EAGLE MOUNTAIN
PLANNING COMMISSION MEETING

December 14, 2021, 5:30 PM
Eagle Mountain City Council Chambers
1650 East Stagecoach Run, Eagle Mountain, Utah 84005

5:30 P.M. - Eagle Mountain City Planning Commission Work Session

1. Discussion Items

1.A DISCUSSION ITEM - Wildlife Corridor Overlay Rezone
City staff has been working on a map which identifies all private property located within the defined Wildlife Corridor. On October 26th a brief update of the progress the City has made was presented to the Planning Commission, but there was no time set aside for questions or comments.

This item is being brought back to receive questions, comments, and feedback from the Planning Commission ahead of staff taking further action.
Ridgeline-Wildlife Corridor Non-Buildable
Wildlife Corridor - Parcel Overlap

1.B DISCUSSION ITEM - Road Standards

6:30 P.M. - Eagle Mountain City Planning Commission Policy Session

2. Pledge of Allegiance

3. Declaration of Conflicts of Interest

4. Approval of Meeting Minutes

4.A November 9, 2021 Planning Commission Minutes
PC Minutes 11.09.21 DRAFT

5. Status Report

5.A Status Report
A update on Planning Items

6. Action and Advisory Items

6.A ACTION ITEM / PUBLIC HEARING - Eagle Quest East

A Master Development Plan, Preliminary Plat, Rezone and General Plan Amendment for 424 single family residential lots located on approximately 163.211 acres for an overall project density of 2.597 DU/AC. Located north of Sunset Flats, west of Lake Mountain Road parcel 59:006:0053.

The Eagle Mountain Planning Commission reviewed a concept plan for Eagle Quest East on July 27th 2021 at which time the applicant presented two concepts, concept 1 included 486 units and dedicated the full width of Arterial and Collector roads to the city, concept 2 included 426 units and did not dedicate full widths of Arterial and Collector ROWs to the city.

A number of items were discussed in the meeting including location of Parks, required secondary access to the development, transitioning, lot sizes/density, connectivity, and buffering of surrounding uses.

The applicant also indicated that it was their wish for Airport road to be moved to the east property line of their project rather than cutting diagonally through this project.
Land Use, Concept, and Phasing Plan
Parks and Rec
Traffic Study
Future Land Use Maps
Concept Plan Review Meeting Minutes

6.B ACTION ITEM / PUBLIC HEARING - Atlas Tower - Sunset Flats
A Site Plan approval for a 80' Wireless Communications Tower to be located on 2,500 SF of property located on parcel 59:007:0077. Wireless Communications towers are Special Uses within all zones.
Site Location
Narrative
Site Plan
Silo Tower

6.C ACTION ITEM / PUBLIC HEARING - Salt City Fitness
A Site Plan approval for a .97 Acre (42,304 SF) piece of property located within parcel 59:056:0048 for Salt City Fitness, a fitness equipment repair company. The site is located within property zoned with the Sweetwater Industrial Overlay Zone.

Note, Salt City Fitness is not a gym facility
Elevations
Elevation Rendering
Landscaping
Civil Plans

6.D ACTION ITEM / PUBLIC HEARING - Antelope Meadows Pool and Clubhouse
A proposal to add a clubhouse and pool to the Antelope Meadows Development
Elevations
Landscape and Site Plans

6.E ACTION ITEM / PUBLIC HEARING - Eagle Ridge
A General Plan Amendment, Rezone, and a Preliminary Plat for a 17 lot development located on 22.049 acres, parcel 58:044:0011.
Vicinity Map
Compatibility Statement
Preliminary Plat

6.F ACTION ITEM / PUBLIC HEARING - RTI Overlay Zone (Code Amendment)
This proposed code amendment to the Regional Technology and Industry Overlay Zone (Chapter 17.48) removes the automatic repeal date, modifies the prohibited uses, and makes minor adjustments to the chapter.
17.48 RTI Overlay Zone - Amendments
RTI Overlay Expansion Support Letter

6.G ACTION ITEM / PUBLIC HEARING - Triumph

Review/approval for a requested General Plan Map Amendment (Agricultural/RD2 to Foothill Residential); a Master Development Plan Permit, Rezone Application (RA to FR); and,

a 235-lot single-family, residential Preliminary Plat [Triumph Subdivision"] all on some 161.99 acres of land east of Pony Express Parkway and south of Eagle Mountain Blvd. (refer to attached County parcel/vicinity map)...

Utah County Parcel Map.Triumph Subdivision Vicinity.Screenshot 2021-11-30 131226.jpg
General Plan Future Land Use Map snippet.Triumph Subdivision.Nov 2021.jpg
20-0055 Triumph Preliminary 120321.pdf
2021_1027 - Triumph - Traffic Plan Memo.docx
2021_1027 - Triumph - Compatibility Statement.docx

7. Discussion Items

8. 2022 Meeting Schedule

8.A 2022 Planning Commission Schedule
2022 Meeting Calendar

9. Recognition

10. Adjournment

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In accordance with the Americans with Disabilities Act, Eagle Mountain City will make reasonable accommodation for participation in all Public Meetings and Work Sessions. Please call the City Recorder's Office at least 3 working days prior to the meeting at 801-789-6610. This meeting may be held telephonically to allow a member of the public body to participate. This agenda is subject to change with a minimum 24-hour notice.

CERTIFICATE OF POSTING

The undersigned, duly appointed City Recorder, does hereby certify that the above agenda notice was posted on this 10th day of December, 2021, on the Eagle Mountain City bulletin boards, the Eagle Mountain City website www.emcity.org, posted to the Utah State public notice website http://www.utah.gov/pmn/index.html, and was emailed to at least one newspaper of general circulation within the jurisdiction of the public body.

Fionnuala B. Kofoed, MMC, City Recorder

EAGLE MOUNTAIN	**EAGLE MOUNTAIN CITY** **PLANNING COMMISSION MEETING** **DECEMBER 14, 2021**
TITLE:	DISCUSSION ITEM - Wildlife Corridor Overlay Rezone
ITEM TYPE:	Discussion
APPLICANT:	Staff

ACTION ITEM:
No

PUBLIC HEARING:
No

PREPARED BY:
Tayler Jensen,

BACKGROUND:

ITEMS FOR CONSIDERATION:

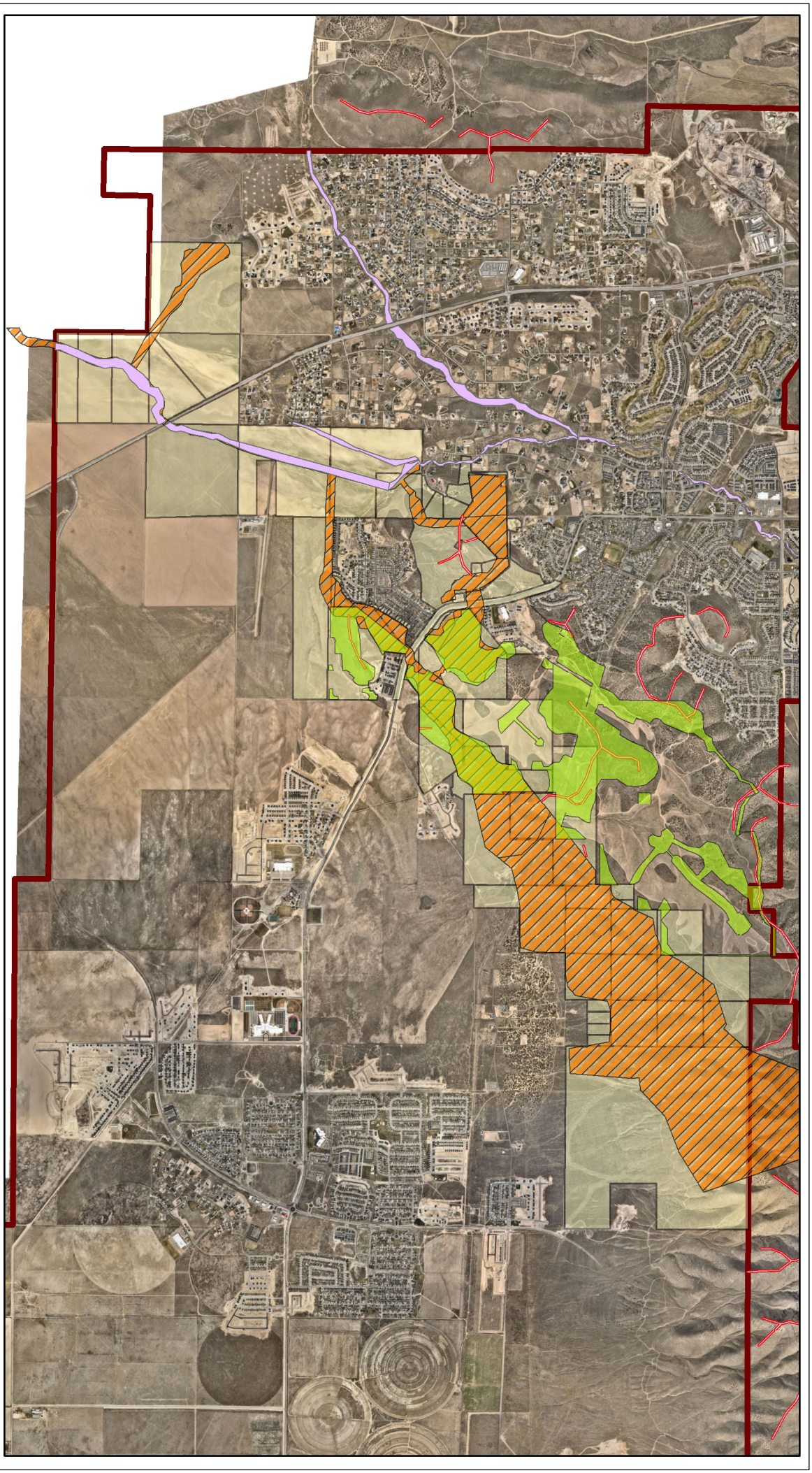
REQUIRED FINDINGS:

RECOMMENDATION:

ATTACHMENTS:

Ridgeline-Wildlife Corridor Non-Buildable
Wildlife Corridor - Parcel Overlap

Wildlife Corridor - Parcels Overlap



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Legend

- Parks and Open Space
- 25 FT Wash Buffer
- 50 FT Ridge Buffer
- Wildlife Corridor
- Parcels Overlapping Wildlife Corridor
- Municipal Boundary

EAGLE MOUNTAIN

Disclaimer: Eagle Mountain City makes no warranty with respect to The accuracy, completeness, or usefulness of these maps. Eagle Mountain City assumes no liability for direct, indirect, special, or Consequential damages resulting from the use or misuse of these Maps or any of the information contained herein. Portions may be Copied for incidental uses, but may not be resold.

Contact Eagle Mountain City
Engineering/GIS Department
801-789-6662

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Wildlife Corridor - Parcels Overlap

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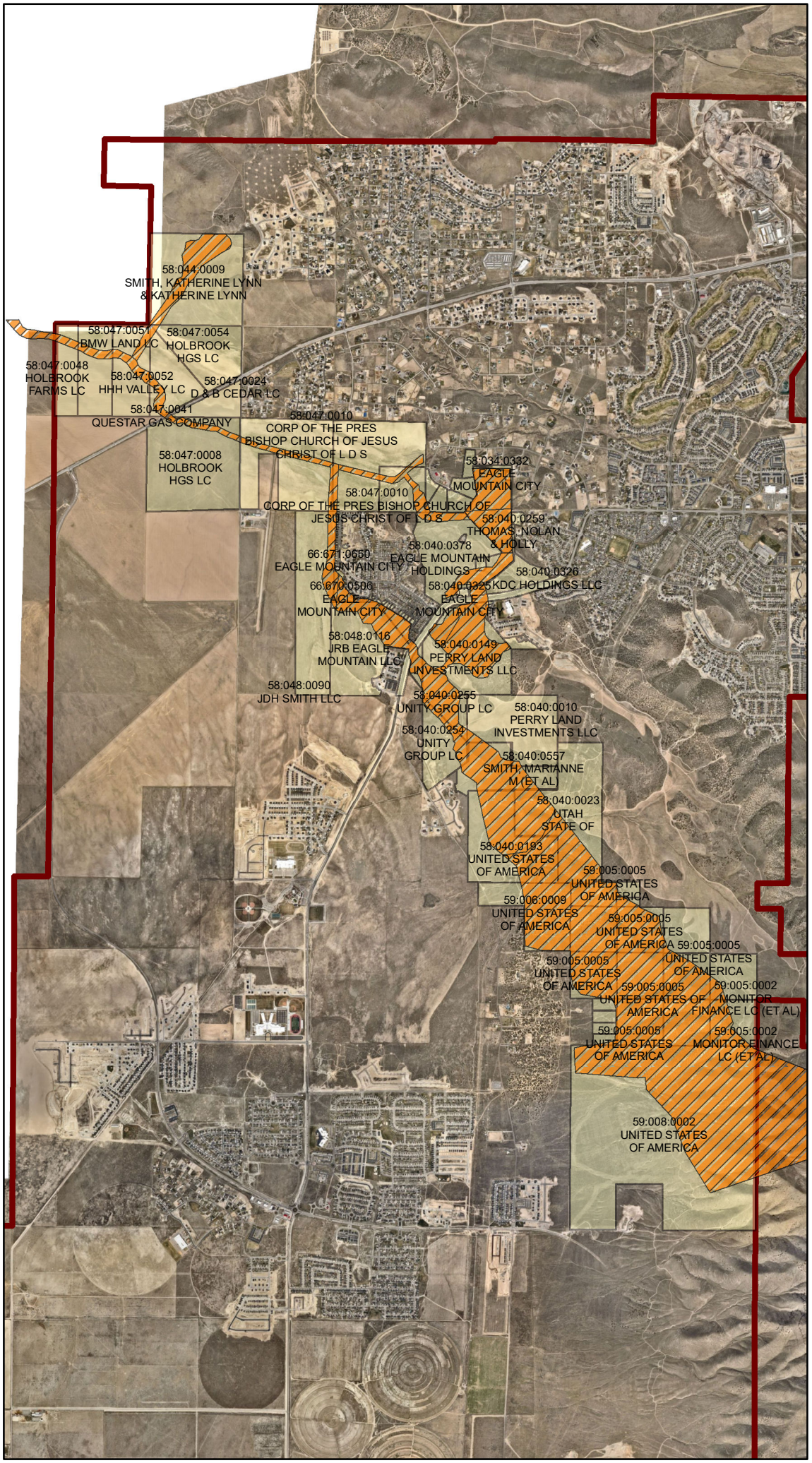
Legend

- Wildlife Corridor
- Parcels Overlapping Wildlife Corridor
- Municipal Boundary



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EAGLE MOUNTAIN	**EAGLE MOUNTAIN CITY** **PLANNING COMMISSION MEETING** **DECEMBER 14, 2021**
TITLE:	DISCUSSION ITEM - Road Standards
ITEM TYPE:	Discussion
APPLICANT:	Staff

ACTION ITEM:
No

PUBLIC HEARING:
No

PREPARED BY:
Tayler Jensen, Planning

BACKGROUND:

Staff is soliciting feedback and discussion from the Planning Commission on a number of road standard issues including but not limited to:

- Curb extensions/Road bulb-outs: Curb extensions are defined in 17.10 of EMMC as "...a traffic calming measure, primarily used to extend a sidewalk, reducing the crossing distance for pedestrians." Despite being promoted by code as a traffic calming measure, they are not employed in the city, nor are they included in road standards.
- Providing on-street parking in residential (particularly multifamily) developments/ ROW's
- Adopting private street standards.

ITEMS FOR CONSIDERATION:

REQUIRED FINDINGS:

RECOMMENDATION:

ATTACHMENTS:

EAGLE MOUNTAIN
Planning Commission MEETING MINUTES

November 9, 2021, 5:30 p.m.
Eagle Mountain City Council Chambers
1650 East Stagecoach Run, Eagle Mountain, Utah 84005

COMMISSION MEMBERS PRESENT: Jeremy Bergener, Christopher Pengra, and Brett Wright. Commissioner Erin Wells was excused.

COMMISSION MEMBERS PRESENT ELECTRONICALLY: Matthew Everett.

ELECTED OFFICIALS PRESENT: Councilmember Donna Burnham, Primary Liaison to the Planning Commission.

CITY STAFF PRESENT: Steve Mumford, Assistant City Administrator/Community Development Director; Robert Hobbs, Planning Manager; Tayler Jensen, Senior Planner; and Elizabeth Fewkes, Recording Secretary.

CITY STAFF PRESENT ELECTRONICALLY: Chris Trusty, City Engineer; and Jeremy Cook, City Attorney.

5:30 P.M. – Eagle Mountain City Planning Commission Work Session

Commissioner Wright called the meeting to order at 5:31 p.m.

1. Discussion Items

1.A. RTI Overlay Zone – Discussion

Assistant City Administrator/Community Development Director Steve Mumford presented the item. The Regional Technology and Industry (RTI) Overlay Zone is intended to promote large-scale development of technological, clean industrial, distribution, and high-tech manufacturing uses. The standards allow properties that have received the overlay zone to go through a streamlined approval process if they permanently employ over 100 people or include a minimum of 100,000 square feet of building floor area in the first phase of development. The RTI Overlay Zone has been utilized for Facebook, Tyson, and Google. The City received an "Award of Merit" from the Utah Chapter of the American Planning Association for the Overlay. The Overlay has been a very helpful economic development tool, and there is an interest in extending the sunset date of the ordinance. Per EMMC 17.48.020, "The appointed economic development board liaison will serve as DRC liaison to City Council." However, there currently is no active economic development board. The development review committee (DRC) liaison could be the liaison to the Chamber of Commerce or the liaison to the Planning Commission. EMMC 17.48.120 Repeal Date stipulates this chapter shall be automatically repealed on May 31, 2022. The City may determine to renew the standards or remove the repeal date section should the retention of the RTI Overlay Zone be desired.

Mr. Mumford presented and reviewed RTI Overlay standards found in EMMC 17.48 for consideration of potential amendments.

Discussion ensued regarding resident concerns with negotiations for businesses in the RTI Zone that are outside of public view, possibly having the Planning Commission and/or City Council review the DRC materials for the initial approval in a public forum, water usage considerations, including the existing buildings approved in the City as examples of elevations EMMC Chapter 17.48, increasing opportunities for expedited public input, mechanisms to target desired RTI businesses, the desire to amend rather than appeal the standards, and concerns that changing the approval process will decrease the City's competitive advantage and defeat the benefits created with the Overlay.

Commissioner Wright said he would not be in favor of implementing the overlay as a permanent ordinance and supports the inclusion of an automatic repeal date to ensure the standards are reviewed frequently. He requested for the item to return on a future policy session as an agenda item.

Mr. Mumford stated that changing the approval process would render the overlay ineffective. Prior to the overlay, other businesses elected not to locate in Eagle Mountain City due to concerns with the approval process or decided not to move forward on a project due to concerns with the repeal date.

1.B. DISCUSSION ITEM – Lone Tree 3

Senior Planner Tayler Jensen presented the item. On May 7, 2019, the Eagle Mountain City Council approved the Lone Tree Plat F preliminary plat, during the review of the project the applicant volunteered to remove the 17 lots within the 300 series of lots from the preliminary plat, with the understanding that by doing so they would lose vesting and he would need to come back through the preliminary platting process if he desired to build the lots. Having built out the rest of Plat F, the applicant is bringing this concept plan back for Planning Commission review. There is an approved preliminary plat for Circle 5 Ranch on top of the rock hill. This plat includes a stubbed connection into Lone Tree; this access is important as it provides a second route in and out of the future Circle 5 Ranch development. The applicant's first proposal to staff included only ten lots, the use of a cul-de-sac, and did not tie into road stub in Circle 5 Ranch, this raised concerns that it could require the City to approve a plat, and lots that did not have an adequate second access. The applicant's current proposal shows 22 lots and a connection into the approved stub in Circle 5 Ranch.

The average lot size in the proposed plat is approximately 18,500 square feet. The smallest lot size in the proposed plat is 6,550 square feet. The largest lot size in the proposed plat is 29,467 square feet. Four lots are under 10,000 square feet in size making them significantly smaller than the rest of the plat. Removing the four outlier lots, the average lot size of the additional 18 units is nearly 21,000 square feet. The Future Land Use Designation for the area is Neighborhood Residential One. The four smallest lots are adjacent to the existing development with lots between 5,000 to 11,450 square feet.

Applicant representative Brian Haskell said due to the nature of the terrain, the area will require custom builds. The connection to Circle 5 Ranch will require great effort and expenditure; however, as they recognize the need for connectivity, they have brought forth a plan with the requested connection. He confirmed that they allowed their previous vesting to expire due to issues with the plan. They discussed several options with staff and received input from several engineers. The building pads will be located in areas of the development within the City's buildable slope requirements. He is unsure if blasting would be required and will apply for a permit if needed in accordance with City blasting regulations. The lots would likely be terraced into the hillsides and/or walkout basements to avoid blasting if possible. Lots 301, 302, 303, and 304 are similar in lot size and frontage to the adjacent lots to transition to the bordering development. The lots have sufficient width to transverse the slopes. The frontage on lot 302 is approximately 60 feet. Some rock is stockpiled on the site that will be used for rock walls or crushed for fill. They have coordinated the connection to align with the preliminary plat for Circle 5 Ranch.

The Planning Commission recommended reducing the number of lots in the project in order to meet the lot size and frontage requirements for the FR Zone, adjusting the road to increase the buildable width for lots 301, 302, 303, and 304, providing sufficient connectivity due to the increased fire hazards for hillside homes, and evaluating the buildability of the lots based upon slope requirements and adjusting the plan accordingly.

Mr. Jensen verified that the Circle 5 Ranches has a preliminary plat that was approved prior to plat expirations. The Fire Marshal had not expressed concerns with the proposed connection during the development review committee evaluation.

Commissioner Wright adjourned the work session at 6:25 p.m.

6:30 P.M. – Eagle Mountain City Planning Commission Policy Session

Commissioner Wright called the meeting to order at 6:36 p.m.

2. Pledge of Allegiance

Commissioner Pengra led the Pledge of Allegiance.

3. Declaration of Conflicts of Interest

None.

4. Approval of Meeting Minutes

4.A. October 26, 2021 Planning Commission Minutes

MOTION: ***Commissioner Bergener moved to approve the October 26, 2021 minutes. Commissioner Wright seconded the motion. Those voting aye: Jeremy Bergener, Matthew Everett, Christopher Pengra, and Brett Wright. The motion passed with a unanimous vote.***

5. Status Report

Mr. Jensen stated that the City Council had not met since the previous Planning Commission meeting due to the election. Staff is working on the zoning map and Wildlife Corridor Overlay Zone.

6. Action and Advisory Items

6.A. PUBLIC HEARING – Ranches Crossing

Mr. Jensen presented the item. This application is for a master site plan for five commercial pad sites located at the northeast intersection of Ranches Crossing and Pony Express Parkway. It should be noted that master site plans are by definition considered rezones.

The applicant has provided some general architectural guidelines, which roughly match the City's Commercial Design Standards. The applicant has completed a traffic study that study shows the intersection of Rock Creek Road and Ranches Parkway currently operates with a LOS F in the p.m. peak hours. The applicant's proposal creates two new roads. Access Y which accesses Ranches Parkway to the west and Access Z which completes Clear Rock Road providing it as a full access onto Pony Express Parkway. Both of these accesses are included as recommended mitigations which include Access Y along Ranches Parkway should be built with a southbound left-turn deceleration with a minimum of 50 feet of storage. This is a new access point and will need to modify the center landscaped median if it is to be installed. Access Z will be built to align with the existing access to the south and include an eastbound left-turn deceleration lane with a minimum of 50 feet of storage. There is currently already a left turn pocket on Pony Express to accommodate this eastbound left-turn movement. The eastbound left queue at Pony Express Parkway/Ranches Parkway is already operating near capacity and based on the volumes should be considered for dual left turns. This is an existing issue that worsens as traffic and development in the area increases. There is an opportunity to extend the eastbound left-turn storage length by utilizing the existing landscaped median to the west. The traffic modeling software also does not take into account the visual blockages caused by the median and the additional delays that may be caused by the berms and landscaping of the medians. The applicant is showing access and circulation with access coming off Rock Creek Road, Clear Rock Road, and a new access onto Ranches Parkway.

Staff and the applicant are seeking feedback from the Planning Commission on if headlight screening needs to be provided where the road accesses onto Clear Rock Road as there are townhome units on the opposite side of the road. The applicant is showing a significant amount of parking between the proposed development pads and both Ranches Parkway and Pony Express Parkway. Per EMMC 17.72.030(B), all parking should be located to the side or rear of the buildings and should not be located between the buildings and the street. It is the opinion of staff that this master plan should be updated to show development pads next to the right-of-way with parking behind.

A recommendation of approval may be made to the City Council for the reasons set forth in the staff report and the meeting along with the following conditions:

1. The applicant shall provide a plan for the phasing and timing of improvements;
2. The applicant shall provide all mitigations recommended by the traffic study;
3. Approval of the master site plan is conditional on the approval of a master development agreement; and
4. The applicant shall update the master site plan to show development pads adjacent to the public right-of-way with parking located behind the buildings as required in EMMC 17.72.030(B).

Mr. Jensen requested direction from the Commission regarding possible screening requirements adjacent to Access Z.

Applicant representative Brian Haskell explained that their plans exclude a connection to Ruby Lane because the road is a private drive for the adjacent units. They have not secured tenants or users identified for the site but are in the process of attracting higher-end and sit-down restaurant uses that could be contracted with once the preliminary plat is approved. The plan and parking configuration will be adapted to accommodate the individual tenants. The associated utilities will be installed for the access on Ranches Parkway and Pony Express Parkway. They have requested a full egress and ingress access to both parkways with locations based upon the review by the traffic study performed by their traffic engineer. The eastbound turn-off Ranches Parkway onto Pony Express Parkway is currently operating at near capacity; however, their site should not increase the burden of the eastbound turn.

Commissioner Wright opened the public hearing at 6:55 p.m.

Patrick Quinney, Danielle Gish, Analia Funke, Cathy Quinney, Tanner Nelson, and Asenath Rallison submitted email comments against the proposal due to concerns with increased traffic and traffic flow issues, privacy screening, child and pedestrian safety, property devaluation, and litter, trash, or vandalism caused by commercial business patrons.

Marilene Hunzeker stated she was speaking on behalf of several of her neighbors who were unable to attend the meeting. She expressed concern with sexual predator access and the visibility of their children at the Rock Creek Road pool, increased traffic on Rock Creek Road, and noise nuisance and quality of life impacts especially to residents that work graveyard shifts. She advocated against the proposed Access Z and the resulting business traffic passing their homes and yards as well as the public exposure. She expressed frustration that the individual that sold her the home had lied and said the area would be developed for residential rather than commercial uses. She would prefer office buildings to restaurants.

Cathy Quinney requested considerations for their neighborhood including preventing access on Ruby Lane from Clear Rock Road to prevent through traffic from the businesses, a buffer, such as a wall, and headlight screening along their properties, and light and noise pollution mitigation.

Scott Sweeney advocated against connecting Clear Rock Road and Ruby Lane and for the City to address the traffic issues at the intersection of Ranches Parkway and Pony Express Parkway. He

expressed concern with the impact of four or five fast-food restaurants in the area and supported the proposal for other restaurant uses.

Jeff Ruth said although he appreciates concerns expressed by impacted residents, especially if they had been lied to about the plans for the property; however, he knew the area would be developed as commercial ten years ago due to the zoning of the area. The City has limited commercial space and adjacent homeowners do not get to pick and choose how the landowner develops their commercial properties.

Commissioner Wright closed the public hearing at 7:08 p.m.

Commissioner Everett concurred with the need for headlight screening and buffering to prevent commercial traffic from entering Ruby Lane from Access Z. He is in favor of Access Y but expressed concern with Access X burdening a residential road with commercial traffic, especially where the City has set precedence by preventing commercial traffic accessing a residential road in Oak Hollow for another development. He would be in favor of moving the project forward with conditions removing Access X and addressing mitigation for Access Z.

Commissioner Bergener said his main concerns are adequate screening for buffering and headlights. He is unsure if removing Access X would negatively impact traffic and place more burden on the Ranches Parkway and Pony Express Parkway intersection. He is unsure regarding the City's ability to cut off access on Ruby Lane.

Commissioner Pengra stated connecting Clear Rock Road to Ruby Lane has always been planned and he would not be in favor of blocking the access due to emergency access concerns. This area has always been contemplated for Commercial Community uses. Five lots on three acres are likely unfeasible. A sit-down restaurant is unlikely as it would require a full acre of land and sit-down restaurant tenants desire to be located in trade areas with other retailers. Fast food or gas stations are more likely uses. He expressed concern with locating parking along the primary drive aisle and pedestrians crossing the drive aisle to access the businesses and felt tenants will likely object to the proposed configuration. He concurs with enforcing the screening requirements. He is not in favor of the proposal as presented.

Commissioner Wright stated that he supports commercial development of the area but is concerned with the proposal for five lots on the available acreage.

Mr. Haskell expressed frustration that the Commission did not express these concerns during the concept phase of the project. They are open to changes to the project; nevertheless, they desire for the project to be allowed to move forward to allow them to make the necessary adjustments during the individual site plan applications as they can secure tenants. He would not oppose blocking residential street access for Access X as long as there was still access for the commercial development and if the reduced connectivity is permitted by City connectivity requirements. A wall is planned between the site and the pool and clubhouse area and they are willing to adhere to all screening and buffering requirements.

Discussion ensued regarding the desire to allow the project to move forward without vesting the proposed site plan as presented.

Mr. Jensen explained that individual site plans would be required for each of the commercial lots as they come forward and other commercial plans have been adjusted to accommodate specific uses during the site plan application approval.

Mr. Mumford said the most important aspects of a commercial master site plan consideration are access points, buffering with neighboring uses, and streetlight and sign locations. The original plan submitted was less specific. The applicant added possible configurations and details to meet applications requirements. Ruby Road was intended to connect to Clear Rock Road and omitting the connection would need to be cleared by the Fire Marshal.

MOTION: ***Commissioner Pengra moved to recommend approval to the City Council of the master site plan for Ranches Crossing with the following conditions:***

1. ***The proposed lot plan shall be excluded from the approval;***
2. ***Clear Rock Road shall connect to Ruby Lane;***
3. ***Access X on Rock Creek Road shall be provided; and***
4. ***The applicant-prosed design standards are excluded from the approval and the site plans shall adhere to current Municipal Code design standards at the time of approval.***

Commissioner Wright seconded the motion. Those voting aye: Jeremy Bergener, Christopher Pengra, and Brett Wright. Those voting nay: Matthew Everett. The motion carried with a vote of 3:1.

6.B. PUBLIC HEARING – Tagg N Go Carwash

Mr. Jensen presented the item. The proposed site plan is located directly south of Maverick, and directly north of the recently approved Stonebridge Montessori School. The approval for the Stonebridge Montessori School required a connection to the north. This is addressed by this site plan as it provides a full drive access, 26 feet from curb to curb, to Stonebridge Lane and moves the entire drive access off the school's site. The parcel is shown as Community Commercial on the City's Future Land Use Plan, and the applicant is proposing a rezone to the Commercial Community (CC) zone, which is appropriate within the Community Commercial land use designation.

The significant adjacent buildings include Maverick and Stonebridge Montessori School. The elevations are similar in style to the Stonebridge School while the chosen colors are of a darker pallet. Traffic modeling software anticipates all vehicles exiting onto Stonebridge Lane during the evening peak hours reducing the total traffic on Campus Drive and increasing the need for a future traffic light at Stonebridge Lane and Ranches Parkway. There were also questions about the number of vehicles/trips being shown on the traffic study for the car wash. The applicant has indicated that those numbers are accurate for weekday trips. Most visits to the carwash happen on the weekends and are not typically modeled in a traffic report as the peak traffic numbers occur during the week.

The General Plan designates the area as Community Commercial, and surrounding land uses are commercial in nature, therefore, the proposal complies with this provision. The proposed rezone and site plan fit with the commercial uses in the area, and a car wash has long been anticipated for the area. The proposed rezone and anticipated land use are not anticipated to overburden City services. Traffic is a concern in the area and has been addressed in a traffic study. The study reveals that traffic concerns exist in the area and indicates mitigation to improve the overall traffic situation from its current levels. The proposed rezone to Commercial Community is not expected to have a significant negative impact on surrounding property values. The proposal includes seven normal parking stalls and 19 vacuum stalls. Municipal Code defines quiet hours as 9:00 p.m. to 7:00 a.m. Monday through Friday and 9:00 p.m. to 9:00 a.m. on Saturday and Sunday.

Staff recommends that the Planning Commission motion to recommend approval of the Tagg N Go Rezone, rezoning parcel 66:403:0102 to the Commercial Community (CC) Zone for the reasons listed in this staff report and the meeting with any conditions the Planning Commission finds appropriate.

Staff recommends that the Planning Commission motion to recommend approval of the Tagg N Go Site Plan to the City Council with the following condition, and any other conditions the Planning Commission feels are appropriate:

1. The project shall comply with quiet hours defined in EMMC 8.15.070 9:00 p.m. to 7:00 a.m. Monday through Friday and 9:00 p.m. to 9:00 a.m. on Saturday and Sunday.

Applicant representative Conner Atkin stated they are usually open at 7:00 a.m. on Saturdays during the summer and 7:30 a.m. during the winter. The traffic engineer said that modeling indicated 150 cars per hour on Saturday; however, they would be unable to service that many cars per hour. Their modeling is based on capturing existing traffic rather than generating additional traffic to the business. For this location, they anticipate servicing 2% of traffic or 500 cars a day. Four to five staff members will be onsite including two managers. They provided seven employee parking stalls because the space allowed for providing additional parking.

Discussion ensued regarding the daily trip calculations in the traffic study.

Mr. Jensen explained that EMMC 8.15.070 specifically references construction noises and a measurement of 65 decibels or greater is considered to be a noise disturbance.

Commissioner Wright opened the public hearing at 7:48 p.m.

Dale Erling requested for the following email to be read into the record, "I am again writing about the proposed car wash. The plan to have traffic exit onto Stonebridge lane is not a solution. A residential road is not nor should serve as an access point for a business. The future traffic light mentioned in your staff report, is just a possibility. If traffic is already requiring consideration of a light how is adding to the burden a solution? The traffic on Ranches Parkway is getting heavier and will continue to do so as you approve higher density housing in the Porters Crossing area. The accumulative effective is greater than the Campus Drive and Carwash studies suggest. Add to that a poorly designed median with sub standard site lines and a difficult turn angle and you a compounding an issue your own staff recommends needing mediation. In your own agenda

documents your staff states that re-zoning is a legislative issue. You can listen to the voice of the people in the area and deny the re-zone. It is within code and your relam of influence. The city is beyond the point we need to accept every applicant or every development. If the car wash is interested in eagle mountain, there are other locations within the city that need that service that is not within two miles of two other car washes - Quick Quack and the Chevron. Planning should consider the highest best use of the land and the character of the existing neighborhood over a developers interest. Other uses for that land will come along that are in better harmony with the area and do not require contrived fixes into a residential neighborhood. Nor the hope of some future remedy like a stop light. Planning commissions in the East regularly deny developers plans that are not in the current zoning or require improvement s like storm water detention basins, accelerate/de-accelerate lanes, etc. it is time for city leadership to take the lead in thoughtful development of our city. Accenting to whatever is requested is not city planning but permitting. I will not be able to attend the meeting due to other civic commitments, but would like my comments read in the public comment section if the meeting."

Michelle Blackburn stated her concern is the north-to-south road connection with Stonebridge Lane diverting traffic through the residential neighborhood. She had interpreted the traffic study as indicating 61 trips per day and expressed concern with the anticipated 500 trips per day without the installation of a traffic light at Stonebridge Lane and Ranches Parkway and the impact of the increased traffic on making a left-hand turn off Stonebridge Lane onto Ranches Parkway. She recommended mitigation to divert traffic back onto Ranches Parkway to prevent vehicles diverting onto Stonebridge Lane and Appaloosa Way to connect with Ranches Parkway farther to the south.

Jay Shippen, Christine Kiesel, Alexis Hicks, Dale Erling, Carrie Koka, Brain Koka, Michelle Blackburn, Travis Anderson, Amber Feller, and Dennis Kiesel submitted emails against the proposal due to concerns with an access to the car wash from Stonebridge Lane due to traffic congestion, the need for a traffic light and other traffic mitigation measures, the carwash queue impeding traffic flow, questions regarding the traffic study for the area, pedestrian and vehicular safety, and negative impact to the quality of life for the adjacent neighborhood.

Commissioner Wright closed the public hearing at 7:57 p.m.

City Engineer Chris Trusty stated that a traffic light for the intersection of Stonebridge Lane and Ranches Parkway could be added to the Impact Fee Facility Plan (IFFP) to collect impact fees to fund the light that is anticipated to be warranted by 2025. An IFFP update is scheduled to be approved within the next couple of months. The connection to the north to Maverick is crucial to preventing the intersection from failing. He said that the peak hour is usually used to evaluate the traffic study as it has the most critical impact and the number of vehicles serviced will be limited by the capacity of the carwash. The north-to-south connection from the Maverik and Stonebridge Lane is crucial to preventing the intersection at Campus Drive and Ranches Parkway from failing.

Commissioner Wright stated he felt that the screening provided by the compact burning bush and the design continuity between the adjacent buildings were significant and adequate.

Commissioner Everett stated that the purpose of the headlight screening is to protect headlights impacting motorists on Ranches Parkway and is most critical during the winter months with shorter

days and is concerned the screening quality would reduce when the compact burning bush loses its leaves. As such, he would prefer the addition of evergreen plants to achieve the purpose of the screening requirement. He recognized the residents' concerns with the access onto Stonebridge Lane and noted the future traffic light will alleviate some of those concerns. He is concerned with the inconsistency and variance in the anticipated trip calculations.

Commissioner Pengra recognized the concerns with the confusion with the traffic study evaluation; however, his main concern is the indication of a LOS D during the morning and evening peak hours. Traffic improvements generally lag behind the need and are a cost of development. Attracting the services to the City desired by residents frequently requires a short-term degrade in service for long-term benefits. Fortunately, staff has shown proficiency in prioritizing traffic improvement projects. He is not concerned with headlight screening due to the layout of the carwash.

Commissioner Bergener said as the applicant explained that the majority of the business traffic is existing traffic already in the area, the use should not greatly increase traffic. He has no concerns with the screening proposal or the plan's adherence to the design standards.

Commissioner Wright stated that Commissioner Everett and he measured the decibel reading from approximately ten feet away from the exit of an existing carwash. The reading registered 78 to 82 decibels with the fans running. The carwash facing west and away from the road and the school provides the opportunity for future development to be aware of the conditions and potential noise issues before developing the adjacent site.

Mr. Mumford verified that the Quick Quack carwash in the City operates from 7:00 a.m. to 7:00 p.m. The noise ordinance is simple and directed towards construction noise. Car washes at gas stations have been required to have limited hours of operation.

MOTION: ***Commissioner Pengra moved to recommend approval to the City Council of the rezone of parcel 66:403:0102 to the Commercial Community Zone. Commissioner Everett seconded the motion. Those voting aye: Jeremy Bergener, Matthew Everett, Christopher Pengra, and Brett Wright. The motion passed with a unanimous vote.***

MOTION: ***Commissioner Pengra moved to recommend approval to the City Council of a site plan for the Tagg N Go with the condition that the applicant shall comply with the traffic mitigation strategies recommended in the traffic impact study. Commissioner Bergener seconded the motion. Those voting aye: Jeremy Bergener, Matthew Everett, Christopher Pengra, and Brett Wright. The motion passed with a unanimous vote.***

6.C. PUBLIC HEARING – Marketplace at Eagle Mountain Town Center Lot 8 Retail Site A

Mr. Jensen presented the item. This application is for a commercial site plan approval for a building on lot 8 located in the development known as Marketplace at Eagle Mountain Town Center located

on the northwest corner of the intersection of Eagle Mountain Boulevard and Pony Express Parkway. The lot is approximately 28,350 square feet in size. The master site plan and preliminary plat for the Marketplace at Eagle Mountain Town Center were approved on August 18, 2020, with the development agreement being approved on December 1, 2020. The property is zoned Commercial Community (CC). Commercial site plan. The main entrance to the building is located on the south elevation which opens onto a pedestrian plaza. The applicant is providing 24 parking stalls. A mix of uses is anticipated, there is only room for one drive-through, and the location has access to the excess parking provided with the Macey's project. As such, it is anticipated that the project exceeds the minimum parking standards. The proposal has a drive-through that must meet the standards of EMMC 17.75.069 including up to 120 feet of stacking space. Although there are more than 120 feet of queue length for the drive-through, a significant portion of the length is after the ordering window and thus may not be in compliance with this provision.

Staff recommends that the Planning Commission motion to recommend approval of the application to the City Council, for the reasons set forth in the staff report and the meeting, with the following conditions any conditions the Planning Commission finds appropriate:

1. The drive through shall provide at least 120 feet of stacking before the ordering window;
2. The applicant shall extend the median between drive-throughs;
3. Signage and painted arrows shall be included to clearly indicate the correct direction of travel for the drive-throughs; and
4. The applicant shall add bike racks to the pedestrian area in accordance with EMMC 17.35.050(K).

Applicant representative Bill Gaskill said the ordering board will be on the island on the left side of the rendering with stripping to direct traffic flow. They added a separate island to divide the drive-through lane from the traffic coming in the opposite direction to increase safety. The wall with fewer design elements is located between the grocery store and an adjacent building and will not be visible. The color is the same as the grocery store but looks slightly different in the packet materials due to ink variance. They agreed with Macey's to set this building back to increase visibility for the grocery store. The resulting space will be developed as a courtyard, patio dining area for patrons. Agreements between the tenants allow for overflow parking utilization between businesses if required by the locations with fewer parking stalls.

Commissioner Wright opened the public hearing at 8:30 p.m. As there were no comments, Commissioner Wright closed the hearing.

MOTION: ***Commissioner Pengra moved to recommend approval to the City Council of the site plan for lot 8 retail site at the Marketplace at Eagle Mountain Town Center with the following conditions:***

1. ***The drive through shall provide at least 120 feet of stacking before the ordering window;***
2. ***The applicant shall extend the median between drive-throughs;***
3. ***Signage and painted arrows shall be included to clearly indicate the correct direction of travel for the drive-throughs; and***
4. ***The applicant shall add bike racks to the pedestrian area in accordance with EMMC 17.35.050(K).***

Commissioner Wright seconded the motion. Those voting aye: Jeremy Bergener, Matthew Everett, Christopher Pengra, and Brett Wright. The motion passed with a unanimous vote.

6.D. PUBLIC HEARING – Sign Code

Mr. Jensen presented the item. The applicant is proposing changes to EMMC 17.80 which regulates the size of signs in Eagle Mountain. The applicant's proposed changes are driven by their desire to allow for a preferred sign design to be placed at their Marketplace at Eagle Mountain Town Center project. Proposed changes to EMMC 17.80.070(B) include allowing a combined monument sign at each drive access onto a street (currently one is allowed/required per frontage), increasing the maximum height for combined monument signs to 20 feet from 10 feet, and removing the requirement for brick, rock, or stone along the vertical edge of combined monument signs. EMMC 17.80.070(C) suggested amendments include allowing a maximum height for individual monument signs to increase to six feet from five feet and allowing design elements on individual monument signs to be up to eight feet rather than the currently permitted 6.5 feet. Neither change would allow for additional sign copy area, rather it will allow for the vertical display of information rather than requiring a horizontal sign. The applicant has provided renderings of their preferred signs which would meet the standards of the proposed ordinance.

Applicant Bill Gaskill explained that they desire to allow more pad signs for larger projects and an increase in sign height. They have two entrances and some tenants will not have signage on one of the entrances. The amendment would allow sufficient signage for users towards the back of the project. A 15-foot wide and 10-foot-tall sign creates a wall at the entrance that obscures business and vehicular visibility. Setbacks, parking, topography, slope, curb and gutter constraints, and decreasing the impact to landscaping and visibility are the reasons they desire to amend the standards to permit taller, narrower signs.

Commissioner Wright opened the public hearing at 8:40 p.m.

Jesse Clark submitted the following email, “I do not see a valid reason to EM Citizens for the city to change our city code regarding signs for the benefit of a builder. I oppose this code change, specifically regarding the increased height to 20 feet and the removal of required materials signs. Please vote NO to amend this city code.”

Commissioner Wright closed the public hearing at 8:41 p.m.

Commissioner Wright supported the desire to have signage at both entrances; however, he is concerned with allowing a 20-foot-high sign especially due to resident concerns. He is willing to allow the increase from five to six feet on individual monument signs to improve the visibility of the tenant signage and to permit the design element to increase to eight feet.

Discussion ensued regarding concerns with the visual impact and magnitude of a 20-foot-high sign resulting in disharmony with the existing signage and the landscape of the City.

Commissioner Everett concurred with Commissioner Wright and requested for references to the Airpark Zone to be removed from the Municipal Code sign standards as a part of the motion.

Commissioner Pengra noted that the Eagle Mountain Boulevard side of the project has three entrances and objected to allowing a combined monument sign at each entrance. He suggested allowing two combined monument signs per development rather than one per access.

Discussion ensued regarding the appropriate number of combined monument signs to permit in relation to the number of access.

Mr. Mumford said he feels that some of the signage in the City are ineffective with directing you to an unfamiliar business; however, they might be less vital due to virtual maps and directions.

Discussion ensued regarding aesthetical requirements to ensure sign quality and continuity in the City.

Commissioner Pengra stated he would be willing to consider allowing a combined monument sign increase to 15 feet but not 20 feet. He did not object to allowing individual monument signs to increase to six feet but is against amending the sign material design standards.

Commissioner Wright and Everett stated they were against permitting a combined monument sign increase to 15-feet.

MOTION: ***Commissioner Wright moved to recommend approval to the City Council of a development code amendment to Eagle Mountain Municipal Code 17.80 Sign Regulations and Sign Permits:***

1. ***EMMC 17.80.070(B) shall be amended to allow a combined monument sign at each drive access onto a street;***
2. ***In EMMC 17.80.070(C), the maximum height for an individual monument sign shall be increased to six feet;***
3. ***EMMC 17.80.070(C) shall be amended to allow design elements on individual monument signs up to eight feet; and***
4. ***References to the Airpark Zone shall be removed from EMMC 17.80.***

Commissioner Everett seconded the motion. Those voting aye: Jeremy Bergener, Matthew Everett, Christopher Pengra, and Brett Wright. The motion passed with a unanimous vote.

6.E. PUBLIC HEARING – Big O Tires

Mr. Jensen presented the item. On December 1, 2020, the Eagle Mountain City Council approved the master site plan for Silver Fox Cascade, which included a site plan approval for a Cascade Collision Auto Repair on lot 1. The applicant has since made a slight amendment to the lot lines in the master site plan shifted lot lines to better accommodate users by including the entire access and internal access easement on one lot so that it can be built at once but did not create any new building areas or lots. The proposed Big O Tires is located on lot 2 of the Pony Express Business Park subdivision, which was previously known as Silver Fox Cascade.

The property in question is zoned CC. Automobile service and minor repair are permitted uses in the CC Zone. The applicant proposed 30-foot setback exceeds the 25-foot setback maximum. The proposed elevations are largely without horizontal articulation, it is up to the Planning Commission to determine if the contrast of the CMU and roll-up doors on the north and south elevations comply with this standard or if additional design elements should be added. All sides of a building shall include the chosen details. The applicant's proposal includes awnings on two facades, columns on two facades, decorative masonry, and architectural lighting on three facades. Additional features should be added to all facades to bring the project into compliance with this provision. The nature of repair shops, like Big O, requires large service bays and roll-up doors, it shall be up to the Planning Commission to determine if additional architectural features should be required. The proposal includes about 1,400 square feet of the gross finished floor and 12 service bays; thus 27 parking stalls are required and 32 parking stalls are provided.

Staff recommends that the Planning Commission motion to recommend approval of the Big O site plan to the City Council for the reasons set forth in the staff report and the meeting with the following conditions:

1. The applicant shall provide safe pedestrian access from Pony Express Parkway to the customer lobby;
2. The applicant shall ensure that all lighting complies with dark sky standards including full cutoff lights, no overspill, no more than 100,000 lumens per acre, and all parking lot lights shall be under 17 feet in height;
3. The applicant shall move the building forward at least 5 feet to comply with the maximum front setback of 25 feet; and
4. The applicant shall provide additional architectural features so that all facades contain at least six of the architectural features as defined and required by EMMC 17.72.040(E)(1).

Applicant representative Trevor Sharp said he will discuss the setback requirements with the engineer to adjust the plans. The proposed location is to provide clearance for vehicles pulling out of the bays. Additional design elements and signage can be added to the north elevations fronting on Pony Express Parkway. Reorienting the building 90 degrees for the bays not to face Pony Express Parkway would result in compromising the stabilization of the building due to the slope and grade of the site.

