTOM
BRG	BEARING
BTWN	BETWEEN
CC.	CENTER-TO CENTER
CGS	CENTER OF GROSS STEEL
C.J.	CONST/CONTROL JOINT
CJP	COMPLETE JOINT PENETRATION GROOVE WELD (FULL PEN WELD)
COL	COLUMN
CONC	CONCRETE
CONST	CONSTRUCTION
CP-x	CONCRETE PIER
CTR	CENTER
CW-x	CONCRETE WALL
DB	DECK BEARING
DBA	DEFORMED BAR ANCHOR
DBE	DECK BEARING ELEVATION
DBL	DOUBLE
DET	DETAIL
DIA	DIAMETER
DIM	DIMENSION
DN	DOWN
DWG	DRAWING
DWL	DOWEL
EA	EACH
E.N.	EDGE NAILING
E.F.	EACH FACE
E.J.	EXPANSION JOINT
ELEC	ELECTRICAL
ELEV	ELEVATION
E.O.D.	EDGE OF DECK
E.O.S.	EDGE OF SLAB
EQUIP	EQUIPMENT
EQ	EQUAL
E.W.	EACH WAY
EXST	EXISTING
EXP	EXPANSION
EXT	EXTERIOR
FC-x	CONTINUOUS FOOTING MARK
F.D.	FLOOR DRAIN
FDN	FOUNDATION
F.F.	FINISHED FLOOR
F.N.	FIELD NAILING
FR-x	RECTANGULAR FOOTING
FS-x	SQUARE FOOTING MARK
FT	FOOT
FTG	FOOTING
FTS-x	THICKENED SLAB MARK
GA	GAUGE
GALV	GALVANIZED
GSN	GENERAL STRUCTURAL NOTES
HORIZ	HORIZONTAL
HSA	HEADED STUD ANCHOR
HT	HEIGHT
ICC	INTERNATIONAL CODE COUNCIL
IBC	INTERNATIONAL BUILDING CODE
I.F.	INSIDE FACE
IN.	INCH
INT	INTERIOR
JT	JOINT
JST	JOIST
k	KIP(S) = 1000 POUNDS
KLF	KIPS PER LINEAL FOOT
KSF	KIPS PER SQUARE FOOT
LBS	POUNDS
LF	LINEAL FOOT
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
LSH	LONG SIDE HORIZONTAL
LSV	LONG SIDE VERTICAL
LVL	LAMINATED VENEER LUMBER
MAX	MAXIMUM
MECH	MECHANICAL
MFR	MANUFACTURER
MIN	MINIMUM
MISC	MISCELLANEOUS
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
O.C.	ON CENTER
O.F.	OUTSIDE FACE
OPNG	OPENING
OPP	OPPOSITE
PAF	POWDER-ACTUATED FASTENER
PCF	POUNDS PER CUBIC FOOT
PL	PLATE
PLF	POUNDS PER LINEAL FOOT
PNL	PANEL
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PT	POINT
REINF	REINFORCING
REQD	REQUIRED
R.D.	ROOF DRAIN
RTU	ROOF TOP UNITS
SBP-x	STEEL BASE PLATE MARK
SCW	SEISMIC CRITICAL WELD
SC-x	STEEL COLUMN MARK
SCP-x	STEEL CAP PLATE MARK
SHT	SHEET
SI	SPECIAL INSPECTION
SIM	SIMILAR
SMU	SUSPENDED MECHANICAL UNITS
SOG	SLAB-ON-GRADE
SQ	SQUARE
SRE	SEISMIC RESISTING ELEMENT
STAG	STAGGERED
STD	STANDARD
STL	STEEL
STR	STRUCTURAL
STS	SELF TAPPING SCREWS
T&B	TOP AND BOTTOM
TEMP	TEMPERATURE
THDS	THREADS
T.O.	TOP OF
TOC	TOP OF CONCRETE
TOD	TOP OF DECK
TOF	TOP OF FOOTING
TOS	TOP OF STEEL
TOW	TOP OF WALL
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
VERT	VERTICAL
W/	WITH
WT	WALL THICKNESS
WWF	WELDED WIRE FABRIC
WWM	WELDED WIRE MESH

MARKS AND SYMBOLS LEGEND

- SECTION MARK
- SHEET NUMBER
- FOOTING DESIGNATION
- TOP OF FOOTING ELEVATION
- INDICATES CONCRETE WALL. DASHED WALLS STOP AT DECK
- INDICATES WOOD STUD WALL. DASHED WALLS STOP AT DECK
- INDICATES STRUCTURAL WALL ABOVE.
- DEPRESS FOUNDATION WALL AND POUR SLAB OVER. SEE DETAIL (2278913-21)
- INDICATES PLYWOOD ROOF SHEATHING, SEE SCHEDULE ON SHEET S602
- INDICATES MOMENT CONNECTION, SEE DETAILS
- INDICATES FLOOR OFFSET, SEE DETAILS
- CW-x — INDICATES CONCRETE FOUNDATION WALL TYPE, SEE SCHEDULE ON SHEET S601
- CW-x/WSW-x — INDICATES WOOD SHEARWALL (AND TYPE) OVER CONCRETE WALL (AND TYPE), SEE SCHEDULES ON SHEET(S) S601 & S602
- FCx.x — INDICATES CONTINUOUS FOOTING. SEE SCHEDULE ON SHEET S601
- FSx.x — INDICATES SPOT FOOTING. SEE SCHEDULE ON SHEET S601
- FTSx.x — INDICATES THICKENED SLAB FOOTING. SEE SCHEDULE ON SHEET S601
- SC-x — INDICATES STEEL COLUMN, SEE SCHEDULE ON SHEET S601
- C.J. — INDICATES CONTROL / CONSTRUCTION JOINT, SEE DETAIL(S) 5/SS01
- CP-x — INDICATES CONCRETE PIER. SEE SCHEDULE ON SHEET S601
- WH-x — INDICATES WOOD HEADER TYPE. SEE SCHEDULE ON SHEET S602
- HDUx — INDICATES HOLD DOWN TYPE. SEE SCHEDULE ON SHEET S602
- R.D. — INDICATES ROOF DRAIN, SEE DETAIL 6/SS11
- RTU — INDICATES ROOF MECHANICAL UNIT AND WEIGHT OF UNIT

SNOW DRIFT LEGEND

- INDICATES AREA OF SNOW DRIFT. JOIST SUPPLIER TO ADD SNOW DRIFT LOAD TO JOISTS AND GIRDERS
- xx psf, 0 psf, x'-x" — INDICATES ADDITIONAL LOADING DUE TO SNOW DRIFT (SEE SNOW DRIFT NOTE) xx psf INDICATES LOAD AT HIGH POINT x'-x" INDICATES LENGTH OF DRIFT
- xx psf, x psf, x'-x" — INDICATES ADDITIONAL LOADING DUE TO SNOW DRIFT (SEE SNOW DRIFT NOTE) xx psf INDICATES LOAD AT HIGH POINT, x psf INDICATES LOAD AT LOW POINT x'-x" INDICATES LENGTH OF DRIFT
- SNOW DRIFT NOTE — SEE PLAN FOR SNOW DRIFT LOADING. THESE LOADS ARE IN ADDITION TO THE JOIST UNIFORM AND POINT LOADS SHOWN ON PLANS. JOIST SUPPLIER TO ADD SNOW DRIFT LOAD TO BOTH JOISTS AND GIRDERS

SHEET LIST

Sheet Number	Sheet Name
S001	GENERAL STRUCTURAL NOTES
S002	GENERAL STRUCTURAL NOTES
S003	SPECIAL INSPECTIONS
S004	SPECIAL INSPECTIONS
S010	LEGENDS AND ABBREVIATIONS
S101	FOOTING AND FOUNDATION PLAN
S111	ROOF FRAMING PLAN
S121	HIGH ROOF FRAMING PLAN
S501	DETAILS
S502	DETAILS
S511	DETAILS
S512	DETAILS
S513	DETAILS
S601	SCHEDULES
S602	SCHEDULES

FIVE DEGREES DESIGN
1457 EAST 840 NORTH
OREM, UTAH 84097
801.850.4583
chris@fivedegreesdesign.com

DATE: 01 JUNE 2021
PROJECT #: 210345
DRAWN BY: MP
CHECKED BY: AP

REVISIONS

PROFESSIONAL ENGINEER No. 11702949 ALEXANDER PIKET STATE OF UTAH
09/08/2022

PROJECT

COST U LESS CONCEPT PLAN

ADDRESS:
64 NORTH 900 WEST
AMERICAN FORK, UT 84003

LEGENDS AND ABBREVIATIONS

S010

BHB STRUCTURAL
2766 South Main Street
Salt Lake City, Utah 84115
801-355-5656
bhb@bhbengineers.com

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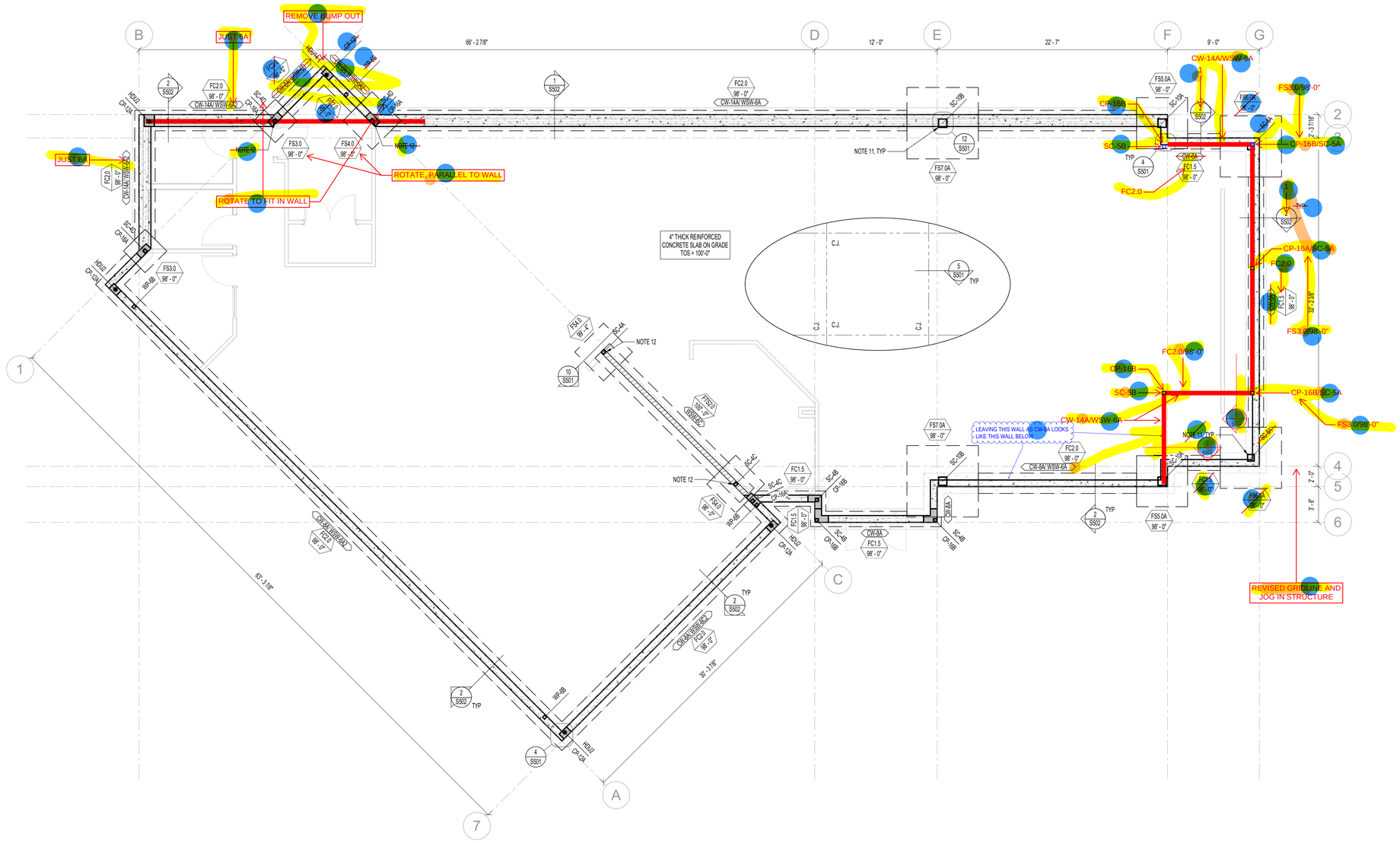

1 FOOTING AND FOUNDATION PLAN

3/16" = 1'-0" 0" 4'-0" 8'-0" 16'-0"

FOOTING AND FOUNDATION PLAN NOTES

1. COORDINATE LOCATION OF DEPRESSED SLABS, SLOPED SLABS, AND FLOOR DRAINS WITH ARCHITECTURAL AND MECHANICAL DRAWINGS.
2. SEE ARCHITECTURAL AND CIVIL DRAWINGS FOR EXTERIOR CONCRETE WORK AT DOORS, SIDEWALKS, ETC.
3. SEE ARCHITECTURAL DRAWINGS FOR CONTROL JOINT LOCATIONS.
4. ALL SPOT FOOTINGS SHALL BE CENTERED UNDER COLUMNS (UNO).
5. SEE DETAILS 1/S501 AND 2/S501 FOR CONDITION WHERE BURIED PIPES RUN PARALLEL AND PERPENDICULAR TO FOOTINGS.
6. SEE DETAIL 5/S501 FOR TYPICAL CONTROL/CONSTRUCTION JOINTS IN CONCRETE SLAB ON GRADE.
7. SEE DETAIL 7/S501 FOR SLAB REINFORCING WHERE CONTROL JOINTS ARE DISCONTINUOUS.
8. SEE DETAIL 6/S501 FOR ADDITIONAL REINFORCING AT MISCELLANEOUS OPENINGS IN CONCRETE WALLS.
9. SEE DETAIL 9/S501 FOR BOTTOM TRACK FASTENER DETAIL.
10. SEE ARCHITECTURAL DRAWINGS FOR DIMENSIONS TO ALL STEEL COLUMNS.
11. BLOCKOUT FOUNDATION WALL AS REQ'D FOR INSTALLATION OF BASEPLATE AND ANCHOR BOLTS.
12. USE 3/4"DIA ALL THREAD WITH A 1/2"x4"x0'-4" PL WASHER AND (2) HEAVY HEXT NUTS. 9" ANCHOR BOLT EMBEDMENT INTO CONCRETE MINIMUM.

BHB STRUCTURAL
2766 South Main Street
Salt Lake City, Utah 84115
801-355-5656
bhb@bhbengineers.com

FIVE DEGREES DESIGN
1457 EAST 840 NORTH
OREM, UTAH 84097
801.850.4583
chris@fivedegreesdesign.com

DATE:	01 JUNE 2021
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DRAWN BY:	MP
CHECKED BY:	AP

REVISIONS

PROFESSIONAL ENGINEER No. 11102949 ALEXANDER PIKET STATE OF UTAH

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STRUCTURAL

FOOTING AND FOUNDATION PLAN

S101

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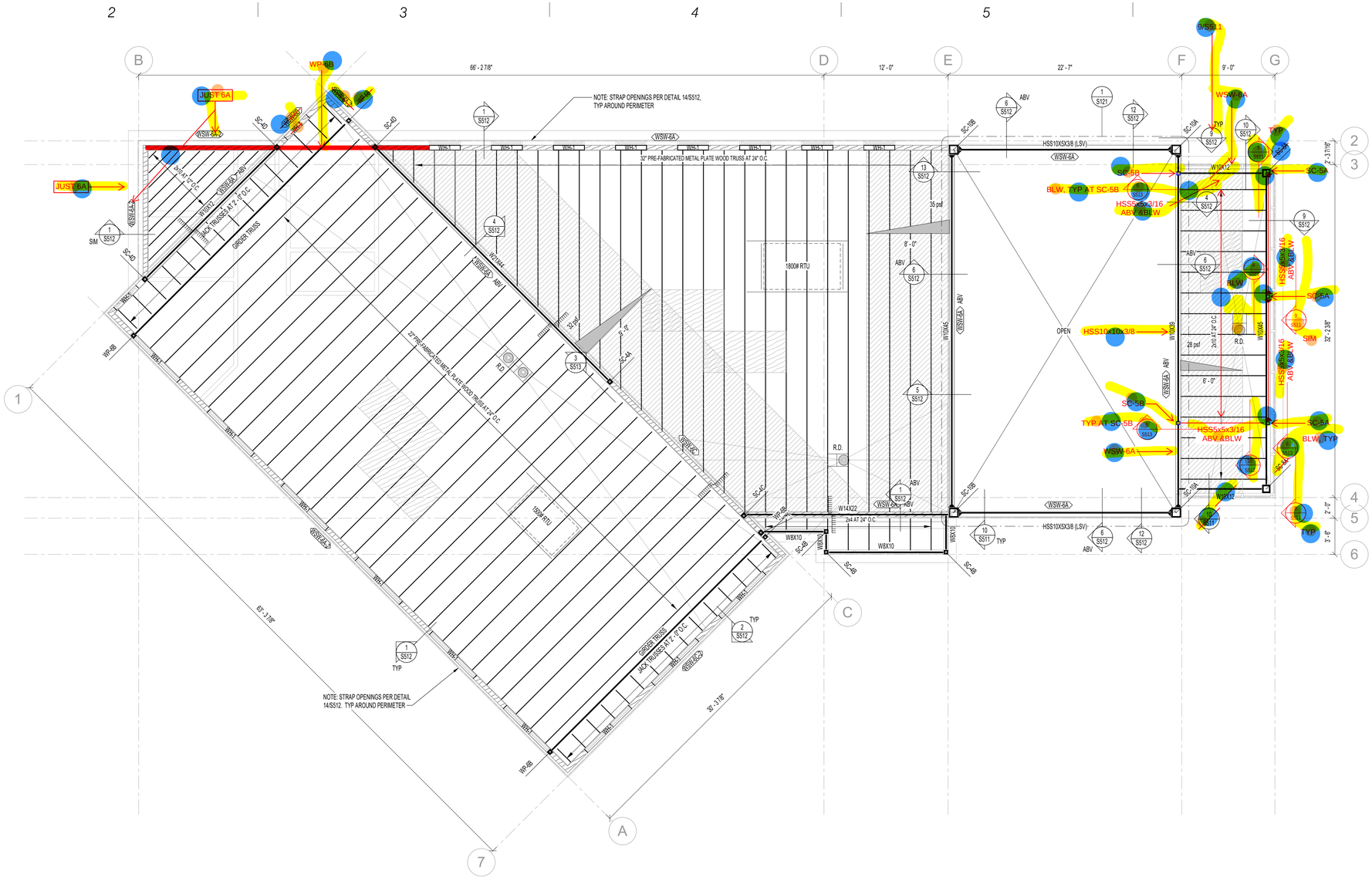

1 ROOF FRAMING PLAN

3/16" = 1'-0" 0" 4'-0" 8'-0" 16'-0"

ROOF FRAMING DESIGN LOADS

ROOF LOADS:	
DEAD LOAD	20 psf
SNOW LOAD	22 psf
TOTAL LOAD	42 psf

ROOF FRAMING PLAN NOTES

1. VERIFY ALL ROOF OPENINGS FOR MECHANICAL SHAFTS, DRAINS, ETC. WITH ARCHITECTURAL AND MECHANICAL DRAWINGS.
2. SEE DETAIL 1/S511 FOR FRAMING AROUND ALL OPENINGS.
3. SEE DETAIL 4/S511 FOR TYPICAL BUILT-UP BEAM DETAIL.
4. SEE DETAIL 2/S511 FOR TYPICAL TOP PLATE SPLICE DETAIL.
5. SEE DETAIL 3/S511 FOR TYPICAL TOP PLATE SPLICE SCHEDULE AT PIPE.
6. SEE ARCHITECTURAL PLANS FOR DIMENSIONS TO ALL STEEL COLUMNS.

BHB STRUCTURAL
2766 South Main Street
Salt Lake City, Utah 84115
801-355-5656
bhb@bhbengineers.com

FIVE DEGREES DESIGN
1457 EAST 840 NORTH
OREM, UTAH 84097
801.850.4583
chris@fivedegreesdesign.com

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AMERICAN FORK, UT 84003

STRUCTURAL

ROOF FRAMING PLAN

S111

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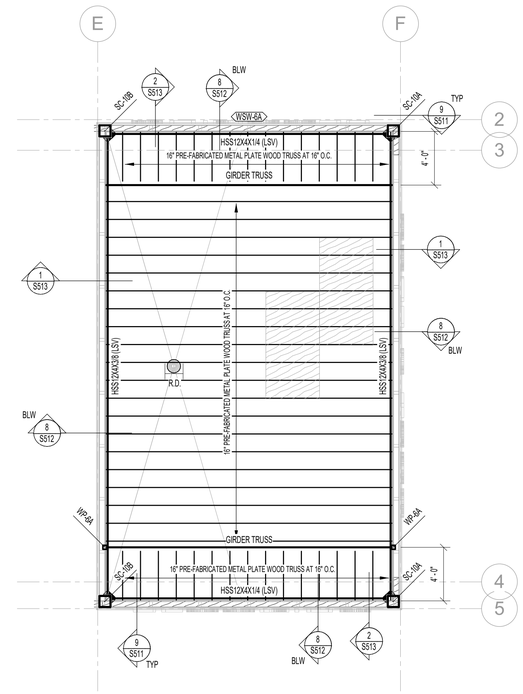

1 HIGH ROOF FRAMING

[1/S111]

3/16" = 1'-0" 0" 4'-0" 8'-0" 16'-0"

ROOF FRAMING DESIGN LOADS

ROOF LOADS:	
DEAD LOAD	20 psf
SNOW LOAD	22 psf
TOTAL LOAD	42 psf

ROOF FRAMING PLAN NOTES

1. VERIFY ALL ROOF OPENINGS FOR MECHANICAL SHAFTS, DRAINS, ETC. WITH ARCHITECTURAL AND MECHANICAL DRAWINGS.
2. SEE DETAIL 1/S511 FOR FRAMING AROUND ALL OPENINGS.
3. SEE DETAIL 4/S511 FOR TYPICAL BUILT-UP BEAM DETAIL.
4. SEE DETAIL 2/S511 FOR TYPICAL TOP PLATE SPLICE DETAIL.
5. SEE DETAIL 3/S511 FOR TYPICAL TOP PLATE SPLICE SCHEDULE AT PIPE.
6. SEE ARCHITECTURAL PLANS FOR DIMENSIONS TO ALL STEEL COLUMNS.

BHB STRUCTURAL
2766 South Main Street
Salt Lake City, Utah 84115
801-355-5656
bhb@bhbengineers.com

FIVE DEGREES DESIGN
1457 EAST 840 NORTH
OREM, UTAH 84097
801.850.4583
chris@fivedegreesdesign.com

DATE:	01 JUNE 2021
PROJECT #:	210345
DRAWN BY:	MP
CHECKED BY:	AP

REVISIONS

PROFESSIONAL ENGINEER
No. 11702949
ALEXANDER PIKET
STATE OF UTAH

09/08/2022

PROJECT

COST U LESS CONCEPT PLAN

ADDRESS:
64 NORTH 900 WEST
AMERICAN FORK, UT 84003

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HIGH ROOF FRAMING PLAN

S121

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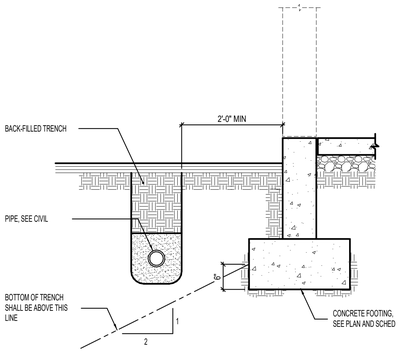
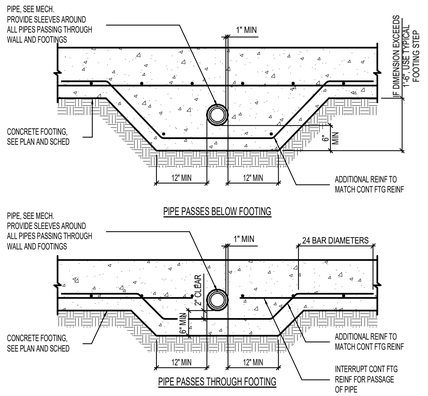
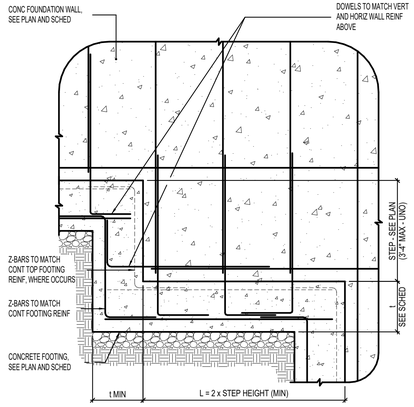


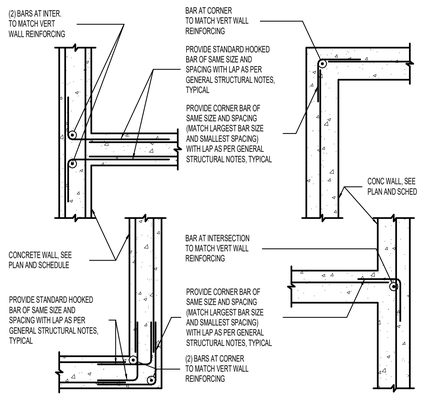
1 CONDITION AT PIPE PARALLEL TO CONCRETE FOOTING
NO SCALE



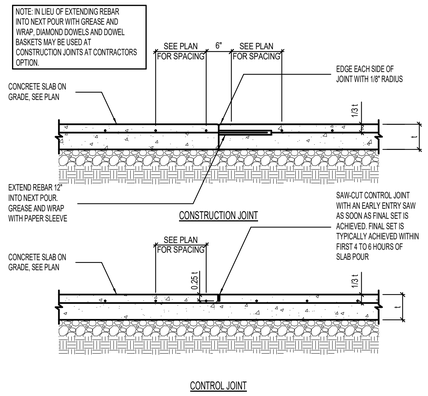
2 CONDITIONS AT PIPE PERPENDICULAR TO FOOTING
NO SCALE



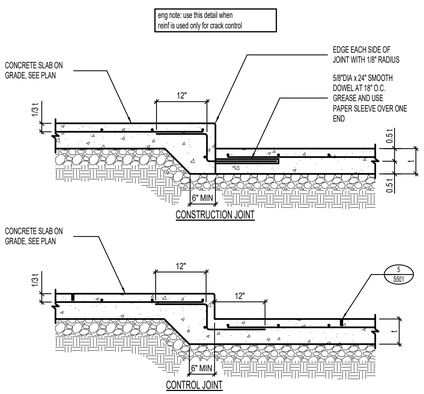
3 TYPICAL FOOTING STEP DETAIL
NO SCALE



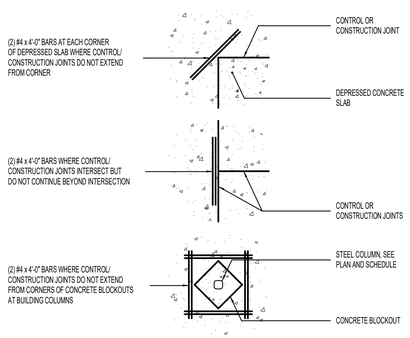
4 TYPICAL CORNER WALL REINFORCING AT CONCRETE WALLS [PLAN VIEW]
NO SCALE



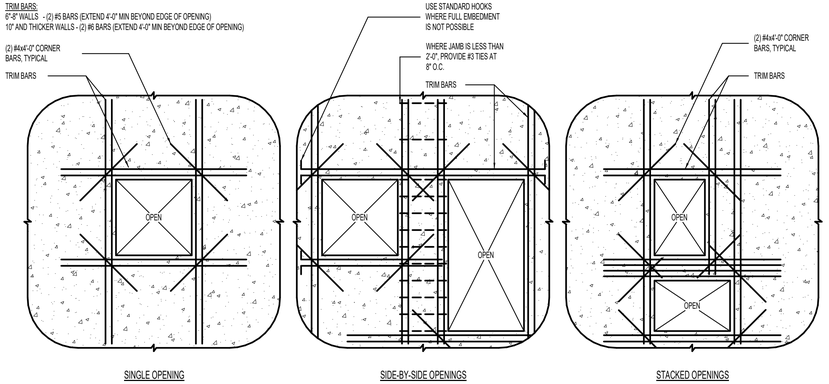
5 TYPICAL SLAB ON GRADE JOINT DETAILS
NO SCALE



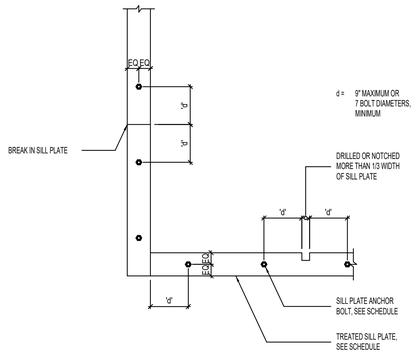
6 JOINT DETAILS AT SLAB DEPRESSIONS
NO SCALE



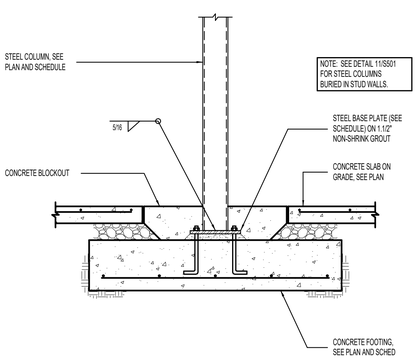
7 LOCATIONS REQUIRING ADDITIONAL SLAB REINFORCING [PLAN VIEW]
NO SCALE



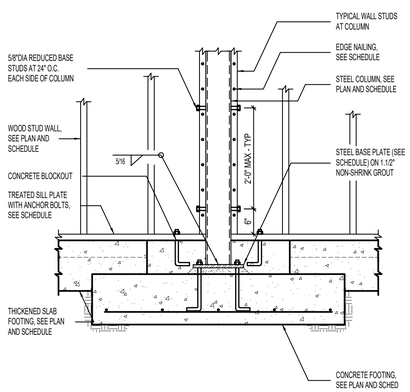
8 TYPICAL REINFORCING FOR MISCELLANEOUS OPENINGS LESS THAN 3'-0" IN CONCRETE WALLS
WHERE MISCELLANEOUS OPENING WIDTH IS GREATER THAN 3'-0" WIDE, CONTACT STRUCTURAL ENGINEER.
NO SCALE



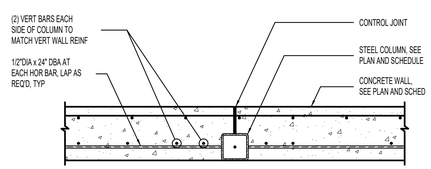
9 SILL PLATE BOLTING DETAIL
[PLAN VIEW]
NO SCALE



10 TYPICAL INTERIOR STEEL COLUMN TO FOOTING DETAIL
NO SCALE



11 TYPICAL INTERIOR STEEL COLUMN BEARING ON FOOTING IN INTERIOR WOOD STUD WALL
NO SCALE



12 TYPICAL STEEL COLUMN BURIED IN CONCRETE WALLS
[PLAN VIEW]
NO SCALE

BHB STRUCTURAL
2766 South Main Street
Salt Lake City, Utah 84115
801-355-5656
bhb@bhbengineers.com

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OREM, UTAH 84097
801.850.4583
chris@fivedegreesdesign.com

DATE: 01 JUNE 2021
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DRAWN BY: MP
CHECKED BY: AP

REVISIONS

PROFESSIONAL ENGINEER No. 11102949 ALEXANDER PIKET STATE OF UTAH
09/08/2022

PROJECT

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ADDRESS:
64 NORTH 900 WEST
AMERICAN FORK, UT 84003

STRUCTURAL

DETAILS

S501

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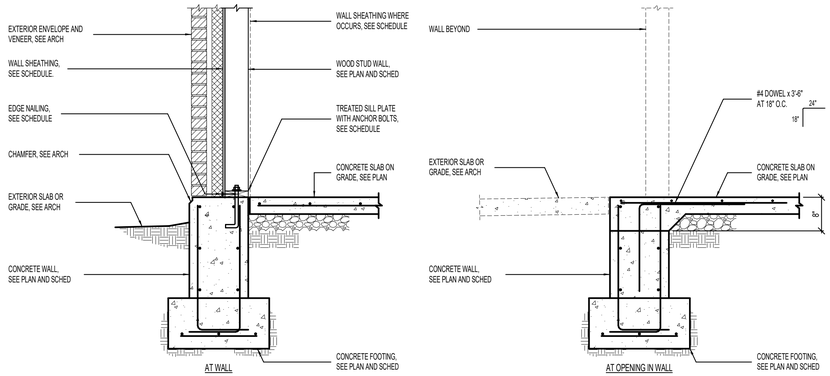
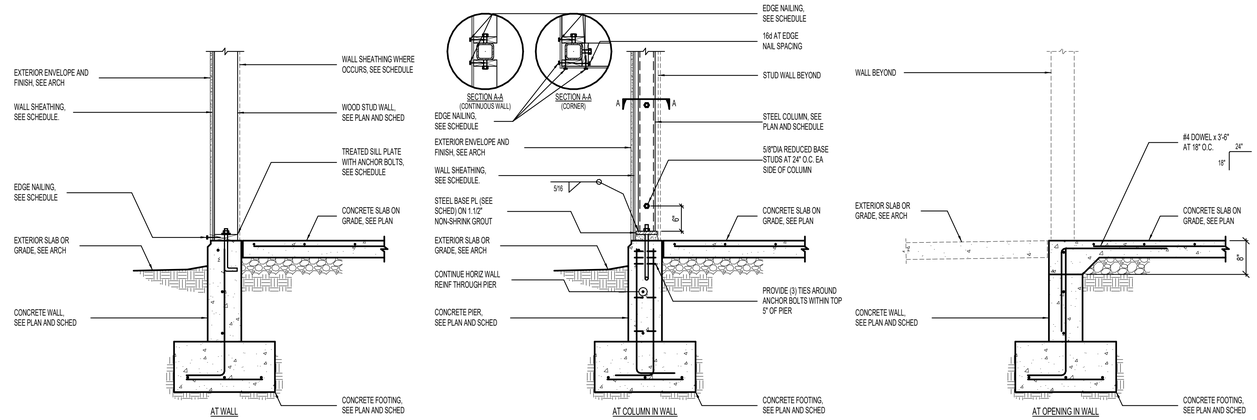


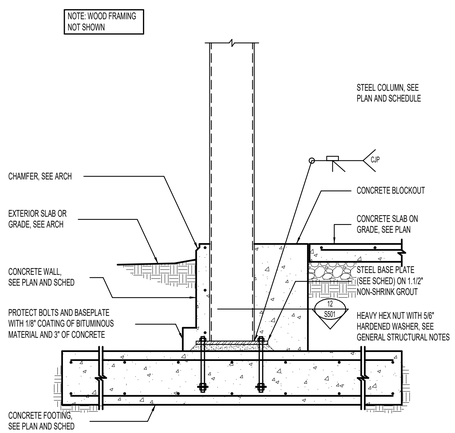
1 TYPICAL EXTERIOR WOOD STUD WALL BEARING ON DOUBLE WYTHE REINFORCED CONCRETE FOUNDATION WALL

NO SCALE



2 TYPICAL EXTERIOR WOOD STUD WALL BEARING ON CONCRETE FOUNDATION WALL

NO SCALE



3 STEEL COLUMN AT CONCRETE FOOTING

NO SCALE

FIVE DEGREES DESIGN
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OREM, UTAH 84097
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chris@fivedegreesdesign.com

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AMERICAN FORK, UT 84003

STRUCTURAL

DETAILS

S502

BHB STRUCTURAL
2766 South Main Street
Salt Lake City, Utah 84115
801-355-5656
bhb@bhbengineers.com

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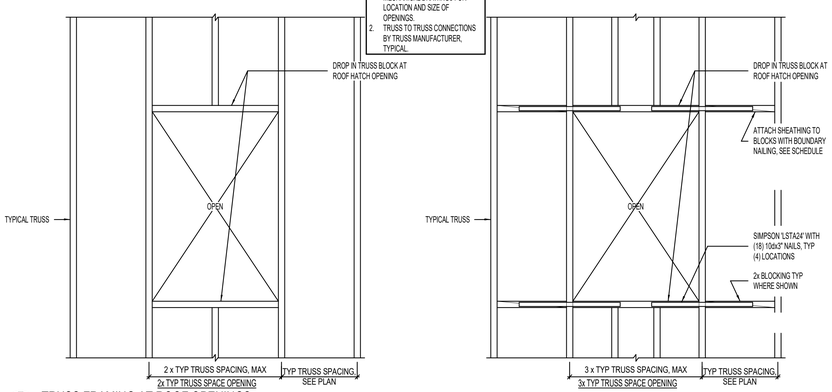
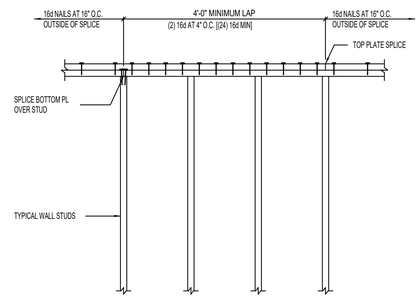
NOTES:
1. SEE ARCHITECTURAL AND MECHANICAL DRAWINGS FOR LOCATION AND SIZE OF OPENINGS.
2. TRUSS TO TRUSS CONNECTIONS BY TRUSS MANUFACTURER, TYPICAL.



1 TRUSS FRAMING AT ROOF OPENINGS [PLAN VIEW]

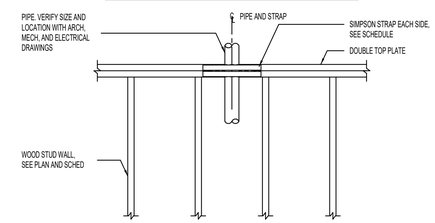
NO SCALE



2 TYPICAL TOP PLATE SPLICE DETAIL

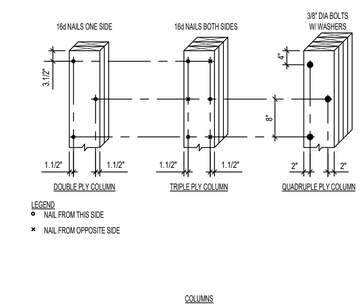
NO SCALE

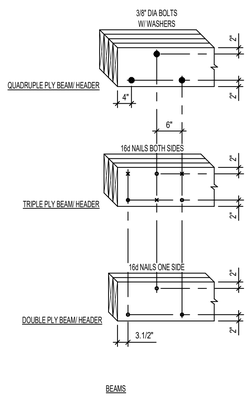
TOP PLATE SPLICE	
HOLE SIZE	STRAPS
LESS THAN OR EQUAL TO 1/3 STUD WIDTH	NONE REQUIRED
GREATER THAN 1/3 AND LESS THAN OR EQUAL TO 2/3 STUD WIDTH	(2) SIMPSON CTS218 WITH (24) 10dx1.1/2" NAILS OR EQUIVALENT
GREATER THAN 2/3 STUD WIDTH	(4) SIMPSON CTS218 WITH (24) 10dX1.1/2" NAILS [(2) CTS218 EACH SIDE OF WALL] OR EQUIVALENT



3 TOP PLATE SPLICE SCHEDULE AT PIPE

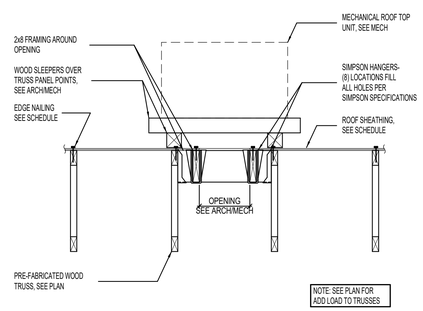
NO SCALE





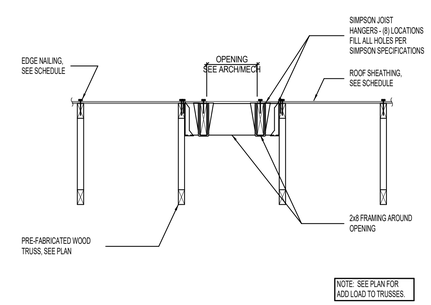
4 TYPICAL BUILT-UP WOOD MEMBER DETAIL

NO SCALE



5 TYPICAL MECHANICAL UNIT SUPPORT DETAIL

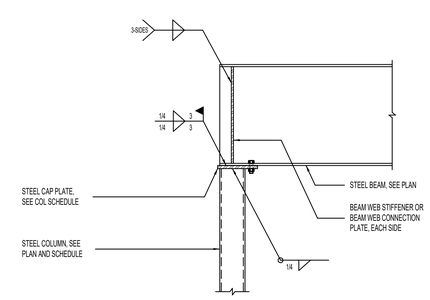
NO SCALE



6 TYPICAL ROOF OPENING DETAIL

NO SCALE

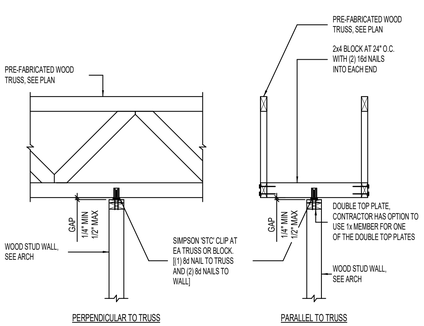
NOTE: SEE DETAILS AND FOR STEEL COLUMNS BURIED IN STUD WALLS.



7 TYPICAL STEEL BEAM BEARING AT STEEL COLUMN

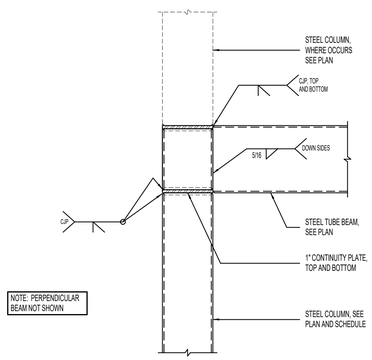
NO SCALE

NOTE: DECK NOT SHOWN IN THIS DETAIL.



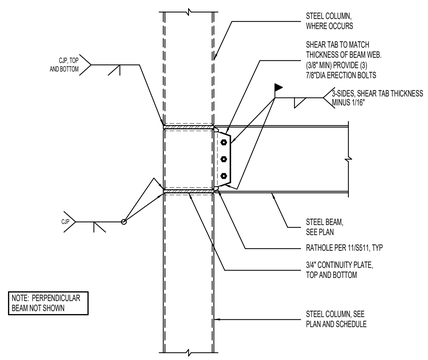
8 TYPICAL INTERIOR NON-BEARING WALL BRACING

NO SCALE



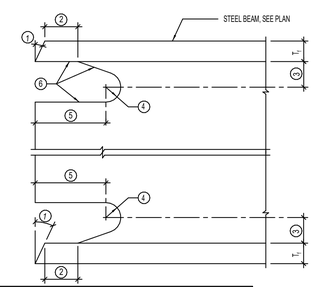
9 MOMENT CONNECTION DETAIL

NO SCALE



10 MOMENT CONNECTION DETAIL

NO SCALE



NOTES:
1. BEVEL AS REQUIRED BY AWS D1.1 FOR SELECTED GROOVE WELD PROCEDURE.
   A. TOLERANCES SHALL NOT ACCUMULATE TO THE EXTENT THAT THE ANGLE OF THE ACCESS HOLE CUT TO THE FLANGE SURFACE EXCEEDS 20°.
2. LARGER OF T OR 1/2" (PLUS 1/2 T , MINUS 1/4 T).
3. 3/4 T TO T , 3/4"-MIN (± 1/4").
4. 3/8" MINIMUM RADIUS (PLUS NOT LIMITED, MINUS 0).
5. 3 T ± 1/2".
6. FABRICATION DETAILS, INCLUDING CUTTING METHODS, SMOOTHNESS REQUIREMENTS, AND OTHER QUALITY ASSURANCE GUIDELINES, SHALL CONFORM TO THE REQUIREMENTS OF AISC-341 AND AISC-358.

11 RATHOLE DETAIL AT MOMENT CONNECTION

NO SCALE

BHB STRUCTURAL
2766 South Main Street
Salt Lake City, Utah 84115
801-355-5656
bhb@bhbengineers.com

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DETAILS

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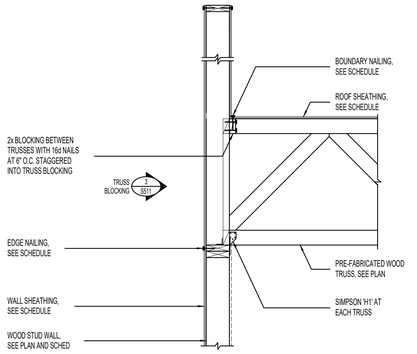
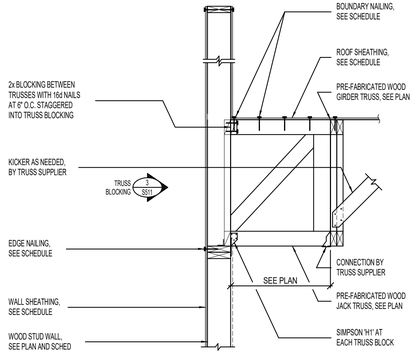
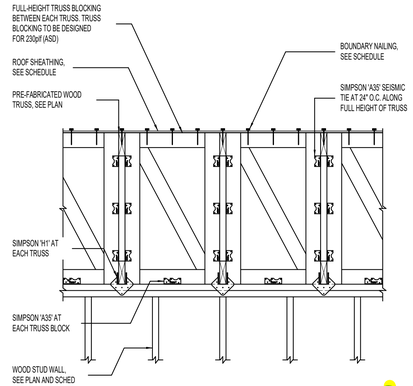


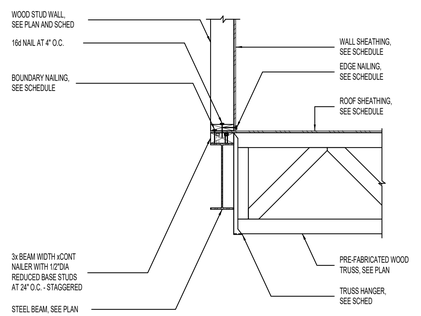
1 TYPICAL TRUSS BEARING ON WOOD STUD WALL [TRUSS PERPENDICULAR TO WALL]
NO SCALE

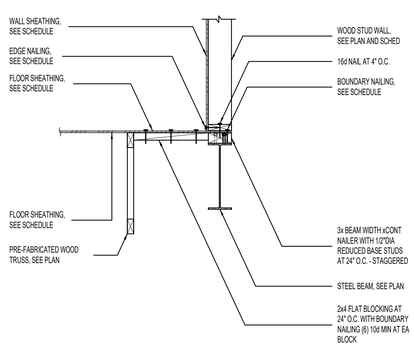


2 TYPICAL TRUSS BLOCKING BEARING ON WOOD STUD WALL [TRUSS PARALLEL TO WALL]
NO SCALE

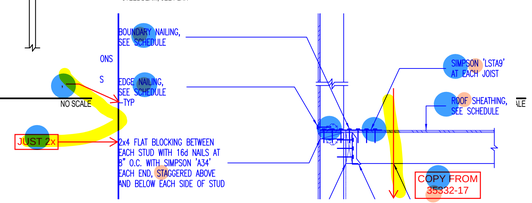


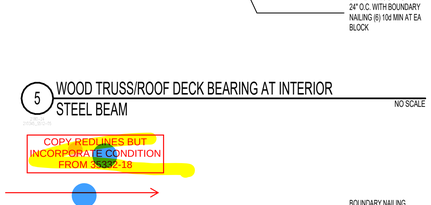
3 TYPICAL TRUSS BLOCKING ELEVATION
NO SCALE

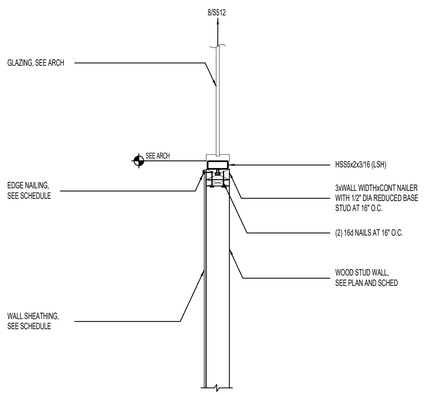




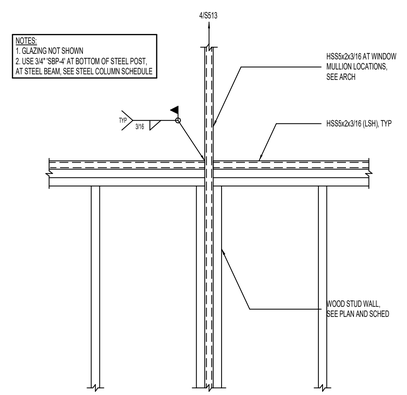
5 WOOD TRUSS/ROOF DECK BEARING AT INTERIOR STEEL BEAM
NO SCALE



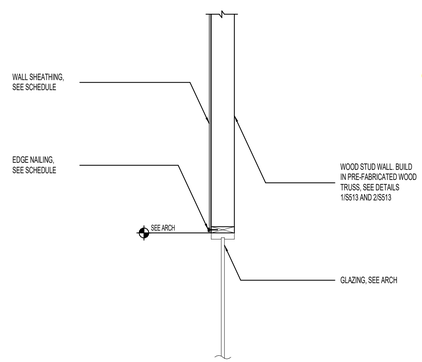




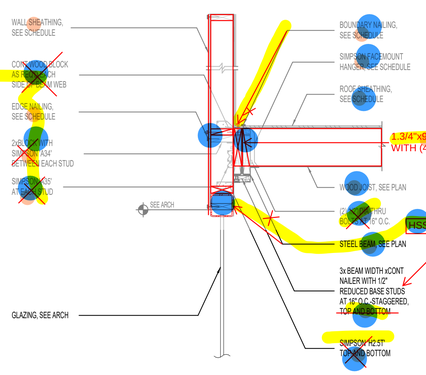
6 GLAZING AT WOOD STUD WALL
NO SCALE



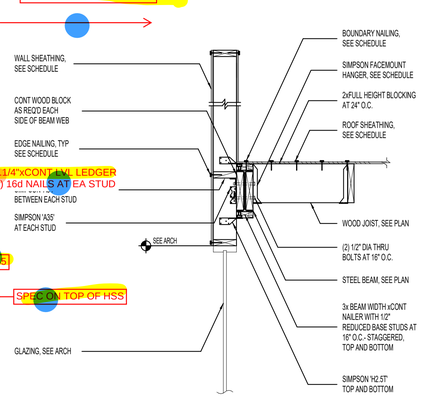
7 GLAZING AT WOOD STUD WALL (ELEVATION VIEW)
NO SCALE



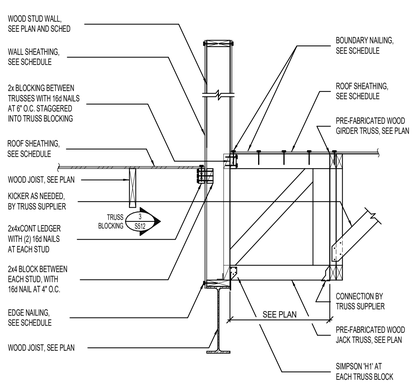
8 GLAZING AT WOOD STUD WALL
NO SCALE



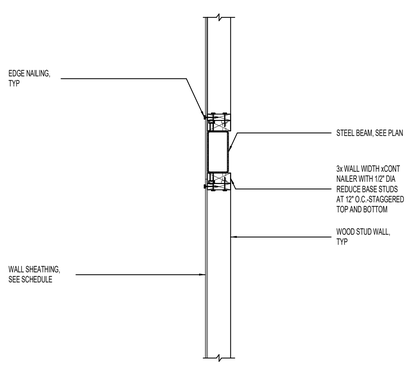
9 STEEL BEAM AT GLAZING
NO SCALE



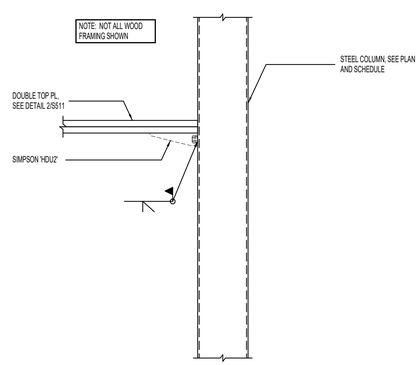
10 STEEL BEAM AT GLAZING
NO SCALE



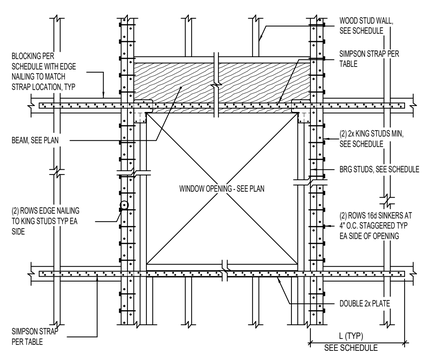
11 TYPICAL TRUSS BLOCKING BEARING ON WOOD STUD WALL [TRUSS PARALLEL TO WALL]
NO SCALE

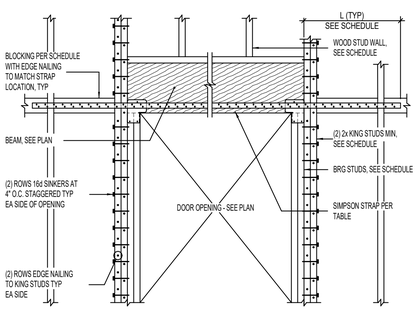


12 STEEL BEAM AT WOOD STUD WALL
NO SCALE



13 DRAG CONNECTION DETAIL
NO SCALE





MARK	STRAP	FASTENERS	MIN LAP LENGTH (L)	BLOCKING
A	"CS16"	(2) ROWS 10d COMMON AT 2.1/16" O.C.	2'-0"	2x4 FLAT

NOTE:
1. SHEATHING IS NOT SHOWN IN THIS DETAIL.
2. SHEATH CONTINUOUS ABOVE AND BELOW OPENING(S) TO MATCH SW TYPE.
3. WHERE OPENING(S) ARE LESS THAN 2x LAP LENGTH APART, PROVIDE CONTINUOUS STRAP ACROSS WALL AND OPENING(S).
4. WHERE SHEATHING IS REQUIRED ON BOTH SIDES OF WALL, PROVIDE STRAPPING ON BOTH SIDES.

14 SHEARWALL PENETRATION DETAIL
NO SCALE

BHB STRUCTURAL
2766 South Main Street
Salt Lake City, Utah 84115
801-355-5656
bhb@bhbengineers.com

FIVE DEGREES DESIGN
1457 EAST 840 NORTH
OREM, UTAH 84097
801.850.4583
chris@fivedegreesdesign.com

DATE: 01 JUNE 2021
PROJECT #: 210345
DRAWN BY: MP
CHECKED BY: AP

REVISIONS

PROFESSIONAL ENGINEER No. 11102949 ALEXANDER PIKET STATE OF UTAH
09/08/2022

PROJECT

COST U LESS CONCEPT PLAN

ADDRESS:
64 NORTH 900 WEST
AMERICAN FORK, UT 84003

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DETAILS

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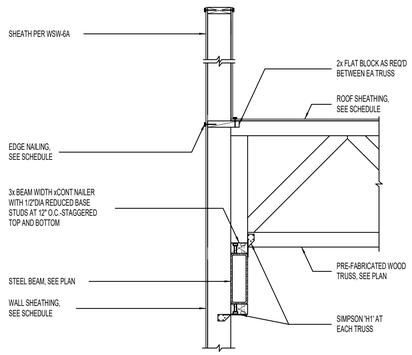
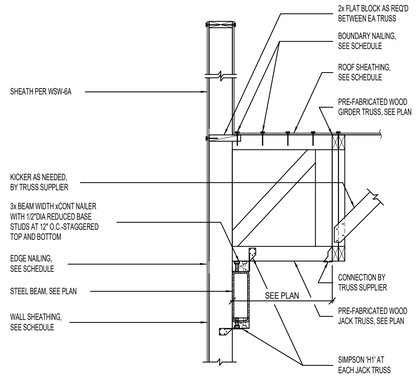


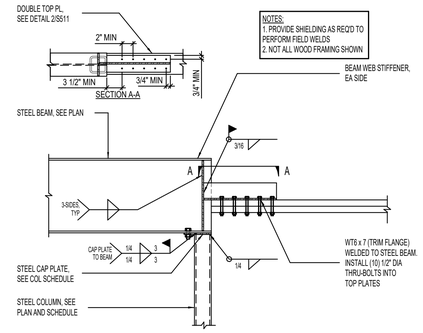
1 WOOD TRUSS AT STEEL BEAM

NO SCALE



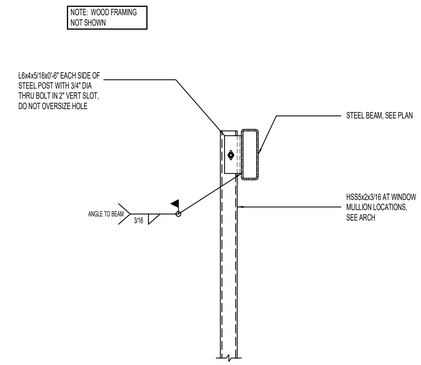
2 WOOD TRUSS AT STEEL BEAM

NO SCALE



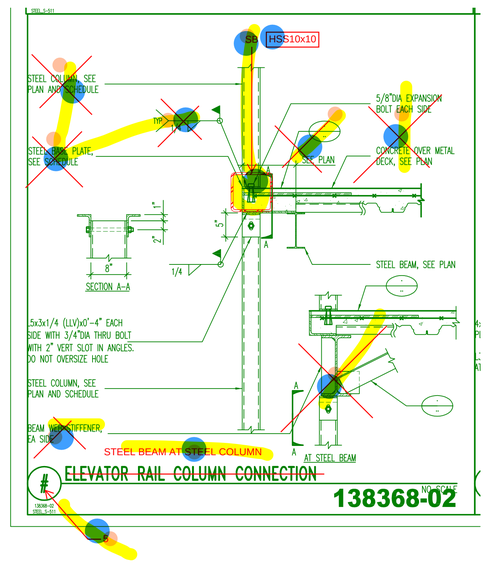
3 DRAG DETAIL AT BEAM TO WALL CONNECTION

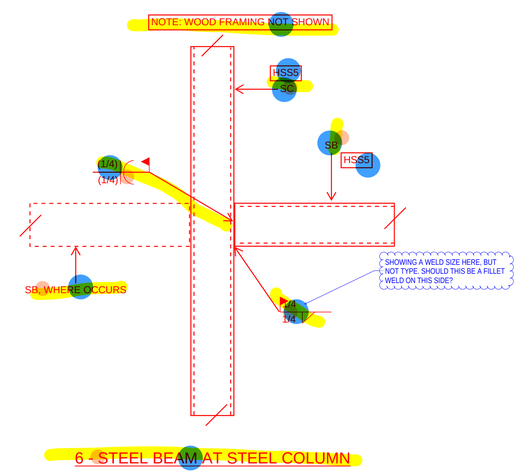
NO SCALE



4 STEEL POST AT STEEL BEAM

NO SCALE





6 - STEEL BEAM AT STEEL COLUMN

FIVE DEGREES DESIGN
1457 EAST 840 NORTH
OREM, UTAH 84097
801.850.4583
chris@fivedegreesdesign.com

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No. 11102949
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COST U LESS CONCEPT PLAN

ADDRESS:
64 NORTH 900 WEST
AMERICAN FORK, UT 84003

STRUCTURAL

DETAILS

S513

BHB STRUCTURAL
2766 South Main Street
Salt Lake City, Utah 84115
801-355-5656
bhb@bhbengineers.com

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CONCRETE FOOTING SCHEDULE

MARK	WIDTH	LENGTH	DEPTH	REINFORCING CROSSWISE				REINFORCING LENGTHWISE				COMMENTS
				No.	SIZE	LENGTH	SPACING	No.	SIZE	LENGTH	SPACING	
FTS2.0	2'-0"	CONT	12"	-	#4	1'-6"	48"	3	#4	CONT	EQ	THICKENED SLAB
FC1.5	1'-6"	CONT	12"	-	#4	1'-0"	48"	2	#5	CONT	EQ	.
FC2.0	2'-0"	CONT	12"	-	#4	1'-6"	48"	3	#4	CONT	EQ	
FS3.0	3'-0"	3'-0"	12"	3	#5	2'-6"	EQ	3	#5	2'-6"	EQ	
FS3.5	3'-6"	3'-6"	12"	3	#5	3'-0"	EQ	3	#5	3'-0"	EQ	
FS4.0	4'-0"	4'-0"	12"	4	#5	3'-6"	EQ	4	#5	3'-6"	EQ	
FS4.5	4'-6"	4'-6"	12"	4	#5	4'-0"	EQ	4	#5	4'-0"	EQ	
FS5.0	5'-0"	5'-0"	12"	5	#5	4'-6"	EQ	5	#5	4'-6"	EQ	
FS5.0A	5'-0"	5'-0"	12"	5	#5	4'-6"	EQ	5	#5	4'-6"	EQ	REINFORCE TOP AND BOTTOM
FS5.5	5'-6"	5'-6"	12"	5	#5	5'-0"	EQ	5	#5	5'-0"	EQ	
FS6.0	6'-0"	6'-0"	13"	6	#5	5'-6"	EQ	6	#5	5'-6"	EQ	
FS6.0A	6'-0"	6'-0"	13"	6	#5	5'-6"	EQ	6	#5	5'-6"	EQ	REINFORCE TOP AND BOTTOM
FS6.5	6'-6"	6'-6"	14"	7	#5	6'-0"	EQ	7	#5	6'-0"	EQ	
FS7.0	7'-0"	7'-0"	15"	8	#5	6'-6"	EQ	8	#5	6'-6"	EQ	
FS7.0A	7'-0"	7'-0"	15"	8	#5	6'-6"	EQ	8	#5	6'-6"	EQ	REINFORCE TOP AND BOTTOM

CONCRETE FOOTING NOTES:
1. PLACE ALL FOOTING REINFORCING IN THE BOTTOM OF THE FOOTING WITH 3" CLEAR CONCRETE COVER (UNO).
2. TOP REINFORCING, WHERE OCCURS, SHALL BE PLACED IN THE TOP OF THE FOOTING WITH 2" MINIMUM CONCRETE COVER.
3. IF FOOTINGS ARE EARTH-FORMED, FOOTINGS SHALL BE 6" LONGER AND WIDER THAN SCHEDULED.
4. RUN CONTINUOUS FOOTING REINFORCEMENT THROUGH SPOT FOOTINGS.
5. SEE GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.
6. SOME SCHEDULED FOOTINGS MAY NOT BE USED, SEE FOOTING AND FOUNDATION PLAN FOR FOOTING MARKS.

1 CONCRETE FOOTING SCHEDULE
NO SCALE

CONCRETE REINFORCING BAR LAP SPLICE SCHEDULE

BAR SIZE	fc = 3000psi & fc = 3500 psi				fc = 4000psi & fc = 4500 psi				fc = 5000psi				fc = 6000psi			
	REGULAR		TOP		REGULAR		TOP		REGULAR		TOP		REGULAR		TOP	
	CLASS		CLASS		CLASS		CLASS		CLASS		CLASS		CLASS		CLASS	
	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B
#3	17"	22"	22"	28"	15"	19"	19"	24"	13"	17"	17"	22"	12"	16"	15"	20"
#4	22"	29"	29"	37"	19"	25"	25"	32"	17"	22"	22"	29"	16"	20"	20"	27"
#5	28"	36"	36"	47"	24"	31"	31"	40"	22"	28"	28"	36"	20"	26"	26"	33"
#6	33"	43"	43"	56"	29"	37"	37"	48"	26"	33"	33"	43"	24"	31"	31"	40"
#7	48"	63"	63"	81"	42"	54"	54"	70"	37"	49"	49"	63"	34"	44"	44"	58"
#8	55"	72"	72"	93"	48"	62"	62"	80"	43"	56"	55"	72"	39"	51"	51"	66"
#9	62"	81"	81"	105"	54"	70"	70"	91"	48"	63"	63"	81"	44"	57"	57"	74"
#10	70"	91"	91"	118"	61"	79"	79"	102"	54"	70"	70"	91"	50"	64"	64"	83"
#11	78"	101"	101"	131"	67"	87"	87"	113"	60"	78"	78"	101"	55"	71"	71"	93"

TABULATED VALUES ARE FOR CASE 1 REINFORCEMENT, WHERE THE REQUIREMENTS OF TABLE BELOW ARE MET. WHERE THESE CONDITIONS ARE NOT MET, MULTIPLY THE LAP LENGTHS ($\sqrt{f'c}$d) BY 1.5.

REQUIREMENT FOR CASE 1 LAP LENGTHS

BAR CLEAR SPACING	CLEAR COVER	STIRRUPS OR TIES
>=d_b	>=d_b	>=CODE FOR MINIMUM THROUGHOUT $\sqrt{f'c}$d
>=2d_b	>=d_b	NO REQUIREMENT

d_b = BAR DIAMETER

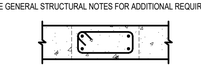
CONCRETE REINFORCING BAR LAP SPLICE NOTES:
1. THIS SCHEDULE SHALL BE USED FOR ALL BAR SPLICES IN CONCRETE WALLS, UNLESS NOTED OTHERWISE.
2. CLASS 'A' SPLICES MAY BE USED ONLY IN CASES WHERE 50% OR LESS OF THE BARS ARE SPLICED WITHIN THE LAP SPLICE LENGTH.
3. CLASS 'B' SPLICES SHALL BE USED FOR ALL SPLICES UNLESS THE REQUIREMENTS OF NOTE No. 2 ABOVE ARE MET.
4. TIES AND STIRRUPS SHALL NOT BE SPLICED.
5. DO NOT SPLICE VERTICAL BARS IN RETAINING WALLS UNLESS SPECIFICALLY SHOWN.
6. THE VALUES TABULATED IN SCHEDULE ARE FOR GRADE 60 REINFORCING BARS. FOR GRADE 75, MULTIPLY LAP LENGTHS BY 1.25 AND FOR GRADE 80, MULTIPLY BY 1.33.
7. THE VALUES TABULATED IN SCHEDULE ARE MINIMUM REQUIREMENTS. LONGER LENGTHS MAY BE USED FOR CONSTRUCTIBILITY.
8. TOP BARS ARE CLASSIFIED AS HORIZONTAL BARS WHERE 12", OR MORE, OF FRESH CONCRETE IS CAST BELOW THE REINFORCING BAR.
9. FOR EPOXY-COATED OR ZINC AND EPOXY DUAL-COATED BARS WITH CLEAR COVER < 3d b OR CLEAR SPACING <6d b, MULTIPLY LAP LENGTHS BY 1.5. FOR ALL OTHER CASES MULTIPLY BY 1.2
10. FOR LIGHT WEIGHT CONCRETE, MULTIPLY LAP LENGTHS BY 1.33 UNLESS THE AVERAGE SPLITTING TENSILE STRENGTH (F ct) IS SPECIFIED. FOR LIGHT WEIGHT CONCRETE WHERE F ct IS SPECIFIED, REFER TO ACI318-14 SECTION 19.2.4.3
11. SPLICES FOR BUNDLED BARS:
    a. FOR BUNDLED BARS OF THREE OR LESS, LAP SPLICE LENGTHS SHALL BE MULTIPLIED BY 1.2.
    b. FOR BUNDLED BARS OF FOUR OR MORE, LAP SPLICE LENGTHS SHALL BE MULTIPLIED BY 1.33.
    c. INDIVIDUAL BAR SPLICES WITHIN A BUNDLE SHALL NOT OVERLAP.
    d. ENTIRE BUNDLES SHALL NOT BE LAP SPLICED.
12. SEE GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.

2 CONCRETE REINFORCING BAR LAP SPLICE SCHEDULE
NO SCALE

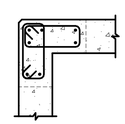
CONCRETE PIER SCHEDULE

MARK	PIER SIZE	REINFORCING		TYPE	COMMENTS
		VERTICAL	TIES		
CP-12A	16"x/WT	(4) #4	#3 AT 8" O.C.	A	.
CP-16A	16"x/WT	(4) #5	#3 AT 8" O.C.	A	
CP-16B	16"x16"x/WT	(7) #5	#3 AT 8" O.C.	B	

CONCRETE PIER NOTES:
1. INSTALL (3) SETS OF TIES WITHIN TOP 5" OF ALL PIERS (UNO).
2. RUN HORIZONTAL CONCRETE WALL REINFORCING CONTINUOUS THROUGH PIER WHEN PIER IS POURED MONOLITHICALLY WITH CONCRETE WALL.
3. SEE GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.



TYPE "A"



TYPE "B"

3 CONCRETE PIER SCHEDULE
NO SCALE

CONCRETE WALL SCHEDULE

MARK	THICKNESS	REINFORCING			WALL TYPE	COMMENTS
		VERTICAL	HORIZONTAL	TOP AND BOTTOM		
CW-8A	8"	#4 AT 18" O.C.	#4 AT 12" O.C.	(1) #4	A	.
CW-14A	14"	#4 AT 18" O.C. E.F.	#4 AT 14" O.C. E.F.	(2) #4	C	

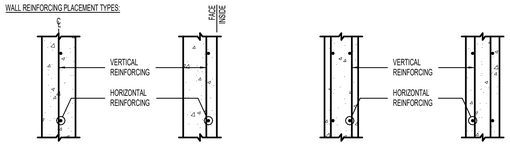
ABBREVIATIONS:
E.F. EACH FACE
I.F. INSIDE FACE
O.F. OUTSIDE FACE

WALLS NOT DESIGNATED IN PLAN

THICKNESS	REINFORCING	
	VERTICAL	HORIZONTAL
6"	#4 AT 18" O.C.	#4 AT 18" O.C.
8"	#4 AT 18" O.C.	#4 AT 12" O.C.
10"	#4 AT 16" O.C.	#5 AT 15" O.C.
12"	#4 AT 18" O.C. E.F.	#4 AT 16" O.C. E.F.

CONCRETE FOUNDATION WALL NOTES:
1. SEE GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.

WALL REINFORCING PLACEMENT TYPES:



TYPE 'A' TYPE 'B' TYPE 'C' TYPE 'D'

4 CONCRETE WALL SCHEDULE
NO SCALE

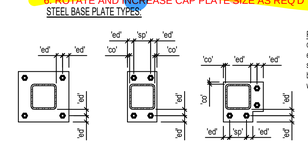
SC-5A | HSS5x5x5/16 | 3/4" (SBP-2 OR SBP-3) | SEE DETAILS | NOTE 5
SC-5B | HSS5x5x3/16 | 3/4" (SBP-3) | 1/2" (SCP-3)

STEEL COLUMN SCHEDULE

MARK	SIZE	STEEL BASE PLATE	STEEL CAP PLATE	COMMENTS
SC-4A	HSS4x4x3/16	3/4" (SBP-1)	1/2" (SCP-2)	
SC-4B	HSS4x4x3/16	3/4" (SBP-3)	1/2" (SCP-2)	
SC-4C	HSS4x4x3/16	3/4" (SBP-1)	1/2" (SCP-2)	
SC-4D	HSS4x4x3/16	3/4" (SBP-2)	1/2" (SCP-2)	NOTE 6
SC-8A	HSS8x8x3/8	1" (SBP-1)	1/2" (SCP-2)	NOTE 5
SC-10A	HSS10x10x3/8	1.1/2" (SBP-4)	SEE DETAILS	NOTE 5
SC-10B	HSS10x10x1/2	1.1/2" (SBP-4)	SEE DETAILS	NOTE 5

STEEL COLUMN NOTES:
1. UNLESS NOTED OTHERWISE, ALL COLUMNS SHALL BE INSTALLED WITH (4) 3/4"DIA ANCHOR RODS WITH 3" MINIMUM HOOKS. PROJECT ANCHOR RODS 3" MINIMUM ABOVE THE TOP OF THE BASE PLATE. EMBEDMENT SHALL BE 9" MINIMUM. ALL RODS SHALL BE INSTALLED WITH HARDENED WASHERS BENEATH THE NUT. ANY BOLT HOLES LARGER THAN THE ROD DIAMETER PLUS 5/16" SHALL HAVE 5/16" PLATE WASHERS INSTALLED BENEATH THE HARDENED WASHERS.
2. ALL CAP PLATE BOLTS SHALL BE 3/4"DIA A325N BOLTS, TYPICAL UNLESS NOTED OTHERWISE.
3. ANCHOR RODS SHALL NOT BE WELDED (INCLUDING TACK WELDS).
4. SEE GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.
5. USE 3/4" DIA ALL THREAD (ASTM F1554 GR 55) WITH A 12"x4"x2"-4" PL WASHER AND (2) HEAVY NUTS. 12" ANCHOR BOLT EMBEDMENT INTO CONCRETE MINIMUM. SEE DETAIL 3/S502 FOR ADDITIONAL REQUIREMENTS.
6. ROTATE AND INCREASE CAP PLATE SIZE AS REQ'D TO ACCOMODATE BEAM BEARING.

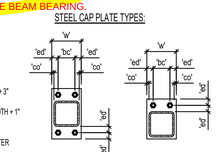
STEEL BASE PLATE TYPES:



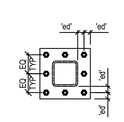
BASE PLATE SBP-1 BASE PLATE SBP-2 BASE PLATE SBP-3

PLATE LEGEND
co = 1/2" MINIMUM
ed = 1.1/2" MINIMUM
sp = 3" MINIMUM
bc = BEAM OR GIRDER GAGE
w = BEAM OR GIRDER GAGE + 3"
OR
BEAM OR GIRDER WIDTH + 1"
OR
COLUMN WIDTH + 1"
WHICHEVER IS GREATER

STEEL CAP PLATE TYPES:



CAP PLATE SCP-1 CAP PLATE SCP-2



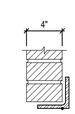
BASE PLATE SBP-4

CAP PLATE SCP-3

5 STEEL COLUMN SCHEDULE
NO SCALE

VENEER LINTEL SCHEDULE

CLEAR OPENING	SIZE OF ANGLE
UP TO 5'-0"	L3.1/2x3x1/4 (LLH)
5'-1" TO 7'-0"	L3.1/2x3.1/2x1/4
7'-1" TO 9'-0"	L5x3.1/2x1/4 (LLV)
9'-1" TO 10'-0"	L5x3.1/2x5/16 (LLV)
10'-1" TO 11'-0"	L5x3.1/2x3/8 (LLV)
11'-1" TO 12'-0"	L6x4x3/8 (LLV)
12'-1" AND OVER	REQUIRES SPECIAL ANALYSIS



NOTE:
LINTELS CARRY VENEER ONLY. WHERE FLOORS, ROOFS, OR CONCENTRATED LOADS OCCUR, FURTHER ANALYSIS IS NECESSARY. PROVIDE 1" OF BEARING AT EACH END FOR EACH FOOT OF SPAN. MINIMUM BEARING OF 6" EACH SIDE OF OPENING. USE THIS SCHEDULE UNLESS NOTED OTHERWISE. STEEL ANGLES SHALL BE GALVANIZED AT EXTERIOR CONDITIONS.

6 VENEER LINTEL SCHEDULE
NO SCALE

BHB STRUCTURAL
2766 South Main Street
Salt Lake City, Utah 84115
801-355-5656
bhb@bhbengineers.com

FIVE DEGREES DESIGN
1457 EAST 840 NORTH
OREM, UTAH 84097
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SCHEDULES

S601

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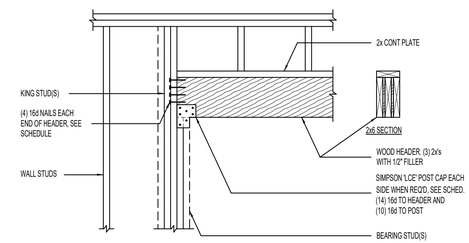
HEADER BEARING SCHEDULE FOR WOOD STUD WALL				
MARK	3'-6" MAX		6'-0" MAX	
	HEADER	JAMB	HEADER	JAMB
WH-1	(3) 2x8	2x/2b	(3) 2x10	3x/2b

HEADER SCHEDULE NOTES:
1. PROVIDE SIMPSON 'LCE' POST CAP FOR ALL HEADER 6'-0" SPAN OR GREATER.

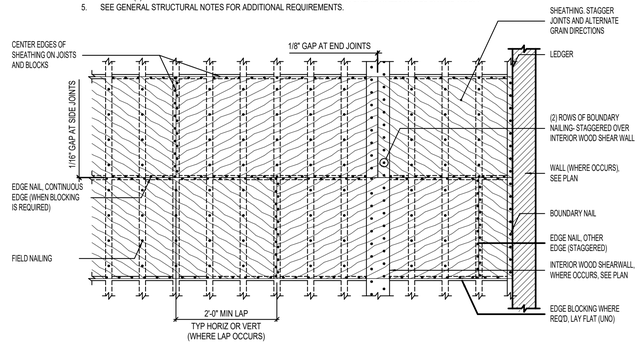


1 HEADER BEARING SCHEDULE FOR 2x4 OR 2x6 STUD WALL

NO SCALE

SHEATHING SCHEDULE AT ROOF AND FLOOR									
LOCATION	WOOD SHEATHING THICKNESS	SPAN RATING	NAIL SIZE	EDGE NAIL		FIELD NAIL	BOUNDARY NAIL	EDGE BLOCK	COMMENTS
				CONT EDGE	OTHER EDGE				
ROOF	15/32"	32/16	8d	6"	6"	12"	6"	NO	

SHEATHING NOTES:
1. MINIMUM NAIL PENETRATION INTO FRAMING: 8d-1.1/2", 10d-1.5/8".
2. USE COMMON NAILS (8d DIAMETER = 0.131", 10d DIAMETER = 0.148").
3. ALL WOOD FLOOR SHEATHING SHALL BE GLUED AND NAILED. USE A CONSTRUCTION ADHESIVE.
4. PROVIDE (2) ROWS OF BOUNDARY NAILING STAGGERED OVER INTERIOR SHEAR WALLS AT FLOOR AND ROOF.
5. SEE GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.

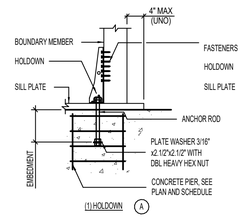


3 SHEATHING SCHEDULE AT ROOF AND FLOOR
[PLAN VIEW]

NO SCALE

HOLDOWN SCHEDULE										
SIMPSON HOLDOWN	BOUNDARY MEMBER	BOUNDARY MEMBER FASTENERS	END LENGTH	ANCHOR ROD	EMBEDMENT			DETAIL	COMMENTS
					LOCATION	CAST IN PLACE	EPOXY		
HDU2	(2) 2x6 DF NO.2 MIN	(6) 1/4"DIA x 2.1/2" SDS		5/8"DIA	AT FOOTING	9"	11"	A	NOTE 6
					AT CONC WALL W/ CONC PIER	16"	18"		
HDU14	6x6 POST DF NO.2 MIN	(36) 1/4"DIA x 2.1/2" SDS		1"DIA	AT FOOTING	15"	N/A	A	NOTE 6
					AT CONC WALL W/ CONC PIER	16"	N/A		

HOLDOWN NOTES:
1. ALL HOLDOWNS SPECIFIED ARE "SIMPSON - STRONG TIE", SEE GENERAL STRUCTURAL NOTES FOR SUBSTITUTIONS.
2. LAG SCREWS SHALL NOT BE USED.
3. DO NOT OVER TORQUE NUTS; SEE MANUFACTURER'S TORQUE REQUIREMENTS.
4. ANCHOR RODS SHALL BE ASTM F1554 Gr. 36 OR A36 THREADED ROD AND SHALL HAVE A 3/16"x2.1/2"x2.1/2" PLATE WASHER WITH DOUBLE HEAVY HEX NUT AT THE EMBEDMENT END INTO THE CONCRETE.
5. INCREASE FOOTING DEPTH WHERE EMBEDMENT LENGTH PLUS 3" IS GREATER THAN FOOTING DEPTH SPECIFIED.
6. WHERE CONCRETE PIER IS PROVIDED IN WALL, ANCHOR BOLT MUST FALL WITHIN THE REINFORCING TIES OF THE PIER.
7. SEE GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.

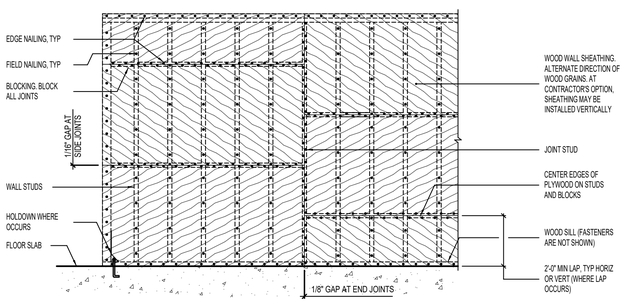


6 HOLDOWN SCHEDULE

NO SCALE

WOOD SHEATHING SHEARWALL SCHEDULE										
MARK	WALL FRAMING					WALL SHEATHING				COMMENTS
	STUDS	TOP PLATE	BOTTOM PLATE	BOTTOM PLATE FASTENERS	STUD & BLOCK AT JOINTS	THICKNESS	NAIL SIZE	EDGE NAIL	FIELD NAIL	
WSW-6A	2x6 AT 16" O.C.	(2) 2x6	2x6	5/8"DIA A.B. AT 48" O.C.	2x	7/16"	8d	6" O.C.	12" O.C.	
WSW-6A2	1.1/2"x5.1/2" LVL	(2) 2x6	2x6	5/8"DIA A.B. AT 48" O.C.	2x	7/16"	8d	6" O.C.	12" O.C.	
WSW-6B	2x6 AT 16" O.C.	(2) 2x6	2x6	5/8"DIA A.B. AT 32" O.C.	2x	7/16"	8d	4" O.C.	12" O.C.	
WSW-6C	2x6 AT 16" O.C.	(2) 2x6	2x6	5/8"DIA A.B. AT 16" O.C.	3x	7/16"	8d	3" O.C.	12" O.C.	
WSW-6C2	1.1/2"x5.1/2" LVL	(2) 2x6	3x6	5/8"DIA A.B. AT 48" O.C.	3x	7/16"	8d	3" O.C.	12" O.C.	
WSW-6D	1.1/2"x5.1/2" LVL	(2) 2x6	3x6	5/8"DIA A.B. AT 16" O.C.	3x	7/16"	8d	2" O.C.	12" O.C.	

WOOD SHEATHING SHEARWALL NOTES:
1. PROVIDE 1/4"x3"x0'-3" WASHER PLATES AT BOLTS. CONTRACTOR HAS OPTION TO PROVIDE A DIAGONAL SLOTTED HOLE WITH A WIDTH OF UP TO 3/16" LARGER THAN THE BOLT DIAMETER AND A SLOT LENGTH OF UP TO 1.3/4", PROVIDED A STANDARD CUT WASHER IS PLACED BETWEEN THE PLATE WASHER AND THE NUT.
2. USE COMMON NAILS (8d DIAMETER = 0.13. AT SILL PLATE USE HOT-DIPPED OR TUMBLED GALVANIZED NAILS.
3. ANCHOR BOLTS SHALL HAVE A 7" MINIMUM EMBEDMENT INTO CONCRETE AND TERMINATE WITH A STANDARD 90° HOOK OF 3-TIMES THE ANCHOR BOLT DIAMETER AND BE HOT-DIPPED GALVANIZED OR STAINLESS STEEL IN ACCORDANCE WITH IBC 2304.10.
4. WHERE STUDS ARE CUT FOR PLACEMENT OF ANCHOR BOLTS OR OTHER ELEMENTS, AN ADJACENT STUD SHALL BE ADDED.
5. WHERE WOOD SHEATHING IS APPLIED TO BOTH SIDES OF A WALL AND NAIL SPACING IS LESS THAN 6" O.C. ON EITHER SIDE, PANEL JOINTS SHALL BE OFFSET TO FALL ON DIFFERENT FRAMING MEMBERS, OR FRAMING MEMBER SHALL BE 3" OR THICKER AND NAILS ON EITHER SIDE SHALL BE STAGGERED.
6. PRE-DRILLED HOLES ARE REQUIRED AT 20d NAILS.
7. SEE GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.



2 WOOD SHEATHING SHEARWALL SCHEDULE
[ELEVATION VIEW]

NO SCALE

MINIMUM NAILING SCHEDULE	
CONNECTION	NAILING
SILL PLATE TO JOIST OR BLOCKING, FACE NAIL	16d AT 16" O.C.
BRIDGING TO JOIST, TOENAIL EACH END	(2) 8d
BLOCKING BETWEEN JOIST OR RAFTERS TO TOP PLATE, TOE NAIL	(3) 8d
RIM JOIST TO TOP PLATE, TOE NAIL	8d AT 6" O.C.
COLLAR TIE TO RAFTER, FACE NAIL	(3) 10d
JACK RAFTER TO HIP, TOE NAIL	(3) 10d
FACE NAIL	(2) 16d
ROOF RAFTER TO 2x RIDGE BEAM, TOE NAIL	(2) 16d
FACE NAIL	(2) 16d
JOIST TO BAND JOIST, FACE NAIL	(3) 16d
LEDGER STRIP, FACE NAIL	(3) 16d
TOP PLATE TO STUD, END NAIL	(2) 16d
DOUBLE STUDS, FACE NAIL	16d AT 24" O.C.
DOUBLED TOP PLATES, FACE NAIL	16d AT 24" O.C.
DOUBLED TOP PLATES, FACE NAIL	16d AT 16" O.C.
TOP PLATES, LAPS & INTERSECTION, FACE NAIL	(2) 16d
CONTINUOUS HEADER, TWO PIECES	16d AT 16" O.C. ALONG EACH EDGE
CEILING JOISTS TO PLATE, TOENAIL	(3) 8d
CONTINUOUS HEADER TO STUD, TOENAIL	(4) 8d
CEILING JOISTS, LAPS OVER PARTITIONS, FACE NAIL	(3) 16d
CEILING JOISTS TO PARALLEL RAFTERS, FACE NAIL	(3) 16d
RAFTER TO PLATE, TOENAIL	(3) 8d
1" BRACE TO EACH STUD & PLATE, FACE NAIL	(2) 8d
BUILT-UP CORNER STUDS	16d AT 24" O.C.
BUILT-UP GIRDER & BEAMS	20d AT 32" O.C. AT TOP, BOTTOM, AND STAGGERED ON OPPOSITE SIDES. (2) 20d AT ENDS AND AT EACH SPLICE.
STUD TO SOLE PLATE, TOE NAIL	(4) 8d
STUD TO SOLE PLATE, END NAIL	(2) 16d
PLYWOOD & PARTICLEBOARD:	SEE WOOD SCHEDULE USED IN DRAWINGS FOR NAIL SIZE AND SPACING

MINIMUM NAILING NOTES:
1. NAILING SCHEDULE IS PER TABLE 2304.10.1 OF THE I.B.C. 2018.
2. NAILING REQUIREMENTS SHOWN HERE DO NOT REPLACE HARDWARE SHOWN ON THE PLANS OR DETAILS.
3. MINIMUM NAIL PENETRATION INTO FRAMING: 8D - 1.1/2", 10D - 1.5/8", 16D - 1.3/4" (UNO).
4. USE COMMON NAILS (8d DIAMETER = 0.131", 10d DIAMETER = 0.148", 16d DIAMETER = 0.162")
5. SEE GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.

4 MINIMUM NAILING SCHEDULE

NO SCALE

WOOD HANGER SCHEDULE		
STRUCTURAL ELEMENT DESIGNATION	END CONNECTION	
	FACE MOUNT HANGER	TOP FLANGE HANGER
2x6, 2x8	SIMPSON 'LUS26' WITH (4) 10d x3" NAILS INTO BEAM AND (4) 10d x1.1/2" NAILS TO JOIST	SIMPSON '.18' WITH (4) 10dX2.1/2" NAILS INTO BEAM AND WITH (2) PRONGS INTO JOIST
2X10, 2X12	SIMPSON 'LUS210' WITH (8) 10dx3" NAILS TO BEAM AND (4) 10dX1.1/2" NAILS TO JOIST	SIMPSON '.18' WITH (6) 10dX2.1/2" NAILS INTO BEAM AND WITH (2) 10dx1.1/2" NAILS INTO JOIST
1.3/4" X 7.1/4" LVL	SIMPSON 'HU7' WITH (12) 16dX3.1/2" NAILS INTO BEAM AND (4) 10dX1.1/2" NAILS INTO JOIST	SIMPSON 'BA1.81/7.25' WITH (6) 10dX2.1/2" NAILS INTO TOP OF BEAM, (8) 10dX2.1/2" NAILS INTO FACE OF BEAM AND WITH (2) 10dx1.1/2" NAILS INTO JOIST
1.3/4" X (UP TO 16" DEEP) LVL	SIMPSON 'IUS1.81' WITH 10dX3" NAILS INTO BEAM (FILL ALL REQUIRED NAIL HOLES)	SIMPSON 'ITS' WITH (4) 10dX2.1/2" NAILS INTO TOP OF BEAM, (2) 10dX2.1/2" NAILS INTO FACE OF BEAM AND WITH (2) 10dx1.1/2" NAILS INTO JOIST
PREFABRICATED ROOF TRUSSES (1.1/2" WIDE x 30" DEEP (MAX))		SIMPSON 'HWP' AS REQD WITH (3) 16d x 2.1/2" NAILS INTO TOP OF BEAM, (6) 16d x 2.1/2" NAILS INTO FACE OF BEAM AND WITH (12) 10d x 1.1/2" NAILS INTO TRUSS

NOTES:
1. SEE JOIST DETAIL CONNECTION AT JOIST END TO DETERMINE WHICH TYPE OF END CONNECTION TO USE.
2. CONNECTION HARDWARE TO BE SIMPSON STRONG-TIE OR APPROVED EQUAL.
3. MINIMUM NAIL PENETRATION INTO FRAMING: 8d - 1.1/2", 10d - 1.5/8", 16d - 1.3/4" (UNO).
4. USE COMMON NAILS (8d DIAMETER = 0.131", 10d DIAMETER = 0.148", 16d DIAMETER = 0.162")
5. SEE GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.

7 WOOD HANGER SCHEDULE

NO SCALE

WOOD POST SCHEDULE (WP-x)		
MARK	DESIGNATION	CONNECTION
WP-6A	(3) 1.1/2x5.1/2 LVL	
WP-6B	(3) 2x6	

5 WOOD POST SCHEDULE (WP-x)

NO SCALE

FIVE DEGREES DESIGN
1457 EAST 840 NORTH
OREM, UTAH 84097
801.850.4583
chris@fivedegreesdesign.com

DATE: 01 JUNE 2021
PROJECT #: 210345
DRAWN BY: MP
CHECKED BY: AP

REVISIONS

PROFESSIONAL ENGINEER No. 11102949 ALEXANDER PIKET STATE OF UTAH
09/08/2022

PROJECT

COST U LESS CONCEPT PLAN

ADDRESS:
64 NORTH 900 WEST
AMERICAN FORK, UT 84003

STRUCTURAL

SCHEDULES

S602

BHB STRUCTURAL
2766 South Main Street
Salt Lake City, Utah 84115
801-355-5656
bhb@bhbengineers.com

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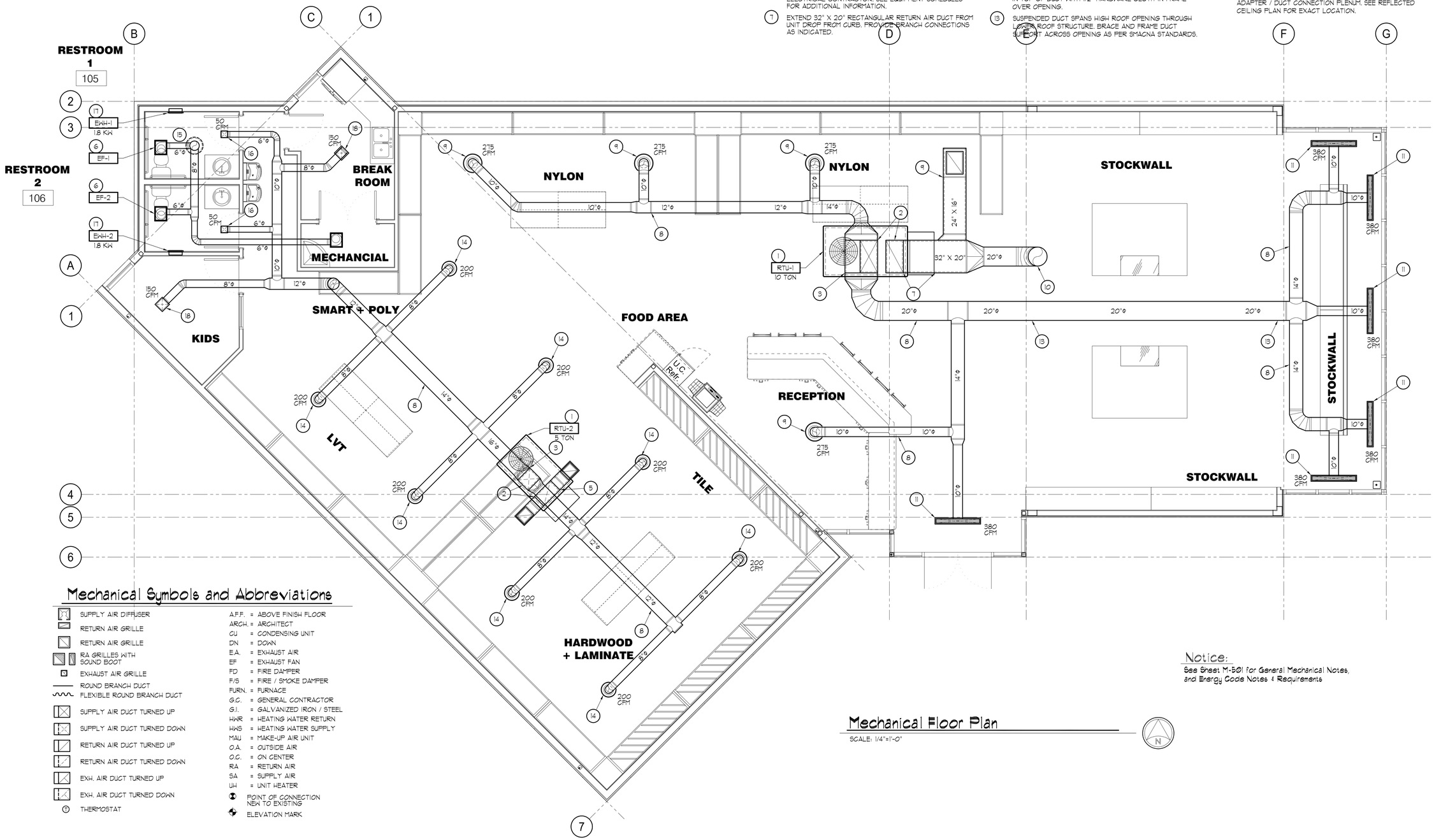
Keyed Reference Notes

1. PROVIDE AND INSTALL CURB MOUNTED GAS / ELECTRIC PACKAGED ROOFTOP UNIT. COORDINATE ACTUAL LOCATION WITH STRUCTURE. SEE EQUIPMENT SCHEDULES FOR ADDITIONAL INFORMATION.
2. EXTEND LINED SUPPLY AIR AND RETURN AIR DUCTS DOWN FROM ROOFTOP UNIT CURB INTO UPPER AREA OF BUILDING BETWEEN ROOF TRUSSES.
3. EXTEND SUPPLY AIR DUCT DOWN AS A PLENUM TO LEVEL DIRECTLY BELOW TRUSSES. PROVIDE SQUARE TO ROUND TRANSITION TAKE-OFF FITTINGS FOR SUPPLY AIR TRUNK MAINS.
4. PROVIDE AND INSTALL SEVEN DAY PROGRAMMABLE HEATING / COOLING THERMOSTAT WITH NIGHT SET-BACK FUNCTION. FOR EXISTING PACKAGED ROOFTOP UNIT TO THIS LOCATION AT 48" A.F.F.
5. PROVIDE RETURN DUCT IN PLENUM "TEE" CONFIGURATION WITH 16" X 14" RETURN INLET DUCTS IN JOIST SPACE. PROVIDE 14" X 18" OPENINGS IN TOP OF DUCT WITH 1/2" HARDWARE CLOTH IN FRAME OVER EACH OPENING
6. PROVIDE AND INSTALL CEILING MOUNTED REST ROOM EXHAUST FAN. COORDINATE WITH REFLECTED CEILING PLAN. SWITCH FAN WITH LIGHTS. LINE VOLTAGE WIRING BY ELECTRICAL CONTRACTOR. SEE EQUIPMENT SCHEDULES FOR ADDITIONAL INFORMATION.
7. EXTEND 32" X 20" RECTANGULAR RETURN AIR DUCT FROM UNIT DROP FROM CURB. PROVIDE BRANCH CONNECTIONS AS INDICATED.
8. SPIRAL FORMED SUPPLY AIR DUCT INSTALLED EXPOSED TO VIEW. COORDINATE INSTALLATION WITH STRUCTURE AND OTHER TRADES. SUPPORT DUCT FROM ROOF STRUCTURE OVERHEAD. DUCT PAINTING BY OTHERS IF REQUIRED.
9. PROVIDE AND INSTALL 10" DIA NECK, ROUND FACE, DUCT MOUNTED SUPPLY AIR DIFFUSER WITH BALANCING DAMPER EXPOSED TO VIEW. INSTALL AT APPROX. 156" A.F.F. COORDINATE LOCATION WITH STRUCTURE AND LIGHTING. BALANCE TO CFM SHOWN.
10. EXTEND 20" DIA. RETURN AIR DUCT UP TO WITHIN 24" OF ROOF STRUCTURE OVERHEAD. TERMINATE DUCT WITH OPEN END FACING UP WITH 1/2" HARDWARE CLOTH IN FRAME.
11. PROVIDE AND INSTALL NEW 48" LONG LINEAR DIFFUSER WITH MINIMUM OF 4 - 1" SLOTS. PROVIDE DUCT CONNECTION PLENUM FOR DIFFUSER. SUSPEND DIFFUSER FROM STRUCTURE OVERHEAD AT APPROX. 156" A.F.F. EXTEND 10" DIA. BRANCH DUCTING TO DIFFUSER PLENUM AS INDICATED. BALANCE TO CFM SHOWN. ADJUST AIR PATTERN FROM DIFFUSER SUCH THAT THE AIR DISCHARGE VELOCITY AT 60" A.F.F. DOES NOT EXCEED 50 FPM.
12. PROVIDE 24" X 16" RETURN DUCT WITH 24" X 16" OPENING IN TOP OF DUCT WITH 1/2" HARDWARE CLOTH IN FRAME OVER OPENING.
13. SUSPENDED DUCT SPANS HIGH ROOF OPENING THROUGH LOWER ROOF STRUCTURE. BRACE AND FRAME DUCT SUPPORT ACROSS OPENING AS PER SMACNA STANDARDS.
14. PROVIDE AND INSTALL 8" DIA NECK, ROUND FACE, DUCT MOUNTED SUPPLY AIR DIFFUSER WITH BALANCING DAMPER EXPOSED TO VIEW. INSTALL AT APPROX. 156" A.F.F. COORDINATE LOCATION WITH STRUCTURE AND LIGHTING. BALANCE TO CFM SHOWN.
15. COMBINE 3 - 6" DIA EXHAUST AIR VENTS INTO 1 - 10" DIA EXHAUST. EXTEND 10" DIA EXHAUST DUCT UP THROUGH ROOF TO WEATHER CAP. MAINTAIN 120" (10'-0") CLEAR FROM ALL OUTSIDE AIR INTAKES.
16. PROVIDE SUPPLY AIR DIFFUSER TYPE CD-1 IN GYP. BD. CEILING. PROVIDE O.B.D. 4-WAY BLOW, 6" X 6" NECK, STEP LOUVER TYPE. STANDARD WHITE FINISH. PROVIDE ADAPTER / DUCT CONNECTION PLENUM. SEE REFLECTED CEILING PLAN FOR EXACT LOCATION.
17. PROVIDE AND INSTALL FAN FORCED ELECTRIC WALL HEATER WITH INTEGRAL THERMOSTAT. COORDINATE INSTALLATION WITH WALL FRAMING AND ELECTRICAL CONTRACTOR. SEE EQUIPMENT SCHEDULES FOR ADDITIONAL INFORMATION.
18. PROVIDE SUPPLY AIR DIFFUSER TYPE CD-1 IN GYP. BD. CEILING. PROVIDE O.B.D. 4-WAY BLOW, 9" X 9" NECK, STEP LOUVER TYPE. STANDARD WHITE FINISH. PROVIDE ADAPTER / DUCT CONNECTION PLENUM. SEE REFLECTED CEILING PLAN FOR EXACT LOCATION.



Mechanical Symbols and Abbreviations

- SUPPLY AIR DIFFUSER
- RETURN AIR GRILLE
- RETURN AIR GRILLE
- RA GRILLES WITH SOUND BOOT
- EXHAUST AIR GRILLE
- ROUND BRANCH DUCT
- FLEXIBLE ROUND BRANCH DUCT
- SUPPLY AIR DUCT TURNED UP
- SUPPLY AIR DUCT TURNED DOWN
- RETURN AIR DUCT TURNED UP
- RETURN AIR DUCT TURNED DOWN
- EXH. AIR DUCT TURNED UP
- EXH. AIR DUCT TURNED DOWN
- THERMOSTAT

A.F.F. = ABOVE FINISH FLOOR
ARCH. = ARCHITECT
CU = CONDENSING UNIT
DN = DOWN
E.A. = EXHAUST AIR
EF = EXHAUST FAN
FD = FIRE DAMPER
F/S = FIRE / SMOKE DAMPER
FURN. = FURNACE
G.C. = GENERAL CONTRACTOR
G.I. = GALVANIZED IRON / STEEL
HWR = HEATING WATER RETURN
HWS = HEATING WATER SUPPLY
MAU = MAKE-UP AIR UNIT
O.A. = OUTSIDE AIR
O.C. = ON CENTER
RA = RETURN AIR
SA = SUPPLY AIR
UH = UNIT HEATER

POINT OF CONNECTION NEW TO EXISTING
ELEVATION MARK

Mechanical Floor Plan

SCALE: 1/4"=1'-0"

Notice:
See Sheet M-501 for General Mechanical Notes, and Energy Code Notes & Requirements

STATE OF UTAH
CHARLES LUSH
No. 155425
July 8, 2021
LICENSED PROFESSIONAL ENGINEER

REVISIONS		
No.	Date	Description
1	-	-

Renegade Design, LLC
18660 E. AUGA VISTA, BLACK CANYON CITY, AZ 85324
PHONE 623-314-9192 HVAC-ENGINEERING@COX.NET

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Cost U Less / Carpet Diem
-
64 North 900 West
American Fork, UT 84003

MAIN LEVEL MECHANICAL FLOOR PLAN

Date July 8, 2021

M-101

Energy Code Compliance - Mechanical Requirements

1 - FUEL GAS FIRED HEATING EQUIPMENT (WHEN PROVIDED AND INSTALLED) SHALL HAVE A MINIMUM EFFICIENCY OF 80% ET OR 80% AFUE. (2018 IEEC C403.2.3)

2 - SINGLE PACKAGED DX COOLING EQUIPMENT (WHEN PROVIDED AND INSTALLED) SHALL HAVE A MINIMUM EFFICIENCY OF 14.0 SEER. (2018 IEEC C403.2.3)

3 - SINGLE SPLIT-SYSTEM DX COOLING EQUIPMENT (WHEN PROVIDED AND INSTALLED) SHALL HAVE A MINIMUM EFFICIENCY OF 13.0 SEER. (2018 IEEC C403.2.3)

4 - HEAT PUMP TYPE EQUIPMENT (WHEN PROVIDED AND INSTALLED) SHALL HAVE A MINIMUM EFFICIENCY OF 8.2 HSPF AND 14.0 SEER. (2018 IEEC C403.2.3)

5 - HEATING AND/OR COOLING TO EACH HVAC ZONE SHALL BE CONTROLLED BY A THERMOSTAT / ZONE SENSOR AT A MINIMUM. (2018 IEEC C403.2.3)
   - A - CONTROL SYSTEM(S) SHALL INCLUDE OPTIMUM START CONTROL LOGIC. (2018 IEEC C403.2.4.2.3).
   - B - ZONE TEMPERATURE CONTROLS SHALL HAVE A 5 DEG.F. DEADBAND (2018 IEEC C403.4.1.2).
   - C - ZONE TEMPERATURE CONTROLS SHALL HAVE SET POINT OVERLAP RESTRICTIONS. (2018 IEEC C403.2.4.1.3).
   - D - ZONE TEMPERATURE CONTROLS SHALL BE PROVIDED WITH PROGRAMMABLE SETBACK CONTROLS. (2018 IEEC C403.2.4.2).
   - E - SETBACK FOR AUTOMATIC ZONE TEMPERATURE CONTROLS SHALL BE INITIALLY PROGRAMMED TO 55 DEG. F. FOR HEATING; 85 DEG.F. FOR COOLING; 7-DAY CLOCK FUNCTION WITH 2 HOUR OCCUPANT OVERRIDE AND 10 HOUR BACK-UP. (2018 IEEC C403.2.4.2.1; C403.2.4.2.2).
   - F - HVAC CONTROLS SYSTEMS SHALL BE TESTED TO ENSURE PROPER OPERATION, CALIBRATION AND ADJUSTMENT OF CONTROLS. (2018 IEEC C408.2.3.2).

6 - HUMIDIFICATION EQUIPMENT OR SYSTEMS (WHEN PROVIDED) FOR EACH HVAC ZONE SHALL BE CONTROLLED BY A HUMIDISTAT / ZONE HUMIDITY SENSOR AT A MINIMUM. (2018 IEEC C403.2.3)

7 - FAN MOTORS NOT LESS THAN 1/12 HP AND LESS THAN 1.0 HP SHALL BE ECM TYPE OR HAVE AN EFFICIENCY RATING OF 70% OR GREATER. MOTOR SPEED CONTROL SHALL BE PROVIDED. (2018 IEEC C403.2.4)

8 - EACH DX COOLING SYSTEM IN EXCESS OF 65 MBH AND EVAPORATOR FANS GREATER THAN 1/4 HP SHALL BE PROVIDED WITH FAN SPEED CONTROLS TO ARY DELIVERED AIR FLOW WITH LOAD AS REQUIRED BY 2018 IEEC C403.8.5.

9 - ALL HVAC PIPING SHALL BE INSULATED IN ACCORDANCE WITH 2018 IEEC TABLE C403.11.3 REQUIREMENTS. INSULATION EXPOSED TO WEATHER SHALL BE PROTECTED FROM DAMAGE AND SHALL BE PROVIDED WITH SOLAR RADIATION SHIELDING OR EQUIVALENT.

10 - NATURAL OR MECHANICAL VENTILATION SHALL BE PROVIDED IN ACCORDANCE WITH 2018 IMC CHAPTER 4. MECHANICAL VENTILATION SHALL HAVE THE CAPABILITY TO REDUCE OUTDOOR AIR SUPPLY TO MINIMUM PER 2018 IMC CHAPTER 4. (2018 IEEC C403.2.2)

11 - HVAC DUCTS AND PLENUMS SHALL BE INSULATED IN ACCORDANCE WITH 2018 IEEC C403.11.1 AND CONSTRUCTED IN ACCORDANCE WITH 2018 IEEC C403.11.2.

12 - ALL AIR INLETS AND OUTLETS INCLUDING REGISTERS, GRILLES, DIFFUSERS AND PLENUM OPENINGS, SHALL BE PROVIDED WITH BALANCING DAMPERS HAVING LOCKING MECHANISMS. (2018 IEEC C408.2.2.1)

13 - OPERATION AND MAINTENANCE MANUALS FOR HVAC SYSTEMS SHALL BE FURNISHED TO THE OWNERS REPRESENTATIVE WITHIN NINETY (90) DAYS OF SYSTEM(S) ACCEPTANCE. (2018 IEEC C408.2.5.3).

14 - AS-BUILT PLANS FOR HVAC SYSTEMS SHALL BE FURNISHED TO THE OWNERS REPRESENTATIVE WITHIN NINETY (90) DAYS OF SYSTEM(S) ACCEPTANCE. (2018 IEEC C408.2.5.1).

15 - AIR AND/OR HYDRONIC TEST AND BALANCE REPORTS FOR HVAC SYSTEMS SHALL BE PROVIDED. (2018 IEEC C408.2.5.3).

16 - SYSTEMS COMMISSIONING FOR THE HVAC SYSTEMS SHALL BE PROVIDED BY THE OWNER / GENERAL CONTRACTOR. MECHANICAL CONTRACTOR SHALL ACTIVELY SUPPORT ALL COMMISSIONING REQUIREMENTS.

General Mechanical Notes

1 - MECHANICAL CONTRACTOR SHALL COORDINATE HIS WORK WITH THE WORK OF OTHER TRADES.

2 - INSTALLATION SHALL BE IN CONFORMANCE WITH THE IBC, 2018 EDITION; IMC 2018 EDITION; IFGC, 2018 EDITION AND THE NEC, 2017 EDITION; ALL AS ADOPTED AND AMENDED BY THE STATE OF UTAH AND THE LOCAL JURISDICTION.

3 - THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE CLEAN-UP AND REMOVAL OF MECHANICAL DEBRIS.

4 - ARRANGE AND SCHEDULE INSPECTIONS IN A TIMELY MANNER WITH THE CONSTRUCTION SCHEDULE.

5 - UNLESS NOTED OTHERWISE, ALL DUCTWORK SHALL BE CONSTRUCTED OF GALVANIZED STEEL AND SHALL CONFORM WITH THE SMACNA AND ASHRAE STANDARDS FOR THE PRESSURE CLASS OF DUCT BEING INSTALLED.

6 - UNLESS NOTED OTHERWISE, ALL SUPPLY AIR, RETURN AIR AND MAKE-UP AIR DUCTWORK INSTALLED IN UNCONDITIONED AREAS OF THE BUILDING, (THIS EXCLUDES RETURN AIR PLENUMS) SHALL BE INSULATED WITH R-8 FOIL FACED DUCT WRAP. EXHAUST DUCTS BETWEEN THE ENVELOPE THERMAL INSULATION AND THE BACKDRAFT DAMPER OF THE FAN SHALL BE INSULATED WITH R-8 FOIL FACED DUCT WRAP.

7 - MECHANICAL EQUIPMENT, MECHANICAL PIPING AND DUCTING SHALL BE SEISMICALLY BRACED WHERE REQUIRED IN CONFORMANCE WITH THE IBC, 2018 EDITION.

8 - ALL MECHANICAL EQUIPMENT SHALL BE UL LISTED.

9 - ALL REFRIGERATION EQUIPMENT SHALL BE ARI LISTED.

10 - REFER TO THE ARCHITECTURAL REFLECTED CEILING PLAN FOR THE EXACT LOCATION OF CEILING REGISTERS, GRILLES AND DIFFUSERS.

11 - UNLESS NOTED OTHERWISE, ALL DUCT SIZES SHOWN ARE INSIDE (FINISHED) DIMENSIONS. INCREASE DUCT SIZES FOR LINER TYPE INSULATION AS REQUIRED.

12 - ALL CONCRETE WORK, ROOFING WORK, FRAMING, AND INTERIOR FINISH WORK IS TO BE PERFORMED BY OTHERS UNDER THE DIRECTION OF THE PROJECT ARCHITECT AND THE SUPERVISION OF THE GENERAL CONTRACTOR.

13 - LOW PRESSURE INSULATED FLEXIBLE DUCTWORK USED FOR RUN-OUTS TO DIFFUSERS AND GRILLES SHALL BE LIMITED TO 60" IN LENGTH AND SHALL ONLY BE USED FOR THE FINAL CONNECTION OF RUN-OUT TO DIFFUSERS AND GRILLES.

14 - PROVIDE COMPLETE AIR BALANCING FOR ALL MECHANICAL SYSTEMS. AIR BALANCING AIR BALANCING SHALL BE PERFORMED BY AM AABC CERTIFIED OR NEBB CERTIFIED AIR BALANCING CONTRACTOR.

Register, Grille and Diffuser Schedule

SYMBOL	BASIS OF DESIGN *	TYPE	SIZE	PATTERN	DESCRIPTION
CD-1	PRICE CO. SPD	CEILING DIFFUSER	SEE PLAN	4-WAY	LAY-IN SUPPLY AIR DIFFUSER PLAQUE FACE, STD WHITE FINISH
CD-2	PRICE CO. LCMD	CEILING DIFFUSER	SEE PLAN	4-WAY	SURFACE MTD. SUPPLY AIR DIFFUSER STD WHITE FINISH / BEVELED FACE
RG-1	PRICE CO. STYLE 85	CEILING RETURN	24" X 24" (NOMINAL)		LAY-IN EGG-CRATE GRILLE, WHITE PROVIDE DUCT CONNECTION PLENUM
RG-2	PRICE CO. STYLE 85	CEILING RETURN	24" X 12" (NOMINAL)		LAY-IN EGG-CRATE GRILLE, WHITE PROVIDE DUCT CONNECTION PLENUM
TG-1	PRICE CO. 530	TRANSFER GRILLE	14" X 10"	1 -WAY	SURFACE MTD. LOUVER FACE STANDARD WHITE FINISH

* APPROVED MANUFACTURERS: PRICE CO.; NAILOR CO.; TITUS CO.

Exhaust Fan Schedule

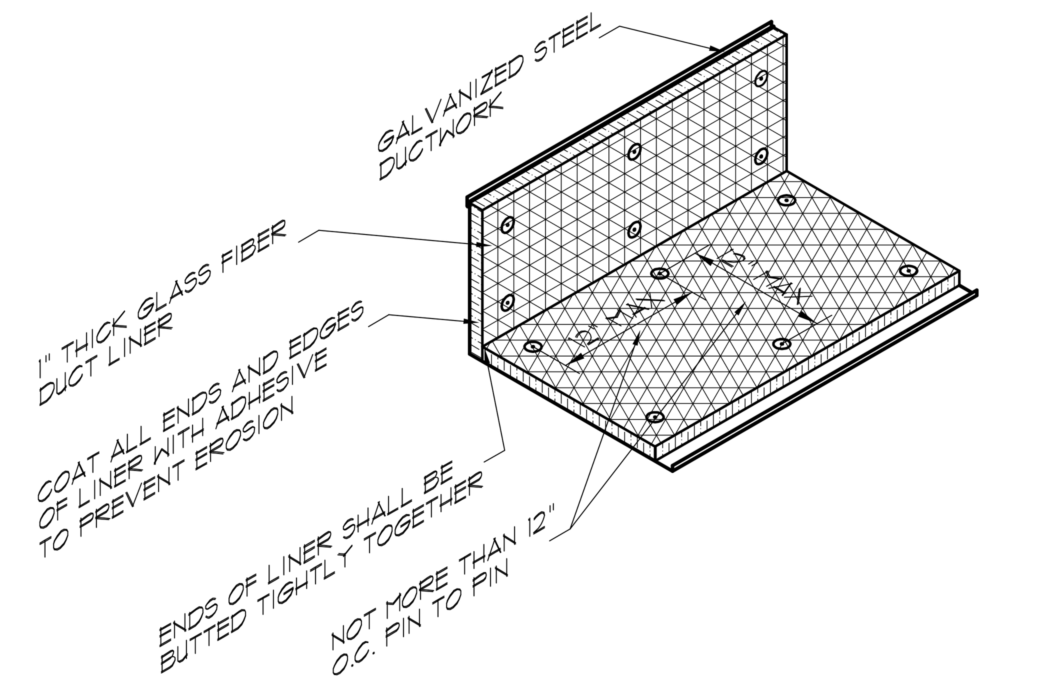
SYMBOL	BASIS OF DESIGN *	TYPE	CFM	SP	FAN RPM	SONES	MOTOR			WEIGHT	
							HP.	RPM	VOLT./PH.		
EF-1	TWIN CITY CO. T-150	CEILING FAN	75	.65"	710	3.1	100 W.	950	115v./1	10#	(1) (2)
EF-2	TWIN CITY CO. T-150	CEILING FAN	75	.65"	710	3.1	100 W.	950	115v./1	10#	(1) (2)
EF-3	TWIN CITY CO. T-200	CEILING FAN	150	.65"	740	3.5	130 W.	950	115v./1	12#	(1) (3)

* APPROVED MANUFACTURERS: TWIN CITY CO.; PENN CO.; GREENHECK CO.

(1) PROVIDE CEILING FANS WITH SPEED CONTROL ACCESSORY FOR SETTING AIR FLOW

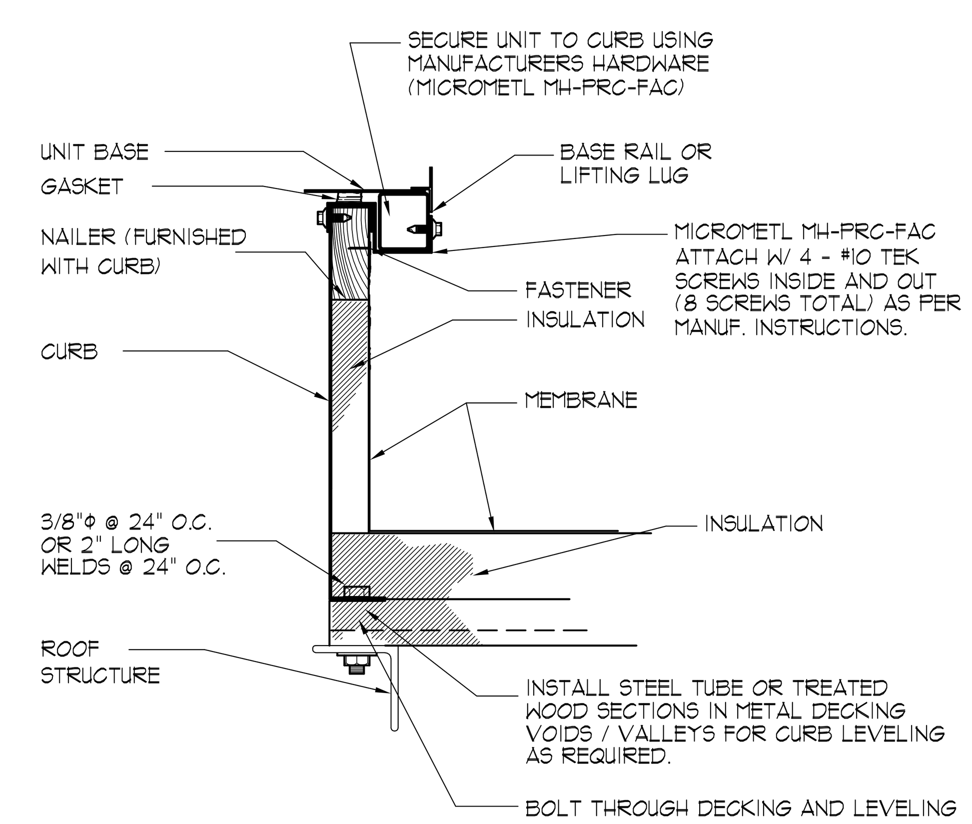
(2) PROVIDE TIME DELAY ACCESSORY FOR FANS CONTROLLED WITH LIGHTS

(3) MECHANICAL CONTRACTOR TO PROVIDE MANUFACTURERS WALL TIMER SWITCH ACCESSORY FOR FAN OPERATION. LINE VOLTAGE WIRING BY ELECTRICAL CONTRACTOR.



1 / M-501 — Duct Liner Detail

NO SCALE



2 / M-501 — Rooftop Unit Curb Detail

NO SCALE

Packaged Rooftop Unit Schedule

RTU-1

DESCRIPTION: PACKAGED ROOFTOP AIR CONDITIONING UNIT COMPLETE WITH: INDOOR PLENUM FAN AND VARIABLE SPEED MOTOR; HEATING SECTION WITH NATURAL GAS FIRED HEAT EXCHANGER; DX COOLING SECTION WITH COIL(S), PIPING, COMPRESSOR; CRANKCASE HEATER; RETURN AIR SMOKE DETECTOR; HIGH ALTITUDE KIT; PROGRAMMABLE THERMOSTAT WITH NIGHT SETBACK; OUTSIDE AIR ECONOMIZER WITH ADJUSTABLE FIXED MINIMUM POSITION; FILTER RACKS WITH FILTERS; FACTORY ROOF MOUNTING CURB. 1,540 LBS MAX OPER. WT.

HEATING: TWO STAGE HEATING; 250.0 / 202.5 MBH HIGH / LOW INPUT (205 / 166.1 MBH INPUT, 166.1 / 132.8 MBH OUTPUT AT 4500 FT. ELEV.) TWO STAGE BURNER. DIRECT SPARK IGNITION. 80% AFUE.

COOLING: 10.0 NOM. TONS. 102.1 MBH NET TOTAL OUTPUT, 102.1 MBH NET SENSIBLE OUTPUT AT 80.0 DEG. F. ENT. D.B. 62.0 DEG. F.ENT. WB., 97 DEG. F. AMB., 4000 CFM ALL AT 4500 FT. ELEV. 1- VARIABLE SPEED HERMETIC COMPRESSOR. 10.5 LBS HFC-410A. 12.1 EER AT ARI STD. CONDITIONS.

SUPPLY BLOWER: 4000 CFM S.A., 3600 MAX. R.A., 400 MIN. O.A. AT 0.60 IN. WG. EXTERNAL STATIC. 1290 RPM VARIABLE SPEED PLENUM FAN TYPE BLOWER. ALL AT 4500 ELEV. 1.21 BHP, 2.75 HP 208V 3 PH BLOWER MOTOR.

UNIT WIRING: 53 MCA, 80 A. MAX FUSE AT 208 VOLTS, 3 PHASE

FILTERS: 3 - 20 X 25 X 2 AND 2 - 20" X 30" X 2 DISPOSABLE MATTED GLASS FIBER MEDIA FILTERS.

MANUFACTURER: TRANE MODEL YZC120F3 OR ENGINEER APPROVED EQUAL.

Packaged Rooftop Unit Schedule

RTU-2

DESCRIPTION: PACKAGED ROOFTOP AIR CONDITIONING UNIT COMPLETE WITH: BELT DRIVE INDOOR BLOWER AND MOTOR; HEATING SECTION WITH NATURAL GAS FIRED HEAT EXCHANGER; DX COOLING SECTION WITH COIL(S), PIPING, COMPRESSOR; CRANKCASE HEATER; RETURN AIR SMOKE DETECTOR; HIGH ALTITUDE KIT; PROGRAMMABLE THERMOSTAT WITH NIGHT SETBACK; OUTSIDE AIR ECONOMIZER WITH ADJUSTABLE FIXED MINIMUM POSITION; FILTER RACKS WITH FILTERS; FACTORY ROOF MOUNTING CURB. 992 LBS MAX OPER WT.

HEATING: 130.0 MBH INPUT (108.1 MBH INPUT, 86.5 MBH OUTPUT AT 4500 FT. ELEV.) SINGLE STAGE BURNER. DIRECT SPARK IGNITION. 80% AFUE.

COOLING: 5.0 NOM. TONS. 55.4 NET TOTAL OUTPUT, 48.7 MBH NET SENSIBLE OUTPUT AT 80.0 DEG. F. ENT. D.B. 62.0 DEG. F.ENT. WB., 95 DEG. F. AMB., 2000 CFM ALL AT 4200 FT. ELEV. 1- VARIABLE SPEED HERMETIC COMPRESSOR. 11.9 LBS HFC-410A. 19.6 IEER AT AHRI STD. CONDITIONS.

SUPPLY BLOWER: 2000 CFM (NOM) S.A., 1800 MAX. R.A., 200 MIN. O.A. AT 0.6 IN. WG. EXTERNAL STATIC. 1158 BLOWER RPM ALL AT 4500 ELEV. 0.88 BHP, 1.0 HP 208V 3PH DIRECT DRIVE BLOWER MOTOR.

UNIT WIRING: 26.0 MCA, 40 A. MAX FUSE AT 208/230 VOLTS, 3 PHASE

FILTERS: 4 - 16 X 35 X 2 DISPOSABLE MATTED GLASS FIBER MEDIA FILTERS.

MANUFACTURER: TRANE CO. MODEL YZC060E3 OR ENGINEER APPROVED EQUAL.

Electric Wall Heater Schedule

EWH-1 EWH-2

DESCRIPTION: WALL MOUNTED FAN-FORCED ELECTRIC WALL HEATER. PROVIDE UNIT FULLY ASSEMBLED WITH REMOTE WALL MOUNTED THERMOSTAT, 40 DEG F. TO 100 DEG. F. RANGE.

CAPACITY: 600 / 2400 WATTS (4 STEP) HEATING OUTPUT AT 240 V 1 PH. FIELD SELECT 1800 WATTS (REQUIRES CHANGING FACTORY SETTINGS).

ELECTRICAL: 10.0 AMPS AT 240V SINGLE PH. (UNIT MAXIMUM)

MANUFACTURER: QMARK (MARLEY ELECTRIC) GFR SERIES MODEL GFR-2404.

STATE OF UTAH LICENSED PROFESSIONAL ENGINEER — CHARLES LUSH — No. 155425 — July 8, 2021

REVISIONS

No.	Date	Description
1	-	-

Renegade Design, LLC
18660 E. AUGA VISTA, BLACK CANYON CITY, AZ 85324
PHONE: 623-374-9192 HVAC-ENGINEERING@COX.NET

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64 North 900 West
American Fork, UT 84003

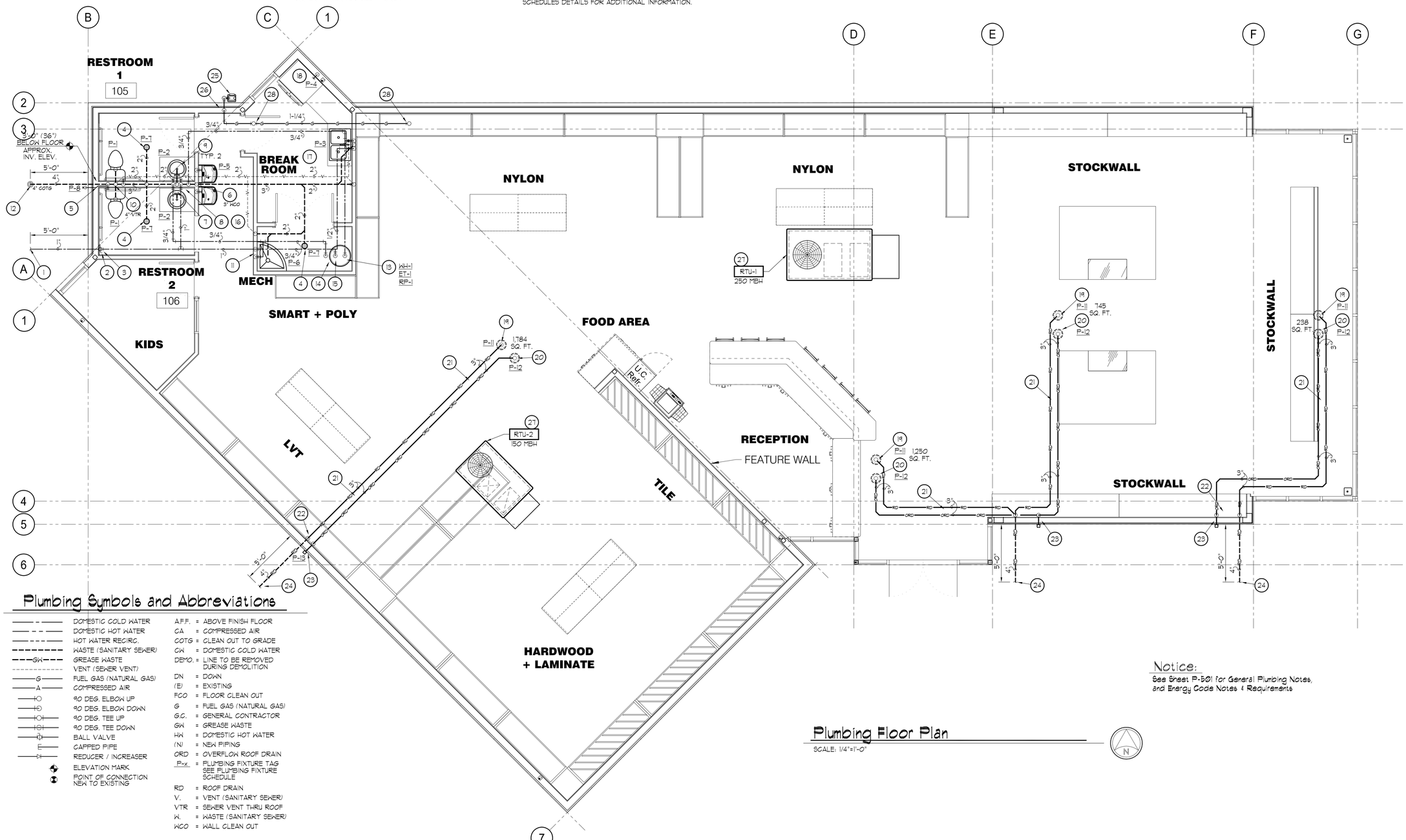
MECHANICAL SCHEDULES
-

Date July 8, 2021

M-501

Keyed Reference Notes

1. INCOMING 1" DOMESTIC COLD WATER LINE. EXTEND 5'-0" BEYOND BUILDING FOUNDATION TO CONTRACT LIMIT LINE. YARD MAIN AND LATERAL BY OTHERS. FIELD VERIFY EXACT LOCATION.
2. ROUTE 1" INCOMING COLD WATER LINE BELOW FLOOR SLAB / FOUNDATION AND RISE INTO WALL CAVITY ON WARM SIDE OF WALL INSULATION. PROVIDE MAIN SERVICE SHUT-OFF VALVE WITH ACCESS
3. 1" DOMESTIC COLD WATER LINE RISER AND PRV STATION. CONSTRUCT PRV IN VERTICAL CONFIGURATION. COORDINATE LOCATION WITH OTHER TRADES. SEE DETAIL FOR ADDITIONAL INFORMATION.
4. PROVIDE 2" FLOOR DRAIN WITH TRAP SEAL AS REQUIRED BY CODE.
5. EXTEND 3/4" COLD WATER THROUGH WALL CAVITY TO SERVE EXTERIOR WALL HYDRANT.
6. PROVIDE WALL CLEAN-OUT AND CHROME ACCESS COVER. SEE PLANS FOR SIZING.
7. DROP 1" COLD WATER IN WALL CAVITY AND CREATE 1" MANIFOLD TO SERVE FIXTURES. EXTEND 1/2" COLD WATER TO SERVE EACH LAVATORY. EXTEND 1/2" COLD WATER TO SERVE EACH TOILET. EXTEND 1/2" COLD WATER TO SERVE EACH ELECTRIC WATER COOLERS. EXTEND 3/4" COLD WATER TO SERVE WALL HYDRANT.
8. DROP 3/4" CIRCULATED HOT WATER MAIN DOWN IN WALL CAVITY AND ROUTE TO SERVE PUBLIC LAVATORIES. RETURN MAIN UP IN WALL CAVITY TO CEILING CAVITY AS INDICATED. PROVIDE 1/2" HOT WATER BRANCH TO SERVE EACH LAVATORY. DO NOT EXCEED CODE REQUIRED BRANCH DISTANCES.
9. PROVIDE AND INSTALL LAVATORY AND FAUCET. PROVIDE MIXING / TEMPERATURE LIMITING ANTI-SCALD DEVICE AT LAVATORIES COMPLIANT WITH ASSE 1070 AS PER CODE. EXTEND 2" WASTE UP IN WALL TO SERVE SINKS. CONTINUE AS 2" VENT UP IN WALL FRAMING AND COMBINE WITH OTHER VENTS AS INDICATED.
10. COMBINE PLUMBING VENTS INTO 1 - 4" VENT THROUGH ROOF TO ATMOSPHERE. COORDINATE WITH STRUCTURE. MAINTAIN 120" (10'-0") MINIMUM CLEARANCE TO ANY AND ALL OUTSIDE AIR INTAKES AS PER CODE REQUIREMENTS.
11. DROP 1/2" HOT WATER AND 1/2" COLD WATER DOWN IN WALL TO SERVE WALL MOUNTED JANITORS SINK FAUCET.
12. EXTEND 4" WASTE LINE TO 5'-0" BEYOND FOUNDATION (CONTRACT LIMIT LINE) EXTENSION AND CONNECTION TO MAIN / LATERAL BY OTHERS. SEE SITE UTILITY DRAWINGS. FIELD VERIFY EXACT LEAVING INVERT ELEVATION.
13. PROVIDE AND INSTALL HIGH EFFICIENCY ELECTRIC WATER HEATER. COORDINATE LOCATION WITH OTHER TRADES. SEE SCHEDULES DETAILS FOR ADDITIONAL INFORMATION.
14. PROVIDE AND INSTALL NEW CIRCULATOR AND EXPANSION TANK FOR WATER HEATER. SEE EQUIPMENT SCHEDULES AND DETAILS FOR ADDITIONAL INFORMATION. PROVIDE ALL SERVICE CONNECTIONS AS PER MANUFACTURERS RECOMMENDATIONS.
15. EXTEND 3/4" COLD WATER , 3/4" HOT WATER AND 3/4" CIRCULATION LINES TO CONNECT TO WATER HEATER. SEE DETAILS.
16. EXTEND 2" VENT UP IN WALL FRAMING AND PROVIDE CLEAN-OUT. EXTEND 2" VENT TO CONNECT TO OTHER VENTS AS INDICATED.
17. PROVIDE AND INSTALL BREAK ROOM SINK WITH FOOD WASTE DISPOSER. EXTEND 1/2" COLD WATER AND 1/2" HOT WATER THROUGH WALL TO SERVE SINK. EXTEND 2" WASTE UP IN WALL TO SERVE SINK. CONTINUE AS 1-1/2" VENT UP IN WALL FRAMING. COMBINE VENTS AS ALLOWED BY CODE.
18. PROVIDE COLD WATER STOP IN RECESSED BOX FOR REFRIGERATOR ICE MAKER CONNECTION. EXTEND 1/2" COLD WATER SUPPLY THROUGH FRAMING TO SERVE STOP.
19. PROVIDE AND INSTALL PRIMARY ROOF DRAIN FIXTURE. SIZE AS INDICATED. COORDINATE LOCATION WITH STRUCTURE. EXTEND DRAIN PIPING AS INDICATED. SEE FIXTURE SCHEDULE.
20. PROVIDE AND INSTALL SECONDARY (OVER FLOW) ROOF DRAIN FIXTURE. SIZE AS INDICATED. COORDINATE LOCATION WITH STRUCTURE. EXTEND DRAIN PIPING AS INDICATED. SEE FIXTURE SCHEDULE.
21. ROUTE PRIMARY AND SECONDARY STORM DRAIN PIPING THROUGH ROOF STRUCTURAL MEMBERS WHERE POSSIBLE AND MAINTAIN MAXIMUM SLOPE.
22. DROP PRIMARY AND SECONDARY STORM DRAIN PIPING DOWN AT EXTERIOR WALL. COORDINATE WITH STRUCTURE. FURRING / ENCLOSURE BY GENERAL CONTRACTOR. SEE ARCHITECTURAL PLANS.
23. DROP SECONDARY (OVER FLOW) STORM DRAIN LINE DOWN IN WALL CAVITY TO APPROX. 12" ABOVE ADJACENT GRADE. EXTEND THROUGH WALL AND TERMINATE WITH DRAIN FIXTURE AS INDICATED. COORDINATE WITH STRUCTURE. SPLASH BLOCK IF REQUIRED BY OTHERS.
24. EXTEND PRIMARY STORM DRAIN OUT TO 5'-0" (CONTRACT LIMIT LINE) CONTINUATION BY SITE UTILITIES CONTRACTOR
25. NEW FUEL GAS METER. 425 CFH FUEL GAS METER BY LOCAL FUEL GAS SUPPLIER. 250.0 MBH NAMEPLATE, 205 MBH DERATED FOR 4500 FT. ELEV. AT 4 OZ./ 0.25 LB SERVICE.
26. EXTEND 1-1/4" FUEL GAS PIPING FROM METER INTO STRUCTURE WALL FRAMING AND EXTEND UP AS SHOWN. LINES EXTEND INTO CEILING CAVITY AT THIS LEVEL AND ROUTE AT STRUCTURE.
27. FUEL GAS FIRED PACKAGE ROOFTOP UNIT. SEE MECHANICAL PLANS FOR ADDITIONAL INFORMATION.
28. EXTEND 1-1/4" GAS UP THROUGH ROOF TO SERVE ROOF MOUNTED PACKAGE UNIT. SEE PLUMBING ROOF PLAN FOR CONTINUATION.



Plumbing Symbols and Abbreviations

- DOMESTIC COLD WATER
- DOMESTIC HOT WATER
- HOT WATER RECIRC.
- WASTE (SANITARY SEWER)
- GREASE WASTE
- VENT (SEWER VENT)
- G — FUEL GAS (NATURAL GAS)
- A — COMPRESSED AIR
- 90 DEG. ELBOW UP
- 90 DEG. ELBOW DOWN
- 90 DEG. TEE UP
- 90 DEG. TEE DOWN
- BALL VALVE
- CAPPED PIPE
- REDUCER / INCREASER
- ELEVATION MARK
- POINT OF CONNECTION NEW TO EXISTING

A.F.F. = ABOVE FINISH FLOOR
CA = COMPRESSED AIR
COTG = CLEAN OUT TO GRADE
CW = DOMESTIC COLD WATER
DEMO. = LINE TO BE REMOVED DURING DEMOLITION
DN = DOWN
(E) = EXISTING
FCO = FLOOR CLEAN OUT
G = FUEL GAS (NATURAL GAS)
G.C. = GENERAL CONTRACTOR
GW = GREASE WASTE
HW = DOMESTIC HOT WATER
(N) = NEW PIPING
ORD = OVERFLOW ROOF DRAIN
P-x = PLUMBING FIXTURE TAG SEE PLUMBING FIXTURE SCHEDULE
RD = ROOF DRAIN
V. = VENT (SANITARY SEWER)
VTR = SEWER VENT THRU ROOF
W. = WASTE (SANITARY SEWER)
WCO = WALL CLEAN OUT

Plumbing Floor Plan

SCALE: 1/4"=1'-0"

Notice:
See Sheet P-501 for General Plumbing Notes, and Energy Code Notes & Requirements

STATE OF UTAH
CHARLES LUSH
No. 155425
July 8, 2021
LICENSED PROFESSIONAL ENGINEER

REVISIONS		
No.	Date	Description
1	-	-

Renegade Design, LLC
18660 E. AUGA VISTA, BLACK CANYON CITY, AZ 85324
PHONE 623-314-9192 HVAC-ENGINEERING@COX.NET

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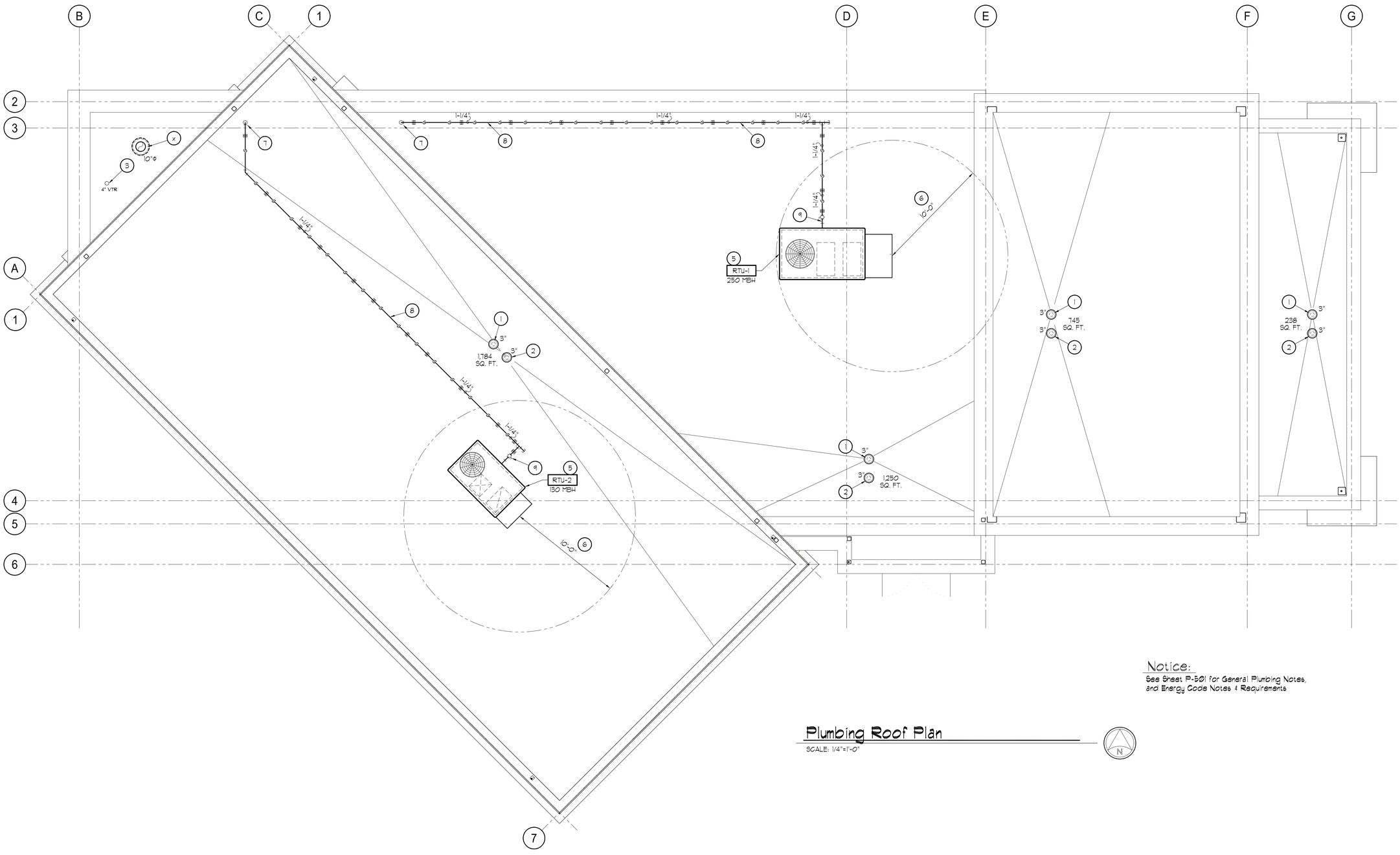
MAIN LEVEL PLUMBING FLOOR PLAN

Date July 8, 2021

P-101

Keyed Reference Notes

1. PROVIDE AND INSTALL PRIMARY ROOF DRAIN FIXTURE. SIZE AS INDICATED. COORDINATE PLACEMENT WITH ARCHITECTURAL AND STRUCTURAL DRAWINGS. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.
2. PROVIDE AND INSTALL SECONDARY / OVERFLOW ROOF DRAIN FIXTURE. SIZE AS INDICATED. COORDINATE PLACEMENT WITH ARCHITECTURAL AND STRUCTURAL DRAWINGS. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.
3. SANITARY SEWER / PLUMBING VENT THROUGH ROOF TO ATMOSPHERE. SIZE AS INDICATED. COORDINATE WITH STRUCTURE. MAINTAIN 120" CLEAR FROM VENT TO ANY AND ALL OUTSIDE AIR INTAKES AS PER CODE.
4. ROOF ACCESS HATCH AND STAIR ASSEMBLY. SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
5. PACKAGED GAS / ELECTRIC ROOFTOP UNIT PROVIDED AND INSTALLED BY MECHANICAL CONTRACTOR. HEATING CAPACITY INDICATED REFLECTS NAMEPLATE RATING. SEE MECHANICAL PLANS AND SCHEDULES FOR ADDITIONAL INFORMATION.
6. MAINTAIN 120" (10'-0") CLEARANCE FROM OUTSIDE AIR INTAKES AT ROOFTOP EQUIPMENT TO ALL EXHAUST VENTS AND PLUMBING VENTS.
7. EXTEND 1-1/4" FUEL GAS MAIN UP THROUGH ROOF STRUCTURE TO SERVE ROOF MOUNTED EQUIPMENT. COORDINATE ROOF PENETRATION LOCATION WITH STRUCTURE. FLASHING AND SEALING OF PIPING PENETRATION PROVIDED BY ROOFING CONTRACTOR.
8. FUEL GAS PIPING TO BE INSTALLED ON AND SUPPORTED FROM ROOF. PROVIDE PIPING SUPPORTS COMPATIBLE WITH FINISHED ROOF SURFACE. EXPOSED PIPING TO BE PAINTED AS PER FUEL GAS CODE REQUIREMENTS.
9. EXTEND AND CONNECT FUEL GAS PIPING BRANCH FROM MAIN ON ROOF TO SERVE NEW PACKAGED UNIT. PROVIDE SHUT-OFF VALVE, TEST TEE AND FLEXIBLE APPLIANCE CONNECTOR AS PER CODE REQUIREMENTS.
10. REST ROOM EXHAUST AIR DUCT UP THROUGH ROOF TO VENT CAP BY MECHANICAL CONTRACTOR. SEE MECHANICAL PLANS FOR ADDITIONAL INFORMATION.



Notice:
See Sheet P-501 for General Plumbing Notes, and Energy Code Notes & Requirements

Plumbing Roof Plan
SCALE: 1/4"=1'-0"

STATE OF UTAH
CHARLES LUSH
No. 155425
July 8, 2021
LICENSED PROFESSIONAL ENGINEER

REVISIONS

No.	Date	Description
△	-	-

Renegade Design, LLC
18660 E. AUGA VISTA, BLACK CANYON CITY, AZ 85324
PHONE: 623-374-9192 HVAC-ENGINEERING@COX.NET

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64 North 900 West
American Fork, UT 84003

ROOF LEVEL PLUMBING FLOOR PLAN

Date July 8, 2021

P-102

General Plumbing Notes

1 - PLUMBING CONTRACTOR SHALL COORDINATE HIS WORK WITH THE WORK OF OTHER TRADES.

2 - INSTALLATION SHALL BE IN CONFORMANCE WITH THE IPC, 2018 EDITION; IBC, 2018 EDITION; IMC 2018 EDITION; IFGC, 2018 EDITION AND THE NEC, 2017 EDITION; ALL AS ADOPTED AND AMENDED BY THE STATE OF UTAH AND THE LOCAL JURISDICTION.

3 - THE PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR THE CLEAN-UP AND REMOVAL OF WORK RELATED DEBRIS.

4 - ARRANGE AND SCHEDULE INSPECTIONS IN A TIMELY MANNER WITH THE CONSTRUCTION SCHEDULE.

5 - UNLESS NOTED OTHERWISE, ALL BELOW SLAB WASTE AND VENT PIPING SHALL BE PVC OR ABS UNDERGROUND. ALL ABOVE GRADE WASTE AND VENT PIPING SHALL BE SERVICE WEIGHT CAST IRON, SCHEDULE 40 DWV PVC OR ABS. ALL PIPING SHALL BE INSTALLED AS PER IPC STANDARDS FOR THE SERVICE INTENDED.

6 - UNLESS NOTED OTHERWISE, ALL DOMESTIC WATER PIPING SHALL BE TYPE "L" COPPER WITH SWEAT CONNECTIONS OR APPROVED PEX TYPE PIPING INSTALLED AS PER IPC STANDARDS FOR THE SERVICE INTENDED.

7 - PLUMBING EQUIPMENT AND PIPING SHALL BE SEISMICALLY BRACED WHERE REQUIRED IN CONFORMANCE WITH THE IBC, 2018 EDITION.

8 - ALL PENETRATIONS OF THE CONCRETE FLOOR SLAB REQUIRED FOR PLUMBING INSTALLATIONS SHALL BE THE RESPONSIBILITY OF THE PLUMBING CONTRACTOR.

9 - ALL FLOOR, WALL AND ROOF PENETRATIONS SHALL BE SEALED SO AS TO MAINTAIN THE INTEGRITY OF THE BUILDING FIRE SAFETY REQUIREMENTS.

10 - REFER TO THE ARCHITECTURAL DIMENSIONED PLANS FOR THE EXACT LOCATION OF PLUMBING FIXTURES AND EQUIPMENT.

11 - ALL HOT, RECIRCUALTION AND COLD DOMESTIC WATER PIPING SHALL BE INSULATED AS PER IECC TABLE C403.2.10 WITH 1" THICK R-3.7 (MIN) OR GREATER PRE FORMED GLASS FIBER INSULATION W/ ALL SERVICE JACKET OR COMPLIANT FOAM INSULATION FOR PEX PIPING..

12 - ALL ROOFING WORK, FRAMING, AND INTERIOR FINISH WORK IS TO BE PERFORMED BY OTHERS UNDER THE DIRECTION OF THE PROJECT ARCHITECT AND THE SUPERVISION OF THE GENERAL CONTRACTOR.

13 - UNLESS NOTED OTHERWISE, ALL PLUMBING FIXTURES AND RELATED TRIM SHALL BE FURNISHED AND INSTALLED BY THE PLUMBING CONTRACTOR. SEE PLUMBING FIXTURE SCHEDULE.

14 - GAS PIPING ABOVE GRADE SHALL BE ASTM A120-74 BLACK STEEL.

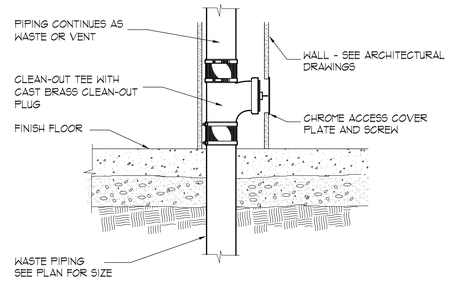
Energy Code Compliance - Plumbing Requirements

1 - HEAT TRAPS SHALL BE INSTALLED ON THE SUPPLY AND DISCHARGE PIPING OF WATER HEATING STORAGE TANKS WITHOUT CIRCULATING SYSTEMS. (2018 IEEC C404.3).

2 - ALL PLUMBING PIPING SHALL BE INSULATED IN ACCORDANCE WITH 2018 IEEC TABLE C403.11.3 REQUIREMENTS.

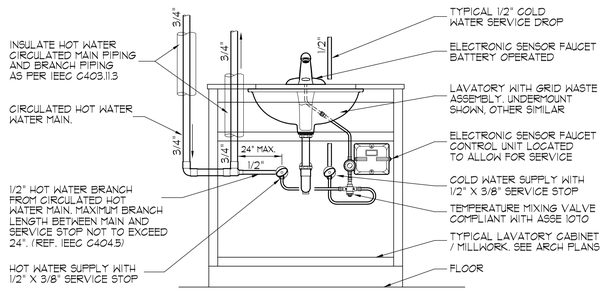
3 - HEATED (HOT) WATER SUPPLY PIPING SHALL CONFORM TO ENERGY CODE LENGTH AND VOLUME REQUIREMENTS. (2018 IEEC C404.5; C404.5.1; C404.5.2).

4 - HOT WATER CIRCULATORS, PIPING AND CONTROLS SHALL COMPLY WITH 2018 IEEC C404 REQUIREMENTS:
- A - CONTROL SHALL LIMIT THE OPERATION OF A PUMP INSTALLED TO MAINTAIN TEMPERATURE OF A STORAGE TANK. (2018 IEEC C404.6.1).
- B - AUTOMATIC TIME SWITCHES SHALL BE PROVIDED AND INSTALLED TO AUTOMATICALLY SWITCH OFF THE RECIRCULATING HOT WATER SYSTEM (2018 IEEC C404.6.1; C404.6.2).
- C - PUMPS THAT CIRCULATE WATER BETWEEN A HEATER AND STORAGE TANK SHALL HAVE CONTROLS THAT LIMIT OPERATION FROM STARTUP TO FIVE MINUTES OR LESS AFTER THE END OF THE HEATING CYCLE. (2018 IEEC C404.6.3).
- D - DEMAND CIRCULATION WATER SYSTEMS SHALL HAVE CONTROLS THAT START THE PUMP UPON RECIEVING A SIGNAL FROM THE ACTION OF A USER OF A FIXTURE OR APPLIANCE AND LIMITS THE TEMPERATURE OF THE WATER ENTERING THE COLD WATER PIPING TO 104 DEG. F. (2018 IEEC C404.7).



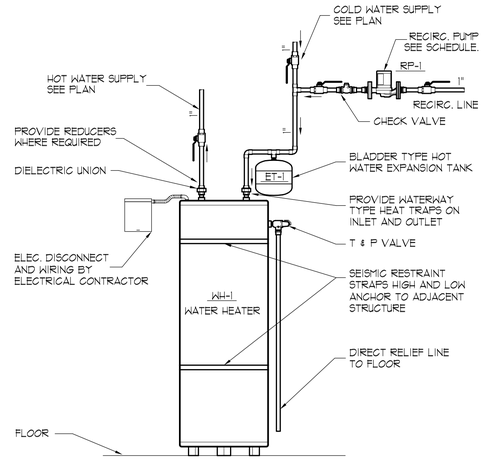
5 / P-501 **Wall Cleanout Detail**

NO SCALE



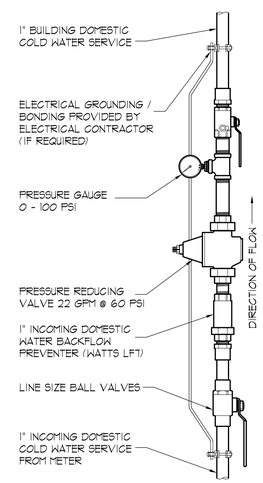
6 / P-501 **Lavatory Water Connection Detail**

NO SCALE



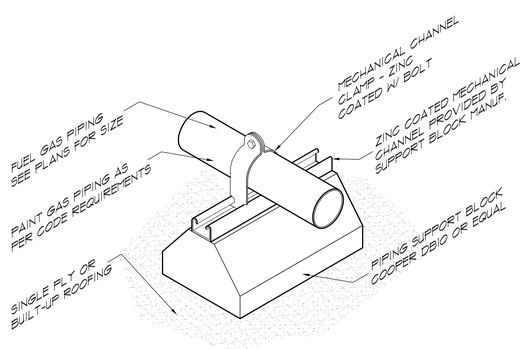
2 / P-501 **Water Heater Detail**

NO SCALE



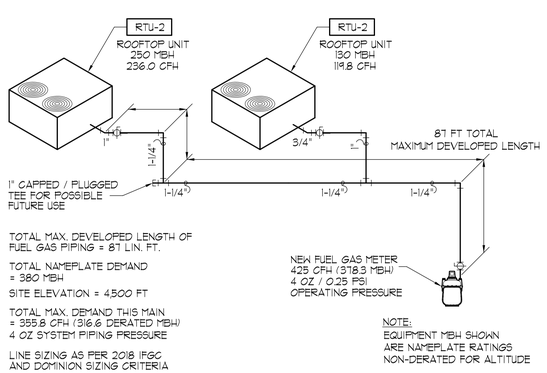
3 / P-501 **Domestic Water PRV Station**

NO SCALE



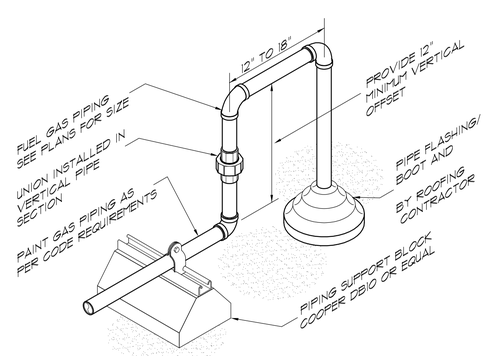
7 / P-501 **Piping Support Block Detail**

NO SCALE



A / P-501 **Fuel Gas Piping Riser Diagram**

NO SCALE



4 / P-501 **Gas Piping Roof Penetration**

NO SCALE

Plumbing Fixture Schedule

SYMBOL	FIXTURE	BASIS OF DESIGN *	WASTE	VENT	COLD	HOT	DESCRIPTION / ACCESSORIES
P-1	ADA TANK TYPE WATER CLOSET	KOHLER CO. "HIGHLINE" K-3493	4"	2"	1/2"	--	FLOOR MOUNT, TANK TYPE BOTTOM OUTLET, SPLIT SEAT.
P-2	COUNTER MOUNT LAVATORY	KOHLER CO. "PENNINGTON" K-2196	1-1/2"	1-1/2"	1/2"	1/2"	DROP-IN MOUNT TYPE HAND LAVATORY WITH ADA COMPLIANT TRIM MOEN 8305 ELECTRONIC FAUCET
P-3	2 COMP. BREAK ROOM SINK	KOHLER "BALLAD" K-5198	2"	1-1/2"	1/2"	1/2"	25" X 22" SINGLE BOWL STAINLESS STEEL 11.5" DEEP SINK KOHLER K-10439 "FORTE" FAUCET. USE BADGER 5 DISPOSER
P-4	RECESSED ICE MAKER STOP ASSY	GUY GRAY MIB - 1 -AB	--	--	1/2"	--	RECESSED ICE MAKER OUTLET BOX WITH 1/4 TURN VALVE / STOP
P-5	ADA ELEC. WATER COOLER	ELKAY EZST1.8C TWO STATION	1-1/2"	1-1/2"	1/2"	1/2"	BI-LEVEL ADA COMPLIANT ELECTRIC WATER COOLER 3.7 FLA @ 115V 1 PH
P-6	CORNER JANITORS SINK	KOHLER WHITBY K-6710	2"	1-1/2"	1/2"	1/2"	CORNER TYPE, K-9840-NA FAUCET, 5' HOSE, RIM GUARD, 2" STRAINER
P-7	STANDARD DUTY FLOOR DRAIN	WATTS CO. FD-15-R OR ZURN CO. FD-2290	2"	1-1/2"	--	--	STD. WT. BODY, DEEP SEAL TRAP ADJ. STANDARD DUTY ROUND GRATE PROVIDE TRAP PRIMER AS REQUIRED
P-8	WALL HYDRANT	WOODFORD MODEL #25	--	--	3/4"	--	FROST PROOF, WALL MOUNTED C/W VACUUM BREAKER
P-11	ROOF DRAIN	WATTS CO. RD-300 OR ZURN CO. Z-100	3"	--	--	--	C/W CLAMPING COLLAR, GRAVEL GUARD
P-12	OVERFLOW ROOF DRAIN	WATTS CO. RD-300 OR ZURN CO. Z-100	3"	--	--	--	C/W CLAMPING COLLAR, GRAVEL GUARD, OVERFLOW DAM
P-13	ROOF DRAIN SPOUT	WATTS CO. RD-940 OR ZURN CO. Z-199	3"	--	--	--	C/W TRIM COLLAR. SPLASH BLOCK BY OTHERS

* APPROVED MANUFACTURERS: KOHLER, TOTO, ELJER, AMERICAN STANDARD, ELKAY

** OWNER SHALL APPROVE FINAL SELECTION OF FIXTURES.

1 PROVIDE AND INSTALL ASSE 1070 DOMESTIC HOT WATER TEMPERING VALVE FOR TEMPERATURE CONTROL AT EACH LAVATORY/HAND SINK.

Domestic Water Heater Schedule

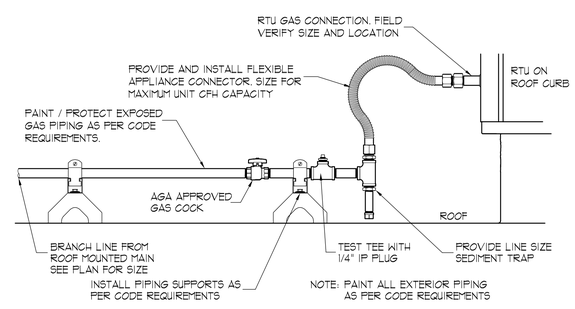
SYMBOL	MANUFACTURER MODEL	CAP. GAL.	REC. GPH	FUEL TYPE	INPUT CAP.	ELEC.	DESCRIPTION / ACCESSORIES
WH-1	BRADFORD WHITE RES3006	30 GAL.	21 G. AT 90°F	ELEC	4500 WATTS	208/ 230 V 1 PH	30 GALLON ELECTRIC WATER HEATER PROVIDE EXPANSION TANK ET-1 (BELOW) AS REQUIRED BY CODE.