Commissioner Wright opened the public hearing at 9:11 p.m. As there were no comments, Commissioner Wright closed the hearing.

Commissioner Wright said although he does not have concerns with the proposed business, he has serious reservations regarding the proposed north elevation facing Pony Express Parkway due to the lack of articulation and design features.

Commissioner Everett concurred and said he would prefer the building be rotated 180 degrees for the proposed south elevation to be along Pony Express Parkway due to the requirement for the front of businesses to face the road. He is confused by the lack of signage on the north elevation which would make it difficult for motorists to identify the business from the parkway. Due to

public concern regarding automotive businesses in this area of the City, he clarified that there have never been any formal discussions regarding amending the CC Zone to remove automotive uses.

Discussion ensued regarding requiring additional design features for the north façade.

Commissioner Pengra stated he believes that the north and south elevations were mislabeled as the internal floor plan aligns with the opposite elevations.

Mr. Sharp stated that he believes that Commissioner Pengra is correct and he can verify with the architect if the elevations were mislabeled. Regardless, they are willing to alter the plans to include the architectural features included on the south elevation on the north side of the building. They likewise desire signage and the most attractive elevation to face the parkway for the benefit of the business.

It was later confirmed that the labels for the north and south elevations had been inadvertently switched.

MOTION: ***Commissioner Pengra moved to recommend approval of the site plan for Big O Tires to the City Council with the following conditions:***

1. ***The applicant shall provide safe pedestrian access from Pony Express Parkway to the customer lobby;***
2. ***The applicant shall ensure that all lighting complies with dark sky standards including full cutoff lights, no overspill, no more than 100,000 lumens per acre, and all parking lot lights shall be under 17 feet in height;***
3. ***The applicant shall move the building forward at least five feet to comply with the maximum front setback of 25 feet;***
4. ***The applicant shall provide additional architectural features so that all facades contain at least six of the architectural features as defined and required by EMMC 17.72.040(E)(1); and***
5. ***The applicant shall review and provide updated elevations with clear illustration of the orientation of the building, correcting any labels as appropriate.***

Commissioner Bergener seconded the motion. Those voting aye: Jeremy Bergener, Matthew Everett, and Christopher Pengra. Those voting nay: Brett Wright. The motion carried with a vote of 3:1.

Commissioner Wright clarified that his dissention was due to his preference for the building to be turned 90 degrees so that the bay doors do not face Pony Express Parkway.

6.F. PUBLIC HEARING – Shooting Ranges

Mr. Jensen presented the item. The RTI Overlay Zone currently allows “Indoor Shooting Ranges” but there is no definition or standards for either indoor or outdoor shooting ranges in Municipal Code. This item proposes the addition of Municipal Code standards to allow for and regulate said uses in the City.

Commissioner Wright opened the public hearing at 9:24 p.m.

Wasatch Wing and Clay General Manager Weston Berry requested for the Commission to remove the proposed requirement in EMMC 17.75.073(C)(7) for a range operator in addition to the credentialed qualified range master because range operator is a nonspecific term and operators generally do not supervise the range and the requirement of a second supervisor would impede and increase the cost of offering private lessons.

Commissioner Wright closed the public hearing at 9:26 p.m.

Commissioner Wright noted that the indoor shooting range standards have the same requirement for secondary supervision by a range operator. He recommended allowing the reclamation of copper and brass casing materials in addition to lead.

Mr. Jensen explained that the five-acre requirement was due to shooting ranges being allowed in the Agricultural Zone which has a five-acre lot size minimum. Wasatch Wing and Clay representatives requested to allow outdoor shooting ranges in the Natural Open Space Zone. They are currently located outside of the City boundaries but the area is included in the City's annexation plan. The land would be annexed as open space; most of their development rights have been sold to Camp Williams. Wasatch Wing and Clay representatives also requested reduced design standards to exempt structures used to shelter shooters. Outdoor shooting ranges are proposed as special rather than permitted uses in the OS-N Zone which require City approval to prevent conflicts and noncongruent adjacent uses.

Commissioner Wright recommended modifying the proposed verbiage in EMMC 17.75.073(C)(9) to incendiary targets, such as Tannerite.

MOTION: ***Commissioner Wright moved to recommend approval to the City Council of the development code amendment to Eagle Mountain Municipal Code 17.10, 17.20, 17.23, 17.35, 17.37, 17.40, and 17.75 with the following changes:***

1. ***EMMC 17.75(A)(7) On-site supervision and monitoring shall be provided by the range operator/owner;***
2. ***EMMC 17.75.073(C)(7) On-site supervision and monitoring shall be provided by the range operator/owner;***
3. ***EMMC 17.75.073(C)(9) Use of exploding, incendiary targets, such as Tannerite, shall be prohibited; and***
4. ***EMMC 17.75.073(D)(8) Outdoor shooting ranges shall be permitted to reclaim lead, copper, brass, steel, or other materials generated in the process of normal operations.***

Commissioner Pengra seconded the motion. Those voting aye: Jeremy Bergener, Matthew Everett, Christopher Pengra, and Brett Wright. The motion passed with a unanimous vote.

6.G. ACTION ITEM – Eagle Crest Business Park

Mr. Jensen presented the item. Eagle Crest is located within the Commercial Portion of the Sage Park development. Sage Park was originally an entirely residential project, but on November 19, 2019, the City Council rezoned approximately 20 acres to Business Park, and granted Light Manufacturing as a conditional use, the Council also allowed for up to nine acres of self-storage in the northern portion of the project along Eagle Mountain Boulevard. This proposal is for a preliminary plat and master site plan for the commercial area rezoned at that meeting. In addition to approving the rezone, the Council added a condition that the approval should mirror concept 2 presented during that meeting.

It is the opinion of staff that the application complies with the terms of the Sage Park Development and Use Agreement including the provisions regarding general configuration, road access, and zoning and land use, and the Council requirement to mirror concept 2. The applicant proposes 14 parking stalls at the office for the storage unit facility; it is up to the Planning Commission to determine if this is sufficient parking. Parking islands are required for every 12 parking stalls; however, the applicant is showing more than 12 parking stalls in a row without parking islands. The applicant's proposal places the expanse of parking between the buildings and the road with all parking in front of buildings this fails to comply with Municipal Code. However, the proposed site plan matches the approved concept plan and the flex use development in the north portion of the City has parking approved for the front of the building to move pedestrian conflict points behind the buildings.

Staff recommends that the Planning Commission motion to recommend approval of the application to the City Council for the reasons set forth in the staff report and the meeting with the following conditions:

1. Any feedback on the proposed elevations;
2. The amount of parking required for the storage facility as determined per EMMC 17.55.120(C);
3. Parking islands shall be required for every 12 parking stalls in accordance with EMMC 17.55.080(C);
4. Headlight screening shall be required between parking areas and the public rights-of-way; and
5. Buildings shall be moved up with parking provided to the rear or side of buildings in accordance with EMMC 17.72.030(B).

Applicant representative Isaac Patterson explained the landscaping on the previous plan had not been updated and resulted in confusion regarding the points of access to the project. The landscaping has been updated in the submission materials to resolve the conflict. The right-in, right-out access is the only access directly onto Eagle Mountain Boulevard. The eastern access on the south is intentionally misaligned with the adjacent road within the Sage Park residential development because the access is not intended as a through street and the alignment as presented allows for a better layout with increased square footage. He requested for the parking island requirement to be excluded from the conditions of approval to facilitate snow removal and to increase parking and as islands have not been used in their other storage facility sites.

Mr. Jensen suggested removing the fifth staff-recommend condition regarding relocating the building and parking due to the reasons discussed in the staff report.

MOTION: ***Commissioner Bergener moved to recommend approval to the City Council of the master site plan and preliminary plat for Eagle Crest Business Park with the following conditions:***

1. ***The amount of parking required for the storage facility as determined per EMMC 17.55.120(C) shall be provided; and***
2. ***Headlight screening shall be required between parking areas and the public rights-of-way.***

Commissioner Pengra seconded the motion. Those voting aye: Jeremy Bergener, Matthew Everett, Christopher Pengra, and Brett Wright. The motion passed with a unanimous vote.

6.H. ACTION ITEM – Ault Farms Master Development Agreement

Mr. Mumford presented the item. The Ault Farms Master Development Plan, General Plan Amendment, and Rezone were approved by the City Council on July 20, 2021. Those approvals are contingent upon the approval of an MDA, as described in EMMC 16.10. The master development agreement was drafted by the City Attorney and the developer's attorney and negotiated between the parties. As required by EMMC 16.10.060, the Planning Commission must review the MDA in a public meeting and provide a recommendation to the City Council.

City Attorney Jeremy Cook clarified that the intention of the language in Section 1.22(f) of the agreement is to stipulate that the developer will only receive reimbursable costs for upsized improvements and not the portion of the standard improvements for the project. He explained that "vested laws" are defined as the laws in effect at the time of the submission or approval of the MDA depending upon the terms of the agreement. Certain aspects are excluded from the vested rights such as changes to safety laws, taxes, development fees, and impact fees.

Discussion ensued regarding the purview and responsibilities of Planning Commissions outlined in Utah Code in relation to the review of and recommendations regarding master development agreements.

MOTION: ***Commissioner Pengra moved to recommend approval to the City Council of the master development agreement for Ault Farms. Commissioner Wright seconded the motion. Those voting aye: Jeremy Bergener, Matthew Everett, Christopher Pengra, and Brett Wright. The motion passed with a unanimous vote.***

6.I. ACTION ITEM – The Pinnacles Master Development Agreement

Mr. Mumford presented the item. The Pinnacles Master Development Plan, General Plan amendment, and rezone were approved by the City Council on April 6, 2021. Those approvals are contingent upon the approval of an MDA, as described in EMMC 16.10. The MDA for the project was drafted by the City Attorney and the developer's attorney and negotiated between the parties. As required by EMMC 16.10.060, the Planning Commission must review the MDA in a public meeting and provide a recommendation to the City Council.

Commissioner Wright expressed concern with the sentence in paragraph two on page five that states, "the parties acknowledge that Developer may propose single-family detached units (cluster units) in the MF-1 zone, as an alternative to townhomes or other attached products," because Municipal Code does not include standards or permit single-family cluster units in the MF1 Zone. He advocated removing the maximum number of units table on page five as the standards will dictate the maximum number of units feasible within each area that adhere to each zone's lot size, frontage, and other requirements due to concerns that the maximum number of units could be considered an approval of a vested number of units regardless of those units meeting City standards.

Mr. Cook explained previous MDAs including maximum unit counts to ensure the number of units was limited especially in consideration of density transfers. The inclusion of a maximum unit count may not be necessary for this agreement. The maximum unit count does not vest the developer with that number of units and a lower unit count might be necessary to meet zoning standards.

Applicant representative Andy Flamm recognized the concerns regarding the cluster lots and desires for the language to acknowledge that they will be requesting the product in hopes of bringing forth an application that resolves Commission and Council concerns such as parking.

Discussion ensued regarding concerns with including language regarding cluster lots in the agreement and the purview of the Planning Commission as a land use authority in relation to the legislative process and master development agreements.

MOTION: ***Commissioner Pengra moved to recommend approval to the City Council of the master development agreement for The Pinnacles noting this is a legislative approval and not an approval properly vested with the Planning Commission. Commissioner Bergener seconded the motion. Those voting aye: Jeremy Bergener and Christopher Pengra. Those voting nay: Matthew Everett and Brett Wright. The motion failed with a vote of 2:2.***

MOTION: ***Commissioner Wright moved to recommend approval to the City Council of the master development agreement for The Pinnacles recommending the removal of the language identifying the maximum number of units and for the Council to consider removing the single-family detached product, cluster units, from the MF1 areas as contained in paragraph two on page five. Commissioner Everett seconded the motion. Those voting aye: Jeremy Bergener, Matthew Everett, Christopher Pengra, and Brett Wright. The motion passed with a unanimous vote.***

7. Discussion Items

8. Next scheduled meeting

The next Planning Commission meeting is scheduled for December 14, 2021.

9. Adjournment

MOTION: ***Commissioner Bergener moved to adjourn the meeting at 10:33 p.m. Commissioner Pengra seconded the motion. Those voting aye: Jeremy Bergener, Matthew Everett, Brett Wright, and Christopher Pengra. The motion passed with a unanimous vote.***

The meeting was adjourned at 10:33 p.m.

Approved by the Planning Commission on December 14, 2021.

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Steve Mumford, AICP
Assistant City Administrator/Community Development Director

DRAFT

EAGLE MOUNTAIN	**EAGLE MOUNTAIN CITY** **PLANNING COMMISSION MEETING** **DECEMBER 14, 2021**
TITLE:	Status Report
ITEM TYPE:	Discussion
FISCAL IMPACT:	
APPLICANT:	

GENERAL PLAN DESIGNATION	CURRENT ZONE	ACREAGE	COMMUNITY

PUBLIC HEARING:
No

PREPARED BY:
Tayler Jensen, Planning

PRESENTED BY:

RECOMMENDATION:

BACKGROUND:
There have been two City Council Meetings since the last Planning Commission meeting on January 9th, in that time the following projects have been approved by the Eagle Mountain City Council:

- Eagle Mountain Medical Office Building Site Plan
- 6.10 Animal Code
- The Pinnacles MDA
- Marketplace at Eagle Mountain Town Center Lot 8 Retail A Site Plan
- Big O Tires Site Plan
- Tagg N Go Rezone and Site Plan
- 17.70 ADU ordinance
- Eagle Crest A Master Site Plan
- Ault Farms MDA

The following items have been considered by the Council but tabled:

- 17.80 Sign Code
- Shooting Range Code
- Ranches Crossing Master Site Plan

ITEMS FOR CONSIDERATION:

REQUIRED FINDINGS:

PLANNING COMMISSION ACTION/RECOMMENDATION:

ATTACHMENTS:

EAGLE MOUNTAIN	**EAGLE MOUNTAIN CITY** **PLANNING COMMISSION MEETING** **DECEMBER 14, 2021**
TITLE:	ACTION ITEM / PUBLIC HEARING - Eagle Quest East
ITEM TYPE:	Master Development Plan, Preliminary Plat, Rezone, and General Plan Amendment
APPLICANT:	Kurt Ostler

ACTION ITEM:
Yes

PUBLIC HEARING:
Yes

PREPARED BY:
Tayler Jensen, Planning

BACKGROUND:

Master Development Plan

At 163+ acres the project does require a Master Development Plan to help ensure that the project will relate well to surrounding uses while establishing the required public investments and benefits for the development and the community. the proposed Preliminary Plat, Rezone, and General Plan Amendment are all proposed as a part of the Master Development Plan, as required by 16.10.030 EMMC.

Preliminary Plat

The applicant is proposing a 424 lot preliminary plat.

General Plan Amendment

The applicant is proposing an amendment to the General Plan Map moving "Old Airport Road" to the east property line of their parcel, the current Future Land Use Map and the Transportation Master Plan map show "Old Airport Road" as a Major Arterial which cuts diagonally though the northeast corner of the development.

Rezone

Currently the entire parcel is zones Agriculture, with a future land use designation of *Neighborhood Residential One*. The applicant is proposing to rezone the 163.211 acres to the following zones:

- 9.1396 Acres to the OS-I Zone
- 9.044 Acres to the RD1 Zone (It should be noted that the RD1 zone is typically anticipated within the *Ag/Rural Density Two* Future Land Use designation, as that is a less intense development pattern it may be considered appropriate within the *Neighborhood Residential One* future land use designation, alternatively the General Plan Map is being proposed to be

amended with this application, and that area could be amended to the *Ag/Rural Density Two* future land use).

- 9.028 Acres to the R1 Zone
- 33.630 Acres to the R2 Zone
- 51.3187 Acres to the R3 Zone

The remaining 51.05 Acres is included in public ROW.

ITEMS FOR CONSIDERATION:

The following items should be considered when making a recommendation to the City Council.

Master Development Plan

Master Development Plans are required for all projects in excess of 50 acres, to help ensure that large projects relate well to surrounding uses, while also establishing the required public investments and benefits for the development and the community. 16.10.030 of EMMC defines the General Considerations to apply to all proposed Master Developments:

A. Zoning Districts: The proposal includes rezones to the OS-I, RD1, R1, R2, and R3 zones in *compliance* with 16.10.030 A.
B. General Plan Amendments: The proposal does make changes to the future transportation map and a General Plan Amendment has been applied for in *compliance* with 16.10.030 B.
C. Master Development Plan: The applicant has applied for a Master Development Plan which will serve as the guiding document for the proposed Eagle Quest East development, and will serve as the basis for the future MDA in *compliance* with 16.10.030 C.

The Criteria for the approval of MDPs are defined in 16.10.070 of the Eagle Mountain Municipal Code. The project's compliance with these standards are discussed below:

A. General Criteria: There are no slopes within the development greater than 25 % and there are no known natural hazards

present on the property. The applicant has designed storm water retention for the entire project, and there are no natural channels, washes, or ridgelines within the property, thus it is the opinion of staff that the MDP *complies* with 16.10.070 A.

B. Criteria related to Infrastructure: Eagle Quest East can be adequately served by existing and proposed utilities in the project area. The proposal is showing minor collectors on the north, west, and east boundary lines as indicated in the future transportation plan, the applicant is proposing to move "Old Airport Road" to the north property line, and has applied for a General Plan Amendment to remain in compliance with this provision, the project will be required to dedicate or purchase required water rights prior to recording any plat for development, thus it is the opinion of staff that the MDP *complies* with 16.10.070 B.

C. Criteria related to Compatibility: The applicant has provided a compatibility statement which indicates the property to the North has the future land use designations of *Neighborhood Residential One and Two*, Eagle Quest East shows R1 zoning adjacent to all *Neighborhood Residential Two* property and R1, R2, R3, and RD1 adjacent to the *Neighborhood Residential One* designation. The property to the south has a future land use designation of *Neighborhood Residential One* and is fully included within the Sunset Flats which includes 1/4 - 1/3 acre lots. The Eagle Quest East Lots range from 8,000 SF to 22,023 SF adjacent to Sunset Flats, it should be noted that a collector road (Aviator Avenue) is between the two developments. The property to the west has a future land use designation of *Neighborhood Residential One* and is included in Village Four of the Overland MDA which has an anticipated density of 2.39 DU/AC. Property to the East of Eagle Quest East is proposed to be separated by the 152' ROW of "Old Airport Road" with the future land use designation being *Rural Density One and Two.* Eagle Quest East is proposing RD1 zoned property along the entire east edge. Per Table 17.60.160(1) the appropriate buffer for the RD1 zone is AG, RA2, RD2, OS-I, & OS-N. Meaning it does not comply with the transitioning standards to the north, or west to the R1 Units within in the development, staff recommends the addition of a row of lots and zoning between the RD1 and R1 zone.

D. Criteria related to Design: Per 17.25.040 RD1 lots require no improved open space, R1 lots require 750 SF of improved open

space, R2 lots require 900 SF of improved open space, and R3 lots require 1,000 SF of improved open space, based on these numbers and the applicants proposal this project is required to provide 9.116 acres (397,100 SF) and 912 Amenity Points. The project is providing 9.1396 acres (398,120.98 SF) of improved open space, however, 4.314 acres (187,918 SF) of this is in the retention pond/park and per 16.35.105 8 only up to 75% of this may count toward improved open space which is 3.24 Acre (140,938 SF). Meaning the total amount of improved open space being provided is approximate 8.06 acres (351,115 SF). Thus approximately 1.06 acres (46,174 SF) of additional improved open space is required. The applicant is proposing a total of 911 Amenity points which does meet the minimum requirement. The proposal does not include any property for civic buildings, schools, churches etc.

Rezone

The following criteria, found in 17.90.060 shall be considered when considering a rezone:

A. Compliance with General Plan: The entire parcel has a future land use designation of *Neighborhood Residential One* the R1, R2, and R3 zones are appropriate within this land use designation. The RD1 zone is not anticipated within the designation, and is a less intense use than typical *NRO* uses.
B. Compatibility Determination: Compatibility is discussed extensively in the MDP portion of this staff report, the property is bordered to the north, west, and south by *Neighborhood Residential One*, it is also bordered by *Neighborhood Residential Two* to the North, and by *Agriculture Rural Density One and Two* to the east.
C. City Services: The proposed development is not anticipated to overburden the City's service capacity.
D. Traffic Generation: The applicant has completed a TIS for this project (Executive summary attached) which shows the roads in the area operating at an acceptable LOS in 2026, however, by 2040 a Signal may be warranted along "Old Airport Road" to maintain breaks in traffic.
E. Property Values: The proposed use is not expected to have a significant negative impact on surrounding property values.

Preliminary Plat

The following shall be considered when reviewing the Preliminary

Plat:

Connectivity: The project has 44 Nodes and 74 Links for a connectivity score of 1.68, a minimum score of 1.6 is required per 16.30.090 thus the proposal *complies* with this provision. The maximum block length is 800' (can be increased to 1,100' with a midblock pedestrian connection) in the R1,R2, and R3 zones and 1,000' (can be increased to 1,200' with a midblock pedestrian connection) in the RD1 Zone. The proposed road network has block lengths that *comply* with these standards.

Development Standards: The following development standards apply to the proposed development:

RD1 Zone

- Minimum Lot Size: 1 Acre
- Minimum Lot Frontage: 150'
- Front Setback: 30'
- Front Garage Setback: 40'
- Rear Setback: 35'
- Side Yard Setback: 15'
- Garage Side Yard Setback: 15'
- Street Side Setback (corner lot): 25'

R1 Zone

- Minimum Lot Size: 1/4 Acre (10,890 SF)
- Minimum Average Lot Size: 1/3 Acre (14,520 SF)
- Minimum Lot Frontage: 85'
- Minimum Lot Frontage Circle and Cul-de-sacs: 45'
- Front Setback: 25'
- Front Garage Setback: 25'
- Rear Setback: 25'
- Side Setback: 10'
- Garage Side Setback: 10'
- Street Side Setback (Corner Lot): 15'

R2 Zone

- Minimum Lot Size: 8,000 SF
- Minimum Average Lot Size: 1/4 Acre (10,890 SF)
- Minimum Lot Frontage: 80'
- Minimum Lot Frontage Circle and Cul-de-sacs: 40'
- Front Setback: 25'

- Front Garage Setback: 25'
- Rear Setback: 20'
- Side Setback: 8'
- Garage Side Setback: 10'
- Street Side Setback (Corner Lot): 15'

R3 Zone

- Minimum Lot Size: 6,500 SF
- Minimum Average Lot Size: 8,500 SF
- Minimum Lot Frontage: 62'
- Minimum Lot Frontage Circle and Cul-de-sacs: 20'
- Front Setback: 15'
- Front Garage Setback: 22'
- Rear Setback: 20'
- Side Setback: 8'
- Garage Side Setback: 10'
- Street Side Setback (Corner Lot): 15'

Community Mailboxes

Chapter 16.35.150 requires community mailboxes are required 1,320 feet of all homes, and shall utilize Mailbox Pullout Design Standards defined in 16.35.150 D. these mailboxes are not currently shown on plans, staff recommends the plat be updated with community boxes, and that at least one is located within the first phase of development.

Road Standards

Per Table 16.35.130(b) the minimum distance between intersections for Five Lane Major Arterials is 1,320', the applicant is proposing a road stub to "Old Airport Road" which is a Five Lane Major Arterial facility approximately 615' away from the intersection with the southern collector road. this road shall be moved to be at least 1,320' from any other intersection onto "Old Airport Road".

General Plan Amendment

The master development plan proposed an amendment to the General Plan Land Use Map from *Neighborhood Residential One* to *Agricultural Rural Density Two* along the Eastern edge of the project.

It also includes an amendment to the General Plan Future Transportation Map by moving a Major Arterial (Old Airport Road) to the Eastern edge of the project.

REQUIRED FINDINGS:

Amendments to the General Plan are legislative actions and do not require approval based upon findings of facts. The Commission should consider the health, safety, and welfare of the Community. Rezones are legislative decisions and are considered valid if reasonably debatable and not illegal. The criteria for a Rezone approval can be found in EMMC 17.90.060. Master Development Plan approvals are based upon compliance with City Code requirements. The approval criteria for a Master Development Agreement can be found in EMMC 16.10. Preliminary Plat approvals are based upon compliance with City Code requirements. The approval criteria for a Preliminary Plat can be found in EMMC 16.20.050.

RECOMMENDATION:

A Recommendation of approval for the General Plan Amendment may be made for the reasons set forth in the staff report and in meeting if the Planning Commission finds the addition of the *Rural Agricultural Density Two* future land use along the eastern edge of the project, and the shifting of Old Airport Road to the Eastern edge of the parcel promotes the health, safety, and welfare of the community.

We recommend the Planning Commission make a motion to recommend approval of the Rezone of parcel 59:006:0053 to the City Council, rezoning the property to RD1, RD2, R1, R2, R3, and OS-N as shown in the Land Use, Concept Site, and Phasing Plan , for the reasons set forth in the meeting with the following conditions:

1. A row of RD2 lots are included between the RD1 and R1 Zoned property.

We recommend the Planning Commission make a motion to recommend approval of the Master Development Plan and

Preliminary Plat to the City Council, for the reasons set forth in the staff report and in the meeting with the following conditions

1. Additional improved open space is provided complying with open space required by 17.25.040
2. Community Mailbox locations be shown on the Master Development Plan/Preliminary Plat that utilize the pullout design standard from 16.35.150 D, with at least one mailbox in the first phase of development.
3. The Road Stub to Old Airport Road shall be moved to be at least 1,320' from any other intersection.

ATTACHMENTS:

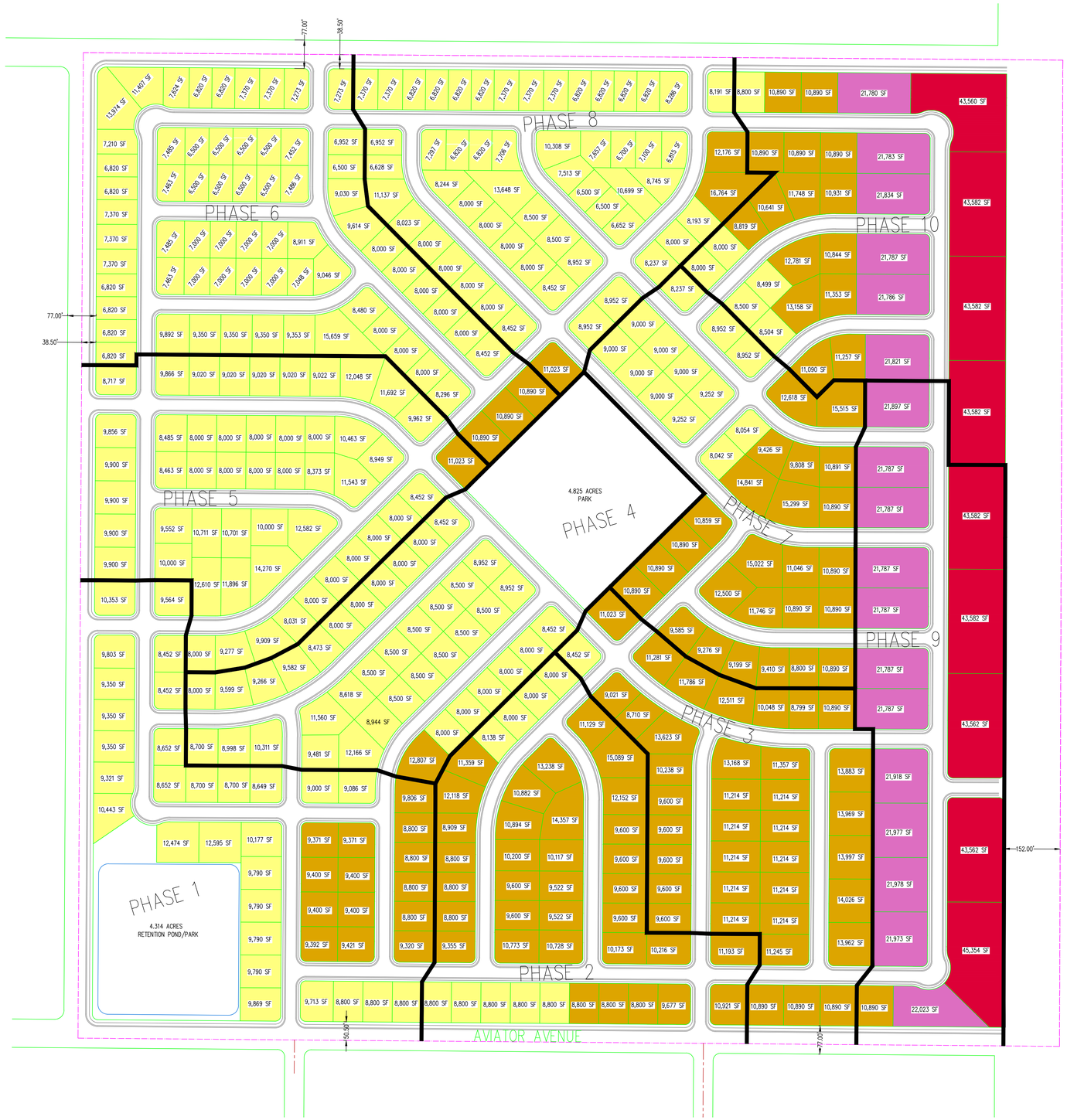
Land Use, Concept, and Phasing Plan

Parks and Rec

Traffic Study

Future Land Use Maps

Concept Plan Review Meeting Minutes



TABULATIONS

TOTAL ACREAGE OF OVERALL PROJECT:	163.211 ACRES	=	100%
IMPROVED OPEN SPACE AREA:	9.1396 ACRES	=	5.6%
ROADWAY AREA:	51.05 ACRES	=	31.3%
RD1 ZONE LOT AREA: (43,772 S.F. LOT AVERAGE)	9.044 ACRES	=	5.5%
R1 ZONE LOT AREA: (21,849 S.F. LOT AVERAGE)	9.028 ACRES	=	5.5%
R2 ZONE LOT AREA: (10,932 S.F. LOT AVERAGE)	33.630 ACRES	=	20.6%
R3 ZONE LOT AREA: (8,500 S.F. LOT AVERAGE)	51.3187 ACRES	=	31.4%

PARK TABULATIONS

263 LOTS (1,000 S.F./LOT)
134 LOTS (900 S.F./LOT)
18 LOTS (750 S.F./LOT)

TOTAL REQUIRED PARK AREA = 397,100 S.F. = 9.12 ACRES

TOTAL PROVIDED PARK AREA = 398,123 S.F. = 9.14 ACRES

LOT NUMBER PER ZONE

RD1 LOTS	=	9
R1 LOTS	=	18
R2 LOTS	=	134
R3 LOTS	=	263
TOTAL LOTS	=	424

AVERAGE LOT AREA FOR TOTAL PROJECT = 10,584 S.F.

150 75 0 150 300 450

Scale 1" = 150'

ZONING LEGEND

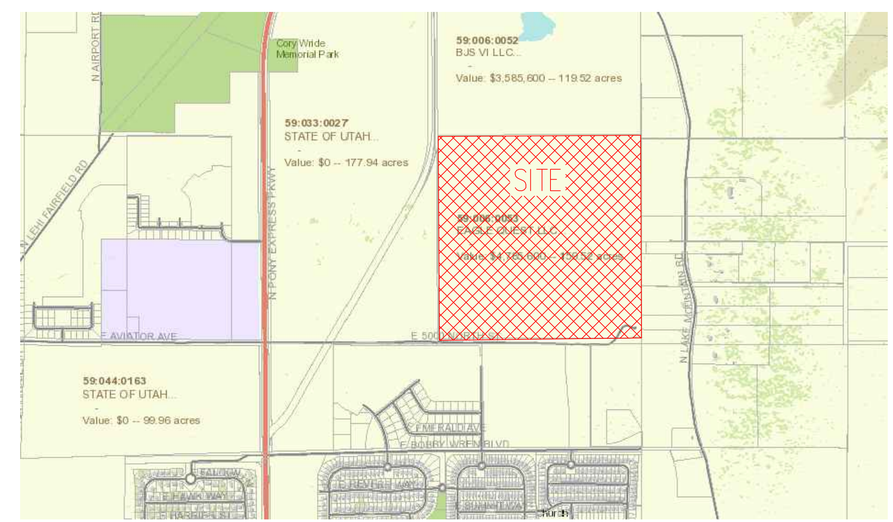
RD1
R1
R2
R3

SETBACK NOTE

SETBACKS VARY BY LOT SIZE. THE SETBACK EXHIBIT WILL BE PROVIDED AS PART OF THE PRELIMINARY AND FINAL PLAT DESIGN PLANS.

FENCING NOTE

COLLECTOR/ARTERIAL ROAD FENCING IS REQUIRED ON ALL LOTS AROUND THE ENTIRE PERIMETER SINCE THEY ALL BACK AGAINST A COLLECTOR OR ARTERIAL ROAD.



VICINITY MAP

REVISIONS

Rev.	Date	Description
1	11/30/21	REVISED PER DRC REVIEW COMMENTS

Developer/Property Owner: KURT OSTLER
Phone: 801-971-2596

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

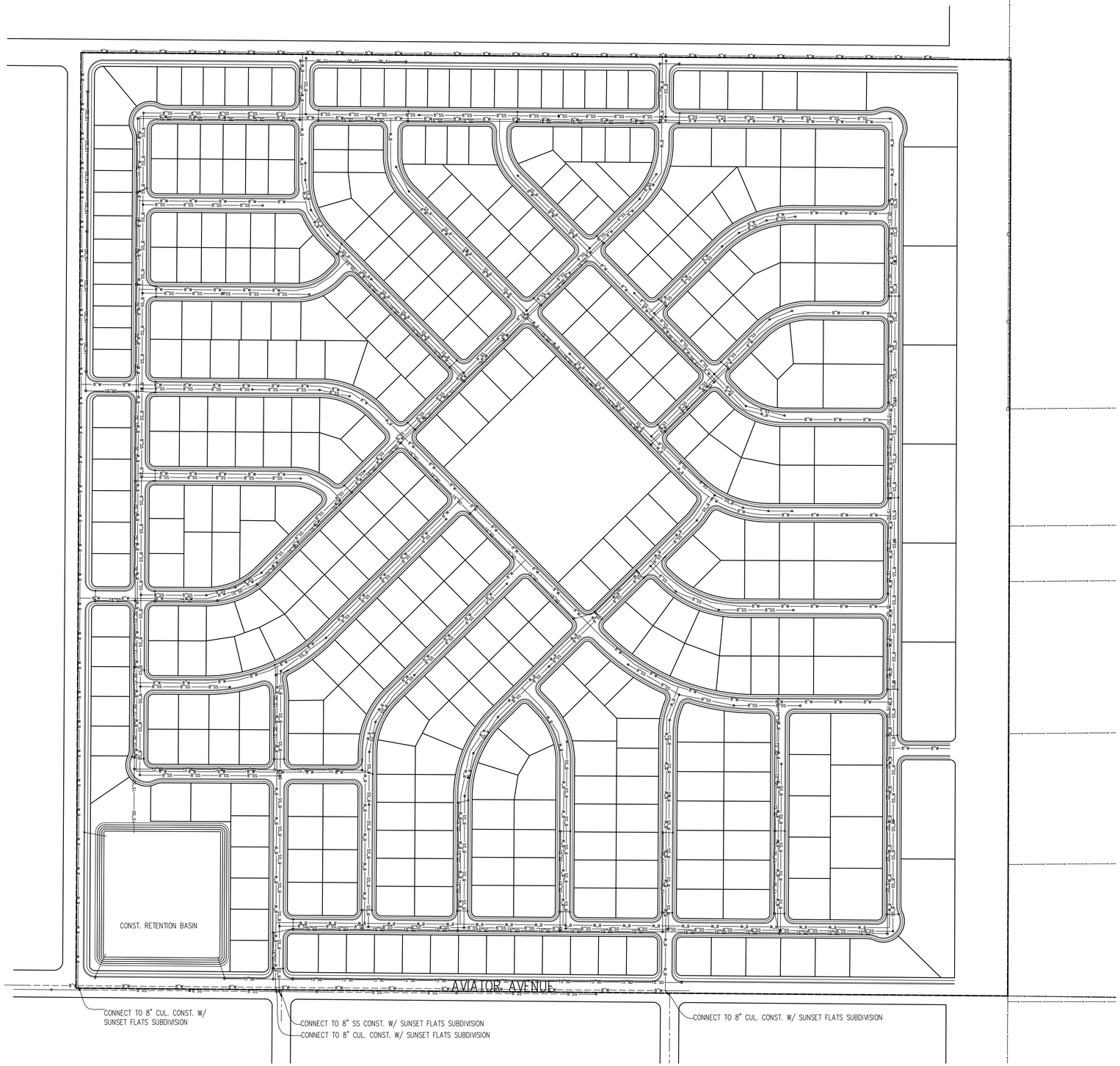
EAGLE QUEST

EAGLE MOUNTAIN UTAH

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

LAND USE, CONCEPT SITE & PHASING PLAN

Scale: 1"=150'
Date: 11/03/21
C1



150 75 0 150 300 450

Scale 1" = 150'

WATER MODELING NOTE:

WITH THE PRELIMINARY PLAN APPLICATION, A WATER MODEL WILL BE PREPARED TO SHOW SUFFICIENT FLOWS AND PRESSURES. THE WATER LINE IS TO BE LOOPED WITH A MINIMUM OF TWO POINTS OF CONNECTION.

UTILITY NOTE:

FIRE HYDRANTS, VALVES, ETC. WILL BE INCLUDED WITH PRELIMINARY PLAN.

STREET LIGHT NOTE:

STREET LIGHTS ARE REQUIRED EVERY 250'-350' ALTERNATING SIDES AND AT EVERY INTERSECTION AND CURVE. STREET LIGHTS WILL BE INCLUDED WITH THE PRELIMINARY PLAN.

REVISIONS

Rev.	Date	Description
1	11/30/21	REVISED PER DRC REVIEW COMMENTS

Developer/Property Owner: KURT OSTLER
Phone: 801-971-2596

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

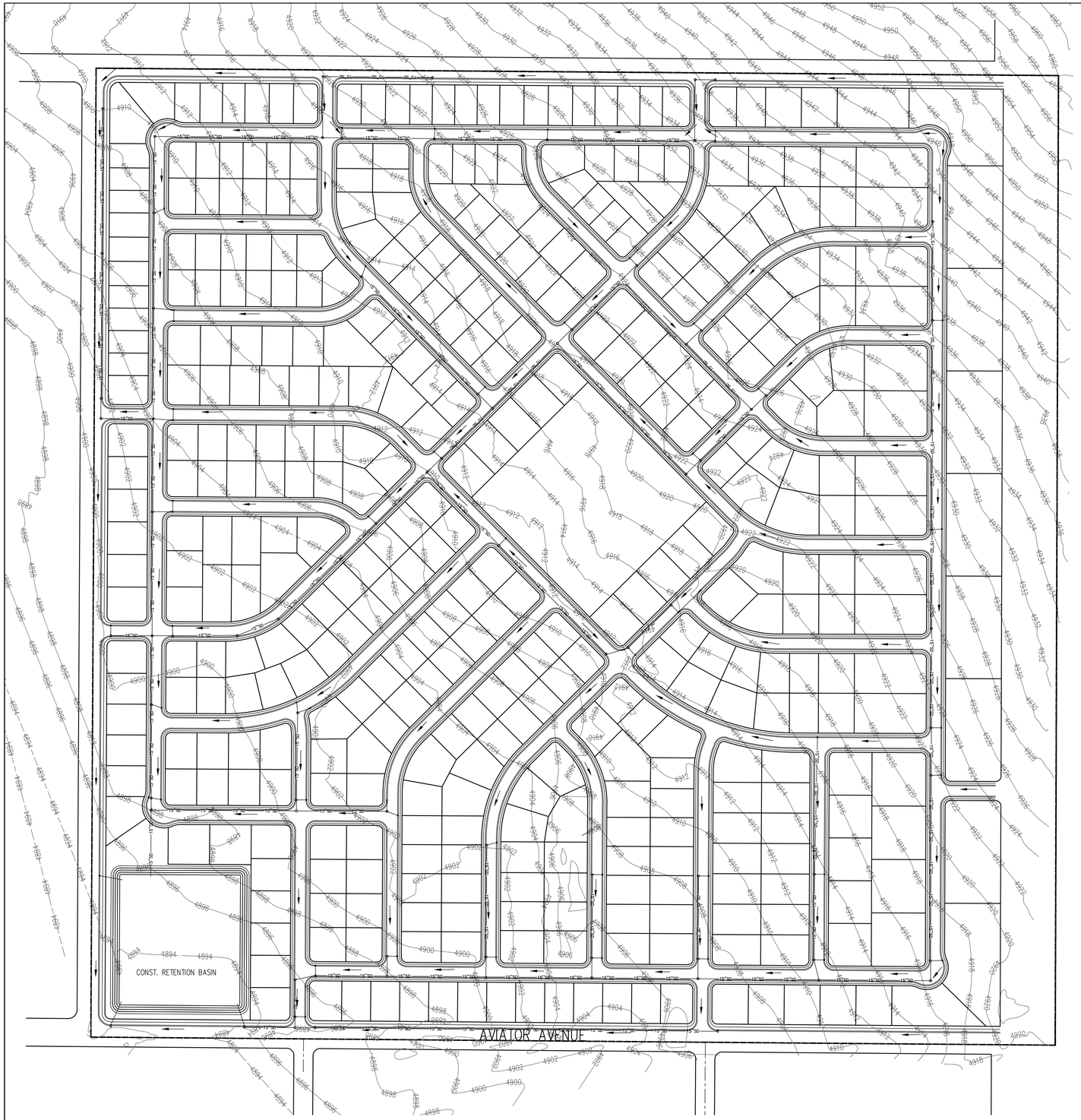
EAGLE QUEST

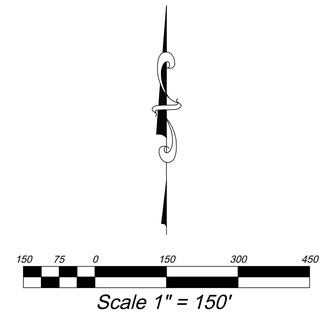
EAGLE MOUNTAIN UTAH

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

CONCEPT UTILITY PLAN

Scale: 1"=150'
Date: 11/03/21
C2





EROSION CONTROL NOTES:

1. EACH PHASE OF CONSTRUCTION WILL ADHERE TO THE FOLLOWING EROSION CONTROL PRACTICES
2. CONSTRUCT A SILT FENCE AROUND PERIMETER OF DOWNSTREAM PORTIONS OF EACH PHASE.
3. INSTALL A CONSTRUCTION ENTRANCE FOR EACH PHASE.
4. CONSTRUCT STORM DRAIN FACILITIES AND INSTALL INLET PROTECTION AFTER INSTALLATION.
5. IMPLEMENT DUST CONTROL MEASURES FOR EACH PHASE.
6. CONTRACTOR IS TO REMOVE INLET PROTECTION FROM CATCH BASINS AND CLEAN-OUT ALL CATCH BASINS BEFORE LEAVING THE SITE.

REVISIONS

Rev.	Date	Description
1	11/30/21	REVISED PER DRC REVIEW COMMENTS

Developer/Property Owner: KURT OSTLER
Phone: 801-971-2596

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

EAGLE QUEST

EAGLE MOUNTAIN UTAH

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

CONCEPT GRADING, DRAINAGE & EROSION PLAN

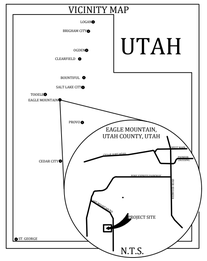
Scale: 1"=150'
Date: 11/03/21

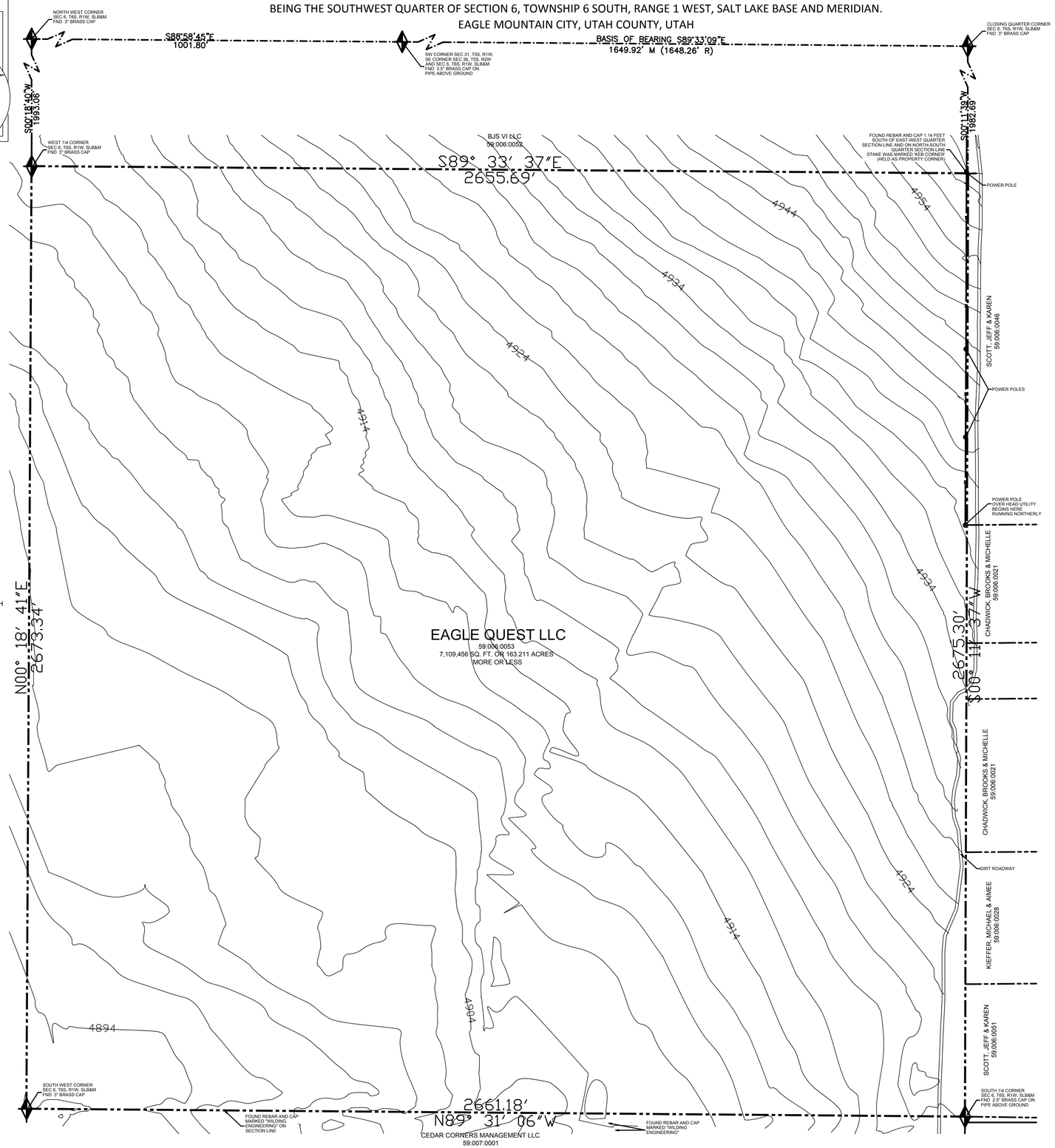
C3

Avenue Project No. 18-162A

BOUNDARY AND TOPOGRAPHY SURVEY

BEING THE SOUTHWEST QUARTER OF SECTION 6, TOWNSHIP 6 SOUTH, RANGE 1 WEST, SALT LAKE BASE AND MERIDIAN.
EAGLE MOUNTAIN CITY, UTAH COUNTY, UTAH





SURVEYOR'S CERTIFICATE

I, MATTHEW STONES, DO HEREBY CERTIFY THAT I AM A PROFESSIONAL LAND SURVEYOR, AND THAT I HOLD LICENSE NUMBER 7176711 AS PRESCRIBED UNDER THE LAWS OF THE STATE OF UTAH, I FURTHER CERTIFY THAT UNDER THE AUTHORITY OF THE OWNERS HAVE MADE A SURVEY OF THE TRACT OF LAND SHOWN ON THIS PLAT AND AS DESCRIBED BELOW, AND HAVE SUBDIVIDED SAID TRACT OF LAND INTO LOTS, BLOCKS, STREETS AND EASEMENTS AND THE SAME HAS BEEN CORRECTLY SURVEYED AND STAKED ON THE GROUND AS SHOWN ON THIS PLAT AND THAT THIS PLAT IS TRUE AND CORRECT.