Expansion Tank Schedule

SYMBOL	MANUFACTURER MODEL	SERVICE TYPE	TANK VOLUME	ACCEPT. VOLUME	DIMENSIONS AND FITTINGS
ET-1	WATTS PLT-5	DOMESTIC HOT WATER	2.1 GAL.	1.2 GAL.	40 PSI AIR CHARGE 3/4" NPTM FITTING

Hot Water Recirc. Pump Schedule

SYMBOL	MANUFACTURER MODEL	TYPE	GPM	TDH (FT)	MOTOR WATT	MOTOR RPM	MOTOR VOLT/PH.	ACCESSORIES
RP-1	B & G NBF 12U/L #103261	CART. CIRC.	3.0	10.0	52.0	2800	115 / 1	PROVIDE C/W AQUASTAT AND CORDED PLUG ASSEMBLY AQS-3/4



1 / P-501 **Gas Connection at Rooftop Unit**

STATE OF UTAH
CHARLES LUSH
No. 155425
July 8, 2021
LICENSED PROFESSIONAL ENGINEER

REVISIONS

No.	Date	Description
1		

Renegade Design, LLC
18668 E. AUGA VISTA, BLACK CANYON CITY, AZ 85324
PHONE 623-314-9192 HVAC-ENGINEERING@COX.NET

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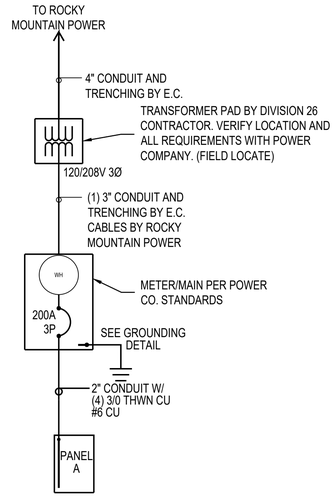
Cost U Less / Carpet Diem

64 North 900 West
American Fork, UT 84003

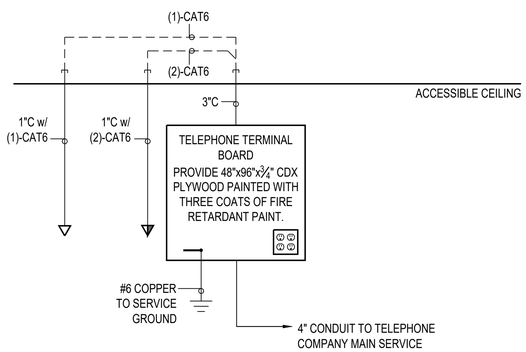
PLUMBING SCHEDULES AND DETAILS

Date July 8, 2021

P-501



① POWER ONE-LINE DIAGRAM



② COMMUNICATIONS RISER DIAGRAM

ELECTRICAL SYMBOLS

SYMBOL	EXPLANATION	SYMBOL	EXPLANATION	SYMBOL	EXPLANATION
	BRANCH CIRCUIT CONCEALED IN CEILING OR WALL	F1	FIXTURE TYPE SYMBOL		TAMPER AND FLOW
	BRANCH CIRCUIT CONCEALED IN GROUND OR FLOOR		FLUORESCENT FIXTURE (TYPICAL)	FACP	FIRE ALARM CONTROL PANEL
A-1,3	BRANCH CIRCUIT HOMERUNS TO PANEL		EMERGENCY LIGHTING UNIT	RFAA	REMOTE FIRE ALARM ANNUNCIATOR PANEL
135	ROOM NUMBER		SURFACE OR PENDANT MOUNTED FIXTURE	NAC	FIRE ALARM NAC PANEL
CFI 1	MECHANICAL EQUIPMENT SYMBOL		RECESSED FIXTURE	VOICE	FIRE ALARM VOICE PANEL
1	KEYED NOTE REFERENCE		WALL MOUNTED FIXTURE	D/H	DOOR HOLDER
42X	FEEDER TAG (SEE FEEDER SCHEDULE)		WALL PACK	F/S	FIRE/SMOKE DAMPER
	LIGHTING AND POWER PANELBOARD		FLUORESCENT STRIP		FIRE ALARM PULL STATION
NON-FUSED / FUSED	DISCONNECT SWITCH		TRACK LIGHTING		FIRE ALARM STROBE
NON-FUSED / FUSED	DISCONNECT SWITCH WITH MOTOR STARTER		EMERGENCY LIGHTING UNIT		FIRE ALARM HORN/STROBE
	MOTOR STARTER		WALL MOUNTED EXIT LIGHT (SINGLE FACE)	LF	FIRE ALARM HORN/STROBE (LF = LOW FREQUENCY)
VFD	VARIABLE FREQUENCY DRIVE		WALL MOUNTED EXIT LIGHT (DOUBLE FACE)		FIRE ALARM HORN/STROBE WITH PROTECTIVE COVER
C	CONDUIT STUB		CEILING MOUNTED EXIT LIGHT		FIRE ALARM SPEAKER/STROBE
J	JUNCTION BOX		CEILING MOUNTED EXIT LIGHT (DOUBLE FACE)	LF	FIRE ALARM SPEAKER/STROBE (LF = LOW FREQUENCY)
	ELECTRIC VEHICLE CHARGING STATION		EXIT LIGHT WITH PROTECTIVE COVER		FIRE ALARM SPEAKER
	DUPLEX RECEPTACLE OUTLET	$	SINGLE POLE SWITCH (SUBSCRIPT AS INDICATED BELOW)	LF	FIRE ALARM SPEAKER (LF = LOW FREQUENCY)
	WP — MODIFIER; A-3 — PANEL SPACE ASSIGNMENT; REF — EQUIPMENT DESIGNATION	2	TWO POLE SWITCH		FIRE ALARM HORN
		3	3-WAY SWITCH		
WP	WEATHERPROOF COVER & LISTED WEATHER RESISTANT DEVICE	4	4-WAY SWITCH	LF	FIRE ALARM HORN (LF = LOW FREQUENCY)
		D	DIMMER SWITCH		
GFCI	PROTECTED BY FAULT CIRCUIT INTERRUPTER	K	KEYED SWITCH		FIRE ALARM STROBE CEILING MOUNTED
+44	MOUNTING HEIGHT ABOVE FLOOR OR GRADE GIVEN IN INCHES.	T	TIMER SWITCH		
		M	MANUAL STARTER WITH THERMAL OVERLOAD		FIRE ALARM HORN/STROBE CEILING MOUNTED
REF	REFRIGERATOR	F	PADDLE FAN SPEED CONTROL. (CANARM "CN" SERIES)		
DW	DISHWASHER	OC	OCCUPANCY SENSOR SWITCH	LF	FIRE ALARM HORN/STROBE CEILING MOUNTED (LF = LOW FREQUENCY)
DISP	DISPOSAL	LV	LOW VOLTAGE CONTROL SWITCH		
WASH	WASHING MACHINE	LV/D	LOW VOLTAGE CONTROL SWITCH WITH DIMMER		FIRE ALARM HORN CEILING MOUNTED
EWC	ELECTRIC WATER COOLER	OC/D	OCCUPANCY SENSOR CONTROL SWITCH WITH DIMMER		
USB	COOPER TR7746 OR EQUAL DUPLEX PLUS USB CHARGER	OC2	DUAL RELAY OCCUPANCY SENSOR CONTROL SWITCH	LF	FIRE ALARM HORN CEILING MOUNTED (LF = LOW FREQUENCY)
TR	TAMPER RESISTANT				
	QUAD RECEPTACLE OUTLET		DOUBLE GANG SWITCH		SMOKE DETECTOR (SUBSCRIPT AS INDICATED BELOW)
	SPLIT WIRED DUPLEX RECEPTACLE OUTLET	A,B,C / A,B	LOW VOLTAGE MULTI BUTTON CONTROL SWITCH (LETTER INDICATES CONTROL OF CORRESPONDING FIXTURES)	B	SMOKE ALARM BATTERY-BACKED
				C	SMOKE/CARBON MONOXIDE ALARM COMBO BATTERY-BACKED
	220V RECEPTACLE OUTLET		CONTROLLING SWITCH (LETTER INDICATES CONTROL OF CORRESPONDING FIXTURES)	D	DUCT SMOKE DETECTOR
				R	SMOKE DETECTOR WITH ADDRESSABLE RELAY
	ISOLATED GROUND RECEPTACLE		OCCUPANCY SENSOR (CEILING MOUNTED)	S	SMOKE DETECTOR WITH SOUNDER BASE
	RECEPTACLE FLOOR DEVICE	DT	DUAL TECHNOLOGY OCCUPANCY SENSOR (CEILING MOUNTED)		HEAT DETECTOR
	CEILING MOUNTED DEVICE	RC	ROOM CONTROLLER		GAS DETECTOR
	SPECIAL RECEPTACLE	RP	RELAY PACK	CO	CARBON MONOXIDE DETECTOR
				CO/NO2	CARBON MONOXIDE/NITROGEN DIOXIDE SENSOR (GARAGE)
	MOTOR OUTLET	LS	DAYLIGHT SENSOR		ADA TWO-WAY COMMUNICATIONS SYSTEM
	EXHAUST FAN	P	PHOTOCELL	KP	DOOR ACCESS CONTROL KEY PAD
T	THERMOSTAT OUTLET	V	VOLUME CONTROL	CR	DOOR ACCESS CONTROL CARD READER
S	REMOTE SENSOR OUTLET		WALL SPEAKER	$DS	DOOR ACCESS CONTROL DOOR STRIKE
	TELEPHONE OUTLET		CEILING SPEAKER	ML	DOOR ACCESS CONTROL MAG LOCK
(#)	COMPUTER DATA OUTLET (#) INDICATES JACK QUANTITIES		SURVEILLANCE CAMERA	DS	DOOR ACCESS CONTROL DOOR SENSOR
	NETWORK AND VOICE OUTLET	DVR	SURVEILLANCE DIGITAL VIDEO RECORDER		DOOR ACCESS CONTROL REQUEST TO EXIT
	WIRELESS ACCESS POINT CEILING MOUNTED				PUSHBUTTON
TV	TELEVISION OUTLET			B	BELL

NOTE: ALL SYMBOLS MAY NOT BE USED.

ABBREVIATIONS INDEX

#	NUMBER	DC	DIRECT CURRENT	KW	KILOWATT	PT	POTENTIAL TRANSFORMER
ϕ	PHASE	DISP	DISPOSAL	LRA	LOCKED ROTOR AMPS	PV	PHOTOVOLTAIC
1ϕ	SINGLE PHASE	DRY	DRYER	LTG	LIGHTING	PVC	POLYVINYL CHLORIDE
2P	TWO-POLE	DW	DISHWASHER	MATV	MASTER ANTENNA TELEVISION	(R)	RELOCATE
3ϕ	THREE PHASE	DWG	DRAWING	MAX	MAXIMUM	RECP	RECEPTACLE
4P	FOUR-POLE	EC	EMPTY CONDUIT	MB	MAIN BUS	REF	REFRIGERATOR
AC	ALTERNATING CURRENT	EM	EMERGENCY	MCB	MAIN CIRCUIT BREAKER	REQ	REQUIRED
AFF	ABOVE FINISHED FLOOR	EMG	EMERGENCY GENERATOR	MCC	MOTOR CONTROL CENTER	RLA	RATED LOAD AMPS
AFG	ABOVE FINISHED GRADE	EMT	ELECTRICAL METALLIC TUBING	MCM	1000 CIRCULAR MILLS	RMS	ROOT MEAN SQUARE
AFP	ARC FAULT PROTECTOR	EPO	EMERGENCY POWER OFF	MH	MANHOLE	SE	SERVICE ENTRANCE
AHJ	AUTHORITY HAVING JURISDICTION	EWC	ELECTRIC WATER COOLER	MIC	MICROPHONE	SPD	SURGE PROTECTION DEVICE
AIC	AMP INTERRUPTING CURRENT (SYMMETRICAL)	EWH	ELECTRIC WATER HEATER	MIN	MINIMUM	SPEC	SPECIFICATION
AL	ALUMINUM	(E)	EXISTING	MLO	MAIN LUGS ONLY	SPK	SPEAKER
AM	AMPS METER	(F)	FUTURE	MNF	MANUFACTURER	SS	SELECTOR SWITCH
AMP	AMPERE	FA	FIRE ALARM	MTG	MOUNTING	SW	SWITCH
ANN	ANNUNCIATOR	FACP	FIRE ALARM CONTROL PANEL	MTR	MOTOR	SWBD	SWITCHBOARD
ATS	AUTOMATIC TRANSFER SWITCH	FC	FOOT CANDLE	MW	MICROWAVE	SWGR	SWITCHGEAR
AUX	AUXILIARY	FLA	FULL LOAD AMPS	(N)	NEW	TTB	TELEPHONE TERMINAL BOARD
AWG	AMERICAN WIRE GAUGE	FT	FOOT	N/A	NOT APPLICABLE	TBC	TELEPHONE TERMINAL CABINET
BC	BARE COPPER	FRZ	FREEZER	NC	NORMALLY CLOSED	TV	TELEVISION
BFG	BELOW FINISH GRADE	FS	FUSED SWITCH	NEC	NATIONAL ELECTRICAL CODE	TYP	TYPICAL
C	CONDUIT	GFAF	DUAL FUNCTION GFCI/AFCI CIRCUIT BREAKER	NEMA	NATIONAL MANUFACTURING ASSOCIATION	UG	UNDERGROUND
CAB	CABINET	GFCI	GROUND FAULT CIRCUIT INTERRUPTER	NFC	NATIONAL FIRE CODE	UNO	UNLESS NOTED OTHERWISE
CATB	COMMUNITY ANTENNA TELEVISION	GFEP	GROUND-FAULT EQUIPMENT PROTECTION	NFPA	NATIONAL FIRE PROTECTION ASSOCIATION	UPS	UNINTERRUPTIBLE POWER SUPPLY
CATV	CABLE TELEVISION	GFP	GROUND FAULT PROTECTOR	NFS	NON FUSED SWITCH	V	VOLT (KV-KILOVOLT)
CFCI	CONTRACTOR FURNISHED CONTRACTOR INSTALLED	GRC	GALVANIZED RIGID CONDUIT	NIC	NOT IN CONTRACT	VA/R	VOLT-AMPS/REACTIVE
CKT	CIRCUIT	GRD	GROUND	NL	NIGHT LIGHT	VM	VOLT METER
CLG	CEILING	HP	HORSE POWER	NO	NORMALLY OPEN	W	WATTS
CNTR	CONTRACTOR	HZ	HERTZ	NTS	NOT TO SCALE	W/	WITH
CO	CONVENIENCE OUTLET	IG	ISOLATED GROUND	OFCI	OWNER FURNISHED CONTRACTOR INSTALLED	WASH	WASHER
CRT	COMPUTER TERMINAL	IMC	INTERMEDIATE METALLIC CONDUIT	OFOI	OWNER FURNISHED OWNER INSTALLED	WH	WATTHOUR
CT	CURRENT TRANSFORMER	IN	INCH	OS&Y	OUTSIDE SCREW AND YOKE	W/O	WITHOUT
CU	COPPER	J-BOX	JUNCTION BOX	PB	PUSH BUTTON	WP	WEATHER PROOF
C/W	CONDUIT WITH	KV	KILOVOLT	PF	POWER FACTOR	XFMR	TRANSFORMER
(D)	DEMOLISH/DELETE	KVA	KILOVOLT AMPERES	PFR	PHASE FAILURE RELAY	XFMR-SW	TRANSFORMER SWITCH
DB	DECIBEL	KVAR	KILOVARS	PNL	PANEL	XP	EXPLOSION PROOF

NOTE: THIS IS A TYPICAL ABBREVIATION LIST. NOT ALL ABBREVIATIONS MAY BE USED ON THIS PROJECT.

SHEET INDEX

SHEET NUMBER	SHEET TITLE
E000	ELECTRICAL COVER SHEET
E020	ENERGY COMPLIANCE CERTIFICATE
E050	ELECTRICAL SPECIFICATIONS
ES101	ELECTRICAL SITE PLAN
E101	POWER PLAN
E102	ROOF POWER PLAN
E151	LIGHTING PLAN
E501	INTERIOR INSTALLATION DETAILS
E502	EXTERIOR INSTALLATION DETAILS
E601	SCHEDULES

ELECTRICAL GENERAL NOTES:

1. FIRE ALARM NOT REQUIRED BY IFC 907.2.7.
2. EXIT SIGNS NOT REQUIRED PER IBC 1013.1 EXEPTION 1.
3. REFER TO ARCHITECTURAL CABINET CASEWORK ELEVATION DRAWINGS FOR CLARIFICATION ON MOUNTING AND PLACEMENT OF ALL RACEWAY. RECEPTACLES, AND SWITCHES.
4. MANY DEVICE MOUNTING LOCATIONS ARE DEPENDANT ON MILLWORK LOCATIONS. COORDINATE ALL APPLICABLE LOCATIONS WITH MILLWORK INSTALLER PRIOR TO BEGINNING WORK.
5. REVIEW AND COORDINATE WITH ARCHITECTURAL, CIVIL, STRUCTURAL, MECHANICAL, PLUMBING, AND OTHER DRAWINGS PRIOR TO BID.
6. NOTIFY AND COOPERATE WITH THE MECHANICAL CONTRACTOR SUCH THAT NO DUCTS, PIPING, OR EQUIPMENT FOREIGN TO THE OPERATION OF THE ELECTRICAL EQUIPMENT SHALL BE PERMITTED TO BE INSTALLED IN, ENTER, OR PASS THROUGH ELECTRICAL ROOMS OR SPACES, OR ABOVE OR BELOW ELECTRICAL EQUIPMENT IN OTHER AREAS.
7. REVIEW ALL ARCHITECT'S ELEVATIONS, SECTIONS, AND FLOOR PLANS PRIOR TO ROUGH-IN OF ELECTRICAL JUNCTION BOXES.
8. CONSULT ARCHITECTS REFLECTED CEILING PLANS FOR EXACT LOCATION OF LIGHTING FIXTURES, SPEAKERS, SMOKE DETECTORS, ETC.
9. MEET WITH THE CEILING AND MECHANICAL CONTRACTORS TO COORDINATE LOCATIONS, CLEARANCES, CEILING TYPES, AND ROUGH-IN REQUIREMENTS OF ALL LIGHTING FIXTURES PRIOR TO DUCT, PIPING, AND CEILING INSTALLATIONS.
10. VERIFY EXACT LOCATION(S) OF ALL EQUIPMENT TO BE FURNISHED BY OTHERS PRIOR TO ROUGH-IN.
11. PERFORM ALL WORK IN A WORKMANLIKE MANNER, PER INDUSTRY STANDARD, AND TO THE SATISFACTION OF THE ARCHITECT AND ENGINEER.
12. WORK, MATERIALS, AND EQUIPMENT SHALL CONFORM TO THE LATEST EDITIONS OF LOCAL, STATE AND NATIONAL CODES, STANDARDS AND ORDINANCES.
13. FINAL CONNECTIONS TO EQUIPMENT SHALL BE MADE AS PER MANUFACTURERS WRITTEN INSTRUCTIONS AND APPROVED WIRING DIAGRAMS AND DETAILS. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO PROVIDE ALL MATERIALS AND EQUIPMENT COMPATIBLE WITH EQUIPMENT ACTUALLY SUPPLIED. THE ELECTRICAL CONTRACTOR SHALL VERIFY ALL ELECTRICAL LOADS (VOLTAGE, PHASE, CONNECTION REQUIREMENTS, ETC.) OF EQUIPMENT FURNISHED UNDER OTHER DIVISIONS WITH APPROVED SHOP DRAWINGS PRIOR TO BEGINNING ROUGH-IN.
14. GANG TOGETHER ALL LIGHT SWITCHES INSTALLED ADJACENT TO EACH OTHER WITH ONE PIECE COVER PLATE.
15. USE EPOXY ANCHORS TO SUPPORT THE ELECTRICAL EQUIPMENT. EXPANSION ANCHOR BOLTS ARE NOT ACCEPTED.
16. PROVIDE BLANK COVER PLATES TO MATCH THE OTHER COVER PLATES FOR ALL JUNCTION BOXES WHERE DEVICES HAVE NOT BEEN INSTALLED AT THE COMPLETION OF WORK.
17. ALL MATERIALS USED IN THIS INSTALLATION SHALL BE U.L. APPROVED AND NEW.
18. DO NOT INSTALL WIRING IN DUCT WORK.
19. TERMINATE THE ELECTRICAL CONNECTIONS TO ALL THE EQUIPMENT BY PROVIDING THE NECESSARY MALE/FEMALE CONNECTOR, RECEPTACLE, PLUG, ETC.
20. VISIT THE PROJECT SITE DURING THE BIDDING PROCESS TO DETERMINE THE TOTAL SCOPE OF THE PROJECT.
21. DO NOT PENETRATE STRUCTURAL ELEMENTS OF FLOORS, WALLS, CEILINGS, ROOF, ETC.

FIVE DEGREES DESIGN
1457 EAST 840 NORTH
OREM, UTAH 84097
801.850.4583
chris@fivedegreesdesign.com

DATE: 13 APRIL 2021
PROJECT #: 20-028
DRAWN BY: KLB
CHECKED BY: KLB

REVISIONS
1 22 AUG 2022 FLOOR PLAN UPDATE

LICENSED PROFESSIONAL ENGINEER 9857303-2202 KYLE L. BREINHOLT August 2022 STATE OF UTAH
KYLE BREINHOLT
LIC.: 9857303
EXP.: 31 MARCH 2023
BREINHOLT POWER ENGINEERING PLLC
805 S 1430 W LEHI, UT 84043
(801)367-5180
BPE#2142

PROJECT

COST U LESS CONCEPT PLAN

ADDRESS:
64 NORTH 900 WEST
AMERICAN FORK, UT 84003

ELECTRICAL

ELECTRICAL COVER SHEET

E000

Section # & Req.ID	Rough-In Electrical Inspection	Complies?	Comments/Assumptions
C405.2.3, C405.2.3.1, C405.2.3.2 [EL23][2]	Daylight zones provided with individual controls that control the lights independent of general area lighting. See code section C405.2.3 Daylight-responsive controls for applicable spaces. C405.2.3.1 Daylight responsive control function and section C405.2.3.2 Sidelit zone.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Sidelit zones on first floor in Group A-2 and M occupancies.
C405.2.4 [EL26][1]	Separate lighting control devices for specific uses installed per approved lighting plans.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C405.2.4 [EL27][1]	Additional interior lighting power allowed for special functions per the approved lighting plans and is automatically controlled and separated from general lighting.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C405.2.5 [EL28][Null]	Manual controls required by the energy code are in a location with ready access to occupants and located where the controlled lights are visible, or identify the area served and their status.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.2.6 [EL30][Null]	Automatic lighting controls for exterior lighting installed. Controls will be daylight controlled, set based on business operation time-of-day, or reduce connected lighting > 30%.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.3 [EL6][1]	Exit signs do not exceed 5 watts per face.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement does not apply.
C405.6 [EL26][2]	Low-voltage dry-type distribution electric transformers meet the minimum efficiency requirements of Table C405.6.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement does not apply.
C405.7 [EL27][2]	Electric motors meet the minimum efficiency requirements of Tables C405.7(1) through C405.7(4). Efficiency verified through certification under an approved certification program or the equipment efficiency ratings shall be provided by motor manufacturer (where certification programs do not exist).	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement does not apply.
C405.8.2, C405.8.2.1 [EL28][2]	Escalators and moving walks comply with ASME A17.1/CSA B44 and have automatic controls configured to reduce speed to the minimum permitted speed in accordance with ASME A17.1/CSA B44 or applicable local code when not conveying passengers.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement does not apply.
C405.9 [EL29][2]	Total voltage drop across the combination of feeders and branch circuits <= 5%.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.

Additional Comments/Assumptions:

1 High Impact (Tier 1) | 2 Medium Impact (Tier 2) | 3 Low Impact (Tier 3)

Section # & Req.ID	Final Inspection	Complies?	Comments/Assumptions
C303.3, C408.2.5.2 [FI17][3]	Furnished O&M instructions for systems and equipment to the building owner or designated representative.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C405.4.1 [FI18][1]	Interior installed lamp and fixture lighting power is consistent with what is shown on the approved lighting plans, demonstrating proposed watts are less than or equal to allowed watts.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Interior Lighting fixture schedule for values.*
C405.5.1 [FI19][1]	Exterior lighting power is consistent with what is shown on the approved lighting plans, demonstrating proposed watts are less than or equal to allowed watts.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Exterior Lighting fixture schedule for values.*
C406.4 [FI54][1]	Enhanced digital lighting controls efficiency package: Interior lighting has following enhanced lighting controls in accordance with Section C405.2.2: Luminaires capable of continuous dimming and being addressed individually, <= 8 luminaires controlled in combination in a daylight zone, digital control system for fixtures, "Sequence of Operations" documentation, and functional testing per Section C408.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C408.1.1 [FI57][1]	Building operations and maintenance documents will be provided to the owner. Documents will cover manufacturers' information, specifications, programming procedures and means of illustrating to owner how building, equipment and systems are intended to be installed, maintained, and operated.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C408.2.5.1 [FI16][3]	Furnished as-built drawings for electric power systems within 90 days of system acceptance.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C408.3 [FI33][1]	Lighting systems have been tested to ensure proper calibration, adjustment, programming, and operation.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.

Additional Comments/Assumptions:

1 High Impact (Tier 1) | 2 Medium Impact (Tier 2) | 3 Low Impact (Tier 3)

COM*check* Software Version COMcheckWeb

Inspection Checklist

Energy Code: 2018 IECC

Requirements: 86.0% were addressed directly in the COM*check* software

Text in the "Comments/Assumptions" column is provided by the user in the COMcheck Requirements screen. For each requirement, the user certifies that a code requirement will be met and how that is documented, or that an exception is being claimed. Where compliance is itemized in a separate table, a reference to that table is provided.

Section # & Req.ID	Plan Review	Complies?	Comments/Assumptions
C103.2 [PR4][1]	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the interior lighting and electrical systems and equipment and document where exceptions to the standard are claimed. Information provided should include interior lighting power calculations, wattage of bulbs and ballasts, transformers and control devices.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C103.2 [PR8][1]	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the exterior lighting and electrical systems and equipment and document where exceptions to the standard are claimed. Information provided should include exterior lighting power calculations, wattage of bulbs and ballasts, transformers and control devices.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C406 [PR9][1]	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the additional energy efficiency package options.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.

Additional Comments/Assumptions:

1 High Impact (Tier 1) | 2 Medium Impact (Tier 2) | 3 Low Impact (Tier 3)

Section # & Req.ID	Rough-In Electrical Inspection	Complies?	Comments/Assumptions
C405.2.2.2 [EL22][1]	Spaces required to have light-reduction controls have a manual control that allows the occupant to reduce the connected lighting load in a reasonably uniform illumination pattern >= 50 percent.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C405.2.1, C405.2.1.1 [EL18][1]	Occupancy sensors installed in classrooms/lecture/training rooms, conference/meeting/multipurpose rooms, copy/print rooms, lounges/breakrooms, enclosed offices, open plan office areas, restrooms, storage rooms, locker rooms, warehouse storage areas, and other spaces <= 300 sqft that are enclosed by floor-to-ceiling height partitions. Reference section language C405.2.1.2 for control function in warehouses and section C405.2.1.3 for open plan office spaces.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C405.2.1.2 [EL19][1]	Occupancy sensors control function in warehouses: In warehouses, the lighting in aisleways and open areas is controlled with occupant sensors that automatically reduce lighting power by 50% or more when the areas are unoccupied. The occupant sensors control lighting in each aisleway independently and do not control lighting beyond the aisleway being controlled by the sensor.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement does not apply.
C405.2.1.3 [EL20][1]	Occupant sensor control function in open plan office areas: Occupant sensor controls in open office spaces >= 300 sq.ft. have controls 1) configured so that general lighting can be controlled separately in control zones with floor areas <= 600 sq.ft. within the space, 2) automatically turn off general lighting in all control zones within 20 minutes after all occupants have left the space, 3) are configured so that general lighting power in each control zone is reduced by >= 80% of the full zone general lighting power within 20 minutes of all occupants leaving that control zone, and 4) are configured such that any daylight responsive control will activate space general lighting or control zone general lighting only when occupancy for the same area is detected.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement does not apply.
C405.2.2.1, C405.2.2.2 [EL21][2]	Each area not served by occupancy sensors (per C405.2.1) have time-switch controls and functions detailed in sections C405.2.2.1 and C405.2.2.2.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Lighting controlled by occupancy sensors.

1 High Impact (Tier 1) | 2 Medium Impact (Tier 2) | 3 Low Impact (Tier 3)

COM*check* Software Version COMcheckWeb

Interior Lighting Compliance Certificate

Project Information

Energy Code: 2018 IECC
Project Title: COST U LESS
Project Type: New Construction

Construction Site:
64 N 900 W
AMERICAN FORK, Utah 84003

Owner/Agent:

Designer/Contractor:
KYLE BREINHOLT
BREINHOLT POWER ENGINEERING
805 S 1430 W
LEHI, Utah 84043
801-367-5180
KYLE@BREINHOLTENG.COM

Additional Efficiency Package(s)

Credits: 1.0 Required 1.0 Proposed
Enhanced Interior Lighting Controls, 1.0 credit

Allowed Interior Lighting Power

A Area Category	B Floor Area (ft2)	C Allowed Watts / ft2	D Allowed Watts
1-Retail	4499	1.06	4769
		Total Allowed Watts =	4769

Proposed Interior Lighting Power

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixture	D Fixture Watt.	E (C X D)
1-Retail				
LED: F1: LED Panel 19W:	1	19	141	2679
LED: F2/F2E: LED PAR 7W:	1	6	21	126
LED: F3: LED Linear 8W:	1	4	12	48
			Total Proposed Watts =	2853

Interior Lighting PASSES: Design 40% better than code

Interior Lighting Compliance Statement

Compliance Statement: The proposed interior lighting design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed interior lighting systems have been designed to meet the 2018 IECC requirements in COM*check* Version COMcheckWeb and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

KYLE BREINHOLT - ELECTRICAL ENGINEER — Name - Title
Signature
22 AUG 2022 — Date

COM*check* Software Version COMcheckWeb

Exterior Lighting Compliance Certificate

Project Information

Energy Code: 2018 IECC
Project Title: COST U LESS
Project Type: New Construction
Exterior Lighting Zone: 2 (Neighborhood business district (LZ2))

Construction Site:
64 N 900 W
AMERICAN FORK, Utah 84003

Owner/Agent:

Designer/Contractor:
KYLE BREINHOLT
BREINHOLT POWER ENGINEERING
805 S 1430 W
LEHI, Utah 84043
801-367-5180
KYLE@BREINHOLTENG.COM

Allowed Exterior Lighting Power

A Area/Surface Category	B Quantity	C Allowed Watts /	D Tradable Wattage	E Allowed Watts (B X C)
Pedestrian and vehicular entrances and exits	6 ft of door	14	Yes	84
			Total Tradable Watts (a) =	84
			Total Allowed Watts =	84
			Total Allowed Supplemental Watts (b) =	400

(a) Wattage tradeoffs are only allowed between tradable areas/surfaces.
(b) A supplemental allowance equal to 400 watts may be applied toward compliance of both non-tradable and tradable areas/surfaces.

Proposed Exterior Lighting Power

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixture	D Fixture Watt.	E (C X D)
Pedestrian and vehicular entrances and exits (6 ft of door width): Tradable Wattage				
LED: F4: LED Roadway-Parking Unit 42W:	1	2	118	236
			Total Tradable Proposed Watts =	236

Exterior Lighting PASSES: Design 51% better than code

Exterior Lighting Compliance Statement

Compliance Statement: The proposed exterior lighting design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed exterior lighting systems have been designed to meet the 2018 IECC requirements in COM*check* Version COMcheckWeb and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

KYLE BREINHOLT - ELECTRICAL ENGINEER — Name - Title
Signature
22 AUG 2022 — Date

FIVE DEGREES DESIGN
1457 EAST 840 NORTH
OREM, UTAH 84097
801.850.4583
chris@fivedegreesdesign.com

DATE: 13 APRIL 2021
PROJECT #: 20-028
DRAWN BY: KLB
CHECKED BY: KLB

REVISIONS
1 22 AUG 2022 FLOOR PLAN UPDATE

LICENSED PROFESSIONAL ENGINEER 9857303-2202 KYLE L BREINHOLT 22 August 2022 STATE OF UTAH

KYLE BREINHOLT
LIC.: 9857303
EXP.: 31 MARCH 2023

BREINHOLT POWER ENGINEERING PLLC
805 S 1430 W LEHI, UT 84043
(801)367-5180
BPE#2142

PROJECT

COST U LESS CONCEPT PLAN

ADDRESS:
64 NORTH 900 WEST
AMERICAN FORK, UT 84003

ELECTRICAL

ENERGY COMPLIANCE CERTIFICATE

E020

ELECTRICAL SPECIFICATIONS

GENERAL PROVISION

A. REFERENCE
   1. THE GENERAL CONDITIONS AND OTHER CONTRACT DRAWINGS AS SET FORTH IN THE FOREGOING PAGES ARE HEREBY INCORPORATED INTO AND BECOME A PART OF THE SPECIFICATIONS FOR WORK UNDER THIS TITLE, INSOFAR AS THEY APPLY HERETO.
   2. ALL SPECIFICATIONS UNDER THIS DIVISION TITLE ARE DIRECTED TO AND ARE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR, UNLESS OTHER TRADES OR PERSONS ARE SPECIFICALLY MENTIONED, "ELECTRICAL CONTRACTOR" IS INFERRED AND INTENDED.
B. CONTRACT DRAWINGS
   1. THE DRAWINGS ACCOMPANYING THESE SPECIFICATIONS ARE COMPLEMENTARY EACH TO THE OTHER AND WHAT IS CALLED FOR BY ONE SHALL BE AS IF CALLED FOR BY BOTH.
   2. CONSULT ALL CONTRACT DRAWINGS WHICH MAY AFFECT THE LOCATION OF EQUIPMENT, CONDUIT AND WIRING AND MAKE MINOR ADJUSTMENTS IN LOCATION TO SECURE COORDINATION.
   3. WIRING LAYOUT IS SCHEMATIC AND EXACT LOCATIONS SHALL BE DETERMINED BY FIELD CONDITIONS.
   4. OTHER THAN MINOR ADJUSTMENTS SHALL BE SUBMITTED TO THE OWNER'S REPRESENTATIVE FOR APPROVAL BEFORE PROCEEDING WITH THE WORK.
C. JOB-SITE COPY OF DOCUMENTS
   1. MAINTAIN AT THE SITE, ONE COPY OF ALL DRAWINGS, SPECIFICATIONS, ADDENDA APPROVED SHOP DRAWINGS, CHANGE ORDERS AND OTHER MODIFICATIONS, IN GOOD ORDER AND MARKED TO RECORD ALL CHANGES MADE DURING CONSTRUCTION. THESE SHALL BE AVAILABLE TO THE OWNER'S REPRESENTATIVE. THE DRAWINGS MARKED TO RECORD ALL CHANGES MADE DURING CONSTRUCTION SHALL BE DELIVERED TO THE OWNER'S REPRESENTATIVE FOR THE OWNER UPON COMPLETION OF THE WORK. AN ADDITIONAL SET OF DRAWINGS WILL BE FURNISHED BY THE OWNER'S REPRESENTATIVE FOR THIS PURPOSE UPON REQUEST.
D. MANUFACTURER'S DRAWINGS
   1. THE CONTRACTOR SHALL SUBMIT TO THE ARCHITECT FOR REVIEW. (6) COPIES OF MANUFACTURER'S DRAWINGS AND WIRING DIAGRAMS. THE ENGINEER WILL REVIEW CONTRACTOR'S SHOP DRAWINGS AND RELATED SUBMITTALS (AS INDICATED BELOW) WITH RESPECT TO THE ABILITY OF THE DETAILED WORK, WHEN COMPLETE, TO BE A PROPERLY FUNCTIONING INTEGRAL ELEMENT OF THE OVERALL SYSTEM DESIGNED BY THE ENGINEER. BEFORE SUBMITTING A SHOP DRAWING OR ANY RELATED MATERIAL TO THE ENGINEER, CONTRACTOR SHALL: REVIEW EACH SUCH SUBMISSION FOR CONFORMANCE WITH THE MEANS, METHODS, TECHNIQUES, SEQUENCES, AND OPERATIONS OF CONSTRUCTION, AND SAFETY PRECAUTIONS AND PROGRAMS INCIDENTAL THERETO, ALL OF WHICH ARE THE SOLE RESPONSIBILITY OF CONTRACTOR: APPROVE EACH SUCH SUBMISSION BEFORE SUBMITTING IT; AND SO STAMP EACH SUCH SUBMISSION BEFORE SUBMITTING IT. THE ENGINEER SHALL ASSUME THAT NO SHOP DRAWING OR RELATED SUBMITTAL COMPRISES A VARIATION UNLESS CONTRACTOR ADVISES ENGINEER OTHERWISE VIA A WRITTEN INSTRUMENT WHICH IS ACKNOWLEDGED BY ENGINEER IN WRITING. THE ITEMS, TYPES OF SUBMITTALS AND RELATED MATERIAL (IF ANY) CALLED FOR ARE INDICATED BELOW:

ITEMS	TYPE SUBMITTALS REQUESTED
LIGHTING AND POWER PANELS	SHOP DRAWINGS
LIGHTING FIXTURES	CATALOG CUTS

E. GUARANTEES
   1. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DEFECTS, REPAIRS AND REPLACEMENTS IN MATERIALS AND WORKMANSHIP FOR A PERIOD OF ONE (1) YEAR AFTER DATE OF SUBSTANTIAL COMPLETION AS DETERMINED BY THE OWNER'S REPRESENTATIVE. PRODUCT GUARANTEES GREATER THAN ONE (1) YEAR SHALL BE PASSED ALONG TO THE OWNER FOR FULL BENEFIT OF THE MANUFACTURER'S WARRANTY.

WORK INCLUDED

A. INSTALLATION, MATERIALS, AND WORKMANSHIP
   1. FURNISH AND INSTALL ALL NECESSARY ANCHORS, SUPPORTS, STRAPS, BOXES, FITTINGS AND OTHER SIMILAR APPURTENANCES NOT INDICATED ON THE DRAWINGS BUT WHICH ARE REQUIRED FOR A COMPLETE AND PROPERLY INSTALLED SYSTEM CONSISTENT WITH THE ARCHITECTURAL TREATMENT OF THE BUILDING.
   2. THE ELECTRICAL CONTRACTOR, INSOFAR AS THE WORK IS CONCERNED, SHALL AT ALL TIMES KEEP THE PREMISES IN A NEAT AND ORDERLY CONDITION. AND AT THE COMPLETION OF THE WORK, SHALL PROPERLY CLEAN UP AND CART AWAY DEBRIS AND EXCESS MATERIALS. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE COST OF DUMPSTER & REFUSED DISPOSAL AS REQUIRED FOR ELECTRICAL WORK.
   3. ALL MATERIALS SHALL BE NEW AND UNDETERIORATED AND OF A QUALITY NOT LESS THAN THE MINIMUM SPECIFIED.
B. COORDINATION OF PLANS AND SPECIFICATIONS
   1. CONTACT THE OWNER'S REPRESENTATIVE IMMEDIATELY IF THERE IS ANY QUESTIONS REGARDING THE MEANING OR INTENT OF EITHER PLANS OR SPECIFICATIONS, OR UPON NOTICING ANY DISCREPANCIES OR OMISSIONS IN EITHER PLANS OR SPECIFICATIONS.
C. CUTTING AND PATCHING
   1. ALL ELECTRICAL EQUIPMENT SHALL BE KEPT DRY AND CLEAN DURING THE CONSTRUCTION PERIOD. INTERIOR OF ALL ENCLOSURES SHALL BE CLEANED OF DIRT AND DEBRIS BEFORE INSTALLING TRIM OR COVERS.
   2. ALL FINISHED SURFACES OF EQUIPMENT FURNISHED UNDER THIS CONTRACT SHALL BE THOROUGHLY CLEANED OF DIRT AND ALL SCRATCHED OR DAMAGED SURFACES SHALL BE TOUCHED UP WITH MATCHING MATERIALS BEFORE FINAL ACCEPTANCE OF THE WORK.
   3. WHEN ALL WORK IS COMPLETED AND ALL WORK HAS BEEN SATISFACTORILY TESTED AND ACCEPTED BY THE OWNER'S REPRESENTATIVE, ALL CONDUIT AND OTHER EXPOSED SURFACES SHALL BE THOROUGHLY CLEANED.

CODES AND FEES

A. CODES:
   1. ALL WORK PERFORMED UNDER THIS SPECIFICATION SHALL BE DONE IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE AS PREPARED AND PUBLISHED BY THE NATIONAL FIRE PROTECTION ASSOCIATION AND ANY APPLICABLE STATE OR LOCAL CODES.
B. FEES:
   1. OBTAIN AND PAY FOR ANY AND ALL PERMITS REQUIRED BY ALL LAWS AND REGULATIONS AND PUBLIC AUTHORITY HAVING SUCH JURISDICTION.

TESTS AND INSPECTIONS

A. OBTAIN ALL INSPECTIONS REQUIRED BY ALL LAWS, ORDINANCES, RULES, REGULATIONS OR PUBLIC AUTHORITY HAVING JURISDICTION AND OBTAIN CERTIFICATES OF SUCH INSPECTIONS AND SUBMIT SAME TO THE OWNER'S REPRESENTATIVE. PAY ALL FEES, CHARGES AND OTHER EXPENSES IN CONNECTION THEREIN. OBTAIN OCCUPANCY PERMIT AS REQUIRED BY OWNER. FINAL PAYMENT SHALL NOT BE MADE UNTIL OCCUPANCY PERMIT IS OBTAINED.
B. WORK SHALL BE UNACCEPTABLE WHEN FOUND TO BE DEFECTIVE OR CONTRARY TO THE PLANS SPECIFICATIONS, CODES SPECIFIED OR ACCEPTED STANDARDS OF GOOD WORKMANSHIP.
C. THE CONTRACTOR SHALL PROMPTLY CORRECT ALL WORK FOUND UNACCEPTABLE BY THE OWNER'S REPRESENTATIVE WHETHER OBSERVED BEFORE OR AFTER SUBSTANTIAL COMPLETION AND WHETHER OR NOT FABRICATED, INSTALLED OR COMPLETED. THE CONTRACTOR SHALL BEAR ALL COSTS OF CORRECTING SUCH UNACCEPTABLE WORK, INCLUDING COMPENSATION FOR THE OWNER'S REPRESENTATIVE ADDITIONAL SERVICES MADE NECESSARY THEREBY.

CONDUIT

A. FURNISH AND INSTALL ALL CONDUITS, BOXES, FITTINGS, ETC., FOR A COMPLETE RACEWAY SYSTEM.
B. ALL WIRING SHALL BE RUN IN EMT CONDUIT OR MC CABLE WITH GROUND CONDUCTOR UNLESS OTHERWISE NOTED.
C. ALL CONDUIT SIZES STATED HEREIN OR MARKED ON THE DRAWINGS ARE MINIMUM SIZE AND SHALL BE NO LESS THAN ½" UNLESS OTHERWISE NOTED.
D. ALL CONDUIT SHALL BE SUBSTANTIALLY SUPPORTED BY PIPE STRAPS OR SUITABLE CLAMPS OR HANGERS ATTACHED TO THE ELEMENTS OF THE BUILDING STRUCTURE TO PROVIDE RIGID INSTALLATION; IN NO CASE SHALL CONDUIT BE ATTACHED OR SUPPORTED FROM ADJOINING PIPE OR INSTALLED IN SUCH A MANNER AS TO PREVENT THE READY REMOVAL OF OTHER PIPE FOR REPAIRS.

WIRE AND CABLE

A. ALL CONDUCTORS SHALL BE COPPER AND OF THE AWG SIZE AND TYPE SHOWN ON THE DRAWINGS. WHERE NO SIZE OR TYPE IS SHOWN. CONDUCTORS SHALL NOT BE LESS THAN #12 TYPE XHHW, THHN, OR THWN. CONDUCTORS #8 AWG AND LARGER SHALL BE STRANDED COPPER AND HAVE 600 VOLT INSULATION; BE UL LABELED AND OF AMERICAN MANUFACTURER.
B. ALL CONNECTIONS ARE TO BE MADE USING PRESSURE TYPE TERMINALS.
C. THE FOLLOWING COLOR CODE SHALL BE USED:

	120/240 VOLT	120/208 VOLT	277/480 VOLT
PHASE A	BLACK	BLACK	BROWN
PHASE B	RED	RED	ORANGE
PHASE C		BLUE	YELLOW
NEUTRAL	WHITE	WHITE	WHITE
GROUND	GREEN	GREEN	GREEN

D. CONDUCTORS NO. 10 AWG OR SMALLER SHALL HAVE INSULATION COLORED AS NOTED ABOVE.
E. CONDUCTORS NO. 8 AWG OR LARGER SHALL HAVE INSULATION COLORED AS NOTED ABOVE OR COLORED TAPE, MINIMUM SIZE ¾", WRAPPED TWICE AROUND AT THE FOLLOWING POINTS:
   1. AT EACH TERMINAL
   2. AT EACH CONDUIT ENTRANCE
   3. AT INTERVALS NOT MORE THAN 12 INCHES APART IN ALL BOXES, PANEL TUBS, SWITCHBOARDS, ETC
G. ALL BRANCH CIRCUITS SHALL BE MARKED IN THE PANEL BOARD GUTTERS. MARKERS SHALL INDICATE CORRESPONDING BRANCH–CIRCUIT NUMBERS.
H. EACH BRANCH CIRCUIT REQUIRING A NEUTRAL SHALL BE FURNISHED WITH A SEPARATE INDIVIDUAL NEUTRAL CONDUCTOR.

BOXES AND PLATES

A. FURNISH AND INSTALL ALL OUTLET, JUNCTION, AND PULL BOXES AS INDICATED ON THE DRAWINGS AND AS NECESSARY TO INSTALL THE REQUIRED CONDUIT AND WIRING IN A NEAT AND WORKMANLIKE MANNER.
B. PULL BOXES AND JUNCTION BOXES SHALL BE GALVANIZED AND OF THE CORRECT SIZE AND GAUGE, SIZED IN ACCORDANCE WITH CODE REQUIREMENTS AND SHALL BE U.L. LABELED.
C. BOXES AT EXTERIOR AREAS TO BE WATERTIGHT AND DUST-TIGHT WITH GASKETED COVERS.
D. ALL BOXES FOR EXPOSED WORK IN FINISHED SPACES SHALL BE "FS" TYPE WITH THREADED HUBS WITH RIGID CONDUIT RISER (DEEP WIRE MOLD BOXES)
E. ALL BOXES SHALL BE RIGIDLY SUPPORTED INDEPENDENT OF THE CONDUIT SYSTEM. BOXES CAST INTO MASONRY OR CONCRETE ARE CONSIDERED TO BE RIGIDLY SUPPORTED.

WIRING DEVICES

A. WIRING DEVICES SHALL BE SIMILAR TO THOSE LISTED BELOW AND OF SPECIFIED AMPERAGE. OTHER SPECIAL PURPOSE DEVICES SHALL BE AS SPECIFIED ON THE DRAWINGS.
B. DUPLEX GROUNDING TYPE RECEPTACLE–20 AMP, 125 VOLT–
   1. HUBBELL–5352
   2. ARROW HART–5352
C. SINGLE POLE SWITCHES - 20 AMP, 120 VOLT
D. WEATHERPROOF RECEPTACLES - 20 AMP, 125 VOLT–NEMA 5–20R
   1. HUBBELL–5352 WITH 5205 COVER INTERMATIC GUARDIAN
   2. I SERIES, NEMA 3R COVER
   3. ARROW HART–5352 WITH 4500 COVER
E. G.F.C.I. RECEPTACLE- 20 AMP, 125 VOLT–NEMA 5-20 R
   1. HUBBELL- GF 5262 WITH MATCHING NYLON COVER PLATE OR WO-26 W.P. COVER
F. GROUND ALL RECEPTACLES IN ACCORDANCE WITH ARTICLE 250-146 OF NEC AND AS INDICATED IN THE GROUNDING SECTION OF THIS SPECIFICATION.
G. PROVIDE TAMPER RESISTANT RECEPTACLES PER NEC 406.12.

IDENTIFICATION

A. EACH PIECE OF SERVICE EQUIPMENT AND INDIVIDUAL SWITCHES, ALL DISCONNECTS, STARTERS, ALL EXHAUST FAN MANUAL STARTING SWITCHES.
B. IDENTIFICATION SHALL BE IN THE FORM OF LAMINATED PLASTIC NAMEPLATES, BLACK RACE, WITH THE LETTERS ENGRAVED INTO THE WHITE BACKGROUND. MINIMUM ¼" HIGH. PLATES SHALL BE DRILLED ON EACH END FOR SHEET METAL SCREW ATTACHMENT. NO "DYMO" OR SIMILAR TYPE LABELS WILL BE ALLOWED.
C. PANEL BOARD DIRECTORY: A TYPED CIRCUIT DIRECTORY SHALL BE PROVIDED INDICATING LOCAL AREA SERVED AND LOCATION FOR EACH BRANCH CIRCUIT.

GROUNDING

A. ALL FEEDERS AND BRANCH CIRCUITS OVER 100 VOLTS SHALL INCLUDE A GROUNDING CONDUCTOR SIZED IN ACCORDANCE WITH NEC TABLE 250-122, EXCEPT NOT BE SMALLER THAN #12 FOR POWER AND LIGHTING CIRCUITS AND #14 FOR CONTROL CIRCUITS. ALL GROUND CONDUCTORS SHALL BE GREEN, OR AS SPECIFIED UNDER "WIRE AND CABLE".
B. ALL GROUND CLAMPS SHALL BE PENN-UNION "GPL" TYPE OR SIMILAR BY O.Z. OR BURNDY.
C. CONDUIT FOR SOLITARY GROUND CONDUCTORS SHALL BE RIGID SCHEDULE 40 PVC NON- METALLIC ELECTRICAL CONDUIT WITH U.L. LABEL SOLITARY GROUND CONDUCTORS SHALL NOT BE PLACED THROUGH METALLIC SLEEVES OR CONDUITS AND SHALL NOT BE COMPLETELY ENCIRCLED BY METALLIC HANGERS OR SUPPORTS.
D. THE GROUND CONDUCTOR SHALL BE CONNECTED TO THE NEUTRAL IN ONLY TWO LOCATIONS -ON THE SUPPLY SIDE OF THE SERVICE DISCONNECT MEANS PER NEC–250–24 AND ON SEPARATELY DERIVED SYSTEMS PER NEC 250-30.
E. AT EACH RECEPTACLE BOX, THE GROUND CONDUCTOR SHALL ENTER AND CONNECT, WITH NORMAL WIRING CONNECTOR, TO: 1) THE GROUND PIGTAIL TO RECEPTACLE: 2) THE GROUND PIGTAIL TO THE BOX GROUND SCREW; AND 3) THE OUTGOING GROUND CONDUCTOR TO NEXT DEVICE, IF NOT AT END OF RUN. METAL TO METAL CONTACT BETWEEN THE DEVICE YOKE AND THE OUTLET BOX IS NOT ACCEPTABLE AS A BOND FOR EITHER SURFACE. MOUNTED BOXES OR FLUSH TYPE BOXES.
F. CONDUIT SYSTEM SHALL BE ELECTRICALLY CONTINUOUS. ALL LOCK NUTS SHALL CUT THROUGH ENAMELED OR PAINTED SURFACES ON ENCLOSURES. WHERE ENCLOSURES AND NON-CURRENT CARRYING METALS ARE ISOLATED FROM THE CONDUIT SYSTEM, USE BONDING JUMPERS WITH APPROVED CLAMPS. WHERE REDUCING WASHERS ARE USED AND WHERE CONCENTRIC OR ECCENTRIC KNOCKOUTS ARE NOT COMPLETELY REMOVED BONDING BUSHINGS SHALL BE REQUIRED.

POWER AND LIGHTING PANELS

A. FURNISH AND INSTALL, AS SCHEDULED AND SHOWN ON THE DRAWINGS, POWER PANELS FOR OPERATION ON VOLTAGES INDICATED.
B. ALL TERMINATIONS SHALL BE MARKED "75°C ONLY", "60/75° C" OR LISTED FOR USE OF 75° C INSULATED CONDUCTORS AT FULL 75° C AMPACITY.
C. ALL BUS BARS SHALL BE SILVER OR TIN PLATED COPPER.
D. CABINETS SHALL BE OF COMMERCIAL GALVANIZED SHEET STEEL, CODE GAUGE AND SIZE, SURFACE OR RECESSED MOUNTED AS CALLED FOR IN THE DRAWINGS.
E. NEUTRAL ASSEMBLY SHALL HAVE INDIVIDUAL ANTI-TURN SOLDERLESS TERMINALS, SIMILAR TO SQUARE D TYPE PK, FOR CONNECTION OF ULTIMATE NUMBER OF NEUTRAL WIRES. SHEET METAL TERMINAL STRIPS AND CONNECTIONS WILL BE REJECTED.
F. PANEL SHALL HAVE A COPPER GROUND BAR SIMILAR TO NEUTRAL BAR IN NUMBER, SIZE, AND TYPE OF ANTI-TURN SOLDERLESS LUGS. THIS GROUND BAR SHALL BE FACTORY BONDED TO THE PANEL TUB IN THE GUTTER SPACE OPPOSITE THE MAINS AND THE NEUTRAL ASSEMBLY AND SHALL HAVE THE SCREWDRIVER SLOTS FACING THE FRONT OF THE PANEL.
G. QUALITY STANDARD: SQUARE D TYPE NQOD

LIGHTING FIXTURES

A. CONTRACTOR SHALL FURNISH AND INSTALL LIGHTING FIXTURES AND LAMPS AS INDICATED IN FIXTURE SCHEDULE SHOWN ON DRAWINGS, AND SPECIFIED HEREIN.
B. NEUTRAL ASSEMBLY SHALL HAVE INDIVIDUAL ANTI-TURN SOLDERLESS TERMINALS, SIMILAR TO SQUARE D TYPE PK, FOR CONNECTION OF ULTIMATE NUMBER OF NEUTRAL WIRES. SHEET METAL TERMINAL STRIPS AND CONNECTIONS WILL BE REJECTED.
C. ALL LAMP HOLDERS INSTALLED BY THE ELECTRICAL CONTRACTOR SHALL BE FURNISHED COMPLETE WITH NEW LAMPS OF THE SIZE INDICATING ON THE FIXTURE SCHEDULE.
D. LAMP CURRENT CREST FACTOR SHALL NOT EXCEED 1.8 AND SHALL BE COMPATIBLE WITH BALLAST BEING UTILIZED (PROGRAM START ELECTRONIC BALLAST SHALL BE USED).
E. ANY FIXTURES SCRATCHED, BENT, CRACKED OR IN ANY WAY DAMAGED BEFORE ACCEPTANCE BY OWNER SHALL BE REPLACED AT THIS CONTRACTOR'S EXPENSE.
F. ALL LAMPS SHALL BE IN WORKING ORDER AT THE TIME OF FINAL ACCEPTANCE OF THE WORK BY THE OWNER.
G. ALL LIGHTING FIXTURES ARE TO BE GROUNDED ON THE INTERIOR OF THE FIXTURE HOUSING, ON CLEAN BARE METAL (FREE OF PAINT). BY USE OF PIGTAIL AND FASTENED BY A SCREW USED FOR NO OTHER PURPOSE.
H. COMMISSIONING
   1. C408.3 LIGHTING SYSTEM FUNCTIONAL TESTING. CONTROLS FOR AUTOMATIC LIGHTING SYSTEMS SHALL COMPLY WITH SECTION C408.3.
   2. C408.3.1 FUNCTIONAL TESTING. TESTING SHALL ENSURE THAT CONTROL HARDWARE AND SOFTWARE ARE CALIBRATED, ADJUSTED, PROGRAMMED AND IN PROPER WORKING CONDITION IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS AND MANUFACTURER'S INSTALLATION INSTRUCTIONS. THE CONTRACTOR SHALL CONDUCT THE REQUIRED FUNCTIONAL TESTING. WHERE REQUIRED BY THE CODE OFFICIAL, AN APPROVED PARTY INDEPENDENT FROM THE DESIGN OR CONSTRUCTION OF THE PROJECT SHALL BE RESPONSIBLE FOR THE FUNCTIONAL TESTING AND SHALL PROVIDE DOCUMENTATION TO THE CODE OFFICIAL CERTIFYING THAT THE INSTALLED LIGHTING CONTROLS MEET THE PROVISIONS OF SECTION C405. WHERE OCCUPANT SENSORS, TIME SWITCHES, PROGRAMMABLE SCHEDULE CONTROLS, PHOTOSENSORS OR DAYLIGHTING CONTROLS ARE INSTALLED, THE FOLLOWING PROCEDURES SHALL BE PERFORMED:
      a. CONFIRM THAT THE PLACEMENT, SENSITIVITY AND TIME-OUT ADJUSTMENTS FOR OCCUPANT SENSORS YIELD ACCEPTABLE PERFORMANCE.
      b. CONFIRM THAT THE TIME SWITCHES AND PROGRAMMABLE SCHEDULE CONTROLS ARE PROGRAMMED TO TURN THE LIGHTS OFF.
      c. CONFIRM THAT THE PLACEMENT AND SENSITIVITY ADJUSTMENTS FOR PHOTOSENSOR CONTROLS REDUCE ELECTRIC LIGHT BASED ON THE AMOUNT OF USABLE DAYLIGHT IN THE SPACE AS SPECIFIED.

TELEPHONE/DATA SYSTEMS

A. SUMMARY
   1. INCLUDES BUT NOT LIMITED TO
      a. FURNISH AND INSTALL BUILDING TELEPHONE AND COMPUTER NETWORK RACEWAY AND CABLE SYSTEM AS DESCRIBED IN CONTRACT DOCUMENTS INCLUDING, BUT NOT LIMITED TO, RACEWAY, OUTLETS, MODULAR JACKS, DEVICE PLATES, CABLES, PUNCH DOWN BLOCKS, BACKBOARDS, CABINETS, PATCH PANELS, GROUNDING AND OTHER MISCELLANEOUS ITEMS REQUIRED FOR A COMPLETE SYSTEM.
      b. FURNISH AND INSTALL MAIN SERVICE RACEWAY AS DESCRIBED IN CONTRACT DOCUMENTS AND TO COMPLY WITH TELEPHONE COMPANY REQUIREMENTS.
B. COMPONENTS
   1. TELEPHONE OUTLET BOX SHALL BE SINGLE DEVICE BOX.
   2. BUILDING TELEPHONE AND COMPUTER NETWORK SYSTEM CABLE
      a. 23 GAUGE, SOLID TINNED COPPER, FOUR TWISTED PAIRS. CATEGORY 6
      b. USE PLENUM-RATED CABLE IN CEILINGS AND AREAS USED FOR PLENUM AIR RETURN
   3. TELEPHONE TERMINATION BLOCKS
      a. UL VERIFIED CATEGORY 6.
      b. 110 TERMINATION WITH TIN LEAD PLATED IDC
   4. NETWORK PATCH PANELS
      a. UL VERIFIED CATEGORY 6
      b. 110 TERMINATION WITH TIN LEAD PLATED IDC
      c. 19" RACK MOUNT WITH BACKBOARD MOUNTING FRAME.
      d. 48 PORTS
   5. TELEPHONE/NETWORK JACKS
      a. WALL JACKS
         1) CAT6 - HUBBELL HXJ6 OR ALTERNATE MANUFACTURER WITH EQUIVALENT PERFORMANCE STANDARD.
      b. PLATES
         1) HUBBELL - IFP SERIES (PORT QUANTITY AS REQUIRED, COLOR BY ARCHITECT)
   6. BACKBOARDS: INTERIOR GRADE PLYWOOD WITHOUT VOIDS, ¾ INCH THICK; UL-LABELED FIRE RETARDANT.
      a. SIZE: 48 INCHES WIDE 96 INCHES HIGH.
      b. DO NOT PAINT OVER UL LABEL.
      c. PROVIDE ONE 48" MULTI-OUTLET POWER STRIP WITH INTEGRAL SURGE PROTECTION AND OUTLETS AT 6" O.C. (MINIMUM 7 OUTLETS) MOUNTED AT CENTER OF TERMINAL BOARD.
C. INSTALLATION
   1. RUN 1" CONDUIT TO ACCESSIBLE CEILING SPACE FROM EACH OUTLET. INSTALL CABLE FROM TERMINAL BOARD TO EACH TELEPHONE/NETWORK OUTLET.
   2. TERMINATE CABLES AT EACH OUTLET WITH SPECIFIED MODULAR JACK ASSEMBLY.
   3. TERMINATE CABLES ON PUNCH DOWN BLOCKS OR PATCH PANELS AT TERMINAL BOARD.
   4. PROVIDE TYPED LABELS AT ALL JACKS CORRESPONDING TO TYPED NUMBERING SYSTEM AT PATCH PANEL OR TERMINAL STRIP.
D. QUALITY ASSURANCE
   1. COMPLY WITH APPLICABLE PORTIONS OF NEC ANSI/EIA/TIA 568 AS TO TYPE PRODUCTS USED AND INSTALLATION OF COMPONENTS. PROVIDE PRODUCTS AND MATERIALS WHICH HAVE BEEN UL-LISTED AND LABELED.

FIRE DETECTION & FAN CONTROL

A. SUMMARY
   1. INCLUDES BUT NOT LIMITED TO
      g. FURNISH AND INSTALL BUILDING SMOKE DETECTION & FAN CONTROL SYSTEM INCLUDING, DUCT SMOKE DETECTORS, RELAYS, AND MISCELLANEOUS EQUIPMENT FOR FIRE/SMOKE DAMPER AND FAN SHUTDOWN CONTROL.
B. COMPONENTS
   1. IN-DUCT SMOKE DETECTOR HOUSING
      a. IN-DUCT SMOKE DETECTOR HOUSING SHALL ACCOMMODATE EITHER AN IONIZATION SENSOR OR A PHOTOELECTRIC SENSOR, EITHER OF WHICH PROVIDES CONTINUOUS ANALOG MONITORING.
      b. WHEN SUFFICIENT SMOKE IS SENSED APPROPRIATE ACTION IS TAKEN TO SHUT DOWN AIR HANDLING SYSTEMS TO HELP PREVENT THE DISTRIBUTION OF TOXIC SMOKE AND FIRE GASES THROUGHOUT THE AREAS SERVED BY THE DUCT SYSTEM.
   2. AUTOMATIC SMOKE DETECTORS -
      a. PHOTOELECTRIC TYPE.
      b. LISTED UNDER UL STANDARD 268.
      c. 120V WITH AUXILIARY RELAY CONTACTS
C. INSTALLATION
   1. INSTALL SMOKE DETECTORS IN THE FOLLOWING LOCATIONS:
      a. IN AIR DUCTS OF AIR-MOVING EQUIPMENT WITH AIR FLOW IN EXCESS OF 2000 CFM PER LATEST EDITION OF THE INTERNATIONAL MECHANICAL CODE.
      b. BUILDING SPACES WITH TWO OR MORE AIR-MOVING UNITS WITH A COMBINED TOTAL AIR FLOW IN EXCESS OF 2000 CFM
      c. IN AIR DUCTS CONTAINING FIRE/SMOKE DAMPERS WITHIN 5 FT. OF THE DAMPER.
   2. IF SUPPLY DUCTS ARE INACCESSIBLE, MOUNT SMOKE DETECTOR ON CEILING IN AREA SERVED BY AIR-HANDLING EQUIPMENT OR ADJACENT TO FIRE/SMOKE DAMPERS.
   3. WIRE SMOKE DETECTORS TO AUTOMATICALLY SHUT DOWN AIR SUPPLY FANS, FIRE/SMOKE DAMPERS, AND ALL OTHER SMOKE-BLOCKING DEVICES UPON ACTIVATION OF THE DETECTOR.
   4. PROVIDE VISUAL AND AUDIBLE INDICATION IN AN APPROVED LOCATION FOR SMOKE DETECTOR ACTUATION AND TROUBLE.

FIVE DEGREES DESIGN
1457 EAST 840 NORTH
OREM, UTAH 84097
801.850.4583
chris@fivedegreesdesign.com

DATE:	13 APRIL 2021
PROJECT #:	20-028
DRAWN BY:	KLB
CHECKED BY:	KLB

REVISIONS
1 22 AUG 2022 FLOOR PLAN UPDATE

LICENSED PROFESSIONAL ENGINEER
9857303-2202
KYLE L. BREINHOLT
23 August 2022
STATE OF UTAH

KYLE BREINHOLT
LIC.: 9857303
EXP.: 31 MARCH 2023

BREINHOLT POWER ENGINEERING PLLC
805 S 1430 W LEHI, UT 84043
(801)367-5180
BPE#2142

PROJECT

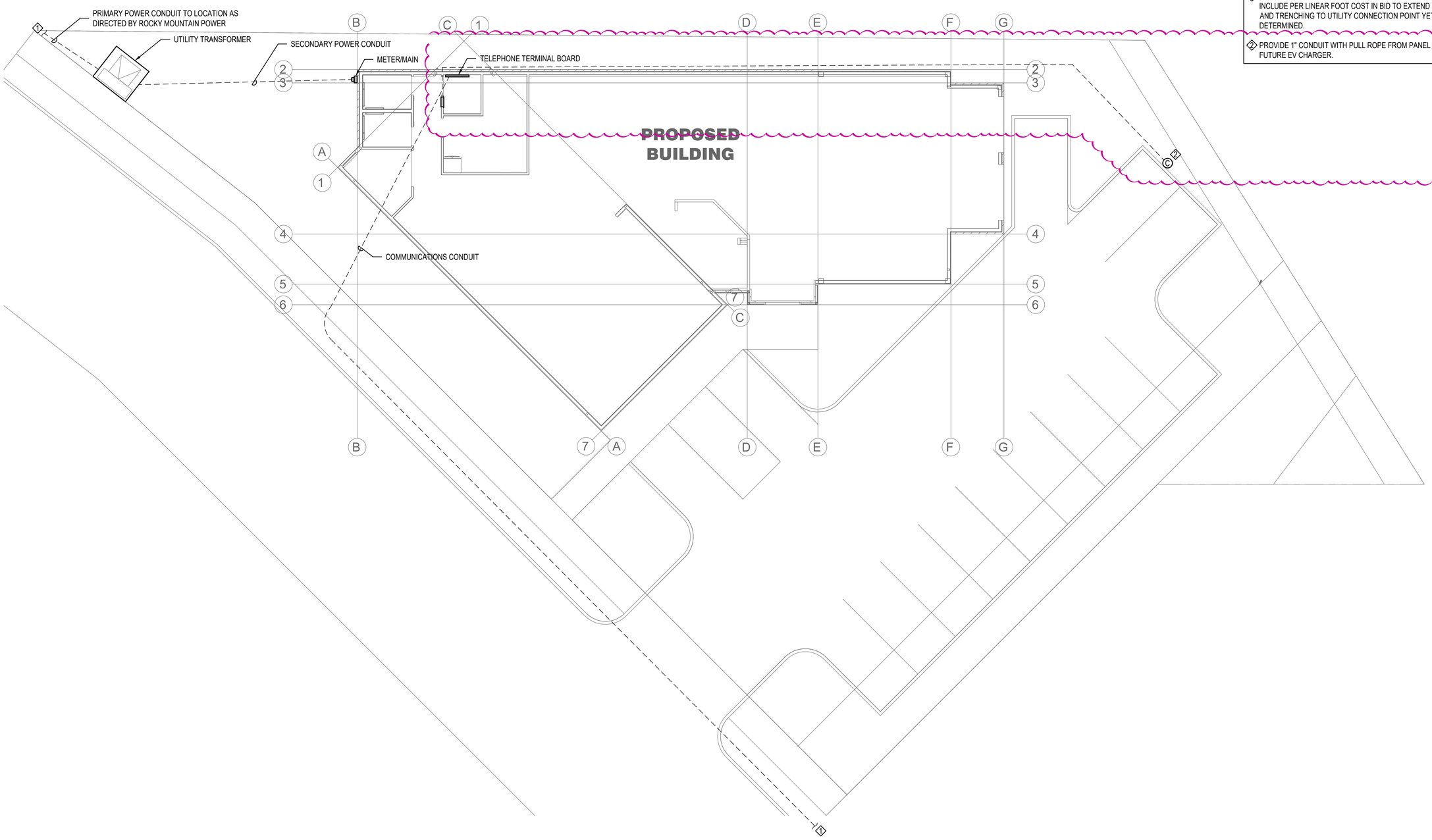
COST U LESS CONCEPT PLAN

ADDRESS:
64 NORTH 900 WEST
AMERICAN FORK, UT 84003

ELECTRICAL

ELECTRICAL SPECIFICATIONS

E050



1 SITE ELECTRICAL PLAN
SCALE: 1/8" = 1'-0"
0 4' 8' 16'
N

ELECTRICAL GENERAL NOTES:

1. PROVIDE CONDUIT AND TRENCHING TO PROPERTY LINE. INCLUDE PER LINEAR FOOT COST IN BID TO EXTEND CONDUIT AND TRENCHING TO UTILITY CONNECTION POINT YET TO BE DETERMINED.
2. PROVIDE 1" CONDUIT WITH PULL ROPE FROM PANEL A FOR FUTURE EV CHARGER.

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1457 EAST 840 NORTH
OREM, UTAH 84097
801.850.4583
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REVISIONS
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LIC.: 9857303
EXP.: 31 MARCH 2023
BREINHOLT POWER ENGINEERING LLC
805 S 1430 W LEHI, UT 84043
(801)367-5180
BPE#2142

PROJECT

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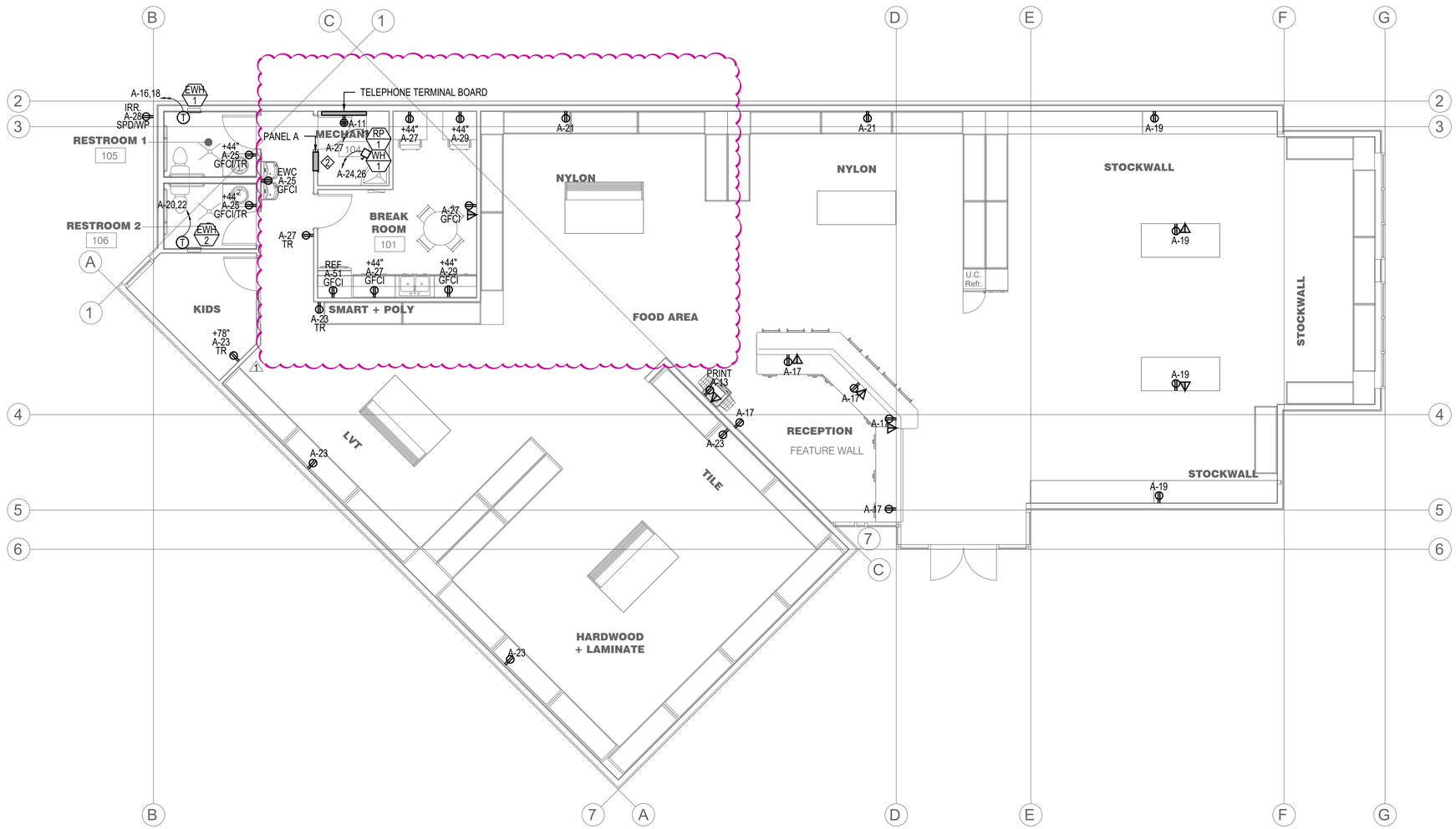
ELECTRICAL

ELECTRICAL SITE PLAN

ES101



1 POWER PLAN
SCALE: 3/16" = 1'-0"
0 2'-8" 5'-4" 10'-8"

NOTES:

1. PROVIDE TAMPER RESISTANT DEVICES IN KIDS AREA, HALLWAYS, AND RESTROOMS.

2. COORDINATE WALL THICKNESS WITH FRAMING CONTRACTOR TO ALLOW FOR INSTALLATION OF RECESSED PANEL BOARD.

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1457 EAST 840 NORTH
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801.850.4583
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805 S 1430 W LEHI, UT 84043
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BPE#2142

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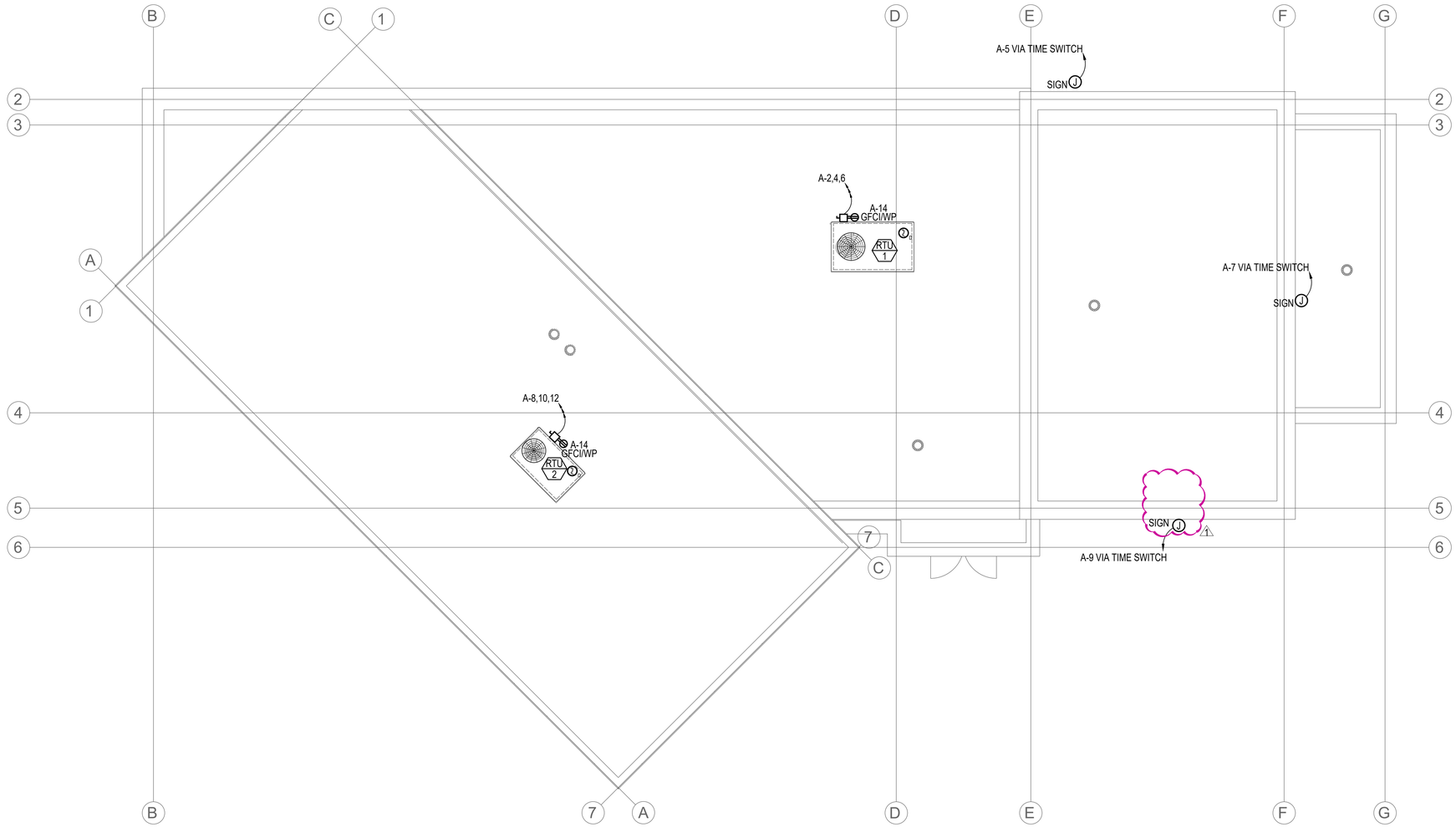
ELECTRICAL

POWER PLAN

E101



1 POWER PLAN
SCALE: 3/16" = 1'-0"
0 2'-8" 5'-4" 10'-8"

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1457 EAST 840 NORTH
OREM, UTAH 84097
801.850.4583
chris@fivedegreesdesign.com

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805 S 1430 W LEHI, UT 84043
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BPE#2142

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ADDRESS:
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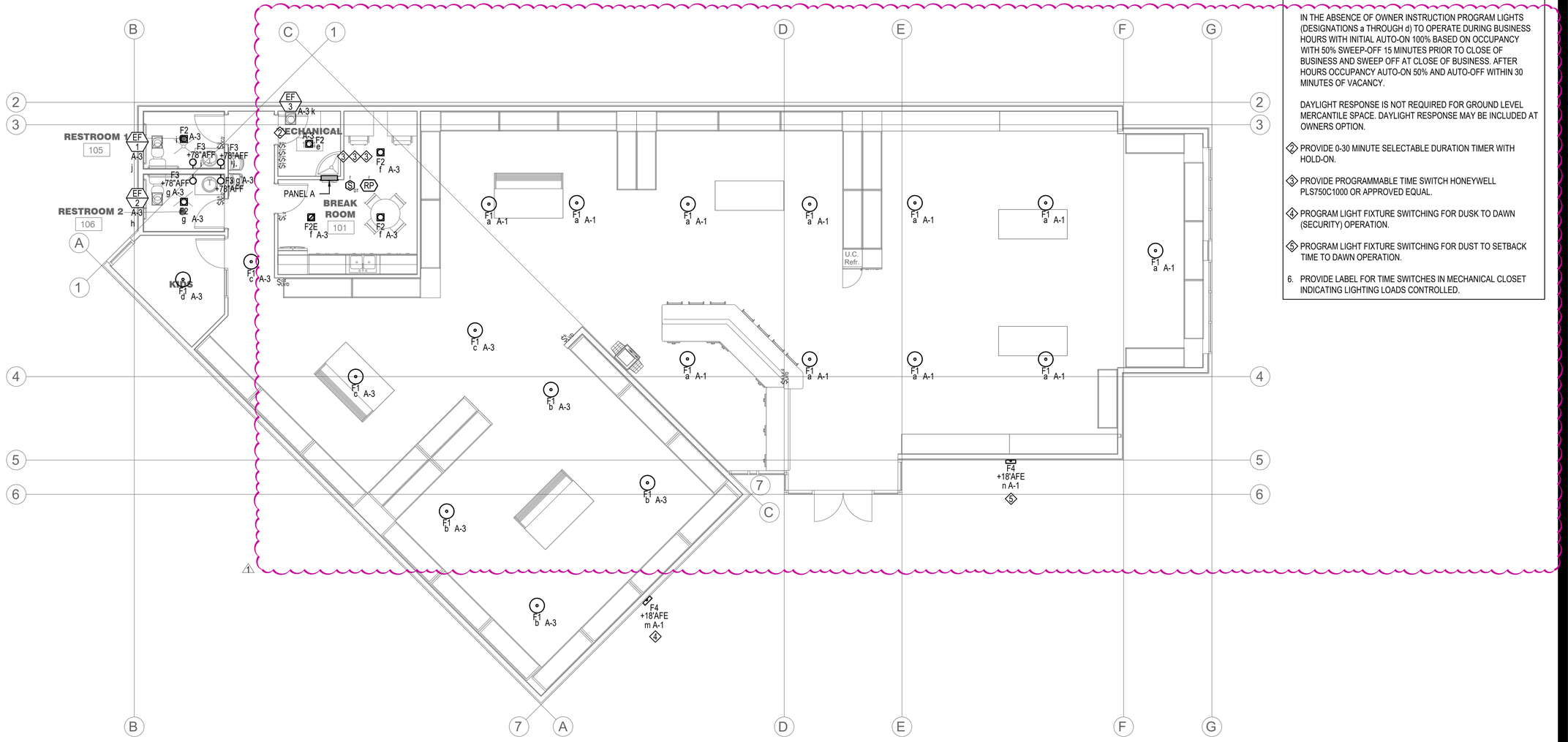
ELECTRICAL

ROOF POWER PLAN

E102



1 POWER PLAN
SCALE: 3/16" = 1'-0"
0 2'-8" 5'-4" 10'-8"

NOTES:

1. PROGRAM NETWORKED LUMINAIR LEVEL LIGHTING CONTROLS AS DIRECTED BY OWNER WITHIN REQUIREMENTS OF IECC C405.

   IN THE ABSENCE OF OWNER INSTRUCTION PROGRAM LIGHTS (DESIGNATIONS a THROUGH d) TO OPERATE DURING BUSINESS HOURS WITH INITIAL AUTO-ON 100% BASED ON OCCUPANCY WITH 50% SWEEP-OFF 15 MINUTES PRIOR TO CLOSE OF BUSINESS AND SWEEP OFF AT CLOSE OF BUSINESS. AFTER HOURS OCCUPANCY AUTO-ON 50% AND AUTO-OFF WITHIN 30 MINUTES OF VACANCY.

   DAYLIGHT RESPONSE IS NOT REQUIRED FOR GROUND LEVEL MERCANTILE SPACE. DAYLIGHT RESPONSE MAY BE INCLUDED AT OWNERS OPTION.

2. PROVIDE 0-30 MINUTE SELECTABLE DURATION TIMER WITH HOLD-ON.

3. PROVIDE PROGRAMMABLE TIME SWITCH HONEYWELL PLS750C1000 OR APPROVED EQUAL.

4. PROGRAM LIGHT FIXTURE SWITCHING FOR DUSK TO DAWN (SECURITY) OPERATION.

5. PROGRAM LIGHT FIXTURE SWITCHING FOR DUST TO SETBACK TIME TO DAWN OPERATION.

6. PROVIDE LABEL FOR TIME SWITCHES IN MECHANICAL CLOSET INDICATING LIGHTING LOADS CONTROLLED.

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1457 EAST 840 NORTH
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801.850.4583
chris@fivedegreesdesign.com

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BREINHOLT POWER ENGINEERING PLLC
805 S 1430 W LEHI, UT 84043
(801)367-5180
BPE#2142

PROJECT

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ADDRESS:
64 NORTH 900 WEST
AMERICAN FORK, UT 84003

ELECTRICAL

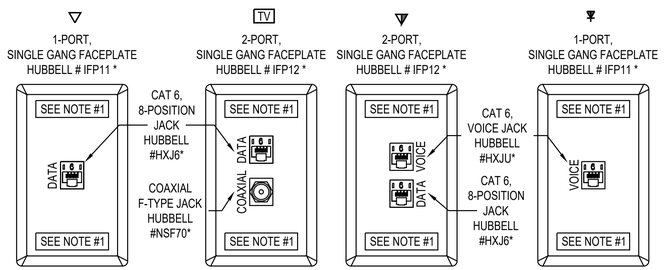
LIGHTING PLAN

E151

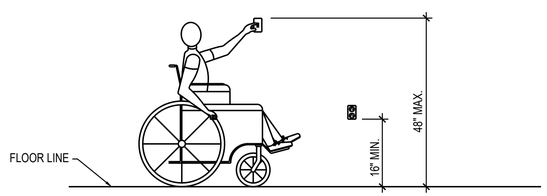
ELECTRICAL GENERAL NOTES:

1. COORDINATE STATION AND PORT LABELING WITH OWNER.
2. ALL PATCH CABLES AND STATION CABLES SHALL BE PROVIDED AND INSTALLED BY EC.
3. ALL PATCHING AND/OR CROSS CONNECTION SHALL BE PERFORMED BY THE EC.

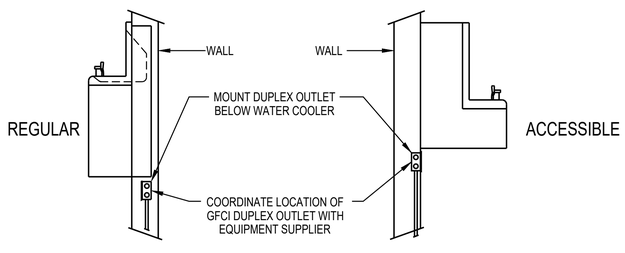
* MATCH FACEPLATE COLOR TO RECEPTACLES.



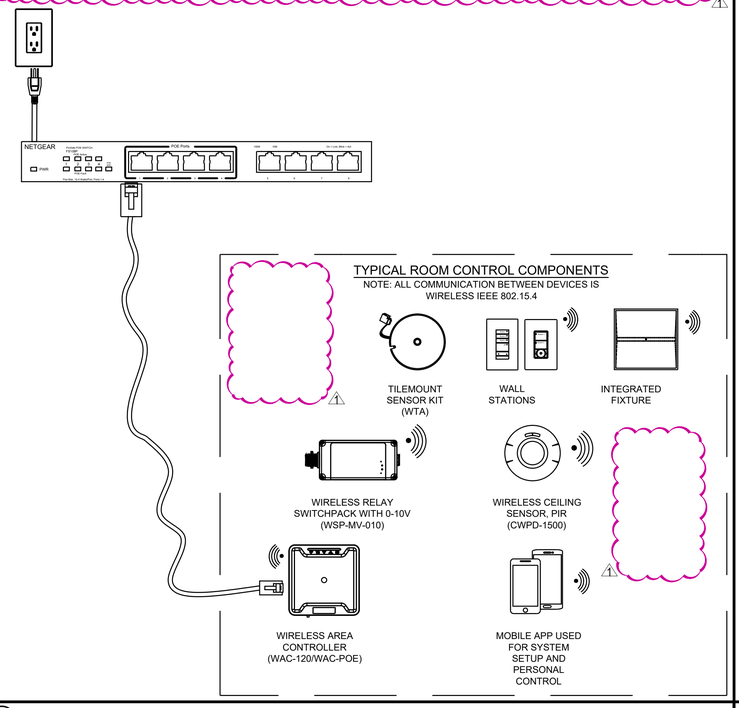
⑦ DATA/VOICE JACK INSTALLATION DETAIL



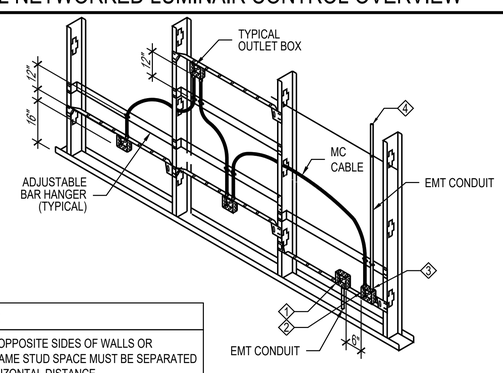
⑧ DEVICE MOUNTING HEIGHTS INSTALLATION DETAIL



⑨ ELECTRIC WATER COOLER INSTALLATION DETAIL



⑤ TYPICAL NETWORKED LUMINAIR CONTROL OVERVIEW



KEYED NOTES:

1. OUTLET BOXES ON OPPOSITE SIDES OF WALLS OR PARTITION IN THE SAME STUD SPACE MUST BE SEPARATED BY A MIN. OF 6" HORIZONTAL DISTANCE.
2. ELECTRICAL BOXES INSTALLED IN FIRE RESISTANT WALLS OR PARTITIONS SHALL COMPLY WITH IBC 714.3.2 (24" SEPARATION ON OPPOSITE SIDES.)
3. INSULATED THROAT EMT CONNECTOR.
4. HOME RUN TO PANEL MUST BE IN RACEWAY.

GENERAL NOTES:

1. TYPICAL FOR WOOD AND METAL STUD ROUGH IN.
2. PLASTER RINGS NOT SHOWN. COORDINATE RING DEPTH TO BE FLUSH WITH FINAL FINISH SURFACE.
3. LOCATE ALL OUTLET BOXES IN ACCORDANCE WITH ARCHITECTURAL AND MECHANICAL DRAWINGS, AND WITH ALL APPLICABLE SHOP DRAWINGS.

⑥ ROUGH-IN DETAIL FOR MC CABLE

GROUNDING ELECTRODE CONDUCTOR ⑤

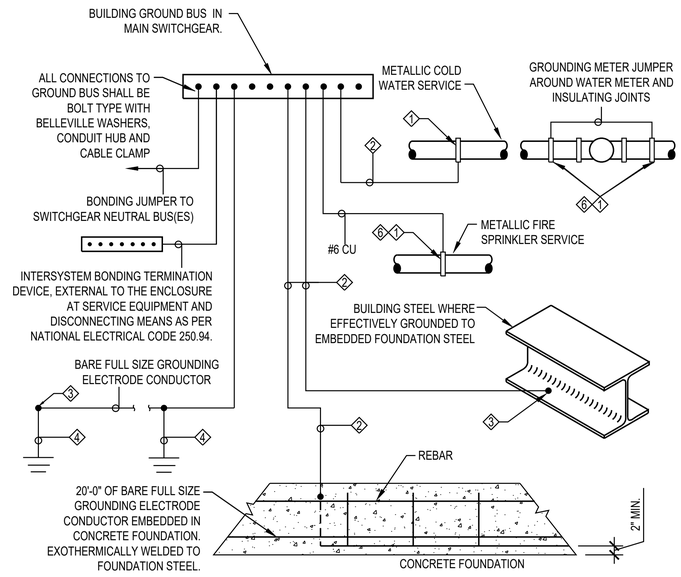
UNGROUNDED PHASE CONDUCTOR (COPPER)	UNGROUNDED PHASE CONDUCTOR (ALUMINUM)	GRND WIRE SIZE (CU)
#2 OR SMALLER	1/O OR SMALLER	#8
1 OR 1/0	2/O OR 3/0	#6
2/0 OR 3/0	4/0 OR 250	#4
>3/0 THRU 350 KCMIL	>250 KCMIL THRU 500 KCMIL	#2
>350 KCMIL THRU 600 KCMIL	>500 KCMIL THRU 900 KCMIL	1/0
>600 KCMIL THRU 1100 KCMIL	>900 KCMIL THRU 1750 KCMIL	2/0
>1100 KCMIL	>1750 KCMIL	3/0

NOTE:

1. WHEN PRESENT CONTRACTOR SHALL PROVIDE ALL GROUNDING MEANS INDICATED. CONTRACTOR SHALL REFER TO ELECTRICAL ONE-LINE DIAGRAM AND GROUNDING ELECTRODE CONDUCTOR SCHEDULE (THIS DETAIL) FOR GROUNDING ELECTRODE CONDUCTOR SIZE. CONTRACTOR SHALL REFER TO ELECTRICAL SPECIFICATIONS FOR SPECIFICS OF GROUNDING SYSTEM INSTALLATION AND MATERIALS.
2. GROUNDING ROD SHALL BE MIN. 9FT. AWAY FROM IRRIGATION CONTROLLER.

KEYED NOTE:

1. T&B 3900 BU GROUND CLAMP WITH 3/4" CONDUIT HUB AND CABLE CLAMP.
2. FULL SIZE GROUNDING ELECTRODE CONDUCTOR IN PVC.
3. EXOTHERMICALLY WELDED (TYPICAL).
4. DRIVEN GROUND RODS ⅝"x8' COPPER/STEEL ON BUILDING EXTERIOR.
5. TABLE TAKEN FROM NEC 250.66. UNGROUNDED PHASE CONDUCTOR REFERS TO THE SIZE OF THE LARGEST UNGROUNDED SERVICE-ENTRANCE CONDUCTOR OR EQUIVALENT AREA FOR PARALLEL CONDUCTORS. SEE NEC 250.66.
6. BOND METAL PIPING PER NEC 250.104.



② SERVICE GROUNDING DETAIL

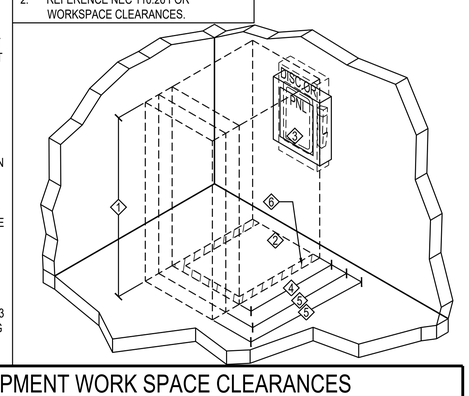
SCALE: NTS

KEYED NOTES:

1. THE MINIMUM HEADROOM OF WORKING SPACE SHALL BE 6½ FT.
2. THE WIDTH OF THE WORKING SPACE SHALL BE THE WIDTH OF THE EQUIPMENT OR 30 IN., WHICHEVER IS GREATER. THE PANEL DOOR SHALL OPEN AT LEAST 90 DEGREES.
3. ALL CIRCUIT BREAKERS OR DISCONNECT HANDLES SHALL BE NOT MORE THAN 6 FT 7 IN. ABOVE THE FLOOR WHEN IN THEIR HIGHEST POSITION.
4. 3 FT CLEARANCE IF 0-150V TO GROUND.
5. 3.5FT CLEARANCE IF 151-600V TO GROUND. 4FT IF EXPOSED LIVE PARTS ON BOTH SIDES OF THE WORKING SPACE.
6. IN AREAS WHERE STORAGE IS LIKELY TO ENCROACH ON WORK SPACE CLEARANCE PROVIDE FLOOR MARKING TAPE, ON FINISHED FLOOR, FOR ELECTRICAL EQUIPMENT WORKING CLEARANCE IDENTIFICATION. FLOOR MARKING TAPE SHALL BE SELF-ADHESIVE VINYL OR POLYESTER TAPE WITH OVERLAMINATE, 3 INCHES (76MM) WIDE, WITH ALTERNATING BLACK AND WHITE STRIPES.

GENERAL NOTE:

1. ALL WORKING SPACE CLEARANCE MEASURED FROM FACE OF PANEL FOR DEPTH, LEFT OR RIGHT EDGE FOR WIDTH, AND STANDING SURFACE FOR HEADROOM.
2. REFERENCE NEC 110.26 FOR WORKSPACE CLEARANCES.



③ ELECTRICAL EQUIPMENT WORK SPACE CLEARANCES

FIVE DEGREES DESIGN
1457 EAST 840 NORTH
OREM, UTAH 84097
801.850.4583
chris@fivedegreesdesign.com

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REVISIONS
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KYLE BREINHOLT
LIC.: 9857303
EXP.: 31 MARCH 2023
BREINHOLT POWER ENGINEERING
805 S 1430 W LEHI, UT 84043
(801)367-5180
BPE#2142

PROJECT

COST U LESS CONCEPT PLAN

ADDRESS:
64 NORTH 900 WEST
AMERICAN FORK, UT 84003

ELECTRICAL

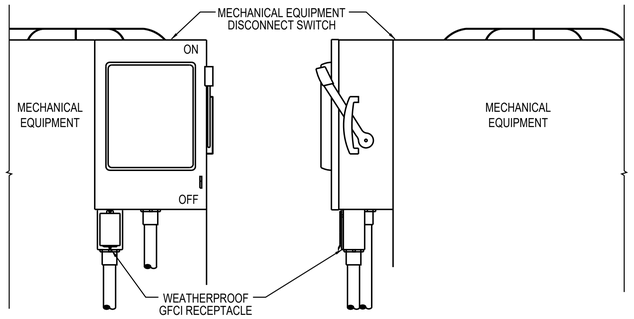
INTERIOR INSTALLATION DETAILS

E501

NOT USED

NOT USED

NOT USED

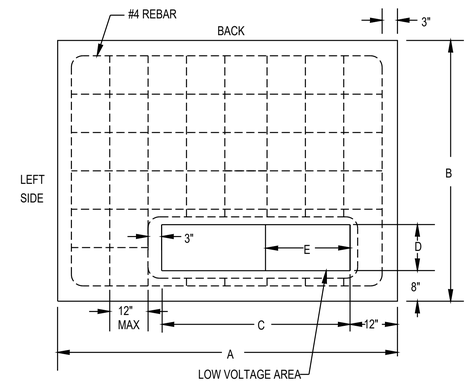


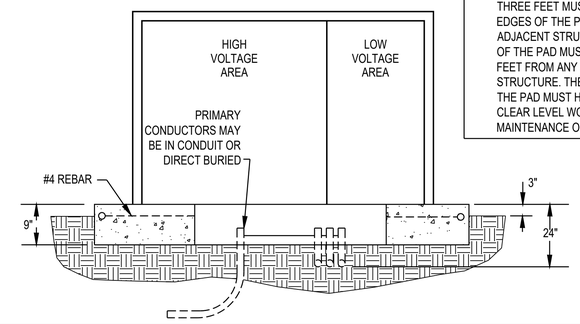
④ WEATHERPROOF RECEPTACLE INSTALLATION DETAIL

NOT USED

NOT USED

TRANSFORMER PAD DIMENSION CHART					
TRANSFORMER RATING	DIMENSIONS				
	A	B	C	D	E
75-500KVA	84"	78"	48"	15"	20"
750-2500KVA	96"	82"	60"	16"	30"





② ROCKY MOUNTAIN POWER TRANSFORMER FLAT PAD

SCALE: NTS

NOTES:

1. SITE PREPARATION: ALL DIRT BENEATH THE PAD SITE MUST BE COMPACTED AND LEVEL PRIOR TO SETTING OR POURING THE PAD TO PREVENT SETTLING.

2. CONCRETE: SHALL BE MADE USING A STANDARD BRAND OF PORTLAND CEMENT. STEEL REINFORCEMENT SHALL BE #4 REBAR PLACED ACCORDING TO THE DRAWINGS. THE PAD MUST BE POURED AT LEAST THREE FULL DAYS PRIOR TO SETTING THE UNIT. CONCRETE MUST BE KEPT ABOVE FREEZING AT LEAST 72 HOURS AFTER POURING. THE FINISHED SURFACE MUST BE COMPLETELY FLAT AND LEVEL. ALL WORK MUST BE DONE TO HIGH QUALITY STANDARDS.

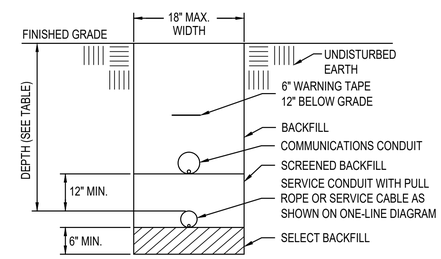
3. PREFABRICATION: THE PAD MAY EITHER BE CONSTRUCTED ON THE SITE OR PREFABRICATED ACCORDING TO SPECIFICATIONS.

4. TRANSFORMER CONDUIT WINDOW LAYOUT: LOW VOLTAGE CONDUITS SHALL BE FORMED AS TIGHTLY AS POSSIBLE AGAINST RIGHT SIDE OF THE OPENING AND SHALL IN NO CASE EXTEND FURTHER THAN 16" FROM THE RIGHT SIDE OF CONDUIT WINDOW ON THE PAD. DO NOT PUT ANY CONCRETE IN OR UNDER THE CONDUIT WINDOW. USE DIRT TO SEPARATE CONDUITS. BELL ENDS ARE REQUIRED FOR ALL METAL CONDUITS BUT NOT FOR PLASTIC CONDUIT.

5. CLEARANCE: THE FRONT OF THE PAD SHOULD ALWAYS FACE AWAY FROM ADJACENT STRUCTURES AND BE FREE OF OBSTRUCTIONS. AT LEAST THREE FEET MUST SEPARATE THE EDGES OF THE PAD FROM ANY ADJACENT STRUCTURES. THE EDGES OF THE PAD MUST BE AT LEAST TEN FEET FROM ANY COMBUSTIBLE STRUCTURE. THE AREA IN FRONT OF THE PAD MUST HAVE TEN FEET OF CLEAR LEVEL WORKING AREA FOR MAINTENANCE OF THE UNIT.

LOCATION DESCRIPTION	MIN. DEPTH
BELOW CONCRETE SLAB (NOT TRAFFIC)	18 INCHES
BELOW TRAFFIC SURFACES	24 INCHES
PARKING LOT (PAVED OR NON-PAVED)	24 INCHES
OTHER LOCATIONS	24 INCHES
UTILITY SECONDARY	24 INCHES*
UTILITY PRIMARY	48 INCHES*

(SEE NEC TABLE 300.5)
* VERIFY ALL DIMENSIONS WITH LOCAL POWER COMPANY STANDARDS AND SPECIFICATIONS.



③ TRENCHING DETAIL

SCALE: NTS

NOT USED

NOT USED

NOT USED

FIVE DEGREES DESIGN
1457 EAST 840 NORTH
OREM, UTAH 84097
801.850.4583
chris@fivedegreesdesign.com

DATE:	13 APRIL 2021
PROJECT #:	20-028
DRAWN BY:	KLB
CHECKED BY:	KLB

REVISIONS
1 22 AUG 2022 FLOOR PLAN UPDATE

LICENSED PROFESSIONAL ENGINEER
9857303-2202
KYLE L. BREINHOLT
August 2022
STATE OF UTAH

KYLE BREINHOLT
LIC.: 9857303
EXP.: 31 MARCH 2023

BREINHOLT POWER ENGINEERING LLC
805 S 1430 W LEHI, UT 84043
(801)367-5180
BPE#2142

PROJECT

COST U LESS CONCEPT PLAN

ADDRESS:
64 NORTH 900 WEST
AMERICAN FORK, UT 84003

ELECTRICAL

EXTERIOR INSTALLATION DETAILS

E502

PANEL SCHEDULE "A"

VOLTAGE: 208 Y/ 120 VOLTS
MOUNTING: FLUSH
ENCLOSURE: NEMA 1
PHASE: 3
WIRE: 4
BUS RATING (AMPS): 225
MAIN LUGS ONLY
MINIMUM EQUIPMENT RATING: 10,000 AMPS (RMS-SYM) AFC 6,217
REMARKS:

CIRCUIT BREAKER					FEEDER			CKT. LOAD		LOAD/PHASE (VA)			CKT. LOAD		FEEDER				CIRCUIT BREAKER			
No.	AMPS	POLE	MOD.	CIRCUIT NAME	C	WIRE	GRD	DEMAND FACTOR	WATTS	ØA	ØB	ØC	WATTS	DEMAND FACTOR	GRD	WIRE	C	CIRCUIT NAME	MOD.	POLE	AMPS	No.
1	20	1	-	LIGHTS SHOW ROOM & EXTERIOR	¾"	#12	#12	1.25	1,787	6,470			4,683	1.00	#10	#8	¾"	RTU-1	-	3	50	2
3	20	1	EM	LIGHTS BACK ROOMS	¾"	#12	#12	1.25	1,632		6,315		4,683	1.00	-	#8	-	-	-	-	-	4
5	20	1	-	SIGN N	¾"	#12	#12	1.25	1,000			5,683	4,683	1.00	-	#8	-	-	-	-	-	6
7	20	1	-	SIGN E	¾"	#12	#12	1.25	1,000	4,122			3,122	1.00	#10	#8	¾"	RTU-2	-	3	40	8
9	20	1	-	SIGN S	¾"	#12	#12	1.25	1,000		4,122		3,122	1.00	-	#8	-	-	-	-	-	10
11	20	1	-	TELEPHONE TERMINAL BOARD	¾"	#12	#12	1.00	360			3,482	3,122	1.00	-	#8	-	-	-	-	-	12
13	20	1	-	PRINTER	¾"	#12	#12	1.00	1,500	1,860			360	1.00	#12	#12	¾"	CO ROOF	-	1	20	14
15	20	1	-	REFRIGERATOR	¾"	#12	#12	1.00	1,200		2,400		1,200	1.00	#12	#12	¾"	EWH-1	-	2	20	16
17	20	1	-	CO RECEPTION	¾"	#12	#12	1.00	900			2,100	1,200	1.00	-	#12	-	-	-	-	-	18
19	20	1	-	CO E	¾"	#12	#12	1.00	720	1,920			1,200	1.00	#12	#12	¾"	EWH -2	-	2	20	20
21	20	1	-	CO N	¾"	#12	#12	1.00	360		1,560		1,200	1.00	-	#12	-	-	-	-	-	22
23	20	1	-	CO W	¾"	#12	#12	1.00	900			3,150	2,250	1.00	#10	#10	¾"	WH-1	-	2	30	24
25	20	1	GFCI	CO RR & EWC	¾"	#12	#12	1.00	860	3,110			2,250	1.00	-	#10	-	-	-	-	-	26
27	20	1	-	CO BREAK RM, MECH. & RP-1	¾"	#12	#12	1.00	772		952		180	1.00	#12	#12	¾"	IRRIGATION CONTROLLER	GFCI	1	20	28
29	20	1	-	CO BREAK RM	¾"	#12	#12	1.00	360			360		1.00				SPACE	-			30
31			-	SPACE				1.00		0				1.00				SPACE	-			32
33			-	SPACE				1.00			0			1.00				SPACE	-			34
35			-	SPACE				1.00				0		1.00				SPACE	-			36
37			-	SPACE				1.00		0				1.00				SPACE	-			38
39			-	SPACE				1.00			0			1.00				SPACE	-			40
41			-	SPACE				1.00				0		1.00				SPACE	-			42

NOTES :

A. ALL INSULATION ON CONDUCTORS TO BE THHN UNLESS NOTED OTHERWISE. INSULATION ON ALL UNDERGROUND EXTERIOR CONDUCTORS SHALL BE THHW.
B. LOAD DEMANDS CALCULATED AS PER SECTIONS 210 & 220 OF THE NATIONAL ELECTRICAL CODE.
C. PANEL COVER SHALL BE FIELD MARKED FOR FLASH PROTECTION WITH A PERMANENT LABEL AS REQUIRED BY THE NATIONAL ELECTRICAL CODE SECTION 110. LABEL SHALL READ: "DANGER: POTENTIAL ARC FLASH HAZARD"
D. ABBREVIATIONS: CO-CONVENIENCE OUTLET, RR-RESTROOM, (N)ORTH, (S)OUTH, (E)AST, (W)EST.

ØA	ØB	ØC	TOTALS	
17,483	15,350	14,776	47,608	CONNECTED LOAD (VA)
			132	CONNECTED LOAD (A)
697	658	250	1,605	DEMAND FACTOR ADJUSTMENTS (VA)
18,180	16,008	15,026	49,213	TOTAL LOAD (VA)
151	133	125		TOTAL LOAD (A)
			151	MAXIMUM LOAD (A)
37%	33%	31%		PHASE BALANCE

FAULT CURRENT CALCULATION TABLE

MAIN UTILITY COMPANY TRANSFORMER (ROCKY MOUNTAIN POWER)	TRANSFORMER KVA	AFC AT UTILITY	%Z
3Ø 120/208V -200A PAD MOUNTED	75	8,196 A	2.54%

CONFIGURATION						FEEDER			SYSTEM								
FROM		TO		LENGTH	SOURCE FAULT CURRENT	FEEDER SIZE	FEEDERS PER PHASE	WIRE CONSTANT	LINE TO LINE VOLTS	XFMR SECONDARY VOLTS	PHASE	KVA	%Z	MOTOR LOAD	FAULT CURRENT AT EQUIPMENT	FULL OR SERIES RATED	MINIMUM SYMMETRICAL EQUIPMENT AIC RATING
TRANSFORMER	UTILITY	SWITCHBOARD	METER	20'-0"	8,196 AIC	4/0 AL	1	11,174	208 V		3Ø		-		7,304 AIC	FULL	10,000 AIC
SWITCHBOARD	METER	PANELBOARD	A	40'-0"	7,304 AIC	3/0 CU	1	13,923	208 V		3Ø		-		6,217 AIC	FULL	10,000 AIC

NOTE: DISTANCES INDICATED ARE FOR FAULT-CURRENT ANALYSIS ONLY. CONTRACTOR SHALL USE FIELD MEASUREMENTS ESTABLISH CONDUCTOR LENGTHS FOR ORDERING PURPOSES.

LIGHT FIXTURE SCHEDULE

FIXTURE NUMBER	FIXTURE MANUFACTURER	FIXTURE CATALOG #	LAMPS TYPE	FIXTURE VOLTS	FIXTURE WATTS	FIXTURE MOUNTING	DESCRIPTION	REMARKS
F1	GE	ABN1-0-24-T-49-1D-NA	LED 4000K CCT 24,000LM 90 CRI LLC NETWORKED	120	141	PENDANT	PENDANT MOUNTED ROUND HIGHBAY WITH NETWORKED LUMEN LEVEL CONTROL AND INTEGRAL SENSORS.	
F2	HALO COMMERCIAL LITHONIA LIGHTOLIER ATLANTIC PRESCOLITE MAXILUME LITON DMF	HC620D010-HM612840-61MDH LDN6 35/15 LO6AR LSS MVOLT EZ1 P6RD15NZ10UVB W/P6RD835VB W/P6RDCC LED6-DLM15-35K-U-6LED10-SS LF6SL-6LFSL15L35K HH6-LED-1500L-DIM10-MVOLT-MD-35K-90/HH6-6501-CL-WH CH618UE-D10/CR6L22SS-T35 DCDH-N-R-4-DCD3M-15-9-35-FLDCD3T-R-4-S-WH	LED 3500 KELVIN 1500 LUMENS 80 CRI	120	21	RECESSED	LED DOWNLIGHT WITH ALZAK TRIM	
F2E	HALO COMMERCIAL LITHONIA LIGHTOLIER ATLANTIC PRESCOLITE MAXILUME LITON DMF	HC620D010-IEM14-HM612840-61MDH LDN6 35/15 LO6AR LSS MVOLT EZ1 EL P6RD15NZ10UVBEM W/P6RD835VB W/P6RDCC LED6-DLM15-35K-U-iLEM-6LED10-SS LF6SLEM-6LFSL15L35KEM HH6-LED-1500L-DIM10-MVOLT-MD-35K-90-EMG-LED/HH6-6501-CL-WH CH618UE-D10-EM/CR6L22SS-T35 DCDH-N-R-4-15-O-EM-DCD3M-15-9-35-FL-A-DCD3T-R-4-S-WH	LED 3500 KELVIN 1500 LUMENS 80 CRI	120	21	RECESSED	LED DOWNLIGHT WITH ALZAK TRIM AND EMERGENCY BATTERY PACK	
F3	TECH	700BCBND-13-C-LED930	LED 3000K CCT 348 LM 90CRI	120	12	SURFACE WALL	VANITY FIXTURE	
F4	LUMARK LITHONIA VISIONAIRE BROWNLEE ORACLE	MH-IPT-100-MT WST-100M-MD SIL-2-T3-100M-DL 7037-100M OWP-FC-201-MH-100-MVOLT-CBA	100W MH	120	118	SURFACE WALL	TRAPEZOID WALL SCONCE (100 WATT METAL HALIDE)	COLOR TO BE SELECTED BY ARCHITECT

EQUIPMENT SCHEDULE

SYMBOL	DESCRIPTION	SERVICE VOLTS	SERVICE PHASE	DISCONNECT SIZE	DISCONNECT FUSE/MOCP	STARTER	LOAD HP/TON	LOAD VA	LOAD AMPS	REMARKS
RTU 1	ROOF TOP UNIT	208 V	3Ø	60A NEMA 3R	50	INTEGRAL	7½ TON	14,050	39.0 A	PROVIDE SMOKE DETECTOR. CONNECT TO FAN SHUT-DOWN.
RTU 2	ROOF TOP UNIT	208 V	3Ø	60A NEMA 3R	40	INTEGRAL	5 TON	9,367	26.0 A	PROVIDE SMOKE DETECTOR. CONNECT TO FAN SHUT-DOWN.
EF 1	EXHAUST FAN	120 V	1Ø	INTEGRAL PLUG	-	-	-	100	0.8 A	EF CONTROLLED WITH LIGHTING
EF 2	EXHAUST FAN	120 V	1Ø	INTEGRAL PLUG	-	-	-	100	0.8 A	EF CONTROLLED WITH LIGHTING
EF 3	EXHAUST FAN	120 V	1Ø	INTEGRAL PLUG	-	-	-	130	1.1 A	EF CONTROLLED BY 24-HR TIMER
EWH 1	ELECTRIC WALL HEATER	208 V	1Ø	T-STAT	-	-	-	2,400	11.5 A	
EWH 2	ELECTRIC WALL HEATER	208 V	1Ø	T-STAT	-	-	-	2,400	11.5 A	
WH 1	WATER HEATER	208 V	1Ø	30A NEMA 1	-	-	-	4,500	21.6 A	
RP 1	RECIRCULATION PUMP	120 V	1Ø	TOGGLE SWITCH	-	-	-	52	0.4 A	

NOTES:

A. VERIFY ALL EQUIPMENT LOCATIONS AND CONNECTION REQUIREMENTS (i.e. VOLTAGE, PHASE, FLA, ETC.) WITH MECHANICAL DRAWINGS/SUBMITTALS BEFORE FOR ACTUAL EQUIPMENT INSTALLED.
B. ALL FUSES SHALL BE DUAL ELEMENT TIME DELAY. FINAL BREAKER/FUSE & DISCONNECT SIZE SHALL BE DETERMINED BY MANUFACTURER'S RECOMMENDATION FOR ACTUAL EQUIPMENT INSTALLED.
C. MAXIMUM VALUES INDICATED.
D. DISCONNECTING MEANS NOT REQUIRED FOR EQUIPMENT WITHIN SIGHT (AS DEFINED IN NEC) OF BRANCH PANEL SERVING EQUIPMENT. SEE NEC 422.31 (B).
E. DISCONNECTING MEANS NOT REQUIRED FOR APPLIANCES NOT OVER 300 VA. SEE NEC 422.31 (A).

FIVE DEGREES DESIGN
1457 EAST 840 NORTH
OREM, UTAH 84097
801.850.4583
chris@fivedegreesdesign.com

DATE: 13 APRIL 2021
PROJECT #: 20-028
DRAWN BY: KLB
CHECKED BY: KLB

REVISIONS
1 22 AUG 2022 FLOOR PLAN UPDATE

KYLE BREINHOLT
LIC.: 9857303
EXP.: 31 MARCH 2023
BREINHOLT POWER ENGINEERING PLLC
805 S 1430 W LEHI, UT 84043
(801)367-5180
BPE#2142

PROJECT

COST U LESS CONCEPT PLAN

ADDRESS:
64 NORTH 900 WEST
AMERICAN FORK, UT 84003

ELECTRICAL

SCHEDULES

E601

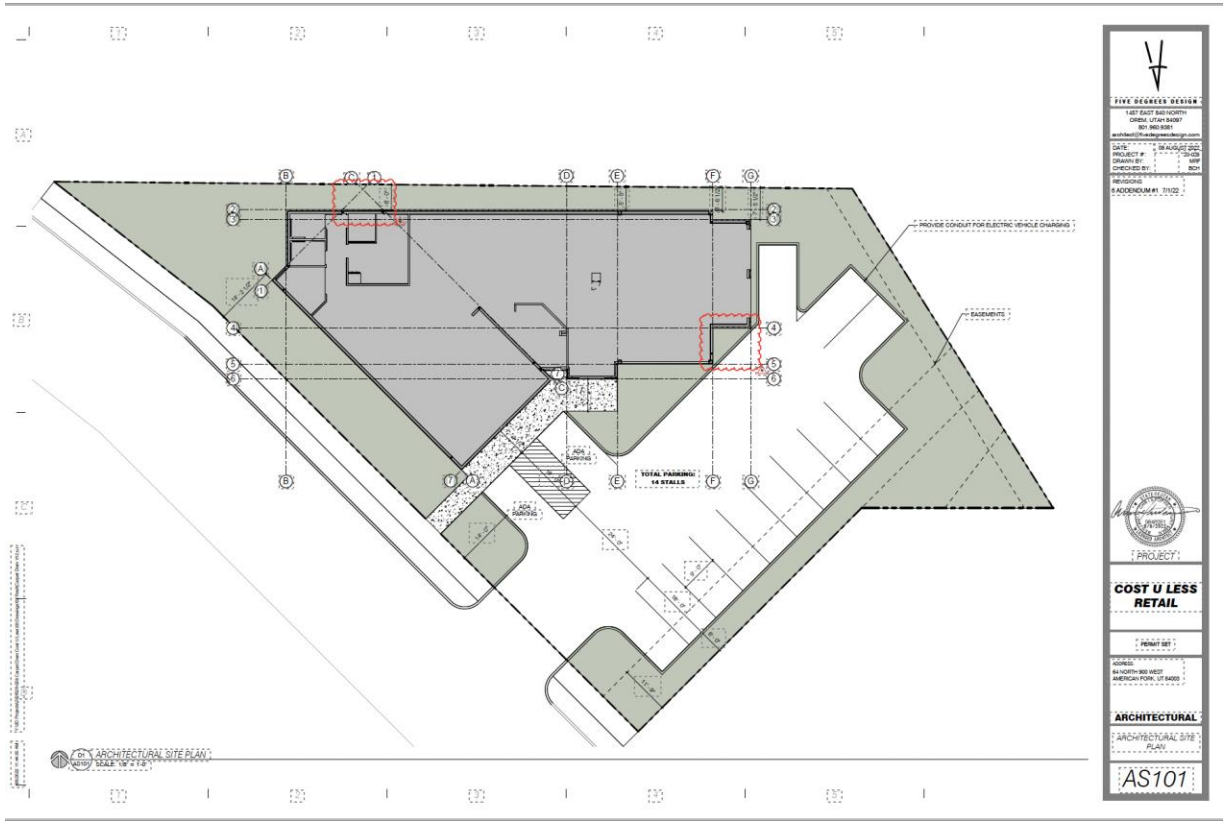
CostULess Flooring

Parking Study for Retail Development

64 North 500 West

COSTULESS
FLOORING

Proposed Project:



Comment to be addressed from TRC

- ”The parking requirement is at 3.5 ksfGFA making 15.75 stalls. As stated in the architecture letter, (“due to the abnormal shape of the lot and required parking and setbacks there is insufficient room to permit the required parking for the intended building.”) This is not enough reasoning for a parking reduction.
- General retail off street parking Section 17.5.133(c)(6)
  - Off Street Parking Standards states: “General Retail” (not in shopping center) states that we are required to have 3.5 parking per ksfGFA.
- Costuless Flooring is designed to be 4438 sqft
- As currently engineered, we have 14 parking stalls
- City Requirement: 15.5 parking stalls for sqft

Option 1: Requesting Adjustment

- 17.5.133(d)(1)

  We are requesting an adjustment to allow for 14 stalls rather than 15.5
- CostULess Flooring Total Area: 4438sqft
- Parking Requirement as delineated by American Fork City:

  3.5 per 1000sqft
- As currently designed:

  1.5 stalls short of the city requirement or 3.17 stalls per 1000sqft.

Understanding our Business

- Current Retail location: Draper UT
  - 20 Years
  - Revenue per year 6 Million
  - Employees: 3
  - Hours of Operation : 10-8pm
  - Closed Sundays and Major Holidays
  - Size of Show Room: 5,920 sqft

COSTULESS
FLOORING

Understanding our Business : Current Parking

- Parking Stalls at Draper Utah retail space: 13
- Daily Foot Traffic for business: 10.13 customers/day
- Approximately 0-5/hour throughout the day

CostULess Flooring Customer Traffic: July 2022

July 1-2	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Total
10:00					0	0	0
11:00					0	2	2
12:00					2	3	5
1:00					3	2	5
2:00					2	3	5
3:00					3	2	5
4:00					1	Closed	1
5:00					0	Closed	0
6:00					0	Closed	0
7:00					0	Closed	0
Total					11	12	23

July 4-9	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Total
10:00	Holiday	0	1	3	1	0	5
11:00	Holiday	0	1	0	2	0	3
12:00	Holiday	2	1	0	1	2	6
1:00	Holiday	2	1	0	2	3	8
2:00	Holiday	3	1	1	1	3	9
3:00	Holiday	2	1	0	0	5	8
4:00	Holiday	0	2	0	3	Closed	5
5:00	Holiday	1	0	0	1	Closed	2
6:00	Holiday	0	0	2	0	Closed	2
7:00	Holiday	0	0	2	1	Closed	3
Total	0	10	8	8	12	13	51

July 11-16	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Total
10:00	2	0	2	0	2	3	9
11:00	2	1	2	1	2	3	11
12:00	1	0	0	2	2	4	9
1:00	0	1	0	2	0	1	4
2:00	0	0	0	2	0	2	4
3:00	2	1	0	2	0	3	8
4:00	1	0	2	2	0	Closed	5
5:00	1	3	1	1	0	Closed	6
6:00	2	3	1	0	1	Closed	7
7:00	1	1	2	1	1	Closed	6
Total	12	10	10	13	8	16	69

July 18-23	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Total
10:00	3	0	1	3	1	0	8
11:00	3	0	1	0	2	0	6
12:00	1	2	1	0	1	2	7
1:00	1	2	1	0	2	3	9
2:00	1	3	1	1	1	3	10
3:00	0	2	1	0	0	5	8
4:00	0	0	2	0	3	Closed	5
5:00	0	1	0	0	1	Closed	2
6:00	0	0	0	2	0	Closed	2
7:00	1	0	0	2	1	Closed	4
Total	10	10	8	8	12	13	61

July 25-30	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Total
10:00	Holiday	1	0	2	1	3	7
11:00	Holiday	0	0	3	1	3	7
12:00	Holiday	0	0	3	2	3	8
1:00	Holiday	2	2	2	2	1	9
2:00	Holiday	1	2	1	2	3	9
3:00	Holiday	2	1	0	1	2	6
4:00	Holiday	2	0	0	0	Closed	2
5:00	Holiday	0	0	0	2	Closed	2
6:00	Holiday	1	4	2	0	Closed	7
7:00	Holiday	0	1	1	3	Closed	5
Total	0	9	10	14	14	15	62

Analysis of Foot Traffic Parking

1.08 customers per hour

Maximum of 5 customers in showroom at one time

Monday at 1:00pm

Tuesday at 12:00pm

Wednesday at 7:45pm

Thursday at 2:00pm

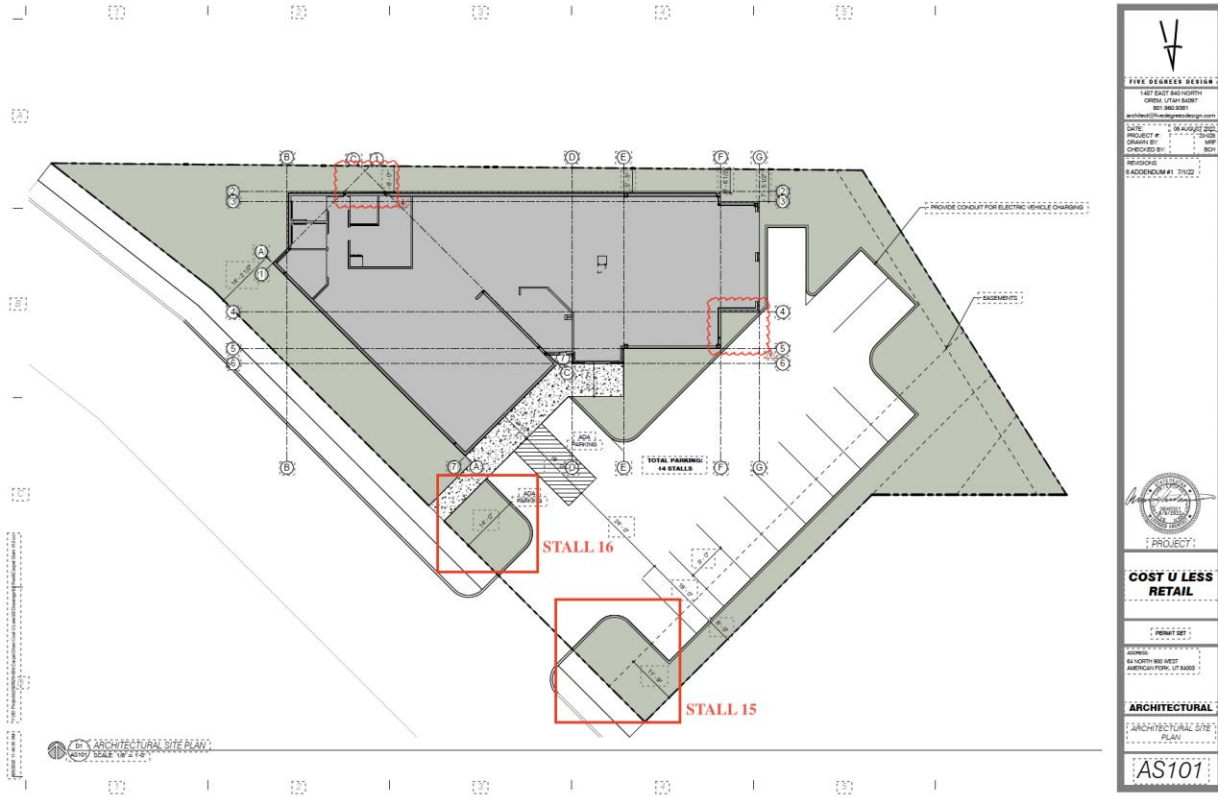
Friday at 11:00am & 5:00pm

Saturday at 1:00pm and 3:00pm

Appropriate amount of sqft

- Due the the amount of flooring samples and options of flooring to be stocked, the size of the building cannot be reduced.
  - 16 vendors with multiples samples and types of flooring to be displayed
  - Selling hardwood, laminate, carpet, tile, LVP
- CostuLess Draper location is 1600 sqft larger than what is being engineered and uses fewer than 8 parking stalls at a time.

Option 2: Reduce Greenspace



Reducing Greenspace

- By reducing greenspace and adding parking, the ratio of required greenspace on a commercial lot will not be aligned with code.
- Request a variance on the landscaping code
- Viable option based upon:
  - The amount of greenspace still available on the lot
  - The odd shape of the lot
  - Reduction of green watering space to decrease water consumption.

AMERICAN FORK CITY
PLANNING COMMISSION

MEETING DATE: February 22nd, 2023

AGENDA TOPIC:

Review and action on a Preliminary Plan for Axcess Accident Center, located in the area of 64 East 150 North, in the Central Commercial (CC-1) Zone.

BACKGROUND INFORMATION		
Location:		64 East 150 North
Applicants:		Excel Engineering, Adam Anderson
Existing Land Use:		General Commercial, Residential High Density
Proposed Land Use:		N/A
Surrounding Land Use:	North	Residential High Density
	South	General Commercial
	East	Residential High Density, General Commercial
	West	Residential High Density, General Commercial
Existing Zoning:		CC-1, R4-7500
Proposed Zoning:		N/A
Surrounding Zoning:	North	R4-7500
	South	CC-1
	East	R4-7500, CC-1
	West	CC-1

BACKGROUND:

The applicant is applying for a Final Plat approval for Axcess Accident Center, for a new commercial development in the CC-1 Zone, located in the area 64 E 150 N. The proposal consists of two lots being consolidated into a single lot for a chiropractic medical office project. All development parcels consist of approximately 0.57 acres. Parcel IDs will include: 02:038:0008 and 02:038:0006.

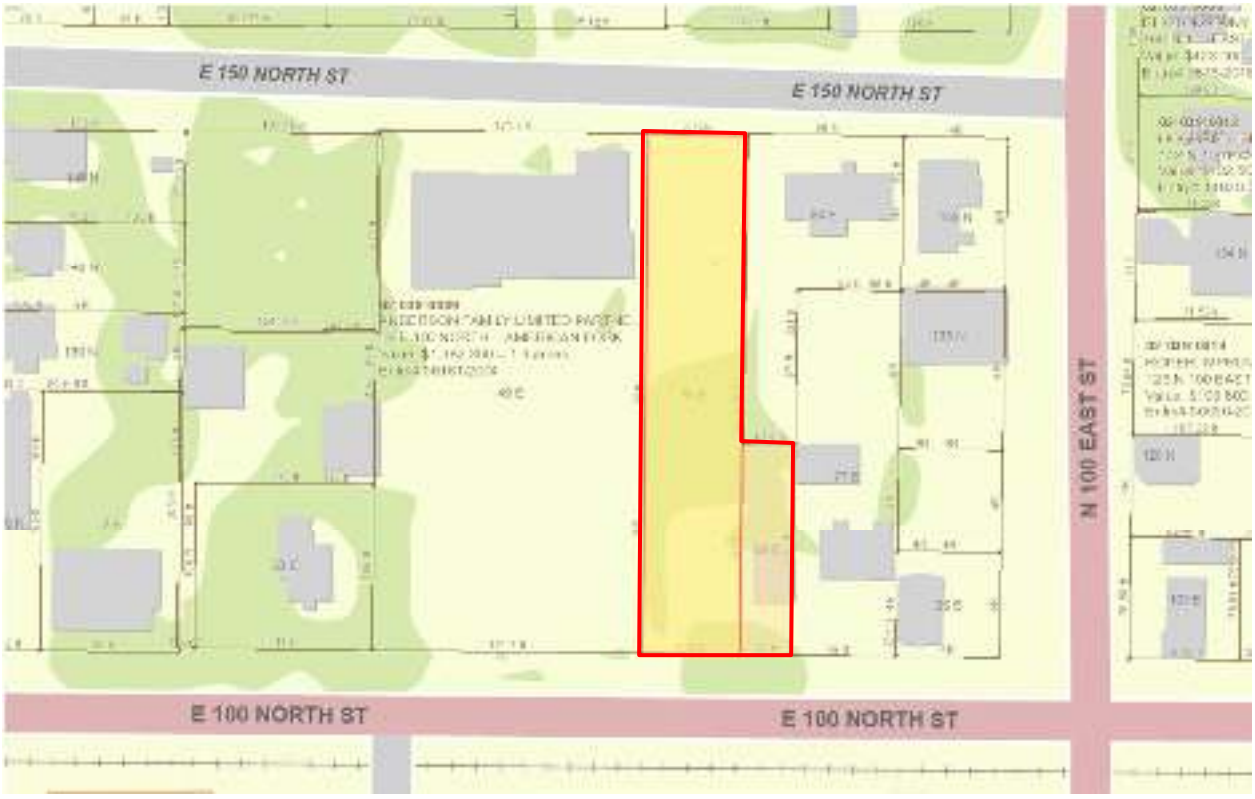
The Planning Commission will be the approval body for this Preliminary Plan.

Sec 17.7.205 Staff Submits Preliminary Plans, Documents, And Statements To Planning Commission - Public Notice Required

1. Upon completion of the technical review conference by the staff and other review agencies, and a determination that the materials are in a form suitable for consideration, the preliminary plan and supporting materials shall be placed on the agenda of the planning commission.

Public notice of any pending action by the planning commission regarding a proposed project shall be provided in the manner required for an amendment to the development code, as set forth under state law and Title 17.11 of this code.

PROJECT MAP:



PROJECT CONDITIONS OF APPROVAL:

1. Cross Access Agreement for the property will need to be recorded with Utah County before permits are issued.

FINDINGS OF FACT:

- The Preliminary Plan application meets the requirements of Section 17.7.205 and of American Fork City Municipal Code.
- Cross Access Agreement for the property will need to be recorded with Utah County before permits are issued.

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 Plan Review Comments:** All plans and documents shall comply with all the Technical Review Committee comments and the City Engineer's final review.
8. **Commercial Structure:** Record an Owner Acknowledgment and Utility Liability Indemnification if the proposed building is a multi-unit commercial structure served by a single utility service.
9. **Sensitive Lands:** Record all applicable documents required for compliance with the City's Sensitive Lands Ordinance.
10. **Utility Notification Form:** Submit a Subdivision Utility Notification Form.

11. **Professional Verification:** Submit final stamped construction documentation by all appropriate professionals.
12. **Fees:** Payment of all development, inspection, recording, streetlight, and other project related fees.
13. **Mylar:** Submit a Mylar. All plats will receive final verification of all formats, notes, conveyances, and other items contained on the plat by City staff (recorder, legal, engineer, GIS, planning).

STAFF RECOMMENDATION:

The Preliminary Plan application meets the requirements of Section 17.7.210 & Section 17.7.211 and staff recommends APPROVING the application WITH CONDITIONS.

POTENTIAL MOTIONS – Site Plan

APPROVAL

Madame Chairwoman, I move that we approve the Preliminary Plan for Axcess Accident Center, located in the area of 64 East 150 North, in the Central Commercial (CC-1) Zone, subject to any conditions found in the Staff Report, or recommended by the Fire Marshal.

DENIAL

Madame Chairwoman, I move that we deny the Preliminary Plan for Axcess Accident Center, located in the area of 64 East 150 North, in the Central Commercial (CC-1) Zone.

TABLE

Madame Chairwoman, I move that we table action on the Preliminary Plan for Axcess Accident Center, located in the area of 64 East 150 North, in the Central Commercial (CC-1) Zone, and instruct the developer/staff to _____.

AMERICAN FORK CITY
PLANNING COMMISSION

MEETING DATE: February 22nd, 2023

AGENDA TOPIC:

Review and action on a Final Plat for Axcess Accident Center, located in the area of 64 East 150 North, in the Central Commercial (CC-1) Zone.

BACKGROUND INFORMATION		
Location:		64 East 150 North
Applicants:		Excel Engineering, Adam Anderson
Existing Land Use:		General Commercial, Residential High Density
Proposed Land Use:		N/A
Surrounding Land Use:	North	Residential High Density
	South	General Commercial
	East	Residential High Density, General Commercial
	West	Residential High Density, General Commercial
Existing Zoning:		CC-1, R4-7500
Proposed Zoning:		N/A
Surrounding Zoning:	North	R4-7500
	South	CC-1
	East	R4-7500, CC-1
	West	CC-1

BACKGROUND:

The applicant is applying for a Final Plat approval for Axcess Accident Center, for a new commercial development in the CC-1 Zone, located in the area 64 E 150 N. The proposal consists of two lots being consolidated into a single lot for a chiropractic medical office project. All development parcels consist of approximately 0.57 acres. Parcel IDs will include: 02:038:0008 and 02:038:0006.

Sec 17.7.210 Staff Submits Final Plan/Plat And Supporting Materials To Planning Commission

Upon completion of the technical review conference and subject to a finding that the project materials are in a form suitable for action by the planning commission, the final plans/plats and supporting materials shall be placed on the agenda of the planning commission.

Sec 17.7.211 Planning Commission Acts On Final Plan/Plat And Supporting Materials

When the final plan/plat and supporting materials required for approval have been completed in final form, the plan/plat and supporting materials shall be placed on the agenda of the planning commission and the commission may act to recommend approval of the final plan/plat upon a finding that:

1. The final plan/plat and supporting materials conform with terms of the preliminary approval.
2. The final plan/plat complies with all city requirements and standards relating to large scale developments.
3. The detailed engineering plans and materials comply with the city standards and policies.
4. The estimates of cost of constructing the required improvements are realistic.
5. The water rights conveyance documents have been provided.

Upon a finding of approval, the chairman shall be authorized to sign the final subdivision plats, where applicable.

PROJECT MAP:

PROJECT CONDITIONS OF APPROVAL:

1. Cross Access Agreement for the property will need to be recorded with Utah County before permits are issued.

FINDINGS OF FACT:

- The Final Plat application meets the requirements of Section 17.7.210 and Section 17.7.211 of American Fork City Municipal Code.
- Cross Access Agreement for the property will need to be recorded with Utah County before permits are issued.

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 Plan Review Comments:** All plans and documents shall comply with all the Technical Review Committee comments and the City Engineer's final review.
8. **Commercial Structure:** Record an Owner Acknowledgment and Utility Liability Indemnification if the proposed building is a multi-unit commercial structure served by a single utility service.
9. **Sensitive Lands:** Record all applicable documents required for compliance with the City's Sensitive Lands Ordinance.
10. **Utility Notification Form:** Submit a Subdivision Utility Notification Form.
11. **Professional Verification:** Submit final stamped construction documentation by all appropriate professionals.
12. **Fees:** Payment of all development, inspection, recording, streetlight, and other project related fees.
13. **Mylar:** Submit a Mylar. All plats will receive final verification of all formats, notes, conveyances, and other items contained on the plat by City staff (recorder, legal, engineer, GIS, planning).

STAFF RECOMMENDATION:

The Final Plat application meets the requirements of Section 17.7.210 & Section 17.7.211 and staff recommends APPROVING the application WITH CONDITIONS.

POTENTIAL MOTIONS – Site Plan

APPROVAL

Madame Chairwoman, I move that we recommend approval for the Final Plat for Axcess Accident Center, located in the area of 64 East 150 North, in the Central Commercial (CC-1) Zone, subject to any conditions found in the Staff Report, or recommended by the Fire Marshal.

DENIAL

Madame Chairwoman, I move that we recommend denial for the Final Plat for Axcess Accident Center, located in the area of 64 East 150 North, in the Central Commercial (CC-1) Zone.

TABLE

Madame Chairwoman, I move that we table action on the Final Plat for Axcess Accident Center, located in the area of 64 East 150 North, in the Central Commercial (CC-1) Zone, and instruct the developer/staff to _____.

AMERICAN FORK CITY
PLANNING COMMISSION

MEETING DATE: February 22nd, 2023

AGENDA TOPIC:

Review and action on a Site Plan for Axcess Accident Center, located in the area of 64 East 150 North, in the Central Commercial (CC-1) Zone.

BACKGROUND INFORMATION		
Location:		64 East 150 North
Applicants:		Excel Engineering, Adam Anderson
Existing Land Use:		General Commercial, Residential High Density
Proposed Land Use:		N/A
Surrounding Land Use:	North	Residential High Density
	South	General Commercial
	East	Residential High Density, General Commercial
	West	Residential High Density, General Commercial
Existing Zoning:		CC-1, R4-7500
Proposed Zoning:		N/A
Surrounding Zoning:	North	R4-7500
	South	CC-1
	East	R4-7500, CC-1
	West	CC-1

BACKGROUND:

The applicant is applying for a Site Plan approval for Axcess Accident Center, for a new commercial development in the CC-1 Zone, located in the area 64 E 150 N. The proposal consists of two lots being consolidated into a single lot for a chiropractic medical office project. All development parcels consist of approximately 0.57 acres. Parcel IDs will include: 02:038:0008 and 02:038:0006.

Due to the development being in the CC-1 zone, the Planning Commission is the approval body for the Site Plan.

Sec 17.6.101 Administrative Site Plan Review

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

1. Planning commission to approve. The planning commission, acting in an administrative capacity, shall have the function, duty and power to approve or disapprove a project plan and to attach such modifications or conditions as may be deemed appropriate to improve the layout, to ensure that the project will not pose any detrimental effect to persons or property, or to protect the health, safety, and general welfare of the citizens of the city.
2. Application required. Application for site plan approval shall be submitted on forms provided by the city and shall be accompanied by maps and drawings showing the following:
1. The location of all existing and proposed buildings and structures on the site, with full dimensions showing the distance between buildings and distances from buildings to adjacent property lines.
2. The location of all parking spaces, driveways, and points of vehicular ingress and egress.
3. A landscaping plan showing the location, types, and initial sizes of all planting materials to be used together with the location of fences, walls, hedges, and decorative materials.
4. Preliminary elevations of main buildings showing the general appearance and types of external materials to be used.
5. The locations of solid waste receptacles and trash pick-up areas.
3. Appeals permitted. Any person aggrieved by a determination of the planning commission may request a hearing before the city council who shall have the authority to reverse, affirm or modify any decision of said commission. Any such appeal shall be filed within ten days of the determination of the planning commission.
4. Issuance of a permit. A building permit shall not be issued for any building or structure or external alterations thereto until the provisions of this section have been complied with. Any construction not in conformance with an approved site plan shall be considered a violation of this code. Any building permit issued shall ensure that development is undertaken and completed in conformity with the plans as approved.

PROJECT MAP:

PROJECT CONDITIONS OF APPROVAL:

1. Cross Access Agreement for the property will need to be recorded with Utah County before permits are issued.
2. Site Plan can be approved subject to the approval of Axcess Accident Center's Final Plat from City Council.

FINDINGS OF FACT:

- The site plan application meets the requirements of Section 17.6.101 of American Fork City Municipal Code.
- Cross Access Agreement for the property will need to be recorded with Utah County before permits are issued.
- The Planning Commission will be the approval body for this site plan as it resides in the CC-1 Zone. Section 17.4.401 (D)(8) states, "prior to the issuance of a building permit for any development within the zone, a site plan shall be submitted to and approved by the planning commission. Said site plan shall be prepared and approved in accordance with the provisions of Section 17.6.101."
- City Council will need to approve of Axcess Accident Center's Final Plat before permits are issued for the site plan.

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.

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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).

STAFF RECOMMENDATION:

The Site Plan application meets the requirements of Section 17.6.101 and staff recommends APPROVING the application WITH CONDITIONS.

POTENTIAL MOTIONS – Site Plan

APPROVAL

Madame Chairwoman, I move that we approve the Site Plan for Axcess Accident Center, located in the area of 64 East 150 North, in the Central Commercial (CC-1) Zone, subject to any conditions found in the Staff Report, or recommended by the Fire Marshal.

DENIAL

Madame Chairwoman, I move that we deny the Site Plan for Axcess Accident Center, located in the area of 64 East 150 North, in the Central Commercial (CC-1) Zone.

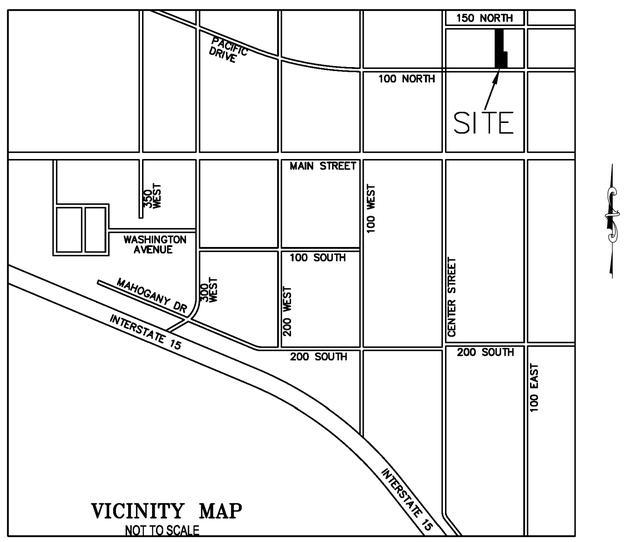
TABLE

Madame Chairwoman, I move that we table action on the Site Plan for Axcess Accident Center, located in the area of 64 East 150 North, in the Central Commercial (CC-1) Zone, and instruct the developer/staff to _____.

AXCESS ACCIDENT CENTER BUILDING

ADDRESS: 63 EAST 100 NORTH

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



VICINITY MAP
NOT TO SCALE

CONTACT LIST:

COMPANY	CONTACT	PHONE
AF PUBLIC WORKS – CULINARY/PI	JAY BREMS	801-763-3060
AF PUBLIC WORKS – SEWER/STORM DRAIN	ASHTON HARDY	801-763-3060
AF PUBLIC WORKS – CITY INSPECTOR	DEE HOWARD	801-763-3060
AF PUBLIC WORKS – SWPPP INSPECTOR	HARLAN NIELSON	801-763-3060
AF FIRE MARSHAL	MAT SACCO	801-763-3045
T.S.S.D.	DAVID BARLOW	801-756-5231
AF IRRIGATION COMPANY	ERNIE JOHN	801-471-6576
MITCHELL HOLLOW IRRIGATION CO.	DALE JONES	801-768-8150
ROCKY MOUNTAIN POWER	TERIA WALKER	801-756-1310
COMCAST	ELYSIA VALDEZ	801-401-3017
CENTURYLINK	BILL WESTFALL	435-623-4252
AF FIBER	KYLE PETERSON	801-400-2933
DOMINION ENERGY	TRENT JOHNSON	801-853-6548

ABBREVIATION TABLE

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

SHEET INDEX

C1 COVER SHEET
C2 SITE PLAN
C3 DEMOLITION PLAN
C4 UTILITY PLAN
C5 GRADING & DRAINAGE PLAN
C6 EROSION CONTROL PLAN
C7 BMP DETAILS
C8 AMERICAN FORK STANDARD CONSTRUCTION NOTES
C9 DETAIL SHEET
C10 DETAIL SHEET
C11 DETAIL SHEET
ALTA SURVEY

Next Step
Approved with Conditions
Proceed to Planning Commission on 2/22/23

NOTES TO CONTRACTOR

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

American Fork City
Development Review
Committee

PLANNING & ZONING REVIEWED
TVANEKELENBURG
1/26/23

Fire Department
Reviewed
M. Sacco 01/23/2023

Engineering Division
Reviewed
jmortimer 01/25/2023

REGISTERED PROFESSIONAL ENGINEER
01/10/23
No. 270393
DAVID W. PETERSON
STATE OF UTAH

BENCH MARK

SOUTH QUARTER CORNER, SECTION 14, TOWNSHIP 5 SOUTH, RANGE 1 EAST, SALT LAKE BASE AND MERIDIAN
ELEVATION = 4594.27 (NGVD 29 DATUM)
NAVD 88 IS 3.6' HIGHER THAN NGVD 29

REVISIONS

Rev.	Date	Description
1	09/28/22	REVISED PER CITY COMMENTS
2	12/13/22	REVISED PER CITY COMMENTS
3	01/10/23	REVISED PER CITY COMMENTS

Know what's below. Call before you dig.

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

Developer: AXCESS CHIROPRACTIC
95 EAST 200 NORTH, AMERICAN FORK, UT 801-763-8813

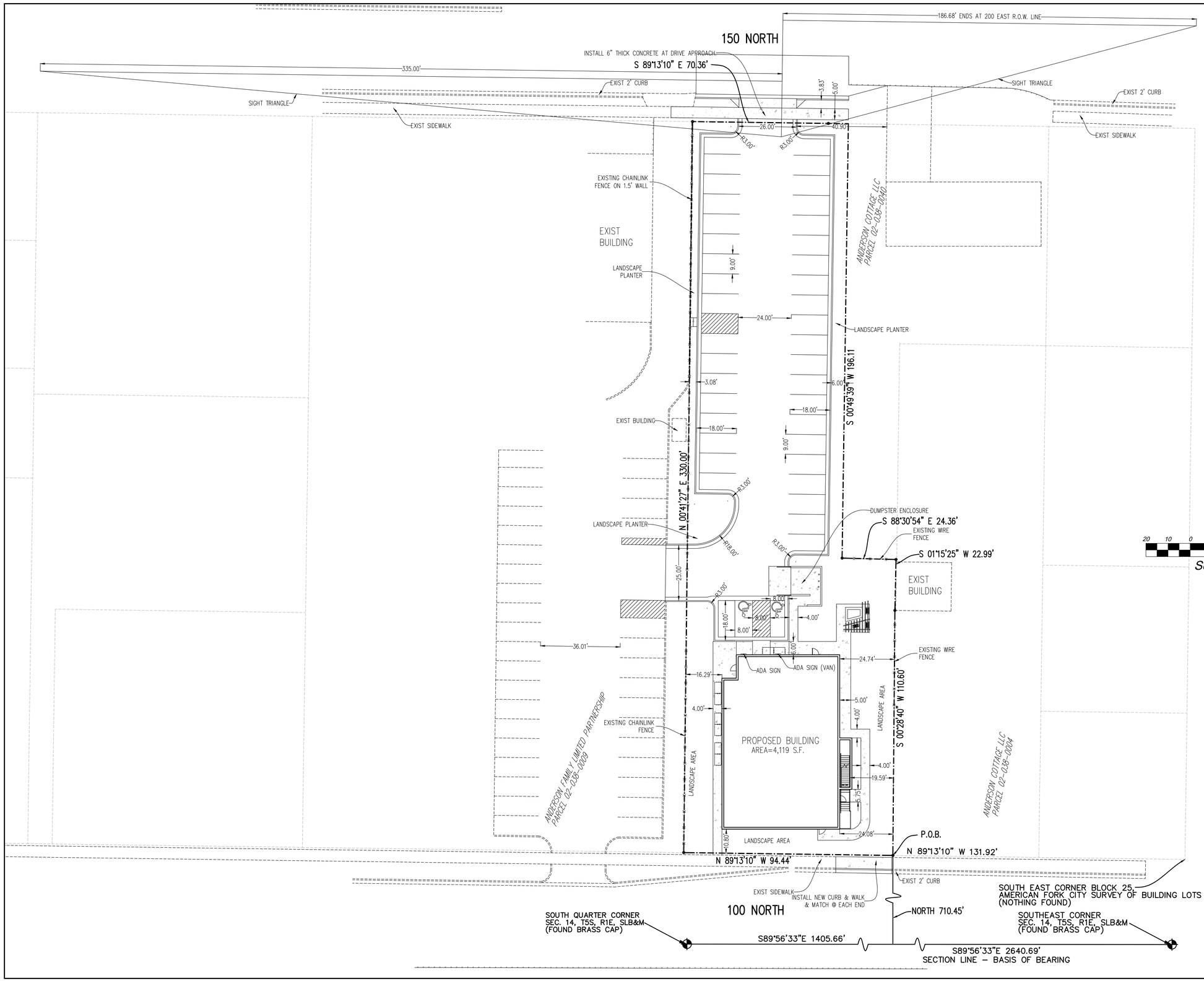
EXCEL ENGINEERING
David W. Peterson, P.E., License #270393
12 West 100 North, Suite 201, American Fork, UT 84003
P: (801) 756-4504; david@excelcivil.com

AXCESS ACCIDENT CENTER BUILDING
AMERICAN FORK 63 EAST 100 NORTH UTAH

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

COVER SHEET

Scale: NTS
Date: 07/21/22
C1



GENERAL SITE NOTES

1. CURRENT ZONING: CC-1
2. ALL CONSTRUCTION TO CONFORM TO AMERICAN FORK CITY STANDARDS AND SPECIFICATIONS.
3. SURVEYING BY LEVEL OF FOCUS
4. TYPE OF BUILDING: BUILDING CONSTRUCTION TYPE II-B
5. TYPE OF OCCUPANCY: BUSINESS GROUP AND OCCUPANCY
6. TYPE OF CONSTRUCTION: PRE-CAST TILT-UP WITH INSULATED PANELS
7. BUILDING TOTAL BUILDING SQUARE FOOTAGE (ALL BUILDINGS & FLOORS): 12,357 S.F., 4,119 S.F. PER FLOOR
8. PROPOSED BUILDING PARKING TABULATIONS:
   - BASEMENT FOR STORAGE; 0 STALLS REQUIRED
   - LEVEL 1: MEDICAL OFFICES: 4.5 STALLS/1,000 S.F. = 18.5 STALLS
   - LEVEL 2: OFFICE DOWNTOWN: 3 STALLS/1,000 S.F. = 12.3 STALLS
   - PARKING STALLS REQUIRED: 30.8 STALLS.
   - TOTAL PARKING PROVIDED: 41 STALLS
9. BUILDING HEIGHT = SEE BUILDING ELEVATIONS
10. FLOOD ZONE DESIGNATION: ZONE X , FIRM MAP PANEL #: 49049C0168F, EFFECTIVE DATE: 06/19/2020

SITE TABULATIONS:

TOTAL PROPERTY AREA = 26,365 S.F. = 100%
BUILDING/ROOF AREA = 4,120 S.F. = 15.6%
IMPERVIOUS AREA = 14,946 S.F. = 56.7%
LANDSCAPE AREA = 7,299 S.F. = 27.7%

BOUNDARY DESCRIPTION

BEGINNING AT A POINT LOCATED NORTH 89°13'10" WEST 131.92 FEET ALONG THE SOUTHERLY BLOCK LINE OF BLOCK 25, PLAT "A" AMERICAN FORK CITY SURVEY OF BUILDING LOTS, SAID POINT BEING LOCATED SOUTH 89°56'33" EAST ALONG THE SECTION LINE 1405.66 FEET AND NORTH 710.45 FEET FROM THE SOUTH QUARTER CORNER OF SECTION 14, TOWNSHIP 5 SOUTH, RANGE 1 EAST, SALT LAKE BASE AND MERIDIAN;

THENCE N 89°13'10" W, A DISTANCE OF 94.44 FEET; THENCE N 00°41'27" E, A DISTANCE OF 330.00 FEET; THENCE S 89°13'10" E, A DISTANCE OF 70.36 FEET; THENCE S 00°49'39" W, A DISTANCE OF 196.11 FEET; THENCE S 88°30'54" E, A DISTANCE OF 24.36 FEET; THENCE S 01°15'25" W, A DISTANCE OF 22.99 FEET; THENCE S 00°28'40" W, A DISTANCE OF 110.60 FEET TO THE POINT OF BEGINNING.

CONTAINING 26,365 SQUARE FEET OR 0.6053 ACRES, MORE OR LESS.