12-12-2018
DATE

PROFESSIONAL LAND SURVEYOR
LICENSE NO. 7176711
MATT STONES
STATE OF UTAH

MATTHEW C STONES, PLS
NO. 7176711

ORIGINAL BOUNDARY DESCRIPTION

COMMENCING SOUTH 1972.08 FEET FROM THE NORTHWEST CORNER OF SECTION 6, TOWNSHIP 6 SOUTH, RANGE 1 WEST, SALT LAKE BASE AND MERIDIAN, THENCE EAST 2640.00 FEET TO THE NORTH QUARTER CORNER OF SAID SECTION 6, THENCE SOUTH 2632.08 FEET, THENCE WEST 2640.00 FEET TO THE WEST LINE OF SAID SECTION 6, THENCE NORTH 2632.08 FEET TO THE POINT OF BEGINNING.

AS SURVEYED BOUNDARY DESCRIPTION

BEGINNING AT THE WEST QUARTER CORNER OF SECTION 6, TOWNSHIP 6 SOUTH, RANGE 1 WEST, SALT LAKE BASE AND MERIDIAN, THENCE SOUTH 89°33'37" EAST 2655.69 FEET TO THE SOUTH EAST CORNER OF THE PARCEL KNOWN AS 59:006:0052 IN THE UTAH COUNTY RECORDER OFFICE AND MARKED WITH A REBAR AND CAP MARKED "KEB CORNER"; THENCE SOUTH 00°11'37" WEST 2675.30 FEET TO THE SOUTH QUARTER CORNER OF SAID SECTION 6; THENCE NORTH 89°31'06" WEST 2661.18 FEET TO THE SOUTH WEST CORNER OF SAID SECTION 6; THENCE NORTH 00°18'41" EAST WEST 2673.34 FEET TO THE POINT OF BEGINNING.

CONTAINING 7,109,456 SQ. FT. OR 163.211 ACRES MORE OR LESS.

SURVEYOR NARRATIVE

IT IS THE INTENT OF THIS SURVEY TO OBTAIN TOPOGRAPHICAL AND BOUNDARY INFORMATION FOR CONCEPTUAL DESIGN AND PLANNING. THE BASIS OF BEARING IS SOUTH 89°33'09" EAST ALONG THE NORTH SECTION LINE OF SECTION 6, TOWNSHIP 6 SOUTH, RANGE 1 WEST, SALT LAKE BASE AND MERIDIAN, BETWEEN FOUND MONUMENTS REPRESENTING THE SOUTH WEST CORNER OF SECTION 31, TOWNSHIP 5 SOUTH, RANGE 1 WEST, SALT LAKE BASE AND MERIDIAN, AND THE NORTH QUARTER OF CORNER OF SAID SECTION 6. THE BOUNDARY IS DETERMINED BY HOLDING THE FOUND SECTION CORNERS OF SAID SECTION 6. THE NORTH EAST CORNER WAS DETERMINED TO BY A FOUND REBAR AND CAP WITH A LATHE THAT MARKED "KEB CORNER". THE REBAR COINCIDES WITH THE CALL FOR THE CORNER ACCORDING TO SURVEYS ON FILE IN THE UTAH COUNTY SURVEYOR OFFICE.

THE CONTOUR INTERVAL IS 2'

DOCUMENTS USED

SURVEYS AS RECORDED IN THE UTAH COUNTY SURVEYOR OFFICE:
97-207; 98-247; 00-114; 01-427; 02-260; 04-295; 07-420; 07-422; 07-427; 07-433; 07-434; 15-195; 16-128
DEEDS AS RECORDED IN THE UTAH COUNTY RECORDER OFFICE:
ENTRY NUMBER: 1352-2014 A PLAT
ENTRY NUMBER: 131957-2008 RESOLUTION
ENTRY NUMBER: 56210-2004 AFFIDAVIT
ENTRY NUMBER: 101064-2000 AFFIDAVIT OF CORRECTION
ENTRY NUMBER: 101062-2000 WD
ENTRY NUMBER: 96181-2000 WD
ENTRY NUMBER: 70434-2000 SUBORDINATION AGREEMENT
ENTRY NUMBER: 64356-2000 DOR
ENTRY NUMBER: 51699-2000 WD
ENTRY NUMBER: 51698-2000 WD
ENTRY NUMBER: 41630-2017 WD
ENTRY NUMBER: 14631-2016 DOR
ENTRY NUMBER: 141428-2002 WD
ENTRY NUMBER: 1578-2001 WD
ENTRY NUMBER: 66446-2009 SWD
ENTRY NUMBER: 81031-2008 WD
ENTRY NUMBER: 131995-2006 WD
ENTRY NUMBER: 54745-2006 WD
ENTRY NUMBER: 19071-2005 PATENT NO. 19679

LEGEND:
- BOUNDARY
- MAJOR CONTOUR
- OVERHEAD POWER
- ROAD WAYS
- OTHER PROPERTIES
- MONUMENT LINE
- FOUND MONUMENT

N

150 0 150 300
scale 1" = 150' feet

REVISIONS:

EAGLE QUEST, LLC
6616 WEST 10760 NORTH
HIGHLAND, UTAH 84003

avenue CONSULTANTS
Avenue Consultants, Inc
6575 South Redwood Road, Suite 101
Taylorsville, UT 84123
801-207-7660
www.avenueconsultants.com

BOUNDARY AND TOPOGRAPHY

BEING THE SOUTH WEST QUARTER OF SECTION 6, TOWNSHIP 6 SOUTH, RANGE 1 WEST, SALT LAKE BASE AND MERIDIAN

Drawn by	MCS
Detailer	CJC
Checker	MCS

SUBSET NO.

SHEET NO.
1 of 1

P:_2018\18-162 - Eagle Quest LLC - East Eagle Mountain\000_CAD\003_Survey\east Parcel\east Parcel.dwg

12/6/2018 2:55 PM

PARKS & OPEN SPACE WORKSHEET

Directions: Submit a completed worksheet with your preliminary plat or site plan application. Proposed amenities and park designs are subject to approval by the Planning Commission and City Council.

Required Improved Open Space				
Residential Lots / Units		**Required Open Space (Square Feet)[a]**		**Required Open Space (Acres)[b]**
___424varying size_____	x 1,000 =	**___397,100_____ sq ft**	/ 43,560 =	**_____9.11__ Acres**

Park Fee-In-Lieu (if applicable)		
Required Open Space (Square Feet)[a]		**Total Fee-In-Lieu**
_____ sq ft	x $5.75 =	**$_____**

Required Amenity Points		
Required Open Space (Acres)[b]		**Required Amenity Points**
__9.11___ Acres	x 100 =	**__911____ Points**

Park & Improved Open Space Elements / Amenities			
Park Feature / Improvement	**Points Available**	**Proposed Quantities**	**Proposed Points**
Bench / Picnic Table (w/ shade structure or trees)	2	26	52
Bicycle Rack (4+ bikes)	2	2	4
Trees (5) (A majority must be shade trees)	2	191	77
Shade Structure	4		
Drinking Fountain	5		
Asphalt or Concrete Trails – 8 ft wide, excluding sidewalks along streets (per 100 linear feet)	6	1,257+798+284+365	162
Parking* (5 stalls)	6		
Swings (4+ swings)	7		
Concrete Basketball Court (1/2)	20		
Pavilion w/ tables, garbage receptacles, barbeques (per 100 square feet)	4	600 (4)	96
Playground Equipment* per $1,000	2	$90,000 (2)	180
Splash Pad* per $1,000	2		
Tennis Court (6,600 sq ft or 55'x120') or 2 Pickelball Courts	100	2	200
Sports Court (6,600 sq ft or 55'x120') Full Size Basketball	100	1	100
Restroom (600+ sq ft)	100		
Restroom (1200+ sq ft)	200		
Public Art	Varies		
Other: Trash Recepticles 2 pts	Varies	10	20
Other: Exercise Stations 5 pts	Varies	4	20
TOTAL			911

** Public art should reflect the neighborhood or community identity or culture. Creativity is encouraged in playground equipment and splash pads, and may be awarded more points than standard equipment. Costs for playground equipment and splash pads reflect equipment costs only. Parking must be adjacent to improved open space, and must be in addition to any required parking for the development.*

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

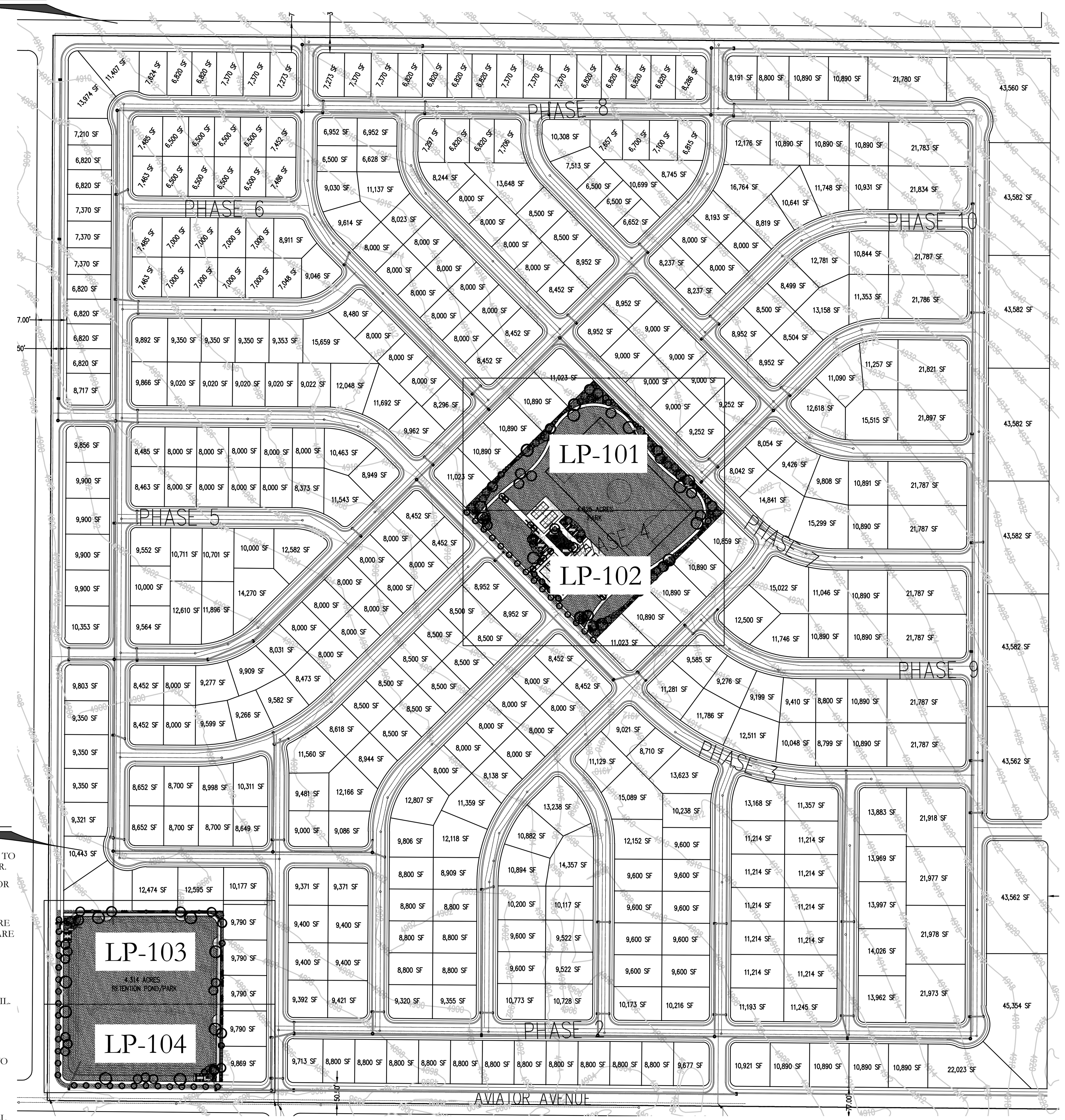
1. LANDSCAPE CONTRACTOR SHALL HAVE ALL UTILITIES BLUE STAKED PRIOR TO DIGGING. ANY DAMAGE TO UTILITIES SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE WITH NO ADDITIONAL COST TO THE OWNER.
2. DURING THE BIDDING AND INSTALLATION PROCESS, THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR VERIFYING QUANTITIES OF ALL 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



SHEET INDEX

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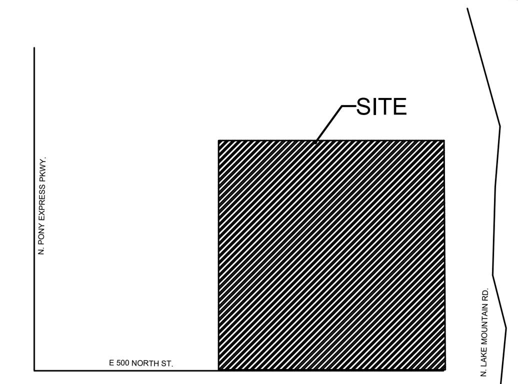
VICINITY MAP



PLANT LEGEND

DECIDUOUS TREES	CODE	QTY	BOTANICAL / COMMON NAME	CONT	CAL	SIZE
Ag'a	Ag'a	9	Amelanchier x grandiflora `Autumn Brilliance` / `Autumn Brilliance` Serviceberry	B & B	Multi-trunked	
Cc'i	Cc'i	15	Crataegus crus-gali inermis / Thornless Cockspur Hawthorn	B & B	2"Cal	
Gb'p	Gb'p	15	Ginkgo biloba `Princeton Sentry` / Princeton Sentry Gingko	B & B	2"Cal	
Ma'm	Ma'm	15	Maackia amurensis `JFS-Schiectell` TM / MaacNificent Maackia	B & B	2"Cal	
Qr'a	Qr'a	43	Quercus robur x alba `JFS-KW1QX` TM / Street Spire Oak	B & B	2"Cal	
Ux'f	Ux'f	18	Ulmus x `Frontier` / Frontier Elm	B & B	2"Cal	
Zs'g	Zs'g	23	Zelkova serrata `Green Vase` / Green Vase Zelkova	B & B	2"Cal	
Zs'm	Zs'm	4	Zelkova serrata `Musashino` / Musashino Zelkova	B & B	2"Cal	

EVERGREEN TREES	CODE	QTY	BOTANICAL / COMMON NAME	CONT	CAL	SIZE
Jc's	Jc's	30	Juniperus chinensis `Spartan` / Spartan Juniper	B & B		5`-6`
PA	PA	19	Picea abies / Norway Spruce	6` MIN.		

DECIDUOUS SHRUBS	CODE	QTY	BOTANICAL / COMMON NAME	CONT
Cs'm	Cs'm	31	Cytisus scoparius `Moonlight` / Moonlight Broom	5 gal
Ea'c	Ea'c	35	Euonymus alatus `Compactus` / Compact Burning Bush	5 gal
P'gf	P'gf	20	Potentilla fruticosa `Goldfinger` / Goldfinger Potentilla	5 gal
Px'c	Px'c	45	Prunus x cistena / Purple Leaf Sand Cherry	5 gal

EVERGREEN SHRUBS	CODE	QTY	BOTANICAL / COMMON NAME	CONT
Cd'c	Cd'c	38	Cotoneaster dammeri `Coral Beauty` / Coral Beauty Cotoneaster	5 gal

GRASSES	CODE	QTY	BOTANICAL / COMMON NAME	CONT
Ca'k	Ca'k	210	Calamagrostis x acutiflora `Karl Foerster` / Feather Reed Grass	1 gal
	M'ML	30	Miscanthus sinensis `Morning Light` / Morning Light Maiden Grass	2 gal

SITE MATERIALS LEGEND

SYMBOL	1 LANDSCAPE DESCRIPTION	QTY
1-01	SODDED LAWN AREA LAWN AREAS SHALL BE SOD. NEW TURF AREAS TO BE SODDED WITH 18% "BLUESTAR KENTUCKY BLUEGRASS, 19% "MARQUIS" KENTUCKY BLUEGRASS, 17% "NEWPORT" KENTUCKY BLUEGRASS, 17% "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.	306,943 sf
1-03	1.5" OQUIRRH GRAVEL OR APPROVED EQUAL. PLANTING AREAS TO RECEIVE MIN. 6" 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.	37,330 sf
1-04	6" CONCRETE MOW CURB	450 lf

SYMBOL	1 LANDSCAPE DESCRIPTION	QTY
1-10	PLAYGROUND SURFACE. SOF`FALL ENGINEERED WOOD.	82.95 cy

ISSUE DATE: 12/3/2021

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PLAN INFORMATION

811 BLUE STAKES OF UTAH
UTILITY NOTIFICATION CENTER, INC
1-800-662-4111
www.bluestakes.org

N

0' 100' 200' 400' 800'
GRAPHIC SCALE: 1" = 200'

PROJECT INFORMATION

EAGLE QUEST
EAGLE MOUNTAIN, UTAH

DEVELOPER / PROPERTY OWNER / CLIENT

KURT OSTLER
801-971-2596
KURTOSTLER@YAHOO.COM

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
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LICENSE STAMP

LICENSED LANDSCAPE ARCHITECT
JEREMY AINSWORTH
8128121-5301
12/03/2021
ELECTRONIC SEAL
STATE OF UTAH

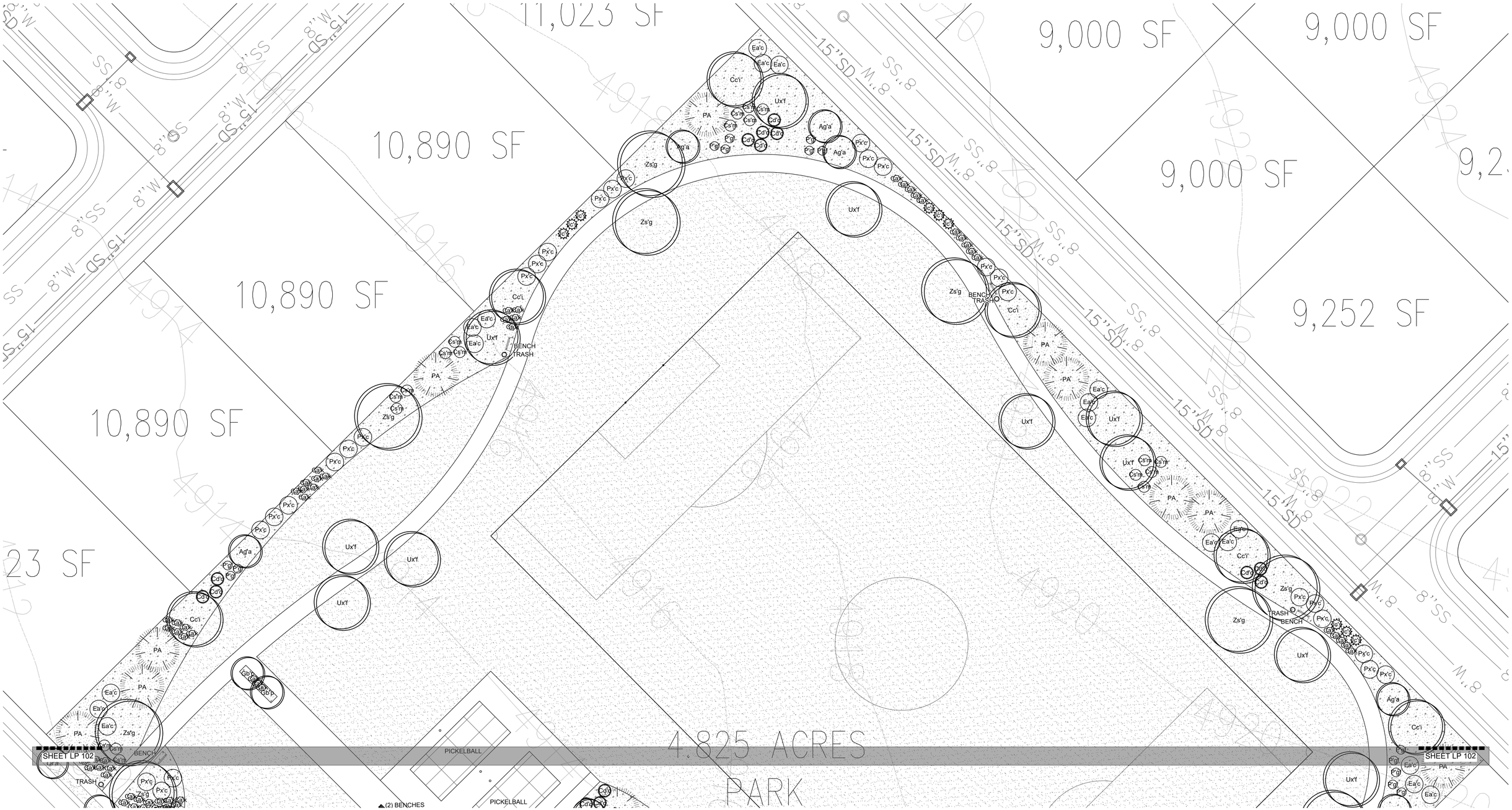
DRAWING INFO

PM: JTA
DRAWN: ACP
CHECKED: JMA
PLOT DATE: 12/3/2021

LANDSCAPE PLAN COVER

PRELIMINARY PLANS NOT FOR CONSTRUCTION

LP-100



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0' 10' 20' 40' 80'
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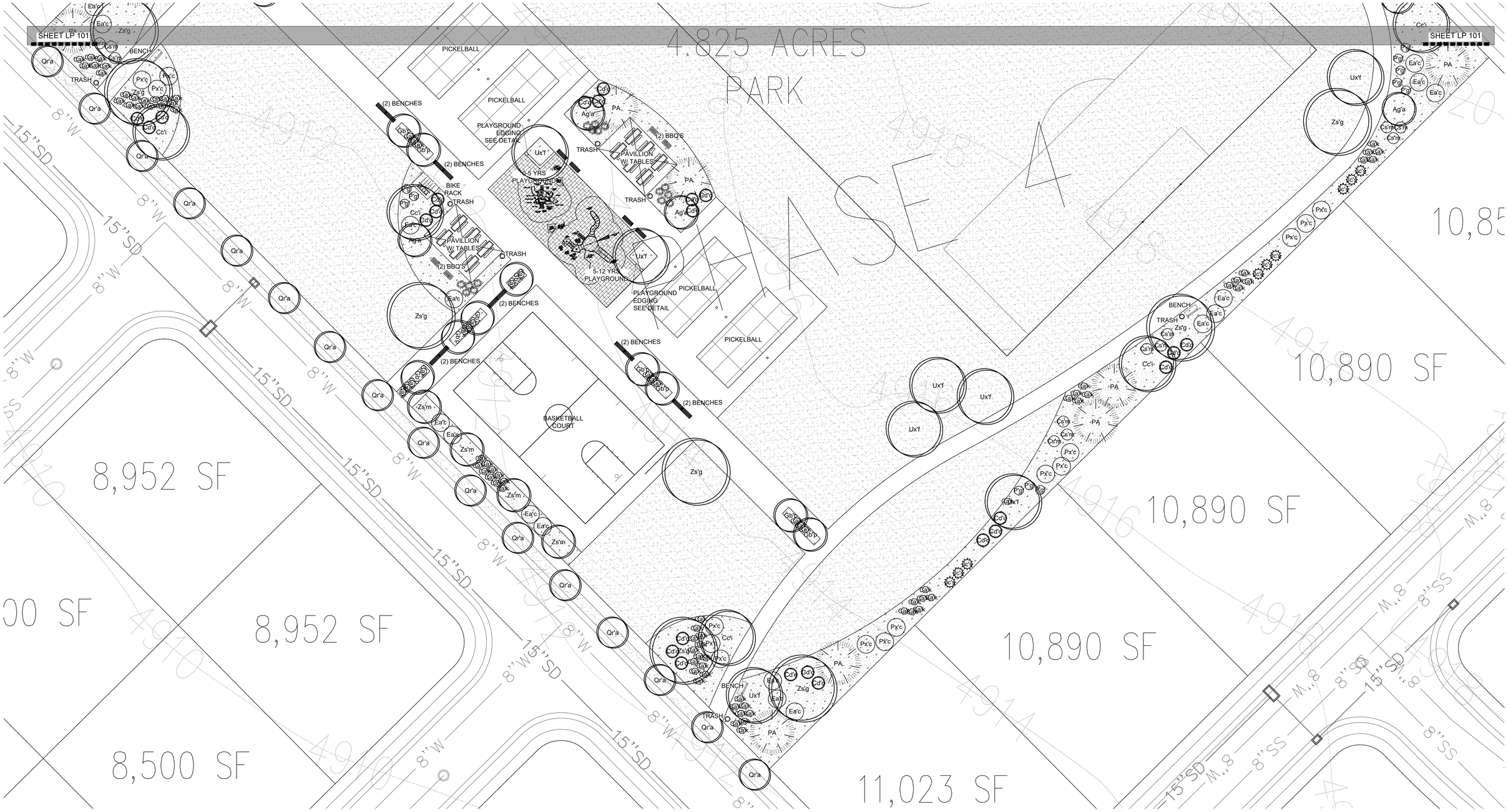
LANDSCAPE PLAN

PRELIMINARY PLANS NOT FOR CONSTRUCTION

LP-101



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8128127-5301
12/03/2021
ELECTRONIC SEAL
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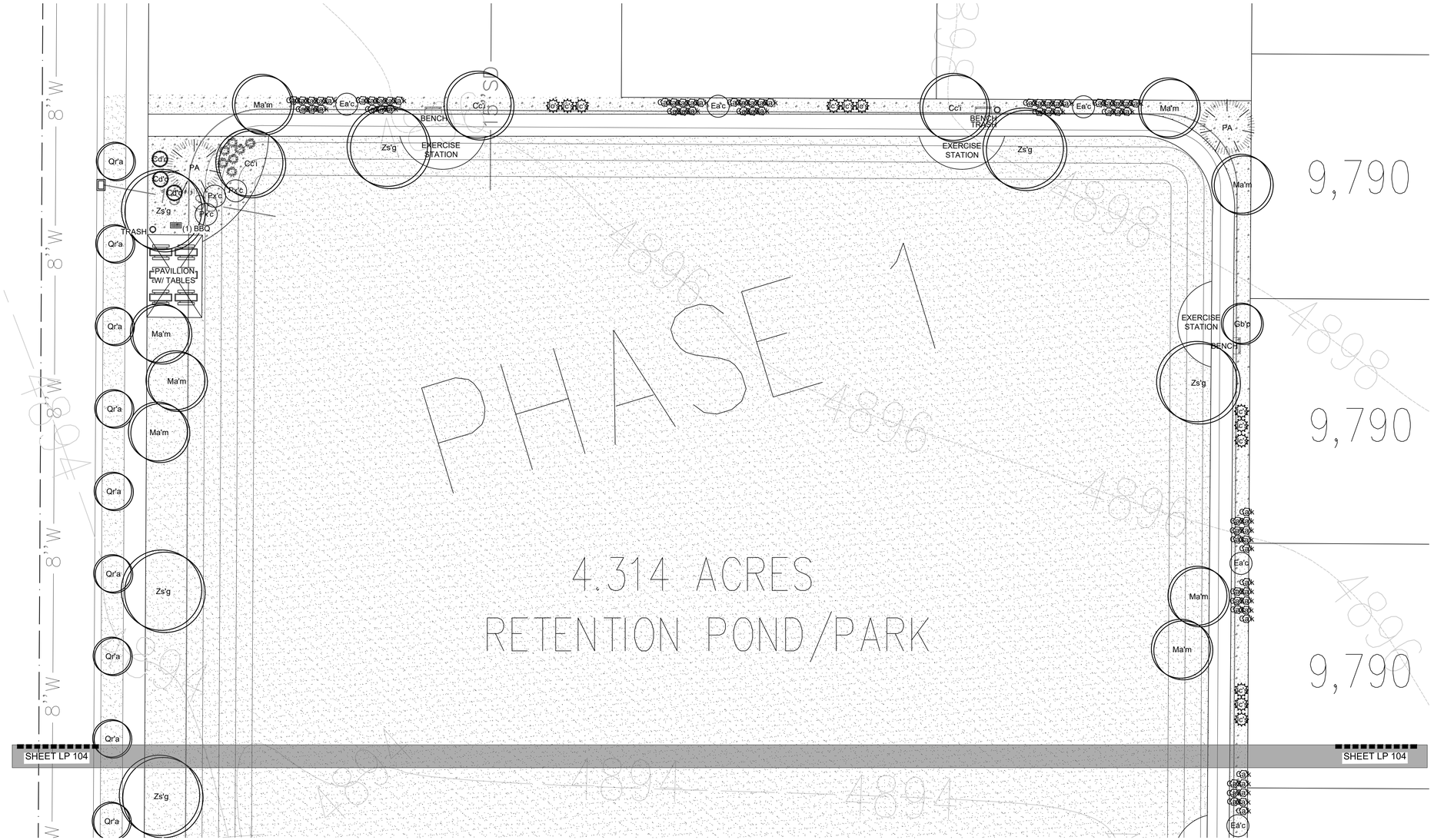
LANDSCAPE PLAN

PRELIMINARY PLANS NOT FOR CONSTRUCTION

LP-102



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LICENSED LANDSCAPE ARCHITECT
EDWIN AINSWORTH
812812 - 5301
12/03/2021
ELECTRONIC SEAL
STATE OF UTAH

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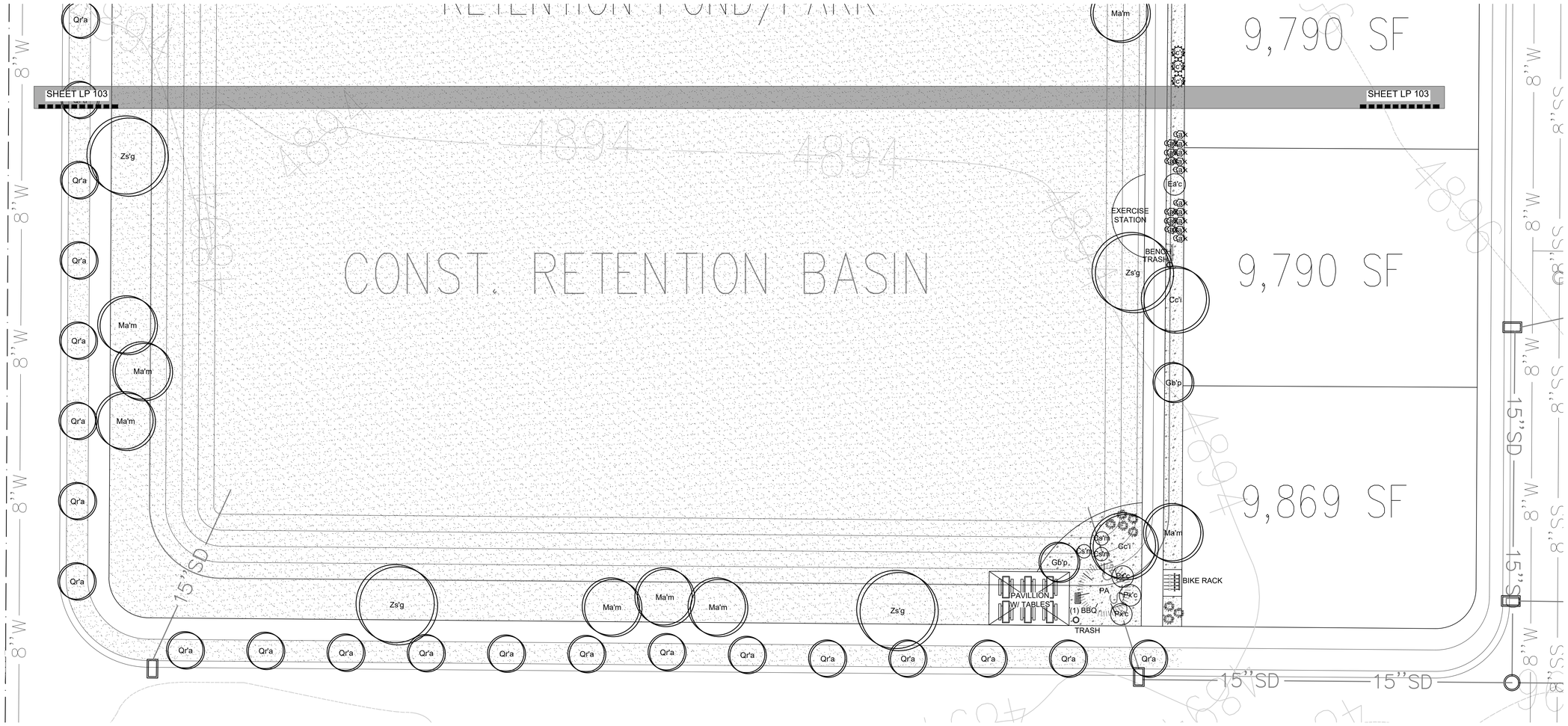
LANDSCAPE PLAN

PRELIMINARY PLANS NOT FOR CONSTRUCTION

LP-103



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LICENSE STAMP

LICENSED LANDSCAPE ARCHITECT
JEREMY ANDWORTH
812817-5301
12/03/2021
ELECTRONIC SEAL
STATE OF UTAH

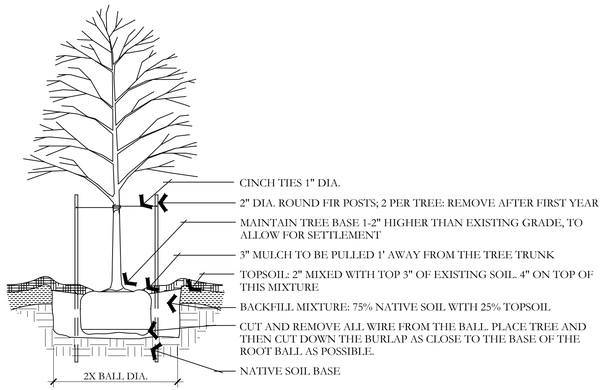
DRAWING INFO

PM:	JTA
DRAWN:	ACP
CHECKED:	JMA
PLOT DATE:	12/3/2021

LANDSCAPE PLAN

PRELIMINARY PLANS NOT FOR CONSTRUCTION

LP-104



A DECIDUOUS TREE PLANTING

NOT TO SCALE

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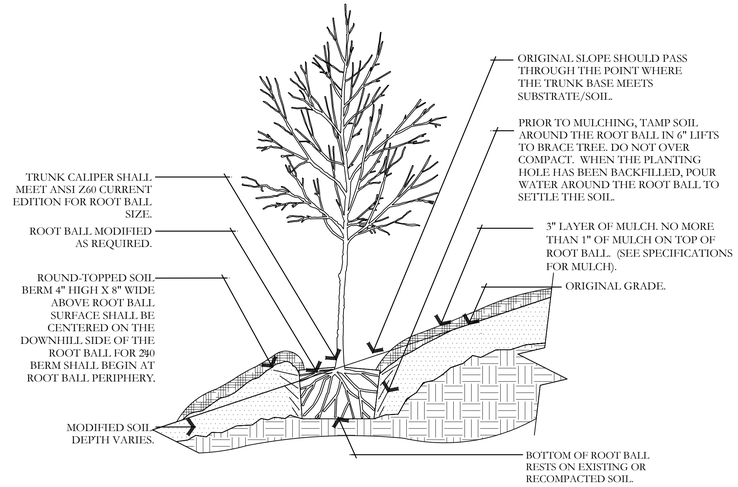
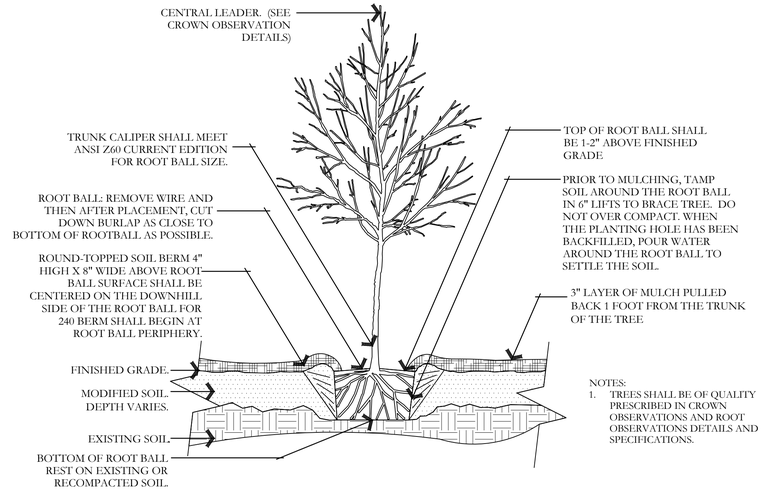


B TREE ON SLOPE 5% (20:1) TO 50% (2:1)

NOT TO SCALE

PKJ DESIGN GROUP

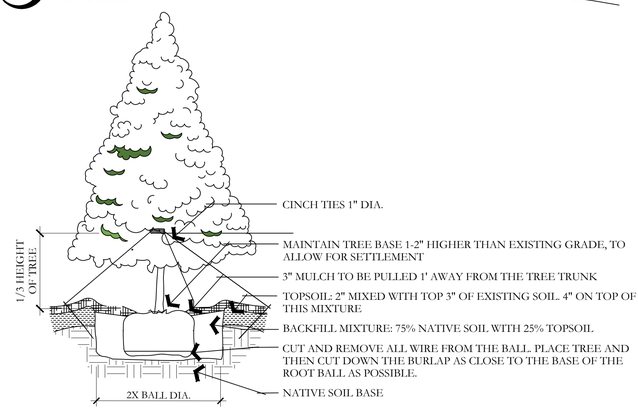


NOTES:
1. TREES SHALL BE OF QUALITY PRESCRIBED IN CROWN OBSERVATIONS AND ROOT OBSERVATIONS DETAILS AND SPECIFICATIONS.

C TREE W/ BERM (EXISTING SOIL MODIFIED)

NOT TO SCALE

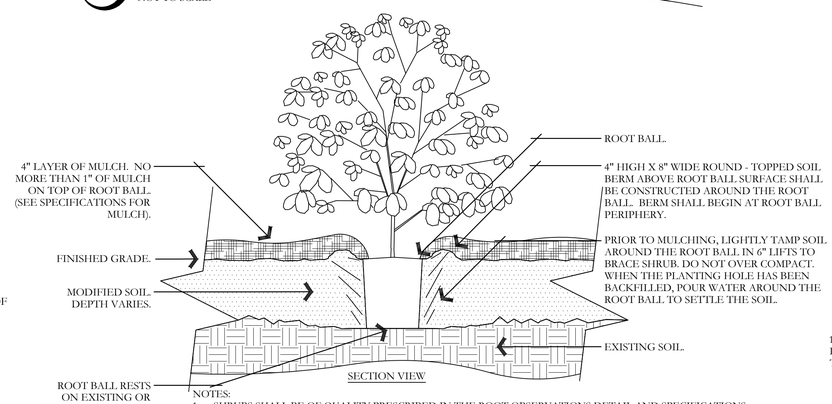
PKJ DESIGN GROUP



D EVERGREEN TREE PLANTING

NOT TO SCALE

PKJ DESIGN GROUP

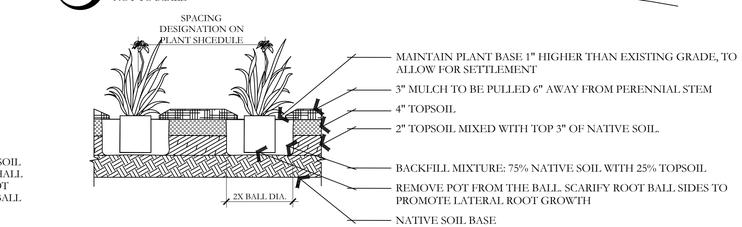


NOTES:
1. SHRUBS SHALL BE OF QUALITY PRESCRIBED IN THE ROOT OBSERVATIONS DETAIL AND SPECIFICATIONS.
2. SEE SPECIFICATIONS FOR FURTHER REQUIREMENTS RELATED TO THIS DETAIL.

E SHRUB - MODIFIED SOIL

NOT TO SCALE

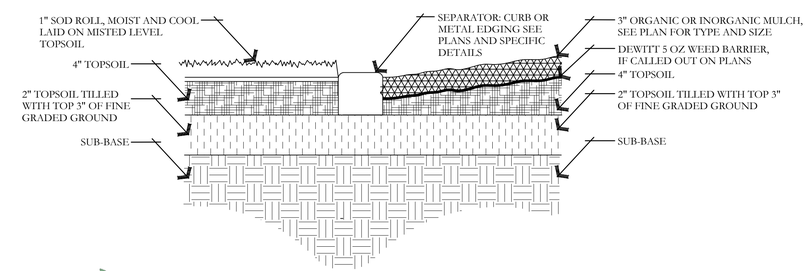
PKJ DESIGN GROUP



F PERENNIAL PLANTING

NOT TO SCALE

PKJ DESIGN GROUP



I SOD LAYING/MULCH DETAIL

NOT TO SCALE

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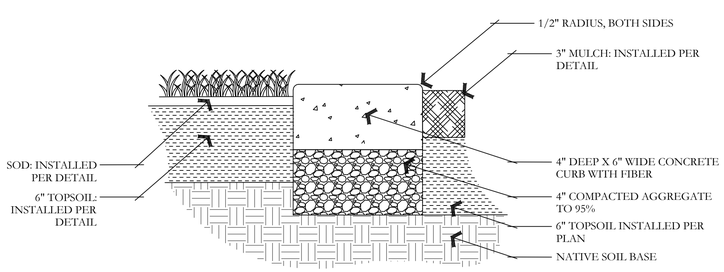

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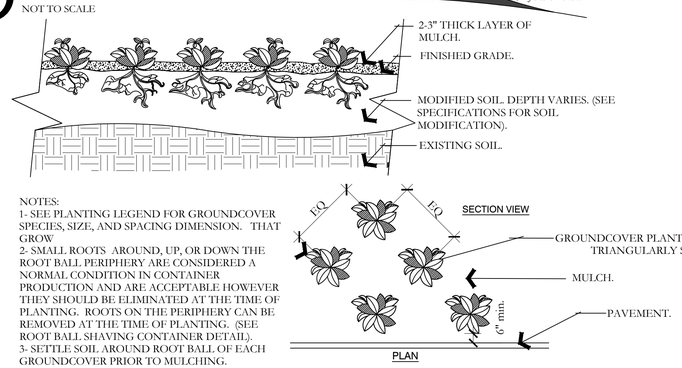
NOT TO SCALE

PKJ DESIGN GROUP

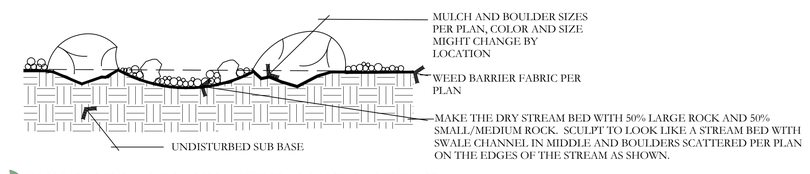


NOTES:
1- SEE PLANTING LEGEND FOR GROUNDCOVER SPECIES, SIZE, AND SPACING DIMENSION. THAT GROW
2- SMALL ROOTS AROUND, UP, OR DOWN THE ROOT BALL PERIPHERY ARE CONSIDERED A NORMAL CONDITION IN CONTAINER PRODUCTION AND ARE ACCEPTABLE HOWEVER THEY SHOULD BE ELIMINATED AT THE TIME OF PLANTING. ROOTS ON THE 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



J BOULDER AND DRY STREAM BED DETAIL

NOT TO SCALE

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ISSUE DATE	PROJECT NUMBER	PLAN INFORMATION	PROJECT INFORMATION	DEVELOPER / PROPERTY OWNER / CLIENT	LANDSCAPE ARCHITECT / PLANNER	LICENSE STAMP	DRAWING INFO
12/3/2021	UT21139						

NO.	REVISION	DATE
1	XXXX	XX-XX-XX
2		
3		
4		
5		
6		
7		

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EAGLE MOUNTAIN, UTAH

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LICENSED LANDSCAPE ARCHITECT JEREMY AINSWORTH 8128121-5301 12/03/2021 LICENSING SEAL STATE OF UTAH

DRAWING INFO	
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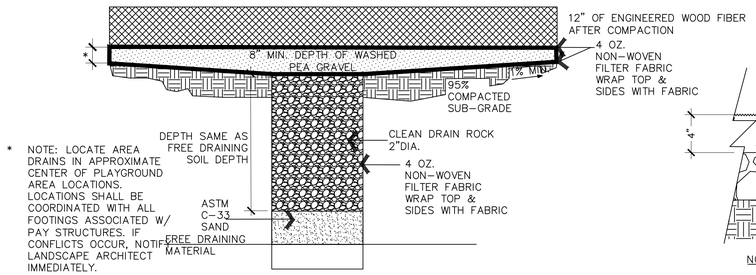
PLOT DATE:	12/3/2021

LANDSCAPE DETAILS

PRELIMINARY PLANS NOT FOR CONSTRUCTION

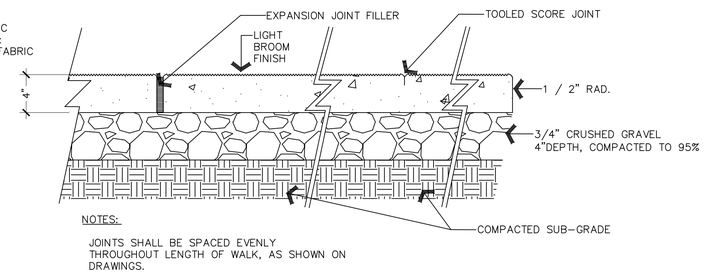
LP-501



O AREA DRAIN DETAIL

NOT TO SCALE

PKJ DESIGN GROUP



P CONCRETE FLATWORK DETAIL

NOT TO SCALE

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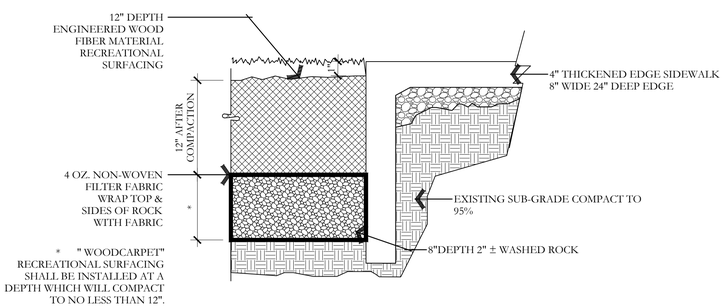
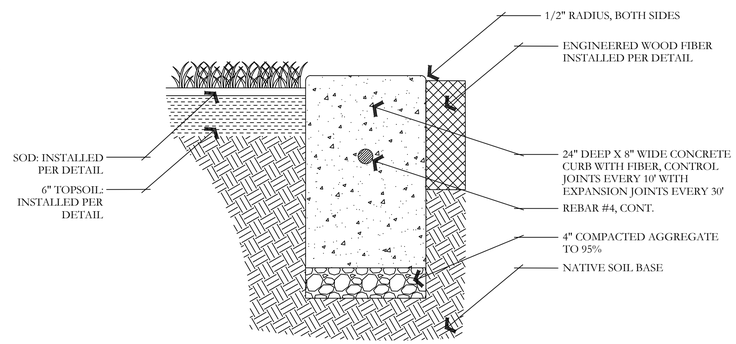


N ENGINEERED WOOD FIBER SAFETY SURFACING

NOT TO SCALE

PKJ DESIGN GROUP



N PLAYGROUND EDGING

NOT TO SCALE

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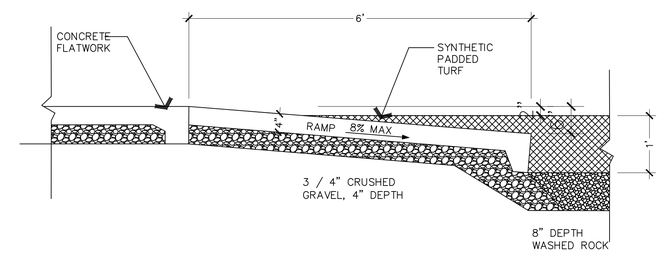

M ADA RAMP

NOT TO SCALE

PKJ DESIGN GROUP

ISSUE DATE: 12/3/2021

PROJECT NUMBER: UT21139

PLAN INFORMATION

NO.	REVISION	DATE
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LANDSCAPE DETAILS

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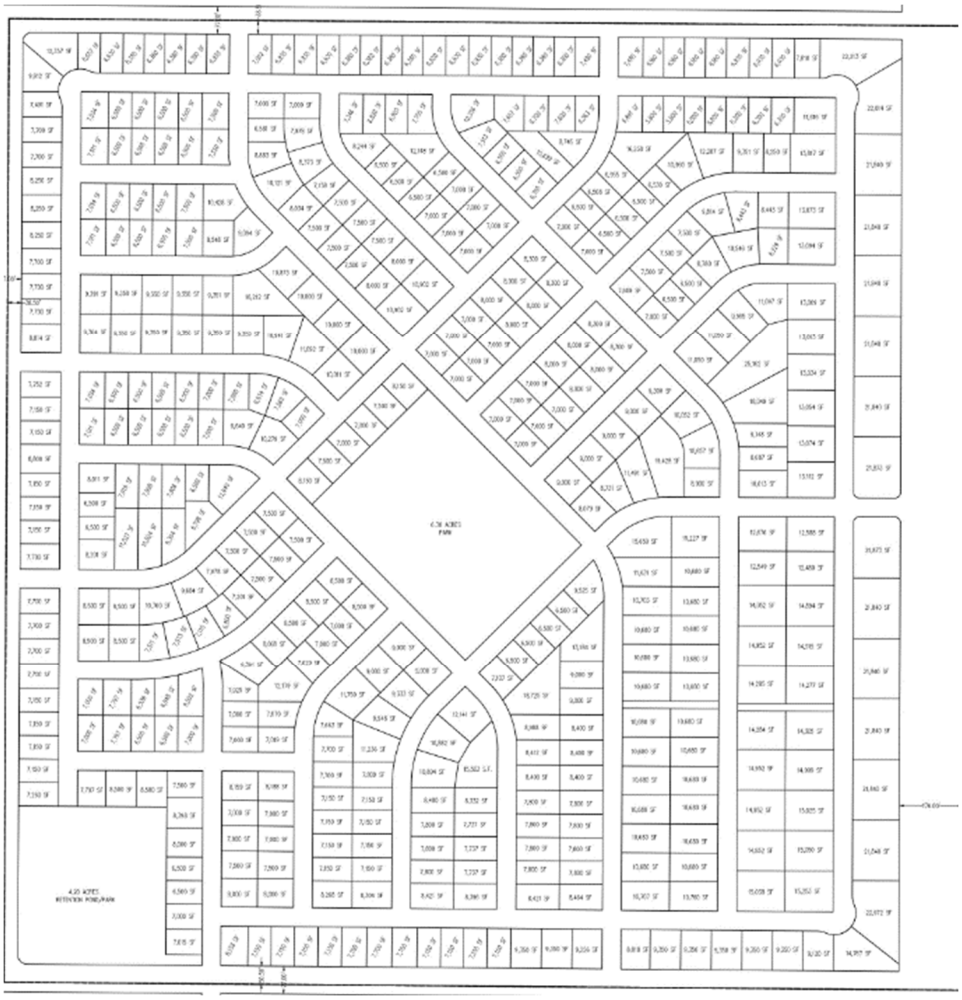
LP-502

HALES ENGINEERING
innovative transportation solutions

Eagle Quest Residential

Traffic Impact Study



Eagle Mountain, Utah

August 13, 2021

UT21-1962

LICENSED PROFESSIONAL ENGINEER
NO. 12335093
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08/13/2021
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EXECUTIVE SUMMARY

This study addresses the traffic impacts associated with the proposed Eagle Quest Residential development located in Eagle Mountain, Utah. The Eagle Quest Residential development is located northwest of the future Aviator Avenue / Airport Road intersection, east of Pony Express Parkway.

The purpose of this traffic impact study is to analyze traffic operations at key intersections for existing (2021), future (2026), and future (2040) conditions with and without the proposed project and to recommend mitigation measures as needed. Recommended changes to storage lengths are shown in Table ES-1. The peak hour level of service (LOS) results are shown in Table ES-2.

Table ES-1: Recommended Storage Lengths

	Intersection	Recommended Storage Lengths (feet)															
		Northbound				Southbound				Eastbound				Westbound			
		LT		RT		LT		RT		LT		RT		LT		RT	
		E	P	E	P	E	P	E	P	E	P	E	P	E	P	E	P
1	Mid Valley Road / Pony Express Parkway	-	-	-	100	-	-	-	-	-	-	-	-	-	-	-	100
3	Aviator Avenue / Pony Express Parkway	-	-	-	100	-	-	-	-	-	-	-	-	-	-	-	100
4	Bobby Wren Boulevard / Pony Express Parkway	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100
9	North Collector / Airport Road	-	-	-	-	-	-	-	-	-	100	-	-	-	-	-	-
13	East Access / Airport Road	-	-	-	-	-	-	-	-	-	100	-	-	-	-	-	-
16	Aviator Avenue / Airport Road	-	-	-	-	-	-	-	-	-	125	-	-	-	-	-	-

1. Storage lengths are based on 2040 95th percentile queue lengths and do not include required deceleration / taper distances
2. E = Existing storage length (approximate), if applicable; P = proposed storage length for new turn lanes or changes to existing turn lanes, if applicable

Source: Hales Engineering, August 2021

Table ES-2: Peak Hour Level of Service Results

	Intersection	Level of Service						
		Morning Peak Hour						
		Existing (2021)		Future (2026)			Future (2040)	
		BG	PP	BG	BG MIT	PP	BG	PP
1	Mid Valley Road / Pony Express Parkway	A	A	A	A	A	B	B
2	Aviator Avenue / Eagle Mountain Boulevard	B	B	B	B	B	A	A
3	Aviator Avenue / Pony Express Parkway	A	A	A	A	B	B	B
4	Bobby Wren Boulevard / Pony Express Parkway	B	B	B	B	A	B	A
5	Eagle Mountain Boulevard / Pony Express Parkway	A	A	B	A	B	A	A
6	West Collector / North Collector	-	-	-	-	-	-	a
7	North Access 1 / North Collector	-	-	-	-	-	-	a
8	North Access 2 / North Collector	-	-	-	-	-	-	a
9	North Collector / Airport Road	-	-	-	-	-	-	d
10	West Access 1 / West Collector	-	-	-	-	a	-	a
11	West Access 2 / West Collector	-	-	-	-	a	-	a
12	West Collector / Aviator Avenue	-	-	-	-	a	-	a
13	East Access / Airport Road	-	-	-	-	-	-	d
14	South Access 1 / Aviator Avenue	-	a	-	-	a	-	a
15	South Access 2 / Aviator Avenue	-	a	-	-	a	-	a
16	Aviator Avenue / Airport Road	-	-	-	-	-	-	d

	Intersection	Level of Service						
		Evening Peak Hour						
		Existing (2021)		Future (2026)			Future (2040)	
		BG	PP	BG	BG MIT	PP	BG	PP
1	Mid Valley Road / Pony Express Parkway	A	A	A	A	A	B	A
2	Aviator Avenue / Eagle Mountain Boulevard	B	B	B	B	B	B	B
3	Aviator Avenue / Pony Express Parkway	A	A	A	A	B	A	B
4	Bobby Wren Boulevard / Pony Express Parkway	B	B	B	B	A	B	B
5	Eagle Mountain Boulevard / Pony Express Parkway	D	D	F	C	C	B	B
6	West Collector / North Collector	-	-	-	-	-	-	a
7	North Access 1 / North Collector	-	-	-	-	-	-	a
8	North Access 2 / North Collector	-	-	-	-	-	-	a
9	North Collector / Airport Road	-	-	-	-	-	-	f
10	West Access 1 / West Collector	-	-	-	-	a	-	a
11	West Access 2 / West Collector	-	-	-	-	a	-	a
12	West Collector / Aviator Avenue	-	-	-	-	a	-	a
13	East Access / Airport Road	-	-	-	-	-	-	e
14	South Access 1 / Aviator Avenue	-	a	-	-	a	-	a
15	South Access 2 / Aviator Avenue	-	a	-	-	a	-	a
16	Aviator Avenue / Airport Road	-	-	-	-	-	-	f

1. Intersection LOS values represent the overall intersection average for roundabout, signalized, and all-way stop-controlled (AWSC) intersections (uppercase letter) and the worst movement for all other unsignalized intersections (lowercase letter)
2. BG = Background (without project traffic), PP = Plus Project (with project traffic), MIT = Mitigated Scenario

Source: Hales Engineering, August 2021

SUMMARY OF KEY FINDINGS & RECOMMENDATIONS

Project Conditions

- The development will consist of 486 residential single-family units
- The project is anticipated to generate approximately 4,454 weekday daily trips, including 351 trips in the morning peak hour, and 464 trips in the evening peak hour

2021	Background	Plus Project
Assumptions	• Construction finished along Pony Express Parkway with new signal at Bobby Wren Blvd • Ault Farms and Sunset Flats developments added to background volumes	• Aviator Avenue constructed east of Pony Express Parkway with some traffic from the Sunset Flats development diverted north • 1/3 of development completed
Findings	• Acceptable LOS • Moderate queuing of 600 feet at Eagle Mountain Blvd / Pony Express Parkway on the westbound approach	• Acceptable LOS • Moderate queuing of 750 feet at Eagle Mountain Blvd / Pony Express Parkway on the westbound approach
2026	**Background**	**Plus Project**
Assumptions	• None	• Aviator Avenue and West Collector constructed along project connecting to Pony Express Parkway. Some traffic from Sunset Flats development diverted north • Full development completed
Findings	• Poor LOS at Eagle Mountain Blvd / Pony Express Parkway roundabout • Significant queuing of over 2,000 feet at Eagle Mountain Blvd / Pony Express Parkway on multiple approaches	• Acceptable LOS
Mitigations	• **Eagle Mountain Blvd / Pony Express Parkway**: Convert to 2-lane roundabout	• None
2040	**Background**	**Plus Project**
Assumptions	• Eagle Mountain Blvd widened to 5 lanes • Airport Road constructed with 5 lanes	• North Collector constructed from Airport Road to Eagle Mountain Boulevard

Findings	• Acceptable LOS	• Poor LOS at:
		  ○ North Collector / Airport Road
		  ○ East Access / Airport Road
		  ○ Aviator Avenue / Airport Road

Mitigations	• None	• A signal could be considered along Airport Road to maintain breaks in traffic

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I. INTRODUCTION

A. Purpose

This study addresses the traffic impacts associated with the proposed Eagle Quest Residential development located in Eagle Mountain, Utah. The proposed project is located northwest of the future Aviator Avenue / Airport Road intersection, east of Pony Express Parkway. Figure 1 shows a vicinity map of the proposed development.

The purpose of this traffic impact study is to analyze traffic operations at key intersections for existing (2021), future (2026), and future (2040) conditions with and without the proposed project and to recommend mitigation measures as needed.

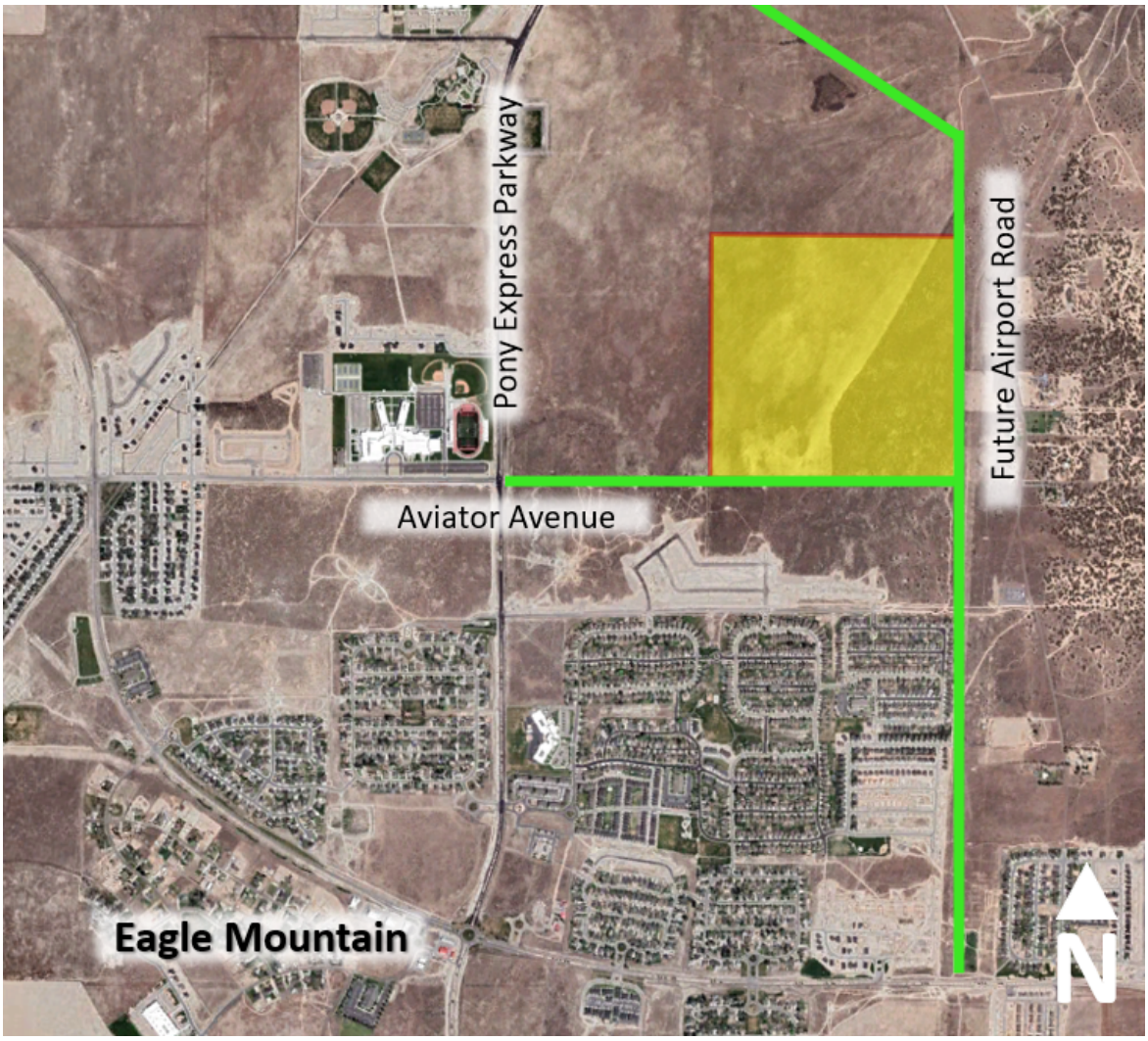

Figure 1: Vicinity map showing the project location in Eagle Mountain, Utah

B. Scope

The study area was defined based on conversations with the development team. This study was scoped to evaluate the traffic operational impacts of the project on the following intersections:

Existing

- Mid Valley Road / Pony Express Parkway
- Aviator Avenue / Eagle Mountain Boulevard
- Aviator Avenue / Pony Express Parkway
- Bobby Wren Boulevard / Pony Express Parkway
- Eagle Mountain Boulevard / Pony Express Parkway

Future

- West Collector / North Collector
- North Access 1 / North Collector
- North Access 2 / North Collector
- North Collector / Airport Road
- West Access 1 / West Collector
- West Access 2 / West Collector
- West Collector / Aviator Avenue
- East Access / Airport Road
- South Access 1 / Aviator Avenue
- South Access 2 / Aviator Avenue
- Aviator Avenue / Airport Road

C. Analysis Methodology

Level of service (LOS) is a term that describes the operating performance of an intersection or roadway. LOS is measured quantitatively and reported on a scale from A to F, with A representing the best performance and F the worst. Table 1 provides a brief description of each LOS letter designation and an accompanying average delay per vehicle for both signalized and unsignalized intersections.

The *Highway Capacity Manual* (HCM), 6th Edition, 2016 methodology was used in this study to remain consistent with "state-of-the-practice" professional standards. This methodology has different quantitative evaluations for signalized and unsignalized intersections. For signalized, roundabout, and all-way stop-controlled (AWSC) intersections, the LOS is provided for the overall intersection (weighted average of all approach delays). For all other unsignalized intersections, LOS is reported based on the worst movement.

Using Synchro/SimTraffic software, which follow the HCM methodology, the peak hour LOS was computed for each study intersection. Multiple runs of SimTraffic were used to provide a statistical evaluation of the interaction between the intersections. The detailed LOS reports are provided in Appendix B. Hales Engineering also calculated the 95th percentile queue lengths for the study intersections using SimTraffic. The detailed queue length reports are provided in Appendix D.

D. Level of Service Standards

For the purposes of this study, a minimum acceptable intersection performance for each of the study intersections was set at LOS D. If levels of service E or F conditions exist, an explanation and/or mitigation measures will be presented. A LOS D threshold is consistent with "state-of-the-practice" traffic engineering principles for urbanized areas.

Table 1: Level of Service Description

LOS		Description of Traffic Conditions	Average Delay (seconds/vehicle)	
			Signalized Intersections	Unsignalized Intersections
A		Free Flow / Insignificant Delay	≤ 10	≤ 10
B		Stable Operations / Minimum Delays	> 10 to 20	> 10 to 15
C		Stable Operations / Acceptable Delays	> 20 to 35	> 15 to 25
D		Approaching Unstable Flows / Tolerable Delays	> 35 to 55	> 25 to 35
E		Unstable Operations / Significant Delays	> 55 to 80	> 35 to 50
F		Forced Flows / Unpredictable Flows / Excessive Delays	> 80	> 50

Source: Hales Engineering Descriptions, based on the *Highway Capacity Manual* (HCM), 6th Edition, 2016 Methodology (Transportation Research Board)

II. EXISTING (2021) BACKGROUND CONDITIONS

A. Purpose

The purpose of the background analysis is to study the intersections and roadways during the peak travel periods of the day with background traffic and geometric conditions. Through this analysis, background traffic operational deficiencies can be identified, and potential mitigation measures recommended. This analysis provides a baseline condition that may be compared to the build conditions to identify the impacts of the development.

B. Roadway System

The primary roadways that will provide access to the project site are described below:

Airport Road – is a city-maintained roadway which is classified by the Eagle Mountain Transportation Master Plan (January 2020) as a "Major Arterial." The roadway may have up to seven travel lanes but will likely be built initially with one travel lane in each direction and a center two-way left-turn lane (TWLTL). Based on similar streets in the area, the posted speed will likely be 35 mph in the study area. A minimum of 1,320 feet between intersections are given as the access spacing standards for a Major Arterial.

Aviator Avenue – is a city-maintained roadway which is classified by the Eagle Mountain Transportation Master Plan (January 2020) as a "Collector." The roadway may have one travel lane in each direction. Based on similar streets in the area, the posted speed will likely be 35 mph in the study area. A minimum of 200 feet between intersections are given as the access spacing standards for a Collector.

North Collector – is a city-maintained roadway which is classified by the Eagle Mountain Transportation Master Plan (January 2020) as a "Collector." The roadway may have one travel lane in each direction. Based on similar streets in the area, the posted speed will likely be 35 mph in the study area. A minimum of 200 feet between intersections are given as the access spacing standards for a Collector.

West Collector – is a city-maintained roadway which is classified by the Eagle Mountain Transportation Master Plan (January 2020) as a "Collector." The roadway may have one travel lane in each direction. Based on similar streets in the area, the posted speed will likely be 35 mph in the study area. A minimum of 200 feet between intersections are given as the access spacing standards for a Collector.

C. Traffic Volumes

Weekday morning (7:00 to 9:00 a.m.) and evening (4:00 to 6:00 p.m.) peak period traffic counts were performed at the following intersections:

- Mid Valley Road / Pony Express Parkway
- Aviator Avenue / Eagle Mountain Boulevard
- Aviator Avenue / Pony Express Parkway
- Bobby Wren Boulevard / Pony Express Parkway
- Eagle Mountain Boulevard / Pony Express Parkway

The counts were performed on Thursday, July 22, 2021. The morning peak hour was determined to be between 7:15 and 8:15 a.m., and the evening peak hour was determined to be between 5:00 and 6:00 p.m. Additional counts from previous projects taken on May 14, 2020, and December 4, 2019, were used to incorporate school volumes and balance them through the rest of the intersections. These previous counts were increased to anticipated 2021 traffic volumes with a 10% annual growth rate, based on automatic traffic recorder (ATR) #226 on SR-73. Detailed count data are included in Appendix A.

Trip generation from major developments that will likely impact the project were incorporated into the background volumes. This includes the Ault Farms and Sunset Flats developments. Trip distribution was based on traffic impact studies previously completed for these developments.

Hales Engineering made seasonal adjustments to the observed traffic volumes. Monthly traffic volume data were obtained from a nearby UDOT ATR on SR-73 (ATR #626). In recent years, traffic volumes in July have been equal to approximately 98% of average traffic volumes. The observed traffic volumes were increased accordingly to determine average turning movement counts at the study intersections.

The traffic counts were collected during the COVID-19 pandemic when traffic volumes may have been slightly reduced due to social distancing measures. According to the UDOT Automatic Traffic Signal Performance Measures (ATSPM) website, the traffic volumes on July 25, 2019 (pre-social distancing) were equal or lower than those on July 22, 2021. Therefore, no COVID-19 adjustment was made to the data.

After all of the adjustments, the evening peak hour volumes were approximately 4% higher than the morning peak hour volumes near the study area. Figure 2 shows the existing evening and evening peak hour volumes as well as intersection geometry at the study intersections.

Eagle Mountain Eagle Quest TIS
Existing (2021) Background

Morning Peak Hour
Figure 2A

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Eagle Mountain Eagle Quest TIS
Existing (2021) Background

Evening Peak Hour
Figure 2B

Hales Engineering
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D. Level of Service Analysis

Hales Engineering determined that all study intersections are anticipated to operate at acceptable levels of service during both peak hours, as shown in Table 2. These results serve as a baseline condition for the impact analysis of the proposed development during existing (2021) conditions.

Table 2: Existing (2021) Background Peak Hour LOS

Intersection		LOS (Sec. Delay / Veh.) / Movement[1]	
Description	Control	Morning Peak	Evening Peak
Mid Valley Road / Pony Express Parkway	Signal	A (6.8)	A (3.7)
Aviator Avenue / Eagle Mountain Boulevard	Signal	B (11.0)	B (13.0)
Aviator Avenue / Pony Express Parkway	Signal	A (8.6)	A (7.2)
Bobby Wren Boulevard / Pony Express Parkway	Signal	B (12.5)	B (13.8)
Eagle Mountain Boulevard / Pony Express Parkway	Roundabout	A (9.4)	D (30.4)

1. Movement indicated for unsignalized intersections where delay and LOS represents worst movement. SBL = Southbound left movement, etc.
2. Uppercase LOS used for signalized, roundabout, and AWSC intersections. Lowercase LOS used for all other unsignalized intersections.

Source: Hales Engineering, August 2021

E. Queuing Analysis

Hales Engineering calculated the 95th percentile queue lengths for each of the study intersections. Some moderate queueing of 600 feet for westbound vehicles, 350 feet for northbound vehicles, and 250 feet for eastbound vehicles are anticipated at the Eagle Mountain Boulevard / Pony Express Parkway roundabout during the evening peak hour.

F. Mitigation Measures

No mitigation measures are recommended.

III. PROJECT CONDITIONS

A. Purpose

The project conditions discussion explains the type and intensity of development. This provides the basis for trip generation, distribution, and assignment of project trips to the surrounding study intersections defined in Chapter I.

B. Project Description

The proposed Eagle Quest Residential development is located northwest of the future Aviator Avenue / Airport Road intersection, east of Pony Express Parkway. The development will consist of 486 residential single-family units. A concept plan for the proposed development is provided in Appendix C.

C. Trip Generation

Trip generation for the development was calculated using trip generation rates published in the Institute of Transportation Engineers (ITE), *Trip Generation*, 10th Edition, 2017. Trip generation for the proposed project is included in Table 3.

The total trip generation for the development is as follows:

- Daily Trips: 4,454
- Morning Peak Hour Trips: 351
- Evening Peak Hour Trips: 464

Table 3: Trip Generation

Trip Generation Eagle Mountain - Eagle Quest								
Weekday Daily Land Use[1]	# of Units	Unit Type	Trip Generation	% Entering	% Exiting	Trips Entering	Trips Exiting	**Total New Daily Trips**
Single-Family Detached Housing (210)	486	Dwelling Units	4,454	50%	50%	2,227	2,227	**4,454**
Morning Peak Hour Land Use[1]	# of Units	Unit Type	Trip Generation	% Entering	% Exiting	Trips Entering	Trips Exiting	**Total New AM Trips**
Single-Family Detached Housing (210)	486	Dwelling Units	350	25%	75%	88	263	**351**
Evening Peak Hour Land Use[1]	# of Units	Unit Type	Trip Generation	% Entering	% Exiting	Trips Entering	Trips Exiting	**Total New PM Trips**
Single-Family Detached Housing (210)	486	Dwelling Units	464	63%	37%	292	172	**464**

1. Land Use Code from the Institute of Transportation Engineers (ITE) *Trip Generation*, 10th Edition, 2017.

SOURCE: Hales Engineering, August 2021

D. Trip Distribution and Assignment

Project traffic is assigned to the roadway network based on the type of trip and the proximity of project access points to major streets, high population densities, and regional trip attractions. Existing travel patterns observed during data collection also provide helpful guidance to establishing these distribution percentages, especially near the site. The resulting distribution of project generated trips during the evening and evening peak hour is shown in Table 4.

Table 4: Trip Distribution

Direction	% To/From Project
North Pony Express	65%
Northwest Eagle Mountain	25%
South	10%

These trip distribution assumptions were used to assign the morning and evening peak hour generated traffic at the study intersections to create trip assignment for the proposed development. Trip assignments for the development in 2021, 2026, and 2040 are shown in Figure 3, Figure 4, and Figure 5, respectively. It was assumed that only 1/3 of the development would be able to be constructed for the 2021 analysis.

E. Access

The proposed access for the site will be gained at the following locations (see also concept plan in Appendix C):

<u>Airport Road:</u>

- The East Access will be located approximately 1,275 feet north of the Aviator Avenue / Airport Road intersection and 1,275 feet south of the North Collector / Airport Road intersection. It will access the project on the west side of Airport Road. It is anticipated that the access will be stop-controlled.

<u>Aviator Avenue:</u>

- South Access 1 will be located approximately 1,875 feet west of the Aviator Avenue / Airport Road intersection and 500 feet east of the West Collector / Aviator Avenue intersection. It will access the project on the north side of Aviator Avenue. It is anticipated that the access will be stop-controlled.
- South Access 2 will be located approximately 775 feet west of the Aviator Avenue / Airport Road intersection and 1,600 feet east of the West Collector / Aviator Avenue intersection. It will access the project on the north side of Aviator Avenue. It is anticipated that the access will be stop-controlled.

Eagle Mountain Eagle Quest TIS
Trip Assignment (2021)

Morning Peak Hour
Figure 3A

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Eagle Mountain Eagle Quest TIS
Trip Assignment (2021)

Evening Peak Hour
Figure 3B

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Eagle Mountain Eagle Quest TIS
Trip Assignment (2026)

Morning Peak Hour
Figure 4A

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Eagle Mountain Eagle Quest TIS
Trip Assignment (2026)

Evening Peak Hour
Figure 4B

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Eagle Mountain Eagle Quest TIS
Trip Assignment (2040)

Morning Peak Hour
Figure 5A

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Eagle Mountain Eagle Quest TIS
Trip Assignment (2040)

Evening Peak Hour
Figure 5B

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North Collector:

- North Access 1 will be located approximately 1,825 feet west of the North Collector / Airport Road intersection and 575 feet east of the West Collector / North Collector intersection. It will access the project on the south side of North Collector. It is anticipated that the access will be stop-controlled.
- North Access 2 will be located approximately 775 feet west of the North Collector / Airport Road intersection and 1,600 feet east of the West Collector / North Collector intersection. It will access the project on the south side of North Collector. It is anticipated that the access will be stop-controlled.

West Collector:

- West Access 1 will be located approximately 875 feet south of the West Collector / North Collector intersection and 1,625 feet north of the West Collector / Aviator Avenue intersection. It will access the project on the east side of West Collector. It is anticipated that the access will be stop-controlled.
- West Access 2 will be located approximately 1,475 feet south of the West Collector / North Collector intersection and 1,025 feet north of the West Collector / Aviator Avenue intersection. It will access the project on the east side of West Collector. It is anticipated that the access will be stop-controlled.

F. Auxiliary Lane Requirements

Based on UDOT Administrative Rule R930-6, which outlines minimum turn volumes (measured in vehicles per hour) to warrant auxiliary lanes, recommendations are made for turning lanes along Pony Express Parkway and Airport Road, as shown in Table 5. Airport Road is anticipated to be constructed with two travel lanes in each direction with a center two-way left-turn lane, which will accommodate left-turns along that corridor. Right-turn deceleration lanes were assumed at all intersections along Airport Road based on these guidelines.

Table 5: Auxiliary Lane Summary

Intersection	Auxiliary Lane Type		Minimum Requirement	Measure	Met?
North Collector / Pony Express	Left Turn	Deceleration (SB-to-EB)	10 vph	47 vph	Yes
	Right turn	Deceleration (NB-to-EB)	25 vph	3 vph	No
North Collector / Airport Road	Left turn	Deceleration (NB-to-WB)	10 vph	1 vph	No
	Right turn	Deceleration (SB-to-WB)	25 vph	82 vph	Yes
East Access / Airport Road	Left turn	Deceleration (NB-to-WB)	10 vph	3 vph	No
	Right turn	Deceleration (SB-to-WB)	25 vph	66 vph	Yes
Aviator Avenue / Airport Road	Left turn	Deceleration (NB-to-WB)	10 vph	10 vph	Yes
	Right turn	Deceleration (SB-to-WB)	25 vph	66 vph	Yes

IV. EXISTING (2021) PLUS PROJECT CONDITIONS

A. Purpose

The purpose of the existing (2021) plus project analysis is to study the intersections and roadways during the peak travel periods of the day for existing background traffic and geometric conditions plus the net trips generated by the proposed development. This scenario provides valuable insight into the potential impacts of the proposed project on background traffic conditions.

B. Roadway Network

Based on conversations with the developer and Eagle Mountain City, it was assumed that the development would connect south through the Sun Flats development to Bobby Wren Boulevard during its initial construction.

C. Traffic Volumes

Hales Engineering added the project trips discussed in Chapter III to the existing (2021) background traffic volumes to predict turning movement volumes for existing (2021) plus project conditions. Only 1/3 of the development was assumed to be constructed for existing (2021) conditions. Existing (2021) plus project evening peak hour turning movement volumes are shown in Figure 6.

D. Level of Service Analysis

Hales Engineering determined that all intersections are anticipated to operate at acceptable levels of service during both peak hours with project traffic added, as shown in Table 6.

E. Queuing Analysis

Hales Engineering calculated the 95th percentile queue lengths for each of the study intersections. Some significant queueing of 750 feet for westbound vehicles, 450 feet for northbound vehicles, and 250 feet for eastbound vehicles are anticipated at the Eagle Mountain Boulevard / Pony Express Parkway roundabout during the evening peak hour.

F. Mitigation Measures

The Eagle Mountain Boulevard / Pony Express Parkway will be near capacity with all of the anticipated developments being constructed in the area. Eagle Mountain City has plans to widen Eagle Mountain Boulevard and Pony Express Parkway and will likely convert the roundabout to a 2-lane roundabout at that time. No mitigation measures are recommended in the interim.

Eagle Mountain Eagle Quest TIS
Existing (2021) Plus Project

Morning Peak Hour
Figure 6A

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Eagle Mountain Eagle Quest TIS
Existing (2021) Plus Project

Evening Peak Hour
Figure 6B

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Table 6: Existing (2021) Plus Project Peak Hour LOS

Intersection		LOS (Sec. Delay / Veh.) / Movement[1]	
Description	**Control**	**Morning Peak**	**Evening Peak**
Mid Valley Road / Pony Express Parkway	Signal	A (6.6)	A (3.9)
Aviator Avenue / Eagle Mountain Boulevard	Signal	B (11.1)	B (13.8)
Aviator Avenue / Pony Express Parkway	Signal	A (8.5)	A (7.6)
Bobby Wren Boulevard / Pony Express Parkway	Signal	B (15.3)	B (14.5)
Eagle Mountain Boulevard / Pony Express Parkway	Roundabout	A (8.8)	D (34.8)
South Access 1 / Aviator Avenue	NB/SB Stop	a (4.8) / SBT	a (4.9) / NBT
South Access 2 / Aviator Avenue	NB/SB Stop	a (4.8) / SBT	a (4.9) / SBT

1. Movement indicated for unsignalized intersections where delay and LOS represents worst movement. SBL = Southbound left movement, etc.
2. Uppercase LOS used for signalized, roundabout, and AWSC intersections. Lowercase LOS used for all other unsignalized intersections.

Source: Hales Engineering, August 2021

V. FUTURE (2026) BACKGROUND CONDITIONS

A. Purpose

The purpose of the future (2026) background analysis is to study the intersections and roadways during the peak travel periods of the day for future background traffic and geometric conditions. Through this analysis, future background traffic operational deficiencies can be identified, and potential mitigation measures recommended.

B. Roadway Network

According to the Mountainland Association of Governments (MAG) Regional Transportation Plan and coordination with Eagle Mountain City, there are no projects planned before 2026 in the study area. Therefore, no changes were made to the roadway network for the future (2026) analysis.

C. Traffic Volumes

Hales Engineering obtained future (2026) forecasted volumes from the Wasatch Front Regional Council (WFRC) / MAG travel demand model. Peak period turning movement counts were estimated using National Cooperative Highway Research Program (NCHRP) 255 methodologies which utilize existing peak period turn volumes and future average weekday daily traffic (AWDT) volumes to project the future turn volumes at the major intersections. Future (2026) morning and evening peak hour turning movement volumes are shown in Figure 7.

D. Level of Service Analysis

Hales Engineering determined that all study intersections are anticipated to operate at acceptable levels of service in future (2026) background conditions, except the Eagle Mountain Boulevard / Pony Express Parkway roundabout during the evening peak hour, as shown in Table 7. These results serve as a baseline condition for the impact analysis of the proposed development for future (2026) conditions.

E. Queuing Analysis

Hales Engineering calculated the 95th percentile queue lengths for each of the study intersections. Significant 95th percentile queue lengths of over 2,000 feet are anticipated during the evening peak hour at the Eagle Mountain Boulevard / Pony Express Parkway roundabout for the northbound and westbound approaches.

Eagle Mountain Eagle Quest TIS
Future (2026) Background

Morning Peak Hour
Figure 7A

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Eagle Mountain Eagle Quest TIS
Future (2026) Background

Evening Peak Hour
Figure 7B

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Table 7: Future (2026) Background Peak Hour LOS

Intersection		LOS (Sec. Delay / Veh.) / Movement[1]	
Description	Control	Morning Peak	Evening Peak
Mid Valley Road / Pony Express Parkway	Signal	A (7.1)	A (3.9)
Aviator Avenue / Eagle Mountain Boulevard	Signal	B (12.5)	B (13.9)
Aviator Avenue / Pony Express Parkway	Signal	A (8.8)	A (7.6)
Bobby Wren Boulevard / Pony Express Parkway	Signal	B (10.5)	B (14.7)
Eagle Mountain Boulevard / Pony Express Parkway	Roundabout	B (15.0)	F (>80)

1. Movement indicated for unsignalized intersections where delay and LOS represents worst movement. SBL = Southbound left movement, etc.
2. Uppercase LOS used for signalized, roundabout, and AWSC intersections. Lowercase LOS used for all other unsignalized intersections.

Source: Hales Engineering, August 2021

F. Mitigation Measures

Hales Engineering recommends converting the Eagle Mountain Boulevard / Pony Express Parkway roundabout into a 2-lane roundabout and creating storage for a second lane on the eastbound, westbound, and northbound approaches. The roadway geometry of the roundabout is shown in Figure 8 with LOS results in Table 8. Queuing was reduced to under 300 feet for all approaches. These results serve as a baseline condition for the impact analysis of the proposed development for future (2026) conditions.

Table 8: Future (2026) Background Peak Hour LOS (Mitigated)

Intersection		LOS (Sec. Delay / Veh.) / Movement[1]	
Description	Control	Morning Peak	Evening Peak
Mid Valley Road / Pony Express Parkway	Signal	A (7.2)	A (4.2)
Aviator Avenue / Eagle Mountain Boulevard	Signal	B (12.5)	B (14.2)
Aviator Avenue / Pony Express Parkway	Signal	A (8.8)	A (7.5)
Bobby Wren Boulevard / Pony Express Parkway	Signal	B (10.4)	B (15.5)
Eagle Mountain Boulevard / Pony Express Parkway	Roundabout	A (8.8)	C (17.9)

1. Movement indicated for unsignalized intersections where delay and LOS represents worst movement. SBL = Southbound left movement, etc.
2. Uppercase LOS used for signalized, roundabout, and AWSC intersections. Lowercase LOS used for all other unsignalized intersections.

Source: Hales Engineering, August 2021

Eagle Mountain Eagle Quest TIS
Future (2026) Background

Mitigated Roadway Geometry
Figure 8

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VI. FUTURE (2026) PLUS PROJECT CONDITIONS

A. Purpose

The purpose of the future (2026) plus project analysis is to study the intersections and roadways during the peak travel periods of the day for future background traffic and geometric conditions plus the net trips generated by the proposed development. This scenario provides valuable insight into the potential impacts of the proposed project on future background traffic conditions.

B. Roadway Network

Based on conversations with the developer and Eagle Mountain City, it was assumed that Aviator Avenue would connect the development to Pony Express Parkway by future (2026) conditions and the West Collector would be constructed along the west side of the development.

C. Traffic Volumes

Hales Engineering added the project trips discussed in Chapter III to the future (2026) background traffic volumes to predict turning movement volumes for future (2026) plus project conditions. It was assumed that the entire development would be completed by future (2026) conditions. Additionally, with the construction of Aviator Avenue, it was assumed that some of the traffic generated by the Sun Flats development would reroute north to the new connection. Future (2026) plus project morning and evening peak hour turning movement volumes are shown in Figure 9.

D. Level of Service Analysis

Hales Engineering determined that all intersections are anticipated to operate at acceptable levels of service during both peak hours in future (2026) plus project conditions, as shown in Table 9.

E. Queuing Analysis

Hales Engineering calculated the 95th percentile queue lengths for each of the study intersections. Some queueing is anticipated at the Eagle Mountain Boulevard / Pony Express Parkway roundabout with 350 on the southbound approach during the evening peak hour and 350 feet on the northbound approach during the morning peak hour.

F. Mitigation Measures

No mitigation measures are recommended.

Eagle Mountain Eagle Quest TIS
Future (2026) Plus Project

Morning Peak Hour
Figure 9A

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Eagle Mountain Eagle Quest TIS
Future (2026) Plus Project

Evening Peak Hour
Figure 9B

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Table 9: Future (2026) Plus Project Peak Hour LOS

Intersection		LOS (Sec. Delay / Veh.) / Movement[1]	
Description	**Control**	**Morning Peak**	**Evening Peak**
Mid Valley Road / Pony Express Parkway	Signal	A (7.5)	A (4.6)
Aviator Avenue / Eagle Mountain Boulevard	Signal	B (12.7)	B (15.3)
Aviator Avenue / Pony Express Parkway	Signal	B (12.1)	B (15.8)
Bobby Wren Boulevard / Pony Express Parkway	Signal	A (7.9)	A (8.9)
Eagle Mountain Boulevard / Pony Express Parkway	Roundabout	B (14.5)	C (16.5)
West Access 1 / West Collector	WB Stop	a (3.9) / WBL	a (3.8) / WBL
West Access 2 / West Collector	WB Stop	a (4.5) / WBL	a (4.5) / WBL
West Collector / Aviator Avenue	SB Stop	a (4.1) / SBR	a (5.4) / EBL
South Access 1 / Aviator Avenue	NB/SB Stop	a (7.9) / SBT	a (8.8) / NBT
South Access 2 / Aviator Avenue	NB/SB Stop	a (5.8) / NBT	a (6.8) / NBT

1. Movement indicated for unsignalized intersections where delay and LOS represents worst movement. SBL = Southbound left movement, etc.
2. Uppercase LOS used for signalized, roundabout, and AWSC intersections. Lowercase LOS used for all other unsignalized intersections.

Source: Hales Engineering, August 2021

VII. FUTURE (2040) BACKGROUND CONDITIONS

A. Purpose

The purpose of the future (2040) background analysis is to study the intersections and roadways during the peak travel periods of the day for future background traffic and geometric conditions. Through this analysis, future background traffic operational deficiencies can be identified, and potential mitigation measures recommended.

B. Roadway Network

According to the MAG Regional Transportation Plan and coordination with Eagle Mountain City, the following projects are planned before 2040 in the study area:

- Airport Road (5-lanes) constructed to the east of the project area from Eagle Mountain Boulevard to SR-73
- Mid Valley Road connected from Airport Road to Eagle Mountain Boulevard
- Eagle Mountain Boulevard widened to 5 lanes

C. Traffic Volumes

Hales Engineering obtained future (2040) forecasted volumes from the WFRC / MAG travel demand model. Peak period turning movement counts were estimated using National Cooperative Highway Research Program (NCHRP) 255 methodologies which utilize existing peak period turn volumes and future average weekday daily traffic (AWDT) volumes to project the future turn volumes at the major intersections. Future (2040) background morning and evening peak hour turning movement volumes are shown in Figure 10.

D. Level of Service Analysis

Hales Engineering determined that all study intersections are anticipated to operate at acceptable levels of service during the morning and evening peak hours in future (2040) background conditions, as shown in Table 10. These results serve as a baseline condition for the impact analysis of the proposed development for future (2040) conditions.

E. Queuing Analysis

Hales Engineering calculated the 95th percentile queue lengths for each of the study intersections. No significant queueing was observed during either peak hour.

F. Mitigation Measures

No mitigation measures are recommended.

Eagle Mountain Eagle Quest TIS
Future (2040) Background

Morning Peak Hour
Figure 10A

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Eagle Mountain Eagle Quest TIS
Future (2040) Background

Evening Peak Hour
Figure 10B

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Table 10: Future (2040) Background Peak Hour LOS

Intersection		LOS (Sec. Delay / Veh.) / Movement[1]	
Description	Control	Morning Peak	Evening Peak
Mid Valley Road / Pony Express Parkway	Signal	B (10.1)	B (10.1)
Aviator Avenue / Eagle Mountain Boulevard	Signal	A (9.3)	B (10.5)
Aviator Avenue / Pony Express Parkway	Signal	B (10.5)	A (9.0)
Bobby Wren Boulevard / Pony Express Parkway	Signal	B (10.3)	B (12.9)
Eagle Mountain Boulevard / Pony Express Parkway	Roundabout	A (7.1)	B (14.3)

1. Movement indicated for unsignalized intersections where delay and LOS represents worst movement. SBL = Southbound left movement, etc.
2. Uppercase LOS used for signalized, roundabout, and AWSC intersections. Lowercase LOS used for all other unsignalized intersections.

Source: Hales Engineering, August 2021

VIII. FUTURE (2040) PLUS PROJECT CONDITIONS

A. Purpose

The purpose of the future (2040) plus project analysis is to study the intersections and roadways during the peak travel periods of the day for future background traffic and geometric conditions plus the net trips generated by the proposed development. This scenario provides valuable insight into the potential impacts of the proposed project on future background traffic conditions.

B. Roadway Network

Based on conversations with the developer and Eagle Mountain City, it was assumed that, in addition to the previously mentioned roadways constructed, that the North Collector would be built connecting Airport Road to Eagle Mountain Boulevard on the north side of the development.

C. Traffic Volumes

Hales Engineering added the project trips discussed in Chapter III to the future (2040) background traffic volumes to predict turning movement volumes for future (2040) plus project conditions. Future (2040) plus project morning and evening peak hour turning movement volumes are shown in Figure 11.

D. Level of Service Analysis

Hales Engineering determined that all intersections are anticipated to operate at acceptable levels of service in future (2040) plus project conditions, except for all intersections along Airport Road during the evening peak hour, as shown in Table 11.

E. Queuing Analysis

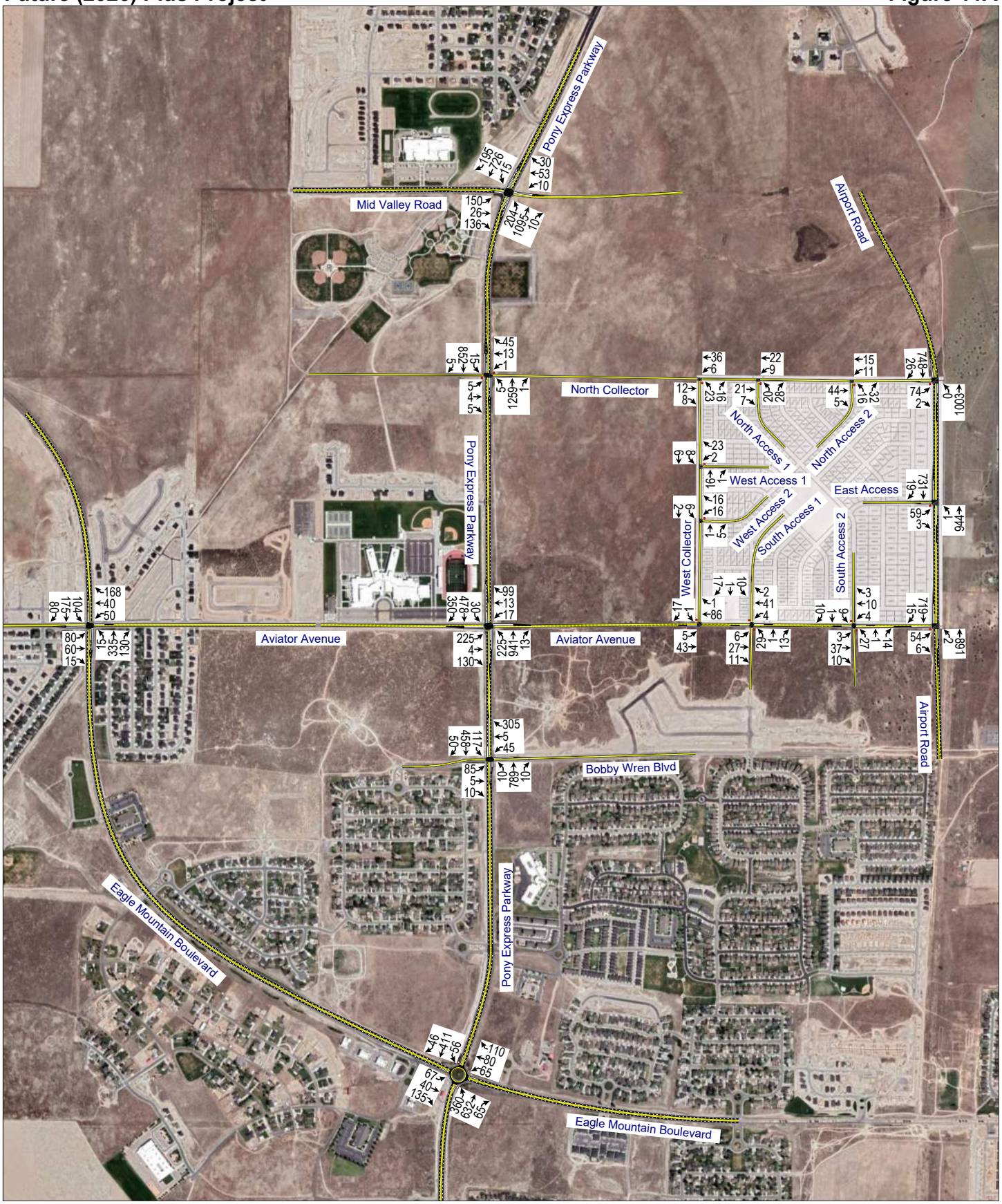
Hales Engineering calculated the 95th percentile queue lengths for each of the study intersections. Some 95th percentile queue lengths of 250 feet are anticipated during the evening peak hour for the northbound approach of the Eagle Mountain Boulevard / Pony Express Parkway roundabout. There are also queues of 100-125 feet for eastbound left-turn movements for all streets and accesses on Airport Road during both peak hours.

F. Mitigation Measures

None of the intersections along Airport Road are anticipated to meet warrants for a signal. However, the city could consider at least one signal along the corridor when warranted to keep breaks in traffic and allow left-turn movements. Based on consistency along the corridor, Aviator Avenue / Airport Road would likely be the best choice for a potential signal. A signal at this location was not analyzed.