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

REGISTERED PROFESSIONAL ENGINEER
01/10/23
No. 270393
DAVID W. PETERSON
STATE OF UTAH

BENCH MARK

SOUTH QUARTER CORNER, SECTION 14, TOWNSHIP 5 SOUTH, RANGE 1 EAST, SALT LAKE BASE AND MERIDIAN
ELEVATION = 4594.27 (NGVD 29 DATUM)
NAVD 88 IS 3.6' HIGHER THAN NGVD 29

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

Developer: AXCESS CHIROPRACTIC
95 EAST 200 NORTH, AMERICAN FORK, UT 801-763-8813

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

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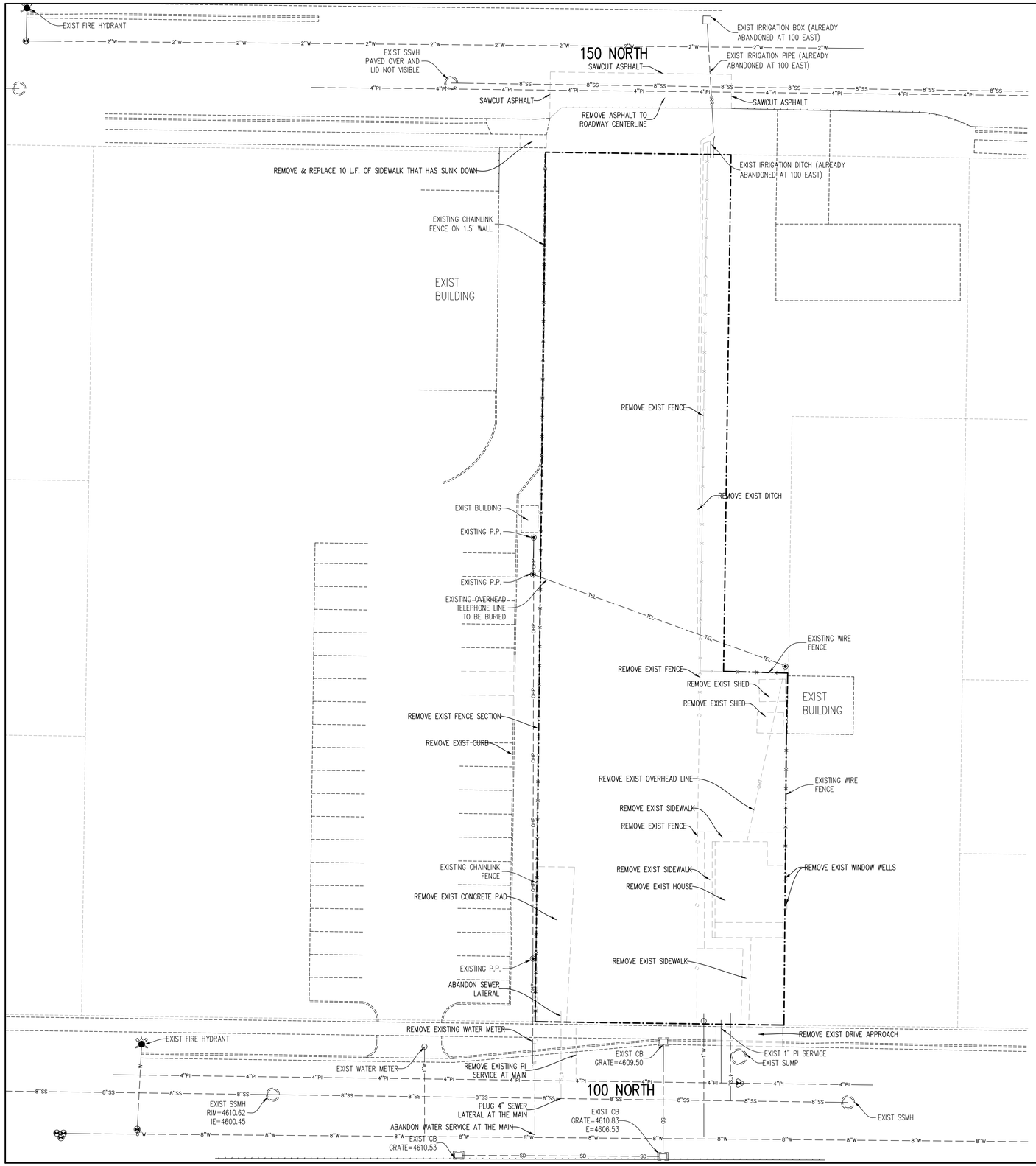
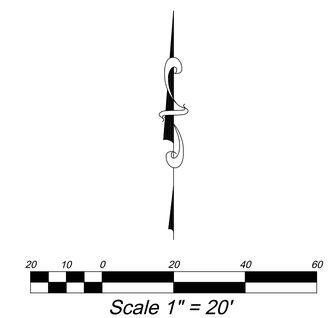
AXCESS ACCIDENT CENTER BUILDING

AMERICAN FORK 63 EAST 100 NORTH UTAH

Drawn by: D.W.P.	SITE PLAN	Scale: 1"=20'
Designed by: D.W.P.		Date: 07/21/22
Checked by: D.W.P.		C2





REGISTERED PROFESSIONAL ENGINEER
09/16/22
No. 270393
DAVID W. PETERSON
STATE OF UTAH

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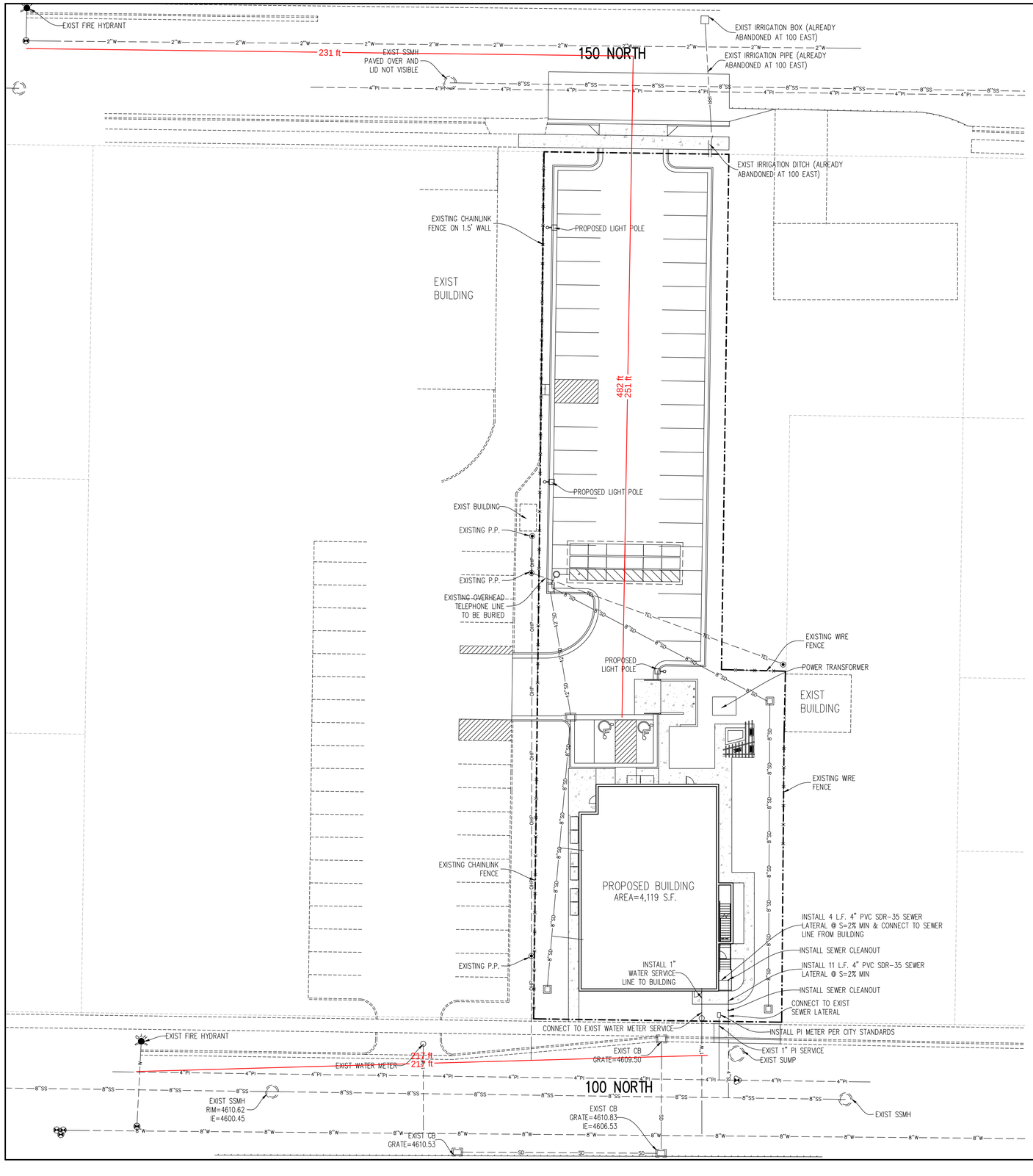
AXCESS ACCIDENT CENTER BUILDING

AMERICAN FORK 63 EAST 100 NORTH UTAH

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

DEMOLITION PLAN

Scale: 1"=20'
Date: 07/21/22
C3



SEWER NOTES:

1. ALL SEWER MAINS AND LATERALS MUST BE INSPECTED AND APPROVED BY THE CITY OF AMERICAN FORK PUBLIC WORKS DEPARTMENT BEFORE BACKFILLING IS ACCOMPLISHED.
2. SEWER LATERALS ARE TO BE INSTALLED AT A MINIMUM SLOPE OF 2%
3. NEW SERVICE LATERALS SHALL BE PVC PLASTIC PIPE CONFORMING TO ASTM D3034 SDR35
4. ALL LATERAL CONNECTIONS SHALL "INSERT-A-TEE" OR WYE AT TEN O'CLOCK OR TWO O'CLOCK POSITIONING TO CENTER OF MAIN LINE AND SHALL BE ENCASED IN CONCRETE AFTER INSPECTION IS MADE.
5. THERE SHALL BE A MINIMUM 3 FEET OF COVER OVER ALL SEWER LATERAL LINES AND 3.5 FEET MINIMUM COVER AT PROPERTY LINE.
6. THERE SHALL BE A MAXIMUM DISTANCE OF 5 FEET FROM THE FOUNDATION WALL TO THE FIRST EXTERIOR CLEANOUT WITH A MAXIMUM DISTANCE BETWEEN CLEANOUTS OF 75 FEET.
7. THERE SHALL A BE CLEANOUT AT ANY 90° BEND OR ANY COMBINATION OF BENDS IN EXCESS OF 90°.
8. CLEANOUT STANDPIPE CAN BE CAST IRON OR IRON OR PVC WITH CAST IRON CAP OR BRASS CAP.
9. ALL CLEANOUTS SHALL REMAIN VISIBLE AND ACCESSIBLE.
10. ALL SEWER CONSTRUCTION MUST CONFORM TO AF CITY STANDARD DRAWINGS.

WATER NOTES:

1. ALL WATER MAINS, TRANSMISSION AND DISTRIBUTION LINES, SHALL BE CONSTRUCTED USING DUCTILE IRON IN ACCORDANCE WITH AWWA C151 AND ANSI A-21.51
2. DUCTILE IRON PIPE SHALL BE CLASS 50 FOR SLIP-ON OR MECHANICAL JOINT PIPING (CLASS 51 FOR 6 INCH SIZE AND UNDER) AND CLASS 53 FOR FLANGED JOINT PIPING UNLESS OTHERWISE REQUIRED BY THE CITY ENGINEER.
3. ALL WATER CONSTRUCTION TO CONFORM TO AF CITY STANDARD DRAWINGS.
4. WATER LINE MIN. COVER IS 48" TO TOP OF PIPE.
5. WATER SERVICE MATERIAL TO BE POLY PIPE.

GENERAL UTILITY NOTES:

1. THERE ARE NO EXISTING LAND DRAINAGE SYSTEMS, WETLANDS, OR DRAINAGE AREAS TRIBUTARY TO THIS SITE.
2. NO UTILITY LINE EXTENSIONS REQUIRED FROM ADJACENT PROPERTY OWNERS.
3. ALL CONSTRUCTION SHALL CONFORM TO AMERICAN FORK CITY STANDARDS AND SPECIFICATIONS, LATEST EDITION.
4. ALL ROOF DRAINS WILL BE CONVEYED TO THE APPROPRIATE UNDERGROUND FACILITY WHERE POSSIBLE, NOT CONVEYED ACROSS PARKING OR SIDEWALK. ROOF DRAINS SHOULD DISCHARGE AT LEAST 10 FEET FROM FOUNDATIONS OR BACKFILL LIMITS, WHICHEVER IS GREATER. CONNECT ALL ROOF DRAINS TO STORM DRAIN PIPING SHOWN WHERE POSSIBLE.

FIRE HYDANT NOTE

1. CONSTRUCTION TYPE = IIB
2. TOTAL SQUARE FOOTAGE = 12,357 S.F.
3. REQUIRED FIRE FLOW = 2,250 GPM
4. HYDRANTS REQUIRED FOR 2,250 GPM = 2, THERE ARE EXISTING HYDRANTS ON 150 NORTH AND 100 NORTH TO SATISFY THIS REQUIREMENT.

STORM DRAIN DESIGN

SEE SHEET C5 FOR STORM DRAIN DESIGN

NOTES TO CONTRACTOR

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

20 10 0 20 40 60

Scale 1" = 20'

UTILITY LEGEND

- FIRE HYDRANT
- 6"PI — PRESSURE IRRIG.
- 8"W — CULINARY WATER
- 8"SS — SEWER PIPE PVC SDR-35
- 15"SD — STORM DRAIN PIPE
- EDGE OF ASPHALT
- X — FENCE
- OHP — OVERHEAD POWER LINE
- G — GAS LINE

REGISTERED PROFESSIONAL ENGINEER
07/21/22
No. 270393
DAVID W. PETERSON
STATE OF UTAH

Know what's below. Call before you dig.

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

BENCH MARK

SOUTH QUARTER CORNER, SECTION 14, TOWNSHIP 5 SOUTH, RANGE 1 EAST, SALT LAKE BASE AND MERIDIAN
ELEVATION = 4594.27 (NGVD 29 DATUM)
NAVD 88 IS 3.6' HIGHER THAN NGVD 29

REVISIONS

Rev.	Date	Description
1	09/28/22	REVISED PER CITY COMMENTS
2	12/13/22	REVISED PER CITY COMMENTS

Developer: AXCESS CHIROPRACTIC
95 EAST 200 NORTH, AMERICAN FORK, UT 801-763-8813

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

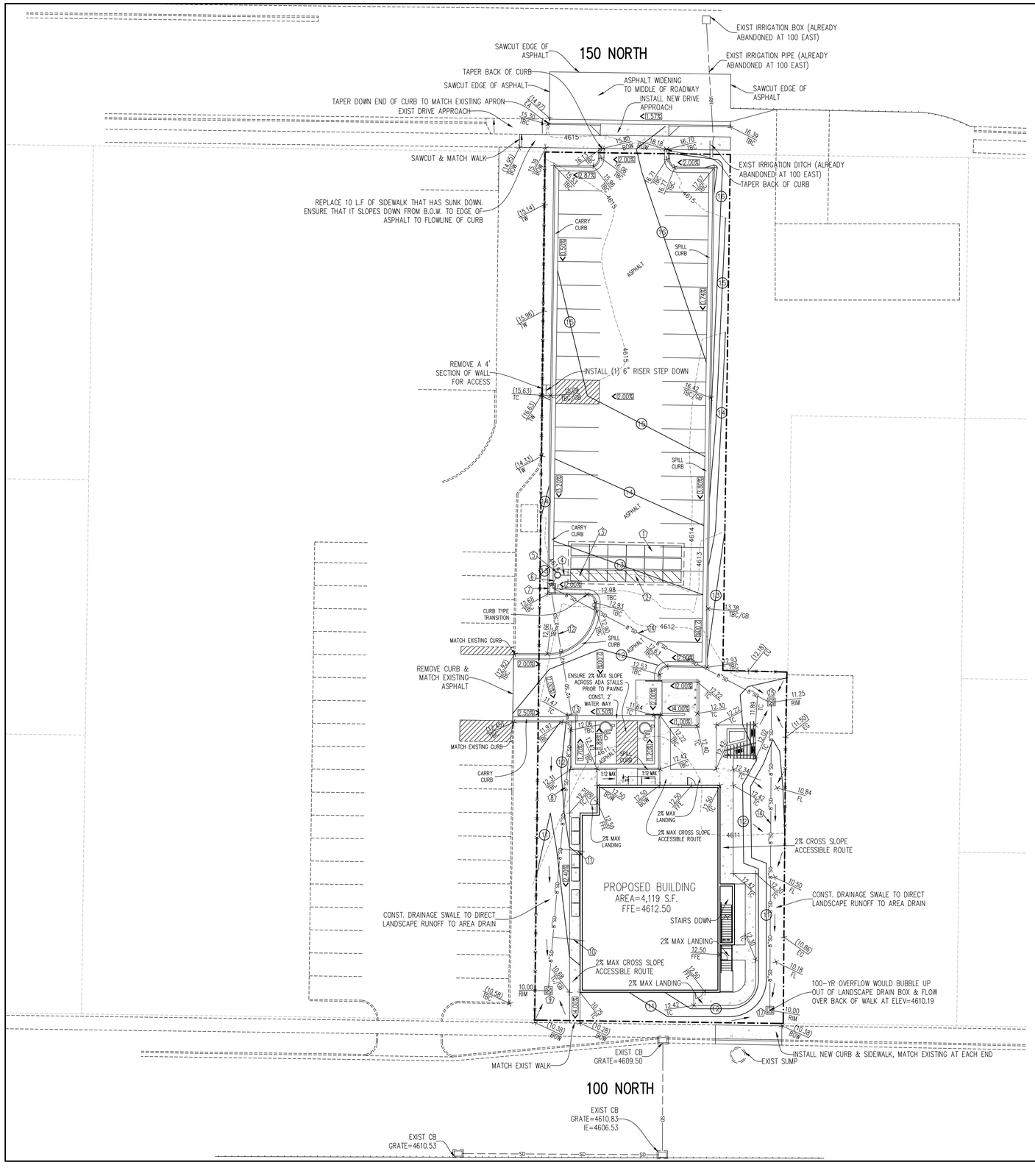
AXCESS ACCIDENT CENTER BUILDING

AMERICAN FORK 63 EAST 100 NORTH UTAH

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

UTILITY PLAN

Scale: 1"=20'
Date: 07/21/22
C4



STORM DRAIN KEYED NOTES

1. INSTALL CULTEC RECHARGER SYSTEM PER MANUFACTURER SPECIFICATIONS. INSTALL (18) RECHARGER 330XLHD CHAMBERS (3 ROWS OF 6) WITH 6" STONE ABOVE AND 6" STONE BELOW CHAMBERS. SYSTEM VOLUME=1,615 C.F., CHAMBERS ARE SPACED 6" APART WITH 12" OF GRAVEL AROUND THE PERIMETER OF THE CHAMBERS. TOP OF GRAVEL=4610.00, TOP OF CHAMBER=4609.50, 12" IE IN TO CHAMBER=4607.02, BOTTOM OF CHAMBER=4606.96, BOTTOM OF GRAVEL=4606.46. (STORMTECH, PRINSCO, OR CONTECH CHAMBERS ARE APPROVED ALTERNATES AS LONG AS THEY ARE INSTALLED PER THEIR MANUFACTURER SPECIFICATIONS, THE CHAMBERS HAVE THE SAME DIMENSIONS AND THE SYSTEM IS INSTALLED WITH THE SAME VOLUME). SEE STORM DRAINAGE REPORT FOR PERCOLATION RATE.
2. INSTALL SEPARATOR ROW
3. INSTALL INSPECTION PORT
4. INSTALL 4.0 L.F. 12" ADS @ S=2%
5. INSTALL AQUA-SWIRL CONCENTRATOR AS-2, BYP CW STD. RIM=4612.56, 12" IE THRU=4607.10. HS-25 LOADING IS REQUIRED.
6. INSTALL 3.3 L.F. 12" ADS @ S=2%
7. INSTALL 2'X3' CATCH BASIN, TBC=4612.68, GRATE=4612.18, 8" IE IN=4607.17, 12" IE THRU=4607.17
8. INSTALL 101.9 L.F. 8" ADS @ S=0.4%
9. INSTALL 2'X2' CATCH BASIN WITH GRATE, GRATE=4610.00, 8" IE OUT=4608.00
10. INSTALL 12 L.F. 6" ADS @ S=2%. CONNECT TO 8" ADS PIPE WITH INSERTA-TEE OR 8"X8"X6" TEE. 6" FLOWLINE AT BUILDING=4608.24. COORDINATE CONNECTION TO BUILDING WITH ARCHITECT AND MECHANICAL PLANS.
11. INSTALL 9 L.F. 6" ADS @ S=5%. CONNECT TO 8" ADS PIPE WITH INSERTA-TEE OR 8"X8"X6" TEE. 6" FLOWLINE AT BUILDING=4608.05. COORDINATE CONNECTION TO BUILDING WITH ARCHITECT AND MECHANICAL PLANS.
12. INSTALL 47.3 L.F. 12" ADS @ S=0.9%
13. INSTALL 2'X3' CATCH BASIN, GRATE=4611.35, 8" IE IN=4607.59, 12" IE OUT=4607.59
14. INSTALL 92.2 L.F. 8" ADS @ S=0.4%
15. INSTALL 2'X2' CATCH BASIN WITH GRATE, GRATE=4611.25, 8" IE THRU=4607.54
16. INSTALL 115.2 L.F. 8" ADS @ S=0.4%
17. INSTALL 2'X2' CATCH BASIN WITH GRATE, GRATE=4610.00, 8" IE OUT=4608.00

20 10 0 20 40 60

Scale 1" = 20'

ON-SITE PAVEMENT DESIGN

DRIVE AISLES
3.5" ASPHALT
10" AGGREGATE BASE

PARKING STALL AREA
3" ASPHALT
8" AGGREGATE BASE

FOLLOW ALL PAVEMENT PREPARATION RECOMMENDATIONS FROM THE GEOTECH LETTER DATED NOVEMBER 22, 2021.

REGISTERED PROFESSIONAL ENGINEER
07/21/22
No. 270393
DAVID W. PETERSON
STATE OF UTAH

GRADING LEGEND

FFE	FINISHED FLOOR ELEV.
BOW	BACK OF WALK
GB	GRADE BREAK
TC	TOP OF CONCRETE
TBC	TOP BACK OF CURB
TA	TOP OF ASPHALT
EA	EDGE OF ASPHALT
RIM	RIM ELEVATION
FL	FLOWLINE
EG	EXIST GROUND
FG	FINISHED GRADE
TW	TOP OF WALL
BW	BOTTOM OF WALL
IE	INVERT ELEVATION
0.00%	DIRECTION OF DRAINAGE
(00.00)	EXISTING ELEVATION
00.00 TBC	PROPOSED ELEVATION
4608	EXISTING CONTOUR
00	PROPOSED CONTOUR
00	STORM DRAIN KEYED NOTE

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

BENCH MARK

SOUTH QUARTER CORNER, SECTION 14, TOWNSHIP 5 SOUTH, RANGE 1 EAST, SALT LAKE BASE AND MERIDIAN
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AXCESS ACCIDENT CENTER BUILDING

AMERICAN FORK 63 EAST 100 NORTH UTAH

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

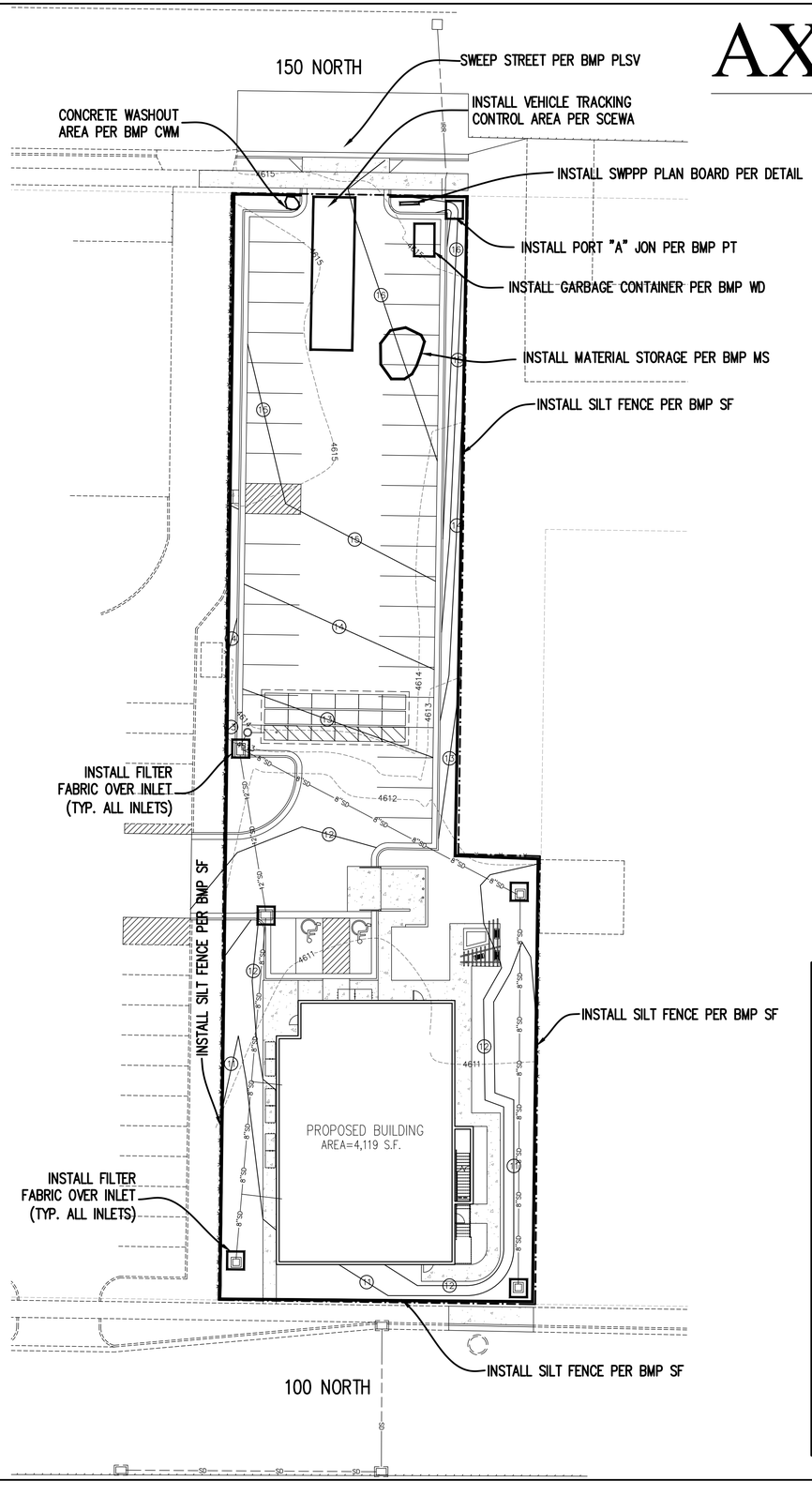
GRADING & DRAINAGE PLAN

Scale: 1"=20'
Date: 07/21/22
C5

AXCESS ACCIDENT CENTER BUILDING

ADDRESS: 63 EAST 100 NORTH

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



20 10 0 20 40 60

Scale 1" = 20'

SWPPP Storm Water Pollution Prevention Plan

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

Project Name: 123abc

SWPPP Location: ABC Company Construction Trailer
100 W Center

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

MINIMUM SIGN DIMENSION = 4'X4'

NOI 8.5"x 11"

NOI 8.5"x 11"

SWPPP Drawing 17"x 22"

PERCOLATION RATE: 1 MINUTE PER INCH

DISTURBED AREA = 0.56 ACRES

C-VALUE BEFORE CONSTRUCTION = 0.30
C-VALUE AFTER CONSTRUCTION = 0.77

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

SWPPP CONTACT LIST:

COMPANY	CONTACT	PHONE
AF STORM DRAIN SEWER	Ashton Hardy	(801) 404 6162
AF STORM WATER INSPECTOR	Harlan Nielson	(801) 404 6361
AF FLOOD IRRIGATION COMPANY	Ernie Johns	(801) 756 6626
TIMPANOGOS SPECIAL SERVICE DISTRICT	Jon Adams	(801) 756 5231

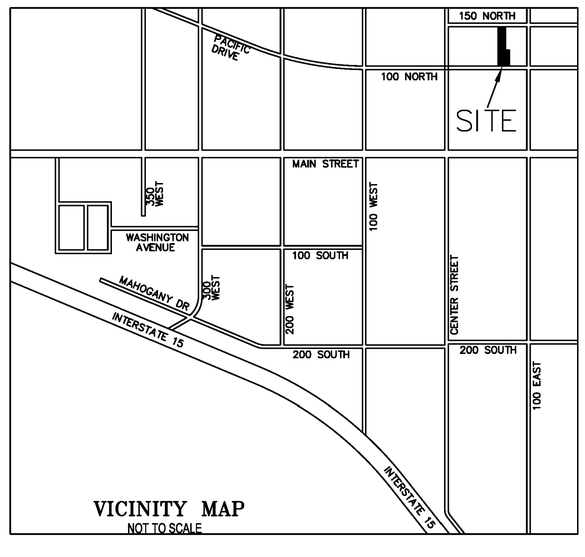
SITE OPERATOR IS RESPONSIBLE FOR THE FOLLOWING:

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

SWMP CERTIFICATION STATEMENT

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

REGISTERED PROFESSIONAL ENGINEER
01/10/23
No. 270393
DAVID W. PETERSON
STATE OF UTAH



VICINITY MAP
NOT TO SCALE

EROSION CONTROL NOTES:

1. CONSTRUCT A SILT FENCE AS SHOWN ON PLAN. SEE BMP SF.
2. INSTALL SEDIMENT TRAP IN FRONT OF ALL SILT FENCES. SEE BMP ST.
3. CONST. A 15'X50'X2' DEEP COBBLE VEHICLE TRACKING CONTROL AREA AS SHOWN ON PLAN. SEE BMP SCEWA
4. INSTALL CONCRETE WASH OUT AREA. SEE BMP CWM
5. INSTALL FILTER FABRIC UNDER CONSTRUCTED STORM DRAIN INLETS.
6. INSTALL GARBAGE CONTAINER. SEE BMP WD
7. INSTALL PORTABLE TOILET. SEE BMP PT
8. INSTALL MATERIALS STORAGE AREA. SEE BMP MS
9. CONTRACTOR WILL BE RESPONSIBLE FOR THE IMPLEMENTATION AND MAINTENANCE OF BMP'S DURING CONSTRUCTION.
10. CONTRACTOR TO WATER SITE AT LEAST WEEKLY OR MORE FREQUENTLY AS NEEDED TO CONTROL DUST POLLUTION.
11. SWEEP STREET. SEE BMP'S DC & PLSV
12. INSTALL LANDSCAPING. SEE BMP TPS
13. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE IMPLEMENTATION OF THE BMP'S. CONTACT DEVELOPER FOR CONTRACTOR INFORMATION.

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AXCESS ACCIDENT CENTER BUILDING
AMERICAN FORK 63 EAST 100 NORTH UTAH

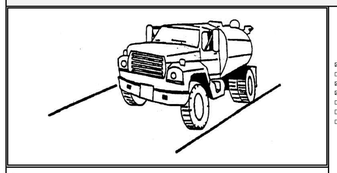
Drawn by: D.W.P.
Designed by: D.W.P.
Checked by: D.W.P.

EROSION CONTROL PLAN

Scale: 1"=20'
Date: 07/21/22

C6

BMP: Dust Controls — DC



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

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

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

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

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

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

Adapted from Salt Lake County BMP Fact Sheet

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

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

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

■ High ☒ Medium ☐ Low

BMP: Parking Lot Sweeping/Vacuuming — PLSV

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

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

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

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

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

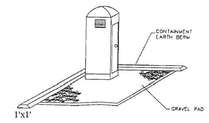
Targeted Pollutants
- ■ Sediment
- ■ Nutrients
- ■ Heavy Metals
- ■ Toxic Materials
- ■ Oxygen Demanding Substances
- ☐ Oil & Grease
- ☒ Floatable Materials
- ☐ Bacteria & Viruses

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

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

■ High ☒ Medium ☐ Low

BMP: Portable Toilets — PT



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

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

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

Installation/Application Criteria:
- Locate portable toilets in convenient locations throughout the site.
- Prepare level, gravel surface and provide clear access to the toilets for servicing and for on-site personnel.
- Construct earth berm perimeter (See Earth Berm Barrier Information Sheet), control for spill/protection leak.
- Stake toilets to prevent them from tipping.

Limitations:
No limitations.

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

Adapted from Salt Lake County BMP Fact Sheet

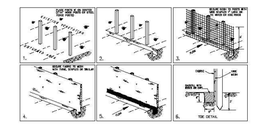
Targeted Pollutants
- ☐ Sediment
- ☐ Nutrients
- ☐ Toxic Materials
- ☐ Oil & Grease
- ☐ Floatable Materials
- ■ Other Waste

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

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

■ High ☒ Medium ☐ Low

BMP: Silt Fence — SF



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

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

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

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

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

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

Adapted from Salt Lake County BMP Fact Sheet

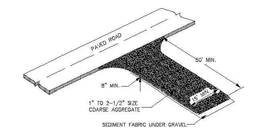
Targeted Pollutants
- ■ Sediment
- ☐ Nutrients
- ☐ Toxic Materials
- ☒ Oil & Grease
- ☐ Floatable Materials
- ☐ Other Waste

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

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

■ High ☒ Medium ☐ Low

BMP: Stabilized Construction Entrance and Wash Area — SCEWA



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

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

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

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

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

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

Adapted from Salt Lake County BMP Fact Sheet

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

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

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

■ High ☒ Medium ☐ Low

BMP: BMP Inspection and Maintenance — BMPIM

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

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

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

Limitations:
- ➢ Availability of trained staff

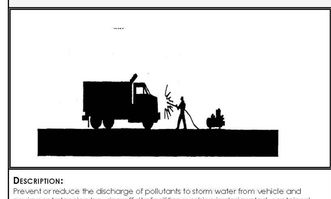
Targeted Pollutants
- ■ Sediment
- ■ Nutrients
- ☐ Heavy Metals
- ■ Toxic Materials
- ☐ Oxygen Demanding Substances
- ■ Oil & Grease
- ■ Floatable Materials
- ☐ Bacteria & Viruses

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

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

■ High ☒ Medium ☐ Low

BMP: Vehicle And Equipment Cleaning — VEC



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

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

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

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

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

Adapted from Salt Lake County BMP Fact Sheet

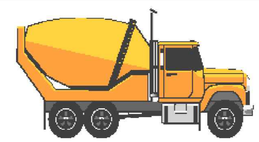
Targeted Pollutants
- ☐ Sediment
- ☐ Nutrients
- ■ Toxic Materials
- ☒ Oil & Grease
- ☐ Floatable Materials
- ☐ Other Waste

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

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

■ High ☒ Medium ☐ Low

BMP: Concrete Waste Management — CWM



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

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.

Adapted from Salt Lake County BMP Fact Sheet

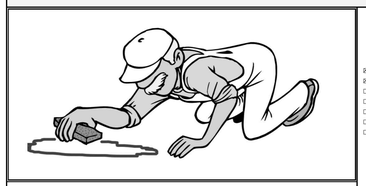
Targeted Pollutants
- ☐ Sediment
- ☐ Nutrients
- ☐ Toxic Materials
- ☐ Oil & Grease
- ☐ Floatable Materials
- ☒ Other Waste

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

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

■ High ☒ Medium ☐ Low

BMP: Spill Clean-Up — SCU



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

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

Application:
All sites

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

Methods:
- Clean-up spills/leaks immediately and remediate cause.
- Use as little water as possible. NEVER HOSE DOWN OR BURY SPILL CONTAMINATED MATERIAL.
- Use rags or absorbent material for clean-up. Excavate contaminated soils. Dispose of clean-up material and soil as hazardous waste.
- Document all spills with date, location, substance, volume, actions taken and other pertinent data.
- Contact local Fire Department and State Division of Environmental Response and Remediation (Phone #801-536-4100) for any spill of reportable quantity.

Adapted from Salt Lake County BMP Fact Sheet

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

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

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

■ High ☒ Medium ☐ Low

REGISTERED PROFESSIONAL ENGINEER
07/21/22
No. 270393
DAVID W. PETERSON
STATE OF UTAH

Developer: AXCESS CHIROPRACTIC 95 EAST 200 NORTH, AMERICAN FORK, UT 801-763-8813	AXCESS ACCIDENT CENTER BUILDING AMERICAN FORK 63 EAST 100 NORTH UTAH	
EXCEL ENGINEERING David W. Peterson, P.E., License #270393 12 West 100 North, Suite 201, American Fork, UT 84003 P: (801) 756-4504; david@excelcivil.com	Drawn by: D.W.P. Designed by: D.W.P. Checked by: D.W.P. BMP DETAILS	Scale: NTS Date: 07/21/22 C7

GENERAL NOTES

1. City of American Fork, A.P.W.A, Utah Chapter and Utah Department of Transportation Construction and Material Specifications, current editions, and any supplements thereto (hereafter referred to as Standard Specifications), shall govern all construction items unless otherwise noted. If a conflict between specifications is found, the more strict specification will apply as decided by the City Engineer. Item Numbers listed refer to City of American Fork Item Numbers unless otherwise noted.

2. The City Engineer will not be responsible for means, methods, procedures, techniques, or sequences of construction that are not specified herein. The City Engineer will not be responsible for safety on the work site, or for failure by the Contractor to perform work according to contract documents.

3. The Developer or Contractor shall be responsible to obtain all necessary permits including but not limited to Road Cut Permits and Notices of Intent (NOI), Building Permits, etc.

4. The Contractor shall notify the City of American Fork, Public Works Department in writing at least 7 working days prior to beginning construction and request a pre-construction meeting. Bond for public improvements and inspection fees must be paid in full prior to requesting a pre-construction meeting.

5. The Contractor shall be solely responsible for complying with all federal, state and local safety requirements including the Occupational Safety and Health Act of 1970. The Contractor shall exercise precaution always for the protection of persons (including employees) and property. It shall also be the sole responsibility of the Contractor to initiate, maintain and supervise all safety requirements, precautions and programs in connection with the work, including the requirements for confined spaces per 29 CFR 1910.146.

6. Following completion of construction of the site improvements and before requesting occupancy, a proof survey shall be provided to the City of American Fork, Public Works Department, that documents "as _ built" elevations, dimensions, slopes and alignments of all elements of this project. The proof survey shall be prepared, signed and submitted by the Professional Engineer who sealed the constructions drawings.

7. The Contractor shall restrict construction activity to public right_of_way and areas defined as permanent and/or temporary construction easements, unless otherwise authorized by the City Engineer.

8. The Contractor shall carefully preserve benchmarks, property corners, reference points, stakes and other survey reference monuments or markers. In cases of willful or careless destruction, the Contractor shall be responsible for restorations. Resetting of markers shall be performed by a License Utah Professional Surveyor as approved by the City Engineer.

9. Non_rubber tired vehicles shall not be moved on or across public streets or highways without the written permission of the City Engineer.

10. The Contractor shall restore all disturbed areas to equal or better condition than existed before construction. Drainage ditches or watercourses that are disturbed by construction shall be restored to the grades and cross_sections that existed before construction.

11. Tracking or spilling mud, dirt or debris upon streets, residential or commercial drives, sidewalks or bike paths is prohibited. Any such occurrence shall be cleaned up immediately by the Contractor at no cost to the City. If the Contractor fails to remove said mud, dirt, debris, or spillage, the City reserves the right to remove these materials and clean affected areas, the cost of which shall be the responsibility of the Contractor.

12. Disposal of excess excavation within Special Flood Hazard Areas (100-year floodplain) must be approved by the City Engineer.

13. All signs, landscaping, structures or other appurtenances within right-of-way disturbed or damaged during construction shall be replaced or repaired to the satisfaction of the City Engineer. The cost of this work shall be the responsibility of the Contractor.

14. All field tile broken or encountered during excavation shall be replaced or repaired and connected to the public storm sewer system as directed by the City Engineer. The cost of this work shall be the responsibility of the Contractor.

15. All precast concrete products shall be inspected at the location of manufacture. Approved precast concrete products will be stamped or have such identification noting that inspection has been conducted by the City of American Fork. Precast concrete products without proof of inspection shall not be approved for installation.

16. All trenches within public right-of-way shall be backfilled according to the approved construction drawings or securely plated during nonworking hours.

17. Trenches outside these areas shall be backfilled or shall be protected by approved temporary fencing or barricades during nonworking hours. Clean up shall follow closely behind the trenching operation.

18. All trees within the construction area not specifically designated for removal shall be preserved, whether shown or not shown on the approved construction drawings. Trees to be preserved shall be protected with high visibility fencing placed a minimum 15 feet from the tree trunk. Trees 6 - inches or greater at DBH (Diameter Breast Height) must be protected with fencing placed at the critical root zone or 15 feet, whichever is greater.

19. Trees not indicated on the approved construction drawings for removal may not be removed without prior approval of the Division of Engineering.

20. Permits to construct in the right-of-way of existing streets must be obtained from the City of American Fork, Public Works Department before commencing construction.

21. The Contractor shall be responsible for the condition of trenches within the right-of-way and public easements for a period of one year from the final acceptance of the work, and shall make any necessary repairs at no cost to the City.

22. Pavements shall be cut in neat, straight lines the full depth of the existing pavement, or as required by the City Engineer.

23. The replacement of driveways, handicapped ramps, sidewalks, bike paths, parking lot pavement, etc. shall be provided according to the approved construction drawings and the City of American Fork standard construction drawings.

24. Any modification to the work shown on drawings must have prior written approval by the City Engineer.

25. Traffic control and other regulatory signs shall comply with the Utah Department of Transportation Traffic Control guidelines and MUTCD Manual, current edition

26. Public street signs shall meet all City of American Fork specifications with lettering colored in white displayed over a green background.

27. Private street signs shall meet all City of American Fork specifications with lettering colored in white displayed over a blue background

AS-BUILT DRAWINGS

The Contractor shall prepare and furnish the Owner and Engineer a set of record drawings (As-Builts) at substantial completion of the project. All new Utility work completed during the project shall be Mapped (Surveyed or GPS'D) and submitted to the City electronically in both a PDF and GIS format. GIS DATA shall be in a Shape file format compatible with ARCMAP version 10.8 and in State Plane Coordinates (UTAH Central Zone - NAD 83 - US Survey feet)

UTILITIES

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

COMPANY	CONTACT	PHONE
AF PUBLIC WORKS - CULINARY/PI	JAY BREMS	801-763-3060
AF PUBLIC WORKS - SEWER/STORM DRAIN	ASHTON HARDY	801-763-3060
AF PUBLIC WORKS - CITY INSPECTOR	DEE HOWARD	801-763-3060
AF PUBLIC WORKS - SWPPP INSPECTOR	HARLAN NIELSON	801-763-3060
AF FIRE MARSHAL	MAT SACCO	801-763-3045
T.S.S.D.	DAVID BARLOW	801-756-5231
AF IRRIGATION COMPANY	ERNIE JOHN	801-471-6576
MITCHELL HOLLOW IRRIGATION CO.	DALE JONES	801-768-8150
ROCKY MOUNTAIN POWER	TERIA WALKER	801-756-1310
COMCAST	ELYSIA VALDEZ	801-401-3017
CENTURYLINK	BILL WESTFALL	435-623-4252
AF FIBER	KYLE PETERSON	801-400-2933
DOMINION ENERGY	TRENT JOHNSON	801-853-6548

2. The Contractor shall give notice of intent to construct to Blue Stake (telephone number 800-662-4111) at least 2 working days before start of construction.

3. The identity and locations of existing underground utilities in the construction area have been shown on the approved construction drawings as accurately as provided by the owner of the underground utility. The City of American Fork and the City Engineer assumes no responsibility for the accuracy or depths of underground facilities shown on the approved construction drawings. If damage is caused, the Contractor shall be responsible for repair of the same and for any resulting contingent damage.

4. Location, support, protection and restoration of all existing utilities and appurtenances, whether shown or not shown on the approved construction drawings, shall be the responsibility of the Contractor.

5. When unknown or incorrectly located underground utilities are encountered during construction, the Contractor shall immediately notify the owner and the City Engineer.

TRAFFIC CONTROL

1. Traffic control shall be furnished, erected, maintained, and removed by the Contractor according to Utah Department Of Transportation, Traffic Control guidelines or Manual of Uniform Traffic Control Devices, current edition.

2. All traffic lanes of public roadways shall be fully open to traffic from 7:00 AM to 9:00 AM and from 4:00 PM to 6:00 PM unless authorized differently by the City Engineer.

3. At all other hours the Contractor shall maintain minimum one _ lane two _ way traffic. Traffic circulation must be supervised by a Certified Flagger.

4. Steady _ burning, Type "C" lights shall be required on all barricades, drums, and similar traffic control devices in use at night.

5. Access from public roadways to all adjoining properties for existing residents or businesses shall be maintained throughout the duration of the project for mail, public water and sanitary sewer service, and emergency vehicles.

6. The Contractor shall provide a traffic control plan detailing the proposed maintenance of traffic procedures. The traffic control plan must incorporate any traffic control details contained herein.

7. The traffic control plan proposed by the Contractor must be approved by the City Engineer prior to construction.

8. Traffic Control requiring road closures and/ or detouring must be approved by the City Council.

EROSION AND SEDIMENT CONTROL

1. The Contractor or Developer is responsible for submitting a Notice of Intent (NOI) to be reviewed and approved by the Utah DWQ.

2. The NOI must be submitted to DWQ 45 days prior to the start of construction and may entitle coverage under the Utah DWQ General Permit for Storm Water Discharges associated with construction activity. A project location map must be submitted with the NOI.

3. A sediment and erosion control plan must be submitted to the City Engineer for approval if a sediment and erosion control plan has not already been included with the approved construction drawings. This plan must be made available at the project site at all times.

4. A UPDES Storm water Discharge Permit may be required. The Contractor shall be considered the Permittee.

5. The Contractor shall provide sediment control at all points where storm water runoff leaves the site, including waterways, overland sheet flow, and storm sewers.

6. Accepted methods of providing erosion/sediment control include but are not limited to: sediment basins, silt filter fence, aggregate check dams, and temporary ground cover. Hay or straw bales are not permitted.

7. The Contractor shall provide adequate drainage of the work area at all times consistent with erosion control practices.

8. Disturbed areas that will remain un-worked for 30 days or more shall be seeded or protected within seven calendar days of the disturbance.

9. Other sediment controls that are installed shall be maintained until vegetative growth has been established. The Contractor shall be responsible for the removal of all temporary sediment devices at the conclusion of construction but not before growth of permanent ground cover.

WATER LINE

1. All water line materials shall be provided and installed according to current specifications of the City of American Fork, Water Department.

2. All public water pipe with a diameter 3 inches to 8 inches shall be Ductile Iron, Class 53. Public water pipe 12 inches in diameter or larger shall be Ductile Iron, Class 54.

3. Only fire hydrants conforming to City of American Fork standards will be approved for use.

4. Public water lines shall be disinfected by the City of American Fork, Water Department. Requests for water line chlorination shall be made through the City of American Fork, Water Department. The cost for chlorination shall be paid for by the Contractor.

5. All water lines shall be disinfected according to City of American Fork Standard specifications. Special attention is directed to applicable sections of American Water Works Association specification C_651, particularly for flushing (Section 5) and for chlorinating valves and fire hydrants (Section 7).

6. Pressure testing shall be performed in accordance with the City of American Fork, Construction and Material Specifications. When water lines are ready for disinfection, the Contractor shall submit two (2) sets of "as-built" plans, and a letter stating that the water lines have been pressure tested and need to be disinfected, to the City of American Fork, Water Department.

7. The Contractor shall be responsible for all costs associated with the disinfection of all water lines construction per this plan. Pressure testing shall be performed in accordance with the City of American Fork, Construction and Material Specifications.

8. The Contractor shall paint all fire hydrants according to City of American Fork standards. The cost of painting fire hydrants shall be included in the contract unit price for fire hydrants.

9. No water taps or service connections (e.g., to curb stops or meter pits) may be issued until adjacent public water lines serving the construction site have been disinfected by the City of American Fork, Water Department and have been accepted by the Public Works Department.

10. The Contractor shall notify the City of American Fork, Water Department at (801) 763 3060 at least 24 hours before tapping into existing water lines.

11. All water main stationing shall be based on street centerline stationing.

12. All bends, joint deflections and fittings shall be backed with concrete per City of American Fork standards.

13. The Contractor shall give written notice to all affected property owners at least 1 working day but not more than 3 working days prior to any temporary interruption of water service. Interruption of water service shall be minimized and must be approved by the City Engineer.

14. All water lines shall be placed at a minimum depth of 4 feet measured from top of finished grade to top of water line. Water lines shall be set deeper at all points where necessary to clear existing or proposed utility lines or other underground restrictions by a minimum of 18 inches.

SANITARY SEWER

1. Sanitary sewage collection systems shall be constructed in accordance with the rules, regulations, standards and specifications of the City of American Fork, Public Works Department and the Utah Department of Health Code and Regulations.

2. The minimum requirements for sanitary sewer pipe with diameters 15 inches and smaller shall be reinforced concrete pipe ASTM C76 Class 3, or PVC sewer pipe ASTM D3034, SDR 35.

3. Pipe for 6-inch diameter house service lines shall be PVC pipe ASTM D3034, SDR 35. PVC pipe shall not be used at depths greater than 28 feet. Pipe materials and related structures shall be shop tested in accordance with City of American Fork Construction Inspection Division quality control requirements.

4. All manhole lids shall be provided with continuous self_sealing gaskets.

5. The approved construction drawings shall show where bolt_down lids are required.

6. Sanitary sewer manholes shall be precast concrete or as approved by the City Engineer and conform to the City of American Fork sanitary manhole standard drawing. Manhole lids shall include the word SEWER.

7. All PVC sewer pipes shall be deflection tested no less than 60 days after completion of backfilling operations.

7. At the determination of the City Engineer, the Contractor may be required to perform a TV inspection of the sanitary sewer system prior to final acceptance by the City. This work shall be completed by the Contractor at his expense.

8. Visible leaks or other defects observed or discovered during TV inspection shall be repaired to the satisfaction of the Engineer.

9. Roof drains, foundation drains, field tile or other clean water connections to the sanitary sewer system are strictly prohibited according to the American Fork Code of Ordinances.

10. All water lines shall be located at least 10 feet horizontally and 18 inches vertically, from sanitary sewers and storm sewers, to the greatest extent practicable.

11. Where sanitary sewers cross water mains or other sewers or other utilities, trench backfill shall be placed between the pipes crossing and shall be compacted granular material according to the city Standard Specifications. In the event that a water line must cross within 18 inches of a sanitary sewer, the sanitary sewer shall be concrete encased or consist of ductile iron pipe material.

12. Existing sanitary sewer flows shall be maintained at all times. Costs for pumping and bypassing shall be included in the Contractor's unit price bid for the related items.

13. The Contractor shall furnish all material, equipment, and labor to make connections to existing manholes.

14. All sewer lines shall be placed at a minimum depth of 4 feet measured from top of finished grade to top of sewer line.

STORM SEWER

1. All storm water detention and retention areas and major flood routing swales shall be constructed to finish grade and hydro _ seeded and hydro _ mulched according to the City of American Fork Standard Specifications.

2. Where private storm sewers connect to public storm sewers, the last run of private storm sewer connecting to the public storm sewer shall be Reinforced Concrete Pipe conforming to ASTM Designation C76, Wall B, Class IV for pipe diameters 12 inches to 15 inches, Class III for 18 inches to 24 inch pipes, and 27 inches and larger pipe shall be Class II, unless otherwise shown on the approved construction drawings.

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

4. All public storm sewers shall be Reinforced Concrete Pipe conforming to ASTM Designation C76, Wall B, Class IV for pipe diameters 12 inches to 15 inches, Class III for 18 inches to 24 inch pipes, and 27 inches and larger pipe shall be Class II, unless otherwise shown on the approved construction drawings.

5. Headwalls and end walls shall be required at all storm sewer inlets or outlets to and from storm water management facilities. Natural stone and/or brick approved by the City Engineer shall be provided on all visible headwalls and/or end walls surfaces.

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

7. Storm sewer outlets greater than 18 inches in diameter accessible from storm water management facilities or watercourses shall be provided with safety grates, as approved by the City Engineer.

STRIPING AND SIGNING

1. All striping must be done following Utah Department of Transportation guidelines and MUTCD Manual recommendations, current edition.

2. All signing must be done following MUTCD Manual recommendations, current edition.

3. Only sand-blasting is allowed for removal of existing striping.

4. Contractor is responsible for removal of conflicting existing striping.

5. Materials used for striping must comply with the Utah Department of Transportation standard specifications.

MAIL DELIVERY

1. The Contractor shall be responsible to ensure that US Mail delivery within the project limits is not disrupted by construction operations.

2. This responsibility is limited to relocation of mailboxes to a temporary location that will allow the completion of the work and shall also include the restoration of mailboxes to their original location or approved new location.

3. Any relocation of mailbox services must be first coordinated with the US Postal Service and the homeowner.

4. Before relocating any mailboxes, the Contractor shall contact the U.S. Postal Service and relocate mailboxes according to the requirements of the Postal Service.

USE OF FIRE HYDRANTS

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

PRESSURIZED IRRIGATION LINE

1. All Pressurized irrigation line materials shall be provided and installed according to current specifications of the City of American Fork, PI Department.

2. All pressurized irrigation pipe with a diameter 3 inches to 12 inches shall be C900 PVC purple pipe.

3. Pressure testing shall be performed in accordance with the City of American Fork, Construction and Material Specifications. The Contractor shall submit two (2) sets of "as-built" plans, and a letter stating that the lines have been pressure tested addressed to the City of American Fork, PI Department.

4. The Contractor shall notify the City of American Fork, PI Department at (801) 404-6129 Jay Brems at least 24 hours before tapping into existing water lines.

5. All pressurized irrigation line stationing shall be based on street centerline stationing.

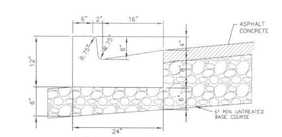
6. All bends, joint deflections and fittings shall be backed with concrete per City of American Fork standards.

7. The Contractor shall give written notice to all affected property owners at least 1 working day but not more than 3 working days prior to any temporary interruption of pressurized irrigation service. Interruption of pressurized irrigation service shall be minimized and must be approved by the City Engineer.

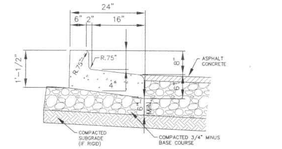
8. All water lines shall be placed at a minimum depth of 2 feet measured from top of finished grade to top of pressurized irrigation line. Pressurized irrigation lines shall be set deeper at all points where necessary to clear existing or proposed utility lines or other underground restrictions by a minimum of 18 inches.

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

Developer: AXCESS CHIROPRACTIC 95 EAST 200 NORTH, AMERICAN FORK, UT 801-763-8813	AXCESS ACCIDENT CENTER BUILDING AMERICAN FORK 63 EAST 100 NORTH UTAH	
EXCEL ENGINEERING David W. Peterson, P.E., License #270393 12 West 100 North, Suite 201, American Fork, UT 84003 P: (801) 756-4504; david@excelcivil.com	Drawn by: D.W.P. Designed by: D.W.P. Checked by: D.W.P.	AMERICAN FORK STANDARD CONSTRUCTION NOTES
	Scale: NTS Date: 07/21/22	C8



TYPE E CURB & GUTTER
-NTS-



REVERSE LIP CURB & GUTTER "PRIVATE USE ONLY"
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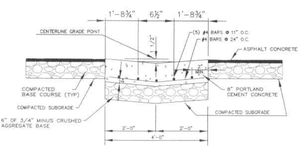

4.0' VALLEY GUTTER
-NTS-

DRAWN: JRP REVISED: DATE: MAY 2002 SCALE: VARIES	Northern ENGINEERING & LAND PLANNING CONSULTING ENGINEERS & MANAGEMENT 1043 E. 800 N. OREM, UTAH 84057 (801) 802-8992	AMERICAN FORK CITY	STANDARD DETAIL FOR TYPE B1 C&G REVERSE LIP C&G VALLEY GUTTER	DRAWING NO. 15.1

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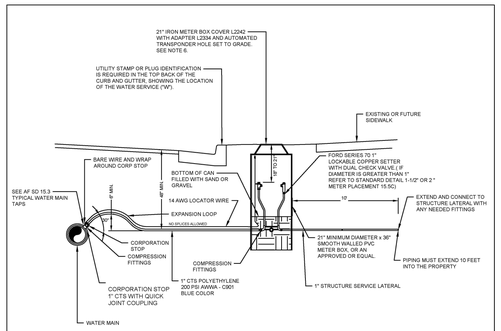
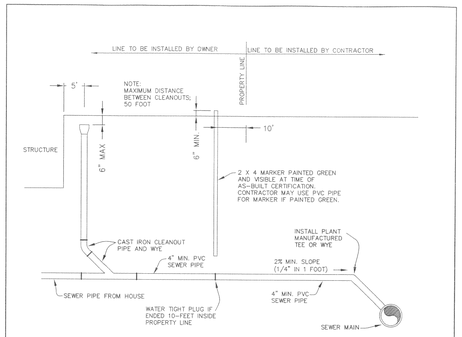


1" CULINARY WATER SERVICE CONNECTION

NOTES:

1. METER BOX, COVER, COPPERSETTER, CORPORATION STOP, & SERVICE LINES TO BE FURNISHED AND INSTALLED BY CONTRACTOR. METER IS REQUIRED AND MUST BE PURCHASED BY THE PROPERTY OWNER FROM THE CITY. METER IS PROVIDED AND INSTALLED BY THE CITY.
2. STAINLESS STEEL STIFFENERS ARE REQUIRED ON ALL POLYETHYLENE CONNECTIONS.
3. CULINARY WATER LATERALS THAT ARE LAID PARALLEL TO A SEWER MUST BE LAID AT LEAST 10'.
4. (EDGE TO EDGE)FROM ANY EXISTING OR PROPOSED SEWER LATERAL. (PER UTAH CODE R309-550-7)
5. WHERE WATER AND SEWER LATERALS MUST CROSS, WATER LATERAL SHALL BE A MINIMUM OF 18" ABOVE THE SEWER LATERAL AS MEASURED EDGE TO EDGE. (PER UTAH CODE R309-550-7)
6. TEFLON TAPE OR APPROVED EQUAL IS REQUIRED ON ALL THREADED CONNECTIONS.
7. ALL METER BOX LIDS WITHIN CONCRETE SHALL BE D&L SUPPLY MODEL B-5021(LIGHT TRAFFIC) WITH A RECESSED TRANSPONDER HOLE SET TO GRADE
8. ALL FITTINGS SHALL BE CTS.
9. SPLICING /REPAIR OF EXISTING POLY PIPE : MECHANICAL COMPRISION WITH INTERNAL STIFFENERS ARE REQUIRED MUST BE APPROVED BY AMERICAN FORK CITY.
10. 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
11. METER CAN SHALL BE INSTALLED AT THE CENTER OF THE PARK STRIP BETWEEN FRONT OF SIDEWALK AND BACK OF CURB

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



SEWER LATERAL DETAIL
-NTS-

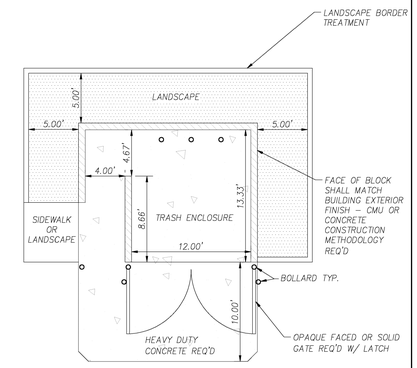
SEWER SURVICE LATERAL SADDLE
-NTS-

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

DRAWN: JRP REVISED: DATE: JULY 2002 SCALE: VARIES	Northern ENGINEERING & LAND PLANNING CONSULTING ENGINEERS & MANAGEMENT 1043 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

T:\AMERICAN FORK T:\PROJECT-AF-CITY-STANDARDS\SEWER LATERAL.dwg - 05/22/2005 - 10:51:26 AM MDT

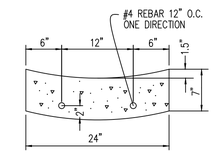
CITY STANDARD - DUMPSTER/ TRASH ENCLOSURE STANDARD 17.5.121.B



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:\LS-PROJECT-AF-CITY-STANDARDS\DUMPSTER.DWG
DATE: NOV. 16, 2010

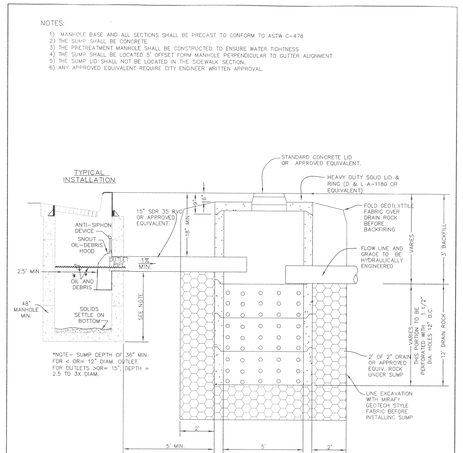
AMERICAN FORK
— 1853 —



24" CONCRETE WATERWAY

NOTE: USE 2" STEEL CHAIR SUPPORTS 18" O.C. FOR SPECIFIED REBAR.

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



PRETREATMENT MANHOLE AND SUMP DETAIL
-NTS-

DRAWN: JRP REVISED: DATE: MAY 2002 SCALE: VARIES	Northern ENGINEERING & LAND PLANNING CONSULTING ENGINEERS & MANAGEMENT 1043 E. 800 N. OREM, UTAH 84057 (801) 802-8992	AMERICAN FORK CITY	STANDARD DETAIL FOR PRETREATMENT MANHOLE AND SUMP	DRAWING NO. 15.14

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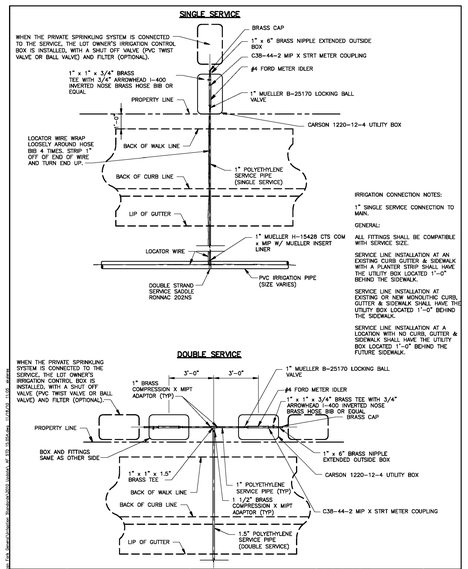
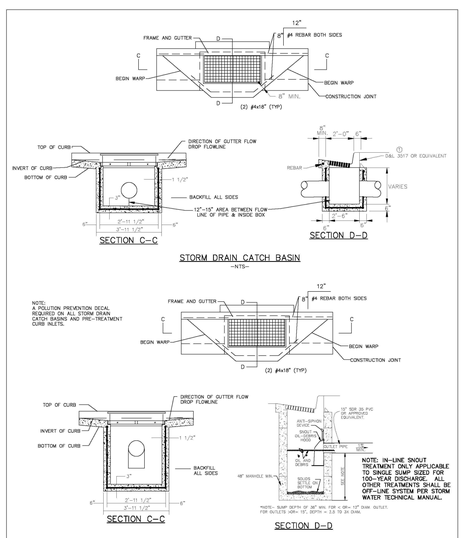
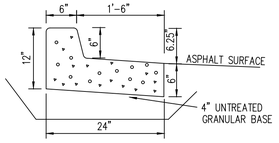


DRAWN: REVISED: 11/2010 DATE: SCALE:	HORROCKS ENGINEERS ONE WEST MAIN P.O. BOX 37 AMERICAN FORK (801) 763-5100	AMERICAN FORK CITY	STANDARD DETAIL FOR SINGLE/DOUBLE SERVICE CONNECTION FOR SECONDARY WATER	DRAWING NO. 15.5A



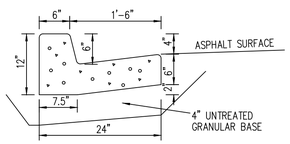
PRE-TREATMENT CURB INLET WITH SINGLE GRATE
-NTS-

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



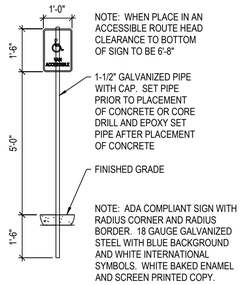
4" UNTREATED GRANULAR BASE UNDER CURB EXTENDING 6" LATERALLY IN FRONT AND BACK COMPACT TO 95% DENSITY ASTM D 1557-78

SPILL CURB
NOT TO SCALE



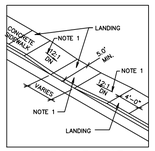
4" UNTREATED GRANULAR BASE UNDER CURB EXTENDING 6" LATERALLY IN FRONT AND BACK COMPACT TO 95% DENSITY ASTM D 1557-78

CARRY CURB
NOT TO SCALE



NOTE: WHEN PLACE IN AN ACCESSIBLE ROUTE HEAD CLEARANCE TO BOTTOM OF SIGN TO BE 6'-8"

ADA VAN SIGN DETAIL



CURB RAMP
NOT TO SCALE

NOTES:
1. 12:1 (MAXIMUM) IN DIRECTION OF TRAVEL. LIMIT CROSS SLOPE ON SIDEWALKS 2%
2. ALL LANDINGS MUST HAVE 1:48 CROSS SLOPE AND RUNNING SLOPE. LANDING MUST BE AS WIDE AS THE RAMP.
3. CROSS SLOPE ON RAMP MUST BE 1:48 OR LESS.

REGISTERED PROFESSIONAL ENGINEER
01/10/22
No. 270393
DAVID W. PETERSON
STATE OF UTAH

Developer: AXCESS CHIROPRACTIC 95 EAST 200 NORTH, AMERICAN FORK, UT 801-763-8813	AXCESS ACCIDENT CENTER BUILDING AMERICAN FORK 63 EAST 100 NORTH UTAH	
EXCEL ENGINEERING David W. Peterson, P.E., License #270393 12 West 100 North, Suite 201, American Fork, UT 84003 P: (801) 756-4504; david@excelcivil.com	Drawn by: D.W.P. Designed by: D.W.P. Checked by: D.W.P.	DETAIL SHEET
	Scale: NTS Date: 07/21/22 C9	

CULTEC RECHARGER® 330XLHD PRODUCT SPECIFICATIONS

GENERAL
CULTEC RECHARGER 330XLHD CHAMBERS ARE DESIGNED FOR UNDERGROUND STORMWATER MANAGEMENT. THE CHAMBERS MAY BE USED FOR RETENTION, RECHARGING, DETENTION OR CONTROLLING THE FLOW OF ON-SITE STORMWATER RUNOFF.

CHAMBER PARAMETERS

1. THE CHAMBERS SHALL BE MANUFACTURED BY CULTEC, INC. OF BROOKFIELD, CT, USA. (203-775-4416 OR 1-800-428-5832)
2. THE CHAMBER SHALL BE VACUUM THERMOFORMED OF HIGH MOLECULAR WEIGHT HIGH DENSITY POLYETHYLENE (HMWHDPE) WITH A BLACK INTERIOR AND BLUE EXTERIOR.
3. THE CHAMBER SHALL BE ARCHED IN SHAPE.
4. THE CHAMBER SHALL BE OPEN-BOTTOMED.
5. THE CHAMBER SHALL BE JOINED USING AN INTERLOCKING OVERLAPPING RIB METHOD. CONNECTIONS MUST BE FULLY SHOULDERED OVERLAPPING RIBS, HAVING NO SEPARATE COUPLINGS OR SEPARATE END WALLS
6. THE NOMINAL CHAMBER DIMENSIONS OF THE CULTEC RECHARGER 330XLHD SHALL BE 30.5 INCHES (775 mm) TALL, 52 INCHES (1321 mm) WIDE AND 8.5 FEET (2.59 m) LONG. THE INSTALLED LENGTH OF A JOINED RECHARGER 330XLHD SHALL BE 7 FEET (2.13 m).
7. MAXIMUM INLET OPENING ON THE CHAMBER ENDWALL IS 24 INCHES (600 mm) HDPE.
8. THE CHAMBER SHALL HAVE TWO SIDE PORTALS TO ACCEPT CULTEC HVLV® FC-24 FEED CONNECTORS TO CREATE AN INTERNAL MANIFOLD. THE NOMINAL DIMENSIONS OF EACH SIDE PORTAL SHALL BE 10.5 INCHES (267 mm) HIGH BY 11.5 INCHES (292 mm) WIDE. MAXIMUM ALLOWABLE OUTER DIAMETER (O.D.) PIPE SIZE IN THE SIDE PORTAL IS 11.75 INCHES (298 mm).
9. THE NOMINAL CHAMBER DIMENSIONS OF THE CULTEC HVLV FC-24 FEED CONNECTOR SHALL BE 12 INCHES (305 mm) TALL, 16 INCHES (406 mm) WIDE AND 24.2 INCHES (614 mm) LONG.
10. THE NOMINAL STORAGE VOLUME OF THE RECHARGER 330XLHD CHAMBER SHALL BE 7.459 FT³ / FT (0.693 m³ / m) - WITHOUT STONE. THE NOMINAL STORAGE VOLUME OF A JOINED RECHARGER 330XLHD SHALL BE 52.213 FT³ / UNIT (1.478 m³ / UNIT) - WITHOUT STONE
11. THE NOMINAL STORAGE VOLUME OF THE HVLV FC-24 FEED CONNECTOR SHALL BE 0.913 FT³ / FT (0.085 m³ / m) - WITHOUT STONE.
12. THE RECHARGER 330XLHD CHAMBER SHALL HAVE FIFTY-SIX DISCHARGE HOLES BORED INTO THE SIDEWALLS OF THE UNIT'S CORE TO PROMOTE LATERAL CONVEYANCE OF WATER.
13. THE RECHARGER 330XLHD CHAMBER SHALL HAVE 16 CORRUGATIONS.
14. THE ENDWALL OF THE CHAMBER, WHEN PRESENT, SHALL BE AN INTEGRAL PART OF THE CONTINUOUSLY FORMED UNIT. SEPARATE END PLATES CANNOT BE USED WITH THIS UNIT.
15. THE RECHARGER 330XLHD STAND ALONE UNIT MUST BE FORMED AS A WHOLE CHAMBER HAVING TWO FULLY FORMED INTEGRAL ENDWALLS AND HAVING NO SEPARATE END PLATES OR SEPARATE END WALLS.
16. THE RECHARGER 330XLSHD STARTER UNIT MUST BE FORMED AS A WHOLE CHAMBER HAVING ONE FULLY FORMED INTEGRAL ENDWALL AND ONE PARTIALLY FORMED INTEGRAL ENDWALL WITH A LOWER TRANSFER OPENING OF 14 INCHES (356 mm) HIGH X 34.5 INCHES (876 mm) WIDE.
17. THE RECHARGER 330XLIHD INTERMEDIATE UNIT MUST BE FORMED AS A WHOLE CHAMBER HAVING ONE FULLY OPEN ENDWALL AND ONE PARTIALLY FORMED INTEGRAL ENDWALL WITH A LOWER TRANSFER OPENING OF 14 INCHES (356 mm) HIGH X 34.5 INCHES (876 mm) WIDE.
18. THE RECHARGER 330XLEHD END UNIT MUST BE FORMED AS A WHOLE CHAMBER HAVING ONE FULLY FORMED INTEGRAL ENDWALL AND ONE FULLY OPEN END WALL AND HAVING NO SEPARATE END PLATES OR END WALLS.
19. THE HVLV FC-24 FEED CONNECTOR MUST BE FORMED AS A WHOLE CHAMBER HAVING TWO OPEN END WALLS AND HAVING NO SEPARATE END PLATES OR SEPARATE END WALLS. THE UNIT SHALL FIT INTO THE SIDE PORTALS OF THE RECHARGER 330XLHD AND ACT AS CROSS FEED CONNECTIONS.
20. CHAMBERS MUST HAVE HORIZONTAL STIFFENING FLEX REDUCTION STEPS BETWEEN THE RIBS.
21. THE CHAMBER SHALL HAVE A 6 INCH (152 mm) DIAMETER RAISED INTEGRAL CAP AT THE TOP OF THE ARCH IN THE CENTER OF EACH UNIT TO BE USED AS AN OPTIONAL INSPECTION PORT OR CLEAN-OUT.
22. THE UNITS MAY BE TRIMMED TO CUSTOM LENGTHS BY CUTTING BACK TO ANY CORRUGATION.
23. THE CHAMBER SHALL BE MANUFACTURED IN AN ISO 9001:2015 CERTIFIED FACILITY.
24. THE CHAMBER SHALL BE DESIGNED AND MANUFACTURED TO MEET THE MATERIAL AND STRUCTURAL REQUIREMENTS OF IAPMO PS 63-2019, INCLUDING RESISTANCE TO AASHTO H-10 AND H-20 HIGHWAY LIVE LOADS, WHEN INSTALLED IN ACCORDANCE WITH CULTEC'S INSTALLATION INSTRUCTIONS.
25. THE CHAMBER SHALL BE DESIGNED AND MANUFACTURED IN ACCORDANCE WITH THE SPECIFICATIONS OF NSAI IRISH AGREEMENT BOARD CERTIFICATE FOR CULTEC ATTENUATION AND INFILTRATION.
26. MAXIMUM ALLOWED COVER OVER TOP OF UNIT SHALL BE 12 FEET (3.66 m)
27. THE CHAMBER SHALL BE DESIGNED TO WITHSTAND TRAFFIC LOADS WHEN INSTALLED ACCORDING TO CULTEC'S RECOMMENDED INSTALLATION INSTRUCTIONS.

CULTEC HVLV FC-24 FEED CONNECTOR PRODUCT SPECIFICATIONS

GENERAL
CULTEC HVLV FC-24 FEED CONNECTORS ARE DESIGNED TO CREATE AN INTERNAL MANIFOLD FOR CULTEC RECHARGER MODEL 330XLHD STORMWATER CHAMBERS.

CHAMBER PARAMETERS

1. THE CHAMBERS SHALL BE MANUFACTURED BY CULTEC, INC. OF BROOKFIELD, CT. (203-775-4416 OR 1-800-428-5832)
2. THE CHAMBER SHALL BE VACUUM THERMOFORMED OF HIGH MOLECULAR WEIGHT HIGH DENSITY POLYETHYLENE (HMWHDPE) WITH A BLACK INTERIOR AND BLUE EXTERIOR.
3. THE CHAMBER SHALL BE ARCHED IN SHAPE.
4. THE CHAMBER SHALL BE OPEN-BOTTOMED.
5. THE NOMINAL CHAMBER DIMENSIONS OF THE CULTEC HVLV FC-24 FEED CONNECTOR SHALL BE 12 INCHES (305 mm) TALL, 16 INCHES (406 mm) WIDE AND 24.2 INCHES (614 mm) LONG.
6. THE NOMINAL STORAGE VOLUME OF THE HVLV FC-24 FEED CONNECTOR SHALL BE 0.913 FT³ / FT (0.085 m³ / m) - WITHOUT STONE.
7. THE HVLV FC-24 FEED CONNECTOR CHAMBER SHALL HAVE 2 CORRUGATIONS.
8. THE HVLV FC-24 FEED CONNECTOR MUST BE FORMED AS A WHOLE CHAMBER HAVING TWO OPEN END WALLS AND HAVING NO SEPARATE END PLATES OR SEPARATE END WALLS. THE UNIT SHALL FIT INTO THE SIDE PORTALS OF THE CULTEC RECHARGER 330XLHD STORMWATER CHAMBER AND ACT AS CROSS FEED CONNECTIONS CREATING AN INTERNAL MANIFOLD.
9. THE CHAMBER SHALL BE DESIGNED TO WITHSTAND TRAFFIC LOADS WHEN INSTALLED ACCORDING TO CULTEC'S RECOMMENDED INSTALLATION INSTRUCTIONS.
10. THE CHAMBER SHALL BE MANUFACTURED IN AN ISO 9001:2015 CERTIFIED FACILITY.

CULTEC NO. 410™ NON-WOVEN GEOTEXTILE

CULTEC NO. 410™ NON-WOVEN GEOTEXTILE MAY BE USED WITH CULTEC CONTACTOR® AND RECHARGER® STORMWATER INSTALLATIONS TO PROVIDE A BARRIER THAT PREVENTS SOIL INTRUSION INTO THE STONE.

GEOTEXTILE PARAMETERS

1. THE GEOTEXTILE SHALL BE PROVIDED BY CULTEC, INC. OF BROOKFIELD, CT. (203-775-4416 OR 1-800-428-5832)
2. THE GEOTEXTILE SHALL BE BLACK IN APPEARANCE.
3. THE GEOTEXTILE SHALL HAVE A TYPICAL WEIGHT OF 4.5 OZ/SY (142 G/M).
4. THE GEOTEXTILE SHALL HAVE A TENSILE STRENGTH VALUE OF 120 LBS (533 N) PER ASTM D4632 TESTING METHOD.
5. THE GEOTEXTILE SHALL HAVE AN ELONGATION @ BREAK VALUE OF 50% PER ASTM D4632 TESTING METHOD.
6. THE GEOTEXTILE SHALL HAVE A MULLEN BURST VALUE OF 225 PSI (1551 KPA) PER ASTM D3786 TESTING METHOD.
7. THE GEOTEXTILE SHALL HAVE A PUNCTURE STRENGTH VALUE OF 65 LBS (289 N) PER ASTM D4833 TESTING METHOD.
8. THE GEOTEXTILE SHALL HAVE A CBR PUNCTURE VALUE OF 340 LBS (1513 N) PER ASTM D6241 TESTING METHOD.
9. THE GEOTEXTILE SHALL HAVE A TRAPEZOID TEAR VALUE OF 50 LBS (222 N) PER ASTM D4533 TESTING METHOD.
10. THE GEOTEXTILE SHALL HAVE A AOS VALUE OF 70 U.S. SIEVE (0.212 MM) PER ASTM D4751 TESTING METHOD.
11. THE GEOTEXTILE SHALL HAVE A PERMITTIVITY VALUE OF 1.7 SEC-1 PER ASTM D4491 TESTING METHOD.
12. THE GEOTEXTILE SHALL HAVE A WATER FLOW RATE VALUE OF 135 GAL/MIN/SF (5500 L/MIN/SM) PER ASTM D4491 TESTING METHOD.
13. THE GEOTEXTILE SHALL HAVE A UV STABILITY @ 500 HOURS VALUE OF 70% PER ASTM D4355 TESTING METHOD.

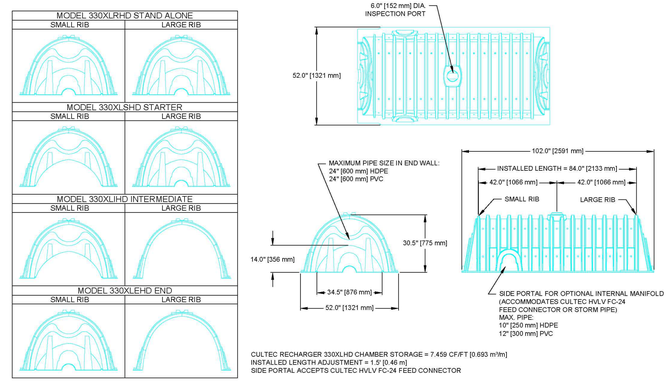
CULTEC NO. 4800™ WOVEN GEOTEXTILE

CULTEC NO. 4800 WOVEN GEOTEXTILE IS DESIGNED AS A UNDERLAYMENT TO PREVENT SCOURING CAUSED BY WATER MOVEMENT WITHIN THE CULTEC CHAMBERS AND FEED CONNECTORS UTILIZING THE CULTEC MANIFOLD FEATURE. IT MAY ALSO BE USED AS A COMPONENT OF THE CULTEC SEPARATOR ROW TO ACT AS A BARRIER TO PREVENT SOIL/CONTAMINANT INTRUSION INTO THE STONE WHILE ALLOWING FOR MAINTENANCE.

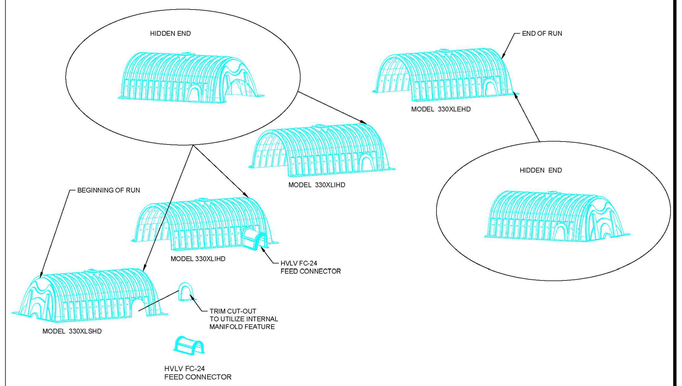
GEOTEXTILE PARAMETERS

1. THE GEOTEXTILE SHALL BE PROVIDED BY CULTEC, INC. OF BROOKFIELD, CT. (203-775-4416 OR 1-800-428-5832)
2. THE GEOTEXTILE SHALL BE BLACK IN APPEARANCE.
3. THE GEOTEXTILE SHALL HAVE A TENSILE STRENGTH OF 550 X 550 LBS (2,448 X 2,448 N) PER ASTM D4632 TESTING METHOD.
4. THE GEOTEXTILE SHALL HAVE A ELONGATION @ BREAK RESISTANCE OF 20 X 20% PER ASTM D4632 TESTING METHOD.
5. THE GEOTEXTILE SHALL HAVE A WIDE WIDTH TENSILE RESISTANCE OF 5,070 X 5,070 LBS/FT (74 X 74 KN/M) PER ASTM D4595 TESTING METHOD.
6. THE GEOTEXTILE SHALL HAVE A WIDE WIDTH TENSILE RESISTANCE @ 2% STRAIN OF 960 X 1,096 LBS/FT (14 X 16 KN/M) PER ASTM D4595 TESTING METHOD.
7. THE GEOTEXTILE SHALL HAVE A WIDE WIDTH TENSILE RESISTANCE @ 5% STRAIN OF 2,740 X 2, 740 LBS/FT (40 X 40 KN/M) PER ASTM D4595 TESTING METHOD.
8. THE GEOTEXTILE SHALL HAVE A WIDE WIDTH TENSILE RESISTANCE @ 10% STRAIN OF 4,800 X 4,800 LBS/FT (70 X 70 KN/M) PER ASTM D4595 TESTING METHOD.
9. THE GEOTEXTILE SHALL HAVE A CBR PUNCTURE RESISTANCE OF 1,700 LBS (7,560 N) PER ASTM D6241 TESTING METHOD.
10. THE GEOTEXTILE SHALL HAVE A TRAPEZOIDAL TEAR RESISTANCE OF 180 X 180 LBS (801 X 801 N) PER ASTM D4533 TESTING METHOD.
11. THE GEOTEXTILE SHALL HAVE AN APPARENT OPENING SIZE OF 40 US STD. SIEVE (0.425 MM) PER ASTM D4751 TESTING METHOD.
12. THE GEOTEXTILE SHALL HAVE A PERMITTIVITY RATING OF 0.15 SEC-1 PER ASTM D4491 TESTING METHOD.
13. THE GEOTEXTILE SHALL HAVE A WATER FLOW RATING OF 11.5 GPM/FT2 (470 LPM/M2) PER ASTM D4491 TESTING METHOD.
14. THE GEOTEXTILE SHALL HAVE A UV RESISTANCE OF 80% @ 500 HRS. PER ASTM D4355 TESTING METHOD.

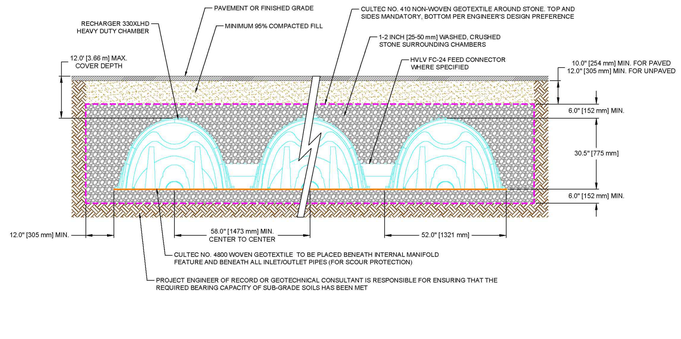
330XLHD 1.0 — **GENERAL NOTES**



330XLHD 2.0 — **CULTEC RECHARGER 330XLHD HEAVY DUTY THREE VIEW**

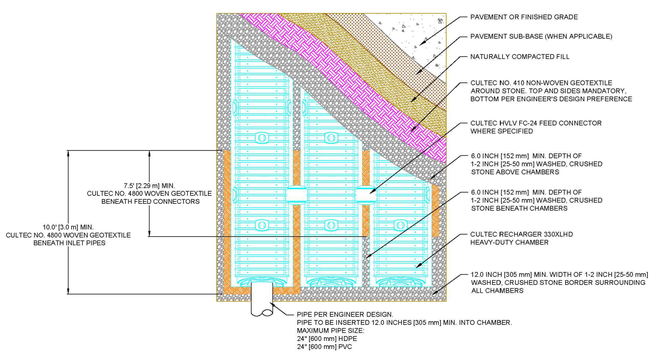


330XLHD 3.0 — **CULTEC RECHARGER 330XLHD HEAVY DUTY END DETAIL INFORMATION**

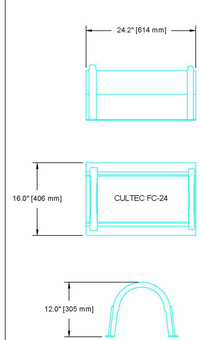


330XLHD 4.0 — **CULTEC RECHARGER 330XLHD HEAVY DUTY CROSS SECTION**

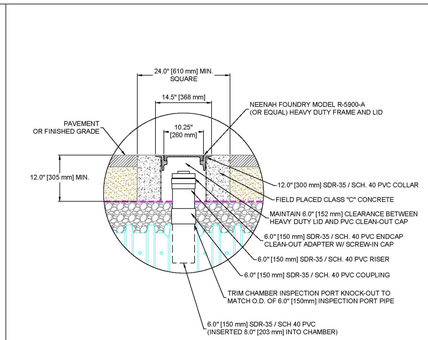
330XLHD 5.0 — **CULTEC RECHARGER 330XLHD HEAVY DUTY TYPICAL INTERLOCK**



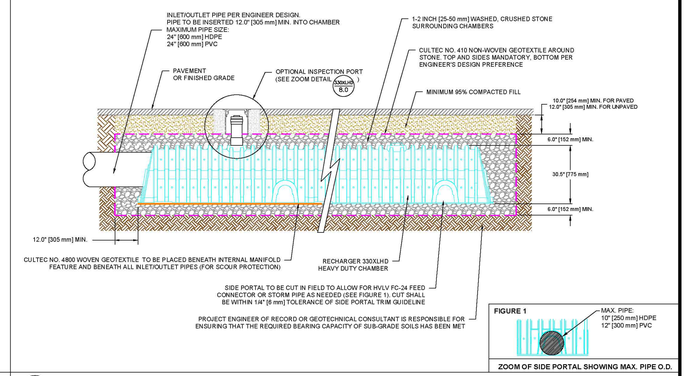
330XLHD 6.0 — **CULTEC RECHARGER 330XLHD HEAVY DUTY PLAN VIEW**



330XLHD 7.0 — **CULTEC HVLV FC-24 FEED CONNECTOR THREE VIEW**



330XLHD 8.0 — **OPTIONAL INSPECTION PORT- ZOOM DETAIL**



330XLHD 9.0 — **CULTEC INTERNAL MANIFOLD- OPTIONAL INSPECTION PORT DETAIL**

CULTEC, Inc.
Subsurface Stormwater Management Systems
P.O. Box 280
878 Federal Road
Brookfield, CT 06804
www.cultec.com
PH: (203) 775-4416
PH: (800) 4-CULTEC
FX: (203) 775-1462
tech@cultec.com

THIS DRAWING WAS PREPARED TO SUPPORT THE PROJECT ENGINEER OF RECORD FOR THE PROPOSED SYSTEM. IT IS THE ULTIMATE RESPONSIBILITY OF THE PROJECT ENGINEER OF RECORD TO ENSURE THAT THE CULTEC SYSTEM'S DESIGN IS IN FULL COMPLIANCE WITH ALL APPLICABLE LAWS AND REGULATIONS. IT IS THE PROJECT ENGINEER OF RECORD'S RESPONSIBILITY TO ENSURE THAT THE CULTEC PRODUCTS ARE DESIGNED IN ACCORDANCE WITH CULTEC'S MINIMUM REQUIREMENTS. CULTEC DOES NOT APPROVE PLANS, SIZING, OR SYSTEM DESIGNS.

RECHARGER 330XLHD
DETAIL SHEET
TRAFFIC APPLICATION

CULTEC STORMWATER CHAMBER			
PROJECT NO:		DATE:	2019
DESIGNED BY:	CULTEC, INC	CHECKED BY:	TECH
SCALE:	N.T.S.	SHEET NO:	1 OF 1

REGISTERED PROFESSIONAL ENGINEER
09/10/22
No. 270393
DAVID W. PETERSON
STATE OF UTAH

Developer: AXCESS CHIROPRACTIC
95 EAST 200 NORTH, AMERICAN FORK, UT 801-763-8813

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

AXCESS ACCIDENT CENTER BUILDING
AMERICAN FORK 63 EAST 100 NORTH UTAH

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

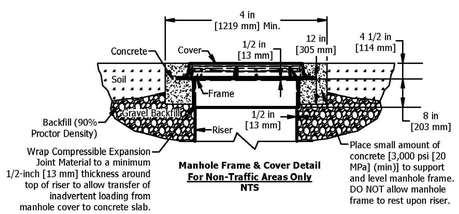
DETAIL SHEET

Scale: NTS
Date: 09/27/22
C10

Aqua-Swirl Polymer Coated Steel (PCS)
Stormwater Treatment System

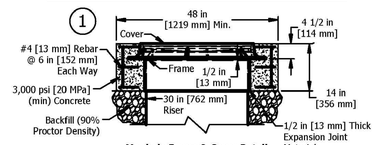
Projected View
SCALE 1:80

Unless other traffic barriers are present, bollards shall be placed around access riser(s) in non-traffic areas to prevent inadvertent loading by maintenance vehicles.



Manhole Frame & Cover Detail
For Non-Traffic Areas Only
NTS

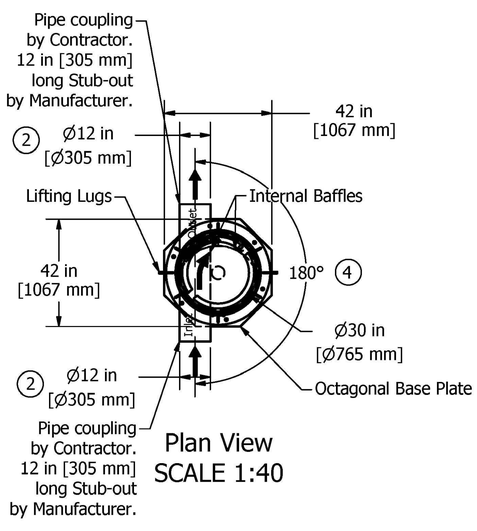
If traffic loading (HS-25) is required or anticipated, a 4-foot [1.22 m] diameter, 14-inch [356 mm] thick reinforced concrete pad must be placed over the Stormwater Treatment System Riser to support and level the manhole frame, as shown. The top of riser pipe must be wrapped with compressible expansion joint material to a minimum 1/2-inch [13 mm] thickness to allow transfer of wheel loads from manhole cover to concrete slab. Manhole cover shall bear on concrete slab and not on riser pipe. The concrete slab shall have a minimum strength of 3,000 psi [20 MPa] and be reinforced with #4 [13 mm] reinforcing steel as shown. Minimum cover over reinforcing steel shall be 1-inch [25 mm]. Top of manhole cover and concrete slab shall be level with finish grade.



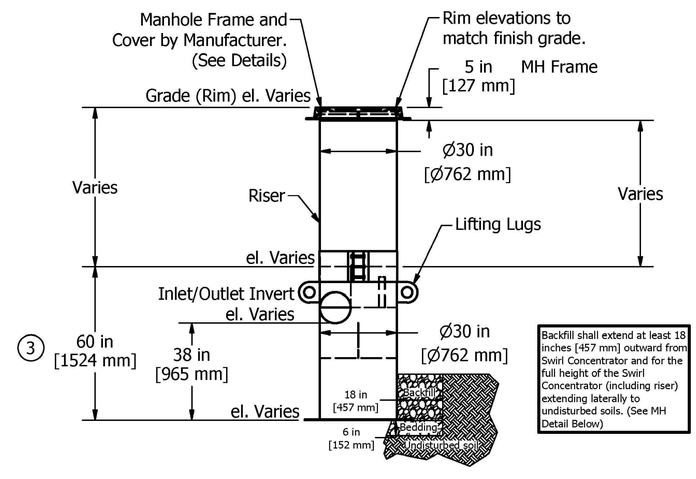
Manhole Frame & Cover Detail
For Traffic Loading Areas
NTS

Please see accompanied Aqua-Swirl specification notes. See Site Plan for actual system orientation. Approximate dry (pick) weight: 1000 lbs [500 kg].

1. As an alternative, 42 in [1067 mm] diameter, HS-20/25 rated precast concrete rings may be substituted. 14 in [356 mm] thickness must be maintained.
2. AS-2 BYP inlet/outlet pipe size ranges from 8 in [203 mm] to 15 in [381 mm].
3. AS-2 chamber height may vary from 52 in [1321 mm] to 60 in [1524 mm], depending on inlet/outlet pipe size.
4. Orientation may vary from a minimum of 90° to a maximum of 180°.



Plan View
SCALE 1:40



Backfill shall extend at least 18 inches [457 mm] outward from Swirl Concentrator and for the full height of the Swirl Concentrator (including riser) extending laterally to undisturbed soils. (See MH Detail Below)

Elevation View
SCALE 1:40

AquaShield WATER TREATMENT SOLUTIONS 2733 Kanasita Drive, Suite 111, Chattanooga, TN 37343 Phone (888) 344-9044 Fax (423) 826-2112 www.aquashieldinc.com	Aqua-Swirl Concentrator AS-2 BYP CW STD	Structure #:	AS-2 STD	Rvwed	Rvw. Date
		Drawn By:	OFlores		
	Aqua-Swirl Concentrator Model Standard Detail	Scale:	As Shown		
		Date:	9/26/2018		
		U.S. Patent No. 6524473 and other Patent Pending			

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AXCESS ACCIDENT CENTER BUILDING
AMERICAN FORK 63 EAST 100 NORTH UTAH

Drawn by: D.W.P.	DETAIL SHEET	Scale: NTS
Designed by: D.W.P.		Date: 09/27/22
Checked by: D.W.P.		C11

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

NORTH

NARRATIVE

1. THE PURPOSE OF THIS SURVEY IS TO SHOW THOSE TO WHOM THIS SURVEY IS CERTIFIED PERTINENT INFORMATION REQUIRED OF AN A.L.T.A./A.C.S.M. LAND TITLE SURVEY.
2. THE BASIS OF BEARING IS SOUTH 89°56'33" EAST ALONG THE SECTION LINE FROM THE SOUTH QUARTER CORNER TO THE SOUTHEAST CORNER OF SECTION 14, TOWNSHIP 5 SOUTH, RANGE 2 EAST, SALT LAKE BASE & MERIDIAN.
3. PROPERTY IS LOCATED IN THE SOUTHWEST QUARTER OF SAID SECTION 14.
4. FOUND UTAH COUNTY BRASS CAP MONUMENTS AT THE SOUTH QUARTER CORNER & THE SOUTHWEST CORNER OF SAID SECTION 14, AS SHOWN HEREON.
5. THIS SURVEY IS REFERENCED TO AND BASED UPON THE TITLE REPORT PREPARED BY OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY, FILE NO. 2269069DJL, DATED JULY 4, 2022 AT 8:00 A.M.
6. SET 5/8" REBAR WITH YELLOW CAP MARKED L OF F/LS 5243543. IF ANY POINT FELL ON CONCRETE, NOTHING WAS SET. IF POINT FELL ON A FENCE POST, NOTHING WAS SET.
7. THE PROPERTY ADDRESSES ARE 63 & 69 EAST 100 NORTH & 84 EAST 150 NORTH.
8. THE CURRENT FLOOD ZONE CLASSIFICATION IS "ZONE C", DEFINED AS AREAS OF MINIMAL FLOODING, BASED ON FLOOD INSURANCE RATE MAP COMMUNITY–PANEL NUMBER 490152 0005 B WITH AN EFFECTIVE DATE OF NOVEMBER 25, 1980. THE GROSS LAND AREA IS 0.5647 ACRES.
10. THE CURRENT ZONING FOR THIS PROPERTY IS ZONE "CC–1" (COMMERCIAL) ACCORDING TO THE CURRENT AMERICAN FORK CITY ZONING MAP.
11. ALL OF THE SUBSTANTIAL FEATURES OBSERVED ON THE SURVEYED PROPERTY ARE SHOWN IN DETAIL.
12. UTILITIES ADJACENT TO AND SERVING THIS PROPERTY ARE SHOWN HEREON.
13. THERE IS NO OBSERVED EVIDENCE OF ANY EARTH MOVING WORK, BUILDING CONSTRUCTION OR BUILDING ADDITIONS,
14. THERE ARE NO PROPOSED CHANGES IN STREET RIGHT–OF–WAY LINES.
15. THERE IS NO OBSERVED EVIDENCE OF SITE USE AS A SOLID WASTE DUMP, SUMP OR SANITARY LANDFILL.
16. THERE ARE NO OBSERVED WETLANDS AS DILENEATED BY APPROPRIATE AUTHORITIES.
17. THIS PROPERTY IS SUBJECT TO ALL EXISTING ROADS, STREET, ALLEYS, DITCHES, RESERVOIRS, UTILITIES, CANALS, PIPELINES, POWER POLES, TELEPHONE, SEWER, GAS OR WATER LINES AND RIGHTS OF WAY AND EASEMENTS THEREOF. IN EXCEPTION 11 OF SAID TITLE REPORT.
18. WATER RIGHTS, OR CLAIMS OR TITLE TO WATER, EXCEPTION 12 OF SAID TITLE REPORT.
19. PUBLIC UTILITY EASEMENT INCLUDING, BUT NOT LIMITED TO, UTILITY LINES, CABLE LINES, STREET LIGHTS, OVERHEAD POWER LINES AND THEIR SUPPORTING STRUCTURES LOCATED OVER AND ACROSS THE PROPERTY, AS EVIDENCED BY VISUAL INSPECTION OF THE SUBJECT PROPERTY, EXCEPTION 13 OF SAID TITLE REPORT.
20. EASEMENTS AND/OR RIGHT–OF–WAYS AS DISCLOSED BY NESNE INSTRUMENTS OF RECORD, INCLUDING BUT NOT LIMITED TO THAT CERTAIN QUIT–CLAIM DEED RECORDED DECEMBER 18, 1990 AS ENTRY 41971:1990 IN BOOK 2749 AT PAGE 5 OF OFFICIAL RECORDS, EXCEPTION 14 OF SAID TITLE REPORT. (RIGHT–OF–WAY FOR IRRIGATION MENTIONED BUT NOT DEFINED)

PARCEL 1 RECORD DESCRIPTION

BEGINNING AT A POINT ON THE NORTH LINE OF 100 NORTH STREET, AMERICAN FORK, UTAH, WHICH POINT IS WEST 131.50 FEET FROM THE SOUTHEAST CORNER OF BLOCK 25, PLAT A, AMERICAN FORK CITY SURVEY OF BUILDING LOTS; THENCE WEST ALONG THE NORTH LINE OF SAID STREET 33.00 FEET TO A FENCE LINE; THENCE NORTH 00°05'45" WEST ALONG SAID FENCE LINE 134.00 FEET; THENCE EAST ALONG SAID FENCE LINE 32.40 FEET TO A FENCE LINE; THENCE SOUTH 00°21'10" EAST ALONG SAID FENCE LINE 134.00 FEET TO THE POINT OF BEGINNING.

PARCEL 2 RECORD DESCRIPTION

COMMENCING 2.50 CHAINS WEST OF THE SOUTHEAST CORNER OF BLOCK 25, PLAT "A" AMERICAN FORK CITY SURVEY OF BUILDING LOTS; THENCE NORTH 20 RODS; THENCE WEST 3 3/4 RODS; THENCE SOUTH 20 RODS; THENCE EAST 3 3/4 RODS TO THE PLACE OF BEGINNING.

PARCEL 3 RECORD DESCRIPTION (TOTAL PARCEL)

COMMENCING AT THE NORTHEAST CORNER OF LOT 2, BLOCK 25, PLAT "A" AMERICAN FORK CITY SURVEY OF BUILDING LOTS, AMERICAN FORK, UTAH, UTAH COUNTY PLAT ACCORDING TO THE OFFICIAL RECORDS IN THE OFFICE OF THE UTAH COUNTY RECORDER; THENCE SOUTH 99 FEET; THENCE WEST 66 FEET, MORE OR LESS TO THE EAST LINE OF LOT 3, BLOCK 25, PLAT "A"; THENCE SOUTH ALONG SAID EAST LINE 97 FEET; THENCE WEST 33 FEET; THENCE NORTH 196 FEET TO THE NORTH LINE OF LOT 3, THENCE EAST ALONG THE NORTH LINE OF LOTS 3 AND 2, 99 FEET, MORE OR LESS, TO THE POINT OF BEGINNING.

PARCEL 1 AS–SURVEYED DESCRIPTION

BEGINNING AT A POINT LOCATED NORTH 89°13'10" WEST 131.92 FEET ALONG THE SOUTHERLY BLOCK LINE FROM THE SOUTHEAST CORNER OF BLOCK 25, PLAT "A" AMERICAN FORK CITY SURVEY OF BUILDING LOTS, SAID POINT ALSO BEING LOCATED SOUTH 89°56'33" EAST ALONG THE SECTION LINE 1405.66 FEET AND NORTH 710.45 FEET FROM THE SOUTH QUARTER CORNER OF SECTION 14, TOWNSHIP 5 SOUTH, RANGE 1 EAST, SALT LAKE BASE AND MERIDIAN; THENCE NORTH 89°13'10" WEST 33.09 FEET; THENCE NORTH 00°06'28" EAST 61.12 FEET; THENCE NORTH 00°49'39" EAST 72.88 FEET; THENCE SOUTH 88°30'54" EAST 33.36 FEET; THENCE SOUTH 01°15'25" WEST 22.99 FEET; THENCE SOUTH 00°28'40" WEST 110.60 FEET TO THE POINT OF BEGINNING.

AREA = 4,456 SQ. FT. OR 0.1023 ACRES

PARCEL 2 AS–SURVEYED DESCRIPTION

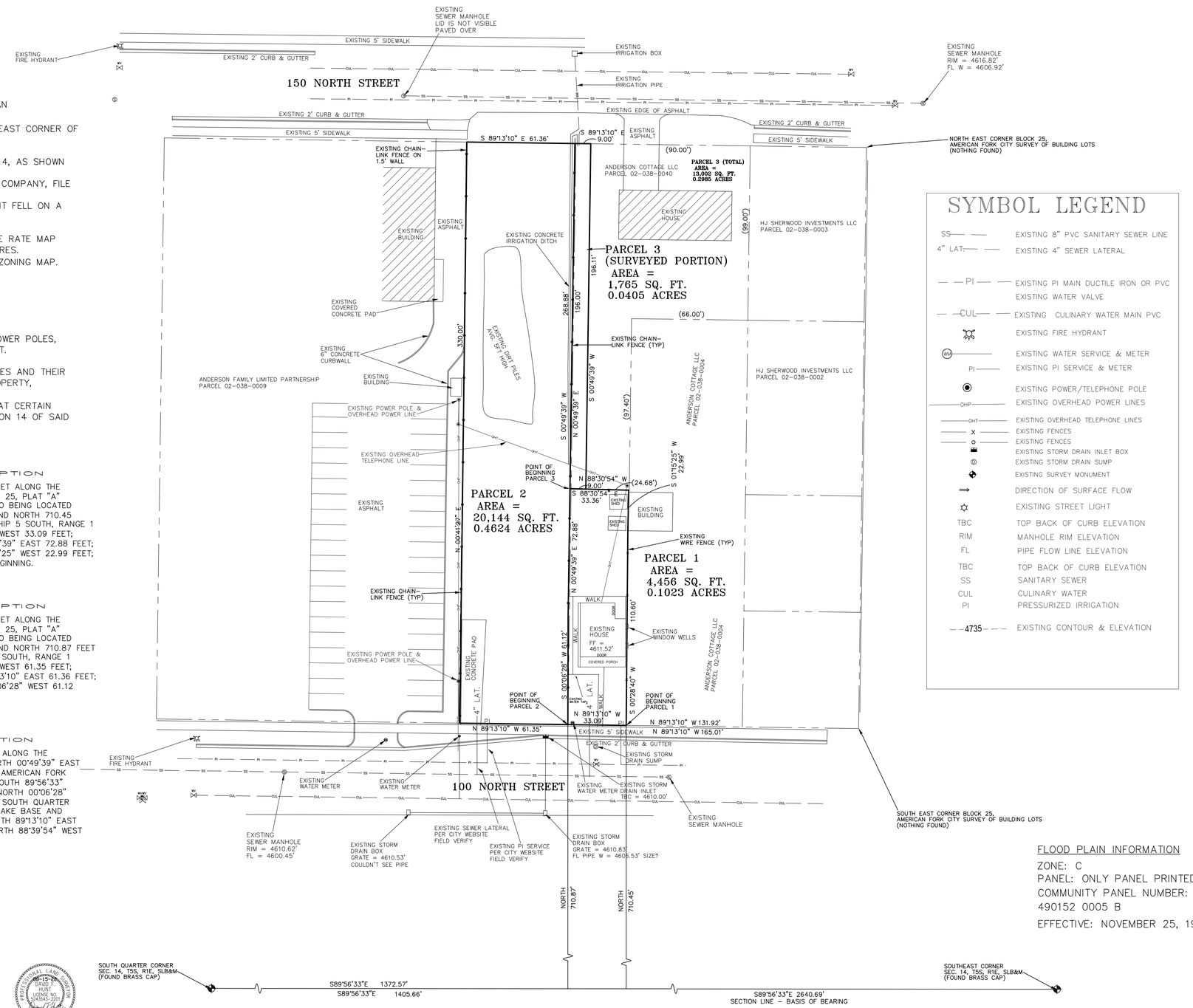
BEGINNING AT A POINT LOCATED NORTH 89°13'10" WEST 165.01 FEET ALONG THE SOUTHERLY BLOCK LINE FROM THE SOUTHEAST CORNER OF BLOCK 25, PLAT "A" AMERICAN FORK CITY SURVEY OF BUILDING LOTS, SAID POINT ALSO BEING LOCATED SOUTH 89°56'33" EAST ALONG THE SECTION LINE 1372.57 FEET AND NORTH 710.87 FEET FROM THE SOUTH QUARTER CORNER OF SECTION 14, TOWNSHIP 5 SOUTH, RANGE 1 EAST, SALT LAKE BASE AND MERIDIAN; THENCE NORTH 89°13'10" WEST 61.35 FEET; THENCE NORTH 00°41'37" EAST 330.00 FEET; THENCE SOUTH 89°13'10" EAST 61.36 FEET; THENCE SOUTH 00°49'39" WEST 268.88 FEET; THENCE SOUTH 00°06'28" WEST 61.12 FEET TO THE POINT OF BEGINNING.

AREA = 22,144 SQ. FT. OR 0.4624 ACRES

PARCEL 3 AS–SURVEYED DESCRIPTION

BEGINNING AT A POINT LOCATED NORTH 89°13'10" WEST 165.01 FEET ALONG THE SOUTHERLY BLOCK LINE, NORTH 00°06'28" EAST 61.12 FEET AND NORTH 00°49'39" EAST 72.88 FEET FROM THE SOUTHEAST CORNER OF BLOCK 25, PLAT "A" AMERICAN FORK CITY SURVEY OF BUILDING LOTS, SAID POINT ALSO BEING LOCATED SOUTH 89°56'33" EAST ALONG THE SECTION LINE 1372.57 FEET, NORTH 710.87 FEET, NORTH 00°06'28" EAST 61.12 FEET AND NORTH 00°49'39" EAST 72.88 FEET FROM THE SOUTH QUARTER CORNER OF SECTION 14, TOWNSHIP 5 SOUTH, RANGE 1 EAST, SALT LAKE BASE AND MERIDIAN; THENCE NORTH 00°49'39" EAST 196.00 FEET; THENCE SOUTH 89°13'10" EAST 9.00 FEET; THENCE SOUTH 00°49'39" WEST 196.11 FEET; THENCE NORTH 88°39'54" WEST 9.00 FEET TO THE POINT OF BEGINNING.

AREA = 1,765 SQ. FT. OR 0.0405 ACRES



SYMBOL LEGEND

SS	EXISTING 8" PVC SANITARY SEWER LINE
4" LAT.	EXISTING 4" SEWER LATERAL
PI	EXISTING PI MAIN DUCTILE IRON OR PVC
	EXISTING WATER VALVE
CUL	EXISTING CULINARY WATER MAIN PVC
	EXISTING FIRE HYDRANT
WM	EXISTING WATER SERVICE & METER
PI	EXISTING PI SERVICE & METER
	EXISTING POWER/TELEPHONE POLE
OHP	EXISTING OVERHEAD POWER LINES
OHT	EXISTING OVERHEAD TELEPHONE LINES
X	EXISTING FENCES
O	EXISTING FENCES
	EXISTING STORM DRAIN INLET BOX
	EXISTING STORM DRAIN SUMP
	EXISTING SURVEY MONUMENT
	DIRECTION OF SURFACE FLOW
	EXISTING STREET LIGHT
TBC	TOP BACK OF CURB ELEVATION
RIM	MANHOLE RIM ELEVATION
FL	PIPE FLOW LINE ELEVATION
TBC	TOP BACK OF CURB ELEVATION
SS	SANITARY SEWER
CUL	CULINARY WATER
PI	PRESSURIZED IRRIGATION
4735	EXISTING CONTOUR & ELEVATION

FLOOD PLAIN INFORMATION

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

ENGINEER

EXCEL ENGINEERING, DAVID W. PETERSON
12 WEST 100 NORTH, SUITE 201
CEDAR HILLS, UT 84062
(801) 756–4504

SURVEYOR

DAVID F. HUNT
1334 EAST 1150 SOUTH
SPANISH FORK, UT 84660
(801) 319–5441

OWNER/DEVELOPER

ALAN ANDERSON & ANDERSON COTTAGE LLC
69 EAST 100 NORTH
AMERICAN FORK, UT 84003

CERTIFICATION

"I HEREBY CERTIFY TO ALAN STEPHEN ANDERSON, ANDERSON COTTAGE LLC, AMERICAN FORK CITY, OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY AND TO THEIR SUCCESSORS AND ASSIGNS THAT:

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2016 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 1, 2, 3, 4, 6(a), 6(b), 7(a), 8, 9, 10(a), 10(b), 11, 12, 13, 16, 17, 18, AND 19 OF TABLE A THEREOF. THE ADDITIONAL ITEMS FROM TABLE "A" REQUESTED WERE #11b AND #20a. THESE ADDITIONAL ITEMS ARE DESCRIBED IN THE NARRATIVE AND/OR SHOWN HEREON. THE FIELD WORK WAS COMPLETED ON JANUARY 18, SEPTEMBER 11, 2020 AND AUGUST 12, 2022. THE LATEST INSPECTION WAS COMPLETED ON AUGUST 12, 2022.

PROFESSIONAL LAND SURVEYOR 08-15-22 DAVID F. HUNT LICENSE NO. 5243543-2201 STATE OF UTAH

REVISIONS	BY
08–15–22	DFH

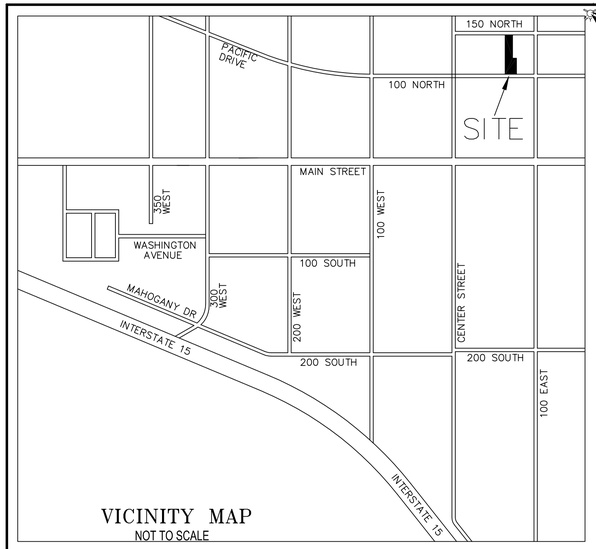
LEVEL OF FOCUS, INC
DAVID F. HUNT, P.L.S.
1334 EAST 1150 SOUTH
SPANISH FORK, UTAH 84660
(801) 319–5441 LEVELOFFOCUS@GMAIL.COM

AF CHIROPRACTIC
A.L.T.A. SURVEY
AMERICAN FORK UTAH

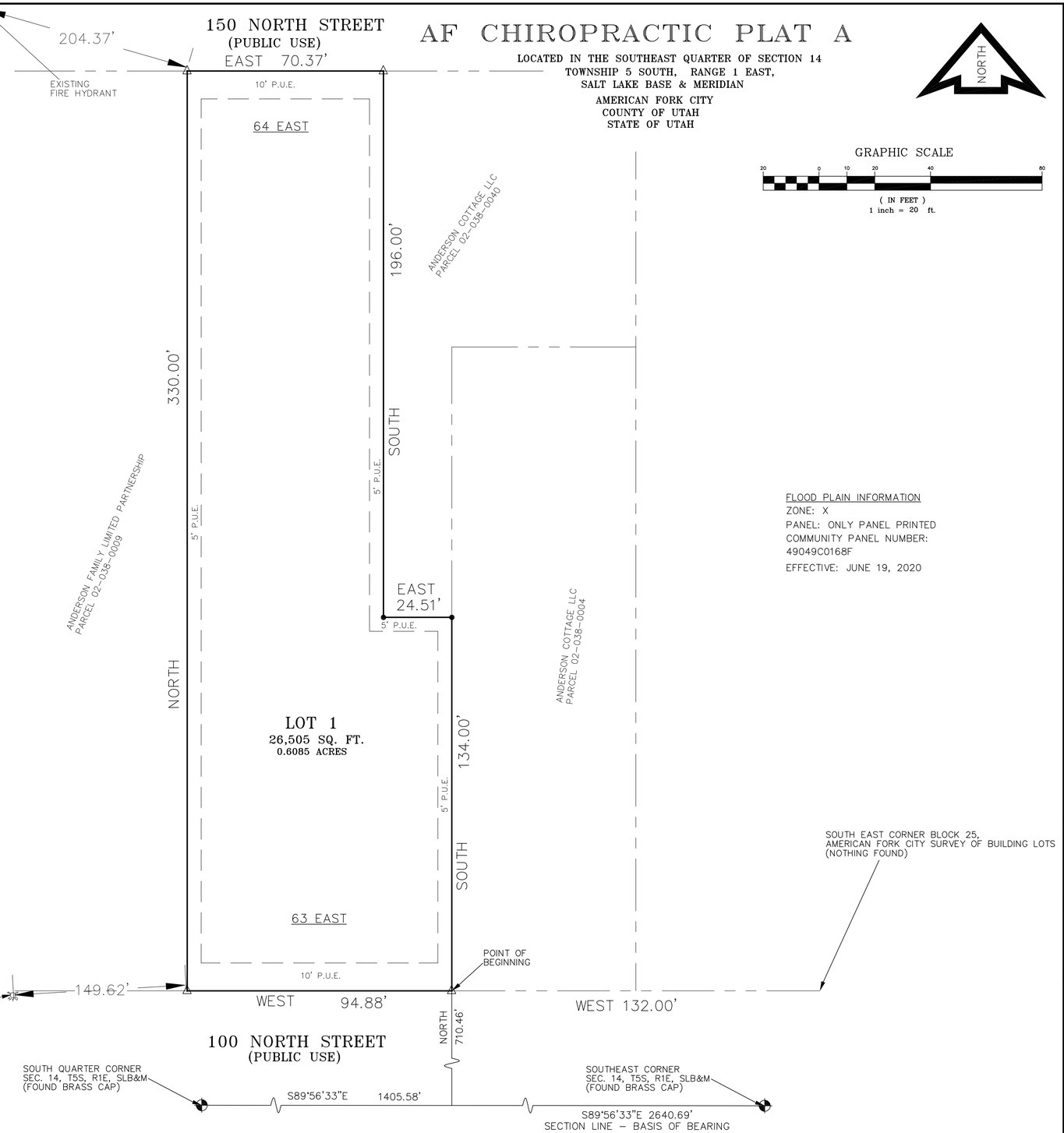
DESIGNER	DRAWN BY	CHECKED BY	SHEET
DFH	DFH	DFH	1 OF 1
DATE 06–18–21	SCALE 1" = 30'	PROJECT NO.	
ADDRESS 63 & 69 WEST 100 NORTH AM. FORK, UT			

AF CHIROPRACTIC PLAT A

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



VICINITY MAP
NOT TO SCALE



NORTH

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

FLOOD PLAIN INFORMATION
ZONE: X
PANEL: ONLY PANEL PRINTED
COMMUNITY PANEL NUMBER:
49049C0168F
EFFECTIVE: JUNE 19, 2020

CITY STANDARD NOTES:

1. THE CURRENT ZONE IS CC-1.
2. "LOWEST FLOOR SLAB ELEVATION MUST BE A MINIMUM OF 3 FEET ABOVE WATER LEVEL MEASURED DURING SPRING SEASON"
3. "OFF-SET PINS TO BE PLACED IN THE BACK OF CURB ALONG ROAD FRONTAGES AND A 5/8" X 24" REBAR WITH NUMBERED SURVEY CAP TO BE PLACED AT ALL OTHER LOT CORNERS"
4. "BUILDING PERMITS WILL NOT BE ISSUED FOR ANY BUILDING UNTIL 1) ASPHALT PAVING IS INSTALLED AND 2) FIRE HYDRANTS ARE INSTALLED, APPROVED BY THE FIRE MARSHALL AND CHARGED WITH CULINARY WATER" (ALL IF NECESSARY)
5. LOT 1 HAS AN EXISTING BUILDING THAT WILL BE REMOVED.
6. LOT 1 HAS EXISTING CITY SERVICES, INCLUDING SEWER, WATER, POWER, COMMUNICATIONS, GAS, ETC.

NOTE: LIQUEFACTION COULD OCCUR AT THIS SITE DURING A LARGE SEISMIC EVENT,ÛUT SUCH LIQUEFACTION IS NOT EXPECTED TO AFFECT THE PROPOSED BUILDING.
HUS, NO EXTRAORDINARY FOUNDATION MEASURES ARE NEEDED

LEGEND

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

AS-SURVEYED DESCRIPTION (FOR OTHER SURVYEOR'S REFERENCE ONLY)

BEGINNING AT A POINT LOCATED NORTH 89°13'10" WEST 131.92 FEET ALONG THE SOUTHERLY BLOCK LINE OF BLOCK 25, PLAT "A" AMERICAN FORK CITY SURVEY OF BUILDING LOTS, SAID POINT ALSO BEING LOCATED SOUTH 89°56'33" EAST ALONG THE SECTION LINE 1405.66 FEET AND NORTH 710.45 FEET FROM THE SOUTH QUARTER CORNER OF SECTION 14, TOWNSHIP 5 SOUTH, RANGE 1 EAST, SALT LAKE BASE AND MERIDIAN; THENCE NORTH 89°13'10" WEST 94.44 FEET; THENCE NORTH 00°41'27" EAST 330.00 FEET; THENCE SOUTH 89°13'10" EAST 70.36 FEET; THENCE SOUTH 00°49'39" WEST 196.11 FEET; THENCE SOUTH 88°30'54" EAST 24.36 FEET; THENCE SOUTH 01°15'25" WEST 22.99 FEET; THENCE SOUTH 00°28'40" WEST 110.60 FEET TO THE POINT OF BEGINNING.

AREA = 26,365 SQ. FT. OR 0.6053 ACRES

SURVEYOR'S CERTIFICATE

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

BOUNDARY DESCRIPTION

A PARCEL OF GROUND SITUATE IN THE SOUTHEAST QUARTER OF SECTION 14 TOWNSHIP 5 SOUTH, RANGE 1 EAST, SALT LAKE BASE AND MERIDIAN, ALSO LOCATED WITHIN BLOCK 25, PLAT A, AMERICAN FORK CITY SURVEY OF BUILDING LOTS, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING 132.00 FEET WEST OF SOUTHEAST CORNER OF BLOCK 25, PLAT "A" AMERICAN FORK CITY SURVEY OF BUILDING LOTS, SAID SOUTHEAST BLOCK CORNER BEING LOCATED SOUTH 89°56'33" EAST ALONG THE SECTION LINE 1405.58 FEET AND NORTH 710.46 FEET FROM THE SOUTH QUARTER CORNER OF SECTION 14, TOWNSHIP 5 SOUTH, RANGE 1 EAST, SALT LAKE BASE AND MERIDIAN; THENCE WEST 94.88 FEET; THENCE NORTH 330.00 FEET; THENCE EAST 70.37 FEET; THENCE SOUTH 196.00 FEET; THENCE EAST 24.51 FEET; THENCE SOUTH 134.00 FEET TO THE POINT OF BEGINNING.

AREA =26,505 SQ. FT. OR 0.6085 ACRES, MORE OR LESS

BLOCK ROTATION = CLOCKWISE 00°46'50"

LOTS = 1

11-28-22
DATE

SURVEYOR
(See Seal Below)

SURVEYOR NOTE
PLEASE SEE THE AS-SURVEYED DESCRIPTION FOR THE PHYSICAL POSSESSION/ MEASURED BOUNDARY AND ACTUAL ACREAGE.

ACCEPTANCE OF LEGISLATIVE BODY

THE _____ OF _____ , COUNTY OF UTAH, APPROVES THIS SUBDIVISION SUBJECT TO THE CONDITIONS AND RESTRICTIONS STATED HEREON, AND HEREBY ACCEPTS THE DEDICATION OF ALL STREETS, EASEMENTS AND OTHER PARCELS OF LAND INTENDED FOR THE PUBLIC PURPOSE OF THE PERPETUAL USE OF THE PUBLIC THIS _____DAY OF _____ A.D. 20 .

MAYOR
CITY COUNCIL MEMBER
CITY COUNCIL MEMBER
CITY COUNCIL MEMBER
CITY COUNCIL MEMBER
CITY COUNCIL MEMBER
CITY COUNCIL MEMBER
CITY COUNCIL MEMBER

APPROVED
CITY ENGINEER

ATTEST
CITY RECORDER
(See Seal Below)

SEWER & WATER AUTHORITY

APPROVED SUBJECT TO THE FOLLOWING CONDITIONS:

PUBLIC WORKS DIRECTOR

PLANNING COMMISSION APPROVAL

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

PLANNING DEPT. DIRECTOR
CHAIRMAN, PLANNING COMMISSION

PLAT "A"

AF CHIROPRACTIC

LOCATED IN THE SOUTHEAST QUARTER OF SECTION 14
TOWNSHIP 5 SOUTH, RANGE 1 EAST,
SALT LAKE BASE & MERIDIAN

A COMMERCIAL SUBDIVISION

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

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

OWNER'S DEDICATION

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

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

MS INVESTMENTS 5 LLC
BY

MSG INVESTMENTS LLC
BY

ACKNOWLEDGEMENT (PERSONAL)

STATE OF UTAH
COUNTY OF UTAH S.S.

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

OWNER (S)

NOTARY'S COMMISSION EXPIRATION DATE
NOTARY PUBLIC FULL NAME & COMMISSION NUMBER
"A NOTARY PUBLIC COMMISSIONED IN UTAH"
PRINT NAME

ACKNOWLEDGEMENT (CORPORATE)

STATE OF UTAH
COUNTY OF UTAH S.S.

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

NOTARY'S COMMISSION EXPIRATION DATE
NOTARY PUBLIC FULL NAME & COMMISSION NUMBER
"A NOTARY PUBLIC COMMISSIONED IN UTAH"
PRINT NAME

NOTARY PUBLIC SEAL

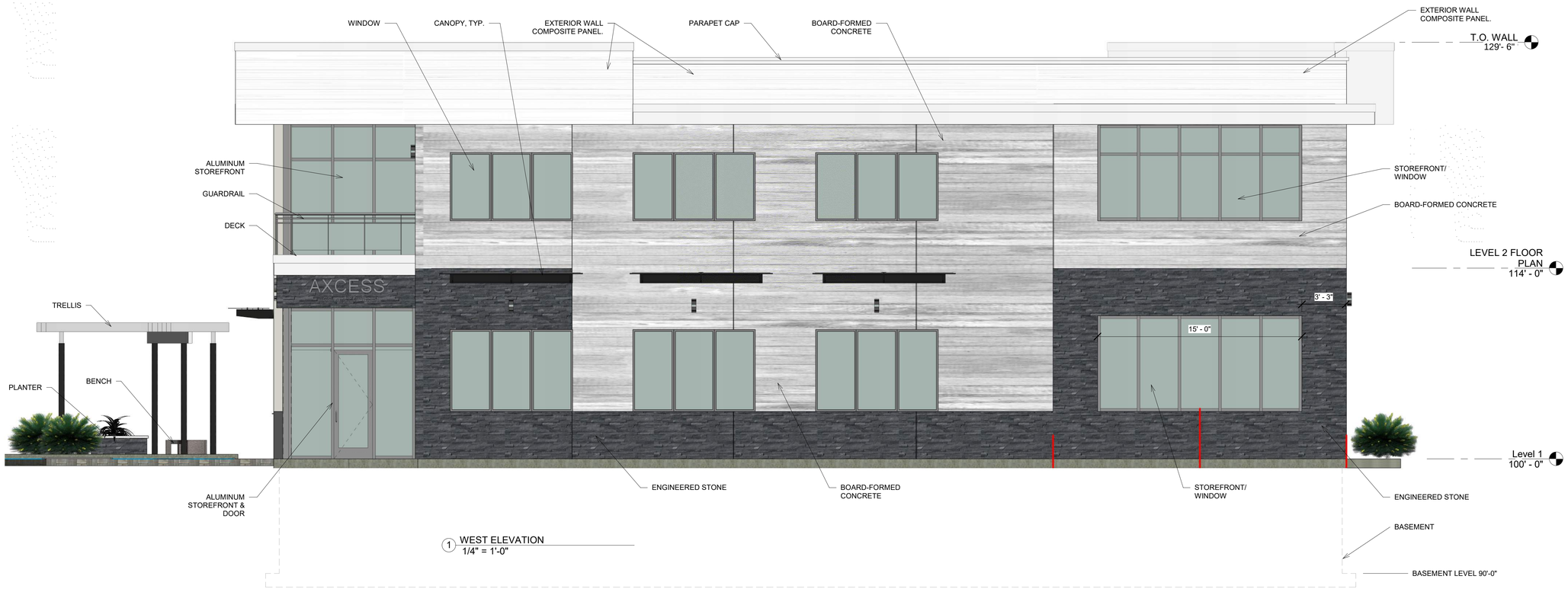
SURVEYOR'S SEAL

PROFESSIONAL LAND SURVEYOR
11-28-22
DAVID F. HUNT
LICENSE NO. 5243543-2201
STATE OF UTAH

CLERK-RECORDER SEAL

2 NORTH ELEVATION
1/4" = 1'-0"

MAX. BUILDING HEIGHT CHANGED TO 29-6"



1 WEST ELEVATION
1/4" = 1'-0"

Rather Architecture
Professional Corporation
1091 W South Jordan Parkway Suite 250
South Jordan, UT 84095
phone: 801.652.7171
email: nh@ratherarchitecture.com

CONTRACTOR

--

PROJECT and OWNER

AXCESS ACCIDENT CENTER

95 East 200 North Street
American Fork, UT 84003

ADAM ANDERSON

REVISION

No.	Description	Date

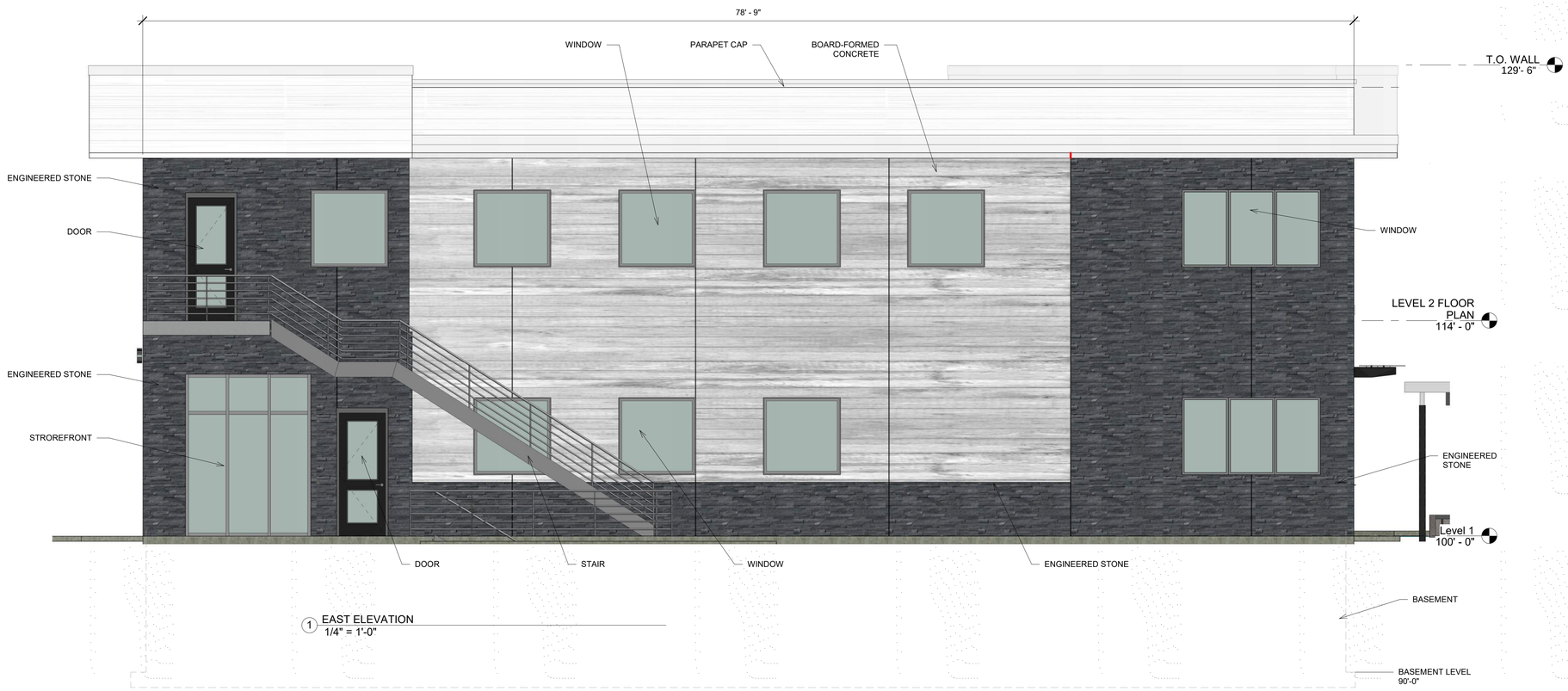
EXTERIOR ELEVATIONS

Project number	1410.175.01
Date	APRIL 6, 2022
Drawn by	KT
Checked by	NHR

A201

Scale 1/4" = 1'-0"

2 SOUTH ELEVATION
1/4" = 1'-0"



1 EAST ELEVATION
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Rather Architecture
Professional Corporation
1091 W South Jordan Parkway Suite 250
South Jordan, UT 84095
phone: 801.652.7171
email: nh@ratherarchitecture.com

CONTRACTOR

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PROJECT and OWNER

AXCESS ACCIDENT CENTER

95 East 200 North Street
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ADAM ANDERSON

REVISION

No.	Description	Date

EXTERIOR ELEVATIONS

Project number	1410.175.01
Date	APRIL 6, 2022
Drawn by	KT
Checked by	NHR

A202

Scale 1/4" = 1'-0"

PLANT LEGEND

DECIDUOUS TREES	CODE	QTY	BOTANICAL / COMMON NAME	CONT	CAL	SIZE
	Ag'f	4	Acer griseum 'JFS KW8AGRI' TM Fireburst Paperbark Maple	B & B	2"Cal	
	Gb'p	6	Ginkgo biloba 'Princeton Sentry' Princeton Sentry Gingko	B & B	2"Cal	
	M'rs	3	Malus x 'JFS KW213MX' TM Raspberry Spear Crabapple	B & B	2"Cal	

EVERGREEN TREES	CODE	QTY	BOTANICAL / COMMON NAME	CONT	CAL	SIZE
	Ca'f	2	Cedrus atlantica 'Fastigiata' Columnar Blue Atlas Cedar	B & B		5'-6'
	Jc's	6	Juniperus chinensis 'Spartan' Spartan Juniper	B & B		5'-6'

DECIDUOUS SHRUBS	CODE	QTY	BOTANICAL / COMMON NAME	CONT
	Br'l	23	Berberis thunbergii 'BailErin' TM Limoncello Barberry	5 gal
	Pb'p	14	Prunus besseyi 'P011S' TM Pawnee Buttes Sand Cherry	5 gal
	S'bp	3	Syringa x 'SMNJRPU' TM Bloomerang Dwarf Purple Lilac	5 gal
	Vt'a	20	Viburnum trilobum 'Alfredo' Alfredo Cranberrybush Viburnum	5 gal

EVERGREEN SHRUBS	CODE	QTY	BOTANICAL / COMMON NAME	CONT
	Pm's	11	Pinus mugo 'Slowmound' Slowmound Mugo Pine Prune candles in spring to maintain compact habit.	5 gal

GRASSES	CODE	QTY	BOTANICAL / COMMON NAME	CONT
	Cb'k	12	Calamagrostis brachytricha Korean Feather Reed Grass	1 gal
	Ca'k	45	Calamagrostis x acutiflora 'Karl Foerster' Feather Reed Grass	1 gal
	M'ml	17	Miscanthus sinensis 'Morning Light' Morning Light Maiden Grass	2 gal

PERENNIALS	CODE	QTY	BOTANICAL / COMMON NAME	CONT
	H'aa	13	Hemerocallis x 'Always Afternoon' Lavendar Daylily	1 gal
	Sn'c	32	Salvia nemorosa 'Caradonna' Cardonna Perennial Salvia	1 gal

ROSES	CODE	QTY	BOTANICAL / COMMON NAME	CONT
	R'ps	23	Rosa x 'NOA168098F' Flower Carpet Pink Supreme Rose	5 gal

SITE MATERIALS LEGEND

SYMBOL	1 LANDSCAPE DESCRIPTION	QTY
I-01	SODDED LAWN AREA LAWN AREAS SHALL BE SOD. NEW TURF AREAS TO BE SODDED WITH 18% "BLUESTAR KENTUCKY BLUEGRASS, 19% "MARQUIS" KENTUCKY BLUEGRASS, 17% "NEWPORT" KENTUCKY BLUEGRASS, 17% "TOUCHDOWN" KENTUCKY BLUEGRASS, 16% "APM PERENNIAL RYEGRASS, 13% "ACCENT PERENNIAL RYEGRASS OR APPROVED EQUAL AT A RATE OF 220 LBS. PER ACRE. FINE LEVEL ALL AREAS PRIOR TO LAYING SOD. ALL LAWN AREAS SHALL BE IRRIGATED WITH 100% COVERAGE BY POP-UP SPRAY HEADS AND GEAR-DRIVEN ROTORS. ALL DECIDUOUS AND CONIFER TREES PLANTED WITHIN SOD AREAS SHALL HAVE A FOUR FOOT(4') DIAMETER TREE RING COVERED WITH CHOCOLATE BROWN BARK MULCH, NO SHREDDED FINES. SUBMIT SAMPLES TO BE APPROVED BY LANDSCAPE ARCHITECT AND OWNER BEFORE INSTALLATION.	1,922 sf
I-03	1" COPPER CANYON CRUSHED ROCK. STONE MULCH PLANTING AREAS TO RECEIVE MIN. 12" DEPTH OF QUALITY TOPSOIL. IF TOPSOIL IS PRESENT ON SITE, PROVIDE SOIL TEST TO DETERMINE SOIL QUALITY FOR PROPOSED PLANTINGS. PROVIDE 3" DEPTH OF STONE MULCH TOP DRESSING.	5,536 sf
I-04	6" CONCRETE MOW CURB	58 lf

SYMBOL	1 LANDSCAPE DESCRIPTION	QTY
I-07	BOULDERS - DECORATIVE	12

ISSUE DATE	PROJECT NUMBER
1/11/2023	UT21130

NO.	REVISION	DATE
1	XXXX	XX-XX-XX
2		
3		
4		
5		
6		
7		

PLAN INFORMATION

811 BLUE STAKES OF UTAH
UTILITY NOTIFICATION CENTER, INC
1-800-662-4111
www.bluestakes.org

N

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

PROJECT INFORMATION

AXCESS CHIROPRACTIC
AMERICAN FORK, UTAH

DEVELOPER / PROPERTY OWNER / CLIENT

AXCESS CHIROPRACTIC
ATT: ADAM ANDERSON

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

LANDSCAPE ARCHITECT / PLANNER

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

LICENSE STAMP

LICENSED LANDSCAPE ARCHITECT
JEREMY AINSWORTH
8128124-5301
01/11/2023
ELECTRONIC SEAL
STATE OF UTAH

DRAWING INFO	
PM:	JTA
DRAWN:	ACP
CHECKED:	JMA
PLOT DATE:	1/11/2023

LANDSCAPE PLAN COLOR

LP-COLOR

LANDSCAPE PLAN SPECIFICATIONS

PART 1 - GENERAL

1.1 SUMMARY

A. This section includes landscape procedures for the Project including all labor, materials, and installation necessary, but not limited to, the following:

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

1.2 SITE CONDITIONS

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

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

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

1.3 PERMITS

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

1.4 PLANT DELIVERY, QUALITY, AND AVAILABILITY

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

1.5 FINAL INSPECTION

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

1.6 LANDSCAPE SUBSTANTIAL COMPLETION

A. A Substantial Completion 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 75% native soil and 25% topsoil, thoroughly mixed together prior to placement.

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

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

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

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

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

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

PART III - EXECUTION

3.1 GRADING

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

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

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

3.2 TURF GRADING

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

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

3.3 PLANTING OPERATIONS

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

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

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

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

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

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

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

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

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

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

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

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

4. TURF - SOD LAYING

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

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

C. Sod Availability and Condition: Sod is to be delivered to the site in good condition. It is to be inspected upon arrival and installed within 24 hours. Sod is to be moist and cool to ensure that decomposition has not begun and is to be free of pests, diseases, or blemishes. The Contractor shall satisfy himself as to the existing conditions prior to any construction. The Contractor shall be fully responsible for furnishing and laying all sod required on the plans. He shall furnish new sod as specified above and lay it so as too completely satisfy the intent and meaning of the plans and specification at no extra cost to the owner. In the case of any discrepancy in the amount of sod to be removed or amount to be used, it shall be the Contractor's responsibility to report such to the Project Representative prior to commencing the work.

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

E. Sod shall be tamped lightly as each piece is set to ensure that good contact is made between edges and also the ground. If voids or holes are discovered, the sod piece(s) is (are) to be raised and topsoil is to be used to fill in the areas until level. Sod laid on any sloped areas shall be anchored with wooden dowels or other materials which are accepted by the grass sod industry.

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

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

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

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

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

3.5 WEED BARRIER

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

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

C. Overlap rows of fabric min. 6"

D. Stable fabric edges and overlaps to ground.

END OF SECTION

LANDSCAPE NOTES

INSTALLATION

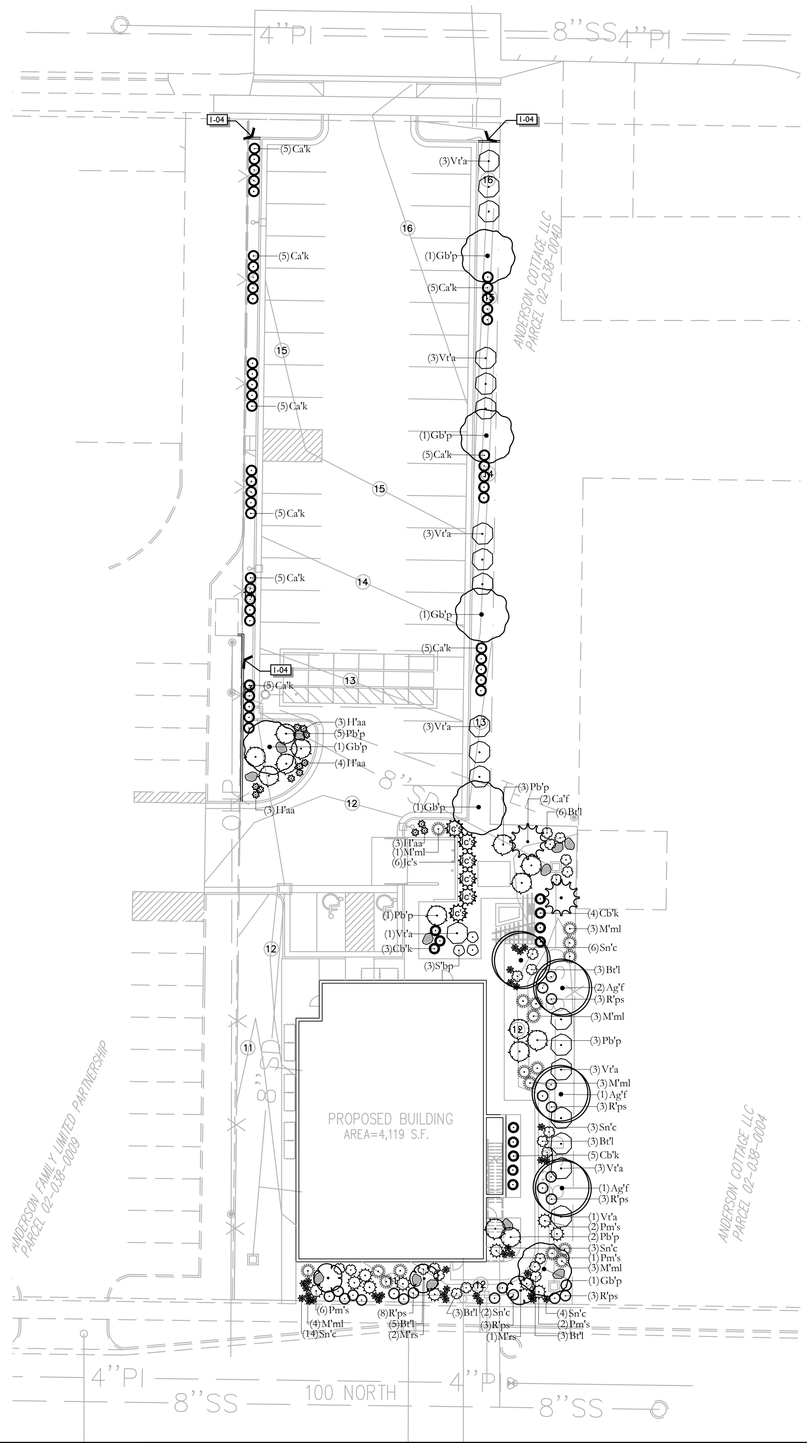
1. LANDSCAPE CONTRACTOR SHALL HAVE ALL UTILITIES BLUE STAKED PRIOR TO DIGGING. ANY DAMAGE TO UTILITIES SHALL BE REPAIRED AT CONTRACTORS EXPENSE WITH NO ADDITIONAL COST TO THE OWNER.
2. DURING THE BIDDING AND INSTALLATION PROCESS, THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR VERIFYING QUANTITIES OF ALL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

INSTALLER RESPONSIBILITIES AND LIABILITIES

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

GRADING AND DRAINAGE REQUIREMENTS

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



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EVERGREEN TREES	CODE	QTY	BOTANICAL / COMMON NAME	CONT	CAL	SIZE
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JC	Jc's	6	Juniperus chinensis 'Spartan' Spartan Juniper	B & B		5'-6'

DECIDUOUS SHRUBS	CODE	QTY	BOTANICAL / COMMON NAME	CONT
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	Pb'p	14	Prunus besseyi 'P011S' TM Pawnee Buttes Sand Cherry	5 gal
	S'bp	3	Syringa x 'SMNJRPU' TM Bloomerang Dwarf Purple Lilac	5 gal
	Vt'a	20	Viburnum trilobium 'Alfredo' Alfredo Cranberrybush Viburnum	5 gal

EVERGREEN SHRUBS	CODE	QTY	BOTANICAL / COMMON NAME	CONT
	Pm's	11	Pinus mugo 'Slowmound' Slowmound Mugo Pine Prune candles in spring to maintain compact habit.	5 gal

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SITE MATERIALS LEGEND

SYMBOL	1 LANDSCAPE DESCRIPTION	QTY
I-01	SODDED LAWN AREA LAWN AREAS SHALL BE SOD. NEW TURF AREAS TO BE SODDED WITH 18% "BLUESTAR KENTUCKY BLUEGRASS, 19% "MARQUIS" KENTUCKY BLUEGRASS, 17% "NEWPORT" KENTUCKY BLUEGRASS, 17% "TOUCHDOWN" KENTUCKY BLUEGRASS, 16% "APM PERENNIAL RYEGRASS, 13% "ACCENT PERENNIAL RYEGRASS OR APPROVED EQUAL AT A RATE OF 220 LBS. PER ACRE. FINE LEVEL ALL AREAS PRIOR TO LAYING SOD. ALL LAWN AREAS SHALL BE IRRIGATED WITH 100% COVERAGE BY POP-UP SPRAY HEADS AND GEAR-DRIVEN ROTORS. ALL DECIDUOUS AND CONIFER TREES PLANTED WITHIN SOD AREAS SHALL HAVE A FOUR FOOT(4') DIAMETER TREE RING COVERED WITH CHOCOLATE BROWN BARK MULCH, NO SHREDDED FINES. SUBMIT SAMPLES TO BE APPROVED BY LANDSCAPE ARCHITECT AND OWNER BEFORE INSTALLATION.	1,922 sf
I-03	1" COPPER CANYON CRUSHED ROCK STONE MULCH PLANTING AREAS TO RECEIVE MIN. 12" DEPTH OF QUALITY TOPSOIL. IF TOPSOIL IS PRESENT ON SITE, PROVIDE SOIL TEST TO DETERMINE SOIL QUALITY FOR PROPOSED PLANTINGS. PROVIDE 3" DEPTH OF STONE MULCH TOP DRESSING.	5,536 sf
I-04	6" CONCRETE MOW CURB	58 lf

SYMBOL	1 LANDSCAPE DESCRIPTION	QTY
I-07	BOULDERS - DECORATIVE	12

ISSUE DATE	PROJECT NUMBER	PLAN INFORMATION
1/11/2023	UT21130	

NO.	REVISION	DATE
1	XXXX	XX-XX-XX
2		
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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

AXCESS CHIROPRACTIC
AMERICAN FORK, UTAH

DEVELOPER / PROPERTY OWNER / CLIENT

AXCESS CHIROPRACTIC
ATT: ADAM ANDERSON

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

LANDSCAPE ARCHITECT / PLANNER

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

LICENSE STAMP

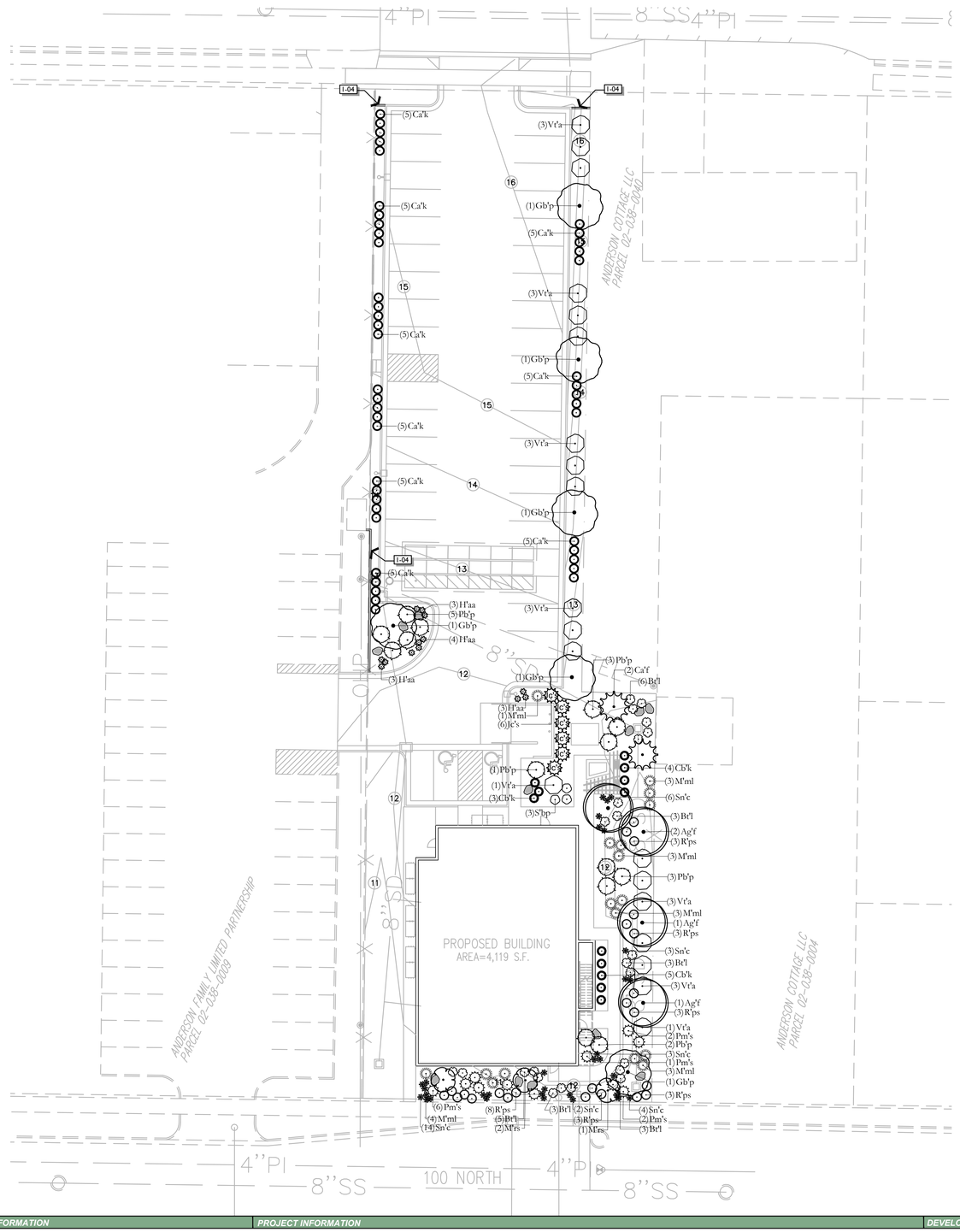
LICENSED LANDSCAPE ARCHITECT
JEREMY AINSWORTH
8128121-5301
01/11/2023
STATE OF UTAH

DRAWING INFO

PM:	JTA
DRAWN:	SAV
CHECKED:	JMA
PLOT DATE:	1/11/2023

LANDSCAPE PLAN COVER

LP-100



PLANT LEGEND

DECIDUOUS TREES	CODE	QTY	BOTANICAL / COMMON NAME	CONT	CAL	SIZE
	Ag'f	4	Acer griseum 'JFS KW8AGRI' TM Fireburst Paperbark Maple	B & B	2"Cal	
	Gb'p	6	Ginkgo biloba 'Princeton Sentry' Princeton Sentry Gingko	B & B	2"Cal	
	M'rs	3	Malus x 'JFS KW213MX' TM Raspberry Spear Crabapple	B & B	2"Cal	

EVERGREEN TREES	CODE	QTY	BOTANICAL / COMMON NAME	CONT	CAL	SIZE
	Ca'f	2	Cedrus atlantica 'Fastigiata' Columnar Blue Atlas Cedar	B & B		5'-6'
C	Je's	6	Juniperus chinensis 'Spartan' Spartan Juniper	B & B		5'-6'

DECIDUOUS SHRUBS	CODE	QTY	BOTANICAL / COMMON NAME	CONT
	Br'l	23	Berberis thunbergii 'BailErin' TM Limoncello Barberry	5 gal
	Pb'p	14	Prunus besseyi 'P011S' TM Pawnee Buttes Sand Cherry	5 gal
	S'bp	3	Syringa x 'SMNJRPU' TM Bloomerang Dwarf Purple Lilac	5 gal
	Vt'a	20	Viburnum trilobum 'Alfredo' Alfredo Cranberrybush Viburnum	5 gal

EVERGREEN SHRUBS	CODE	QTY	BOTANICAL / COMMON NAME	CONT
	Pm's	11	Pinus mugo 'Slowmound' Slowmound Mugo Pine Prune candles in spring to maintain compact habit.	5 gal

GRASSES	CODE	QTY	BOTANICAL / COMMON NAME	CONT
	Cb'k	12	Calamagrostis brachytricha Korean Feather Reed Grass	1 gal
	Ca'k	45	Calamagrostis x acutiflora 'Karl Foerster' Feather Reed Grass	1 gal
	M'ml	17	Miscanthus sinensis 'Morning Light' Morning Light Maiden Grass	2 gal

PERENNIALS	CODE	QTY	BOTANICAL / COMMON NAME	CONT
	Ht'aa	13	Hemerocallis x 'Always Afternoon' Lavendar Daylily	1 gal
	Sn'c	32	Salvia nemorosa 'Caradonna' Cardonna Perennial Salvia	1 gal

ROSES	CODE	QTY	BOTANICAL / COMMON NAME	CONT
	R'ps	23	Rosa x 'NOA168098F' Flower Carpet Pink Supreme Rose	5 gal

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I-03	1" COPPER CANYON CRUSHED ROCK. STONE MULCH PLANTING AREAS TO RECEIVE MIN. 12" DEPTH OF QUALITY TOPSOIL. IF TOPSOIL IS PRESENT ON SITE, PROVIDE SOIL TEST TO DETERMINE SOIL QUALITY FOR PROPOSED PLANTINGS. PROVIDE 3" DEPTH OF STONE MULCH TOP DRESSING.	5,536 sf
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SYMBOL	1 LANDSCAPE DESCRIPTION	QTY
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LICENSE STAMP

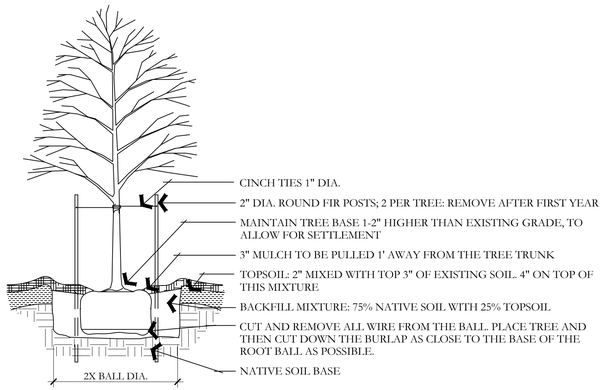
CERTIFIED LANDSCAPE ARCHITECT
JEREMY AINSWORTH
8128121-5301
01/11/2023
ELECTRONIC SEAL
STATE OF UTAH

DRAWING INFO

PM: JTA
DRAWN: SAV
CHECKED: JMA
PLOT DATE: 1/11/2023

LANDSCAPE PLAN

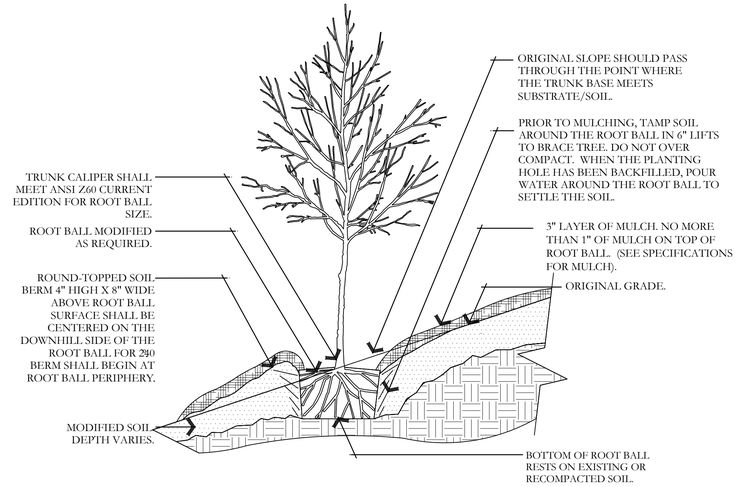
LP-101



A DECIDUOUS TREE PLANTING

NOT TO SCALE

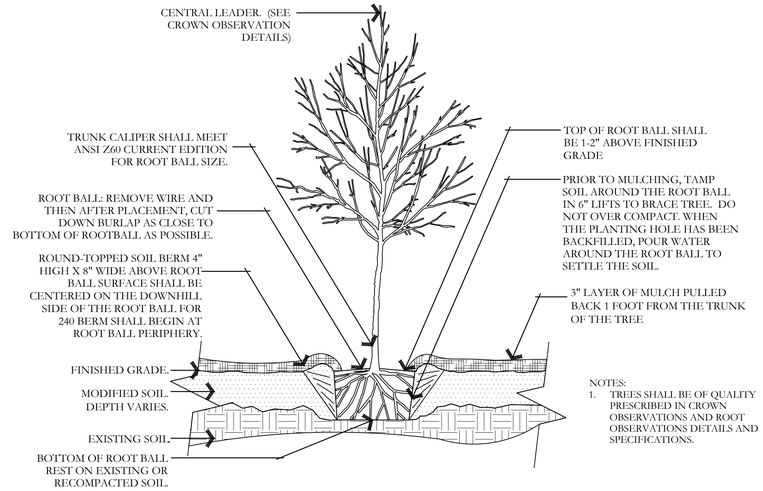
PKJ DESIGN GROUP



B TREE ON SLOPE 5% (20:1) TO 50% (2:1)

NOT TO SCALE

PKJ DESIGN GROUP

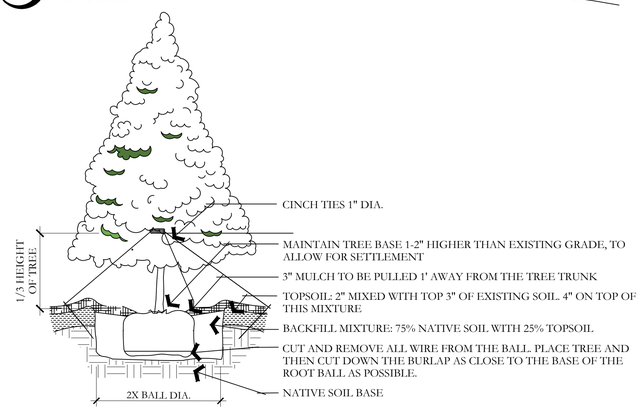


NOTES:
1. TREES SHALL BE OF QUALITY PRESCRIBED IN CROWN OBSERVATIONS AND ROOT OBSERVATIONS DETAILS AND SPECIFICATIONS.

C TREE W/ BERM (EXISTING SOIL MODIFIED)

NOT TO SCALE

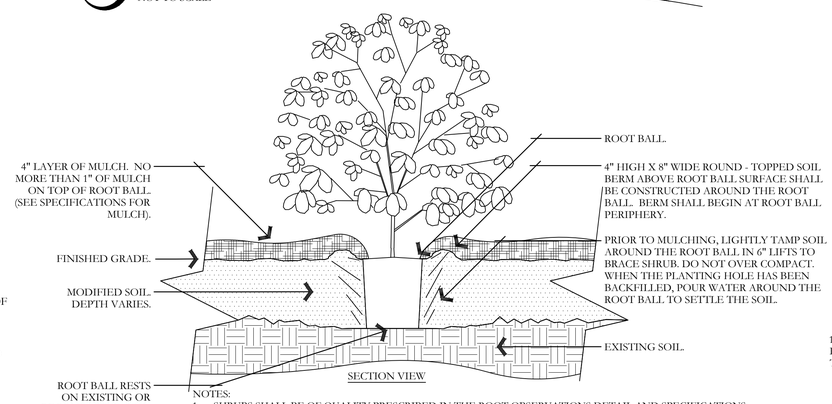
PKJ DESIGN GROUP



D EVERGREEN TREE PLANTING

NOT TO SCALE

PKJ DESIGN GROUP

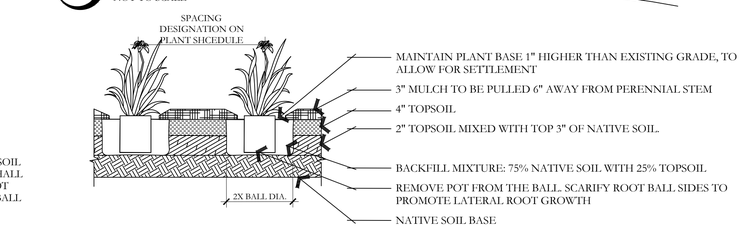


NOTES:
1. SHRUBS SHALL BE OF QUALITY PRESCRIBED IN THE ROOT OBSERVATIONS DETAIL AND SPECIFICATIONS.
2. SEE SPECIFICATIONS FOR FURTHER REQUIREMENTS RELATED TO THIS DETAIL.