Eagle Mountain Eagle Quest TIS
Future (2026) Plus Project

Morning Peak Hour
Figure 11A



Hales Engineering
1220 North 500 West Ste 202, Lehi, UT, 84043

801.766.4343
08/12/2021

Eagle Mountain Eagle Quest TIS
Future (2040) Plus Project

Evening Peak Hour
Figure 11B

Hales Engineering
1220 North 500 West Ste 202, Lehi, UT, 84043

801.766.4343
08/12/2021

Table 11: Future (2040) Plus Project Peak Hour LOS

Intersection		LOS (Sec. Delay / Veh.) / Movement[1]	
Description	Control	Morning Peak	Evening Peak
Mid Valley Road / Pony Express Parkway	Signal	B (10.3)	A (10.0)
Aviator Avenue / Eagle Mountain Boulevard	Signal	A (9.5)	B (10.9)
Aviator Avenue / Pony Express Parkway	Signal	B (11.1)	B (10.5)
Bobby Wren Boulevard / Pony Express Parkway	Signal	A (8.6)	B (10.5)
Eagle Mountain Boulevard / Pony Express Parkway	Roundabout	A (7.3)	B (13.4)
West Collector / North Collector	NB Stop	a (3.9) / NBL	a (4.3) / NBL
North Access 1 / North Collector	NB Stop	a (4.3) / NBL	a (4.4) / NBL
North Access 2 / North Collector	NB Stop	a (4.4) / NBL	a (4.9) / NBL
North Collector / Airport Road	EB Stop	d (29.3) / EBL	f (>50) / EBL
West Access 1 / West Collector	WB Stop	a (3.2) / WBL	a (2.7) / WBR
West Access 2 / West Collector	WB Stop	a (4.0) / WBL	a (4.2) / WBL
West Collector / Aviator Avenue	SB Stop	a (3.8) / SBL	a (3.5) / EBL
East Access / Airport Road	EB Stop	d (27.1) / EBL	e (46.1) / EBL
South Access 1 / Aviator Avenue	SB Stop	a (5.5) / SBT	a (5.0) / NBL
South Access 2 / Aviator Avenue	SB Stop	a (5.8) / SBT	a (4.6) / NBL
Aviator Avenue / Airport Road	EB Stop	d (28.3) / EBL	f (>50) / EBL

1. Movement indicated for unsignalized intersections where delay and LOS represents worst movement. SBL = Southbound left movement, etc.
2. Uppercase LOS used for signalized, roundabout, and AWSC intersections. Lowercase LOS used for all other unsignalized intersections.

Source: Hales Engineering, August 2021

G. Recommended Storage Lengths

Hales Engineering determined recommended storage lengths based on the 95th percentile queue lengths given in the future (2040) plus project scenario. These storage lengths do not include the taper length. Recommended storage lengths for the study intersections are shown in Table 12. Intersections shown in Table 12 include new intersections and existing intersections that have recommended storage length changes.

Table 12: Recommended Storage Lengths

	Intersection	Recommended Storage Lengths (feet)															
		Northbound				Southbound				Eastbound				Westbound			
		LT		RT		LT		RT		LT		RT		LT		RT	
		E	P	E	P	E	P	E	P	E	P	E	P	E	P	E	P
1	Mid Valley Road / Pony Express Parkway	-	-	-	100	-	-	-	-	-	-	-	-	-	-	-	100
3	Aviator Avenue / Pony Express Parkway	-	-	-	100	-	-	-	-	-	-	-	-	-	-	-	100
4	Bobby Wren Boulevard / Pony Express Parkway	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100
9	North Collector / Airport Road	-	-	-	-	-	-	-	-	-	100	-	-	-	-	-	-
13	East Access / Airport Road	-	-	-	-	-	-	-	-	-	100	-	-	-	-	-	-
16	Aviator Avenue / Airport Road	-	-	-	-	-	-	-	-	-	125	-	-	-	-	-	-

1. Storage lengths are based on 2040 95th percentile queue lengths and do not include required deceleration / taper distances
2. E = Existing storage length (approximate), if applicable; P = proposed storage length for new turn lanes or changes to existing turn lanes, if applicable

Source: Hales Engineering, August 2021

APPENDIX A

Turning Movement Counts

TrafficCounts

2364 North 1450 East
Lehi, UT 84043
801.636.0891

Intersection Turning Movement Summary

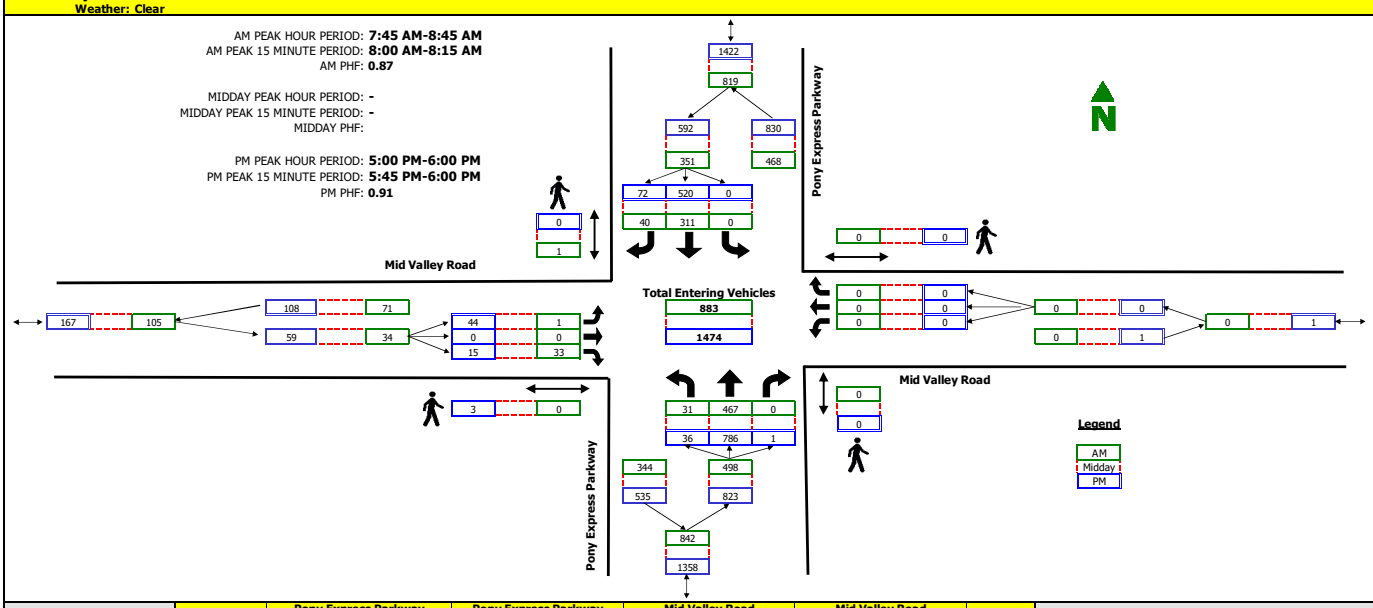
Intersection: Pony Express Parkway / Mid Valley Road
North/South: Pony Express Parkway
East/West: Mid Valley Road
Jurisdiction: Eagle Mountain
Project Title: Eagle Quest TIS
Project No: UT21-1962
Weather: Clear

Date: 7-22-21, Thu
Day of Week Adjustment: 100.0%
Month of Year Adjustment: 98.0%
Adjustment Station #: 626
Growth Rate: 0.0%
Number of Years: 0

AM PEAK HOUR PERIOD: **7:45 AM-8:45 AM**
AM PEAK 15 MINUTE PERIOD: **8:00 AM-8:15 AM**
AM PHF: **0.87**

MIDDAY PEAK HOUR PERIOD: **-**
MIDDAY PEAK 15 MINUTE PERIOD: **-**
MIDDAY PHF:

PM PEAK HOUR PERIOD: **5:00 PM-6:00 PM**
PM PEAK 15 MINUTE PERIOD: **5:45 PM-6:00 PM**
PM PHF: **0.91**



RAW COUNT SUMMARIES	Pony Express Parkway Northbound				Pony Express Parkway Southbound				Mid Valley Road Eastbound				Mid Valley Road Westbound				TOTAL
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	
AM PERIOD COUNTS																	
Period	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**M**	**N**	**O**	**P**	**TOTAL**
7:00 - 7:15	4	97	0	0	0	47	2	0	0	0	1	0	0	0	0	0	151
7:15 - 7:30	2	135	0	0	0	64	6	1	1	0	1	0	0	0	0	0	209
7:30 - 7:45	3	72	0	0	0	56	6	0	0	0	1	0	0	0	0	0	138
7:45 - 8:00	14	109	0	0	0	92	22	0	1	0	16	0	0	0	0	0	254
8:00 - 8:15	14	134	0	0	0	79	12	1	0	0	16	0	0	0	0	0	255
8:15 - 8:30	2	109	0	0	0	60	5	0	0	0	1	0	0	0	0	0	177
8:30 - 8:45	1	115	0	0	0	80	1	0	0	0	0	0	0	0	0	0	197
8:45 - 9:00	5	99	0	0	0	77	4	1	0	0	5	0	0	0	0	0	190
MIDDAY PERIOD COUNTS																	
Period	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**M**	**N**	**O**	**P**	**TOTAL**
9:00 - 9:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 - 9:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 - 9:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 - 10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 - 10:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15 - 10:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30 - 10:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45 - 11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 - 11:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 - 11:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 - 11:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 - 12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 - 12:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 - 12:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 - 12:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 - 13:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:00 - 13:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:15 - 13:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:30 - 13:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:45 - 14:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:00 - 14:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:15 - 14:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:30 - 14:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:45 - 15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:00 - 15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:15 - 15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:30 - 15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:45 - 16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM PERIOD COUNTS																	
Period	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**M**	**N**	**O**	**P**	**TOTAL**
16:00 - 16:15	3	158	0	0	0	112	5	0	11	0	1	1	0	0	0	0	290
16:15 - 16:30	2	166	0	0	0	119	10	0	5	0	0	0	0	0	0	0	302
16:30 - 16:45	2	168	0	0	0	124	6	0	7	0	3	0	0	0	0	0	310
16:45 - 17:00	1	192	0	0	0	129	11	0	9	1	4	0	0	0	0	0	347
17:00 - 17:15	1	184	0	0	0	122	10	0	11	0	1	0	0	0	0	0	329
17:15 - 17:30	2	200	0	0	0	130	8	0	7	0	3	0	0	0	0	0	350
17:30 - 17:45	4	217	0	0	0	135	16	0	11	0	6	1	0	0	0	0	389
17:45 - 18:00	29	185	1	0	0	133	38	0	15	0	5	2	0	0	0	0	406

TrafficCounts

2364 North 1450 East
Lehi, UT 84043
801.636.0891

Intersection Turning Movement Summary

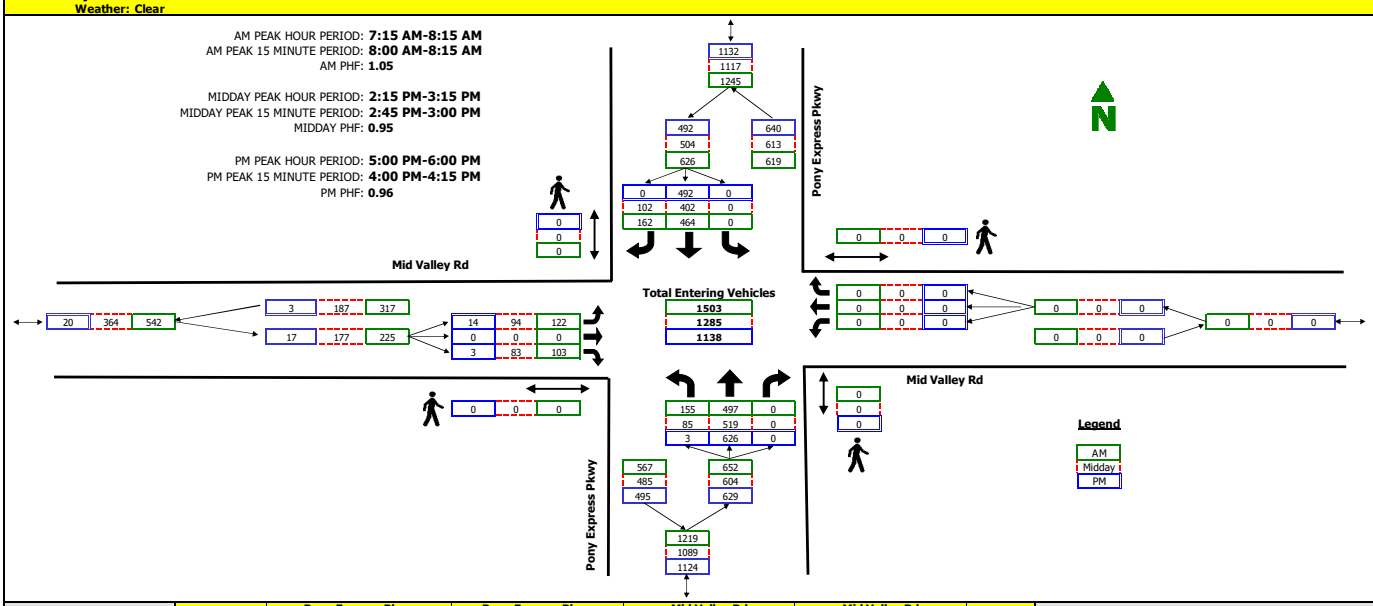
Intersection: Pony Express Pkwy / Mid Valley Rd
North/South: Pony Express Pkwy
East/West: Mid Valley Rd
Jurisdiction: Eagle Mountain, Uath
Project Title: Airport Road TS
Project No: UT19-1571
Weather: Clear

Date: 12-4-19, Wed
Day of Week Adjustment: 100.0%
Month of Year Adjustment: 100.0%
Adjustment Station #: 626
Growth Rate: 10.0%
Number of Years: 1

AM PEAK HOUR PERIOD: **7:15 AM-8:15 AM**
AM PEAK 15 MINUTE PERIOD: **8:00 AM-8:15 AM**
AM PHF: **1.05**

MIDDAY PEAK HOUR PERIOD: **2:15 PM-3:15 PM**
MIDDAY PEAK 15 MINUTE PERIOD: **2:45 PM-3:00 PM**
MIDDAY PHF: **0.95**

PM PEAK HOUR PERIOD: **5:00 PM-6:00 PM**
PM PEAK 15 MINUTE PERIOD: **4:00 PM-4:15 PM**
PM PHF: **0.96**



RAW COUNT SUMMARIES	Pony Express Pkwy Northbound				Pony Express Pkwy Southbound				Mid Valley Rd Eastbound				Mid Valley Rd Westbound				TOTAL
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	
AM PERIOD COUNTS																	
Period	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**M**	**N**	**O**	**P**	**TOTAL**
7:00 - 7:15	3	122	0	0	0	68	4	0	2	0	3	0	0	0	0	0	202
7:15 - 7:30	12	131	0	0	0	140	15	0	3	0	2	0	0	0	0	0	303
7:30 - 7:45	20	122	0	0	0	168	25	0	12	0	9	0	0	0	0	0	356
7:45 - 8:00	67	111	0	0	0	61	58	0	24	0	29	0	0	0	0	0	350
8:00 - 8:15	42	88	0	0	0	53	49	0	72	0	54	0	0	0	0	0	358
8:15 - 8:30	8	86	0	0	0	59	10	0	10	0	9	0	0	0	0	0	182
8:30 - 8:45	0	85	0	0	0	39	10	0	6	0	3	0	0	0	0	0	143
8:45 - 9:00	3	63	0	0	0	55	2	0	5	0	1	0	0	0	0	0	129
MIDDAY PERIOD COUNTS																	
Period	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**M**	**N**	**O**	**P**	**TOTAL**
9:00 - 9:15	5	90	0	0	0	42	2	0	4	0	2	0	0	0	0	0	145
9:15 - 9:30	4	100	0	0	0	53	6	0	2	0	1	0	0	0	0	0	166
9:30 - 9:45	2	68	0	0	0	55	2	0	4	0	5	0	0	0	0	0	136
9:45 - 10:00	2	66	0	0	0	40	4	0	4	0	1	0	0	0	0	0	117
10:00 - 10:15	3	53	0	0	0	34	4	0	1	0	3	0	0	0	0	0	98
10:15 - 10:30	2	71	0	0	0	54	3	0	5	0	1	0	0	0	0	0	136
10:30 - 10:45	1	62	0	0	0	39	3	0	1	0	0	0	0	0	0	0	106
10:45 - 11:00	4	49	0	0	0	48	2	0	4	0	1	0	0	0	0	0	108
11:00 - 11:15	1	92	0	0	0	52	2	0	2	0	1	0	0	0	0	0	150
11:15 - 11:30	3	78	0	0	0	42	1	0	8	0	5	0	0	0	0	0	137
11:30 - 11:45	0	81	0	0	0	65	1	0	1	0	2	0	0	0	0	0	150
11:45 - 12:00	2	75	0	0	0	45	4	0	1	0	3	0	0	0	0	0	130
12:00 - 12:15	1	82	0	0	0	63	4	0	2	0	2	0	0	0	0	0	154
12:15 - 12:30	1	74	0	0	0	63	4	0	4	0	4	0	0	0	0	0	150
12:30 - 12:45	2	66	0	0	0	65	5	0	1	0	2	0	0	0	0	0	141
12:45 - 13:00	2	67	0	0	0	74	3	0	5	0	3	0	0	0	0	0	154
13:00 - 13:15	2	61	0	0	0	55	6	0	4	0	4	0	0	0	0	0	132
13:15 - 13:30	1	65	0	0	0	55	5	0	4	0	1	0	0	0	0	0	131
13:30 - 13:45	2	56	0	0	0	58	2	0	6	0	2	0	0	0	0	0	126
13:45 - 14:00	0	71	0	0	0	74	4	0	3	0	1	0	0	0	0	0	153
14:00 - 14:15	3	79	0	0	0	99	5	0	9	0	5	0	0	0	0	0	200
14:15 - 14:30	21	130	0	0	0	113	21	0	9	0	2	0	0	0	0	0	296
14:30 - 14:45	29	163	0	0	0	73	32	0	8	0	6	0	0	0	0	0	311
14:45 - 15:00	23	91	0	0	0	83	31	0	53	0	58	0	0	0	0	0	339
15:00 - 15:15	4	88	0	0	0	96	9	0	15	0	9	0	0	0	0	0	221
15:15 - 15:30	2	112	0	0	0	114	8	0	11	0	7	0	0	0	0	0	254
15:30 - 15:45	8	158	0	0	0	114	3	0	21	0	6	0	0	0	0	0	310
15:45 - 16:00	8	134	0	0	0	110	16	0	5	0	5	0	0	0	0	0	278
PM PERIOD COUNTS																	
Period	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**M**	**N**	**O**	**P**	**TOTAL**
16:00 - 16:15	13	115	0	0	0	104	16	0	30	0	19	0	0	0	0	0	297
16:15 - 16:30	3	103	0	0	0	109	6	0	18	0	7	0	0	0	0	0	246
16:30 - 16:45	0	108	0	0	0	126	3	0	4	0	1	0	0	0	0	0	242
16:45 - 17:00	0	97	0	0	0	117	1	0	2	0	1	0	0	0	0	0	218
17:00 - 17:15	0	106	0	0	0	129	0	0	2	0	0	0	0	0	0	0	237
17:15 - 17:30	1	153	0	0	0	116	0	0	1	0	1	0	0	0	0	0	272
17:30 - 17:45	2	177	0	0	0	91	0	0	3	0	0	0	0	0	0	0	273
17:45 - 18:00	0	133	0	0	0	111	0	0	7	0	2	0	0	0	0	0	253
18:00 - 18:15	1	83	0	0	0	102	1	0	3	0	1	0	0	0	0	0	191
18:15 - 18:30	2	58	0	0	0	96	0	0	0	0	1	0	0	0	0	0	157
18:30 - 18:45	0	65	0	0	0	94	0	0	1	0	0	0	0	0	0	0	160
18:45 - 19:00	0	50	0	0	0	104	0	0	0	0	2	0	0	0	0	0	156

TrafficCounts

2364 North 1450 East
Lehi, UT 84043
801.636.0891

Intersection Turning Movement Summary

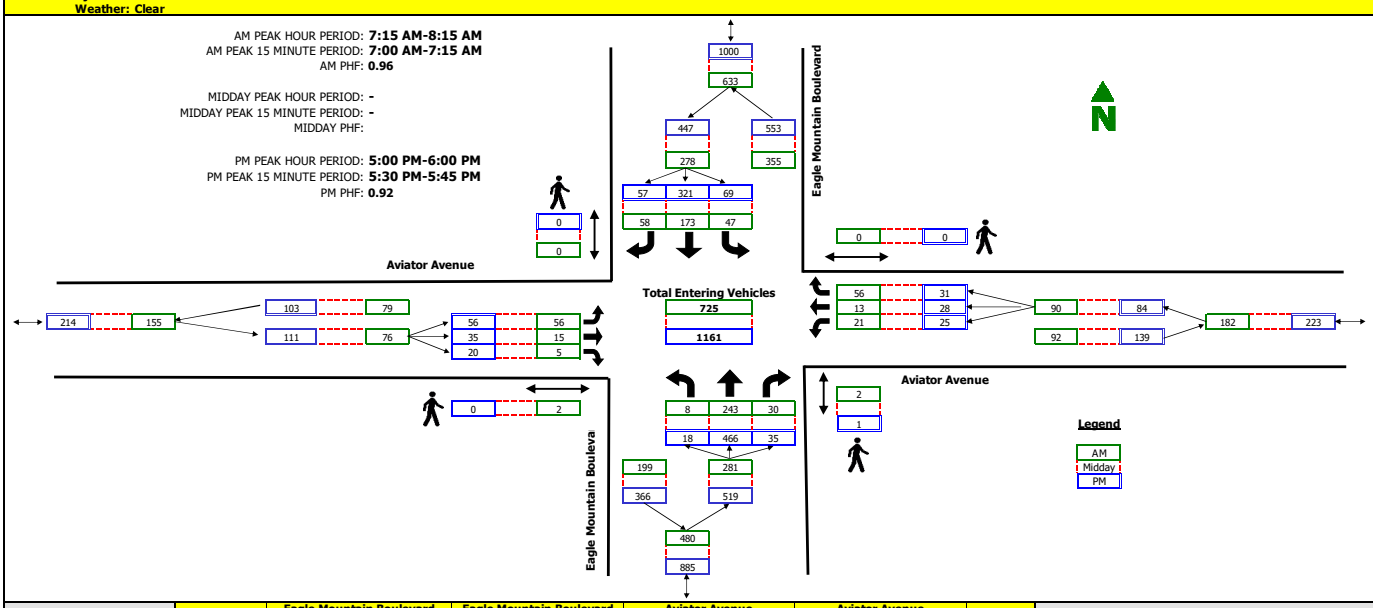
Intersection: Eagle Mountain Boulevard / Aviator Avenue
North/South: Eagle Mountain Boulevard
East/West: Aviator Avenue
Jurisdiction: Eagle Mountain
Project Title: Eagle Quest TIS
Project No: UT21-1962
Weather: Clear

Date: 7-22-21, Thu
Day of Week Adjustment: 100.0%
Month of Year Adjustment: 98.0%
Adjustment Station #: 626
Growth Rate: 0.0%
Number of Years: 0

AM PEAK HOUR PERIOD: **7:15 AM-8:15 AM**
AM PEAK 15 MINUTE PERIOD: **7:00 AM-7:15 AM**
AM PHF: **0.96**

MIDDAY PEAK HOUR PERIOD: **-**
MIDDAY PEAK 15 MINUTE PERIOD: **-**
MIDDAY PHF:

PM PEAK HOUR PERIOD: **5:00 PM-6:00 PM**
PM PEAK 15 MINUTE PERIOD: **5:30 PM-5:45 PM**
PM PHF: **0.92**



RAW COUNT SUMMARIES	Eagle Mountain Boulevard Northbound				Eagle Mountain Boulevard Southbound				Aviator Avenue Eastbound				Aviator Avenue Westbound				TOTAL
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	
AM PERIOD COUNTS																	
Period	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**M**	**N**	**O**	**P**	**TOTAL**
7:00 - 7:15	2	70	2	3	5	46	24	0	15	3	1	0	2	2	17	0	189
7:15 - 7:30	3	76	1	0	5	47	12	0	16	2	1	2	7	3	13	0	186
7:30 - 7:45	2	65	4	0	12	43	29	0	15	3	0	0	3	1	12	0	189
7:45 - 8:00	2	55	19	0	18	48	7	0	6	7	2	0	4	1	13	0	182
8:00 - 8:15	1	47	6	2	12	35	10	0	19	3	2	0	7	8	18	0	168
8:15 - 8:30	1	45	2	0	5	40	11	0	14	4	1	0	0	2	16	0	141
8:30 - 8:45	4	46	3	0	11	44	12	0	17	1	2	2	4	7	14	0	165
8:45 - 9:00	8	46	3	3	10	37	9	0	9	7	3	1	4	3	10	3	149
MIDDAY PERIOD COUNTS																	
Period	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**M**	**N**	**O**	**P**	**TOTAL**
9:00 - 9:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 - 9:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 - 9:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 - 10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 - 10:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15 - 10:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30 - 10:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45 - 11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 - 11:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 - 11:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 - 11:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 - 12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 - 12:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 - 12:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 - 12:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 - 13:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:00 - 13:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:15 - 13:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:30 - 13:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:45 - 14:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:00 - 14:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:15 - 14:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:30 - 14:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:45 - 15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:00 - 15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:15 - 15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:30 - 15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:45 - 16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM PERIOD COUNTS																	
Period	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**M**	**N**	**O**	**P**	**TOTAL**
16:00 - 16:15	4	85	12	2	14	63	8	0	16	9	1	0	7	4	10	0	233
16:15 - 16:30	3	73	6	2	14	67	16	0	12	6	5	1	1	11	9	1	223
16:30 - 16:45	7	98	4	0	22	81	11	0	15	6	2	0	1	5	9	0	261
16:45 - 17:00	6	101	6	0	23	78	14	0	14	8	10	0	3	8	13	0	284
17:00 - 17:15	7	96	7	1	18	80	15	0	13	3	4	0	4	10	9	0	266
17:15 - 17:30	1	146	6	0	17	74	16	0	14	4	3	0	7	3	12	0	303
17:30 - 17:45	1	152	9	0	17	74	18	0	14	13	3	0	5	4	5	0	315
17:45 - 18:00	9	72	13	0	17	93	8	0	15	15	10	0	9	11	5	0	277

TrafficCounts

2364 North 1450 East
Lehi, UT 84043
801.636.0891

Intersection Turning Movement Summary

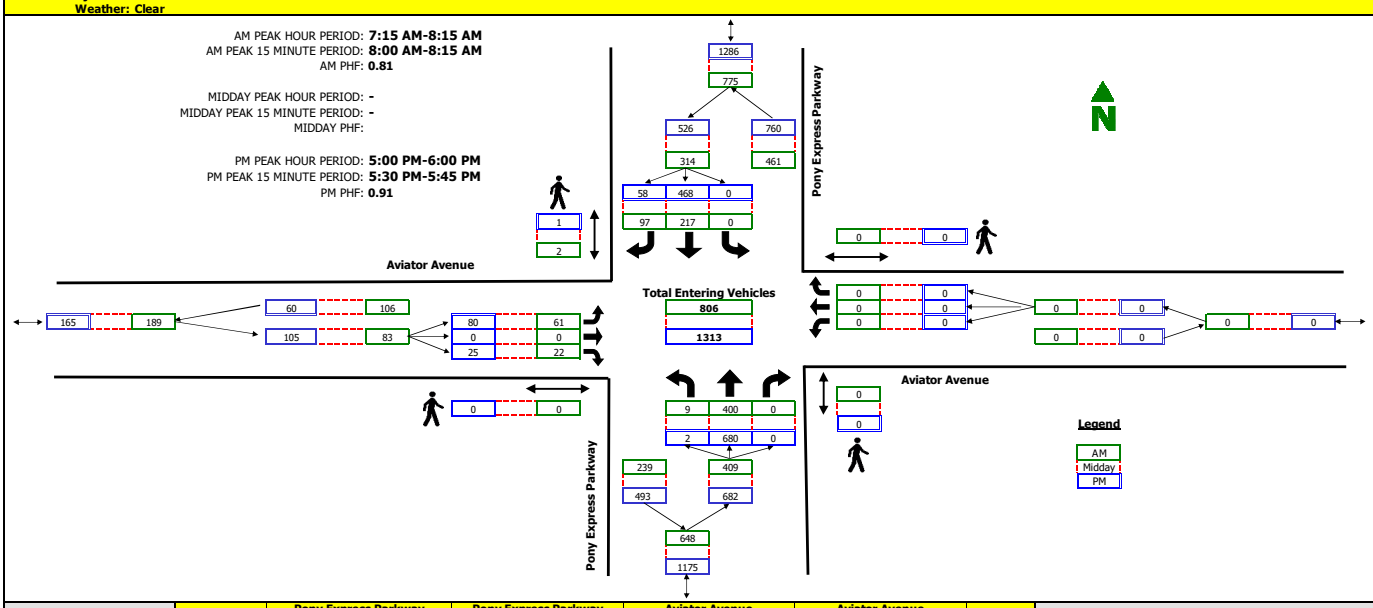
Intersection: Pony Express Parkway / Aviator Avenue
North/South: Pony Express Parkway
East/West: Aviator Avenue
Jurisdiction: Eagle Mountain
Project Title: Eagle Quest TIS
Project No: UT21-1962
Weather: Clear

Date: 7-22-21, Thu
Day of Week Adjustment: 100.0%
Month of Year Adjustment: 98.0%
Adjustment Station #: 626
Growth Rate: 0.0%
Number of Years: 0

AM PEAK HOUR PERIOD: **7:15 AM-8:15 AM**
AM PEAK 15 MINUTE PERIOD: **8:00 AM-8:15 AM**
AM PHF: **0.81**

MIDDAY PEAK HOUR PERIOD: **-**
MIDDAY PEAK 15 MINUTE PERIOD: **-**
MIDDAY PHF:

PM PEAK HOUR PERIOD: **5:00 PM-6:00 PM**
PM PEAK 15 MINUTE PERIOD: **5:30 PM-5:45 PM**
PM PHF: **0.91**



RAW COUNT SUMMARIES	Pony Express Parkway Northbound				Pony Express Parkway Southbound				Aviator Avenue Eastbound				Aviator Avenue Westbound				TOTAL
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	
AM PERIOD COUNTS																	
Period	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**M**	**N**	**O**	**P**	**TOTAL**
7:00 - 7:15	0	110	0	0	0	53	17	0	23	0	5	0	0	0	0	0	208
7:15 - 7:30	2	109	0	0	0	53	9	0	4	0	1	0	0	0	0	0	178
7:30 - 7:45	0	80	0	0	0	47	6	2	6	0	6	0	0	0	0	0	145
7:45 - 8:00	2	107	0	0	0	46	45	0	27	0	8	0	0	0	0	0	235
8:00 - 8:15	5	104	0	0	0	71	37	0	24	0	7	0	0	0	0	0	248
8:15 - 8:30	1	103	0	0	0	45	8	1	10	0	6	0	0	0	0	0	173
8:30 - 8:45	4	84	0	0	0	44	17	0	3	0	1	0	0	0	0	0	153
8:45 - 9:00	7	100	0	0	0	50	21	1	21	0	6	0	0	0	0	0	205
MIDDAY PERIOD COUNTS																	
Period	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**M**	**N**	**O**	**P**	**TOTAL**
9:00 - 9:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 - 9:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 - 9:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 - 10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 - 10:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15 - 10:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30 - 10:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45 - 11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 - 11:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 - 11:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 - 11:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 - 12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 - 12:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 - 12:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 - 12:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 - 13:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:00 - 13:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:15 - 13:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:30 - 13:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:45 - 14:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:00 - 14:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:15 - 14:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:30 - 14:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:45 - 15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:00 - 15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:15 - 15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:30 - 15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:45 - 16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM PERIOD COUNTS																	
Period	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**M**	**N**	**O**	**P**	**TOTAL**
16:00 - 16:15	1	138	0	0	0	109	11	0	30	0	12	0	0	0	0	0	301
16:15 - 16:30	1	143	0	0	0	102	16	0	13	0	3	0	0	0	0	0	278
16:30 - 16:45	0	128	0	0	0	118	10	0	12	0	10	0	0	0	0	0	278
16:45 - 17:00	0	156	0	0	0	129	14	0	18	0	4	0	0	0	0	0	321
17:00 - 17:15	2	161	0	0	0	101	15	0	13	0	7	0	0	0	0	0	299
17:15 - 17:30	0	178	0	0	0	115	8	0	10	0	8	0	0	0	0	0	319
17:30 - 17:45	0	190	0	0	0	124	13	0	27	0	6	0	0	0	0	0	360
17:45 - 18:00	0	151	0	0	0	128	22	1	30	0	4	0	0	0	0	0	335

TrafficCounts

2364 North 1450 East
Lehi, UT 84043
801.636.0891

Intersection Turning Movement Summary

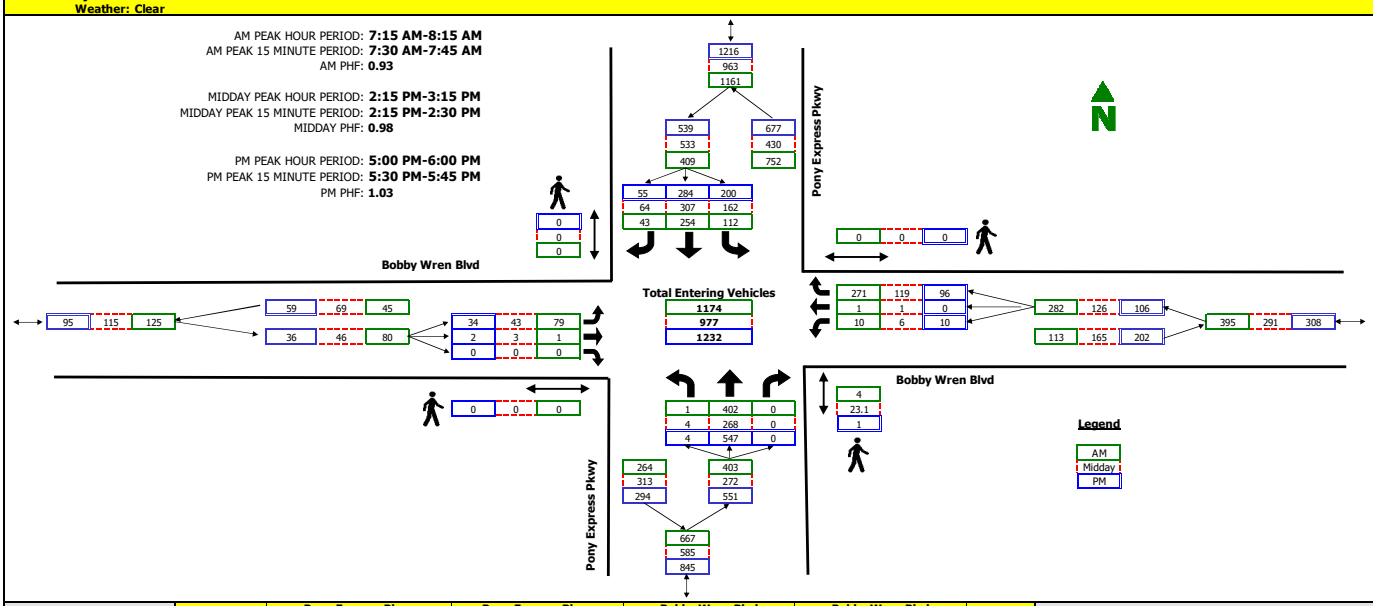
Intersection: Pony Express Pkwy / Bobby Wren Blvd
North/South: Pony Express Pkwy
East/West: Bobby Wren Blvd
Jurisdiction: Eagle Mountain, Utah
Project Title: Airport Road TS
Project No: UT19-1571
Weather: Clear

Date: 12-5-19, Thu
Day of Week Adjustment: 100.0%
Month of Year Adjustment: 100.0%
Adjustment Station #: 626
Growth Rate: 10.0%
Number of Years: 1

AM PEAK HOUR PERIOD: **7:15 AM-8:15 AM**
AM PEAK 15 MINUTE PERIOD: **7:30 AM-7:45 AM**
AM PHF: **0.93**

MIDDAY PEAK HOUR PERIOD: **2:15 PM-3:15 PM**
MIDDAY PEAK 15 MINUTE PERIOD: **2:15 PM-2:30 PM**
MIDDAY PHF: **0.98**

PM PEAK HOUR PERIOD: **5:00 PM-6:00 PM**
PM PEAK 15 MINUTE PERIOD: **5:30 PM-5:45 PM**
PM PHF: **1.03**



RAW COUNT SUMMARIES	Pony Express Pkwy Northbound				Pony Express Pkwy Southbound				Bobby Wren Blvd Eastbound				Bobby Wren Blvd Westbound				TOTAL
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	
AM PERIOD COUNTS																	
Period	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**M**	**N**	**O**	**P**	**TOTAL**
7:00 - 7:15	0	81	0	4	9	27	0	0	10	0	0	0	1	1	43	0	172
7:15 - 7:30	0	95	0	3	15	44	7	0	23	0	0	0	3	0	70	0	257
7:30 - 7:45	0	103	0	1	32	69	10	0	14	1	0	0	3	1	83	0	316
7:45 - 8:00	0	105	0	0	22	63	9	0	20	0	0	0	1	0	58	0	278
8:00 - 8:15	1	62	0	0	33	55	13	0	15	0	0	0	2	0	35	0	216
8:15 - 8:30	0	49	0	0	15	43	2	0	9	0	0	0	2	2	32	0	154
8:30 - 8:45	1	39	0	1	11	26	4	0	10	1	0	0	0	0	25	0	117
8:45 - 9:00	2	49	0	0	13	19	4	0	2	0	0	0	1	0	21	0	111
MIDDAY PERIOD COUNTS																	
Period	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**M**	**N**	**O**	**P**	**TOTAL**
9:00 - 9:15	0	68	0	0	13	36	3	0	6	0	0	0	2	0	31	0	159
9:15 - 9:30	0	67	0	0	8	50	3	0	6	0	0	0	3	0	28	0	165
9:30 - 9:45	0	53	0	0	18	23	4	0	5	1	0	0	0	1	23	0	128
9:45 - 10:00	1	48	0	0	10	23	2	0	3	0	0	0	1	0	23	0	111
10:00 - 10:15	0	36	0	2	7	29	1	0	5	0	0	0	2	0	19	0	99
10:15 - 10:30	1	38	0	0	10	35	4	0	3	0	0	0	1	0	20	0	112
10:30 - 10:45	0	46	0	0	13	31	5	0	4	0	0	0	1	0	10	0	110
10:45 - 11:00	1	33	0	0	15	27	0	0	4	0	0	0	1	0	13	0	94
11:00 - 11:15	0	42	0	0	18	53	5	0	9	0	0	0	0	0	22	0	149
11:15 - 11:30	1	52	0	0	16	35	6	0	1	0	0	0	0	0	15	0	126
11:30 - 11:45	0	52	0	0	13	33	4	0	9	0	0	0	2	0	27	0	140
11:45 - 12:00	0	38	0	0	1	46	3	0	6	1	0	0	4	0	22	0	121
12:00 - 12:15	1	55	0	0	18	30	6	0	3	0	0	0	2	0	16	0	131
12:15 - 12:30	0	44	0	0	20	49	5	0	6	1	0	0	0	0	20	0	145
12:30 - 12:45	0	57	0	0	14	39	7	0	3	0	0	0	3	0	20	0	143
12:45 - 13:00	0	55	0	0	22	49	3	0	4	0	0	0	6	1	19	0	159
13:00 - 13:15	0	37	0	0	11	34	4	0	5	1	0	0	1	0	11	0	104
13:15 - 13:30	0	42	0	0	11	36	9	0	4	0	0	0	1	0	11	0	114
13:30 - 13:45	0	43	0	0	16	29	6	0	4	0	0	0	1	0	14	0	113
13:45 - 14:00	0	43	0	0	19	45	4	0	8	0	0	0	1	0	17	0	137
14:00 - 14:15	0	51	0	1	23	44	7	0	6	0	0	0	0	0	15	0	146
14:15 - 14:30	0	76	0	10	42	74	12	0	7	0	0	0	2	0	36	0	249
14:30 - 14:45	2	62	0	9	38	74	11	0	19	1	0	0	0	1	26	0	234
14:45 - 15:00	0	50	0	1	35	70	27	0	11	2	0	0	1	0	24	0	220
15:00 - 15:15	2	56	0	1	32	61	8	0	2	0	0	0	2	0	22	0	185
15:15 - 15:30	0	84	0	1	35	71	6	0	6	0	0	0	1	1	30	0	234
15:30 - 15:45	0	75	0	2	22	60	14	0	4	0	0	0	3	0	26	0	204
15:45 - 16:00	0	85	0	1	47	67	8	0	7	2	0	0	1	1	22	0	240
PM PERIOD COUNTS																	
Period	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**M**	**N**	**O**	**P**	**TOTAL**
16:00 - 16:15	0	69	0	0	41	60	8	0	11	0	0	0	4	1	32	0	226
16:15 - 16:30	0	68	0	2	41	61	16	0	6	1	0	0	1	2	27	0	223
16:30 - 16:45	1	71	0	1	43	51	10	0	4	0	0	0	3	0	33	0	216
16:45 - 17:00	0	64	0	0	38	61	7	0	10	2	0	0	2	2	13	0	199
17:00 - 17:15	2	74	0	0	46	69	11	0	9	0	0	0	3	0	13	0	227
17:15 - 17:30	0	135	0	0	43	70	16	0	4	1	0	0	1	0	26	0	296
17:30 - 17:45	1	149	0	0	38	61	10	0	11	1	0	0	3	0	25	0	299
17:45 - 18:00	1	139	0	1	55	58	13	0	7	0	0	0	2	0	23	0	298
18:00 - 18:15	0	63	1	0	52	47	5	0	6	0	0	0	2	0	20	0	196
18:15 - 18:30	0	53	0	0	50	56	7	0	1	0	0	0	5	0	23	0	195
18:30 - 18:45	0	42	0	0	51	56	8	0	0	0	0	0	1	0	21	0	179
18:45 - 19:00	0	38	0	0	45	58	12	0	3	0	0	0	4	0	17	0	177

TrafficCounts

2364 North 1450 East
Lehi, UT 84043
801.636.0891

Intersection Turning Movement Summary

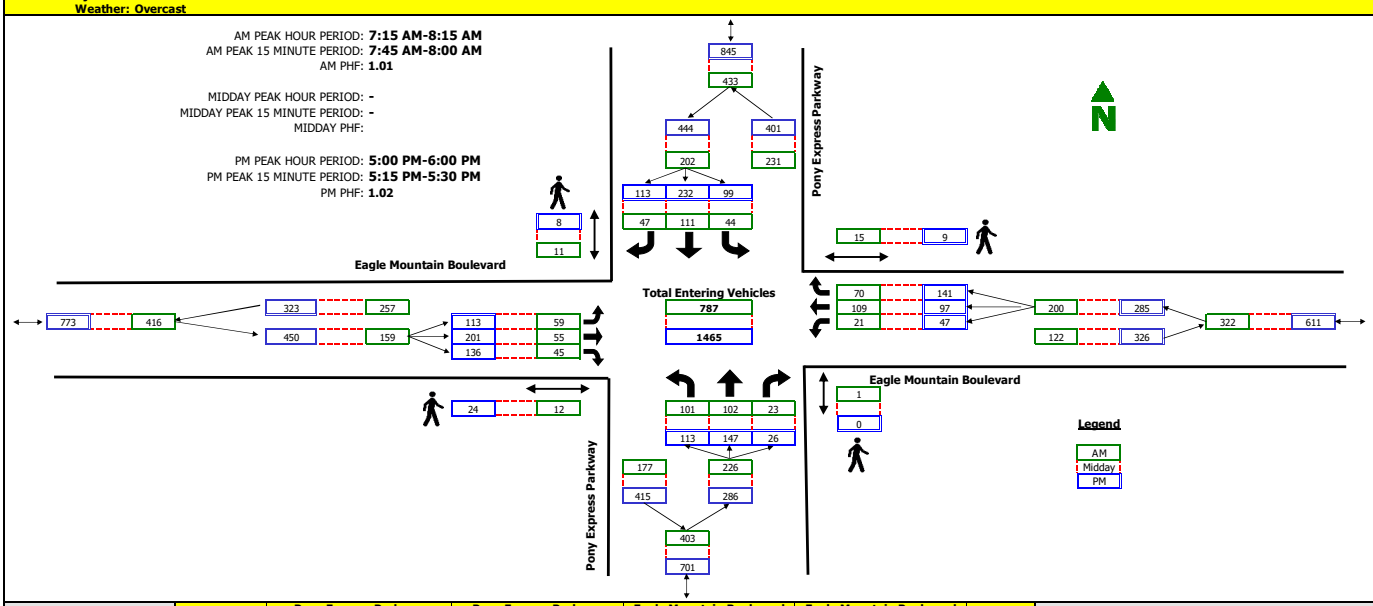
Intersection: Pony Express Parkway / Eagle Mountain Boulevard
North/South: Pony Express Parkway
East/West: Eagle Mountain Boulevard
Jurisdiction: Eagle Mountain
Project Title: Ault Farms TIS
Project No: UT20-1681
Weather: Overcast

Date: 5-14-20, Thu
COVID-19 Adjustment: 71.9%
Month of Year Adjustment: 100.0%
Adjustment Station #: 626
Growth Rate: 10.0%
Number of Years: 1

AM PEAK HOUR PERIOD: **7:15 AM-8:15 AM**
AM PEAK 15 MINUTE PERIOD: **7:45 AM-8:00 AM**
AM PHF: **1.01**

MIDDAY PEAK HOUR PERIOD: **-**
MIDDAY PEAK 15 MINUTE PERIOD: **-**
MIDDAY PHF:

PM PEAK HOUR PERIOD: **5:00 PM-6:00 PM**
PM PEAK 15 MINUTE PERIOD: **5:15 PM-5:30 PM**
PM PHF: **1.02**



RAW COUNT SUMMARIES	Pony Express Parkway Northbound				Pony Express Parkway Southbound				Eagle Mountain Boulevard Eastbound				Eagle Mountain Boulevard Westbound				TOTAL
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	
AM PERIOD COUNTS																	
Period	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**M**	**N**	**O**	**P**	**TOTAL**
7:00 - 7:15	24	19	3	0	3	22	6	0	4	7	17	0	3	13	18	0	139
7:15 - 7:30	26	18	3	0	4	21	11	0	13	7	11	0	4	28	10	0	156
7:30 - 7:45	21	18	8	0	11	33	7	8	13	13	15	10	6	22	18	14	185
7:45 - 8:00	19	28	7	0	17	25	11	1	11	17	8	0	6	24	21	0	194
8:00 - 8:15	26	29	3	1	8	22	14	1	17	13	7	1	3	25	15	0	182
8:15 - 8:30	19	26	3	0	7	11	15	3	11	7	10	0	3	26	14	4	152
8:30 - 8:45	17	21	1	0	15	11	4	0	11	17	7	0	3	14	15	0	136
8:45 - 9:00	7	14	3	0	3	28	10	0	13	11	14	0	10	26	21	0	160
MIDDAY PERIOD COUNTS																	
Period	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**M**	**N**	**O**	**P**	**TOTAL**
9:00 - 9:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 - 9:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 - 9:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 - 10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 - 10:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15 - 10:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30 - 10:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45 - 11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 - 11:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 - 11:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 - 11:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 - 12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 - 12:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 - 12:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 - 12:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 - 13:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:00 - 13:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:15 - 13:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:30 - 13:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:45 - 14:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:00 - 14:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:15 - 14:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:30 - 14:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:45 - 15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:00 - 15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:15 - 15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:30 - 15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:45 - 16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM PERIOD COUNTS																	
Period	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**M**	**N**	**O**	**P**	**TOTAL**
16:00 - 16:15	36	40	6	0	8	28	22	4	25	22	29	3	7	22	15	3	260
16:15 - 16:30	17	25	7	0	19	35	22	1	17	33	25	0	6	24	19	1	249
16:30 - 16:45	18	42	1	0	29	36	14	13	31	49	26	3	3	21	33	19	303
16:45 - 17:00	17	33	3	1	24	50	19	3	21	38	43	3	7	21	29	0	305
17:00 - 17:15	28	47	7	0	26	38	26	3	29	35	40	4	11	24	35	3	346
17:15 - 17:30	25	32	4	0	21	68	29	0	15	60	26	11	8	25	47	1	360
17:30 - 17:45	32	26	10	0	25	54	26	4	28	46	33	7	11	18	21	4	330
17:45 - 18:00	18	29	3	0	18	51	22	0	31	42	25	0	13	21	25	0	298

APPENDIX B

LOS Results

HALES ENGINEERING
innovative transportation solutions

SimTraffic LOS Report

Project: Eagle Mountain Eagle Quest TIS
Analysis Period: *Existing (2021) Background*
Time Period: *Morning Peak Hour* **Project #:** *UT21-1962*

Intersection: Pony Express Parkway & Mid Valley Road
Type: Signalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	155	163	105	13.1	*B*
	T	816	816	100	5.2	*A*
	Subtotal	971	979	101	6.5	*A*
SB	T	558	563	101	6.2	*A*
	R	162	162	100	3.7	*A*
	Subtotal	720	725	101	5.6	*A*
EB	L	122	120	98	16.1	*B*
	R	103	108	105	5.9	*A*
	Subtotal	225	228	101	11.3	*B*
Total		1,916	1,932	101	6.8	*A*

Intersection: Eagle Mountain Boulevard & Aviator Avenue
Type: Signalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	8	7	85	15.9	*B*
	T	322	317	98	14.1	*B*
	R	108	113	104	10.1	*B*
	Subtotal	438	437	100	13.1	*B*
SB	L	62	65	105	11.3	*B*
	T	198	199	101	6.5	*A*
	R	58	61	105	4.0	*A*
	Subtotal	318	325	102	7.0	*A*
EB	L	56	54	96	20.6	*C*
	T	34	30	88	11.6	*B*
	R	5	6	114	2.8	*A*
	Subtotal	95	90	95	16.4	*B*
WB	L	39	43	110	19.0	*B*
	T	22	24	108	15.0	*B*
	R	99	100	101	5.7	*A*
	Subtotal	160	167	104	10.5	*B*
Total		1,012	1,019	101	11.0	*B*

HALES ENGINEERING
innovative transportation solutions

SimTraffic LOS Report

Project: Eagle Mountain Eagle Quest TIS
Analysis Period: *Existing (2021) Background*
Time Period: *Morning Peak Hour* **Project #:** *UT21-1962*

Intersection: Pony Express Parkway & Aviator Avenue
Type: Signalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	170	173	102	14.4	*B*
	T	786	788	100	6.5	*A*
	Subtotal	956	961	101	7.9	*A*
SB	T	351	361	103	8.6	*A*
	R	310	312	101	7.4	*A*
	Subtotal	661	673	102	8.0	*A*
EB	L	185	188	102	15.8	*B*
	R	93	92	99	4.1	*A*
	Subtotal	278	280	101	12.0	*B*
Total		1,895	1,914	101	8.6	*A*

Intersection: Pony Express Parkway & Bobby Wren Blvd
Type: Signalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	2	1	50	21.6	*C*
	T	435	442	102	14.6	*B*
	R	10	10	103	4.1	*A*
	Subtotal	447	453	101	14.4	*B*
SB	L	163	161	99	20.0	*B*
	T	246	256	104	10.6	*B*
	R	35	37	106	7.6	*A*
	Subtotal	444	454	102	13.7	*B*
EB	L	63	61	97	10.8	*B*
	T	2	2	100	11.3	*B*
	R	2	3	150	5.7	*A*
	Subtotal	67	66	99	10.6	*B*
WB	L	39	40	102	15.1	*B*
	T	2	2	100	15.1	*B*
	R	457	456	100	9.6	*A*
	Subtotal	498	498	100	10.1	*A*
Total		1,456	1,471	101	12.5	*B*

HALES ENGINEERING
innovative transportation solutions

SimTraffic LOS Report

Project: Eagle Mountain Eagle Quest TIS
Analysis Period: *Existing (2021) Background*
Time Period: *Morning Peak Hour* **Project #:** *UT21-1962*

Intersection: Pony Express Parkway & Eagle Mountain Boulevard
Type: Roundabout

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	218	219	101	8.4	*A*
	T	265	267	101	9.5	*A*
	R	23	24	103	7.2	*A*
	Subtotal	506	510	101	8.9	*A*
SB	L	53	52	98	7.0	*A*
	T	177	188	106	9.0	*A*
	R	57	58	101	2.6	*A*
	Subtotal	287	298	104	7.4	*A*
EB	L	83	82	99	11.9	*B*
	T	80	82	102	11.4	*B*
	R	79	83	105	12.0	*B*
	Subtotal	242	247	102	11.8	*B*
WB	L	21	20	94	10.1	*B*
	T	150	150	100	11.1	*B*
	R	99	104	105	9.2	*A*
	Subtotal	270	274	101	10.3	*B*
Total		1,305	1,329	102	9.4	*A*

HALES ENGINEERING
innovative transportation solutions

SimTraffic LOS Report

Project: Eagle Mountain Eagle Quest TIS
Analysis Period: *Existing (2021) Background*
Time Period: *Evening Peak Hour* **Project #:** *UT21-1962*

Intersection: Pony Express Parkway & Mid Valley Road
Type: Signalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	36	32	88	9.3	*A*
	T	963	966	100	3.5	*A*
	Subtotal	999	998	100	3.7	*A*
SB	T	828	845	102	3.4	*A*
	R	72	74	102	2.1	*A*
	Subtotal	900	919	102	3.3	*A*
EB	L	44	41	93	11.7	*B*
	R	15	18	118	4.4	*A*
	Subtotal	59	59	100	9.5	*A*
Total		1,959	1,976	101	3.7	*A*

Intersection: Eagle Mountain Boulevard & Aviator Avenue
Type: Signalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	18	17	96	21.6	*C*
	T	514	511	99	16.3	*B*
	R	35	37	106	11.2	*B*
	Subtotal	567	565	100	16.1	*B*
SB	L	130	131	101	13.9	*B*
	T	403	400	99	7.7	*A*
	R	57	55	96	5.1	*A*
	Subtotal	590	586	99	8.8	*A*
EB	L	56	55	98	25.5	*C*
	T	35	37	106	14.4	*B*
	R	20	21	106	5.3	*A*
	Subtotal	111	113	102	18.1	*B*
WB	L	25	24	97	26.3	*C*
	T	28	26	93	18.3	*B*
	R	66	68	103	6.9	*A*
	Subtotal	119	118	99	13.4	*B*
Total		1,387	1,382	100	13.0	*B*

HALES ENGINEERING
innovative transportation solutions

SimTraffic LOS Report

Project: Eagle Mountain Eagle Quest TIS
Analysis Period: *Existing (2021) Background*
Time Period: *Evening Peak Hour* **Project #:** *UT21-1962*

Intersection: Pony Express Parkway & Aviator Avenue
Type: Signalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	37	36	97	13.2	*B*
	T	912	921	101	6.5	*A*
	Subtotal	949	957	101	6.8	*A*
SB	T	785	807	103	7.5	*A*
	R	59	55	93	4.6	*A*
	Subtotal	844	862	102	7.3	*A*
EB	L	87	84	97	12.9	*B*
	R	86	87	101	5.6	*A*
	Subtotal	173	171	99	9.2	*A*
Total		1,966	1,990	101	7.2	*A*

Intersection: Pony Express Parkway & Bobby Wren Blvd
Type: Signalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	4	3	75	7.7	*A*
	T	668	670	100	16.2	*B*
	R	31	28	90	7.1	*A*
	Subtotal	703	701	100	15.8	*B*
SB	L	431	440	102	19.3	*B*
	T	389	402	103	6.1	*A*
	R	51	51	100	4.8	*A*
	Subtotal	871	893	103	12.5	*B*
EB	L	37	37	99	19.4	*B*
	T	2	2	100	26.3	*C*
	R	2	4	200	8.3	*A*
	Subtotal	41	43	105	18.7	*B*
WB	L	26	26	100	21.0	*C*
	T	2	2	100	23.5	*C*
	R	244	250	102	10.5	*B*
	Subtotal	272	278	102	11.6	*B*
Total		1,887	1,915	101	13.8	*B*

HALES ENGINEERING
innovative transportation solutions

SimTraffic LOS Report

Project: Eagle Mountain Eagle Quest TIS
Analysis Period: *Existing (2021) Background*
Time Period: *Evening Peak Hour* **Project #:** *UT21-1962*

Intersection: Pony Express Parkway & Eagle Mountain Boulevard
Type: Roundabout

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	257	255	99	22.6	*C*
	T	307	306	100	23.8	*C*
	R	26	28	108	21.5	*C*
	Subtotal	590	589	100	23.2	*C*
SB	L	62	60	97	12.1	*B*
	T	282	293	104	13.6	*B*
	R	73	77	105	2.8	*A*
	Subtotal	417	430	103	11.5	*B*
EB	L	176	174	99	24.8	*C*
	T	145	144	99	26.7	*D*
	R	180	182	101	25.5	*D*
	Subtotal	501	500	100	25.6	*D*
WB	L	47	46	98	59.8	*F*
	T	180	176	98	63.2	*F*
	R	220	224	102	63.1	*F*
	Subtotal	447	446	100	62.8	*F*
Total		1,955	1,965	101	30.4	*D*

HALES ENGINEERING
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SimTraffic LOS Report

Project: Eagle Mountain Eagle Quest TIS
Analysis Period: *Existing (2021) Plus Project*
Time Period: *Morning Peak Hour* **Project #:** *UT21-1962*

Intersection: Pony Express Parkway & Mid Valley Road
Type: Signalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	155	155	100	13.3	*B*
	T	872	891	102	5.5	*A*
	Subtotal	1,027	1,046	102	6.7	*A*
SB	T	577	572	99	5.7	*A*
	R	162	169	104	3.6	*A*
	Subtotal	739	741	100	5.2	*A*
EB	L	122	119	98	15.6	*B*
	R	103	108	105	5.4	*A*
	Subtotal	225	227	101	10.7	*B*
Total		1,992	2,014	101	6.6	*A*

Intersection: Eagle Mountain Boulevard & Aviator Avenue
Type: Signalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	8	8	97	19.5	*B*
	T	322	317	98	14.4	*B*
	R	108	106	98	10.4	*B*
	Subtotal	438	431	98	13.5	*B*
SB	L	69	69	100	11.5	*B*
	T	198	207	105	6.6	*A*
	R	58	57	98	4.0	*A*
	Subtotal	325	333	102	7.2	*A*
EB	L	56	58	104	20.8	*C*
	T	34	35	103	11.3	*B*
	R	5	5	100	3.2	*A*
	Subtotal	95	98	103	16.5	*B*
WB	L	39	36	92	18.3	*B*
	T	22	23	106	15.8	*B*
	R	121	122	101	5.7	*A*
	Subtotal	182	181	99	9.5	*A*
Total		1,040	1,043	100	11.1	*B*

HALES ENGINEERING
innovative transportation solutions

SimTraffic LOS Report

Project: Eagle Mountain Eagle Quest TIS
Analysis Period: *Existing (2021) Plus Project*
Time Period: *Morning Peak Hour* **Project #:** *UT21-1962*

Intersection: Pony Express Parkway & Aviator Avenue
Type: Signalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	192	190	99	14.2	*B*
	T	842	853	101	6.5	*A*
	Subtotal	1,034	1,043	101	7.9	*A*
SB	T	370	364	98	8.4	*A*
	R	310	313	101	7.1	*A*
	Subtotal	680	677	100	7.8	*A*
EB	L	185	194	105	16.6	*B*
	R	100	105	105	4.3	*A*
	Subtotal	285	299	105	12.3	*B*
Total		2,000	2,019	101	8.5	*A*

Intersection: Pony Express Parkway & Bobby Wren Boulevard
Type: Signalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	2	2	100	7.5	*A*
	T	436	438	101	7.7	*A*
	R	13	12	91	2.6	*A*
	Subtotal	451	452	100	7.6	*A*
SB	L	189	187	99	12.2	*B*
	T	246	245	99	4.9	*A*
	R	35	37	106	3.4	*A*
	Subtotal	470	469	100	7.7	*A*
EB	L	63	66	105	15.2	*B*
	T	2	2	100	7.8	*A*
	R	2	2	100	8.7	*A*
	Subtotal	67	70	104	14.8	*B*
WB	L	48	46	96	19.2	*B*
	T	2	2	100	15.0	*B*
	R	536	541	101	27.9	*C*
	Subtotal	586	589	101	27.2	*C*
Total		1,574	1,580	100	15.3	*B*

HALES ENGINEERING
innovative transportation solutions

SimTraffic LOS Report

Project: Eagle Mountain Eagle Quest TIS
Analysis Period: *Existing (2021) Plus Project*
Time Period: *Morning Peak Hour* **Project #:** *UT21-1962*

Intersection: Pony Express Parkway & Eagle Mountain Boulevard
Type: Roundabout

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	218	217	99	8.1	*A*
	T	266	268	101	9.2	*A*
	R	23	25	110	7.2	*A*
	Subtotal	507	510	101	8.6	*A*
SB	L	54	53	99	5.8	*A*
	T	182	180	99	7.1	*A*
	R	61	61	100	2.6	*A*
	Subtotal	297	294	99	5.9	*A*
EB	L	85	81	96	11.3	*B*
	T	79	79	100	12.2	*B*
	R	79	84	107	12.2	*B*
	Subtotal	243	244	100	11.9	*B*
WB	L	21	20	96	9.4	*A*
	T	150	143	95	9.9	*A*
	R	99	101	102	8.4	*A*
	Subtotal	270	264	98	9.3	*A*
Total		1,316	1,312	100	8.8	*A*

Intersection: Aviator Avenue & South Access 1
Type: Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	T	15	16	105	4.6	*A*
	R	3	4	133	2.5	*A*
	Subtotal	18	20	111	4.2	*A*
SB	***T***	***44***	***47***	***106***	***4.8***	***A***
	Subtotal	44	47	107	4.8	*A*
WB	L	11	13	116	0.3	*A*
	Subtotal	11	13	118	0.3	*A*
Total		74	80	108	3.9	*A*

HALES ENGINEERING
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SimTraffic LOS Report

Project: **Eagle Mountain Eagle Quest TIS**
Analysis Period: ***Existing (2021) Plus Project***
Time Period: ***Morning Peak Hour*** **Project #:** ***UT21-1962***

Intersection: **Aviator Avenue & South Access 2**
Type: **Unsignalized**

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	T	11	10	89	4.7	*A*
	Subtotal	11	10	91	4.7	*A*
SB	***T***	***33***	***32***	***97***	***4.8***	***A***
	R	11	13	116	2.8	*A*
	Subtotal	44	45	102	4.2	*A*
EB	L	3	4	133	0.2	*A*
	Subtotal	3	4	133	0.2	*A*
Total		58	59	101	4.0	*A*

HALES ENGINEERING
innovative transportation solutions

SimTraffic LOS Report

Project: Eagle Mountain Eagle Quest TIS
Analysis Period: *Existing (2021) Plus Project*
Time Period: *Evening Peak Hour* **Project #:** *UT21-1962*

Intersection: Pony Express Parkway & Mid Valley Road
Type: Signalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	36	31	86	10.8	*B*
	T	1,000	999	100	3.9	*A*
	Subtotal	1,036	1,030	99	4.1	*A*
SB	T	891	904	101	3.6	*A*
	R	72	73	101	2.1	*A*
	Subtotal	963	977	101	3.5	*A*
EB	L	44	42	95	10.8	*B*
	R	15	18	118	5.1	*A*
	Subtotal	59	60	102	9.1	*A*
Total		2,060	2,067	100	3.9	*A*

Intersection: Eagle Mountain Boulevard & Aviator Avenue
Type: Signalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	18	15	85	20.5	*C*
	T	514	527	103	17.4	*B*
	R	35	35	100	11.8	*B*
	Subtotal	567	577	102	17.1	*B*
SB	L	154	156	101	15.7	*B*
	T	403	399	99	8.1	*A*
	R	57	60	105	5.6	*A*
	Subtotal	614	615	100	9.8	*A*
EB	L	56	58	104	23.9	*C*
	T	35	38	109	16.1	*B*
	R	20	19	96	5.6	*A*
	Subtotal	111	115	104	18.3	*B*
WB	L	25	23	93	24.7	*C*
	T	28	27	96	17.3	*B*
	R	80	79	99	8.0	*A*
	Subtotal	133	129	97	12.9	*B*
Total		1,424	1,436	101	13.8	*B*

HALES ENGINEERING
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SimTraffic LOS Report

Project: Eagle Mountain Eagle Quest TIS
Analysis Period: *Existing (2021) Plus Project*
Time Period: *Evening Peak Hour* **Project #:** *UT21-1962*

Intersection: Pony Express Parkway & Aviator Avenue
Type: Signalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	51	45	89	13.7	*B*
	T	950	949	100	6.5	*A*
	Subtotal	1,001	994	99	6.8	*A*
SB	T	848	865	102	8.2	*A*
	R	59	57	97	4.3	*A*
	Subtotal	907	922	102	8.0	*A*
EB	L	87	88	101	13.1	*B*
	R	110	110	100	6.2	*A*
	Subtotal	197	198	101	9.3	*A*
Total		2,104	2,114	100	7.6	*A*

Intersection: Pony Express Parkway & Bobby Wren Boulevard
Type: Signalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	4	4	100	9.1	*A*
	T	669	658	98	17.1	*B*
	R	41	44	107	9.4	*A*
	Subtotal	714	706	99	16.6	*B*
SB	L	518	525	101	19.8	*B*
	T	389	401	103	4.5	*A*
	R	51	50	99	3.7	*A*
	Subtotal	958	976	102	12.7	*B*
EB	L	37	40	107	26.1	*C*
	T	2	2	100	20.2	*C*
	R	2	3	150	8.9	*A*
	Subtotal	41	45	110	24.7	*C*
WB	L	32	30	94	25.7	*C*
	T	2	2	100	34.2	*C*
	R	295	298	101	12.5	*B*
	Subtotal	329	330	100	13.8	*B*
Total		2,042	2,057	101	14.5	*B*

HALES ENGINEERING
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SimTraffic LOS Report

Project: Eagle Mountain Eagle Quest TIS
Analysis Period: *Existing (2021) Plus Project*
Time Period: *Evening Peak Hour* **Project #:** *UT21-1962*

Intersection: Pony Express Parkway & Eagle Mountain Boulevard
Type: Roundabout

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	257	263	102	26.8	*D*
	T	311	311	100	28.2	*D*
	R	26	24	92	27.5	*D*
	Subtotal	594	598	101	27.6	*D*
SB	L	63	66	105	12.5	*B*
	T	284	285	100	13.6	*B*
	R	76	82	108	2.7	*A*
	Subtotal	423	433	102	11.4	*B*
EB	L	181	172	95	24.4	*C*
	T	145	139	96	26.2	*D*
	R	180	181	101	24.8	*C*
	Subtotal	506	492	97	25.1	*C*
WB	L	47	47	101	77.4	*F*
	T	180	176	98	78.9	*F*
	R	221	223	101	74.9	*F*
	Subtotal	448	446	100	76.7	*F*
Total		1,971	1,969	100	34.8	*D*

Intersection: Aviator Avenue & South Access 1
Type: Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	***T***	***49***	***45***	***92***	***4.9***	***A***
	R	12	15	122	3.0	*A*
	Subtotal	61	60	98	4.4	*A*
SB	T	29	28	97	4.7	*A*
	Subtotal	29	28	97	4.7	*A*
WB	L	7	8	110	0.3	*A*
	Subtotal	7	8	114	0.3	*A*
Total		97	96	99	4.2	*A*

HALES ENGINEERING
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SimTraffic LOS Report

Project: **Eagle Mountain Eagle Quest TIS**
Analysis Period: ***Existing (2021) Plus Project***
Time Period: ***Evening Peak Hour*** **Project #:** ***UT21-1962***

Intersection: **Aviator Avenue & South Access 2**
Type: **Unsignalized**

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	T	36	33	91	4.8	*A*
	Subtotal	36	33	92	4.8	*A*
SB	***T***	***21***	***21***	***101***	***4.9***	***A***
	R	7	8	110	2.9	*A*
	Subtotal	28	29	104	4.3	*A*
EB	L	12	15	122	0.3	*A*
	Subtotal	12	15	125	0.3	*A*
Total		76	77	101	3.8	*A*

HALES ENGINEERING
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SimTraffic LOS Report

Project: Eagle Mountain Eagle Quest TIS
Analysis Period: *Future (2026) Background*
Time Period: *Morning Peak Hour* **Project #:** *UT21-1962*

Intersection: Pony Express Parkway & Mid Valley Road
Type: Signalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	170	171	101	13.7	*B*
	T	886	895	101	5.7	*A*
	Subtotal	1,056	1,066	101	7.0	*A*
SB	T	615	616	100	6.5	*A*
	R	175	172	98	4.1	*A*
	Subtotal	790	788	100	6.0	*A*
EB	L	130	127	98	15.8	*B*
	R	115	117	102	6.0	*A*
	Subtotal	245	244	100	11.1	*B*
Total		2,091	2,098	100	7.1	*A*

Intersection: Eagle Mountain Boulevard & Aviator Avenue
Type: Signalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	10	9	92	18.7	*B*
	T	366	374	102	16.7	*B*
	R	125	129	103	11.8	*B*
	Subtotal	501	512	102	15.5	*B*
SB	L	70	68	97	12.0	*B*
	T	210	213	101	7.7	*A*
	R	65	68	105	4.8	*A*
	Subtotal	345	349	101	8.0	*A*
EB	L	60	60	100	20.9	*C*
	T	40	40	99	12.2	*B*
	R	10	11	113	4.1	*A*
	Subtotal	110	111	101	16.1	*B*
WB	L	45	47	105	18.9	*B*
	T	25	27	107	14.7	*B*
	R	120	120	100	6.5	*A*
	Subtotal	190	194	102	10.6	*B*
Total		1,145	1,166	102	12.5	*B*

HALES ENGINEERING
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SimTraffic LOS Report

Project: Eagle Mountain Eagle Quest TIS
Analysis Period: *Future (2026) Background*
Time Period: *Morning Peak Hour* **Project #:** *UT21-1962*

Intersection: Pony Express Parkway & Aviator Avenue
Type: Signalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	190	190	100	15.4	*B*
	T	855	873	102	6.5	*A*
	Subtotal	1,045	1,063	102	8.1	*A*
SB	T	405	404	100	8.8	*A*
	R	325	332	102	8.2	*A*
	Subtotal	730	736	101	8.5	*A*
EB	L	200	192	96	16.6	*B*
	R	105	104	99	4.6	*A*
	Subtotal	305	296	97	12.4	*B*
Total		2,081	2,095	101	8.8	*A*

Intersection: Pony Express Parkway & Bobby Wren Blvd
Type: Signalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	5	4	76	11.2	*B*
	T	515	524	102	6.1	*A*
	R	15	16	107	3.0	*A*
	Subtotal	535	544	102	6.0	*A*
SB	L	170	165	97	12.0	*B*
	T	300	299	100	4.7	*A*
	R	40	44	109	3.9	*A*
	Subtotal	510	508	100	7.0	*A*
EB	L	70	71	101	16.1	*B*
	T	5	5	95	16.1	*B*
	R	5	6	114	6.4	*A*
	Subtotal	80	82	103	15.4	*B*
WB	L	50	51	102	16.1	*B*
	T	5	6	114	19.2	*B*
	R	460	469	102	17.6	*B*
	Subtotal	515	526	102	17.5	*B*
Total		1,641	1,660	101	10.5	*B*

HALES ENGINEERING
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SimTraffic LOS Report

Project: Eagle Mountain Eagle Quest TIS
Analysis Period: *Future (2026) Background*
Time Period: *Morning Peak Hour* **Project #:** *UT21-1962*

Intersection: Pony Express Parkway & Eagle Mountain Boulevard
Type: Roundabout

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	275	281	102	16.4	*C*
	T	330	328	99	17.8	*C*
	R	30	29	97	15.8	*C*
	Subtotal	635	638	100	17.1	*C*
SB	L	60	59	99	8.3	*A*
	T	230	226	98	10.5	*B*
	R	65	71	110	2.7	*A*
	Subtotal	355	356	100	8.6	*A*
EB	L	90	96	106	13.4	*B*
	T	71	74	104	15.8	*C*
	R	105	106	101	13.9	*B*
	Subtotal	266	276	104	14.2	*B*
WB	L	30	29	97	19.7	*C*
	T	160	161	100	19.3	*C*
	R	115	118	103	16.9	*C*
	Subtotal	305	308	101	18.4	*C*
Total		1,562	1,578	101	15.0	*B*

HALES ENGINEERING
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SimTraffic LOS Report

Project: Eagle Mountain Eagle Quest TIS
Analysis Period: *Future (2026) Background*
Time Period: *Evening Peak Hour* **Project #:** *UT21-1962*

Intersection: Pony Express Parkway & Mid Valley Road
Type: Signalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	45	40	89	10.5	*B*
	T	1,096	1,017	93	3.6	*A*
	Subtotal	1,141	1,057	93	3.9	*A*
SB	T	905	919	102	3.7	*A*
	R	75	75	100	2.2	*A*
	Subtotal	980	994	101	3.6	*A*
EB	L	45	40	89	11.8	*B*
	R	20	20	101	4.7	*A*
	Subtotal	65	60	92	9.4	*A*
Total		2,185	2,111	97	3.9	*A*

Intersection: Eagle Mountain Boulevard & Aviator Avenue
Type: Signalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	20	17	86	24.4	*C*
	T	515	468	91	17.9	*B*
	R	40	37	92	13.6	*B*
	Subtotal	575	522	91	17.8	*B*
SB	L	140	138	99	14.0	*B*
	T	495	497	100	9.5	*A*
	R	60	58	97	6.9	*A*
	Subtotal	695	693	100	10.2	*B*
EB	L	60	61	102	25.9	*C*
	T	40	40	100	15.8	*B*
	R	25	27	109	6.0	*A*
	Subtotal	125	128	102	18.5	*B*
WB	L	30	31	104	24.0	*C*
	T	30	28	94	17.8	*B*
	R	75	80	107	7.3	*A*
	Subtotal	135	139	103	13.1	*B*
Total		1,528	1,482	97	13.9	*B*

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SimTraffic LOS Report

Project: Eagle Mountain Eagle Quest TIS
Analysis Period: *Future (2026) Background*
Time Period: *Evening Peak Hour* **Project #:** *UT21-1962*

Intersection: Pony Express Parkway & Aviator Avenue
Type: Signalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	45	44	98	14.0	*B*
	T	1,046	963	92	6.8	*A*
	Subtotal	1,091	1,007	92	7.1	*A*
SB	T	860	877	102	8.0	*A*
	R	65	65	100	4.4	*A*
	Subtotal	925	942	102	7.8	*A*
EB	L	95	93	98	13.9	*B*
	R	95	98	103	6.2	*A*
	Subtotal	190	191	101	9.9	*A*
Total		2,206	2,140	97	7.6	*A*

Intersection: Pony Express Parkway & Bobby Wren Blvd
Type: Signalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	5	3	60	12.7	*B*
	T	795	714	90	17.1	*B*
	R	40	40	100	7.8	*A*
	Subtotal	840	757	90	16.6	*B*
SB	L	440	449	102	22.4	*C*
	T	460	470	102	6.5	*A*
	R	55	56	101	5.5	*A*
	Subtotal	955	975	102	13.8	*B*
EB	L	45	44	98	21.8	*C*
	T	5	6	120	18.3	*B*
	R	5	5	100	7.9	*A*
	Subtotal	55	55	100	20.2	*C*
WB	L	30	27	91	21.5	*C*
	T	5	5	100	27.6	*C*
	R	250	247	99	10.8	*B*
	Subtotal	285	279	98	12.1	*B*
Total		2,135	2,066	97	14.7	*B*

HALES ENGINEERING
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SimTraffic LOS Report

Project: Eagle Mountain Eagle Quest TIS
Analysis Period: *Future (2026) Background*
Time Period: *Evening Peak Hour* **Project #:** *UT21-1962*

Intersection: Pony Express Parkway & Eagle Mountain Boulevard
Type: Roundabout

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	315	285	90	235.6	*F*
	T	415	365	88	238.4	*F*
	R	35	29	83	238.4	*F*
	Subtotal	765	679	89	237.2	*F*
SB	L	75	76	101	19.1	*C*
	T	346	349	101	21.3	*C*
	R	75	77	103	2.9	*A*
	Subtotal	496	502	101	18.1	*C*
EB	L	180	179	100	57.4	*F*
	T	151	154	102	58.9	*F*
	R	220	222	101	55.0	*F*
	Subtotal	551	555	101	56.9	*F*
WB	L	70	62	89	351.2	*F*
	T	185	162	88	357.1	*F*
	R	245	210	86	359.1	*F*
	Subtotal	500	434	87	357.2	*F*
Total		2,311	2,170	94	173.0	*F*

HALES ENGINEERING
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SimTraffic LOS Report

Project: Eagle Mountain Eagle Quest TIS
Analysis Period: *Future (2026) Background (Mitigated)*
Time Period: *Morning Peak Hour* **Project #:** *UT21-1962*

Intersection: Pony Express Parkway & Mid Valley Road
Type: Signalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	170	167	98	14.1	*B*
	T	886	890	100	5.8	*A*
	Subtotal	1,056	1,057	100	7.1	*A*
SB	T	615	608	99	6.6	*A*
	R	175	173	99	3.9	*A*
	Subtotal	790	781	99	6.0	*A*
EB	L	130	128	99	16.4	*B*
	R	115	115	100	5.8	*A*
	Subtotal	245	243	99	11.4	*B*
Total		2,091	2,081	100	7.2	*A*

Intersection: Eagle Mountain Boulevard & Aviator Avenue
Type: Signalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	10	8	82	18.3	*B*
	T	366	376	103	16.3	*B*
	R	125	124	99	12.1	*B*
	Subtotal	501	508	101	15.3	*B*
SB	L	70	67	96	12.7	*B*
	T	210	211	100	7.4	*A*
	R	65	68	105	4.7	*A*
	Subtotal	345	346	100	7.9	*A*
EB	L	60	57	95	20.6	*C*
	T	40	40	99	12.7	*B*
	R	10	12	123	4.1	*A*
	Subtotal	110	109	99	15.9	*B*
WB	L	45	49	109	19.8	*B*
	T	25	26	103	15.0	*B*
	R	120	120	100	6.5	*A*
	Subtotal	190	195	103	11.0	*B*
Total		1,145	1,158	101	12.5	*B*

HALES ENGINEERING
innovative transportation solutions

SimTraffic LOS Report

Project: Eagle Mountain Eagle Quest TIS
Analysis Period: *Future (2026) Background (Mitigated)*
Time Period: *Morning Peak Hour* **Project #:** *UT21-1962*

Intersection: Pony Express Parkway & Aviator Avenue
Type: Signalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	190	188	99	15.0	*B*
	T	855	858	100	6.4	*A*
	Subtotal	1,045	1,046	100	7.9	*A*
SB	T	405	402	99	9.4	*A*
	R	325	323	99	7.9	*A*
	Subtotal	730	725	99	8.7	*A*
EB	L	200	200	100	16.1	*B*
	R	105	108	103	4.6	*A*
	Subtotal	305	308	101	12.1	*B*
Total		2,081	2,079	100	8.8	*A*

Intersection: Pony Express Parkway & Bobby Wren Blvd
Type: Signalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	5	4	76	7.5	*A*
	T	515	521	101	6.2	*A*
	R	15	17	113	3.5	*A*
	Subtotal	535	542	101	6.1	*A*
SB	L	170	166	98	11.4	*B*
	T	300	303	101	4.7	*A*
	R	40	39	97	3.8	*A*
	Subtotal	510	508	100	6.8	*A*
EB	L	70	67	96	15.9	*B*
	T	5	5	95	16.5	*B*
	R	5	5	95	8.3	*A*
	Subtotal	80	77	96	15.4	*B*
WB	L	50	46	92	17.6	*B*
	T	5	5	95	18.9	*B*
	R	460	455	99	17.7	*B*
	Subtotal	515	506	98	17.7	*B*
Total		1,641	1,633	99	10.4	*B*

HALES ENGINEERING
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SimTraffic LOS Report

Project: Eagle Mountain Eagle Quest TIS
Analysis Period: *Future (2026) Background (Mitigated)*
Time Period: *Morning Peak Hour* **Project #:** *UT21-1962*

Intersection: Pony Express Parkway & Eagle Mountain Boulevard
Type: Roundabout

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	275	280	102	7.6	*A*
	T	330	331	100	7.8	*A*
	R	30	31	104	5.8	*A*
	Subtotal	635	642	101	7.6	*A*
SB	L	60	59	99	8.4	*A*
	T	230	230	100	10.0	*A*
	R	65	67	103	2.8	*A*
	Subtotal	355	356	100	8.4	*A*
EB	L	90	94	104	11.4	*B*
	T	71	71	100	11.6	*B*
	R	105	112	106	11.0	*B*
	Subtotal	266	277	104	11.3	*B*
WB	L	30	29	97	10.9	*B*
	T	160	162	101	11.7	*B*
	R	115	117	102	6.1	*A*
	Subtotal	305	308	101	9.5	*A*
Total		1,562	1,583	101	8.8	*A*

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SimTraffic LOS Report

Project: Eagle Mountain Eagle Quest TIS
Analysis Period: *Future (2026) Background (Mitigated)*
Time Period: *Evening Peak Hour* **Project #:** *UT21-1962*

Intersection: Pony Express Parkway & Mid Valley Road
Type: Signalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	45	44	98	10.7	*B*
	T	1,096	1,083	99	4.0	*A*
	Subtotal	1,141	1,127	99	4.3	*A*
SB	T	905	914	101	3.8	*A*
	R	75	77	103	2.3	*A*
	Subtotal	980	991	101	3.7	*A*
EB	L	45	43	96	12.2	*B*
	R	20	20	101	5.1	*A*
	Subtotal	65	63	97	9.9	*A*
Total		2,185	2,181	100	4.2	*A*

Intersection: Eagle Mountain Boulevard & Aviator Avenue
Type: Signalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	20	18	91	23.7	*C*
	T	515	503	98	18.4	*B*
	R	40	42	105	13.2	*B*
	Subtotal	575	563	98	18.2	*B*
SB	L	140	135	97	15.4	*B*
	T	495	505	102	9.2	*A*
	R	60	61	102	6.6	*A*
	Subtotal	695	701	101	10.2	*B*
EB	L	60	58	97	26.2	*C*
	T	40	44	110	16.2	*B*
	R	25	26	105	6.3	*A*
	Subtotal	125	128	102	18.7	*B*
WB	L	30	30	101	25.5	*C*
	T	30	31	104	18.0	*B*
	R	75	76	101	7.6	*A*
	Subtotal	135	137	101	13.9	*B*
Total		1,528	1,529	100	14.2	*B*

HALES ENGINEERING
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SimTraffic LOS Report

Project: Eagle Mountain Eagle Quest TIS
Analysis Period: *Future (2026) Background (Mitigated)*
Time Period: *Evening Peak Hour* **Project #:** *UT21-1962*

Intersection: Pony Express Parkway & Aviator Avenue
Type: Signalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	45	41	91	12.9	*B*
	T	1,046	1,034	99	6.7	*A*
	Subtotal	1,091	1,075	99	6.9	*A*
SB	T	860	872	101	7.9	*A*
	R	65	64	99	4.4	*A*
	Subtotal	925	936	101	7.7	*A*
EB	L	95	94	99	14.2	*B*
	R	95	94	99	5.9	*A*
	Subtotal	190	188	99	10.1	*A*
Total		2,206	2,199	100	7.5	*A*

Intersection: Pony Express Parkway & Bobby Wren Blvd
Type: Signalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	5	5	100	11.8	*B*
	T	795	788	99	18.2	*B*
	R	40	39	98	9.8	*A*
	Subtotal	840	832	99	17.8	*B*
SB	L	440	443	101	23.2	*C*
	T	460	469	102	6.5	*A*
	R	55	53	96	5.4	*A*
	Subtotal	955	965	101	14.1	*B*
EB	L	45	42	93	21.2	*C*
	T	5	5	100	21.6	*C*
	R	5	6	120	10.6	*B*
	Subtotal	55	53	96	20.0	*B*
WB	L	30	31	104	22.7	*C*
	T	5	5	100	25.9	*C*
	R	250	244	98	11.1	*B*
	Subtotal	285	280	98	12.6	*B*
Total		2,135	2,130	100	15.5	*B*

HALES ENGINEERING
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SimTraffic LOS Report

Project: Eagle Mountain Eagle Quest TIS
Analysis Period: *Future (2026) Background (Mitigated)*
Time Period: *Evening Peak Hour* **Project #:** *UT21-1962*

Intersection: Pony Express Parkway & Eagle Mountain Boulevard
Type: Roundabout

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	315	308	98	10.8	*B*
	T	415	411	99	8.2	*A*
	R	35	37	106	6.1	*A*
	Subtotal	765	756	99	9.2	*A*
SB	L	75	75	100	25.1	*D*
	T	346	356	103	27.1	*D*
	R	75	76	101	3.1	*A*
	Subtotal	496	507	102	23.2	*C*
EB	L	180	180	100	21.9	*C*
	T	151	156	103	30.1	*D*
	R	220	225	102	28.8	*D*
	Subtotal	551	561	102	26.9	*D*
WB	L	70	69	99	22.1	*C*
	T	185	185	100	23.0	*C*
	R	245	241	98	8.0	*A*
	Subtotal	500	495	99	15.6	*C*
Total		2,311	2,319	100	17.9	*C*

HALES ENGINEERING
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SimTraffic LOS Report

Project: Eagle Mountain Eagle Quest TIS
Analysis Period: *Future (2026) Plus Project*
Time Period: *Morning Peak Hour* **Project #:** *UT21-1962*

Intersection: Pony Express Parkway & Mid Valley Road
Type: Signalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	170	168	99	15.1	*B*
	T	1,057	1,047	99	6.3	*A*
	Subtotal	1,227	1,215	99	7.5	*A*
SB	T	672	673	100	6.8	*A*
	R	175	170	97	4.0	*A*
	Subtotal	847	843	100	6.2	*A*
EB	L	130	124	96	16.9	*B*
	R	115	118	103	5.8	*A*
	Subtotal	245	242	99	11.5	*B*
Total		2,318	2,300	99	7.5	*A*

Intersection: Eagle Mountain Boulevard & Aviator Avenue
Type: Signalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	10	9	92	16.7	*B*
	T	377	384	102	17.1	*B*
	R	125	128	102	12.1	*B*
	Subtotal	512	521	102	15.9	*B*
SB	L	92	90	98	14.5	*B*
	T	210	211	100	7.6	*A*
	R	65	65	100	4.7	*A*
	Subtotal	367	366	100	8.8	*A*
EB	L	60	56	94	20.2	*C*
	T	40	39	97	12.5	*B*
	R	10	9	92	4.2	*A*
	Subtotal	110	104	95	15.9	*B*
WB	L	45	46	103	18.9	*B*
	T	25	27	107	16.1	*B*
	R	186	186	100	7.6	*A*
	Subtotal	256	259	101	10.5	*B*
Total		1,245	1,250	100	12.7	*B*

HALES ENGINEERING
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SimTraffic LOS Report

Project: Eagle Mountain Eagle Quest TIS
Analysis Period: *Future (2026) Plus Project*
Time Period: *Morning Peak Hour* **Project #:** *UT21-1962*

Intersection: Pony Express Parkway & Aviator Avenue
Type: Signalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	190	191	100	18.1	*B*
	T	736	726	99	9.8	*A*
	R	10	11	113	4.0	*A*
	Subtotal	936	928	99	11.4	*B*
SB	L	91	91	100	21.0	*C*
	T	371	374	101	11.7	*B*
	R	325	326	100	8.8	*A*
	Subtotal	787	791	101	11.6	*B*
EB	L	200	193	97	21.0	*C*
	T	22	22	99	13.4	*B*
	R	105	103	98	4.4	*A*
	Subtotal	327	318	97	15.1	*B*
WB	L	34	31	91	17.7	*B*
	T	66	63	95	15.2	*B*
	R	291	297	102	10.9	*B*
	Subtotal	391	391	100	12.1	*B*
Total		2,442	2,428	99	12.1	*B*

Intersection: Pony Express Parkway & Bobby Wren Blvd
Type: Signalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	5	5	95	8.8	*A*
	T	525	517	98	5.6	*A*
	R	12	12	102	2.9	*A*
	Subtotal	542	534	99	5.6	*A*
SB	L	136	134	99	10.9	*B*
	T	334	336	101	4.6	*A*
	R	40	40	99	3.9	*A*
	Subtotal	510	510	100	6.2	*A*
EB	L	70	71	101	16.4	*B*
	T	5	6	114	16.2	*B*
	R	5	5	95	8.4	*A*
	Subtotal	80	82	103	15.9	*B*
WB	L	40	38	94	16.1	*B*
	T	5	4	76	18.5	*B*
	R	340	342	101	11.0	*B*
	Subtotal	385	384	100	11.6	*B*
Total		1,519	1,510	99	7.9	*A*

HALES ENGINEERING
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SimTraffic LOS Report

Project: Eagle Mountain Eagle Quest TIS
Analysis Period: *Future (2026) Plus Project*
Time Period: *Morning Peak Hour* **Project #:** *UT21-1962*

Intersection: Pony Express Parkway & Eagle Mountain Boulevard
Type: Roundabout

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	275	277	101	16.8	*C*
	T	333	338	102	19.0	*C*
	R	30	32	108	15.6	*C*
	Subtotal	638	647	101	17.9	*C*
SB	L	62	60	97	8.3	*A*
	T	242	237	98	10.4	*B*
	R	76	79	104	2.8	*A*
	Subtotal	380	376	99	8.5	*A*
EB	L	93	88	94	14.2	*B*
	T	71	78	110	15.6	*C*
	R	105	104	99	14.1	*B*
	Subtotal	269	270	100	14.6	*B*
WB	L	30	28	94	14.4	*B*
	T	160	164	102	16.1	*C*
	R	116	109	94	13.3	*B*
	Subtotal	306	301	98	14.9	*B*
Total		1,592	1,594	100	14.5	*B*

Intersection: West Collector & West Access 1
Type: Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	R	9	8	91	0.3	*A*
	Subtotal	9	8	89	0.3	*A*
WB	***L***	***26***	***28***	***109***	***3.9***	***A***
	Subtotal	26	28	108	3.9	*A*
Total		34	36	104	3.1	*A*

HALES ENGINEERING
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SimTraffic LOS Report

Project: **Eagle Mountain Eagle Quest TIS**
Analysis Period: ***Future (2026) Plus Project***
Time Period: ***Morning Peak Hour*** **Project #:** ***UT21-1962***

Intersection: **West Collector & West Access 2**
Type: **Unsignalized**

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	T	9	8	91	1.2	*A*
	R	35	35	100	0.5	*A*
	Subtotal	44	43	98	0.6	*A*
SB	T	26	28	109	0.8	*A*
	Subtotal	26	28	108	0.8	*A*
WB	***L***	***105***	***105***	***100***	***4.5***	***A***
	Subtotal	105	105	100	4.5	*A*
Total		175	176	101	2.9	*A*

Intersection: **Aviator Avenue & West Collector**
Type: **Unsignalized**

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
SB	T	0	0	0		
	R	***131***	***132***	***101***	***4.1***	***A***
	Subtotal	131	132	101	4.1	*A*
EB	L	44	42	96	4.1	*A*
	T	80	82	103	2.0	*A*
	Subtotal	124	124	100	2.7	*A*
WB	T	216	217	100	0.7	*A*
	Subtotal	216	217	100	0.7	*A*
Total		470	473	101	2.2	*A*

HALES ENGINEERING
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SimTraffic LOS Report

Project: **Eagle Mountain Eagle Quest TIS**
Analysis Period: ***Future (2026) Plus Project***
Time Period: ***Morning Peak Hour*** **Project #:** ***UT21-1962***

Intersection: **Aviator Avenue & South Access 1**
Type: **Unsignalized**

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	43	45	105	5.0	*A*
	T	1	2	200	4.3	*A*
	Subtotal	44	47	107	5.0	*A*
SB	***T***	***1***	***1***	***100***	***7.9***	***A***
	R	52	49	94	3.7	*A*
	Subtotal	53	50	94	3.8	*A*
EB	L	17	16	94	2.0	*A*
	T	37	38	102	0.4	*A*
	R	12	14	119	0.1	*A*
	Subtotal	66	68	103	0.7	*A*
WB	T	121	123	101	0.8	*A*
	Subtotal	121	123	102	0.8	*A*
Total		284	288	101	2.0	*A*

Intersection: **Aviator Avenue & South Access 2**
Type: **Unsignalized**

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	43	42	98	4.3	*A*
	T	***1***	***2***	***200***	***5.8***	***A***
	Subtotal	44	44	100	4.4	*A*
SB	T	1	0	0		
	R	78	79	102	3.2	*A*
	Subtotal	79	79	100	3.2	*A*
EB	L	25	23	91	1.9	*A*
	T	0	0	0		
	R	12	15	128	0.2	*A*
	Subtotal	37	38	103	1.2	*A*
Total		160	161	101	3.1	*A*

HALES ENGINEERING
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SimTraffic LOS Report

Project: Eagle Mountain Eagle Quest TIS
Analysis Period: *Future (2026) Plus Project*
Time Period: *Evening Peak Hour* **Project #:** *UT21-1962*

Intersection: Pony Express Parkway & Mid Valley Road
Type: Signalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	45	43	96	12.3	*B*
	T	1,208	1,208	100	4.5	*A*
	Subtotal	1,253	1,251	100	4.8	*A*
SB	T	1,095	1,086	99	4.2	*A*
	R	75	76	101	2.5	*A*
	Subtotal	1,170	1,162	99	4.1	*A*
EB	L	45	46	102	12.9	*B*
	R	20	19	96	5.7	*A*
	Subtotal	65	65	100	10.8	*B*
Total		2,488	2,478	100	4.6	*A*

Intersection: Eagle Mountain Boulevard & Aviator Avenue
Type: Signalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	20	18	91	24.3	*C*
	T	522	518	99	19.9	*B*
	R	40	36	90	13.8	*B*
	Subtotal	582	572	98	19.7	*B*
SB	L	213	220	103	17.4	*B*
	T	495	504	102	9.9	*A*
	R	60	62	104	7.2	*A*
	Subtotal	768	786	102	11.8	*B*
EB	L	60	54	90	27.3	*C*
	T	40	39	98	17.3	*B*
	R	25	24	97	5.7	*A*
	Subtotal	125	117	94	19.5	*B*
WB	L	30	28	94	28.2	*C*
	T	30	28	94	20.5	*C*
	R	118	121	103	8.7	*A*
	Subtotal	178	177	99	13.7	*B*
Total		1,652	1,652	100	15.3	*B*

HALES ENGINEERING
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SimTraffic LOS Report

Project: Eagle Mountain Eagle Quest TIS
Analysis Period: *Future (2026) Plus Project*
Time Period: *Evening Peak Hour* **Project #:** *UT21-1962*

Intersection: Pony Express Parkway & Aviator Avenue
Type: Signalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	45	46	102	13.9	*B*
	T	947	948	100	18.5	*B*
	R	37	35	95	8.0	*A*
	Subtotal	1,029	1,029	100	17.9	*B*
SB	L	345	344	100	25.2	*C*
	T	706	701	99	8.6	*A*
	R	65	65	100	4.7	*A*
	Subtotal	1,116	1,110	99	13.5	*B*
EB	L	95	94	99	29.7	*C*
	T	73	71	98	22.3	*C*
	R	95	95	100	6.0	*A*
	Subtotal	263	260	99	19.0	*B*
WB	L	20	18	91	27.2	*C*
	T	43	40	93	23.2	*C*
	R	211	205	97	11.1	*B*
	Subtotal	274	263	96	14.0	*B*
Total		2,681	2,662	99	15.8	*B*

Intersection: Pony Express Parkway & Bobby Wren Blvd
Type: Signalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	5	4	80	10.4	*B*
	T	833	836	100	8.9	*A*
	R	30	30	101	5.2	*A*
	Subtotal	868	870	100	8.8	*A*
SB	L	285	279	98	14.0	*B*
	T	480	478	99	4.5	*A*
	R	55	57	103	3.9	*A*
	Subtotal	820	814	99	7.7	*A*
EB	L	45	44	98	20.5	*C*
	T	5	6	120	20.6	*C*
	R	5	7	140	7.0	*A*
	Subtotal	55	57	104	18.9	*B*
WB	L	25	24	97	20.8	*C*
	T	5	4	80	28.1	*C*
	R	151	151	100	9.3	*A*
	Subtotal	181	179	99	11.3	*B*
Total		1,924	1,920	100	8.9	*A*

HALES ENGINEERING
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SimTraffic LOS Report

Project: Eagle Mountain Eagle Quest TIS
Analysis Period: *Future (2026) Plus Project*
Time Period: *Evening Peak Hour* **Project #:** *UT21-1962*

Intersection: Pony Express Parkway & Eagle Mountain Boulevard
Type: Roundabout

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	315	312	99	12.2	*B*
	T	427	428	100	9.5	*A*
	R	35	32	91	7.9	*A*
	Subtotal	777	772	99	10.5	*B*
SB	L	76	73	96	29.0	*D*
	T	352	354	100	28.6	*D*
	R	82	82	100	3.1	*A*
	Subtotal	510	509	100	24.5	*C*
EB	L	193	188	97	16.7	*C*
	T	150	150	100	17.8	*C*
	R	220	228	104	16.7	*C*
	Subtotal	563	566	101	17.0	*C*
WB	L	70	66	95	24.6	*C*
	T	185	180	97	26.2	*D*
	R	247	255	103	8.4	*A*
	Subtotal	502	501	100	16.9	*C*
Total		2,352	2,348	100	16.5	*C*

Intersection: West Collector & West Access 1
Type: Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	R	29	29	101	0.6	*A*
	Subtotal	29	29	100	0.6	*A*
WB	***L***	***17***	***15***	***87***	***3.8***	***A***
	Subtotal	17	15	88	3.8	*A*
Total		46	44	96	1.7	*A*

HALES ENGINEERING
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SimTraffic LOS Report

Project: Eagle Mountain Eagle Quest TIS
Analysis Period: *Future (2026) Plus Project*
Time Period: *Evening Peak Hour* **Project #:** *UT21-1962*