E SHRUB - MODIFIED SOIL

NOT TO SCALE

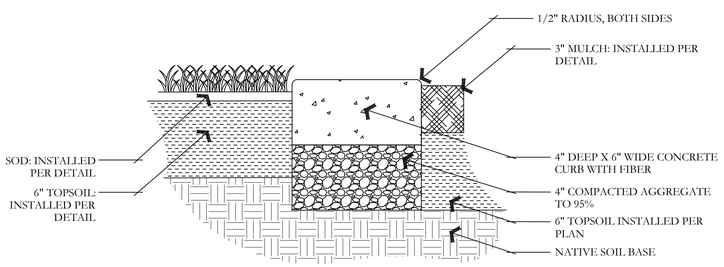
PKJ DESIGN GROUP



F PERENNIAL PLANTING

NOT TO SCALE

PKJ DESIGN GROUP

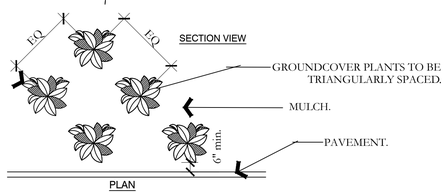


G CONCRETE MOWCURB

NOT TO SCALE

PKJ DESIGN GROUP

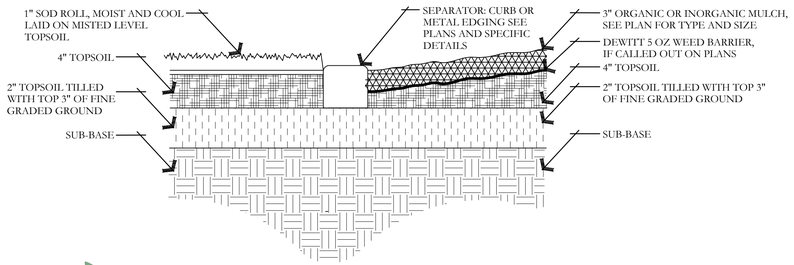
NOTES:
1- SEE PLANTING LEGEND FOR GROUNDCOVER SPECIES, SIZE, AND SPACING DIMENSION. THAT GROW
2- SMALL ROOTS AROUND, UP, OR DOWN THE ROOT BALL PERIPHERY ARE CONSIDERED A NORMAL CONDITION IN CONTAINER PRODUCTION AND ARE ACCEPTABLE HOWEVER THEY SHOULD BE ELIMINATED AT THE TIME OF PLANTING. ROOTS ON THE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



H PERENNIAL/GROUNDCOVER PLANTING

NOT TO SCALE

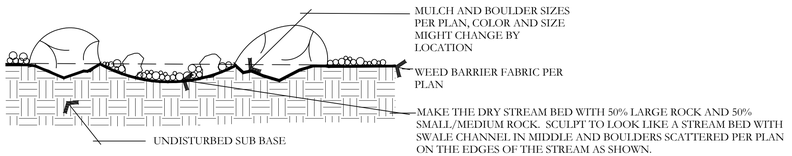
PKJ DESIGN GROUP



I SOD LAYING/MULCH DETAIL

NOT TO SCALE

PKJ DESIGN GROUP



J BOULDER AND DRY STREAM BED DETAIL

NOT TO SCALE

PKJ DESIGN GROUP

ISSUE DATE	PROJECT NUMBER	PLAN INFORMATION
1/11/2023	UT21130	

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ATT: ADAM ANDERSON

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LICENSE STAMP

LICENSED LANDSCAPE ARCHITECT
JEREMY AINSWORTH
8128127-5301
01/11/2023
ELECTRONIC SEAL
STATE OF UTAH

DRAWING INFO	
PM:	JTA
DRAWN:	SAV
CHECKED:	JMA
PLOT DATE:	1/11/2023

LANDSCAPE DETAILS

LP-501

AXCESS CHIROPRACTIC

AMERICAN FORK, UTAH

IRRIGATION PLAN SPECIFICATIONS

IRRIGATION SPECIFICATIONS

PART 1 - GENERAL

1.1 SUMMARY

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

1.2 SYSTEM DESCRIPTION

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

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

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

1.3 DEFINITIONS

A. Water Supply: Secondary water piping and components, furnished and installed by others to provide irrigation water to this Project, including but not limited to filter, saddles, nipples, spools, shut off valves, corporation stop valves, water meters, pressure regulation valves, and piping upstream of (or prior to) the Point of Connection.

B. Point of Connection: Location where the Contractor shall tie into the water supply. May require filter, saddle, nipples, spools, isolation valves or Stop and Waste valve for landscape irrigation needs and use.

C. Main Line Piping: Pressurized piping downstream of the Point of Connection to provide water to remote control valves and quick couplers. Normally under constant pressure.

D. Lateral Line Piping: Circuit piping downstream of remote control valves to provide water to sprinkler heads, drip systems or bubblers.

1.4 REFERENCES

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

a. ASTM-American Society for Testing and Materials

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

1.5 SUBMITTALS

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

B. Operation and Maintenance Manual:

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

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

ii. Parts list for each operating element of the system

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

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

b. Project Record Copy

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

ii. Completed Project As-Built Drawings

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

1.6 QUALITY ASSURANCE

A. Acceptance: Do not install work in this section prior to acceptance by OAR.

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

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

D. Workmanship and Materials:

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

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

E. Contractor Qualifications:

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

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

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

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

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

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

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

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

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

1.7 DELIVERY-STORAGE-HANDLING

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

1.8 SEQUENCING

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

1.9 WARRANTY

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

1.10 OWNER'S INSTRUCTION

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

1.11 MAINTENANCE

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

a. Two quick coupler keys with hose swivels.

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

B. Provide the following services:

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

PART 2 - PRODUCTS

2.1 GENERAL NOTES

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

2.2 POINT OF CONNECTION

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

2.3 CONNECTION ASSEMBLY

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

2.4 CONTROL SYSTEM

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

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

a. Installation of wall-mount/ground pedestal timer controllers: Irrigation contractor shall be responsible for this task. Power configuration for wall-mount/ground pedestal timer 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/extra wire (3 ft.) shall be looped within each valve box of the grouping it is to service.

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

2.5 SLEEVING

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

2.6 MAIN LINE PIPE

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

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

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

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

2.7 MAIN LINE FITTINGS

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

2.8 ISOLATION VALVES

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

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

2.9 MANIFOLDS

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

2.10 REMOTE CONTROL VALVES

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

2.11 MANUAL CONTROL VALVES

A. Quick coupler valve shall be attached to the manifold sub-main line using a Lasco G175212 swing joint assembly with snap-lock outlet and brass stabilizer elbow. Quick coupler valve shall be placed within a Carson 10" round valve box. Top of quick coupler valve cover shall allow for complete installation of valve box lid, but also allow for insertion and operation of key. Base of quick coupler valve and top of quick coupler swing joint shall be encased in ¼" gravel. Contractor shall not place quick coupler valves further than 200 feet apart, to allow for spot watering or supplemental irrigation of new plant material. Quick coupler valve at POC shall not be eliminated or relocated.

2.12 LATERAL LINE PIPE

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

2.13 LATERAL LINE FITTINGS

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

2.14 Spray Sprinklers

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

2.15 VALVE BOXES

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

2.16 IMPORT BACKFILL

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

2.17 OTHER PRODUCTS

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

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

PART 3 - EXECUTION

3.1 PREPARATION

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

3.2 TRENCHING AND BACKFILLING

A. Pulling of pipe shall not be permitted on this project. Over excavate trenches both in width and depth. Ensure base of trench is rock or debris free to protect pipe and wire. Grade trench base to ensure flat, even support of piping. Backfill with clean soil or import material. Contractor shall backfill no less than 2" around entire pipe with clean, rock free fill. Main line piping and fittings shall not be backfilled until OAR has inspected and pipe has passed pressure testing. Perform balance of backfill operation to eliminate any settling.

3.3 SLEEVING

A. Sleeve all piping and wiring that pass under paving or hardscape features. Wiring shall be placed in separate sleeving from piping. Sleeves shall be positioned relative to structures or obstructions to allow for pipe or wire within to be removed if necessary.

3.4 GRADES AND DRAINAGE

A. Place irrigation pipe and other elements at uniform grades. Winterization shall be by evacuation with compressed air. Automatic drains shall not be installed on this Project. Manual drains shall only be installed at POC where designated on Construction Drawings.

3.5 PVC PIPE

A. Install pipe to allow for expansion and contraction as recommended by pipe manufacturer.

B. Install main line pipes with 18" of cover, lateral line pipes with 12" of cover.

C. Drawings show diagrammatic or conceptual location of piping - Contractor shall install piping to minimize change of direction, avoid placement under large trees or large shrubs, avoid placement under hardscape features.

D. Plastic pipe shall be cut squarely. Burrs shall be removed. Spigot ends of pipes 3" and larger shall be beveled.

E. Pipe shall not be glued unless ambient temperature is at least 50 degress F. Pipe shall not be glued in rainy conditions unless properly tented. All solvent weld joints shall be assembled using IPS 711 glue and P70 primer according to manufacturer's specification, no exceptions. All workers performing glue operations shall provide evidence of certification. Glued main line pipe shall cure a minimum of 24 hours prior to being energized. Lateral lines shall cure a minimum of 2 hours prior to being energized and shall not remain under constant pressure unless cured for 24 hours.

F. Appropriate thrust blocking shall be performed on fittings 3" and larger. All threaded joints shall be wrapped with Teflon tape or paste unless directed by product manufacturer or sealing by o-ring.

3.6 CONTROLLERS

A. All grounding for pedestal controllers shall be as directed by controller manufacturer and ASIC guidelines, not to exceed a resistance reading of 5 OHMs.

B. Locate controllers in protected, inconspicuous places, when possible. Coordinate location of pedestal controllers with Landscape Architect to minimize visibility.

C. Coordinate location of wall mount controllers with building or electrical Contractor to facilitate electrical service and future maintenance needs. Wall mount shall be securely fastened to surface. If exterior mounted, wall mount controllers shall have electrical service wire and field control wire in separate, appropriate sized weatherproof electrical conduit, PVC pipe shall not be used.

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

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

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

3.7 VALVES

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

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

C. Valve box and lid shall be set to be flush with finished grade. Only one remote control valve may be installed in a Carson 1419124 box. Place a minimum of 4" of ¼" washed gravel beneath valve box for drainage. Bottom of remote control valve shall be a minimum of 2" above gravel.

3.8 SPRINKLER HEADS

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

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

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

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

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

3.9 FIELD QUALITY CONTROL

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

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

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

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

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

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

3.10 ADJUSTMENT

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

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

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

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

3.11 CLEANING

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

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

C. Contractor is responsible for removal and disposal of offsite trash and debris generated as a result of this Project.

D. OAR shall perform periodic as well as a final cleanliness inspection.

E. Contractor shall leave Project in at least a 'broom clean' condition.

END OF SECTION

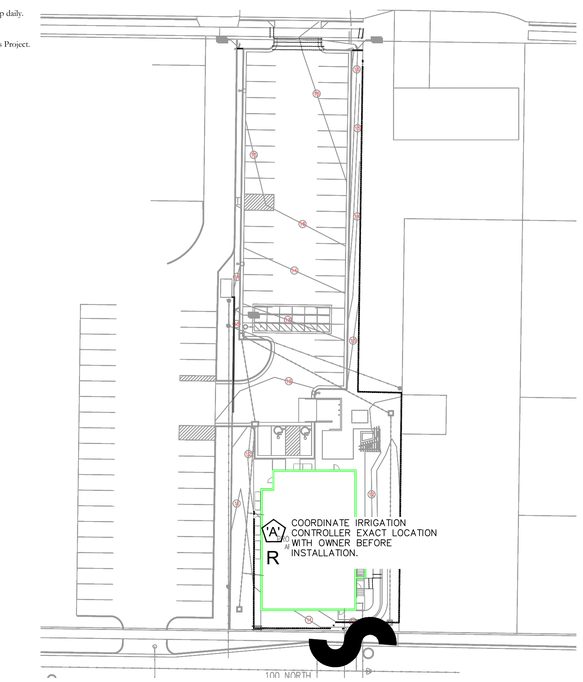
90 Day Establishment Period Irrigation Schedule (April, May, June)									
	Type	Sun	Mon	Tues	Wed	Thurs	Fri	Sat	Operating Pressure
Turf	Turf	15 min	15 min	15 min	15 min	15 min	15 min	15 min	30 psi
Shrubs	Shrubs	25 min	0	25 min	0	25 min	0	25 min	40 psi

Note: Begin irrigation 4:00 am, only 1 cycle per day.

Regular Irrigation Schedule (see Seasonal Differential Chart)									
	Type	Sun	Mon	Tues	Wed	Thurs	Fri	Sat	Operating Pressure
Turf	Turf	15 min	15 min		15 min		15 min		30 psi
Shrubs	Shrubs	45 min		45 min		45 min		45 min	40 psi

Note: Begin irrigation 4:00 am, only 1 cycle per day.

Seasonal Differential							
	April	May	June	July	August	Sept.	October
Turf	10 min	10 min	15 min	15 min	15 min	10 min	10 min
Shrubs	30 min	30 min	45 min	45 min	45 min	30 min	30 min



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

ISSUE DATE: 1/10/2023

PROJECT NUMBER: UT21130

NO.	REVISION	DATE
1	XXXX	XX-XX-XX
2		
3		
4		
5		
6		
7		

PLAN INFORMATION

811 BLUE STAKES OF UTAH
UTILITY NOTIFICATION CENTER, INC
1-800-662-4111
www.bluestakes.org

N

0' 20' 40' 80' 160'
GRAPHIC SCALE: 1" = 40'

PROJECT INFORMATION

AXCESS CHIROPRACTIC
AMERICAN FORK, UTAH

DEVELOPER / PROPERTY OWNER / CLIENT

AXCESS CHIROPRACTIC
ATT: ADAM ANDERSON

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

LANDSCAPE ARCHITECT / PLANNER

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

LICENSE STAMP

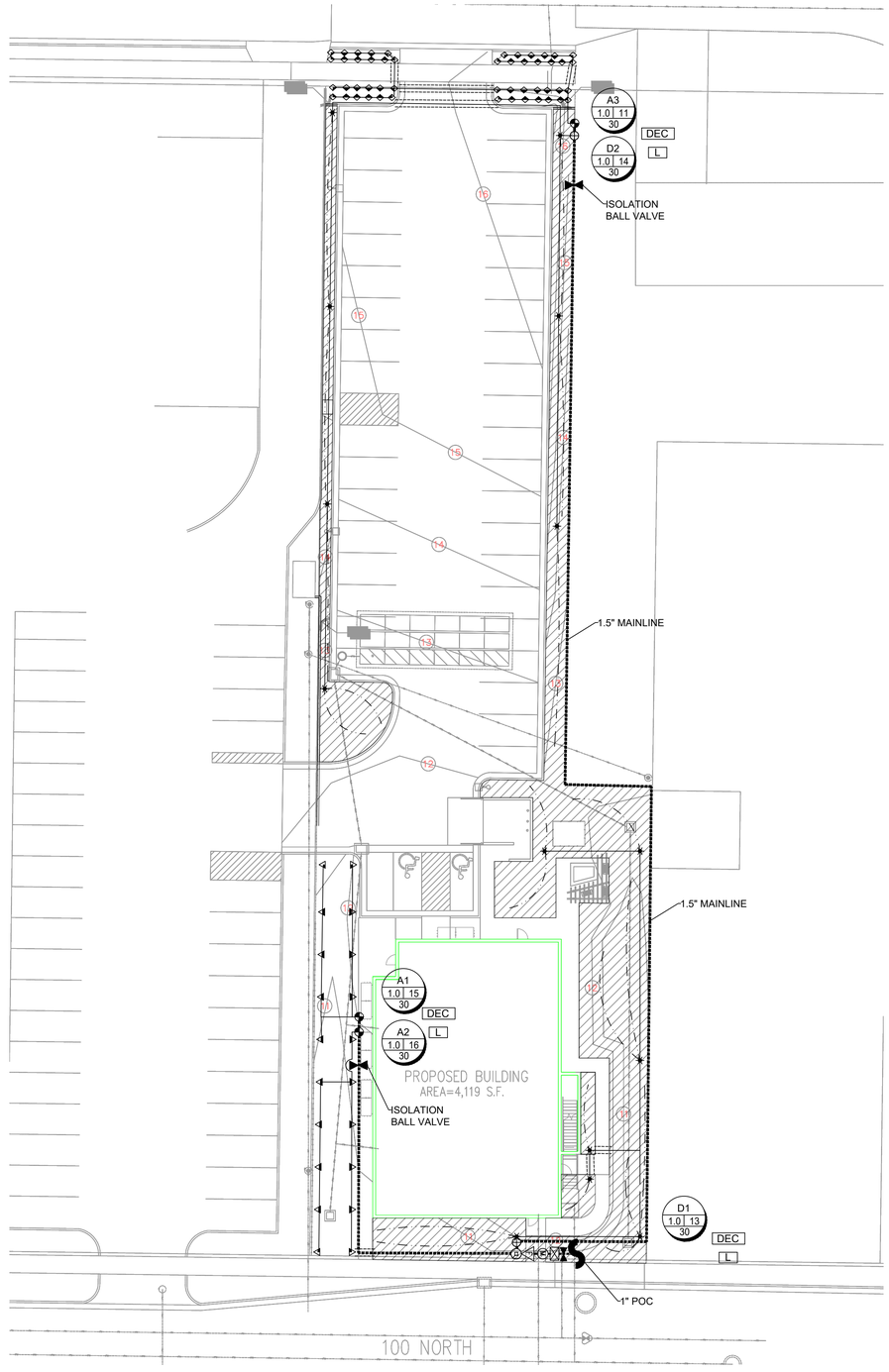
LICENSED LANDSCAPE ARCHITECT
JEREMY AINSWORTH
8128121-5301
01/10/2023
ELECTRONIC SEAL
STATE OF UTAH

DRAWING INFO

PM: JTA
DRAWN: ACP
CHECKED: JMA
PLOT DATE: 1/10/2023

IRRIGATION PLAN COVER

IR-100



IRRIGATION LEGEND

SYMBOL	MANUFACTURER-MODEL NUMBER
	RAINBIRD RD04-S-PRS POP UP SPRAY 5 SERIES @ 30 PSI
	RAINBIRD RD04-S-PRS POP UP SPRAY 8 U-SERIES @ 30 PSI
	RAINBIRD RD04-S-PRS POP UP SPRAY 10 U-SERIES @ 30 PSI
	RAINBIRD RD04-S-PRS POP UP SPRAY 12 U-SERIES @ 30 PSI
	RAINBIRD RD04-S-PRS POP UP SPRAY 15 U-SERIES @ 30 PSI
	RAINBIRD RD04-S-PRS POP UP SPRAY 15 SST @ 30 PSI
	RAINBIRD RD04-S-PRS POP UP SPRAY 15 EST @ 30 PSI
	RAINBIRD 5000 SERIES MPR NOZZLES @ 55 PSI
	RAINBIRD 8005 SERIES Q#8-6.6 GPM, H#14-12.6 GPM, F#26-24.3 GPM NOZZLES @ 55 PSI
	POINT OF CONNECTION (SECONDARY WATER) SEE PLAN FOR SIZE
A	CONTROLLER:RAINBIRD ESP-ME3 CONTROLLER WITH WIFI CAPABILITY, CONTRACTOR TO ADJUST LOCATION WITH OWNER PRIOR TO CONSTRUCTION.
R	RAINBIRD WR2-RC WIRELESS RAIN SHUT OFF DEVICE
	ISOLATION BALL VALVE - LINE SIZED INSTALL PER MANUFACTURER'S SPEC.
	2" T SUPER AMIAD PLASTIC FILTER - INSTALL PER MANUFACTURE'S. RECOMMENDATIONS (130 MICRON)
M	MASTER VALVE
F	FLOW SENSOR
QC	QUICK COUPLER: RAINBIRD 44LRC INSTALL PER MANUFACTURER'S SPEC.
	REMOTE CONTROL VALVE: RAINBIRD PESB-NP-PRS-D AUTOMATIC CONTROL VALVE (SIZE AS NOTED ON PLAN- USE JUMBO BOX-PURPLE LID)
	DRIP CONTROL ZONE KIT: RAINBIRD XCZ-(PER PLAN)-PRBR-COM MED FLOW (SIZE AS NOTED ON PLAN)
	MAINLINE: SCHEDULE 40 PVC WITH SCHEDULE 80 FITTINGS, 1.5" DIAMETER 24" MIN. COVER
	LATERAL LINE: SCHEDULE 40 PVC WITH SCH. 40 FITTINGS. SEE PIPE SIZING CHART
	DRIP CONNECTION. PROVIDE DRIP IRRIGATION TO ALL TREES, SHRUBS,AND PERENNIALS IN PLANTER AREAS
	DRIP LINE: RAINBIRD XFSP-09-18-100 OR EQUIVALENT
	CLASS 200 SLEEVE PER PLAN
NO SYMBOL	WIRE CHASE, SIZE TO BE TWICE THE DIAMETER OF THE WIRE BUNDLE WITHIN. 1.1/4" DIAMETER MINIMUM
NO SYMBOL	14 GAUGE SOLID COPPER SINGLE STRAND CONTROL WIRE. INSTALL PER MANUFACTURER'S SPEC.

DRIP ZONE

TYPE	PART NUMBER	EMITTER FLOW
XFS DRIPLINE	XFSP-09-18	.9 GPH

TOTAL DRIP ZONE FLOW	20 GPM	*EACH ZONE NOT TO EXCEED 20 GPM	
NUMBER OF FLUSH POINTS	2	DRIP ZONE TO APPLY 1/4" OF WATER	23

*ONLY WATER PLANT SPECIFICALLY. DO NOT WATER ROCK AREA WITH NO PLANTS

*NUMBERS MAY CHANGE DUE TO SIZE OF DRIP ZONE PER PLAN.

IRRIGATION NOTES

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

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

VALVE ID TAG

A1 — CONTROLLER NUMBER, VALVE NUMBER

1.0 — VALVE SIZE

18 — GALLONS PER MINUTE

55 — PSI AT LAST HEAD IN ZONE

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

ISSUE DATE	PROJECT NUMBER	PLAN INFORMATION	PROJECT INFORMATION	DEVELOPER / PROPERTY OWNER / CLIENT	LANDSCAPE ARCHITECT / PLANNER	LICENSE STAMP	DRAWING INFO
1/10/2023	UT21130						PM: JTA

NO.	REVISION	DATE
1	XXXX	XX-XX-XX
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3		
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811 BLUE STAKES OF UTAH
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www.bluestakes.org

N

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

AXCESS CHIROPRACTIC
AMERICAN FORK, UTAH

AXCESS CHIROPRACTIC
ATT: ADAM ANDERSON

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

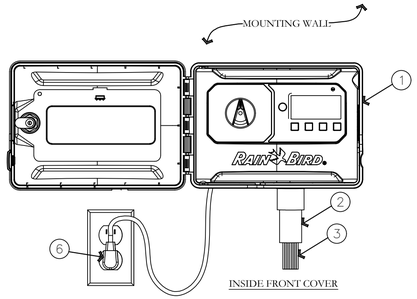
PKJ DESIGN GROUP
Landscape Architecture Planning & Visualization
3450 N. TRIUMPH BLVD. SUITE 102
LEHI, UTAH 84043 (801) 960-2698
www.pkjdesigngroup.com

LICENSED LANDSCAPE ARCHITECT
JEREMY AINSWORTH
8128217-5301
01/10/2023
ELECTRONIC SEAL
STATE OF UTAH

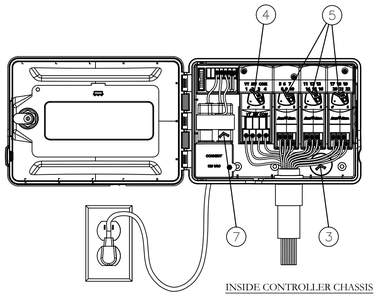
DRAWN: ACP
CHECKED: JMA
PLOT DATE: 1/10/2023

IRRIGATION PLAN

IR-101



1. MODULAR HYBRID CONTROLLER: RAIN BIRD ESP-ME3 INSIDE WALL MOUNT
2. 1-INCH PVC SCH 40 CONDUIT AND FITTINGS
3. WIRES TO REMOTE CONTROL VALVES
4. STANDARD MODULE FOR 4-STATION CONTOLLERS
5. OPTIONAL MODULES FOR 22-STATION CONTROLLER
6. STANDARD 120 V PLUG 120 VAC, 60 HZ INTERNAL TRANSFORMER



CHOOSING CONTROLLER FEATURES

SELECTING THE MODEL
TO SELECT THE DESIRED MODEL
TURN ON ONE OF THE FOLLOWING LAYERS

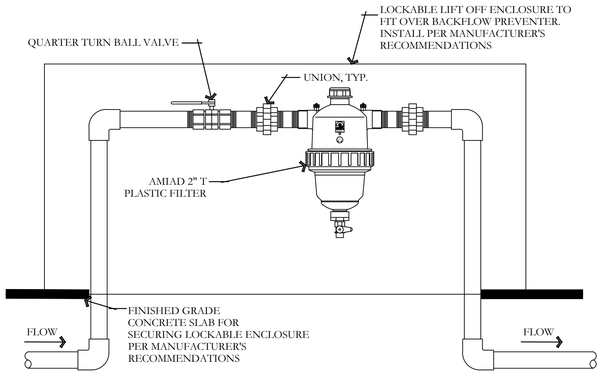
OPTION-4-STATION
OPTION-7-STATION
OPTION-10-STATION
OPTION-13-STATION
OPTION-16-STATION
OPTION-19-STATION
OPTION-22-STATION

TO TURN OFF THIS INSTRUCTION BOX,
TURN OFF LAYER "INSTRUCTION-OPTION".

A ESP-ME3 MODULAR HYBRID CONTROLLER

NOT TO SCALE

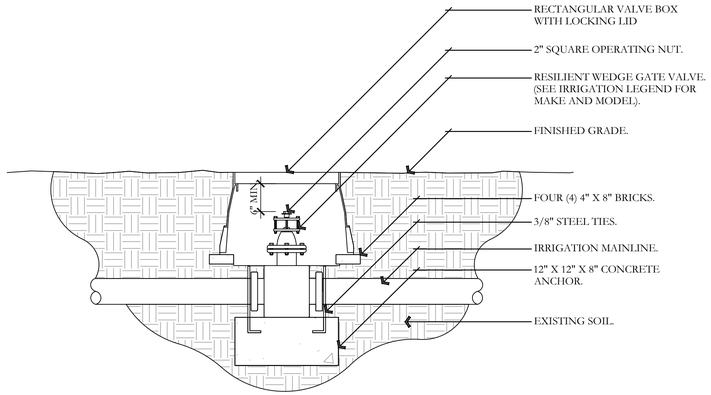
PKJ DESIGN GROUP



B 2" PLASTIC FILTER DETAIL

NOT TO SCALE

PKJ DESIGN GROUP

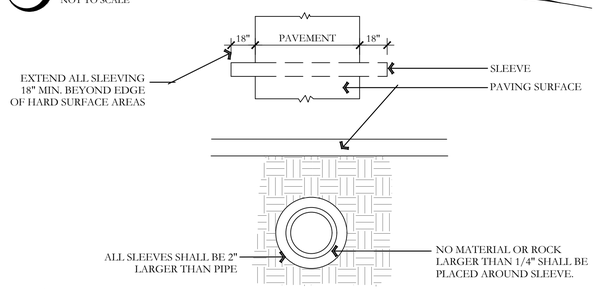


NOTES:
1. INSTALL GATE VALVE PER MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS.
2. VALVE BOX SHALL BE WRAPPED WITH MINIMUM 3 MIL. THICK PLASTIC AND SECURE IT TO VALVE BOX USING DUCT TAPE OR ELECTRICAL TAPE.
3. VALVE BOX SHALL BE LOCATED IN PLANTING AREA.

C GATE VALVE AND ANCHOR DETAIL

NOT TO SCALE

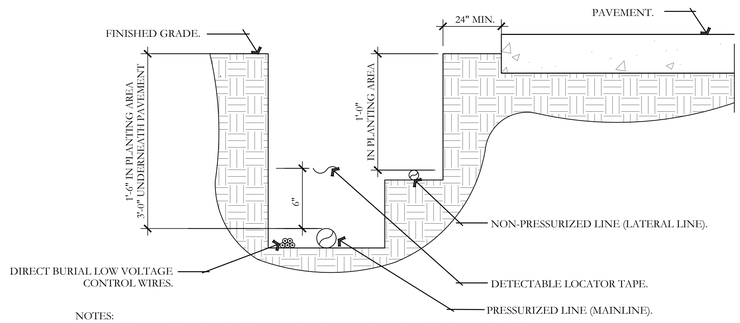
PKJ DESIGN GROUP



D TYPICAL SLEEVING DETAIL

NOT TO SCALE

PKJ DESIGN GROUP

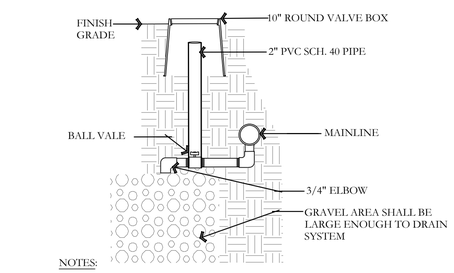


NOTES:
1. SEE IRRIGATION LEGEND FOR MAINLINE AND LATERAL LINE PIPE SIZE AND TYPE.
2. DIRECT BURIAL CONTROL WIRES SHALL BE INSTALLED IN SCH. 40 PVC ELECTRICAL CONDUIT IF REQUIRED.
3. 2-WIRE IRRIGATION WIRE SHALL BE INSTALLED IN SCH. 40 PVC ELECTRICAL CONDUIT.
4. DETECTABLE LOCATOR TAPE SHALL BE LOCATED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

E IRRIGATION TRENCHING DETAIL

NOT TO SCALE

PKJ DESIGN GROUP

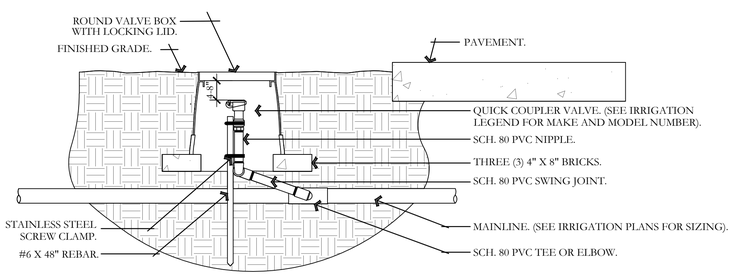


NOTES:
1. ALL FITTINGS TO BE SCH. 80 PVC
2. PROVIDE OWNER WITH KEY

F MANUAL DRAIN DETAIL

NOT TO SCALE

PKJ DESIGN GROUP

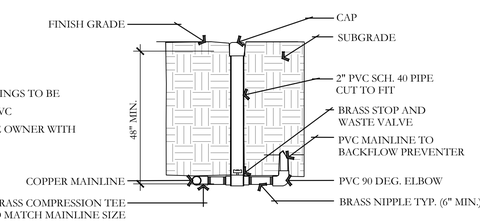


NOTES:
1. ALL THREADED CONNECTIONS SHALL BE INSTALLED USING TEFLON TAPE.
2. VALVE BOX SHALL BE WRAPPED WITH A MINIMUM 3 MIL THICK PLASTIC AND SECURED TO THE VALVE BOX USING DUCT TAPE OR ELECTRICAL TAPE.
3. ALL QUICK COUPLERS SHALL BE INSTALLED A MINIMUM OF 18" OFF OF THE MAINLINE.
4. VALVE BOXES SHALL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

G QUICK COUPLER DETAIL

NOT TO SCALE

PKJ DESIGN GROUP



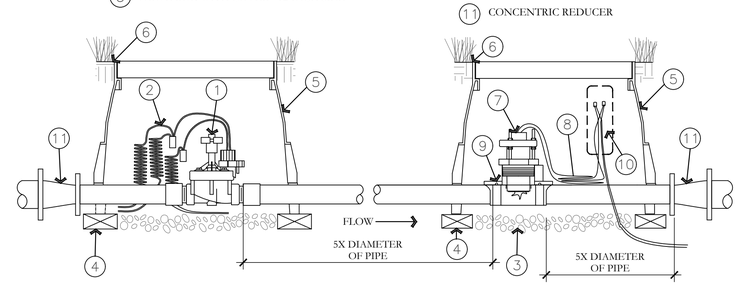
NOTES:
1. ALL FITTINGS TO BE SCH. 80 PVC
2. PROVIDE OWNER WITH KEY

H STOP AND WASTE VALVE ASSEMBLY DETAIL

NOT TO SCALE

PKJ DESIGN GROUP

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



I MASTER VALVE AND FLOW SENSOR DETAIL

NOT TO SCALE

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NO.	REVISION	DATE
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PROJECT INFORMATION

AXCESS CHIROPRACTIC
AMERICAN FORK, UTAH

DEVELOPER / PROPERTY OWNER / CLIENT

AXCESS CHIROPRACTIC
ATT: ADAM ANDERSON

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

LANDSCAPE ARCHITECT / PLANNER

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

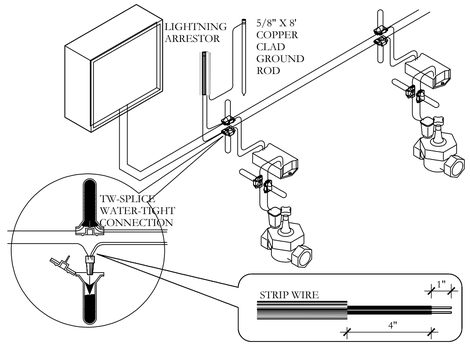
LICENSE STAMP

LICENSED LANDSCAPE ARCHITECT
JEREMY AINSWORTH
8128127-5301
01/10/2023
ELECTRONIC SEAL
STATE OF UTAH

DRAWING INFO	
PM:	JTA
DRAWN:	ACP
CHECKED:	JMA
PLOT DATE:	1/10/2023

IRRIGATION DETAILS

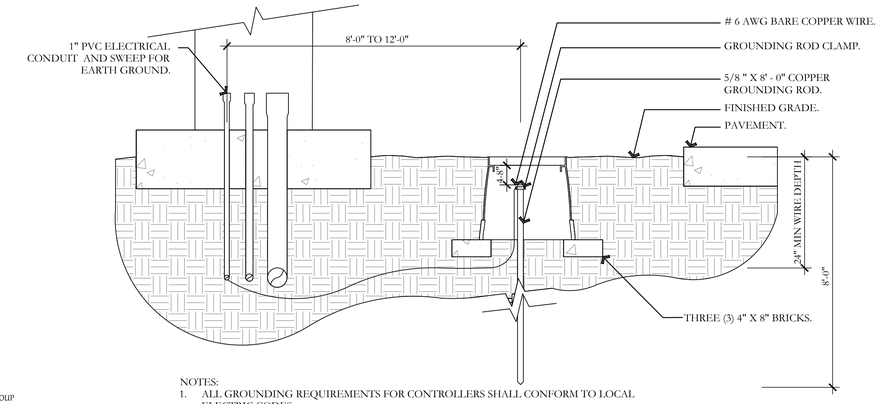
IR-501



J 2-WIRE CONNECTION DETAIL

NOT TO SCALE

PKJ DESIGN GROUP

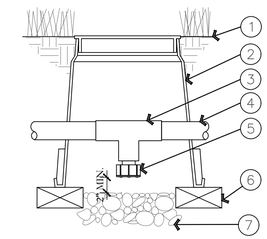


NOTES:
1. ALL GROUNDING REQUIREMENTS FOR CONTROLLERS SHALL CONFORM TO LOCAL ELECTRIC CODES.
2. GROUNDING ROD SHALL NOT BE LOCATED IN THE SAME TRENCH AS THE IRRIGATION MAINLINES OR LATERAL LINES.
3. VALVE BOX SHALL BE WRAPPED WITH A MINIMUM 3 MIL THICK PLASTIC AND SECURED TO THE VALVE BOX USING DUCT TAPE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

K GROUNDING ROD DETAIL

NOT TO SCALE

PKJ DESIGN GROUP

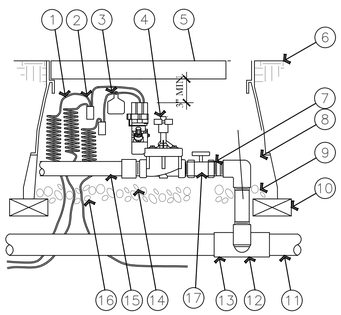


1. FINISH GRADE/TOP OF MULCH
2. VALVE BOX WITH COVER: RAIN BIRD VB-6RND
3. PVC SCH 40 TEE
4. PVC LATERAL PIPE
5. FILTERED DRAIN VALVE: RAIN BIRD 16A-FDV-075
6. BRICK (1 OF 2)
7. 6-INCH MINIMUM DEPTH OF 3/4" WASHED GRAVEL

L LATERAL LINE DRAIN VALVE DETAIL

NOT TO SCALE

PKJ DESIGN GROUP

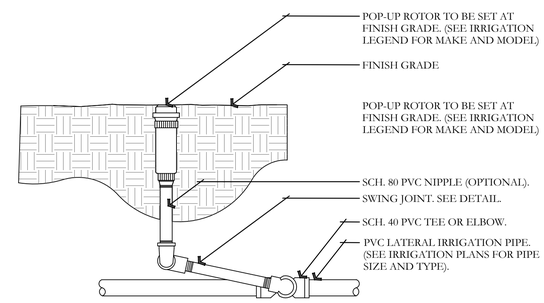


1. 30-INCH LINEAR LENGTH OF WIRE, COILED.
2. WATERPROOF CONNECTION RAIN BIRD SPLICE-1 (1 OF 2)
3. ID TAG: RAIN BIRD VID SERIES
4. REMOTE CONTROL VALVE: RAIN BIRD PESB-PRS-D WITH NP-HAN
5. VALVE BOX WITH COVER: RAIN BIRD VB-STD
6. FINISH GRADE/TOP OF MULCH
7. PVC SCH 80 NIPPLE (CLOSE)
8. PVC SCH 40 ELL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

M ELECTRIC REMOTE-CONTROL VALVE DETAIL

NOT TO SCALE

PKJ DESIGN GROUP

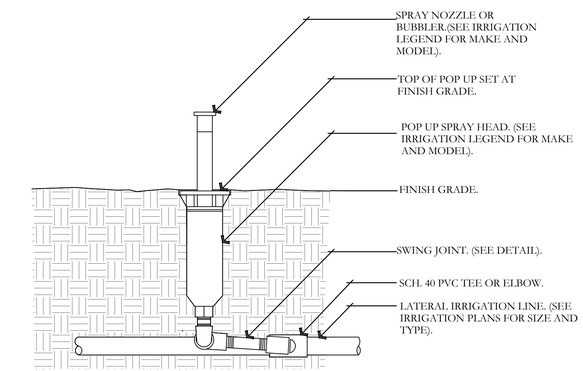


NOTES:
1. ALL THREADED CONNECTION POINTS BETWEEN SCH. 40 PVC AND SCH. 80 PVC FITTING SHALL BE INSTALLED USING TEFLON TAPE.
2. CONTRACTOR SHALL COMPACT SOIL AROUND ROTOR AND RISER PRIOR TO PLANTING, PLUGGING, SEEDING, OR LAYING OF SOD.

N ROTOR SPRAYHEAD DETAIL

NOT TO SCALE

PKJ DESIGN GROUP



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

O POP UP-SPRAY HEAD DETAIL

NOT TO SCALE

PKJ DESIGN GROUP

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AMERICAN FORK, UTAH

DEVELOPER / PROPERTY OWNER / CLIENT

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

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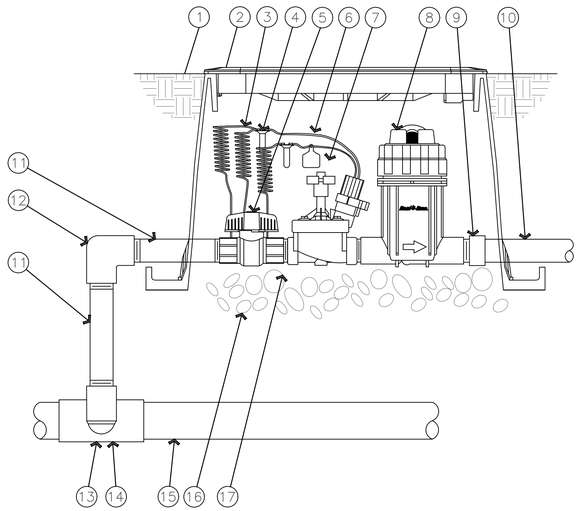
LICENSED LANDSCAPE ARCHITECT
JEREMY AINSWORTH
5128127-5301
01/10/2023
ELECTRONIC SEAL
STATE OF UTAH

DRAWING INFO

PM:	JTA
DRAWN:	ACP
CHECKED:	JMA
PLOT DATE:	1/10/2023

IRRIGATION DETAILS

IR-502

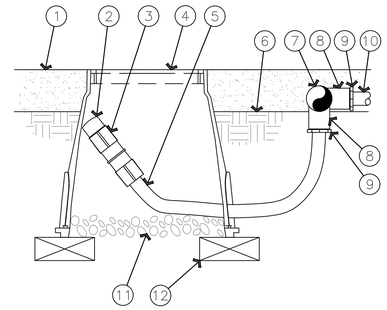


1. FINISH GRADE/TOP OF MULCH
2. VALVE BOX WITH COVER: RAIN BIRD VB-STD
3. 30-INCH LINEAR LENGTH OF WIRE, COILED
4. WATERPROOF CONNECTION: RAIN BIRD DB SERIES
5. 1-INCH BALL VALVE (INCLUDED IN XCZ-PRB-100-COM KIT)
6. ID TAG
7. REMOTE CONTROL VALVE: RAIN BIRD PESB (INCLUCED IN XCZ-PRB-100-COM KIT)
8. PRESSURE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

P DRIP CONTROL ZONE KIT DETAIL

NOT TO SCALE

PKJ DESIGN GROUP



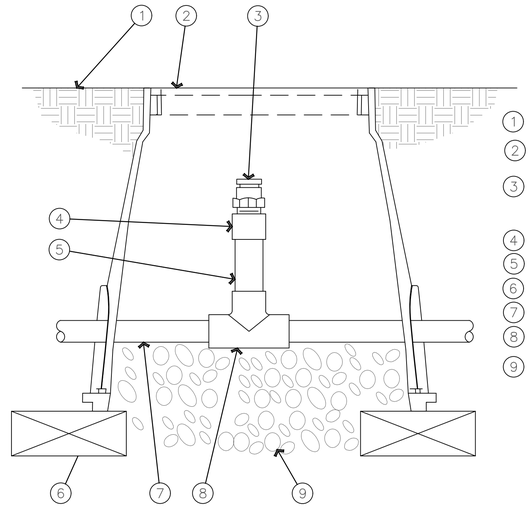
1. MULCH
2. FLUSH CAP FOR EASY FIT COMPRESSION FITTINGS: POTABLE:RAIN BIRD MDCFCAP
3. EASY FIT COUPLING: RAIN BIRD MDCFCOUP
4. SUBTERRANEAN EMITTER BOX: RAIN BIRD SEB 7XB
5. ½" POLYETHYLENE TUBING: RAIN BIRD XF BLANK TUBING
6. FINISH GRADE
7. PVC EXHAUST HEADER
8. PVC SCH 40 TEE OR EL
9. BARB X MALE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

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

Q ON-SURFACE DRIPLINE FLUSH POINT DETAIL

NOT TO SCALE

PKJ DESIGN GROUP

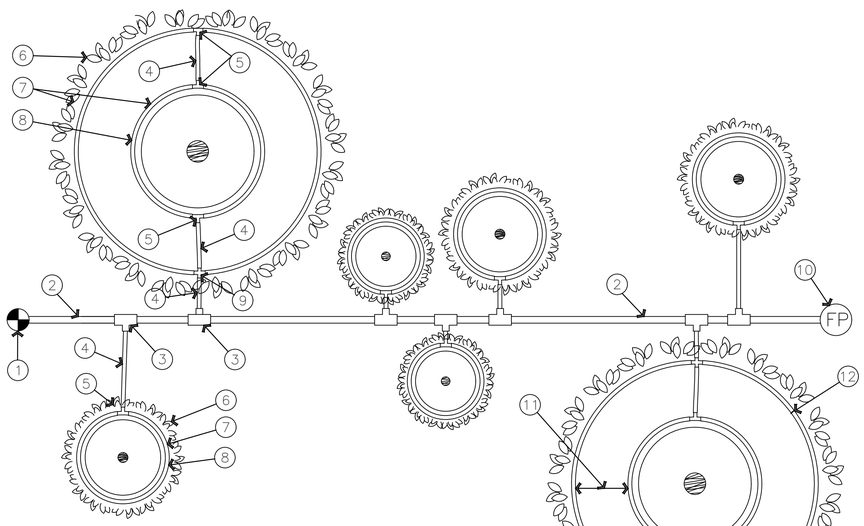


1. FINISH GRADE
2. SUBTERRANEAN EMITTER BOX: RAIN BIRD SEB 7XB
3. ½" AIR RELIEF VALVE: RAIN BIRD ARV050 TO BE INSTALLED AT HIGH POINTS IN DRIP ZONE
4. PVC SCH 40 FEMALE ADAPTER
5. PVC SCH 80 RISER
6. BRICK (1 OF 2)
7. PVC HEADER PIPE
8. PVC SCH 40 TEE
9. 3" MINIMUM DEPTH OF 3/4" WASHED GRAVEL

R AIR RELIEF VALVE DETAIL

NOT TO SCALE

PKJ DESIGN GROUP



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

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

S ON-SURFACE DRIPLINE TREE/SHRUB DETAIL

NOT TO SCALE

PKJ DESIGN GROUP

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DEVELOPER / PROPERTY OWNER / CLIENT

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DAVID W. PETERSON, P.E.
12 West 100 North, SUITE # 201
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LEHI, UTAH 84043 (801) 960-2698
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LICENSE STAMP

LICENSED LANDSCAPE ARCHITECT
JEREMY ANDWORTH
8/28/21 - 5301
01/10/2023
ELECTRONIC SEAL
STATE OF UTAH

DRAWING INFO	
PM:	JTA
DRAWN:	ACP
CHECKED:	JMA
PLOT DATE:	1/10/2023

IRRIGATION DETAILS

IR-503

AMERICAN FORK CITY
PLANNING COMMISSION

MEETING DATE: February 22nd, 2023

AGENDA TOPIC:

Review and action on an Amended Final Plat for Standard Plumbing, located in the area of 552 East 620 South, in the Planned Commercial (GC-2) Zone.

BACKGROUND INFORMATION		
Location:		552 East 620 South
Applicants:		ea architecture, Richard N Reese Family Real Estate
Existing Land Use:		Design Commercial
Proposed Land Use:		N/A
Surrounding Land Use:	North	Design Commercial
	South	Design Commercial
	East	Planned Community
	West	Design Commercial
Existing Zoning:		GC-2
Proposed Zoning:		N/A
Surrounding Zoning:	North	PC
	South	GC-2
	East	PC
	West	GC-2

BACKGROUND:

The applicant is applying for an Amended Final Plat approval for Standard Plumbing, for a new commercial development in the GC-2 Zone, located in the area 552 E 620 S. The proposal consists of one lot being amended to provide for a storage canopy. The development parcel consists of approximately 0.61 acres. Parcel ID will include: 57:033:0002

The applicant has provided signatures of all affected party members involving the final plat, as required by Utah State Code Section 10-9a-608.

Sec 17.7.210 Staff Submits Final Plan/Plat And Supporting Materials To Planning Commission

Upon completion of the technical review conference and subject to a finding that the project materials are in a form suitable for action by the planning commission, the final plans/plats and supporting materials shall be placed on the agenda of the planning commission.

Sec 17.7.211 Planning Commission Acts On Final Plan/Plat And Supporting Materials

When the final plan/plat and supporting materials required for approval have been completed in final form, the plan/plat and supporting materials shall be placed on the agenda of the planning commission and the commission may act to recommend approval of the final plan/plat upon a finding that:

1. The final plan/plat and supporting materials conform with terms of the preliminary approval.
2. The final plan/plat complies with all city requirements and standards relating to large scale developments.
3. The detailed engineering plans and materials comply with the city standards and policies.
4. The estimates of cost of constructing the required improvements are realistic.
5. The water rights conveyance documents have been provided.

Upon a finding of approval, the chairman shall be authorized to sign the final subdivision plats, where applicable.

Utah State Code: 10-9a-608. Subdivision amendments.

(1) (a) A fee owner of land, as shown on the last county assessment roll, in a subdivision that has been laid out and platted as provided in this part may file a written petition with the land use authority to request a subdivision amendment.

(b) Upon filing a written petition to request a subdivision amendment under Subsection (1)(a), the owner shall prepare and, if approved by the land use authority, record a plat in accordance with Section 10-9a-603 that:

(i) depicts only the portion of the subdivision that is proposed to be amended;

(ii) includes a plat name distinguishing the amended plat from the original plat;

(iii) describes the differences between the amended plat and the original plat; and

(iv) includes references to the original plat.

(c) If a petition is filed under Subsection (1)(a), the land use authority shall provide notice of the petition by mail, email, or other effective means to each affected entity that provides a service to an owner of record of the portion of the plat that is being vacated or amended at least 10 calendar days before the land use authority may approve the petition for a subdivision amendment.

(d) If a petition is filed under Subsection (1)(a), the land use authority shall hold a public hearing within 45 days after the day on which the petition is filed if:

(i) any owner within the plat notifies the municipality of the owner's objection in writing within 10 days of mailed notification; or

(ii) a public hearing is required because all of the owners in the subdivision have not signed the revised plat.

(e) A land use authority may not approve a petition for a subdivision amendment under this section unless the amendment identifies and preserves any easements owned by a culinary water authority and sanitary sewer authority for existing facilities located within the subdivision.

(2) The public hearing requirement of Subsection (1)(d) does not apply and a land use authority may consider at a public meeting an owner's petition for a subdivision amendment if:

(a) the petition seeks to:

(i) join two or more of the petitioner fee owner's contiguous lots;

(ii) subdivide one or more of the petitioning fee owner's lots, if the subdivision will not result in a violation of a land use ordinance or a development condition;

(iii) adjust the lot lines of adjoining lots or between a lot and an adjoining parcel if the fee owners of each of the adjoining properties join in the petition, regardless of whether the properties are located in the same subdivision;

(iv) on a lot owned by the petitioning fee owner, adjust an internal lot restriction imposed by the local political subdivision; or

(v) alter the plat in a manner that does not change existing boundaries or other attributes of lots within the subdivision that are not:

(A) owned by the petitioner; or

(B) designated as a common area; and

(b) notice has been given to adjoining property owners in accordance with any applicable local ordinance.

(3) A petition under Subsection (1)(a) that contains a request to amend a public street or municipal utility easement is also subject to Section 10-9a-609.5.

(4) A petition under Subsection (1)(a) that contains a request to amend an entire plat or a portion of a plat shall include:

(a) the name and address of each owner of record of the land contained in the entire plat or on that portion of the plat described in the petition; and

(b) the signature of each owner described in Subsection (4)(a) who consents to the petition.

(5) (a) The owners of record of adjoining properties where one or more of the properties is a lot may exchange title to portions of those parcels if the exchange of title is approved by the land use authority in accordance with Subsection (5)(b).

(b) The land use authority shall approve an exchange of title under Subsection (5)(a) if the exchange of title will not result in a violation of any land use ordinance.

(c) If an exchange of title is approved under Subsection (5)(b):

(i) a notice of approval shall be recorded in the office of the county recorder which:

(A) is executed by each owner included in the exchange and by the land use authority;

(B) contains an acknowledgment for each party executing the notice in accordance with the provisions of Title 57, Chapter 2a, Recognition of Acknowledgments Act; and

(C) recites the legal descriptions of both the original properties and the properties resulting from the exchange of title; and

(ii) a document of conveyance shall be recorded in the office of the county recorder with an amended plat.

(d) A notice of approval recorded under this Subsection (5) does not act as a conveyance of title to real property and is not required in order to record a document conveying title to real property.

(6) (a) The name of a recorded subdivision may be changed by recording an amended plat making that change, as provided in this section and subject to Subsection (6)(c).

(b) The surveyor preparing the amended plat shall certify that the surveyor:

(i) holds a license in accordance with Title 58, Chapter 22, Professional Engineers and Professional Land Surveyors Licensing Act;

(ii) (A) has completed a survey of the property described on the plat in accordance with Section 17-23-17 and has verified all measurements; or

(B) has referenced a record of survey map of the existing property boundaries shown on the plat and verified the locations of the boundaries; and

(iii) has placed monuments as represented on the plat.

(c) An owner of land may not submit for recording an amended plat that gives the subdivision described in the amended plat the same name as a subdivision in a plat already recorded in the county recorder's office.

(d) Except as provided in Subsection (6)(a), the recording of a declaration or other document that purports to change the name of a recorded plat is void.

PROJECT MAP:

PROJECT CONDITIONS OF APPROVAL:

FINDINGS OF FACT:

- The Amended Final Plat application meets the requirements of Section 17.7.210 and Section 17.7.211 of American Fork City Municipal Code.
- The Amended Final Plat application meets the requirements of Utah State Code 10-9a-608

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 Plan Review Comments:** All plans and documents shall comply with all the Technical Review Committee comments and the City Engineer's final review.
8. **Commercial Structure:** Record an Owner Acknowledgment and Utility Liability Indemnification if the proposed building is a multi-unit commercial structure served by a single utility service.
9. **Sensitive Lands:** Record all applicable documents required for compliance with the City's Sensitive Lands Ordinance.
10. **Utility Notification Form:** Submit a Subdivision Utility Notification Form.
11. **Professional Verification:** Submit final stamped construction documentation by all appropriate professionals.
12. **Fees:** Payment of all development, inspection, recording, streetlight, and other project related fees.
13. **Mylar:** Submit a Mylar. All plats will receive final verification of all formats, notes, conveyances, and other items contained on the plat by City staff (recorder, legal, engineer, GIS, planning).

STAFF RECOMMENDATION:

The Amended Final Plat application meets the requirements of Section 17.7.210, 17.7.211, and Utah State Code 10-9a-608. Staff recommends APPROVING the application WITH CONDITIONS.

<u>POTENTIAL MOTIONS – Site Plan</u>

APPROVAL

Madame Chairwoman, I move that we recommend approval for the Amended Final Plat for Standard Plumbing, located in the area of 552 East 620 South, in the Planned Commercial (GC-2) Zone, subject to any conditions found in the Staff Report, or recommended by the Fire Marshal.

DENIAL

Madame Chairwoman, I move that we recommend denial for the Amended Final Plat for Standard Plumbing, located in the area of 552 East 620 South, in the Planned Commercial (GC-2) Zone.

TABLE

Madame Chairwoman, I move that we table action on the Amended Final Plat for Standard Plumbing, located in the area of 552 East 620 South, in the Planned Commercial (GC-2) Zone, and instruct the developer/staff to _____.

AMERICAN FORK CITY
PLANNING COMMISSION

MEETING DATE: February 22nd, 2023

AGENDA TOPIC:

Review and action on a Site Plan for Standard Plumbing, located in the area of 552 East 620 South, in the Planned Commercial (GC-2) Zone.

BACKGROUND INFORMATION		
Location:		552 East 620 South
Applicants:		ea architecture, Richard N Reese Family Real Estate
Existing Land Use:		Design Commercial
Proposed Land Use:		N/A
Surrounding Land Use:	North	Design Commercial
	South	Design Commercial
	East	Planned Community
	West	Design Commercial
Existing Zoning:		GC-2
Proposed Zoning:		N/A
Surrounding Zoning:	North	PC
	South	GC-2
	East	PC
	West	GC-2

BACKGROUND:

The applicant is applying for a Site plan approval for Standard Plumbing, for a new commercial development in the GC-2 Zone, located in the area 552 E 620 S. The proposal consists of one lot to provide for a storage canopy. The development parcel consists of approximately 0.61 acres. Parcel ID will include: 57:033:0002

Sec 17.6.101 Administrative Site Plan Review

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

1. Planning commission to approve. The planning commission, acting in an administrative capacity, shall have the function, duty and power to approve or disapprove a project plan and to attach such modifications or conditions as may be deemed appropriate to improve the layout, to ensure that the project will not pose any detrimental effect to persons or property, or to protect the health, safety, and general welfare of the citizens of the city.
2. Application required. Application for site plan approval shall be submitted on forms provided by the city and shall be accompanied by maps and drawings showing the following:
1. The location of all existing and proposed buildings and structures on the site, with full dimensions showing the distance between buildings and distances from buildings to adjacent property lines.
2. The location of all parking spaces, driveways, and points of vehicular ingress and egress.
3. A landscaping plan showing the location, types, and initial sizes of all planting materials to be used together with the location of fences, walls, hedges, and decorative materials.
4. Preliminary elevations of main buildings showing the general appearance and types of external materials to be used.
5. The locations of solid waste receptacles and trash pick-up areas.
3. Appeals permitted. Any person aggrieved by a determination of the planning commission may request a hearing before the city council who shall have the authority to reverse, affirm or modify any decision of said commission. Any such appeal shall be filed within ten days of the determination of the planning commission.
4. Issuance of a permit. A building permit shall not be issued for any building or structure or external alterations thereto until the provisions of this section have been complied with. Any construction not in conformance with an approved site plan shall be considered a violation of this code. Any building permit issued shall ensure that development is undertaken and completed in conformity with the plans as approved.

PROJECT MAP:

PROJECT CONDITIONS OF APPROVAL:

FINDINGS OF FACT:

- The Site Plan application meets the requirements of Section 17.6.101 and Section of American Fork City Municipal Code.
- All conditions of approval will need to be met before permits are issued.

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 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.
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12. **Fees:** Payment of all development, inspection, recording, streetlight, and other project related fees.
13. **Mylar:** Submit a Mylar. All plats will receive final verification of all formats, notes, conveyances, and other items contained on the plat by City staff (recorder, legal, engineer, GIS, planning).

STAFF RECOMMENDATION:

The Site Plan application meets the requirements of Section 17.6.101 and staff recommends APPROVING the application WITH CONDITIONS.

<u>POTENTIAL MOTIONS – Site Plan</u>

APPROVAL

Madame Chairwoman, I move that we recommend approval for the Site Plan for Standard Plumbing, located in the area of 552 East 620 South, in the Planned Commercial (GC-2) Zone, subject to any conditions found in the Staff Report, or recommended by the Fire Marshal.

DENIAL

Madame Chairwoman, I move that we recommend denial for the Site Plan for Standard Plumbing, located in the area of 552 East 620 South, in the Planned Commercial (GC-2) Zone.

TABLE

Madame Chairwoman, I move that we table action on the Site Plan for Standard Plumbing, located in the area of 552 East 620 South, in the Planned Commercial (GC-2) Zone, and instruct the developer/staff to _____.

A Covered Storage Addition for:

Standard Plumbing

552 East 620 South
American Fork, Utah

Code Information

Code Item	IBC Code Requirement	Actual Building Design
Occupancy Classification	Chapter 3	Moderate Hazard Group S-1
Construction Type	602	Type V-B
Fire-Resistance Rating Requirements	Table 601	
Primary Structural Frame	0	
Bearing Walls, Exterior	0	
Bearing Walls, Interior	0	
Non-Bearing Walls	0	
Floor	0	
Roof	0	
Fire Sprinklers		Yes, NFPA 13
Allowable Building Height	Table 504.3	16'-9"
S (S) Type V-B:	60 feet	
Roof Covering Classification	Table 1505.1	Class C

Building Codes

2009 ANSI A117.1 Standard For Accessible And Usable Buildings And Facilities
2018 International Building Code, including Appendix J
2018 International Plumbing Code
2018 International Mechanical Code
2018 International Fuel Gas Code
2020 National Electrical Code
2018 International Energy Conservation Code, Commercial Provisions
2018 International Fire Code
National Fire Protection Association (NFPA) 101 Life Safety Code, 2015 Edition

General Project Notes

General Provisions

- The intent of the contract documents is to require contractor to provide all labor, materials, equipment, construction, and services necessary for the proper execution and completion of the work. Contractor will perform the work in accordance with the requirements expressly set forth in or reasonably inferable from the contract documents.
- Documents prepared by the Architect are instruments of the Architect's service for use solely with respect to this project. The Architect shall retain all common law, statutory, and other reserved rights, including the copyright. The contractor, subcontractors, and suppliers are authorized to use and reproduce the instruments of service solely and exclusively for execution of the work. The instruments of service may not be used for other projects or for additions to this project outside of the scope of work without the specific written consent of the Architect.
- The contract documents indicate general and typical details of construction. Where conditions are not specifically indicated but are of similar character to details shown, similar details of construction shall be used, subject to review and approval by the Architect and Structural Engineer. Building systems and components not specifically detailed shall be installed, as per minimum manufacturers recommendations.

Contractor

- The contractor shall carefully study and compare the contract documents with each other and with other information provided. Before commencing activities, the contractor shall take field measurements and field verify conditions; carefully compare this and other information known to the contractor with the contract documents; promptly report errors, inconsistencies, or omissions discovered to the Architect. Do not scale drawings, use given dimensions. Check details for location of all items not dimensioned on plans. Dimensions on plans are to face of framing.
- The contractor and subcontractors shall visit the project site, familiarize itself with the local conditions under which the work is to be performed, and correlate its own observations with the requirements of the contract documents.
- Should contractor or any of its subcontractors become aware of any question regarding the meaning or intent of any part of the contract documents prior to commencing that portion of the work about which there is a question, contractor will request an interpretation or clarification from Architect before proceeding.
- Where the contract documents require the contractor to provide professional services for architecture or engineering, the contractor shall cause such services to be performed by appropriately licensed professionals.
- The contractor shall supervise and direct the work using the contractor's best skill and attention. The contractor shall be solely responsible for and have control over construction means, methods, techniques, sequences, and procedures, and for coordinating all portions of the work.
- The contractor shall provide and pay for labor, materials, equipment, tools, utilities, transportation, and other facilities and services necessary for proper execution and completion of the work.
- The contractor shall enforce strict discipline and good order among the contractor's employees and other persons carrying out the contract work. The contractor shall not permit employment of unfit persons or persons not skilled in tasks assigned to them.
- Contractor is responsible for all material stored on site. Any/all damaged or missing material will be replaced at no cost to the owner. No materials from the work are to be stock piled on public right-of-ways. All rubbish and debris is to be removed from the site. The contractor is responsible to maintain the premises free of debris at all times and clean-up daily.
- The contractor warrants to the owner that: materials and equipment furnished under the contract will be new and of good quality unless otherwise required or permitted by the contract documents; the work will be free from defects not inherent in the quality required or permitted; the work will conform to the requirements of the contract documents. Any material or equipment warranties required by the contract documents shall be issued in the name of the owner, or shall be transferable to the owner.
- The contractor shall pay sales, consumer, use, and similar taxes that are legally required when the contract is executed.
- The contractor shall obtain and pay for the building permit and other permits and governmental fees, licenses, and inspections necessary for proper execution and completion of the work.
- The contractor shall comply with and give notices required by agencies having jurisdiction over the work. If the contractor performs the work knowing it to be contrary to applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities, the contractor shall assume full responsibility for such work and shall bear the attributable costs. The contractor shall promptly notify the architect in writing of any known inconsistencies in the contract documents with such governmental laws, rules, and regulations.
- The contractor shall promptly review, approve in writing, and submit to the Architect shop drawings, product data, samples, and similiar submittals required by the contract documents. Shop drawings, product data, samples and similiar submittals are not contract documents.
- The contractor shall confine operations at the site to areas permitted by law, ordinances, permits, the contract documents and the owner.
- The contractor shall be responsible for cutting, fitting, or patching required to complete the work or to make its parts fit together properly.
- The contractor shall keep the premises and surroundding area free from accumulation of debris and trash related to the work. At the completion of the work, the contractor shall remove its tools, construction equipment, machinery, and surplus material and shall properly dispose of waste materials.
- In the event the Contractor encounters on the site material reasonably believed to be hazardous materials which have not been rendered harmless, the Contractor shall immediately stop Work in the area affected and report the condition to the Owner and Architect in writing. The Work in the affected area shall be resumed in the absence of hazardous materials, or when it has been rendered harmless, by written agreement of the Owner and Contractor.
- The contractor must guarantee all work for a period of one year after substantial completion. Manufacturer's warranties do not replace the contractor's responsibility. All material and workmanship defects noted in the first year must be fixed/replaced at no cost to the owner.

Miscellaneous

- At the appropriate times, the contractor shall arrange and bear cost of tests, inspections and approvals of portions of the work required by the contract documents or by laws, statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities.
- Required means of egress and fire protection systems shall be maintained during construction.
- Provide a minimum 2A:10 BC rated fire extinguishers within 75-foot travel distance to all spaces in the structure.
- The contractor is to abide by the Utah Division of Air quality requirements and to contact the Utah Division of Air Quality at 801.536.4400.
- Required means of egress and fire protection systems shall be maintained during construction and demolition, remodeling or alterations and additions to the building. Fire Prevention Bureau staff shall approve review of any existing alterations as required in IFC Section 3311.2.
- Thermal and sound insulation and covering which are installed in concealed and exposed spaces and as covering over pipe and tubing shall be tested in accordance with ASTM E 84 and have a flame spread of 0-25 and smoke index of 0-450.

Drawing Index

G101 Cover Sheet
C101 Site Plan
C201 Electrical Site Plan
A101 Floor Plan and Exterior Elevations

American Fork City
Development Review
Committee

PLANNING AND ZONING REVIEWED
TVANEKELENBURG
2/15/23

Engineering Division
Reviewed
lburr 02/15/2023

Deferred Submittals

Submittal documents for deferred items shall be submitted to the architect or engineer of record who shall review them and forward to the building official with a notation indicating that the deferred documents have been reviewed and that they have been found to be in general conformance with the design of the building. The deferred items shall not be installed until their design & submittal documents have been approved by the building official.

Items to have deferred submittal include:
1. SWPPP Notice of Intent (NOI)

2. Fire Sprinklers: Must be submitted for review and approval by Fire Marshal. Plans shall be prepared and stamped by a Utah Licensed fire protection engineer or the plans must be reviewed and approved by a Utah licensed fire protection engineer with an engineer stamped letter of approval.

Project Team

Architect

EA Architecture
11576 South State Street, #103B
Draper, Utah

Chad Spencer
(801) 450-5113
chad@studio-ea.com

Structural (Concrete)

Mountain View Engineering
6184 West 9790 South
West Jordan, Utah

Jedediah Larsen
(801) 446-2480

Vicinity Map

Revision Schedule

#	Description	Date

LICENSED ARCHITECT
PAUL ANTHONY EVANS
273770
STATE OF UTAH

ea architecture
11576 South State Street, Suite 103b
Draper, Utah 84020

A Covered Storage Addition for

Standard Plumbing

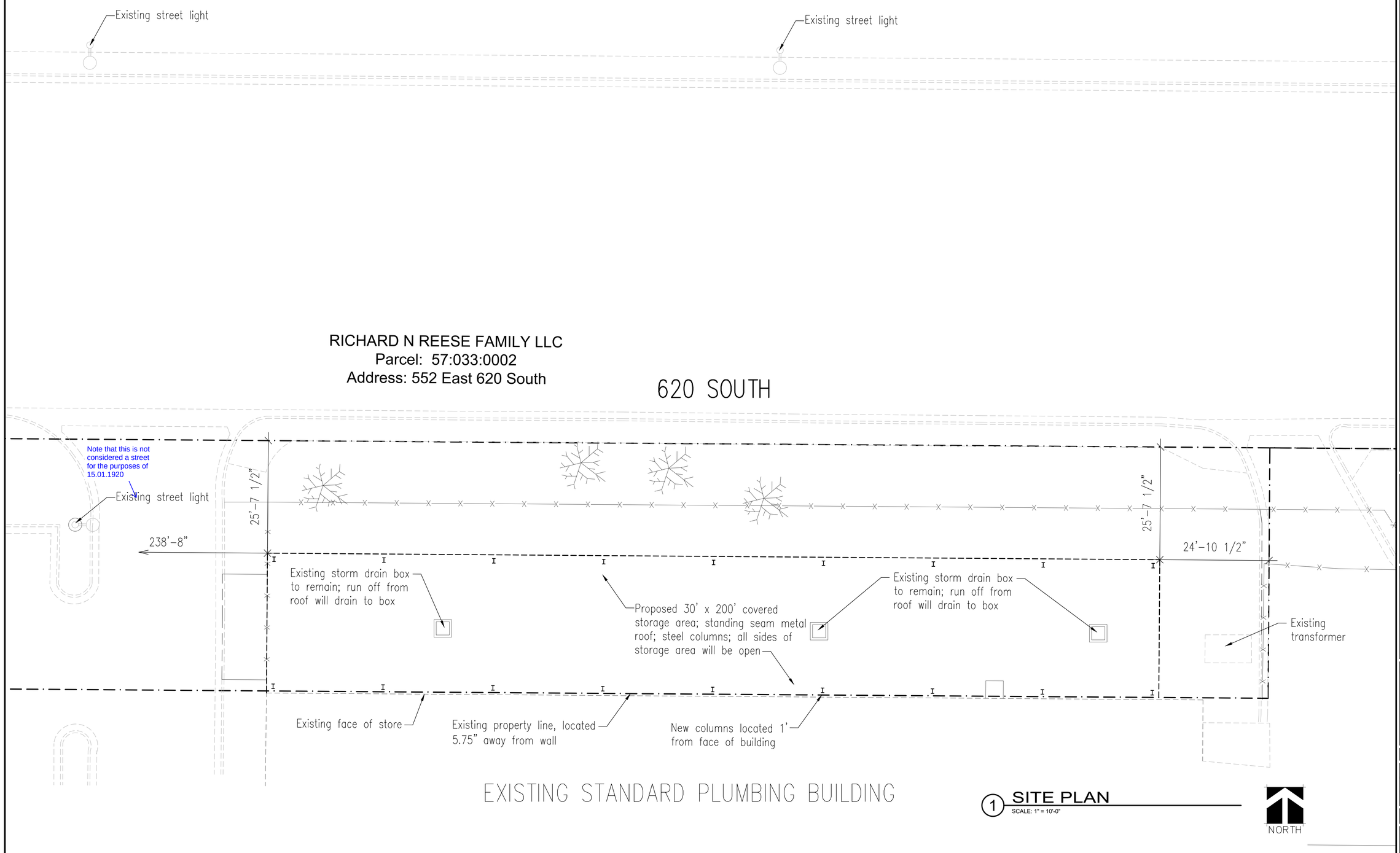
552 East 620 South
American Fork, Utah

Project Number: 22-38

November 21, 2022

Cover Sheet

G101



1 SITE PLAN
SCALE: 1" = 10'-0"

LICENSED ARCHITECT
PAUL ANTHONY EVANS
273770
STATE OF UTAH

evans + associates architecture
11376 south state street, suite 103b, draper, utah 84020
phone 801-553-8272 fax 801-553-8273

A Covered Storage Addition for
Richard N Reese Family Real Estate
552 East 620 South
American Fork, Utah
Parcel Number: 57:033:0002

Project Number: 22-38

October 8, 2021 - Schematic Design

August 19, 2022 - Site Plan Application

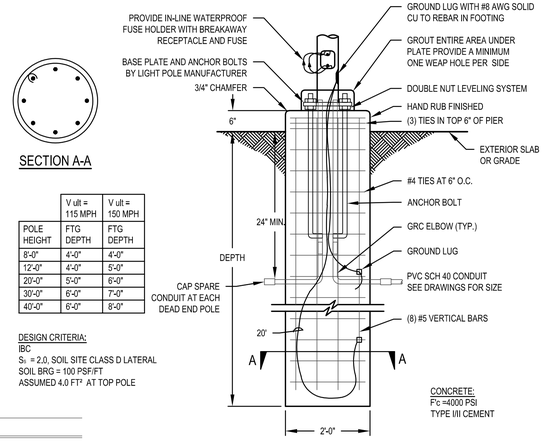
November 21, 2022 - Site Plan Application

SITE PLAN

C101

Know what's below. Call 811 before you dig.
BLUE STAKES OF UTAH
UTAH NOTIFICATION CENTER, INC.
www.bluestakes.org
1-800-662-4111

BLACK AND MCDONALD:
WADE LONG
801.381.9654
wlong@blackandmcdonald.com



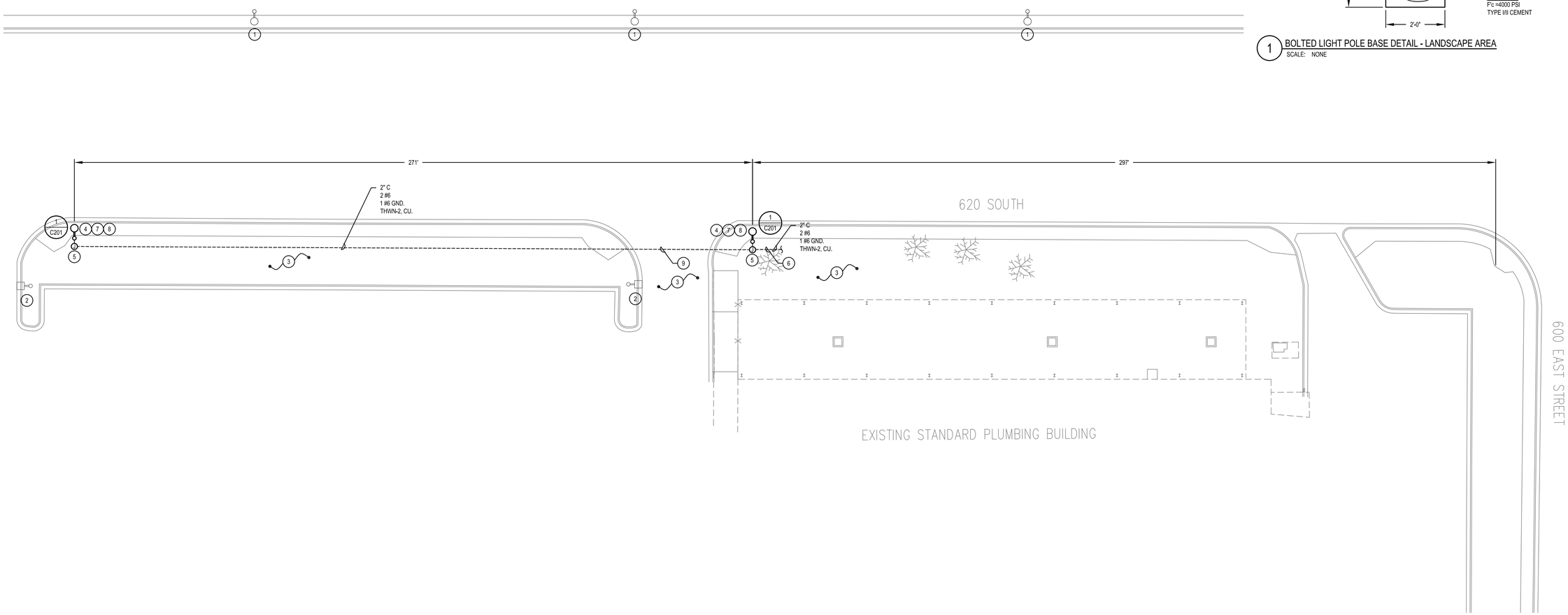
SECTION A-A

	V ult = 115 MPH	V ult = 150 MPH
POLE HEIGHT	FTG DEPTH	FTG DEPTH
8'-0"	4'-0"	4'-0"
12'-0"	4'-0"	5'-0"
20'-0"	5'-0"	6'-0"
30'-0"	6'-0"	7'-0"
40'-0"	6'-0"	8'-0"

DESIGN CRITERIA:
IBC
S_1 = 2.0, SOIL SITE CLASS D LATERAL
SOIL BRG = 100 PSF/FT
ASSUMED 4.0 FT² AT TOP POLE

CONCRETE:
F'c =4000 PSI
TYPE I/II CEMENT

1 BOLTED LIGHT POLE BASE DETAIL - LANDSCAPE AREA
SCALE: NONE



1 ELECTRICAL SITE PLAN
SCALE: 1" = 20'-0"

NORTH

ENVISION ENGINEERING
240 East Morris Ave. Suite 200
South Salt Lake City, UT 84115
P (801) 534-1130
F (801) 534-1080
www.envisioneng.com

KEYED NOTES

1. EXISTING STREET LIGHT TO REMAIN IN PLACE.
2. EXISTING PARKING LOT LIGHT TO REMAIN IN PLACE. PROTECT FROM DAMAGE DURING ALL PHASES OF THE CONSTRUCTION.
3. PRIOR TO INSTALLATION OF STREET LIGHTS CONTRACTOR TO CONFIRM LOCATIONS OF ALL BELOW GRADE UTILITIES. COORDINATE EXACT PLACEMENT OF NEW STREET LIGHTS WITH BELOW GRADE UTILITIES AND UTILITY EASEMENTS.
4. ELECTRICAL CONTRACTOR TO PROVIDE STREET LIGHT POLE, POLE BASE, CONDUIT, CONDUCTORS, AND REQUIRED CONNECTIONS TO ROCKY MOUNTAIN POWER AND AMERICAN FORK CITY.
5. PROVIDE IN-GRADE JUNCTION BOX AND FUSING AS REQUIRED BY ROCKY MOUNTAIN POWER AND AMERICAN FORK CITY. JUNCTION BOX LID TO BE LABELED "STREET LIGHTS". CONFIRM ALL REQUIREMENTS PRIOR TO ANY WORK BEING DONE.
6. CONFIRM CONNECTION LOCATION WITH ROCKY MOUNTAIN POWER, AMERICAN FORK CITY, AND OR BLACK AND MCDONALD PRIOR TO ANY WORK BEING DONE.
7. NEW STREET LIGHT AND POLE TO CONFORM WITH ALL AMERICAN FORK CITY REQUIREMENTS. CONFIRM TYPE WITH AMERICAN FORK CITY PRIOR TO ORDERING. CONTRACTOR TO PROVIDE STREET LIGHT APPLICATION TO AMERICAN FORK CITY PRIOR TO ANY WORK BEING STARTED OR STREET LIGHTS ORDERED.
8. CONTRACTOR TO CONTACT BLACK & MCDONALD FOR ALL REQUIRED INSPECTIONS AND INSPECTION REQUIREMENTS PRIOR TO INSTALLATION OF STREET LIGHTS.
9. BORE UNDER EXISTING DRIVE WAY AS NECESSARY TO EXTEND CONDUITS.