Intersection: West Collector & West Access 2
Type: Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	T	29	29	100	1.9	*A*
	R	117	117	100	0.9	*A*
	Subtotal	146	146	100	1.1	*A*
SB	T	17	15	87	0.8	*A*
	Subtotal	17	15	88	0.8	*A*
WB	***L***	***69***	***68***	***99***	***4.5***	***A***
	Subtotal	69	68	99	4.5	*A*
Total		232	229	99	2.1	*A*

Intersection: Aviator Avenue & West Collector
Type: Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
SB	T	0	1	400	0.3	*A*
	R	86	83	97	3.4	*A*
	Subtotal	86	84	98	3.4	*A*
EB	***L***	***146***	***146***	***100***	***5.4***	***A***
	T	309	303	98	3.2	*A*
	Subtotal	455	449	99	3.9	*A*
WB	T	153	145	95	0.6	*A*
	Subtotal	153	145	95	0.6	*A*
Total		694	678	98	3.1	*A*

HALES ENGINEERING
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SimTraffic LOS Report

Project: Eagle Mountain Eagle Quest TIS
Analysis Period: *Future (2026) Plus Project*
Time Period: *Evening Peak Hour* **Project #:** *UT21-1962*

Intersection: Aviator Avenue & South Access 1
Type: Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	35	33	94	6.0	*A*
	T	***1***	***1***	***100***	***8.8***	***A***
	Subtotal	36	34	94	6.1	*A*
SB	T	1	1	100	3.3	*A*
	R	33	33	101	3.2	*A*
	Subtotal	34	34	100	3.2	*A*
EB	L	57	58	101	2.3	*A*
	T	142	136	96	1.2	*A*
	R	55	56	101	0.5	*A*
	Subtotal	254	250	98	1.3	*A*
WB	T	85	79	93	0.7	*A*
	Subtotal	85	79	93	0.7	*A*
Total		409	397	97	1.7	*A*

Intersection: Aviator Avenue & South Access 2
Type: Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	34	34	100	4.9	*A*
	T	***1***	***1***	***100***	***6.8***	***A***
	Subtotal	35	35	100	5.0	*A*
SB	T	1	1	100	4.3	*A*
	R	51	46	90	3.1	*A*
	Subtotal	52	47	90	3.1	*A*
EB	L	87	83	95	2.4	*A*
	R	54	54	100	0.9	*A*
	Subtotal	141	137	97	1.8	*A*
Total		229	219	96	2.6	*A*

HALES ENGINEERING
innovative transportation solutions

SimTraffic LOS Report

Project: Eagle Mountain Eagle Quest TIS
Analysis Period: *Future (2040) Background*
Time Period: *Morning Peak Hour* **Project #:** *UT21-1962*

Intersection: Pony Express Parkway & Mid Valley Road
Type: Signalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	200	198	99	19.3	*B*
	T	1,036	1,042	101	8.3	*A*
	R	10	11	107	3.0	*A*
	Subtotal	1,246	1,251	100	10.0	*A*
SB	L	15	14	92	19.4	*B*
	T	705	701	99	9.5	*A*
	R	195	188	96	4.3	*A*
	Subtotal	915	903	99	8.6	*A*
EB	L	150	149	99	19.3	*B*
	T	25	23	93	20.0	*B*
	R	135	138	102	7.5	*A*
	Subtotal	310	310	100	14.1	*B*
WB	L	10	12	117	15.5	*B*
	T	50	48	96	15.6	*B*
	R	30	33	110	8.3	*A*
	Subtotal	90	93	103	13.0	*B*
Total		2,562	2,557	100	10.1	*B*

Intersection: Eagle Mountain Boulevard & Aviator Avenue
Type: Signalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	15	13	85	13.2	*B*
	T	335	336	100	10.1	*B*
	R	130	135	104	6.9	*A*
	Subtotal	480	484	101	9.3	*A*
SB	L	100	92	92	11.8	*B*
	T	175	174	100	5.4	*A*
	R	80	81	102	2.7	*A*
	Subtotal	355	347	98	6.5	*A*
EB	L	80	81	102	17.8	*B*
	T	60	61	102	12.3	*B*
	R	15	15	98	3.1	*A*
	Subtotal	155	157	101	14.3	*B*
WB	L	50	48	96	20.0	*B*
	T	40	42	104	15.3	*B*
	R	155	160	103	5.9	*A*
	Subtotal	245	250	102	10.2	*B*
Total		1,236	1,238	100	9.3	*A*

HALES ENGINEERING
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SimTraffic LOS Report

Project: Eagle Mountain Eagle Quest TIS
Analysis Period: *Future (2040) Background*
Time Period: *Morning Peak Hour* **Project #:** *UT21-1962*

Intersection: Pony Express Parkway & Aviator Avenue
Type: Signalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	225	225	100	17.7	*B*
	T	1,020	1,029	101	7.9	*A*
	Subtotal	1,245	1,254	101	9.7	*A*
SB	T	501	497	99	11.2	*B*
	R	350	352	101	9.2	*A*
	Subtotal	851	849	100	10.4	*B*
EB	L	225	226	100	18.4	*B*
	R	130	128	98	5.3	*A*
	Subtotal	355	354	100	13.7	*B*
Total		2,452	2,457	100	10.5	*B*

Intersection: Pony Express Parkway & Bobby Wren Blvd
Type: Signalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	10	12	117	10.5	*B*
	T	775	783	101	7.6	*A*
	R	20	20	101	4.3	*A*
	Subtotal	805	815	101	7.6	*A*
SB	L	140	134	96	14.7	*B*
	T	442	440	100	5.8	*A*
	R	50	47	94	4.9	*A*
	Subtotal	632	621	98	7.7	*A*
EB	L	85	85	100	15.8	*B*
	T	5	5	100	16.4	*B*
	R	10	11	107	7.1	*A*
	Subtotal	100	101	101	14.9	*B*
WB	L	50	54	109	16.1	*B*
	T	5	6	120	19.2	*B*
	R	385	387	101	18.0	*B*
	Subtotal	440	447	102	17.8	*B*
Total		1,975	1,984	100	10.3	*B*

HALES ENGINEERING
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SimTraffic LOS Report

Project: Eagle Mountain Eagle Quest TIS
Analysis Period: *Future (2040) Background*
Time Period: *Morning Peak Hour* **Project #:** *UT21-1962*

Intersection: Pony Express Parkway & Eagle Mountain Boulevard
Type: Roundabout

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	360	366	102	8.0	*A*
	T	630	639	101	7.3	*A*
	R	65	62	95	5.3	*A*
	Subtotal	1,055	1,067	101	7.4	*A*
SB	L	55	52	95	6.5	*A*
	T	406	413	102	6.4	*A*
	R	40	41	102	4.2	*A*
	Subtotal	501	506	101	6.2	*A*
EB	L	65	64	98	8.1	*A*
	T	40	40	99	8.2	*A*
	R	135	134	99	7.3	*A*
	Subtotal	240	238	99	7.7	*A*
WB	L	65	67	103	10.9	*B*
	T	80	76	95	7.5	*A*
	R	110	109	99	5.0	*A*
	Subtotal	255	252	99	7.3	*A*
Total		2,051	2,063	101	7.1	*A*

HALES ENGINEERING
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SimTraffic LOS Report

Project: Eagle Mountain Eagle Quest TIS
Analysis Period: *Future (2040) Background*
Time Period: *Evening Peak Hour* **Project #:** *UT21-1962*

Intersection: Pony Express Parkway & Mid Valley Road
Type: Signalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	210	201	96	20.7	C
	T	1,260	1,267	101	7.8	A
	R	10	11	107	4.0	A
	Subtotal	1,480	1,479	100	9.5	A
SB	L	30	32	107	21.4	C
	T	1,005	1,000	100	9.5	A
	R	90	90	100	3.9	A
	Subtotal	1,125	1,122	100	9.4	A
EB	L	80	81	102	20.9	C
	T	50	49	98	23.2	C
	R	70	72	102	8.1	A
	Subtotal	200	202	101	16.9	B
WB	L	10	10	98	20.8	C
	T	25	23	93	18.8	B
	R	15	17	111	10.6	B
	Subtotal	50	50	100	16.4	B
Total		2,856	2,853	100	10.1	B

Intersection: Eagle Mountain Boulevard & Aviator Avenue
Type: Signalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	30	27	90	16.6	B
	T	616	615	100	12.8	B
	R	45	45	99	8.6	A
	Subtotal	691	687	99	12.7	B
SB	L	160	155	97	13.5	B
	T	510	521	102	5.6	A
	R	65	69	106	3.5	A
	Subtotal	735	745	101	7.0	A
EB	L	65	64	98	24.0	C
	T	45	42	93	14.6	B
	R	30	35	117	4.7	A
	Subtotal	140	141	101	16.4	B
WB	L	35	36	103	22.2	C
	T	35	34	97	15.7	B
	R	90	96	107	6.5	A
	Subtotal	160	166	104	11.8	B
Total		1,726	1,739	101	10.5	B

HALES ENGINEERING
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SimTraffic LOS Report

Project: Eagle Mountain Eagle Quest TIS
Analysis Period: *Future (2040) Background*
Time Period: *Evening Peak Hour* **Project #:** *UT21-1962*

Intersection: Pony Express Parkway & Aviator Avenue
Type: Signalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	60	60	100	15.8	*B*
	T	1,375	1,373	100	8.1	*A*
	Subtotal	1,435	1,433	100	8.4	*A*
SB	T	1,010	1,008	100	9.3	*A*
	R	75	75	100	6.1	*A*
	Subtotal	1,085	1,083	100	9.1	*A*
EB	L	105	101	96	17.9	*B*
	R	115	117	102	7.7	*A*
	Subtotal	220	218	99	12.4	*B*
Total		2,741	2,734	100	9.0	*A*

Intersection: Pony Express Parkway & Bobby Wren Blvd
Type: Signalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	10	10	98	12.1	*B*
	T	1,181	1,185	100	13.5	*B*
	R	45	48	106	9.6	*A*
	Subtotal	1,236	1,243	101	13.3	*B*
SB	L	365	358	98	23.6	*C*
	T	691	696	101	5.4	*A*
	R	70	72	102	4.8	*A*
	Subtotal	1,126	1,126	100	11.1	*B*
EB	L	50	50	101	25.9	*C*
	T	5	6	120	21.7	*C*
	R	10	11	107	11.0	*B*
	Subtotal	65	67	103	23.1	*C*
WB	L	35	30	86	24.5	*C*
	T	5	4	80	24.5	*C*
	R	205	201	98	14.4	*B*
	Subtotal	245	235	96	15.9	*B*
Total		2,672	2,671	100	12.9	*B*

HALES ENGINEERING
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SimTraffic LOS Report

Project: Eagle Mountain Eagle Quest TIS
Analysis Period: *Future (2040) Background*
Time Period: *Evening Peak Hour* **Project #:** *UT21-1962*

Intersection: Pony Express Parkway & Eagle Mountain Boulevard
Type: Roundabout

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	420	415	99	21.7	*C*
	T	765	761	99	11.4	*B*
	R	40	42	104	9.0	*A*
	Subtotal	1,225	1,218	99	14.8	*B*
SB	L	80	79	99	10.7	*B*
	T	576	573	100	8.7	*A*
	R	80	85	107	5.8	*A*
	Subtotal	736	737	100	8.6	*A*
EB	L	190	198	104	17.3	*C*
	T	156	156	100	15.0	*B*
	R	230	244	106	13.8	*B*
	Subtotal	576	598	104	15.3	*C*
WB	L	80	81	102	33.0	*D*
	T	190	187	98	20.1	*C*
	R	280	284	101	15.2	*C*
	Subtotal	550	552	100	19.5	*C*
Total		3,087	3,105	101	14.3	*B*

HALES ENGINEERING
innovative transportation solutions

SimTraffic LOS Report

Project: Eagle Mountain Eagle Quest TIS
Analysis Period: *Future (2040) Plus Project*
Time Period: *Morning Peak Hour* **Project #:** *UT21-1962*

Intersection: Pony Express Parkway & Mid Valley Road
Type: Signalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	204	196	96	17.7	*B*
	T	1,096	1,108	101	8.0	*A*
	R	10	10	98	3.0	*A*
	Subtotal	1,310	1,314	100	9.4	*A*
SB	L	15	15	98	21.9	*C*
	T	726	722	99	9.4	*A*
	R	195	194	99	3.8	*A*
	Subtotal	936	931	99	8.4	*A*
EB	L	150	154	103	27.8	*C*
	T	26	25	96	16.2	*B*
	R	136	134	98	6.4	*A*
	Subtotal	312	313	100	17.7	*B*
WB	L	10	12	117	25.7	*C*
	T	53	50	95	19.8	*B*
	R	30	29	97	10.7	*B*
	Subtotal	93	91	98	17.7	*B*
Total		2,652	2,649	100	10.3	*B*

Intersection: Eagle Mountain Boulevard & Aviator Avenue
Type: Signalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	15	14	92	14.4	*B*
	T	340	342	101	10.7	*B*
	R	130	133	102	6.9	*A*
	Subtotal	485	489	101	9.8	*A*
SB	L	104	104	100	12.6	*B*
	T	175	173	99	5.4	*A*
	R	80	83	104	2.5	*A*
	Subtotal	359	360	100	6.8	*A*
EB	L	80	81	102	17.2	*B*
	T	60	57	95	12.0	*B*
	R	15	15	98	3.1	*A*
	Subtotal	155	153	99	13.9	*B*
WB	L	50	51	103	18.9	*B*
	T	40	43	107	14.8	*B*
	R	168	166	99	6.2	*A*
	Subtotal	258	260	101	10.1	*B*
Total		1,257	1,262	100	9.5	*A*

HALES ENGINEERING
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SimTraffic LOS Report

Project: Eagle Mountain Eagle Quest TIS
Analysis Period: *Future (2040) Plus Project*
Time Period: *Morning Peak Hour* **Project #:** *UT21-1962*

Intersection: Pony Express Parkway & Aviator Avenue
Type: Signalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	225	229	102	18.0	*B*
	T	941	949	101	8.8	*A*
	R	13	13	98	3.7	*A*
	Subtotal	1,179	1,191	101	10.5	*B*
SB	L	30	27	90	19.4	*B*
	T	479	478	100	11.1	*B*
	R	350	349	100	8.5	*A*
	Subtotal	859	854	99	10.3	*B*
EB	L	225	222	99	20.9	*C*
	T	4	5	125	12.4	*B*
	R	130	138	106	6.0	*A*
	Subtotal	359	365	102	15.2	*B*
WB	L	17	15	90	15.1	*B*
	T	13	13	98	14.6	*B*
	R	99	101	102	8.0	*A*
	Subtotal	129	129	100	9.5	*A*
Total		2,527	2,539	100	11.1	*B*

Intersection: Pony Express Parkway & Bobby Wren Blvd
Type: Signalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	10	10	98	10.9	*B*
	T	790	800	101	7.0	*A*
	R	10	11	107	4.0	*A*
	Subtotal	810	821	101	7.0	*A*
SB	L	117	119	102	13.9	*B*
	T	458	462	101	5.6	*A*
	R	50	50	101	4.7	*A*
	Subtotal	625	631	101	7.1	*A*
EB	L	85	84	99	15.8	*B*
	T	5	5	100	15.0	*B*
	R	10	10	98	8.8	*A*
	Subtotal	100	99	99	15.1	*B*
WB	L	45	42	93	15.9	*B*
	T	5	6	120	17.5	*B*
	R	305	309	101	12.7	*B*
	Subtotal	355	357	101	13.2	*B*
Total		1,890	1,908	101	8.6	*A*

HALES ENGINEERING
innovative transportation solutions

SimTraffic LOS Report

Project: Eagle Mountain Eagle Quest TIS
Analysis Period: *Future (2040) Plus Project*
Time Period: *Morning Peak Hour* **Project #:** *UT21-1962*

Intersection: Pony Express Parkway & Eagle Mountain Boulevard
Type: Roundabout

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	360	362	101	8.5	*A*
	T	632	647	102	7.5	*A*
	R	65	73	112	5.1	*A*
	Subtotal	1,057	1,082	102	7.7	*A*
SB	L	56	58	104	7.2	*A*
	T	412	409	99	6.4	*A*
	R	46	48	105	4.3	*A*
	Subtotal	514	515	100	6.3	*A*
EB	L	67	62	92	8.4	*A*
	T	40	44	109	9.1	*A*
	R	135	134	99	6.8	*A*
	Subtotal	242	240	99	7.6	*A*
WB	L	65	65	100	10.8	*B*
	T	80	80	100	7.6	*A*
	R	110	114	104	5.3	*A*
	Subtotal	255	259	102	7.4	*A*
Total		2,068	2,096	101	7.3	*A*

Intersection: West Collector & North Collector
Type: Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	***L***	***23***	***23***	***101***	***3.9***	***A***
	R	16	18	114	2.0	*A*
	Subtotal	39	41	105	3.1	*A*
EB	T	12	10	82	1.3	*A*
	R	8	9	109	1.0	*A*
	Subtotal	20	19	95	1.2	*A*
WB	L	6	4	64	1.7	*A*
	T	36	38	105	0.4	*A*
	Subtotal	42	42	100	0.5	*A*
Total		102	102	100	1.7	*A*

HALES ENGINEERING
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SimTraffic LOS Report

Project: Eagle Mountain Eagle Quest TIS
Analysis Period: *Future (2040) Plus Project*
Time Period: *Morning Peak Hour* **Project #:** *UT21-1962*

Intersection: North Access 1 & North Collector
Type: Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	***L***	***20***	***18***	***91***	***4.3***	***A***
	R	28	32	114	3.0	*A*
	Subtotal	48	50	104	3.5	*A*
EB	T	22	22	101	0.3	*A*
	R	7	7	97	0.2	*A*
	Subtotal	29	29	100	0.3	*A*
WB	L	9	9	97	1.9	*A*
	T	22	23	106	0.5	*A*
	Subtotal	31	32	103	0.9	*A*
Total		108	111	103	1.9	*A*

Intersection: North Access 2 & North Collector
Type: Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	***L***	***16***	***15***	***95***	***4.4***	***A***
	R	32	35	109	3.1	*A*
	Subtotal	48	50	104	3.5	*A*
EB	T	44	46	103	0.3	*A*
	R	5	6	120	0.2	*A*
	Subtotal	49	52	106	0.3	*A*
WB	L	11	10	89	1.6	*A*
	T	16	17	110	0.2	*A*
	Subtotal	27	27	100	0.7	*A*
Total		124	129	104	1.6	*A*

HALES ENGINEERING
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SimTraffic LOS Report

Project: Eagle Mountain Eagle Quest TIS
Analysis Period: *Future (2040) Plus Project*
Time Period: *Morning Peak Hour* **Project #:** *UT21-1962*

Intersection: Airport Road & North Collector
Type: Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	T	1,003	1,021	102	1.4	*A*
	Subtotal	1,003	1,021	102	1.4	*A*
SB	T	748	747	100	1.3	*A*
	R	26	26	100	1.3	*A*
	Subtotal	774	773	100	1.3	*A*
EB	***L***	***74***	***77***	***104***	***29.3***	***D***
	T	1	1	133	0.4	*A*
	R	2	3	150	3.6	*A*
	Subtotal	77	81	105	28.0	*D*
Total		1,854	1,875	101	2.5	*A*

Intersection: West Collector & West Access 1
Type: Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	T	16	16	102	0.3	*A*
	R	1	1	100	0.3	*A*
	Subtotal	17	17	100	0.3	*A*
SB	L	8	7	85	1.6	*A*
	T	6	6	96	0.3	*A*
	Subtotal	14	13	93	1.0	*A*
WB	***L***	***2***	***1***	***50***	***3.2***	***A***
	R	23	25	110	2.7	*A*
	Subtotal	25	26	104	2.7	*A*
Total		56	56	100	1.6	*A*

HALES ENGINEERING
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SimTraffic LOS Report

Project: Eagle Mountain Eagle Quest TIS
Analysis Period: *Future (2040) Plus Project*
Time Period: *Morning Peak Hour* **Project #:** *UT21-1962*

Intersection: West Collector & West Access 2
Type: Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	T	1	1	100	0.2	*A*
	R	5	6	120	0.2	*A*
	Subtotal	6	7	117	0.2	*A*
SB	L	6	4	64	1.5	*A*
	T	2	3	150	0.2	*A*
	Subtotal	8	7	88	0.9	*A*
WB	***L***	***16***	***17***	***108***	***4.0***	***A***
	R	16	17	108	2.8	*A*
	Subtotal	32	34	106	3.4	*A*
Total		46	48	105	2.6	*A*

Intersection: Aviator Avenue & West Collector
Type: Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
SB	***L***	***1***	***1***	***100***	***3.8***	***A***
	R	17	19	113	2.4	*A*
	Subtotal	18	20	111	2.5	*A*
EB	L	5	5	100	2.7	*A*
	T	43	41	95	1.0	*A*
	Subtotal	48	46	96	1.2	*A*
WB	T	86	87	101	0.4	*A*
	R	1	2	200	0.3	*A*
	Subtotal	87	89	102	0.4	*A*
Total		153	155	101	0.9	*A*

HALES ENGINEERING
innovative transportation solutions

SimTraffic LOS Report

Project: Eagle Mountain Eagle Quest TIS
Analysis Period: *Future (2040) Plus Project*
Time Period: *Morning Peak Hour* **Project #:** *UT21-1962*

Intersection: Airport Road & East Access
Type: Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	1	0	0		
	T	944	960	102	1.2	*A*
	Subtotal	945	960	102	1.2	*A*
SB	T	731	730	100	1.1	*A*
	R	19	21	112	0.7	*A*
	Subtotal	750	751	100	1.1	*A*
EB	***L***	***59***	***60***	***102***	***27.1***	***D***
	R	3	3	100	3.5	*A*
	Subtotal	62	63	102	26.0	*D*
Total		1,757	1,774	101	2.0	*A*

Intersection: Aviator Avenue & South Access 1
Type: Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	29	31	107	4.6	*A*
	T	1	2	200	3.9	*A*
	R	13	16	121	3.0	*A*
	Subtotal	43	49	114	4.0	*A*
SB	L	10	10	98	4.5	*A*
	T	***1***	***1***	***100***	***5.5***	***A***
	R	17	17	101	3.1	*A*
	Subtotal	28	28	100	3.7	*A*
EB	L	6	6	96	1.4	*A*
	T	27	24	89	0.2	*A*
	R	11	12	107	0.1	*A*
	Subtotal	44	42	95	0.3	*A*
WB	L	4	3	75	2.1	*A*
	T	43	43	100	0.6	*A*
	R	2	3	150	0.4	*A*
	Subtotal	49	49	100	0.7	*A*
Total		165	168	102	2.1	*A*

HALES ENGINEERING
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SimTraffic LOS Report

Project: **Eagle Mountain Eagle Quest TIS**
Analysis Period: ***Future (2040) Plus Project***
Time Period: ***Morning Peak Hour*** **Project #:** ***UT21-1962***

Intersection: **Aviator Avenue & South Access 2**
Type: **Unsignalized**

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	27	27	100	4.3	*A*
	T	1	1	100	3.9	*A*
	R	14	15	105	3.1	*A*
	Subtotal	42	43	102	3.9	*A*
SB	L	9	11	119	3.9	*A*
	T	***1***	***1***	***100***	***5.8***	***A***
	R	10	11	107	2.7	*A*
	Subtotal	20	23	115	3.4	*A*
EB	L	3	3	100	1.6	*A*
	T	38	37	97	0.5	*A*
	R	10	11	107	0.3	*A*
	Subtotal	51	51	100	0.5	*A*
WB	L	4	3	75	1.7	*A*
	T	10	10	98	0.2	*A*
	R	3	3	100	0.1	*A*
	Subtotal	17	16	94	0.5	*A*
Total		132	133	101	2.1	*A*

Intersection: **Airport Road & Aviator Avenue**
Type: **Unsignalized**

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	2	1	50	2.4	*A*
	T	891	908	102	0.9	*A*
	Subtotal	893	909	102	0.9	*A*
SB	T	720	719	100	1.4	*A*
	R	15	15	98	1.0	*A*
	Subtotal	735	734	100	1.4	*A*
EB	***L***	***54***	***54***	***100***	***28.3***	***D***
	T	1	1	133	0.6	*A*
	R	6	7	112	2.9	*A*
	Subtotal	61	62	102	25.0	*C*
Total		1,689	1,705	101	2.0	*A*

HALES ENGINEERING
innovative transportation solutions

SimTraffic LOS Report

Project: Eagle Mountain Eagle Quest TIS
Analysis Period: *Future (2040) Plus Project*
Time Period: *Evening Peak Hour* **Project #:** *UT21-1962*

Intersection: Pony Express Parkway & Mid Valley Road
Type: Signalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	212	209	99	21.0	C
	T	1,303	1,295	99	7.2	A
	R	10	11	107	3.6	A
	Subtotal	1,525	1,515	99	9.1	A
SB	L	30	30	100	21.4	C
	T	1,073	1,065	99	8.9	A
	R	90	88	98	3.3	A
	Subtotal	1,193	1,183	99	8.8	A
EB	L	80	77	97	32.5	C
	T	53	56	106	21.4	C
	R	74	71	96	7.6	A
	Subtotal	207	204	99	20.8	C
WB	L	10	10	98	36.4	D
	T	27	25	93	18.8	B
	R	15	15	98	10.8	B
	Subtotal	52	50	96	19.9	B
Total		2,978	2,952	99	10.0	A

Intersection: Eagle Mountain Boulevard & Aviator Avenue
Type: Signalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	30	27	90	18.4	B
	T	620	614	99	12.8	B
	R	45	41	91	9.2	A
	Subtotal	695	682	98	12.8	B
SB	L	175	178	102	13.9	B
	T	510	505	99	5.8	A
	R	65	70	108	3.9	A
	Subtotal	750	753	100	7.5	A
EB	L	65	67	103	23.4	C
	T	45	43	95	15.4	B
	R	30	31	103	4.4	A
	Subtotal	140	141	101	16.8	B
WB	L	35	39	111	25.6	C
	T	35	36	103	17.1	B
	R	99	103	104	6.7	A
	Subtotal	169	178	105	12.9	B
Total		1,755	1,754	100	10.9	B

HALES ENGINEERING
innovative transportation solutions

SimTraffic LOS Report

Project: Eagle Mountain Eagle Quest TIS
Analysis Period: *Future (2040) Plus Project*
Time Period: *Evening Peak Hour* **Project #:** *UT21-1962*

Intersection: Pony Express Parkway & Aviator Avenue
Type: Signalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	60	60	100	16.1	*B*
	T	1,318	1,299	99	10.0	*A*
	R	22	23	106	5.9	*A*
	Subtotal	1,400	1,382	99	10.2	*B*
SB	L	123	123	100	25.1	*C*
	T	914	909	99	7.9	*A*
	R	75	77	102	4.5	*A*
	Subtotal	1,112	1,109	100	9.6	*A*
EB	L	105	103	98	21.5	*C*
	T	15	14	92	18.1	*B*
	R	115	122	106	8.4	*A*
	Subtotal	235	239	102	14.6	*B*
WB	L	13	11	83	20.2	*C*
	T	9	10	108	16.5	*B*
	R	76	82	108	11.5	*B*
	Subtotal	98	103	105	12.9	*B*
Total		2,846	2,833	100	10.5	*B*

Intersection: Pony Express Parkway & Bobby Wren Blvd
Type: Signalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	10	10	98	12.9	*B*
	T	1,211	1,196	99	10.8	*B*
	R	35	36	103	7.2	*A*
	Subtotal	1,256	1,242	99	10.7	*B*
SB	L	262	262	100	20.1	*C*
	T	711	712	100	5.2	*A*
	R	70	68	97	5.0	*A*
	Subtotal	1,043	1,042	100	8.9	*A*
EB	L	50	47	94	23.4	*C*
	T	5	5	100	27.6	*C*
	R	10	12	117	10.5	*B*
	Subtotal	65	64	98	21.3	*C*
WB	L	30	30	100	21.4	*C*
	T	5	6	120	26.5	*C*
	R	139	139	100	12.7	*B*
	Subtotal	174	175	101	14.7	*B*
Total		2,538	2,523	99	10.5	*B*

HALES ENGINEERING
innovative transportation solutions

SimTraffic LOS Report

Project: Eagle Mountain Eagle Quest TIS
Analysis Period: *Future (2040) Plus Project*
Time Period: *Evening Peak Hour* **Project #:** *UT21-1962*

Intersection: Pony Express Parkway & Eagle Mountain Boulevard
Type: Roundabout

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	420	417	99	18.9	*C*
	T	776	768	99	10.9	*B*
	R	40	39	97	8.3	*A*
	Subtotal	1,236	1,224	99	13.5	*B*
SB	L	81	75	93	10.3	*B*
	T	585	599	102	8.5	*A*
	R	85	81	96	6.0	*A*
	Subtotal	751	755	101	8.4	*A*
EB	L	197	197	100	17.5	*C*
	T	156	154	99	14.1	*B*
	R	230	229	100	13.2	*B*
	Subtotal	583	580	99	14.9	*B*
WB	L	80	80	100	28.3	*D*
	T	190	184	97	18.5	*C*
	R	282	277	98	15.5	*C*
	Subtotal	552	541	98	18.4	*C*
Total		3,122	3,100	99	13.4	*B*

Intersection: West Collector & North Collector
Type: Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	***L***	***16***	***15***	***95***	***4.3***	***A***
	R	10	10	98	2.1	*A*
	Subtotal	26	25	96	3.4	*A*
EB	T	41	35	85	1.8	*A*
	R	25	27	109	1.7	*A*
	Subtotal	66	62	94	1.8	*A*
WB	L	17	14	84	2.3	*A*
	T	24	25	102	0.6	*A*
	Subtotal	41	39	95	1.2	*A*
Total		133	126	95	1.9	*A*

HALES ENGINEERING
innovative transportation solutions

SimTraffic LOS Report

Project: Eagle Mountain Eagle Quest TIS
Analysis Period: *Future (2040) Plus Project*
Time Period: *Evening Peak Hour* **Project #:** *UT21-1962*

Intersection: North Access 1 & North Collector
Type: Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	***L***	***13***	***12***	***91***	***4.4***	***A***
	R	18	20	113	2.8	*A*
	Subtotal	31	32	103	3.4	*A*
EB	T	29	24	83	0.4	*A*
	R	22	20	92	0.3	*A*
	Subtotal	51	44	86	0.4	*A*
WB	L	31	33	106	1.8	*A*
	T	28	28	100	0.6	*A*
	Subtotal	59	61	103	1.2	*A*
Total		141	137	97	1.5	*A*

Intersection: North Access 2 & North Collector
Type: Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	***L***	***11***	***12***	***107***	***4.9***	***A***
	R	21	19	92	2.7	*A*
	Subtotal	32	31	97	3.6	*A*
EB	T	28	22	79	0.5	*A*
	R	18	21	118	0.2	*A*
	Subtotal	46	43	93	0.4	*A*
WB	L	35	31	89	1.7	*A*
	T	48	48	101	0.4	*A*
	Subtotal	83	79	95	0.9	*A*
Total		160	153	95	1.3	*A*

HALES ENGINEERING
innovative transportation solutions

SimTraffic LOS Report

Project: Eagle Mountain Eagle Quest TIS
Analysis Period: *Future (2040) Plus Project*
Time Period: *Evening Peak Hour* **Project #:** *UT21-1962*

Intersection: Airport Road & North Collector
Type: Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	1	0	0		
	T	991	998	101	1.4	*A*
	Subtotal	992	998	101	1.4	*A*
SB	T	1,266	1,262	100	2.2	*A*
	R	82	78	95	2.5	*A*
	Subtotal	1,348	1,340	99	2.2	*A*
EB	***L***	***48***	***41***	***86***	***58.7***	***F***
	R	1	1	100	3.7	*A*
	Subtotal	49	42	86	57.4	*F*
Total		2,388	2,380	100	2.9	*A*

Intersection: West Collector & West Access 1
Type: Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	T	10	10	98	0.3	*A*
	R	2	3	150	0.2	*A*
	Subtotal	12	13	108	0.3	*A*
SB	L	24	21	88	1.6	*A*
	T	18	20	113	0.5	*A*
	Subtotal	42	41	98	1.1	*A*
WB	L	1	0	0		
	R	***16***	***16***	***102***	***2.7***	***A***
	Subtotal	17	16	94	2.7	*A*
Total		70	70	99	1.3	*A*

HALES ENGINEERING
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SimTraffic LOS Report

Project: Eagle Mountain Eagle Quest TIS
Analysis Period: *Future (2040) Plus Project*
Time Period: *Evening Peak Hour* **Project #:** *UT21-1962*

Intersection: West Collector & West Access 2
Type: Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	T	2	1	50	0.1	*A*
	R	17	15	90	0.2	*A*
	Subtotal	19	16	84	0.2	*A*
SB	L	18	20	113	1.6	*A*
	T	1	1	100	0.6	*A*
	Subtotal	19	21	111	1.6	*A*
WB	***L***	***10***	***12***	***117***	***4.2***	***A***
	R	10	12	117	2.6	*A*
	Subtotal	20	24	120	3.4	*A*
Total		58	61	105	1.9	*A*

Intersection: Aviator Avenue & West Collector
Type: Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
SB	L	1	1	100	2.9	*A*
	R	10	12	117	2.6	*A*
	Subtotal	11	13	118	2.6	*A*
EB	***L***	***17***	***15***	***90***	***3.5***	***A***
	T	143	146	102	1.9	*A*
	Subtotal	160	161	101	2.0	*A*
WB	T	81	83	102	0.3	*A*
	R	2	2	100	0.2	*A*
	Subtotal	83	85	102	0.3	*A*
Total		254	259	102	1.5	*A*

HALES ENGINEERING
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SimTraffic LOS Report

Project: Eagle Mountain Eagle Quest TIS
Analysis Period: *Future (2040) Plus Project*
Time Period: *Evening Peak Hour* **Project #:** *UT21-1962*

Intersection: Airport Road & East Access
Type: Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	3	3	100	10.9	*B*
	T	953	957	100	1.2	*A*
	Subtotal	956	960	100	1.2	*A*
SB	T	1,202	1,200	100	1.7	*A*
	R	66	63	95	1.5	*A*
	Subtotal	1,268	1,263	100	1.7	*A*
EB	***L***	***39***	***41***	***104***	***46.1***	***E***
	R	2	1	50	7.8	*A*
	Subtotal	41	42	102	45.2	*E*
Total		2,265	2,265	100	2.3	*A*

Intersection: Aviator Avenue & South Access 1
Type: Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	***L***	***24***	***24***	***101***	***5.0***	***A***
	T	1	1	100	4.3	*A*
	R	12	14	114	3.3	*A*
	Subtotal	37	39	105	4.4	*A*
SB	L	6	6	96	4.9	*A*
	T	1	1	100	3.7	*A*
	R	11	11	98	3.1	*A*
	Subtotal	18	18	100	3.7	*A*
EB	L	19	20	107	1.9	*A*
	T	57	56	98	0.8	*A*
	R	34	36	106	0.3	*A*
	Subtotal	110	112	102	0.8	*A*
WB	L	18	16	90	2.2	*A*
	T	48	51	105	0.5	*A*
	R	10	9	88	0.3	*A*
	Subtotal	76	76	100	0.8	*A*
Total		242	245	101	1.6	*A*

HALES ENGINEERING
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SimTraffic LOS Report

Project: Eagle Mountain Eagle Quest TIS
Analysis Period: *Future (2040) Plus Project*
Time Period: *Evening Peak Hour* **Project #:** *UT21-1962*

Intersection: Aviator Avenue & South Access 2
Type: Unsignalized

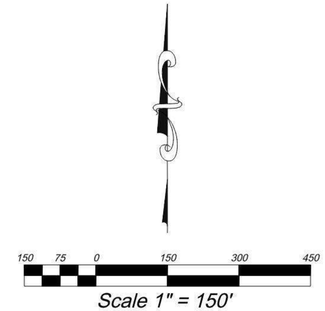
Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	***L***	***23***	***22***	***97***	***4.6***	***A***
	T	1	1	100	3.9	*A*
	R	12	12	98	3.1	*A*
	Subtotal	36	35	97	4.1	*A*
SB	L	6	6	96	4.1	*A*
	T	1	1	100	3.5	*A*
	R	6	6	96	3.0	*A*
	Subtotal	13	13	100	3.5	*A*
EB	L	11	10	89	2.3	*A*
	T	31	32	103	0.8	*A*
	R	34	35	103	0.5	*A*
	Subtotal	76	77	101	0.9	*A*
WB	L	18	15	85	2.0	*A*
	T	48	48	101	0.4	*A*
	R	11	12	107	0.3	*A*
	Subtotal	77	75	97	0.7	*A*
Total		202	200	99	1.6	*A*

Intersection: Airport Road & Aviator Avenue
Type: Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	10	11	107	8.7	*A*
	T	911	915	100	0.9	*A*
	Subtotal	921	926	101	1.0	*A*
SB	T	1,137	1,136	100	1.9	*A*
	R	66	65	98	1.6	*A*
	Subtotal	1,203	1,201	100	1.9	*A*
EB	***L***	***44***	***43***	***97***	***74.5***	***F***
	T	0	1	400	0.0	*A*
	R	4	5	125	4.2	*A*
	Subtotal	48	49	102	65.8	*F*
Total		2,173	2,176	100	3.0	*A*

APPENDIX C

Site Plan



TABULATIONS

LOT SIZE RANGE	NUMBER
5,800 TO 6,499	20
6,500 TO 7,999	231
8,000 TO 8,500	62
8,501 TO 10,890	96
10,891 TO 14,520	36
14,521 TO 21,780	41
TOTAL LOTS	486
AVERAGE LOT SIZE	9,050 S.F.

PARK TABULATIONS

313 LOTS (1,000 S.F./LOT)
96 LOTS (900 S.F./LOT)
77 LOTS (750 S.F./LOT)

TOTAL REQUIRED PARK AREA = 457,150 S.F. = 10.50 ACRES

TOTAL PROVIDED PARK AREA = 457,544 S.F. = 10.50 ACRES

SETBACK NOTE

SETBACKS VARY BY LOT SIZE. THE SETBACK EXHIBIT WILL BE PROVIDED AS PART OF THE PRELIMINARY AND FINAL PLAT DESIGN PLANS.

FENCING NOTE

COLLECTOR/ARTERIAL ROAD FENCING IS REQUIRED ON ALL LOTS AROUND THE ENTIRE PERIMETER SINCE THEY ALL BACK AGAINST A COLLECTOR OR ARTERIAL ROAD.

VICINITY MAP

BENCH MARK	REVISIONS		
	Rev.	Date	Description

Developer/Property Owner: KURT OSTLER
Phone: 801-971-2596

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

EAGLE QUEST

EAGLE MOUNTAIN UTAH

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

CONCEPT PLAN

Scale: 1"=150'
Date: 06/24/21
C1

APPENDIX D

95th Percentile Queue Length Reports

SimTraffic Queueing Report

Project: Eagle Mountain Eagle Quest TIS

Analysis: Existing (2021) Background

Time Period: Morning Peak Hour

95th Percentile Queue Length (feet) - Rounded Up to Nearest Multiple of 25 ft

HALES ENGINEERING
innovative transportation solutions

Project #: UT21-1962

Intersection	NB				SB					EB				WB		
	L	LTR	R	T	L	LT	R	T	TR	L	LTR	R	T	L	LTR	TR
01: Pony Express Parkway & Mid Valley Road	125			125			75	100		100		75				
02: Eagle Mountain Boulevard & Aviator Avenue	25		50	125	75				100	75		25	75	75		75
03: Pony Express Parkway & Aviator Avenue	125			125			125	100		125		50				
04: Pony Express Parkway & Bobby Wren Blvd	25		50	150	150			100	125		75				200	
05: Pony Express Parkway & Eagle Mountain Boulevard		150				125	25				100				125	

SimTraffic Queueing Report

Project: Eagle Mountain Eagle Quest TIS

Analysis: Existing (2021) Background

Time Period: Evening Peak Hour

95th Percentile Queue Length (feet) - Rounded Up to Nearest Multiple of 25 ft

HALES ENGINEERING
innovative transportation solutions

Project #: UT21-1962

Intersection	NB				SB					EB				WB		
	L	LTR	R	T	L	LT	R	T	TR	L	LTR	R	T	L	LTR	TR
01: Pony Express Parkway & Mid Valley Road	75			125			50	100		75		50				
02: Eagle Mountain Boulevard & Aviator Avenue	50		25	175	100				150	100		50	75	50		75
03: Pony Express Parkway & Aviator Avenue	75			150			50	125		75		75				
04: Pony Express Parkway & Bobby Wren Blvd	25		75	175	250			100	100		75				175	
05: Pony Express Parkway & Eagle Mountain Boulevard		375				175	25				250				600	

SimTraffic Queueing Report

Project: Eagle Mountain Eagle Quest TIS

Analysis: Existing (2021) Plus Project

Time Period: Morning Peak Hour

95th Percentile Queue Length (feet) - Rounded Up to Nearest Multiple of 25 ft

HALES ENGINEERING
innovative transportation solutions

Project #: UT21-1962

Intersection	NB						SB					EB				WB				
	L	LT	LTR	R	T	TR	L	LT	R	T	TR	L	LTR	R	T	L	LT	LTR	R	TR
01: Pony Express Parkway & Mid Valley Road	100				125				75	100		100		75						
02: Eagle Mountain Boulevard & Aviator Avenue	25			50	125		75				100	75		25	75	50				75
03: Pony Express Parkway & Aviator Avenue	125				125				125	100		150		75						
04: Pony Express Parkway & Bobby Wren Boulevard	25			50	100		125			50	75		75				325		350	
05: Pony Express Parkway & Eagle Mountain Boulevard			150					100	25				100					125		
06: Aviator Avenue & South Access 1						50		75												
07: Aviator Avenue & South Access 2		50									75									

SimTraffic Queueing Report

Project: Eagle Mountain Eagle Quest TIS

Analysis: Existing (2021) Plus Project

Time Period: Evening Peak Hour

95th Percentile Queue Length (feet) - Rounded Up to Nearest Multiple of 25 ft

HALES ENGINEERING
innovative transportation solutions

Project #: UT21-1962

Intersection	NB						SB					EB				WB				
	L	LT	LTR	R	T	TR	L	LT	R	T	TR	L	LTR	R	T	L	LT	LTR	R	TR
01: Pony Express Parkway & Mid Valley Road	75				125				50	100		75		50						
02: Eagle Mountain Boulevard & Aviator Avenue	50			25	200		125				150	100		50	75	50				75
03: Pony Express Parkway & Aviator Avenue	75				150				50	150		75		75						
04: Pony Express Parkway & Bobby Wren Boulevard	25			100	175		300			100	100		75				75		150	
05: Pony Express Parkway & Eagle Mountain Boulevard			450					175	25				250					750		
06: Aviator Avenue & South Access 1						75		75												
07: Aviator Avenue & South Access 2		75									50									

SimTraffic Queueing Report

Project: Eagle Mountain Eagle Quest TIS

Analysis: Future (2026) Background

Time Period: Morning Peak Hour

95th Percentile Queue Length (feet) - Rounded Up to Nearest Multiple of 25 ft

HALES ENGINEERING
innovative transportation solutions

Project #: UT21-1962

Intersection	NB				SB					EB				WB				
	L	LTR	R	T	L	LT	R	T	TR	L	LTR	R	T	L	LT	LTR	R	TR
01: Pony Express Parkway & Mid Valley Road	125			125			75	125		125		75						
02: Eagle Mountain Boulevard & Aviator Avenue	25		75	175	75				125	75		50	75	75				100
03: Pony Express Parkway & Aviator Avenue	125			125			125	100		150		75						
04: Pony Express Parkway & Bobby Wren Blvd	25		50	100	100			50	75		100				100		250	
05: Pony Express Parkway & Eagle Mountain Boulevard		350				125	25				100					225		

SimTraffic Queueing Report

Project: Eagle Mountain Eagle Quest TIS

Analysis: Future (2026) Background

Time Period: Evening Peak Hour

95th Percentile Queue Length (feet) - Rounded Up to Nearest Multiple of 25 ft

HALES ENGINEERING
innovative transportation solutions

Project #: UT21-1962

Intersection	NB				SB					EB				WB		
	L	LTR	R	T	L	LT	R	T	TR	L	LTR	R	T	L	LTR	TR
01: Pony Express Parkway & Mid Valley Road	75			125			50	100		75		50				
02: Eagle Mountain Boulevard & Aviator Avenue	50		25	175	100				200	100		50	75	50		75
03: Pony Express Parkway & Aviator Avenue	75			150			50	150		75		75				
04: Pony Express Parkway & Bobby Wren Blvd	25		100	200	275			100	125		75				175	
05: Pony Express Parkway & Eagle Mountain Boulevard		2,700				275	50				675				2,525	

SimTraffic Queueing Report

Project: Eagle Mountain Eagle Quest TIS

Analysis: Future (2026) Background (Mitigated)

Time Period: Morning Peak Hour

95th Percentile Queue Length (feet) - Rounded Up to Nearest Multiple of 25 ft

HALES ENGINEERING
innovative transportation solutions

Project #: UT21-1962

Intersection	NB					SB					EB				WB				
	L	LT	R	T	TR	L	LT	R	T	TR	L	LTR	R	T	L	LT	LTR	R	TR
01: Pony Express Parkway & Mid Valley Road	125			125				75	125		125		75						
02: Eagle Mountain Boulevard & Aviator Avenue	25		75	150		75				125	75		50	75	75				100
03: Pony Express Parkway & Aviator Avenue	125			125				125	100		150		75						
04: Pony Express Parkway & Bobby Wren Blvd	25		50	100		100			50	75		100				100		250	
05: Pony Express Parkway & Eagle Mountain Boulevard		100			75		150	50			50	50					125	50	

SimTraffic Queueing Report

Project: Eagle Mountain Eagle Quest TIS

Analysis: Future (2026) Background (Mitigated)

Time Period: Evening Peak Hour

95th Percentile Queue Length (feet) - Rounded Up to Nearest Multiple of 25 ft

HALES ENGINEERING
innovative transportation solutions

Project #: UT21-1962

Intersection	NB					SB					EB				WB			
	L	LT	R	T	TR	L	LT	R	T	TR	L	LTR	R	T	L	LTR	R	TR
01: Pony Express Parkway & Mid Valley Road	75			150				50	125		75		50					
02: Eagle Mountain Boulevard & Aviator Avenue	50		50	200		100				200	100		50	75	75			100
03: Pony Express Parkway & Aviator Avenue	75			150				50	150		100		75					
04: Pony Express Parkway & Bobby Wren Blvd	25		125	225		275			100	125		75				150		
05: Pony Express Parkway & Eagle Mountain Boulevard		125			75		300	50			100	250				200	75	

SimTraffic Queueing Report

Project: Eagle Mountain Eagle Quest TIS

Analysis: Future (2026) Plus Project

Time Period: Morning Peak Hour

95th Percentile Queue Length (feet) - Rounded Up to Nearest Multiple of 25 ft

HALES ENGINEERING
innovative transportation solutions

Project #: UT21-1962

Intersection	NB				SB							EB				WB						
	L	LTR	R	T	L	LR	LT	LTR	R	T	TR	L	LTR	R	T	L	LR	LT	LTR	R	T	TR
01: Pony Express Parkway & Mid Valley Road	125			150					75	125		100		75								
02: Eagle Mountain Boulevard & Aviator Avenue	25		75	150	100						125	75		50	75	75						100
03: Pony Express Parkway & Aviator Avenue	125		25	150	100				125	100		150		75	50	50				150	75	
04: Pony Express Parkway & Bobby Wren Blvd	25		25	100	100					50	75		100					50		150		
05: Pony Express Parkway & Eagle Mountain Boulevard		350					125		25				125						175			
06: West Collector & West Access 1																	50					
07: West Collector & West Access 2																	75					
08: Aviator Avenue & West Collector						75						50										
09: Aviator Avenue & South Access 1		75						75				25										
10: Aviator Avenue & South Access 2		75						75														

SimTraffic Queueing Report

Project: Eagle Mountain Eagle Quest TIS

Analysis: Future (2026) Plus Project

Time Period: Evening Peak Hour

95th Percentile Queue Length (feet) - Rounded Up to Nearest Multiple of 25 ft

HALES ENGINEERING
innovative transportation solutions

Project #: UT21-1962

Intersection	NB						SB							EB				WB						
	L	LT	LTR	R	T	TR	L	LR	LT	LTR	R	T	TR	L	LTR	R	T	L	LR	LT	LTR	R	T	TR
01: Pony Express Parkway & Mid Valley Road	75				150						50	125		75		50								
02: Eagle Mountain Boulevard & Aviator Avenue	50			50	225		150						200	100		50	75	50						100
03: Pony Express Parkway & Aviator Avenue	75			50	250		225				50	125		125		75	100	50				125	75	
04: Pony Express Parkway & Bobby Wren Blvd	25			50	150		150					75	100		75					50		100		
05: Pony Express Parkway & Eagle Mountain Boulevard		150				100			350		75			75	100						200	100		
06: West Collector & West Access 1																			50					
07: West Collector & West Access 2																			75					
08: Aviator Avenue & West Collector								75						75										
09: Aviator Avenue & South Access 1			75							75				25										
10: Aviator Avenue & South Access 2			50							75				25										