REGISTERED PROFESSIONAL ENGINEER
DAVID P. WHITTON
No.264307
STATE OF UTAH

evans + associates architecture
11576 south state street, suite 103b, draper, utah 84020
phone 801-553-8272 fax 801-553-8273

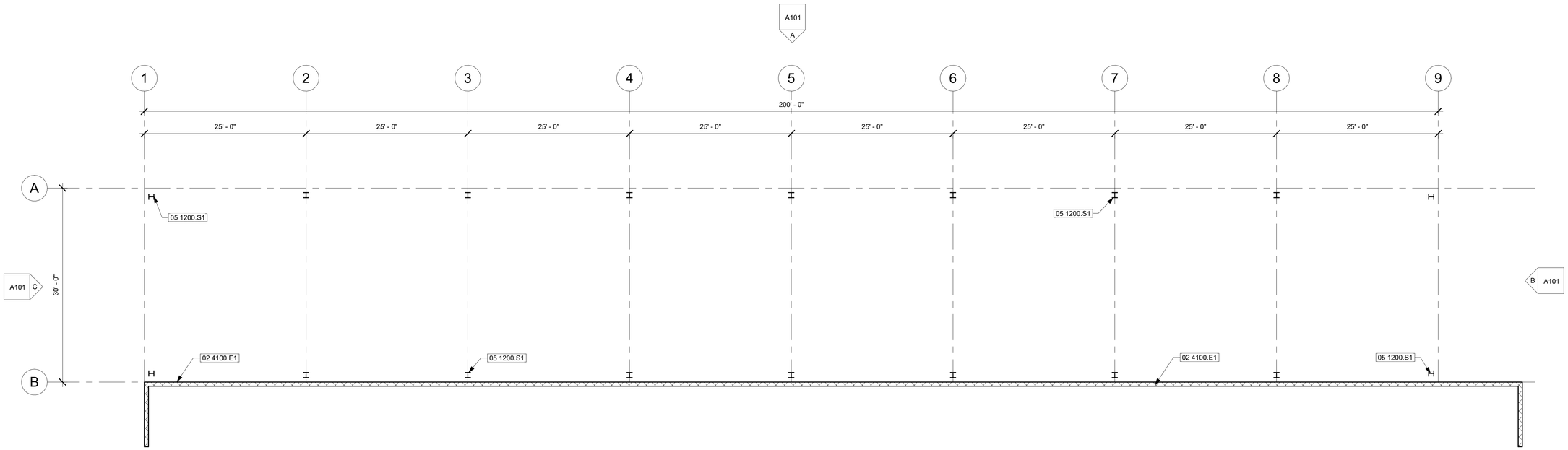
A Covered Storage Addition for
Richard N Reese Family Real Estate
552 East 620 South
American Fork, Utah
Parcel Number: 57:033:0002

Project Number: 22-38

October 8, 2021 - Schematic Design
August 19, 2022 - Site Plan Application
November 21, 2022 - Site Plan Application

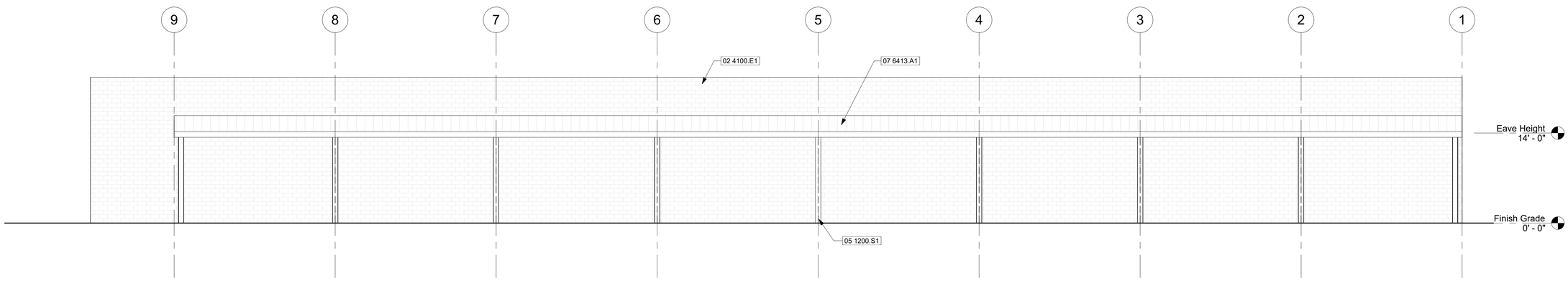
ELECTRICAL SITE PLAN

C201



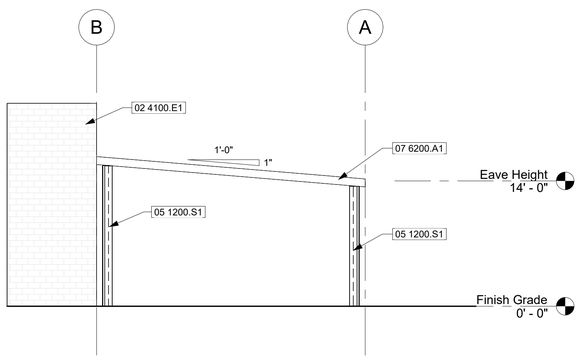
Floor Plan
SCALE: 1/8" = 1'-0"

1



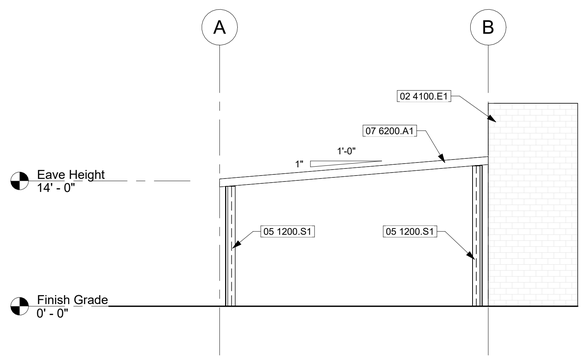
North Elevation
SCALE: 1/8" = 1'-0"

A



East Elevation
SCALE: 1/8" = 1'-0"

B



West Elevation
SCALE: 1/8" = 1'-0"

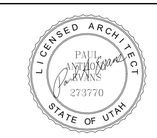
C

Keyed Notes

02 4100.E1	Existing building to remain; protect during construction
05 1200.S1	Pre-engineered metal building column, typical
07 6200.A1	Pre-finished metal fascia with drip edge
07 6413.A1	Standing seam metal roof, install per all manufacturer's recommendations

Revision Schedule

#	Description	Date



ea architecture
11576 South State Street, Suite 103b
Draper, Utah 84020

A Covered Storage Addition for

Standard Plumbing

552 East 620 South
American Fork, Utah

Project Number: 22-38

November 21, 2022

Floor Plan and Exterior Elevations

A101

AMERICAN FORK CITY
PLANNING COMMISSION

MEETING DATE: February 22nd, 2023

AGENDA TOPIC:

Review and action on a Site Plan application for a pylon sign for Deer Park, located at 70 East 1100 S, in the Planned Industrial (PI-1) Zone.

BACKGROUND INFORMATION		
Location:		70 East 1100 S
Applicants:		KB Sign and Construction, Deer Park LLC
Existing Land Use:		Design Industrial
Proposed Land Use:		N/A
Surrounding Land Use:	North	Residential Low Density
	South	Design Industrial
	East	Residential Low Density
	West	Residential Low Density
Existing Zoning:		PI-1
Proposed Zoning:		N/A
Surrounding Zoning:	North	Unincorporated Territory
	South	PF
	East	RA-5
	West	Unincorporated Territory

BACKGROUND:

The applicant is applying for a Site Plan approval for a pylon sign for Deer Park, located in the area 70 E 1100 S. The proposal consists of a 350 square foot pylon sign for Deer Park's planned industrial park. The pylon sign can provide up to 9 tenants for the sign faces. The sign shall be placed on the northeastern portion of Parcel ID: 37:365:0001, adjacent to 1100 South. All development parcels of Deer Park approximately consist of 14.11 acres.

Sec 17.6.101 Administrative Site Plan Review

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

1. Planning commission to approve. The planning commission, acting in an administrative capacity, shall have the function, duty and power to approve or disapprove a project plan and to attach such modifications or conditions as may be deemed appropriate to improve the layout, to ensure that the project will not pose any detrimental effect to persons or property, or to protect the health, safety, and general welfare of the citizens of the city.
2. Application required. Application for site plan approval shall be submitted on forms provided by the city and shall be accompanied by maps and drawings showing the following:
1. The location of all existing and proposed buildings and structures on the site, with full dimensions showing the distance between buildings and distances from buildings to adjacent property lines.
2. The location of all parking spaces, driveways, and points of vehicular ingress and egress.
3. A landscaping plan showing the location, types, and initial sizes of all planting materials to be used together with the location of fences, walls, hedges, and decorative materials.
4. Preliminary elevations of main buildings showing the general appearance and types of external materials to be used.
5. The locations of solid waste receptacles and trash pick-up areas.
3. Appeals permitted. Any person aggrieved by a determination of the planning commission may request a hearing before the city council who shall have the authority to reverse, affirm or modify any decision of said commission. Any such appeal shall be filed within ten days of the determination of the planning commission.
4. Issuance of a permit. A building permit shall not be issued for any building or structure or external alterations thereto until the provisions of this section have been complied with. Any construction not in conformance with an approved site plan shall be considered a violation of this code. Any building permit issued shall ensure that development is undertaken and completed in conformity with the plans as approved.

PROJECT MAP:

PROJECT CONDITIONS OF APPROVAL:

1. N/A

FINDINGS OF FACT:

- The site plan application meets the requirements of Section 17.6.101 of American Fork City Municipal Code.
- The pylon sign meets the requirements of Section 17.5.128 of American Fork City Municipal Code.

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 Plan Review Comments:** All plans and documents shall comply with all the Technical Review Committee comments and the City Engineer's final review.
8. **Commercial Structure:** Record an Owner Acknowledgment and Utility Liability Indemnification if the proposed building is a multi-unit commercial structure served by a single utility service.
9. **Sensitive Lands:** Record all applicable documents required for compliance with the City's Sensitive Lands Ordinance.
10. **Utility Notification Form:** Submit a Subdivision Utility Notification Form.
11. **Professional Verification:** Submit final stamped construction documentation by all appropriate professionals.
12. **Fees:** Payment of all development, inspection, recording, streetlight, and other project related fees.
13. **Mylar:** Submit a Mylar. All plats will receive final verification of all formats, notes, conveyances, and other items contained on the plat by City staff (recorder, legal, engineer, GIS, planning).

STAFF RECOMMENDATION:

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

POTENTIAL MOTIONS – Site Plan

APPROVAL

Madame Chairwoman, I move that we recommend approval for the Site Plan application for a pylon sign for Deer Park, located at 70 East 1100 S, in the Planned Industrial (PI-1) Zone, subject to any conditions found in the Staff Report, or recommended by the Fire Marshal.

DENIAL

Madame Chairwoman, I move that we recommend denial for the Site Plan application for a pylon sign for Deer Park, located at 70 East 1100 S, in the Planned Industrial (PI-1) Zone.

TABLE

Madame Chairwoman, I move that we table action on the Site Plan application for a pylon sign for Deer Park, located at 70 East 1100 S, in the Planned Industrial (PI-1) Zone, and instruct the developer/staff to _____.

1 INTERNALLY ILLUMINATED DS POLE SIGN

Pole Accent Logo
0.090 Aluminum Skin w. Square Tube Sign Framing
(Gauntlet Gray SW7019 ■)
0.5" White Acrylic Push Thru Logo

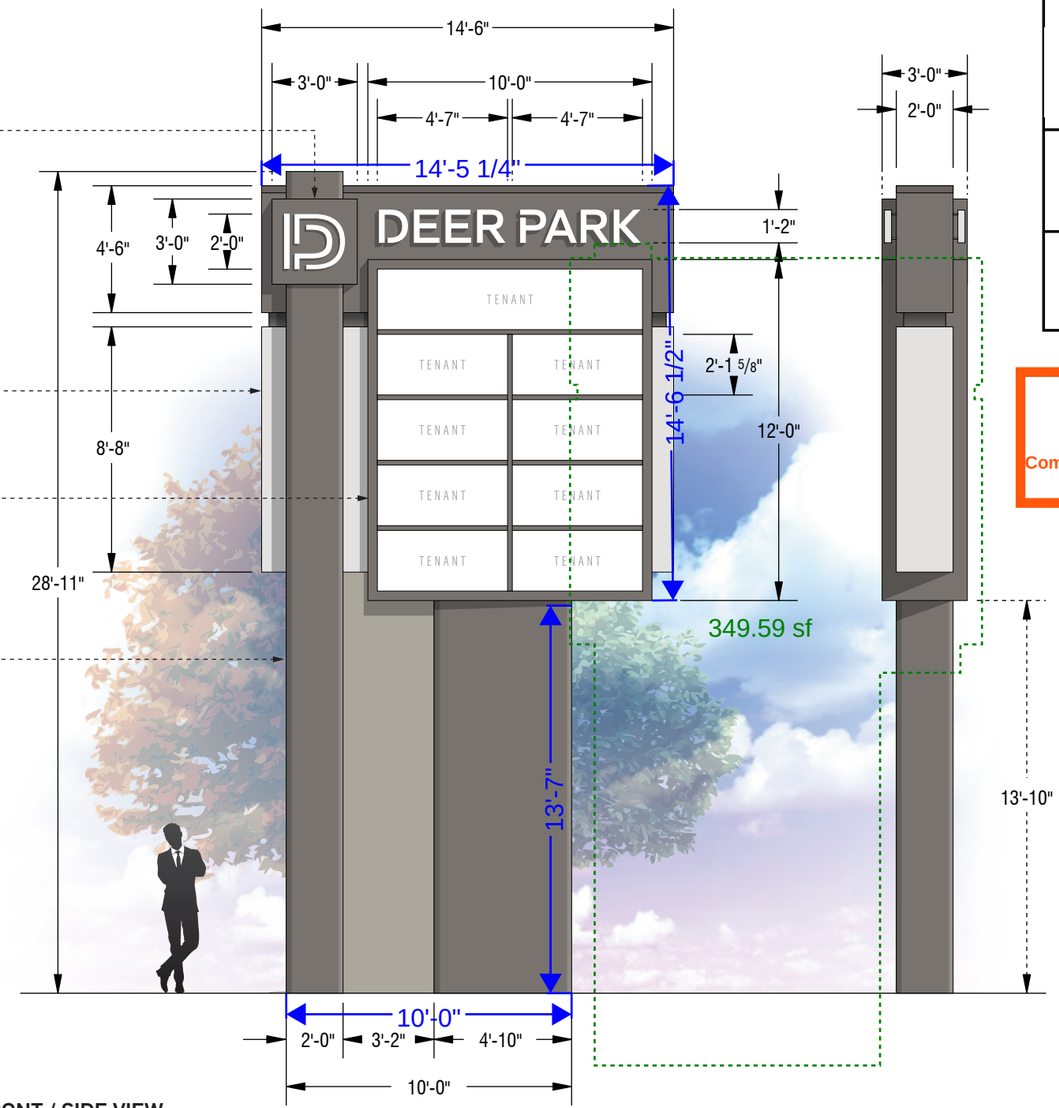
Reverse Illum Channel Letters (Heading)
0.125" Aluminum Faces - Painted; Satin Finish (White ■)
3" .063 Aluminum Returns - Painted; Satin Finish (White ■)
White LED Halo Illumination

Pole Sign Cabinet Body
0.090 Aluminum Skin w. Square Tube Sign Framing
(Gauntlet Gray SW7019 ■)(Dorian Gray SW7017 ■)(Extra White ■)

Internally Illum DS Tenant Cabinet
0.1875" Individual White Acrylic Faces
4" .063 Aluminum Exterior Retainer w. 2" Interior Retainers
(Gauntlet Gray SW7019 ■)
White LED Illumination

Accent Pole Cover
0.090 Aluminum Skin w. Square Tube Sign Framing
(Gauntlet Gray SW7019 ■)(Dorian Gray SW7017 ■)
Installation
Steel Pole w. Concrete Footing as Per Engineering

SQUARE FOOTAGE BREAKDOWN
760' Linear Frontage on 6800 N / 1100 S
210.46 sq.ft. (Top Cabinet Area) / 138.33 sq.ft. (Pole Cover)
Proposed Signage = 348.79 sq.ft.



American Fork City
Technical Review Committee

Engineering Division
Reviewed
lburr 02/07/2023

Planning and Zoning
Reviewed
Copperman 02/07/2022

Next Step
Approved
Proceed to Planning Commission on February 22nd, 2023

A **INTERNALLY ILLUMINATED DS POLE SIGN - FRONT / SIDE VIEW** **QTY 1**

Scale: 3/16" = 1'-0" (11" x 17" Page Size)

KB SIGNS IS A CONTRACTOR WITH THE STATE OF UTAH • CONTRACTOR LICENSE 1068165601 S440 • $1,000,000 LIABILITY INSURANCE • DRAWING IS REPRESENTATIONAL ONLY • SCALE, SIZING AND COLOR MAY VARY • REFER TO PROPOSAL FOR EXACT SPECIFICATIONS

KB SIGNS

INSTALLATION ADDRESS:
Deer Park
70 East 1100 South
American Fork, Utah 84003

DESIGN #
Deer Park Am Fork Ext Pole Sign Package 001-22 (upd)(2)
DATE
01/27/23
SALESPERSON
Bruno Visconti 801.836.7426

CUSTOMER SIGNATURE DATE

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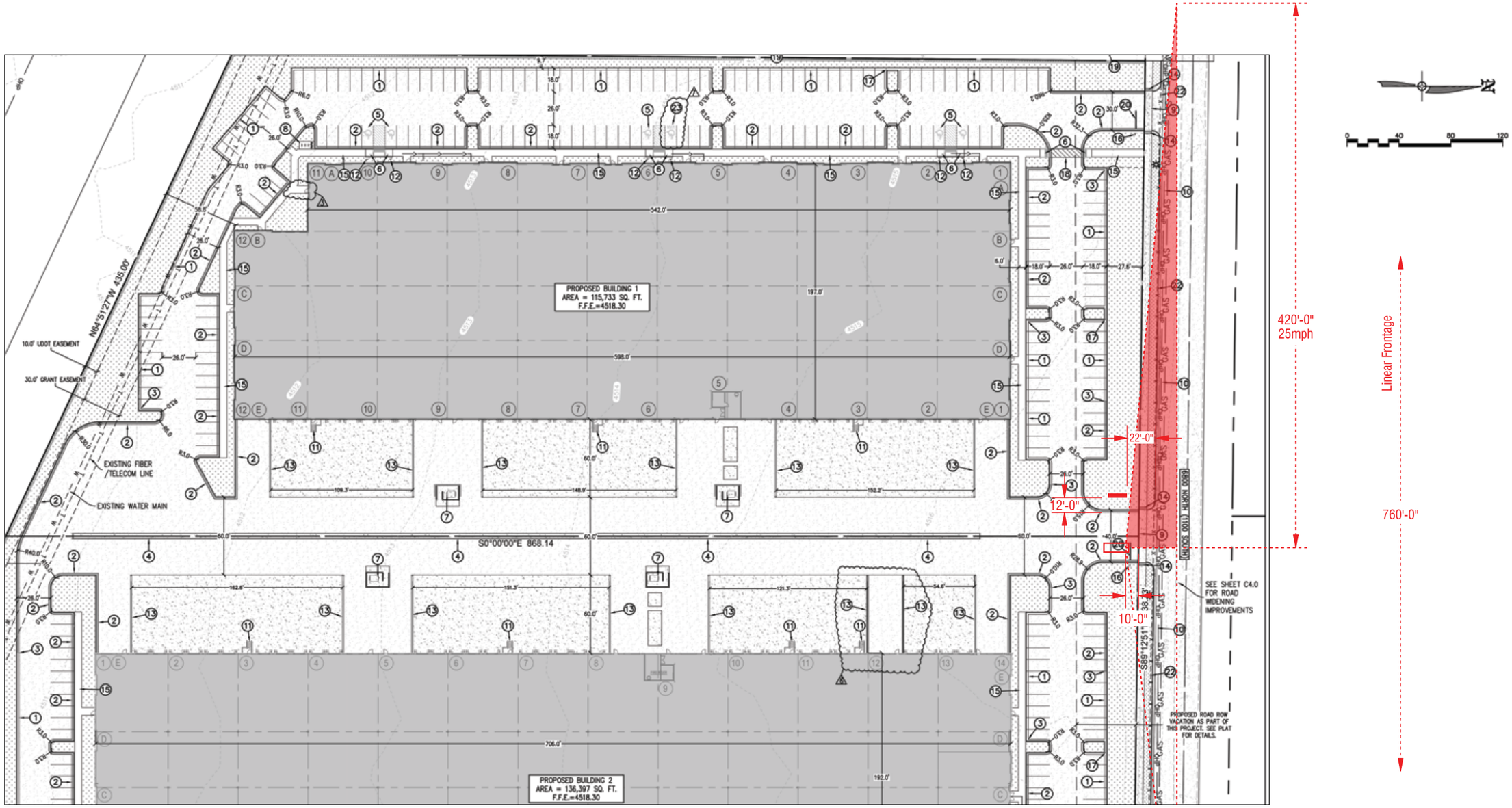

INSTALLATION LOCATION SITE MAP

Scale: 1" = 80'-0" (11" x 17" Page Size)

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KB SIGNS

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American Fork, Utah 84003

DESIGN #
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01/27/23
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INSTALLATION LOCATION SITE MAP - OVERVIEW

Scale: 1" = 800'-0" (11" x 17" Page Size)

KB SIGNS IS A CONTRACTOR WITH THE STATE OF UTAH • CONTRACTOR LICENSE 1068165601 S440 • $1,000,000 LIABILITY INSURANCE • DRAWING IS REPRESENTATIONAL ONLY • SCALE, SIZING AND COLOR MAY VARY • REFER TO PROPOSAL FOR EXACT SPECIFICATIONS

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INSTALLATION ADDRESS:
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70 East 1100 South
American Fork, Utah 84003

DESIGN #
Deer Park Am Fork Ext Pole Sign Package 001-22 (upd)(2)
DATE
01/27/23
SALESPERSON
Bruno Visconti 801.836.7426

CUSTOMER SIGNATURE DATE

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AMERICAN FORK CITY **MEETING DATE:** February 22nd, 2023
PLANNING COMMISSION STAFF REPORT

AGENDA TOPIC:

Review and action on an application for an Accessory Structure in excess of 1,000 square feet, located in the area of 145 West 640 North in the Residential (R1-9000) Zone.

BACKGROUND INFORMATION		
Location:		145 West 640 North
Project Type:		Accessory Structure Site Plan
Applicants:		Matthew Hammond
Existing Land Use:		Residential Low Density
Proposed Land Use:		N/A
Surrounding Land Use:	North	Residential Low Density
	South	Residential Low Density
	East	Residential Low Density
	West	Residential Low Density
Existing Zoning:		R1-9000
Proposed Zoning:		N/A
Surrounding Zoning:	North	R1-9000
	South	R1-9000
	East	R1-9000
	West	R1-9000

BACKGROUND:

The applicant is applying for site plan approval for the development of an accessory structure in the R1-9000 Zone, located at 145 W 640 N. The proposal consists of 1 parcel for an addition to an existing accessory structure. The entire development parcel consists of 0.38 acres. The accessory structure exceeds the 1000 square foot requirement to be brought to the Planning Commission and Planning Commission will be the approval body for this structure.

Sec 17.5.105 Area Of Accessory Buildings

Accessory buildings shall not be larger than an area two times the size of the footprint (foundation) of the primary structure; or cover more than twenty-five percent of the total rear yard area of a lot, whichever is less. All accessory buildings shall be of a character which is consistent and compatible with the bulk, height, style and construction materials of existing dwellings in the immediate vicinity. There shall be no signage on any portion of the accessory building and the area surrounding the accessory building shall be landscaped. An accessory building containing a building footprint of one thousand square feet or larger shall require approval of the planning commission, subject to the following findings: (1) the accessory building will be incidental to the primary use of the parcel, (2) the applicant has provided adequate assurance that neither the accessory building nor any portion thereof will be used or converted for use as living or sleeping quarters (see Section 17.5.106) or for the conduct of a business (except when located in a commercial zone permitting such activity), and (3) the bulk, height, style and construction material of the accessory structure is compatible with dwellings in the immediate vicinity and will not result in an undue negative impact upon adjacent properties.

PROJECT MAP:

PROJECT CONDITIONS OF APPROVAL:

1. N/A

FINDINGS OF FACT:

- The Accessory Structure addition meets the requirements of Section 17.5.105 of American Fork City Code.
- The existing accessory structure had a previous site plan approval from Planning Commission stating that the structure shall not be built within the PUE, but the existing structure is located within the PUE.
- An Easement Encroachment Agreement will need to be provided for the existing accessory structure that encroaches into the current PUE before permits are issued.

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 Plan Review Comments:** All plans and documents shall comply with all the Technical Review Committee comments and the City Engineer's final review.
8. **Commercial Structure:** Record an Owner Acknowledgment and Utility Liability Indemnification if the proposed building is a multi-unit commercial structure served by a single utility service.
9. **Sensitive Lands:** Record all applicable documents required for compliance with the City's Sensitive Lands Ordinance.

10. **Utility Notification Form:** Submit a Subdivision Utility Notification Form.
11. **Professional Verification:** Submit final stamped construction documentation by all appropriate professionals.
12. **Fees:** Payment of all development, inspection, recording, streetlight, and other project related fees.
13. **Mylar:** Submit a Mylar. All plats will receive final verification of all formats, notes, conveyances, and other items contained on the plat by City staff (recorder, legal, engineer, GIS, planning).

POTENTIAL MOTIONS – Accessory Structure Site Plan

APPROVAL

Madame Chairwoman, I move that we approve the Accessory Structure in excess of 1,000 square feet, located in the area of 145 West 640 North in the Residential (R1-9000) Zone, subject to any conditions found in the Staff Report.

DENIAL

Madame Chairwoman, I move that we deny the Accessory Structure in excess of 1,000 square feet, located in the area of 145 West 640 North in the Residential (R1-9000) Zone.

TABLE

Madame Chairwoman, I move that we table action on the Accessory Structure in excess of 1,000 square feet, located in the area of 145 West 640 North in the Residential (R1-9000) Zone, and instruct the developer/staff to _____.

American Fork City
Development Review
Committee

PLANNING & ZONING REVIEWED
TVANEKELENBURG
2/14/23

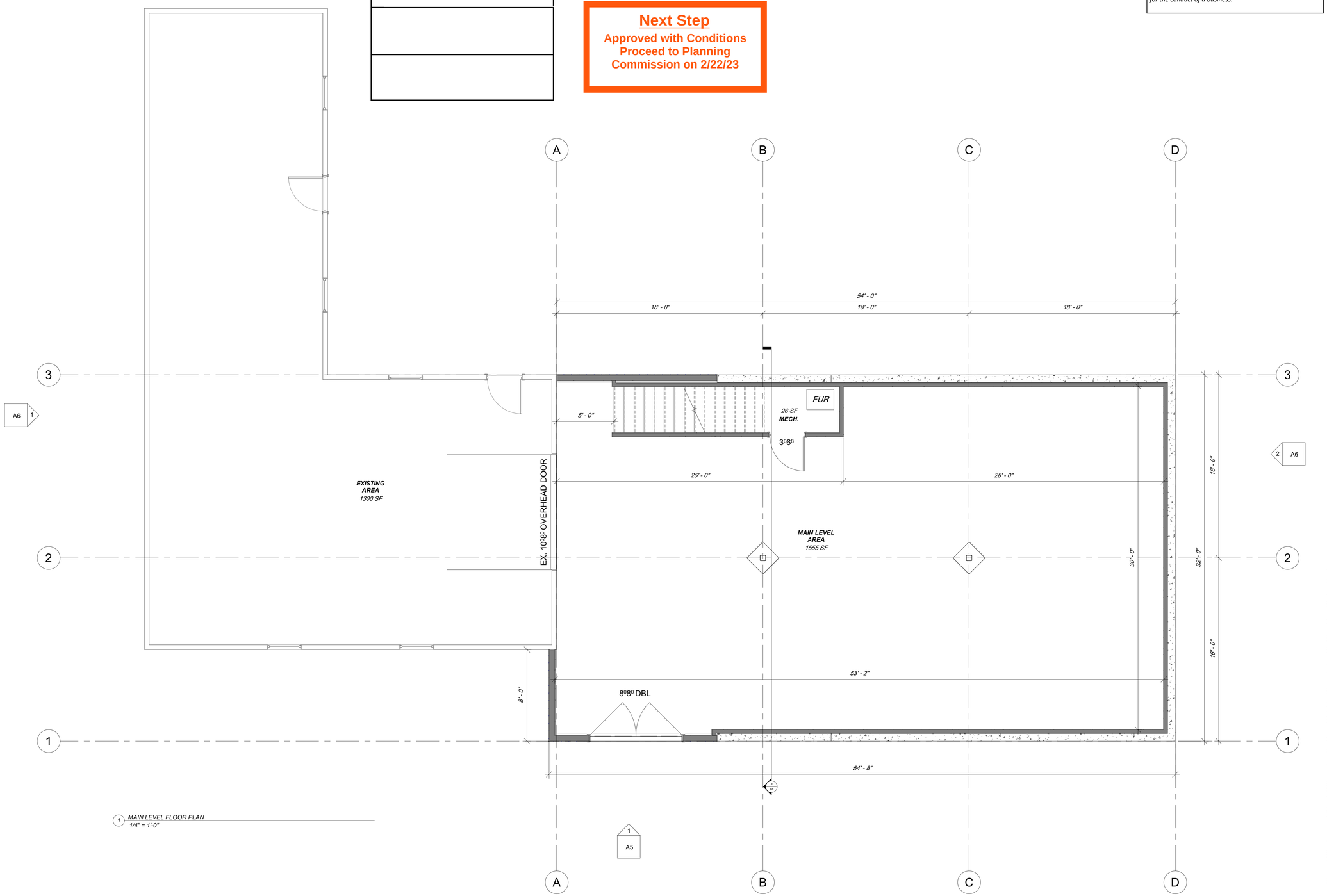
Next Step
Approved with Conditions
Proceed to Planning Commission on 2/22/23

Property Notes

In accordance with the Municipal Code of American Fork, Utah Chapter 17, Section 17.5.105

The accessory building on this parcel will be incidental to the primary use of the parcel, as defined by American Fork City Zone R1-9000

This accessory building, nor any portion thereof, will be used or converted for use as living or sleeping quarters, or for the conduct of a business.



1 MAIN LEVEL FLOOR PLAN
1/4" = 1'-0"

NO	DESCRIPTION	DATE	BY

REVISIONS

HARRIS HOME DESIGN
346 E 200 N.
Alpine, Utah 84004
Phone: (435) 230-0006, Rick Harris
email: harrishomedesign1@gmail.com

PROPOSED MAIN LEVEL FLOOR PLAN

HAMMOND STUDIO

145 W. 840 N.
AMERICAN FORK, UTAH

DATE: 12/12/22
SCALE: 1/4" = 1'-0"

JOB NO.
247

SHEET NO:
A3

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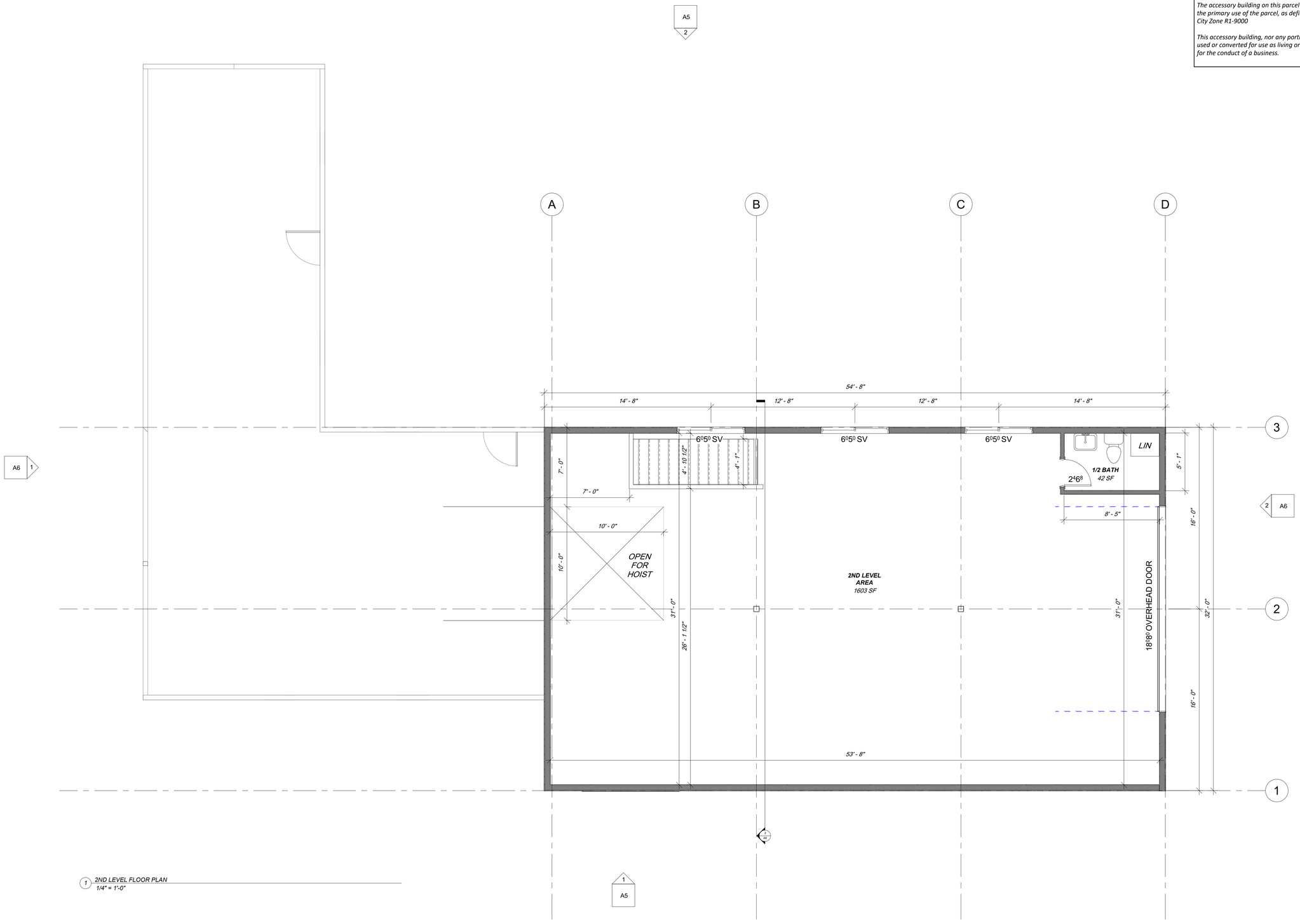
Property Notes

In accordance with the Municipal Code of American Fork, Utah Chapter 17, Section 17.5.105

The accessory building on this parcel will be incidental to the primary use of the parcel, as defined by American Fork City Zone R1-9000

This accessory building, nor any portion thereof, will be used or converted for use as living or sleeping quarters, or for the conduct of a business.



1 2ND LEVEL FLOOR PLAN
1/4" = 1'-0"

NO	DESCRIPTION	DATE	BY

REVISIONS

HARRIS HOME DESIGN
346 E 200 N.
Alpine, Utah 84004
Phone: (435) 230-0006, Rick Harris
email: harrishomedesign1@gmail.com

PROPOSED 2ND LEVEL FLOOR PLAN

HAMMOND STUDIO

145 W. 640 N.
AMERICAN FORK, UTAH

DATE: 12/12/22
SCALE: 1/4" = 1'-0"

JOB NO.
247

SHEET NO:
A4

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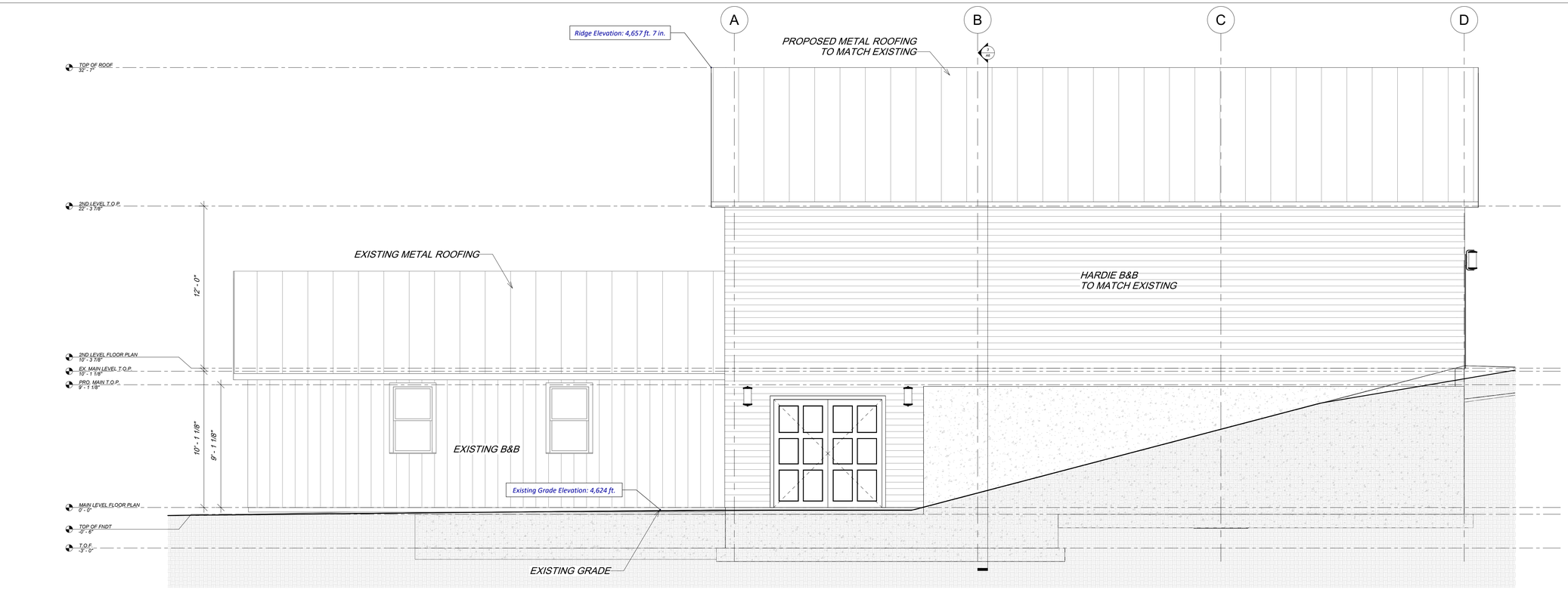
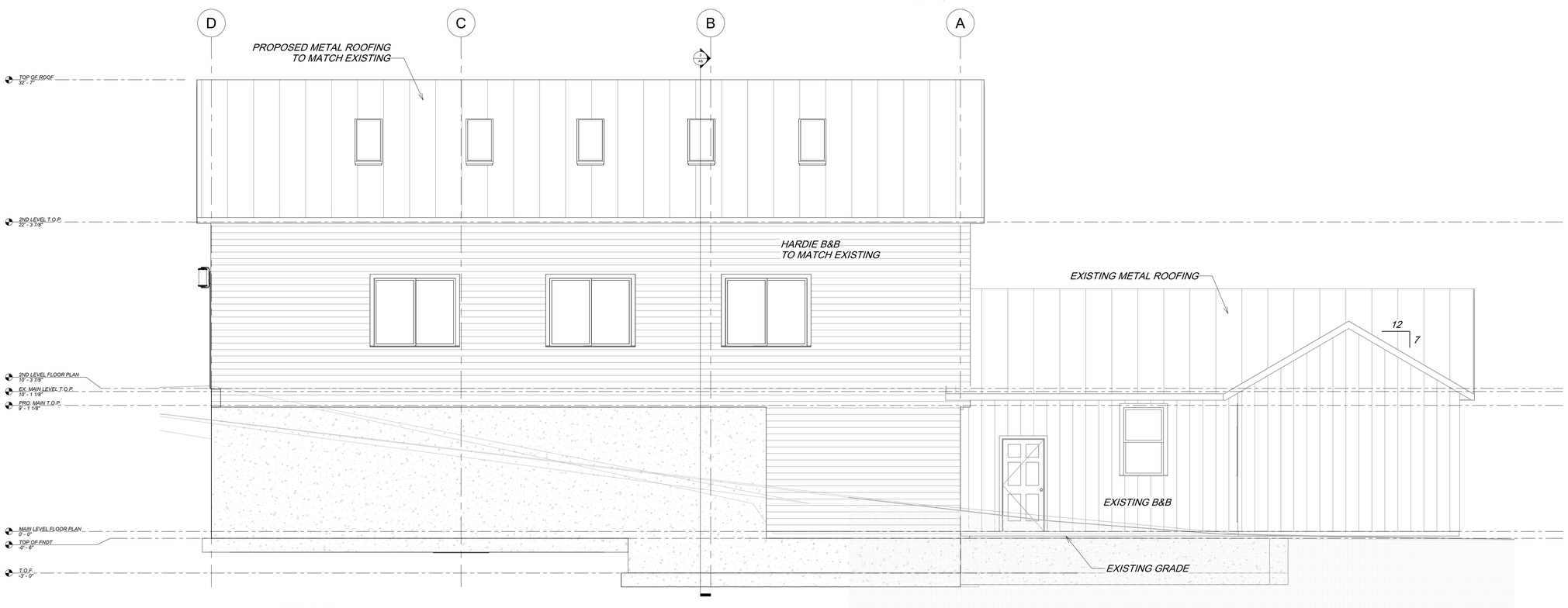


1 SOUTH ELEVATION
1/4" = 1'-0"



2 NORTH ELEVATION
1/4" = 1'-0"

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REVISIONS

NO	DESCRIPTION	DATE	BY

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FRONT AND REAR ELEVATIONS

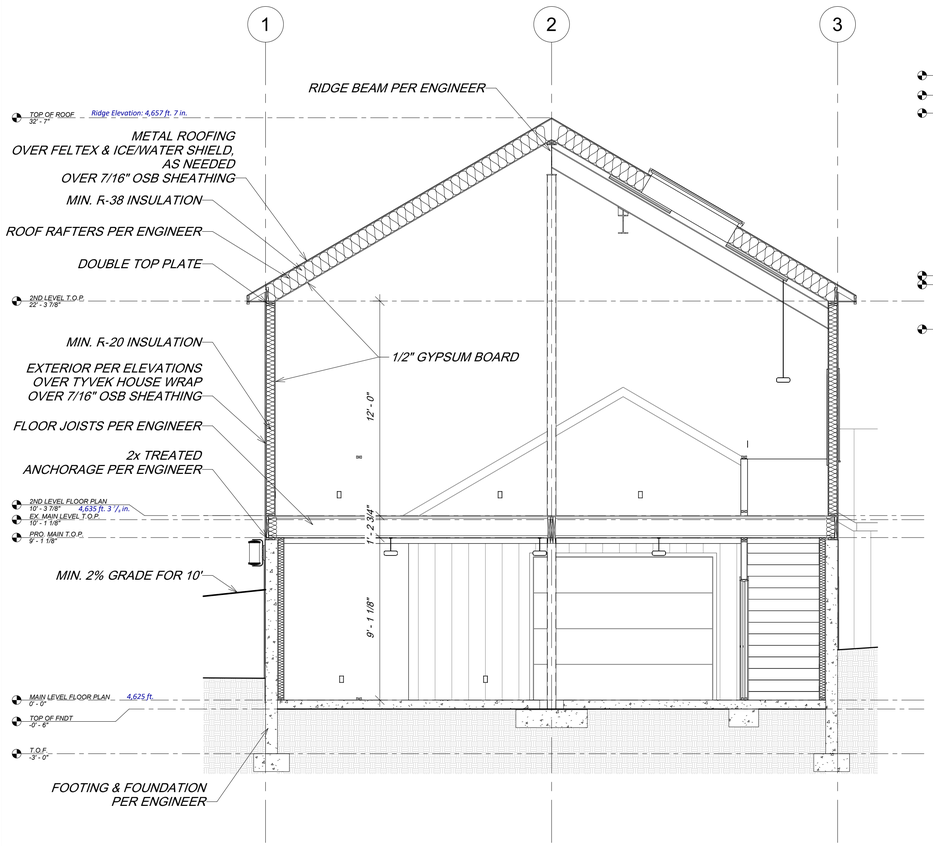
HAMMOND STUDIO

145 W. 640 N.
AMERICAN FORK, UTAH

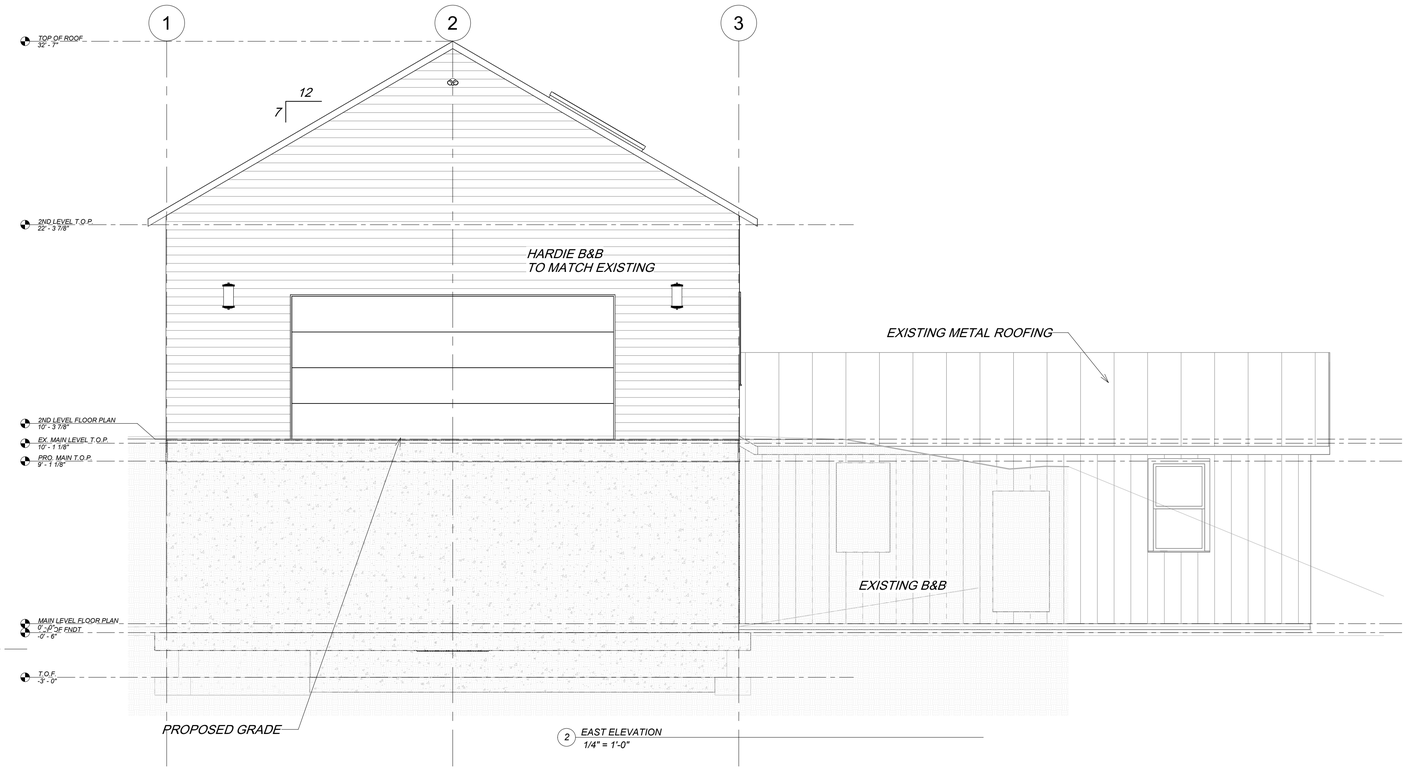
DATE: 12/12/22
SCALE: 1/4" = 1'-0"

JOB NO.
247

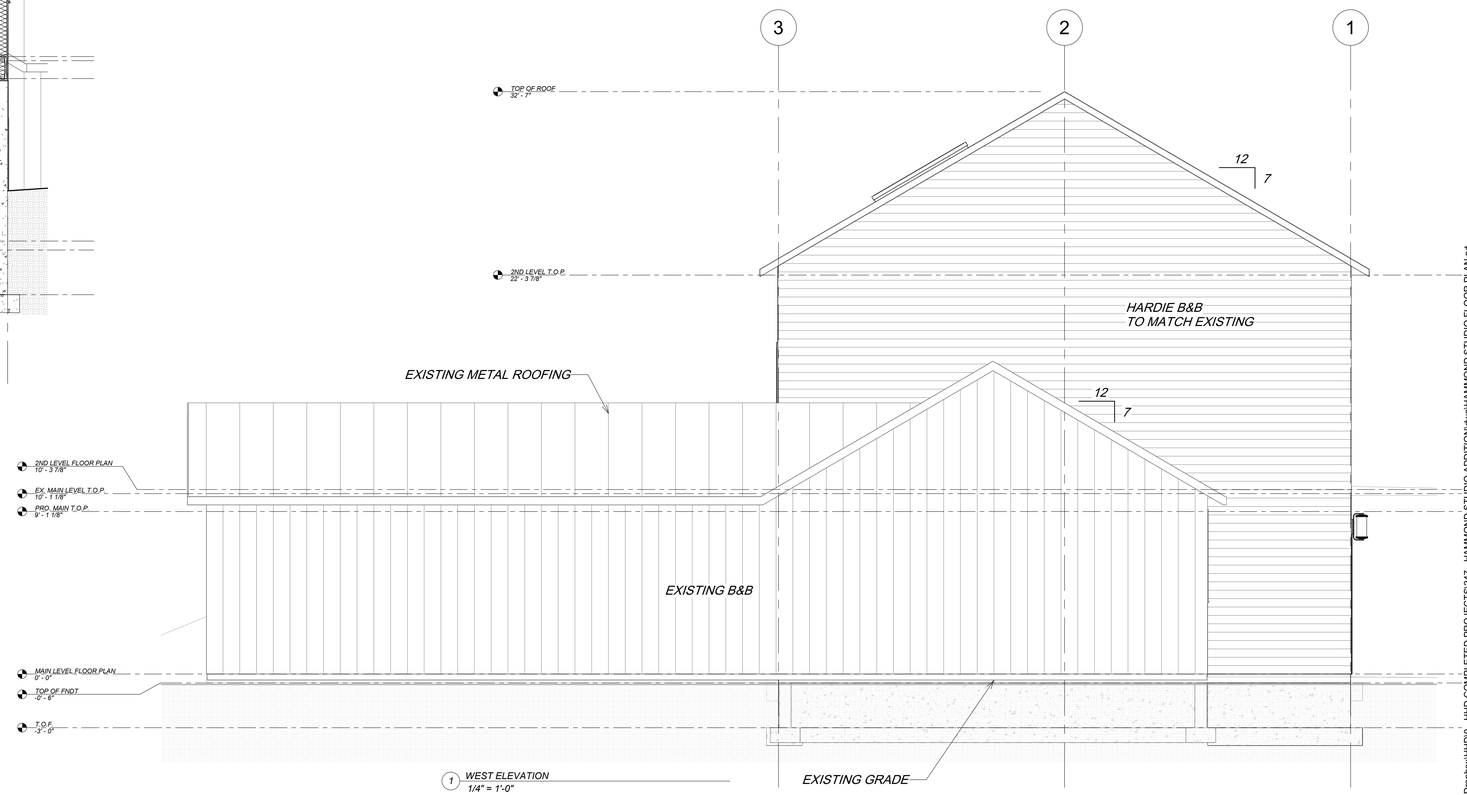
SHEET NO:
A5



3 BUILDING SECTION
1/4" = 1'-0"



2 EAST ELEVATION
1/4" = 1'-0"



1 WEST ELEVATION
1/4" = 1'-0"

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REVISIONS			
NO	DESCRIPTION	DATE	BY

HARRIS HOME DESIGN
346 E 200 N.
Alpine, Utah 84004
Phone: (435) 230-0006, Rick Harris
email: harrishomedesign1@gmail.com

LEFT AND RIGHT ELEVATIONS

HAMMOND STUDIO

145 W. 640 N.
AMERICAN FORK, UTAH

DATE: 12/12/22
SCALE: 1/4" = 1'-0"

JOB NO.
247

SHEET NO:
A6

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ELECTRICAL NOTES

1. GENERAL ELECTRICAL: PER CURRENT ELECTRICAL CODES AND AS NOTED IN PLAN.
2. ELECTRICAL BOXES TO SUPPORT FANS AND LARGE FIXTURES SHALL BE APPROVED FOR SUPPORTING SUCH LOADS.
3. COVERED JUNCTION BOXES SHALL BE PROVIDED UNDER KITCHEN SINKS TO PROVIDE POWER FOR DISHWASHERS, GARBAGE DISPOSELS AND OTHER APPLIANCES AS REQUIRED.

ELECTRICAL OUTLET NOTES

1. ELECTRIC OUTLETS IN BATHROOMS WITHIN SIX FEET OF SINKS, IN GARAGES, BASEMENTS AND OUTDOORS SHALL BE GFI PROTECTED.
2. EXTERIOR OUTLETS SHALL HAVE WEATHER PROOF COVERS.
3. EXTERIOR ELECTRICAL OUTLETS SHALL BE PROVIDED AT THE FRONT AND BACK OF THE BUILDING.
4. ELECTRICAL OUTLETS SHALL BE PLACED NOT FURTHER THAN 12" O.C. ON EVERY WALL AND SHALL BE PLACED ON WALLS GREATER THAN 2' IN LENGTH.
5. COUNTERTOPS 12" AND WIDER SHALL HAVE ELECTRICAL OUTLETS SPACED NOT GREATER THAN 48" O.C.
6. HALLWAYS 10' OR GREATER IN LENGTH SHALL HAVE AT LEAST ONE ELECTRICAL OUTLET.
7. MECHANICAL EQUIPMENT SHALL HAVE AN ELECTRICAL OUTLET LOCATED WITHIN 25'.
8. AT LEAST ONE RECEPTACLE OUTLET SHALL BE INSTALLED AT EACH ISLAND COUNTER SPACES WITH A LONG DIMENSION OF 24" OR GREATER AND A SHORT DIMENSION OF 12" OR GREATER.
9. PROVIDE TWO OR MORE DEDICATED 2¬-AMPERE SMALL APPLIANCE BRANCH CIRCUITS EVENLY PROPORTIONED IN THE KITCHEN, PANTRY, BREAKFAST ROOM, DINING ROOM OR SIMILAR AREA.
10. AT LEAST ONE RECEPTACLE OUTLET SHALL BE INSTALLED AT EACH PENINSULA COUNTER WITH A LONG DIMENSION OF 24" OR GREATER AND A SHORT DIMENSION OF 12" OR GREATER.

LIGHTING NOTES

1. THE PRIMARY LIGHTING FOR KITCHENS AND BATHROOMS SHALL HAVE A MIN. EFFICIENCY OF 40 LUMENS PER WATT.
2. AN EXTERIOR LIGHT SHALL BE PROVIDED FOR EACH EXIT.
3. A SWITCH FOR AN INTERIOR LIGHT SHALL BE PROVIDED AT EVERY ENTRANCE.
4. INCANDESCENT LIGHTS SHALL NOT BE PLACED CLOSER THAN 12" FROM THE NEAREST POINT OF A STORAGE AREA ON A SHELF.
5. INCANDESCENT LIGHT FIXTURES LOCATED IN CLOSETS SHALL BE SHIELDED.
6. LIGHTING WILL BE PROVIDED FOR MECHANICAL EQUIPMENT LOCATED IN AN ATTIC OR UNDER FLOOR SPACE. A LIGHT SWITCH SHALL BE PROVIDED AT THE ACCESS OPENING.
7. FIXTURES TO BE CHOSEN BY HOMEOWNER.

GENERAL MECHANICAL & PLUMBING NOTES

1. METALLIC GAS PIPE, WATER PIPE, AND FOUNDATION REINFORCING BARS SHALL BE BONDED TO HE ELECTRICAL SERVICE GROUND.
2. CLOSE DRYER, KITCHEN AND BATHROOM VENTING SHALL ESHAUST TO THE OUTSIDE OF THE BUILDING AND BE EQUIPPED WITH A BACK DRAFT DAMPER.
3. FURNACE, WATER HEATER AND FIREPLACE FLUES SHALL EXHAUST TO THE OUTSIDE OF THE BUILDING.
4. ALL GAS LINES SHALL BE SIZED FOR APPLIANCE LOAD. "BLACK" PIPE SHALL BE USED INSIDE THE BUILDING, "GREEN" PIPE WHERE ENDERGROUND OR EXPOSED TO WEATHER. ALL JOINTS SHALL BE TAPED WHERE BURIED OR EXPOSED TO WEATHER.
5. TUBS/SHOWERS SHALL BE PROVIDED WITH INDIVIDUAL CONTROL VALVES OF THE PRESSURE BALANCE OR THE THERMOSTATIC MIXING TYPE. THE WATER TEMPERATURE SHALL BE AT A MAXIMUM OF 120º F.
6. WATER HEATER SHALL BE PROVIDED WITH SEISMIC RESTRAINSTS.
7. HOSE BIBBS ARE REQUIRED IN FRONT AND REAR OF BUILDING OR AS NOTED ON PLAN. EACH HOSE BIBB SHALL BE EQUIPPED WITH A BACK FLOW PREVENTION DEVICE.
8. FUEL BURNING WATER HEATERS SHALL BE INSTALLED PER 2002 UPC SECTION 501.0 AND TABLE 5-1 FOR COMBUSTION AIR.
9. A HEATING SYSTEM SHALL BE PROVIDED CAPABLE OF MAINTAINING A ROOM TEMPERATURE OF 70º F AT A POINT 3' ABOVE THE FLOOR IN ALL HABITABLE ROOMS.
10. HEAT DUCTING SHALL BE SECURED, SEALED AND INSULATED.
11. ANY APPLIANCE GENERATING A GLOW, SPARK OR FLAME CAPABLE OF IGNITING FLAMMABLE VAPORS SHALL BE INSTALLED 18" ABOVE THE FLOOR.

SMOKE ALARMS

R314.1 General. Smoke alarms shall comply with NFPA 72 and Section R314.

R314.1 Listings. Smoke alarms shall be listed in accordance with UL 217. Combination smoke and carbon monoxide alarms shall be listed in accordance with UL 217 and UL 2034.

R314.3 Location. Smoke alarms shall be installed in the following locations.

1. In each sleeping room.
2. Outside each separate sleeping area in the immediate vicinity of the bedrooms.
3. On each additional story of the dwelling, including basements and habitable attics and not including crawl spaces and uninhabitable attics. In dwellings or dwelling units with split levels and without an intervening door between the adjacent levels, a smoke alarm installed on the upper level shall suffice for the adjacent lower level provided that the lower level is less than one full story below the upper level.
4. Smoke alarms shall be installed not less than 3 feet (914 mm) horizontally from the door or opening of a bathroom that contains a bathtub or shower unless this would prevent placement of a smoke alarm required by Section R314.3.

R314.3.1 Installation near cooking appliances. Smoke alarms shall not be installed in the following locations unless this would prevent placement of a smoke alarm in a location required by Section R314.3.

1. Ionization smoke alarms shall not be installed less than 20 feet (6096 mm) horizontally from a permanently installed cooking appliance.
2. Ionization smoke alarms with an alarm-silencing switch shall not be installed less than 10 feet (3048 mm) horizontally from a permanently installed cooking appliance.
3. Photoelectric smoke alarms shall not be installed less than 6 feet (1828 mm) horizontally from a permanently installed cooking appliance.

R314.4 Interconnection. Where more than one smoke alarm is required to be installed within an individual dwelling unit in accordance with Section R314.3, the alarm devices shall be interconnected in such a manner that the actuation of one alarm will activate all of the alarms in the individual dwelling unit. Physical interconnection of smoke alarms shall not be required where listed wireless alarms are installed and all alarms sound upon activation of one alarm.

R314.5 Combination alarms. Combination smoke and carbon monoxide alarms shall be permitted to be used in lieu of smoke alarms.

R314.6 Power source. Smoke alarms shall receive their primary power from the building wiring where such wiring is served from a commercial source and, where primary power is interrupted, shall receive power from a battery. Wiring shall be permanent and without a disconnecting switch other than those required for overcurrent portection.

CARBON MONOXIDE ALARMS

R315.1 General. Carbon monoxide alarms shall comply with Section R315.

R315.1.1 Listings. Carbon monoxide alarms shall be listed in accordance with UL 2034. Combination carbon monoxide and smoke alarms shall be listed in accordance with UL 2034 and UL 217.

R315.2 Where required. Carbon monoxide alarms shall be provided in accordance with Sections R315.2.1 and R315.2.2.

R315.2.1 New Construction. For new construction, carbon monoxide alarms shall be provided in dwelling units where either or both of the following conditions exist.

1. The dwelling unit contains a fue›-fired appliance.
2. The dwelling unit has an attached garage with an opeing that communicates with the dwelling unit.

R315.3 Location. Carbon monoxide alarms in dwelling units shall be installed outside of each separate sleeping area in the immedialte vicinity of the bedrooms. Where a fue›-burning appliance is located within a bedroom or its attached bathroom, a carbon monoxide alarm shall be installed within the bedroom.

R315.4 Combination alarms. Combination carbon monoxide and smoke alarms shall be permitted to be used in lieu of carbon monoxide alarms.

R315.5 Power source. Carbon monoxide alarms shall receive their primary power from the building wiring where such wiring is served from a commercial source and , where primary power is interrupted, shall receive power from a battery. Wiring shall be permanent and without a disconnecting switch other than those required for overcurrent portection.

Exceptions:

1. Carbon monoxide alarms shall be permitted to be battery operated where installed in buildings without commercial power.
2. Carbon monoxide alarms installed in accordance with Section R315.2.2 shall be permitted to be battery powered.

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REVISIONS

NO	DESCRIPTION	DATE	BY

HARRIS HOME DESIGN
346 E 200 N.
Alpine, Utah 84004
Phone: (435) 230-0006, Rick Harris
email: harrishomedesign1@gmail.com

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ELECTRICAL NOTES

HAMMOND STUDIO

145 W. 840 N.
AMERICAN FORK, UTAH

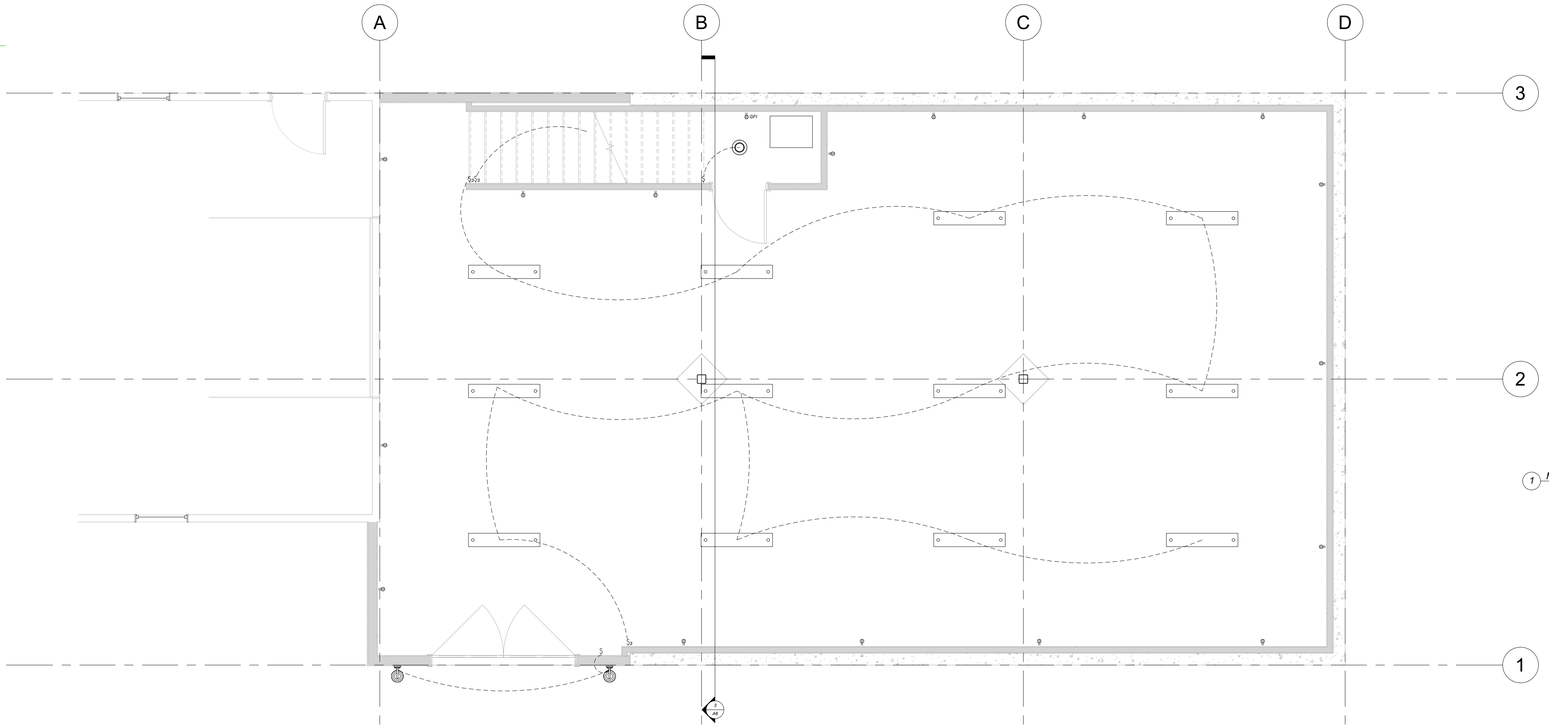
DATE: 12/12/22
SCALE:

JOB NO.
247

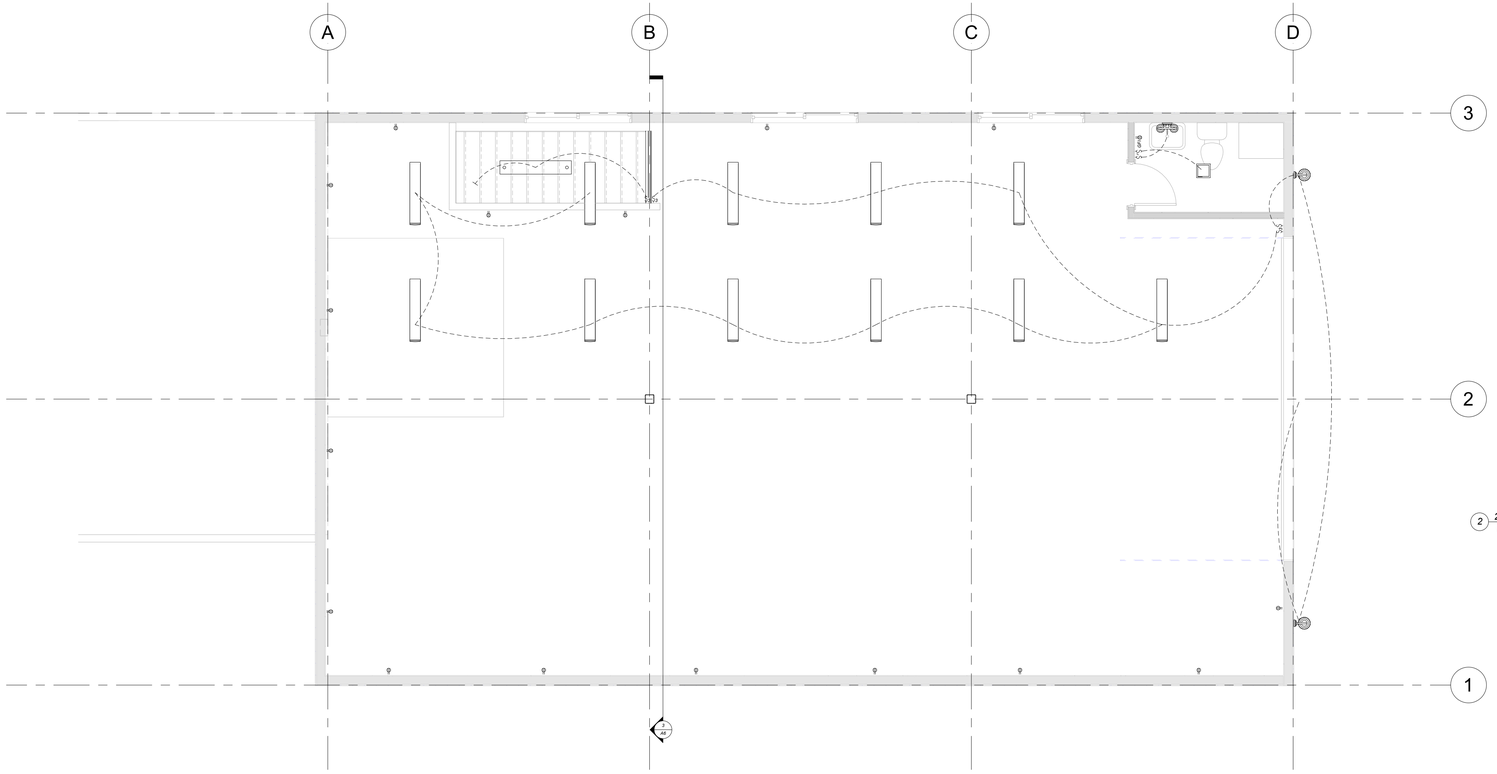
SHEET NO:
E1

ELECTRICAL LEGEND

- CEILING MOUNT LIGHT FIXTURE
- CEILING/SOFFET OUTLET
- S/C — SMOKE/CO DETECTON
- GFI, WP — DUPLEX, GROUND FAULT INTERUPTER, WATER PROFF
- RANGE/DRYER OUTLET
- SINGLE & 3 WAY POLE SWITCH
- RECESSED CAN LIGHT
- SCONCE LIGHT FIXTURE
- CARRAGE LIGHT FIXTURE
- CHANDELIER LIGHT FIXTURE
- PENDANT LIGHT FIXTURE
- EXHAUST FAN
- CEILING FAN



1 MAIN LEVEL ELECTRICAL PLAN
1/4" = 1'-0"



2 2ND LEVEL ELECTRICAL PLAN
1/4" = 1'-0"

REVISIONS

NO	DESCRIPTION	DATE	BY

HARRIS HOME DESIGN
346 E 200 N.
Alpine, Utah 84004
Phone: (435) 230-0006, Rick Harris
email: harrishomedesign1@gmail.com

ELECTRICAL PLANS
HAMMOND STUDIO
145 W. 840 N.
AMERICAN FORK, UTAH

DATE: 12/12/22
SCALE: 1/4" = 1'-0"

JOB NO.
247

SHEET NO:
E2

D:\Dropbox\HHD\0 - HHD COMPLETED PROJECTS\247 - HAMMOND STUDIO ADDITION\dwg\HAMMOND STUDIO FLOOR PLAN.rvt

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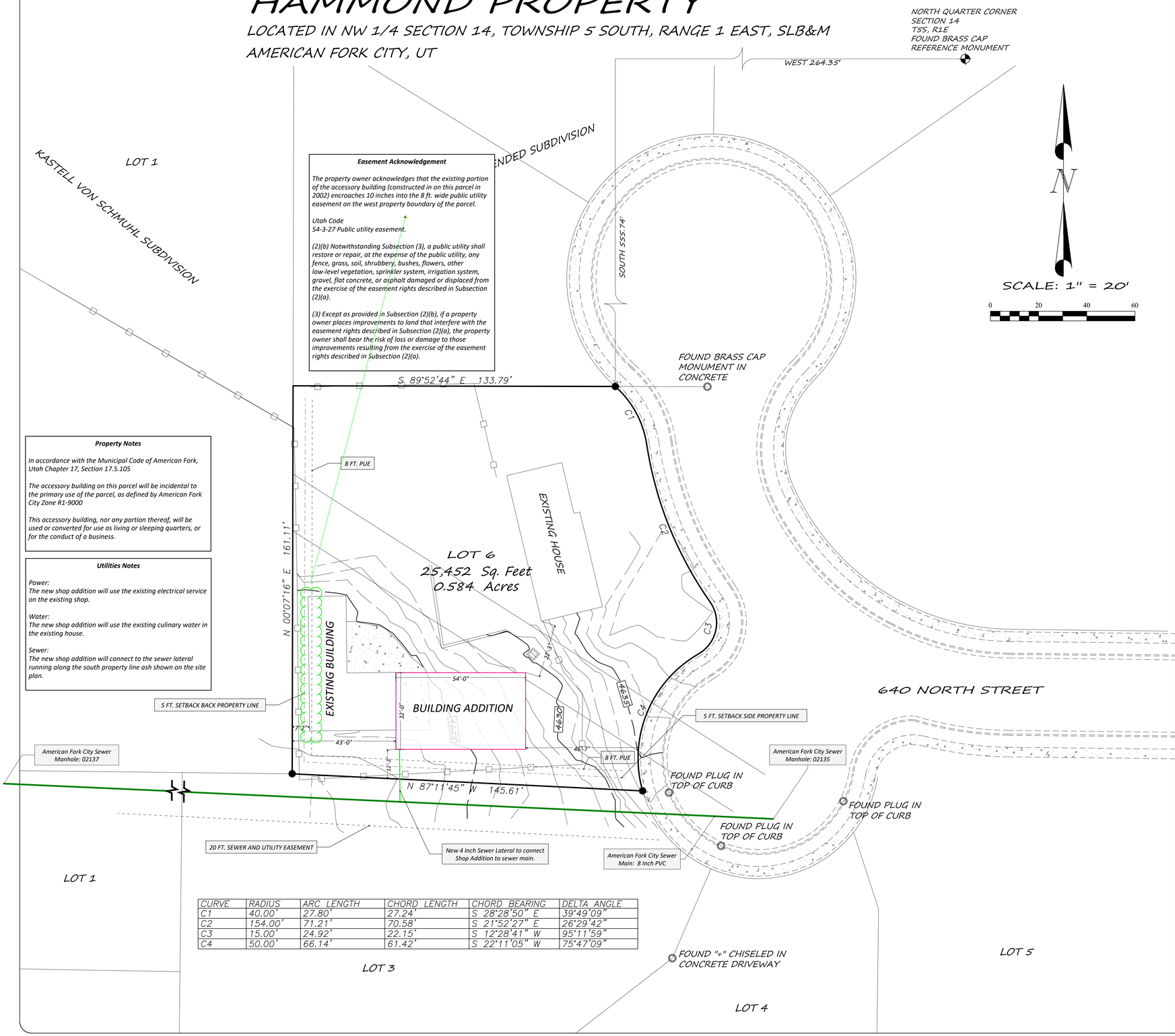
HAMMOND PROPERTY

LOCATED IN NW 1/4 SECTION 14, TOWNSHIP 5 SOUTH, RANGE 1 EAST, SLB&M

AMERICAN FORK CITY, UT



Easement Acknowledgement

The property owner acknowledges that the existing portion of the accessory building (constructed in on this parcel in 2002) encroaches 10 inches into the 8 ft. wide public utility easement on the west property boundary of the parcel.

Utah Code
54-3-27 Public utility easement.

(2)(b) Notwithstanding Subsection (3), a public utility shall restore or repair, at the expense of the public utility, any fence, grass, soil, shrubbery, bushes, flowers, other low-level vegetation, sprinkler system, irrigation system, gravel, flat concrete, or asphalt damaged or displaced from the exercise of the easement rights described in Subsection (2)(a).

(3) Except as provided in Subsection (2)(b), if a property owner places improvements to land that interfere with the easement rights described in Subsection (2)(a), the property owner shall bear the risk of loss or damage to those improvements resulting from the exercise of the easement rights described in Subsection (2)(a).

Property Notes

In accordance with the Municipal Code of American Fork, Utah Chapter 17, Section 17.5.105

The accessory building on this parcel will be incidental to the primary use of the parcel, as defined by American Fork City Zone R1-9000

This accessory building, nor any portion thereof, will be used or converted for use as living or sleeping quarters, or for the conduct of a business.

Utilities Notes

Power:
The new shop addition will use the existing electrical service on the existing shop.

Water:
The new shop addition will use the existing culinary water in the existing house.

Sewer:
The new shop addition will connect to the sewer lateral running along the south property line ash shown on the site plan.

CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
C1	40.00'	27.80'	27.24'	S 28°28'50" E	39°49'09"
C2	154.00'	71.21'	70.58'	S 21°52'27" E	26°29'42"
C3	15.00'	24.92'	22.15'	S 12°28'41" W	95°11'59"
C4	50.00'	66.14'	61.42'	S 22°11'05" W	75°47'09"

SURVEYOR'S CERTIFICATE

I, KEVIN S BISHOP, DO HEREBY CERTIFY THAT I AM A PROFESSIONAL LAND SURVEYOR, AND THAT I HOLD CERTIFICATE NO. 6508652 AS PRESCRIBED UNDER THE LAWS OF THE STATE OF UTAH. I FURTHER DECLARE BY AUTHORITY OF THE OWNERS, I HAVE MADE A SURVEY OF THE TRACT OF LAND SHOWN ON THIS PLAT AND DESCRIBED BELOW.

BOUNDARY DESCRIPTION

LOT 6, PLAT "A" PREECE ESTATES, ACCORDING TO THE OFFICIAL PLAT THEREOF ON FILE IN THE OFFICE OF THE UTAH COUNTY RECORDER.

Kevin S Bishop — SURVEYOR

DECEMBER 30, 2022 — DATE

Next Step
Approved with Conditions
Proceed to Planning Commission on 2/22/23

SURVEYOR'S NOTES

THE PURPOSE OF THIS SURVEY IS TO LOCATE AND MONUMENT THE BOUNDARIES OF PARCEL NO. 49:316:0006 OWNED BY BENJAMIN AND KERRI HAMMOND.

THE SUBJECT PROPERTY IS DESCRIBED IN THAT CERTAIN WARRANTY DEED RECORDED ON APRIL 30, 2015 AS ENTRY 36636:2015.

THE PREECE ESATES PLAT "A" SUBDIVISION WAS RECORDED ON FEBRUARY 11, 1998 AS ENTRY 13097 AND MAP NO. 7433.

THE EXISTING HOUSE LOCATED ON THE SUBJECT PROPERTY HAS A STREET ADDRESS OF 145 WEST 640 NORTH, AMERICAN FORK.

THE FIELD WORK FOR THIS PROJECT WAS PERFORMED IN DECEMBER OF 2022.

American Fork City
Development Review
Committee

PLANNING & ZONING REVIEWED
TVANEKELENBURG
2/14/23

LEGEND

- SECTION CORNER
- 5/8" REBAR, 2' LONG, WITH 2" DIAMETER ALUMINUM OR PLASTIC CAP MARKED OAK HILLS SURVEYING
- FOUND MONUMENT AS NOTED ON PLAT
- WIRE FENCE
- CHAINLINK FENCE
- WOOD OR VINYL FENCE

Office locations
Springville, UT
American Fork, UT
Ph. (801) 796-3828
kevin.oakhills@gmail
Member UCLS/NSPS
OAK HILLS SURVEYING

KEVIN S BISHOP 6508652 12-30-2022 UTAH LICENSED LAND SURVEYOR
SURVEYOR SEAL

RECORD OF SURVEY FOR: BEN HAMMOND

PROJECT ADDRESS: 640 NORTH AMERICAN FORK

SECTION: 14
TOWNSHIP: 5 SOUTH
RANGE: 1 EAST
BASE MERIDIAN: SL B&M

CRD No.

PROJECT NO: 22-245 (21-265)
DRAWN BY: KSB
REVIEWED BY: KSB
APPROVAL DATE: 12/30/2022
MAP SCALE: 1" = 20'

SHEET NO.
1 OF 1