SimTraffic Queueing Report

Project: Eagle Mountain Eagle Quest TIS

Analysis: Future (2040) Background

Time Period: Morning Peak Hour

95th Percentile Queue Length (feet) - Rounded Up to Nearest Multiple of 25 ft

HALES ENGINEERING
innovative transportation solutions

Project #: UT21-1962

Intersection	NB					SB					EB						WB			
	L	LT	R	T	TR	L	LT	R	T	TR	L	LT	LTR	R	T	TR	L	LT	R	TR
01: Pony Express Parkway & Mid Valley Road	150		25	175		50		75	125			125		100				75	75	
02: Eagle Mountain Boulevard & Aviator Avenue	50		75	75		100			75	75	100			50	75		75			100
03: Pony Express Parkway & Aviator Avenue	150			150				125	125		150			75						
04: Pony Express Parkway & Bobby Wren Blvd	50		50	150		100			75	100			100					75	225	
05: Pony Express Parkway & Eagle Mountain Boulevard		125			50		100			75		75				75		75		75

SimTraffic Queueing Report

Project: Eagle Mountain Eagle Quest TIS

Analysis: Future (2040) Background

Time Period: Evening Peak Hour

95th Percentile Queue Length (feet) - Rounded Up to Nearest Multiple of 25 ft

HALES ENGINEERING
innovative transportation solutions

Project #: UT21-1962

Intersection	NB					SB					EB						WB			
	L	LT	R	T	TR	L	LT	R	T	TR	L	LT	LTR	R	T	TR	L	LT	R	TR
01: Pony Express Parkway & Mid Valley Road	150		25	175		50		50	175			125		75				75	50	
02: Eagle Mountain Boulevard & Aviator Avenue	50		50	125		100			100	100	100			50	75		75			75
03: Pony Express Parkway & Aviator Avenue	75			175				50	175		100			75						
04: Pony Express Parkway & Bobby Wren Blvd	50		125	250		250			100	100			100					75	125	
05: Pony Express Parkway & Eagle Mountain Boulevard		275			225		125			100		125				150		175		200

SimTraffic Queueing Report

Project: Eagle Mountain Eagle Quest TIS

Analysis: Future (2040) Plus Project

Time Period: Morning Peak Hour

95th Percentile Queue Length (feet) - Rounded Up to Nearest Multiple of 25 ft

HALES ENGINEERING
innovative transportation solutions

Project #: UT21-1962

Intersection	NB							SB							EB						WB					
	L	LR	LT	LTR	R	T	TR	L	LR	LT	LTR	R	T	TR	L	LT	LTR	R	T	TR	L	LR	LT	R	T	TR
01: Pony Express Parkway & Mid Valley Road	125				25	175		50				75	150		150			100	75		50			75	75	
02: Eagle Mountain Boulevard & Aviator Avenue	50				75	100		100					75	75	100			50	75		75					100
03: Pony Express Parkway & Aviator Avenue	150				25	150		50				125	125		175			75	25		50			75	50	
04: Pony Express Parkway & Bobby Wren Blvd	50				25	125		100					75	100			100						75	150		
05: Pony Express Parkway & Eagle Mountain Boulevard			125				50			100				75		75				75			75			75
06: West Collector & North Collector		50																					25			
07: North Access 1 & North Collector		75																					25			
08: North Access 2 & North Collector		75																					25			
09: Airport Road & North Collector						25							0		100			25								
10: West Collector & West Access 1										25												50				
11: West Collector & West Access 2																						75				
12: Aviator Avenue & West Collector									50						25											
13: Airport Road & East Access	25														100			25								
14: Aviator Avenue & South Access 1				75							75															
15: Aviator Avenue & South Access 2				75							50				25						25					
16: Airport Road & Aviator Avenue	25														75			25								

SimTraffic Queueing Report

Project: Eagle Mountain Eagle Quest TIS

Analysis: Future (2040) Plus Project

Time Period: Evening Peak Hour

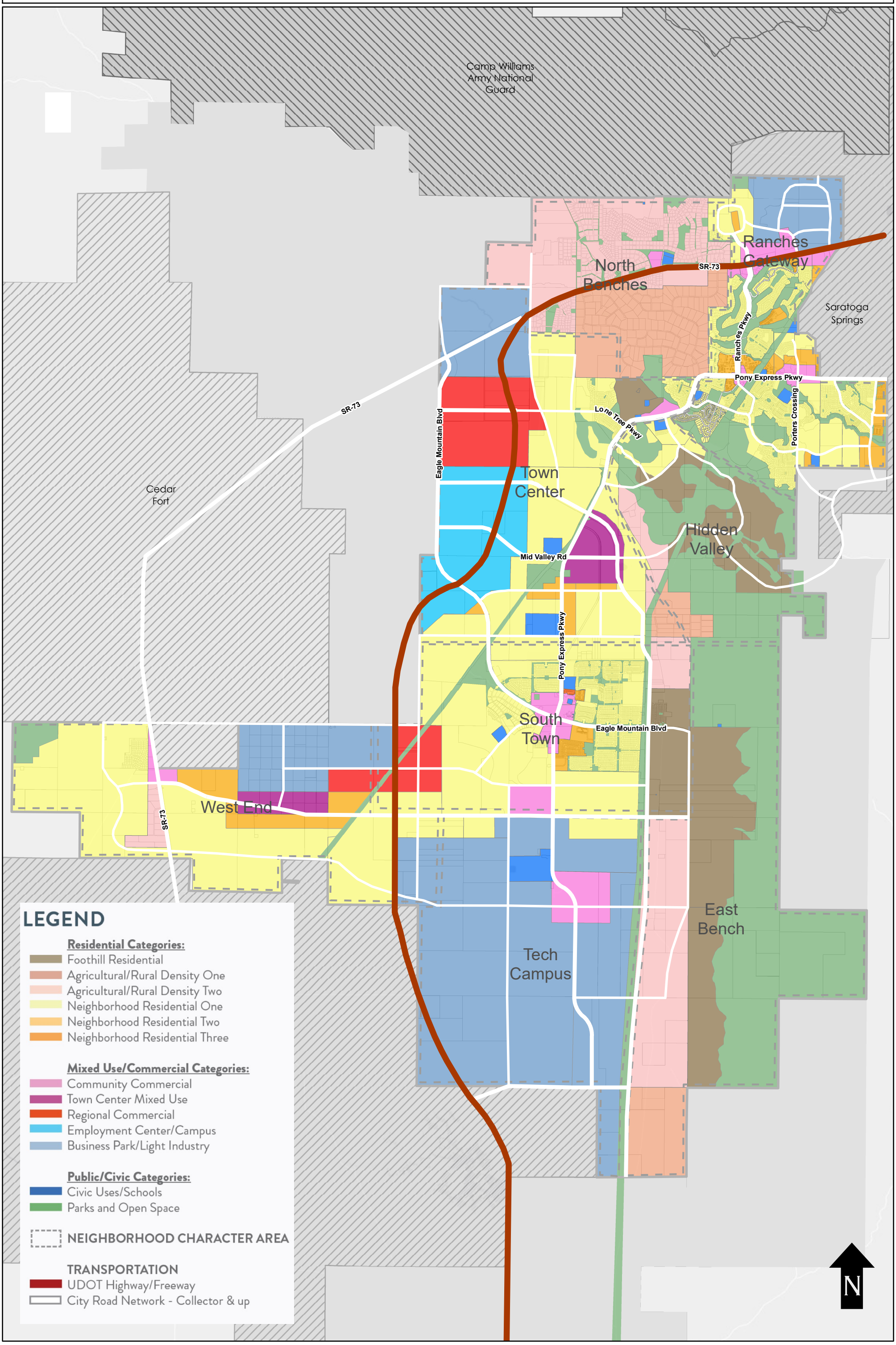
95th Percentile Queue Length (feet) - Rounded Up to Nearest Multiple of 25 ft

HALES ENGINEERING
innovative transportation solutions

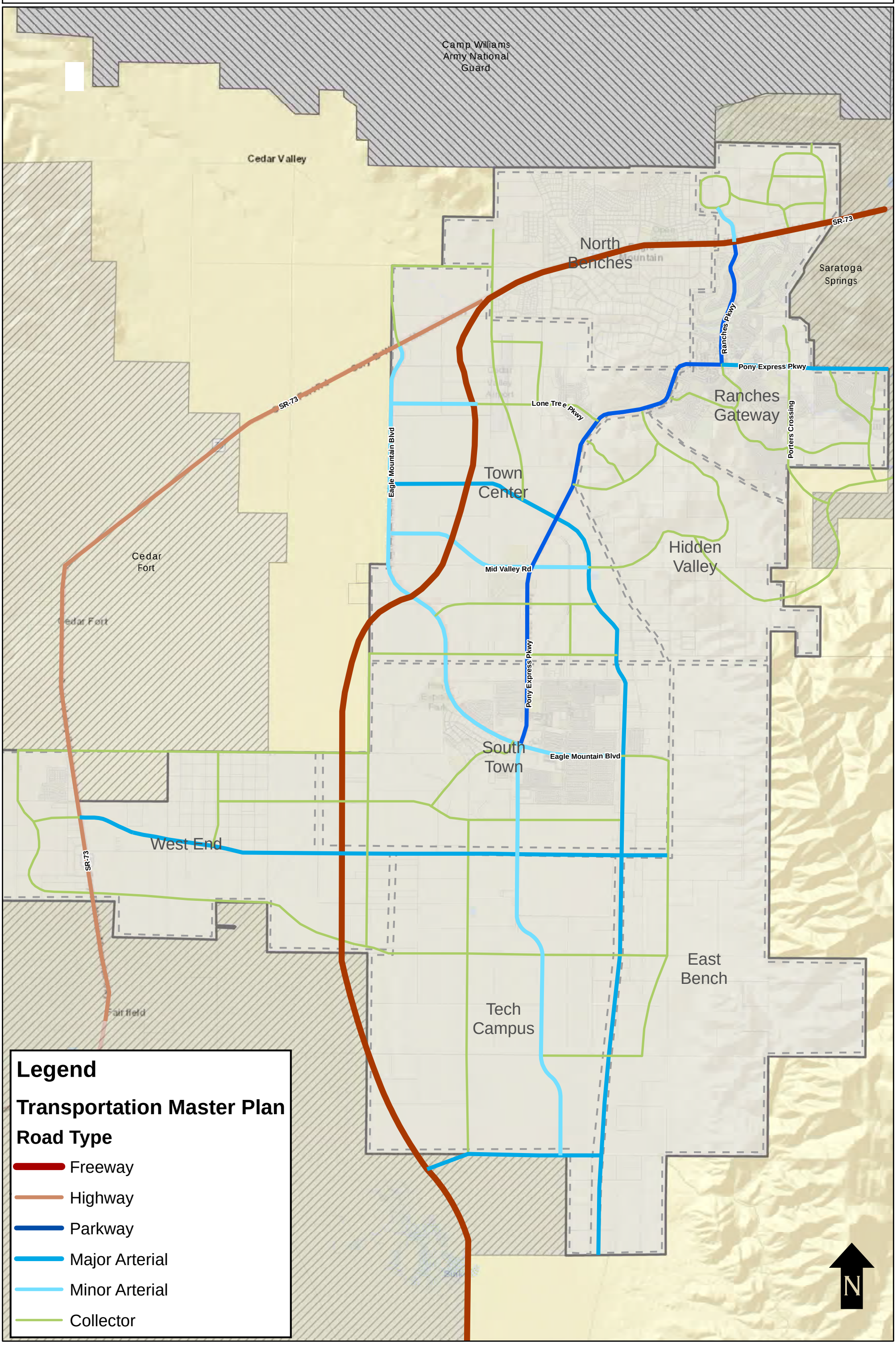
Project #: UT21-1962

Intersection	NB							SB							EB						WB					
	L	LR	LT	LTR	R	T	TR	L	LR	LT	LTR	R	T	TR	L	LT	LTR	R	T	TR	L	LR	LT	R	T	TR
01: Pony Express Parkway & Mid Valley Road	150				25	175		50				50	175		100			75	75		50			50	75	
02: Eagle Mountain Boulevard & Aviator Avenue	50				50	125		125					100	100	100			50	75		75					100
03: Pony Express Parkway & Aviator Avenue	75				25	200		125				50	125		100			75	50		50			75	25	
04: Pony Express Parkway & Bobby Wren Blvd	50				75	200		175					100	125			75						75	100		
05: Pony Express Parkway & Eagle Mountain Boulevard			250				200			125				100		125				125			150			200
06: West Collector & North Collector		50																					25			
07: North Access 1 & North Collector		75																					25			
08: North Access 2 & North Collector		50																					25			
09: Airport Road & North Collector	25														100			25								
10: West Collector & West Access 1										25												50				
11: West Collector & West Access 2										25												50				
12: Aviator Avenue & West Collector									50						25											
13: Airport Road & East Access	25												25		100			25								
14: Aviator Avenue & South Access 1				75							50				25						25					
15: Aviator Avenue & South Access 2				75							50				25						25					
16: Airport Road & Aviator Avenue	50											25	25		125			25								

FUTURE LAND USE & TRANSPORTATION MAP



TRANSPORTATION MASTER PLAN



EAGLE MOUNTAIN PLANNING COMMISSION MEETING MINUTES

July 27, 2021, 5:30 p.m.
Eagle Mountain City Council Chambers
1650 East Stagecoach Run, Eagle Mountain, Utah 84005

5:30 P.M. – Eagle Mountain City Planning Commission Work Session

COMMISSION MEMBERS PRESENT: Jeremy Bergener, Matthew Everett, Christopher Pengra, Erin Wells, and Brett Wright.

CITY STAFF PRESENT: Steve Mumford, Assistant City Administrator/Community Development Director; Tayler Jensen, Senior Planner; and Elizabeth Fewkes, Recording Secretary.

Commissioner Wright called the meeting to order at 5:33 p.m.

1. Discussion Items

1.A. DISCUSSION ITEM – Flag Code

Senior Planner Tayler Jensen presented the item. Municipal Code currently does not address flags in residential and non-residential zones. After reviewing the site plan application for the Macey's at Marketplace at Eagle Mountain Town Center, staff was requested to review code to address flags throughout the City. Staff proposes to include requirements regarding flags in EMMC 17.80.120. Research of other Macey's locations determined that Orem City approved a conditional use permit in 1991 for a 120-foot flagpole and the Logan Macey's location was also approved for a 120-foot flagpole that can fly a 30-foot by 60-foot flag.

The proposed language to be added to as Section 17.80.120(Q):
Q. Flagpoles. Any flagpole must comply with the following standards:

1. In residential zones:
    a. A stand-alone flagpole not to exceed thirty-five feet (35') in height may be installed for every single-family detached residential unit.
    b. Flagpoles not to exceed thirty-five feet (35') in height each may be installed in multifamily developments.
2. In nonresidential zones:
    a. Non-Residential developments may install flagpoles not to exceed eighty feet (80') in height.
3. Size. The size of the flag material, when measured diagonally, shall not exceed one-third (1/3) of the height of the flagpole.
    a. Flagpoles. If designed to accommodate such, may hold more than one flag so long as the combined size of all flags, when measured diagonally, do not exceed one-half (1/2) of the height of the flagpole.

4. Location. All flagpoles shall be located in a place that will not impede traffic or cause a hazard for pedestrians or vehicles.

Mr. Jensen explained that the 80-foot height recommendation is based upon examining flag standards found in other communities, the height of existing flagpoles in the City, and Macey's requesting an 80-foot flagpole.

Commissioner Everett asked if the number of flagpoles allowed in multifamily was per unit if the number of flagpoles in commercial developments should be limited and if the standards should exclude placing private flagpoles in the public right-of-way. He noted that flags are exempt from the dark sky ordinance lighting requirements. He suggested for the allowable height to be lower and to include in the standards an option to request a conditional use permit for higher flagpoles to ensure the size of the flagpole is proportional with the height and size of the building. He stated he feels that 35 feet, the maximum height of buildings, is appropriate and proportional for flagpoles in residential zones, and limiting flagpoles to 20% taller than the highest roofline for commercial uses would prevent disproportionality, especially for corporate flags.

Mr. Jensen explained that the multifamily standards are intended to be per unit and the City has not experienced problems with flagpoles in multifamily residential developments. Should the Commission desire to retain the same standards for single-family and multifamily units, section 17.80.120(Q)(1)(b) could be removed and the verbiage in 17.80.120(Q)(1)(a) could be reworded to include multifamily uses.

Commissioner Bergener arrived at 5:39 p.m.

Mr. Jensen inquired if the Planning Commission felt the standards should apply to all flags or if National, State, and City flags should have different standards than corporate flags.

Commissioner Pengra said although he recognized concerns in residential areas, he advocated for allowing flagpoles of any height for businesses with the requirement for the American flag to be larger than any other flags. He suggested raising the allowable flagpole height to 150-feet for commercial uses and noted that the cost of the flagpole is likely to mitigate the number of businesses desiring tall flagpoles. Nuisance issues are less impactful in commercial areas. He believes proportionality concerns are arbitrary and secondary to the sentiment of honoring the Country and our heritage regardless of the size of the building.

Commissioner Bergener concurred with stipulating that the American flag is the primary flag. He said that as he feels the point of flying a flag is to draw attention to the flag and have it stand out and be visible from far distances, he is in favor of allowing commercial flagpoles taller than 80 feet.

Commissioner Wright stated he desires to encourage the display of the American flag in both residential and commercial areas, agrees with designating the American flag as the primary, predominant flag, and approves of the request for an 80-foot or larger flag for the Macey's location. He suggested for agricultural areas to be included with the non-residential standards; his only concern would be flags near the airport. He said that as 80-feet is the height currently being

requested, he is in favor of the item returning during a policy session for a vote to move the item forward. The item could be revisited and higher flagpoles could be considered should the need arise in the future.

1.B. DISCUSSION ITEM – Rezone Redesignations

Assistant City Administrator/Community Development Director Steve Mumford presented the item. He explained that due to the changes to the residential zoning, the City desires to rezone developments zoned under previous Municipal Code zones to equivalent current zoning districts. The rezone or reclassification or redesignation of zoning of exiting residential parcels would be to the closest applicable residential zoning that exists under current code based on lot size or neighborhood lot size. Most zones would prevent subdividing of the lots unless the area was rezoned in the future.

Commissioner Wells arrived at 5:57 p.m.

Mr. Mumford explained that in many areas of the City some of the lots are slightly below the average acreage of the other lots in the area. Based upon their lower lot sizes, those properties would fall under a different zoning designation than the surrounding properties. Considerations for determining the appropriate zone for such lots should include setback requirements and use differences between zoning districts. The number of animals allowed in residential areas is currently based upon lot size rather than zoning. Residents will be notified of the rezoning process and informed that they will still maintain most of the current rights for their property after rezoning.

Commissioner Pengra expressed concerns with unintended consequences and transitioning of rezoned properties. He desires to thoroughly explore vested rights and legal issues that could arise before taking action.

Commissioner Everett supported the importance of the project as critical in order to create an overview of the zoning within the City in order to make better-informed decisions. He expressed his preference to zone neighboring properties with the same designation and for allowing legal noncompliance for the properties slightly smaller than the average in the area and up zoning those properties rather than downzoning the larger lots, except for areas where only a few larger lots are the anomaly.

Mr. Mumford noted that should the larger lots be assigned a lower zone designation, the issue of those lots being subdivided could become an issue if the division of lots would not be appropriate for that area of the City.

Commissioner Wells concurred with the concerns with unintended consequences and the subdivision of lots that would most likely occur with larger lots or lots on the periphery of areas with a larger variance in lot sizes between adjacent developments. She agrees with the importance of determining the zoning of areas to honor the appropriate transitioning between current and future developments.

Mr. Mumford suggested evaluating each neighborhood individually to preserve rights and to determine what is appropriate for the area.

Commissioner Wright stated that he lives on a 4 ½ acre lot in an area where most lots are over five acres and advocated against zoning his property in a way that would have a negative impact on his neighbors such as allowing the potential subdivision of the larger lots in the Cedar Pass Ranch. He likewise is against causing issues for other neighborhoods. He noted the impact of master development agreements (MDAs) on the rights for individual neighborhoods and would prefer applying the same zoning designation to areas in the City rather than allowing spot zoning.

Commissioner Pengra expressed concern with creating additional complications by adding additional usage regulations on properties already subject to the terms of an MDA.

Mr. Mumford said staff intends to begin rezoning properties with expired MDAs. The rights and regulations for the City zones are clearer and less complex than the rules and regulations within MDAs. The FR zone is based upon not only lot size but the location and description of the zone. Properties in applicable areas could be zoned as FR. One of the intentions of the FR zone is increased open space and none of the developed properties in the City currently meet the intents of the designation.

Commissioner Wright encouraged staff to work closely with the City Attorney when drafting the amendment and expressed appreciation for staff's work in view of the complexity of the undertaking. He agreed with focusing on small areas of the City at a time and adapting to the specific needs of each neighborhood.

Commissioner Wright adjourned the work session at 6:21 p.m.

6:30 P.M. – Eagle Mountain City Planning Commission Policy Session

Commissioner Wright called the policy session to order at 6:35 p.m.

2. Pledge of Allegiance

Commissioner Pengra led the Pledge of Allegiance.

3. Declaration of Conflicts of Interest

Commissioner Wells stated that one of the Eagle Quest applicants is a Councilmember in the City where she works. Although not a conflict of interest, she has elected not to participate in the discussion of item 7.A., the concept plan for Eagle Quest.

4. Approval of Meeting Minutes

4.A. July 13, 2021 Planning Commission Minutes

The approval of the July 13, 2021 meeting minutes was postponed until the August 24, 2021 meeting.

5. Status Report

Mr. Jensen reviewed the planning items discussed and voted upon during the July 20, 2021 City Council meeting.

6. Action and Advisory Items

6.A. ACTION ITEM – Just Chillin

Mr. Jensen presented the item. The application is for s temporary site plan for Just Chillin to relocate on 1681 Heritage Drive to utilize an existing waterline. Staff recommends for the Planning Commission to motion to recommend approval of the temporary site plan for a specified length of time with the condition that the approval is conditional upon the Health Department approval.

Mr. Jensen said the intention is for the applicant to continue to request renewed approvals to use the site until the landowner develops the land. The Planning Commission could elect to cap the timeframe of the temporary site plan approval, should they anticipate negative impacts of the business at that location. The applicant requires the continued permission of the landowner to maintain operations at this location. Seasonal businesses, such as snow cone shacks, operate under a six-to-nine-month seasonal permit that does not require Planning Commission approval.

Mr. Mumford stated that the length of the water line from the capped access to the proposed site is approximately 80 feet.

Applicant Mindy Heaps the owner of Just Chilin Soda shack said they will be connecting to both a water line and a sewer line. Previously, they had used all-purpose cleaner and towels to clean the business. They bring in prepacked food; nothing is prepared on the premises. Tiffany Walden, the landowner, has approved their use of the site until she develops the land in one to two years. They plan to relocate to a permanent building in a year to two years at most and hope to remain within the City where they have a customer base.

Mr. Jensen confirmed that the business would still be required to renew its business license annually regardless of the timeframe indicated on a temporary site plan approval.

MOTION: ***Commissioner Everett moved to recommend approval to the City Council of the temporary site plan for Just Chillin with the following conditions:***

1. ***The temporary site plan is approved for a 24-month period after which the applicant may apply for a renewal;***
2. ***The approval is conditional upon the Utah County Health Department approval; and***
3. ***The applicant shall retain a current business license with the City.***

Commissioner Pengra seconded the motion. Those voting aye: Jeremy Bergener, Matthew Everett, Christopher Pengra, Erin Wells, and Brett Wright. The motion passed with a unanimous vote.

6.B. PUBLIC HEARING – Stonebridge Montessori

Mr. Jensen presented the item. This is a site plan and rezone application for the Stonebridge Montessori School. The school will serve prekindergarten students and will be accessed from Stonebridge Lane. The subject property is located in The Ranches neighborhood and was identified for commercial use within the now expired Ranches Master Development Plan and Agreement. As the agreement has since expired the vested rights no longer carry. The property is identified in the General Plan's Future Land Use Map with a Community Commercial land use designation. The CC and CN are appropriate zones within the Future Land Use Plan.

The front entry is towards the parking lot and not on a main pedestrian way as called for by EMMC 17.72.040(B). It is up to the Planning Commission to determine if the articulation provided complies with EMMC 17.72.040(D). Per EMMC 17.72.040(F)(2), no more than 50% of a building may be stucco. The building is shown set behind parking rather than the building being located adjacent to the street with parking behind the building. Staff has recommended that the building be turned 90 degrees to front on Ranches Parkway to place the parking behind the building.

Staff has previously asked for a cross access to the commercial site to the north, and while the applicant has presented a concept that shows this, their preference is to not provide the cross-parking lot access.

Special use standard evaluation per EMMC 17.75.052 Schools (public/charter/private):

- (A)(1): "Parking requirements shall comply with Chapter 17.55." The site plan shows 32 spaces, including two ADA spaces, which complies with this standard.
- (A)(2): "Adequate off-street stacking areas which are completely contained on site for student pickup and drop-off are required. No off-site stacking is permitted." The applicant shall provide proof that stacking distances are adequate and will not cause traffic to back onto a public right-of-way.
- (B)(1): "All driveways on the school property shall have at least one sidewalk." Sidewalks are included on the southern boundary of the property and at the front of the school building in compliance with this provision.
- (B)(2): "Primary pedestrian crossing shall employ traffic calming features. The site plan shows striping from the ADA parking area to the front entrance of the school, the Planning Commission shall determine if that provides sufficient traffic calming.
- (C): "Outdoor play areas shall be set back from property lines by at least 15 feet made up from substantial landscaping, fencing or wall, and berming where feasible." The landscape plan shows a six-foot privacy fence located on the property line; it is up to the Planning Commission to determine if this complies with this standard.

Staff recommends that the Planning Commission motion to recommend approval of the application to City Council for the reasons set forth in the staff report and in the meeting with the following conditions:

1. The site plan shall be approved without a drive-aisle connecting the northern property;
2. The applicant shall provide proof that stacking distances are adequate and will not cause traffic to back onto public right-of-ways;
3. The applicant shall update the elevations to use an appropriate mixture of material that does not include stucco used on more than 50% of the building;
4. The building shall be turned 90 degrees to locate it at the southeast corner allowing parking and play areas to be located at the west and north; and
5. A three-and-a-half-foot high landscape berm shall be added around the perimeter of the parking area.

Mr. Jensen clarified that the stucco used on the elevations only slightly exceeds the 50% maximum mainly due to the stucco on the rear elevation and the front column. He verified that the area in pink on the site map in the southeast portion of the parking lot represents underground storage tanks.

Applicant representative Tyler Dow said the orientation of the building presented is their preference to provide the best protection for the students. Childcare professionals prefer the proposed orientation because the building provides buffering between the parking area and the playground and prevents visibility into the school. The drive aisle is split and the adjacent use may impact the drop-off and pickup traffic pattern. They anticipate 150 students and tried to optimize the stacking distance from the right-turn entry to the drop-off/pickup area.

Commissioner Wright opened the public hearing at 7:01 p.m. As there were no comments, Commissioner Wright closed the hearing.

Commissioner Everett said that his greatest concern is vehicle stacking backing up onto Ranches Parkway. He recommended making the southern access a one-way entrance. He was a proponent of reorienting the building; however, he now is in favor of the proposed orientation to provide buffering between the playground and parking lot. He feels that the intent of the code has been met regarding the requirement for less than 50% stucco and as such, is not concerned with the proposed elevations.

Mr. Dow said stacking will not be an issue due to the multiple drop-off times at 8:00 a.m., 9:00 a.m., 11:00 a.m., 1:00 p.m., 2:00 p.m., and 4:00 p.m. The stacking lane can accommodate 16 vehicles and their locations have not had traffic impediment issues. They will happily encourage signage, such as for pedestrian crossings, to increase safety.

Commissioner Wells encouraged the applicant to include the information regarding student drop-off times in the packet presented to the City Council to reduce stacking concerns. She agrees with the staff recommendation to increase signage and Commissioner Everett's comments regarding stucco usage. She appreciates the number of windows included in the design. She feels the six-foot, privacy fencing is sufficient due to the surrounding uses. All the public elementary schools

in the City have parking lots located in front of the building and allowing the proposed orientation would treat this school similar to the public schools.

Commissioner Everett noted that the City has no input regarding the design and layout of public schools.

Commissioner Wright said that as the use is allowed in either the CN or CC zone, he sees no benefit to the City to zone the property as CC over CN. Recognizing the argument for separating the parking and the playground, he thinks the building should be turned 90 degrees due to the location of the building along one of the major roadway entries to the City as well as the uncertainty of the adjacent uses. The reorientation would increase the aesthetics with the building, rather than the parking lot, fronting on the roadway, improve buffering between the school and the future use to the west, and lengthen the stacking distance. He supported not requiring connectivity to the north of the property.

Discussion ensued regarding the building orientation.

Commissioner Pengra explained he was not concerned regarding traffic backing up onto Ranches Parkway as parents are more likely to stack or park along Stone Bridge Lane for their safety and the safety of their children which will occur infrequently, possibly only during school events, due to the size of the school. He feels very strongly about the orientation of the school as a father due to sensitivity to information obtained as a radKIDS volunteer. Safety of the children is paramount; design aesthetics are secondary. Less access to the children increases safety and schools are designed the way requested for safety reasons.

Commissioner Wright clarified his preference for CN zoning as it would be more restrictive regarding uses should the school close and the property be utilized for another use.

MOTION: ***Commissioner Everett moved to recommend approval to the City Council of the rezone of the Stonebridge Montessori property to the CN zone. Commissioner Wells seconded the motion. Those voting aye: Jeremy Bergener, Matthew Everett, Christopher Pengra, Erin Wells, and Brett Wright. The motion passed with a unanimous vote.***

MOTION: ***Commissioner Bergener moved to recommend approval to the City Council of the site plan for Stonebridge Montessori with the following conditions:***

1. ***The site plan shall be approved without a drive-aisle connecting to the northern property;***
2. ***The applicant shall provide proof that stacking distances are adequate and will not cause traffic to back onto the public right-of-way; and***
3. ***A three-and-a-half-foot high landscape berm shall be added around the perimeter of the parking area.***

Commissioner Pengra seconded the motion.

Commissioner Wells requested for the motion to include a condition requiring parking lot traffic calming measures and signage. Discussion ensued regarding the suggestion and it was determined to require additional signage.

Commissioner Everett requested for right-turn, entry-only signage to be added to Stone Bridge Lane. Commission Bergener expressed concern with potential conflict with the development to the west and declined to include the requested condition.

AMENDED MOTION: ***Commissioner Bergener moved to recommend approval to the City Council of the site plan for Stonebridge Montessori with the following conditions:***

1. ***The site plan shall be approved without a drive-aisle connecting to the northern property;***
2. ***The applicant shall provide proof that stacking distances are adequate and will not cause traffic to back onto the public right-of-way;***
3. ***A three-and-a-half-foot high landscape berm shall be added around the perimeter of the parking area; and***
4. ***Additional signage shall be added to the parking lot to increase pedestrian safety.***

Commissioner Pengra seconded the motion. Those voting aye: Jeremy Bergener, Matthew Everett, Christopher Pengra, Erin Wells, and Brett Wright. The motion passed with a unanimous vote.

7. Discussion Items

7.A. CONCEPT PLAN – Eagle Quest

Commissioner Wells was present but opted to not participate in the discussion due to the applicant being a Councilmember in the City where she works.

Mr. Jensen presented the item. Two separate concept plans are being presented including two different residential concepts for Parcel 59:006:0053 on approximately 159 acres west of Lake Mountain Road and a business park and multifamily concept for approximately 164 acres west of the Overland development and north of Mid Valley Road and Eagle Mountain Boulevard.

The eastern residential development is north of approximately quarter-acre lots in the Sunset Flats development and is in the area of Overland Village Four which has an approximate density of three lots per acre. The proposal includes two different concepts for the Eastern parcel. Concept One dedicates the arterial and collector roads to the City and includes a mix of RC, R3, R2, R1, and half-acre lots for a total of 486 lots, with an average lot size for the entire project of 9,050 square feet. Concept two dedicates the required half-width of the collector and arterial roads to the City and includes a mix of lot sizes and zones for a total of 426 lots, with an average lot size for the entire project of 10,477 square feet.

The west concept area is designated as Employment Center/Campus on the Future Land Use Plan. The concept plan proposes a General Plan amendment for approximately 11.1 acres to CC, 28.3

acres to MF2, and 36.5 acres to MF1, and 74 acres of Employment Center/Campus. The property is north of Rush Creek and a future charter school, east of a future freeway, west of the Ivory development west of Frontier Middle School, and northwest of Cory Wride Park.

Mr. Jensen explained that larger lots could be included in a lower zoning designation to meet the transition code due to Municipal Code dictating lot size minimums but excluding maximums. He is unsure if the eastern concept plans meet the transition code standards. The applicant proposes relocating the major arterial road, indicated on the Future Transportation Map to transect the northeast corner of the property, to run along the northeast corner at a 90-degree angle.

Applicant Kurt Ostler, a partner in Eagle Quest, LLC, said they have owned the property for over 20 years. Two years ago, they were told that due to animal rights for the properties to the east there could be incompatibility conflicts. To address City Council concerns, they propose half-acre lots along the east side of the development. Smaller lots are placed to the north to buffer the adjacent uses. The proposed curvature for the major arterial road to the east matches the curve radii in the Sunset Flats design to meet a road in the Ivory development. He said concerns from Hoofbeats to Healing and Lake Mountain Road residents regarding increased traffic is one of the reasons for the proposed design and intersection. They are amenable to developing either the concept with the road dedication or the reduced density plan.

Discussion ensued clarifying the land to the north of the property has a Neighborhood Residential Two General Plan land use designation which contemplates the MF1 and RC zones.

Commissioner Wright expressed concern with the recommendation to alter the orientation of the eastern major arterial, the length of the central north to south road encouraging traffic speeds, and the proposal of product not included in the Neighborhood Residential One General Plan designation for the area. He advocated for increasing the R1 product. Half-acre lots would help meet the average lot size zoning requirements to balance the smaller lots.

Mr. Mumford explained the placement of the road to the east facilitates meeting the Utah Department of Transportation (UDOT) intersection and traffic light spacing standards; however, the City is not required to meet those standards unless it becomes a UDOT road in the future. Relocating the curvature to the property to the north would impact that property more than currently contemplated. The City Engineer is evaluating the proposal.

Mr. Ostler said the park locations are to assist with drainage. The central park could potentially be relocated to segment the road along the northeast of the park to mitigate traffic speed concerns.

Commissioner Everett expressed concern regarding the impact to the property owner to the north should the full road curvature be required on their property. He suggested absorbing part of the road curving on this property and advocated for compliance with the General Plan and zoning averages. He supports the shorter block lengths and connectivity and agreed with concerns regarding the length of the road northeast of the central park. He encouraged the applicant to contemplate church and school sites and reminded the applicant that density is nontransferable from land sold for public facilities.

Commissioner Pengra said that due to the width of the powerline corridor and roadway, he is unconcerned with use conflicts with the property to the east. Although he likes the inclusion of half-acre lots in the plan, he does not view the half-acre lots as a benefit to the City that merits other concessions. He agrees with the concerns regarding the length of the central north to east road. He emphatically stated that the major arterial road should not be relocated to reduce impediment to this development due to the thought involved in determining the road location.

Commissioner Bergener echoed Commissioners Wright's sentiments to increase the number of R1 units due to the concerted effort by the Planning Commission to require adherence to the General Plan.

Mr. Ostler announced that after a year of negotiation with a landowner, Intermountain Healthcare (IHC) plans to build a medical facility in the southwest corner of the western development.

Bentley Pay with IHC stated their vision is for a large, community-scale hospital with a medical campus similar in size to the Spanish Fork Hospital with a phased approach, building sections of the hospital in correspondence with need and community growth. They desire for the hospital to be in the appropriate area surrounded by compatible and complementary uses. Other locations have encountered issues with being located by single-family homes. The location is desirable due to the future UDOT freeway and proximity to schools and Wride Memorial Park; however, the agreement would be contingent upon the freeway location as the property would not be large enough should the freeway bisects the parcel. The hospital is included in their planning models with a conceptually anticipated, unfinalized timeframe of five to ten years.

Mr. Ostler said the closest regional hospital is 27 miles away and the Saratoga Springs location is intended for surgical centers and medical offices. He envisions future college campuses in the northwest portion of the development, potentially with medical training programs. The reason for the requested MF1 and MF2 products is to buffer from the R3 and RC products to the east and due to IHC's desire not to build adjacent to single-family uses. Another possibility would be an active adult community or assisted living and commercial uses near the major roadways. The reduced land price offered to IHC in their negotiations is contingent upon the development being granted zoning for the multifamily uses.

Commission Pengra noted the possibility for conditions to change over the next five to ten years and expressed concern with granting entitlements in the hope for a project that does not have finalized plans. Other medical users have expressed interest in the City. Multifamily may be appropriate for this area; however, he is unsure if it would be appropriate to grant that amount of multifamily use requested in exchange for the hospital. He recommended for Mr. Ostler to partner with a master planning developer and believes there are ways for the applicant to work with a developer without creating a conflict of interest as a Councilmember in another city. He expressed his preference for the resulting master development plans as being more desirable and more likely to find favor with Eagle Mountain representatives.

Commissioner Everett said he is excited about a hospital, commercial, and educational uses and feels it is an appropriate and desirable location. He appreciates the applicant's research into the transitioning requirements, nevertheless, the amount of multifamily requested gives him pause. He

supports the proposed active adult or assisted living communities. He recommended incorporating single-family uses into the plan and reducing the overall residential component.

Commissioner Wright concurred with Commissioners Pengra and Everett.

7.B. CONCEPT PLAN – Porters Crossing Town Center Revised Concept Plan

Mr. Jensen presented the item. The request proposes changes to Pods 1, 2, 9a, 9b, 10, and 15 of the Porter's Crossing Town Center Master Development Agreement (MDA) and Master Development Plan (MDP).

Current entitlements:

- Pod 1: Retail pod with 4.9 acres of commercial.
- Pod 2: Mixed-use, residential above retail with 11.6 acres, 180 residential units, 15.5 dwelling units per acre.
- Pod 9a: Institutional 12.3 acres reserved for a recreation center, assisted living, and/or charter school.
- Pod 9b: 4.34 acres reserved for commercial, senior housing, or assisted living housing. Buildings allowed to be up to five stories in height. No required improved park space.
- Pod 10: 4.95 acres reserved for a potential church site.
- Pod 15: 4 acres of community open space located within the powerline corridor.
- Total Residential Units: Over 180 with up to 17 acres of assisted living or senior housing without a specific unit count.
- Total Commercial Area: 4.9 to 9.24 acres.
- Total Open Space: 4 acres.
- Total Church Area: 4.95 acres.

Concept Proposal:

- Pod 1: Hotel, Class A office, and retail buildings.
- Pod 2: Retail buildings.
- Pod 1 and 2 area: 17.3 Acres.
- Pod 9a: 8 acres, 96 apartments, 15 townhomes for a total of 111 residential units and 13.88 dwelling units per acre.
- Pod 9b: 4.34 acres, 80 apartments, 20 townhomes for a total of 100 residential units, and 23.04 dwelling units per acre.
- Pod 10: 4.95 acres, 33 townhomes, and 6.67 dwelling units per acre.
- Pod 15:4 Acres of improved open space.
- Conceptual Residential Units: 244.
- Conceptual Commercial Area: 17.3 acres.
- Conceptual Open Space: 4 acres.

Mr. Jensen explained that past discussions had contemplated a joint recreation center in the development to be shared between the development and the City. The assisted living was intended as an appropriate, buffering use.

Commissioner Wright cited portions of the 2nd Amendment to the Master Development Agreement for the Porter's Crossing Town Center Master Development, Section 4A.1. "Pod 9a. The City and Developer intend that Pod 9a will be dedicated to the City in accordance with Section 10A.4," Section 4A.3. "Pod 9b shall be developed for either Senior Housing, Assisted Living Housing or Commercial or Institutional Uses. Senior Housing or Assisted Living Housing buildings shall not exceed five (5) stories in height and shall include off-street parking," and Section 10A.8. "Alternate Zoning/ Development of Pod 9a and Use of Funds. If City fails to obtain the funding to construct the Recreational Facility by January 1, 2021, City shall notify Developer that it does not intend to construct the Recreational Facility. Upon such notice from the City, Pod 9a shall be automatically zoned either as Residential (with densities not to exceed the density in Pod 6b), or as Commercial or Institutional Use. Developer shall be required to meet the City Vested Code and City bonus density structure if Pod 9a is zoned as Residential. Any alternative zoning Pod 9a shall include, at a minimum, a one (1) acre park improved to the City's minimum standards."

Mr. Mumford confirmed that City failed to obtain the funding to construct the recreational facility by January 1, 2021. The City has not sent an official letter; however, discussions with the developer indicated the City is not prepared to build the recreation facility. The assisted living center was planned on Pod 9b because of the proposed recreation facility and potentially a second-level walkway joining the two buildings. The recreation facility was intended to fulfill some of the amenity requirements for the assisted living and other portions of the development with the intent to have reduced usage fees for the recreation facility for residents in lieu of the standard amenity requirements. The developer desires to renegotiate the agreement to transfer some of the vested density to the portion of the development where the assisted living and recreation facility were contemplated. A benefit to the City of the new proposal is additional commercial uses along Pony Express Parkway in Pod 2. The applicant desires to move the vested density from that area to the northern portion of the development. The City has encouraged the applicant to move forward with the commercial area as soon as possible.

Commissioner Wright desired to clarify that the potential density transfer is not contemplated in the purview of the current agreement and would require an amendment to the terms of the MDA.

Commissioner Wells expressed concern with the distance from the parking to the west and southwest to the apartments it is meant to service increasing the unlikelihood of the residents utilizing the parking and the stalls would more likely be used by the adjacent townhomes. She likes the integration of the housing types, retail, and a potential hotel and appreciates that the applicant located the retail stores along the street as required by Municipal Code. Due to the extremity of the changes from the original MDA, she is evaluating the concept plan as a new application and is unsure if the requested number of increased units is appropriate with consideration of buffering requirements. She is concerned with the proposal for one-car garages due to most households having multiple vehicles.

Commissioner Everett said he supports the retail and hotel proposal as appropriate for the location while desiring to ensure a five-story building adheres to Municipal Code; however, the residential proposal causes him concern. He was unsure if the pool is sized appropriately for the number of residential units served and concurs with the parking guest location concerns. Municipal Code

standards currently require rear-loaded garages on townhomes and one-car garages cause him concern regardless of the garage location.

Commissioner Wright noted that the MDA allows for a five-story building. He is in favor of the commercial site but is concerned with access to the northern portion for the residential uses and the parking located in the powerline corridor. He would prefer assisted living and single-family uses in Pods 9a and 9b similar to the proposal for Pod 6a and 6b.

Commissioner Pengra said that a one-car garage might be the house-owning entry point for new homeowners given the current housing market.

7.C. CONCEPT PLAN – Smith Property

Mr. Jensen presented the item. The conceptual plan is for approximately 80.04 acres located south of the Brandon Park Estates and west of the School and Institutional Trust Lands Administration (SITLA) land known as the "Pony Express Parcel" in the Overland MDP. The property is designated Neighborhood Residential One in the General Plan and slated for two to four units per acre. The regional Pony Express Trail is anticipated to bisect the southeast corner of the property. The concept plan is divided into a northern Phase 1 and a southern Phase 2 with proposed R2 and R3 zoning. SITLA representatives expressed concern with the proposal due to the road alignment and the Pony Express regional trail being depicted as a road in Phase 2 of the project. The trail is currently designated as Lehi-Fairfield Road.

Commissioner Wright clarified that the R2 zone has a minimum lot size requirement of 8,000 square feet and an average lot size of a one-quarter acre and the R3 zone has a minimum lot size of 6,500 square feet and an average lot size of 8,500 square feet.

Applicant Austin Smith expressed concern with how landowners to the south would access their property if Lehi-Fairfield Road were converted to a trail.

Mr. Jensen explained that SITLA anticipates roads along the north and south of their property providing two east to west connections.

Commissioner Everett stated that the City desires to preserve the trail to connect to other trail systems.

Mr. Smith stated his preference is to group the open space into a single larger park with increased amenities.

Commissioner Everett explained that Park 1 fails to comply with accessibility standards. He agrees a larger, centrally-located park would be preferable or a park centered around the regional trail with consideration of the park space being a benefit to the adjacent lots, particularly the smaller lots.

Mr. Jensen confirmed the proposed density for the project is 2.87 dwelling units per acre.

Commissioner Wright stated his interpretation is that the Neighborhood Residential One land use designation contemplates an assortment of R1, R2, and R3 products. He requested for R1 to be added to the plan and a greater variety of lots. He agreed with the suggestion to place smaller lots near the park space. He advocated for preserving the Pony Express Trail through the application of the Historical Preservation Overlay.

Mr. Jensen explained to the applicant that he had provided the engineer for the development with contact information for the SITLA planner for the area to facilitate planning road connectivity between the properties.

Commissioner Pengra expressed concern with requiring the applicant to adapt his plan in accordance with unfinalized plans for the surrounding area and the City's approval to use the Lehi-Fairfield Road as a temporary, secondary development access for other projects due to the difficultly in reverting the road to a trail. Although he loves the preservation of history, including the Pony Express Trail, he is unsure how to revert the road to a trail. Should the City desire to prioritize the preservation of the trail, alternative transportation routes need to be provided.

Mr. Mumford explained that the location of the road is on the historic Pony Express Trail route and is being used as a temporary, alternate access for Facebook. Mortenson Construction paved the road to divert construction traffic around school zones. SITLA refused to allow pavement of their portion of the road due to concern allowing pavement of the road would result in the loss of the area for a regional trail. The General Plan designates the area for a future trail. The timetable for construction completion and access use is unspecified. Facebook buildings 5 and 6 should be completed in two and a half years with room for three more full buildings excluding potential development of an additional 600 acres of undeveloped property. Project Freemont has been approved to the east of Facebook.

Discussion ensued regarding road accesses and the desire to revert the temporary access to preserve the Pony Express Trail and potentially connecting the trail to the park and open space plan and incorporating the Pony Express experience theme for the park.

Commissioner Wright stated that he believes the Pony Express Trail is worth preserving and suggested contemplating zoning the area with the Historical Preservation Overlay.

The applicant stated his willingness to adjust the plan to relocate the parks to incorporate the Pony Express Trail.

Commissioner Bergener noted that cul-de-sacs are discouraged unless required due to topographical issues and recommended for the applicant to remove the cul-de-sac when making other modifications.

8. Next scheduled meeting:

The next Planning Commission meeting is scheduled for August 24, 2021.

9. Adjournment

MOTION: ***Commissioner Wells moved to adjourn the meeting at 9:20 p.m. Commissioner Pengra seconded the motion. Those voting aye: Jeremy Bergener, Matthew Everett, Christopher Pengra, Erin Wells, and Brett Wright. The motion passed with a unanimous vote.***

The meeting was adjourned at 9:20 p.m.

Approved by the Planning Commission on August 24, 2021.

Steve Mumford, AICP
Assistant City Administrator/Community Development Director

EAGLE MOUNTAIN
CITY COUNCIL MEETING MINUTES

September 21, 2021, 4:00 p.m.
Eagle Mountain City Council Chambers
1650 East Stagecoach Run, Eagle Mountain, Utah 84005

4:00 P.M. WORK SESSION – CITY COUNCIL CHAMBERS

ELECTED OFFICIALS PRESENT: Mayor Pro Tempore Melissa Clark, Councilmembers Donna Burnham, Colby Curtis, and Carolyn Love. Mayor Tom Westmoreland and Councilmember Jared Gray were excused.

CITY STAFF PRESENT: Paul Jerome, City Administrator; Steve Mumford, Assistant City Administrator/Community Development Director; Tayler Jensen, Senior Planner; Fionnuala Kofoed, Director of Administrative Services/City Recorder; Elizabeth Fewkes, Recording Secretary; Chris Trusty, City Engineer; Jeremy Cook, City Attorney; Brad Hickman, Parks and Recreation Director; Zac Hilton, Streets and Storm Drain Manager; Jeff Weber, Fleet and Facilities Operations Director; Embret Fossum, UFA Battalion Chief; B.J. Eccles, Sergeant; Tyler Maffitt, Communications Manager; and Evan Berrett, Assistant to the City Administrator.

CITY STAFF PRESENT ELECTRONICALLY: Kimberly Ruesch, Finance Director; Jessa Porter, Planner; Aaron Sanborn, Economic Development Director; Mack Straw, Public Utilities Manager; Michele Graves, Library Director; and Chas Glenn Administrative Assistant.

Mayor Pro Tempore Clark called the meeting to order at 4:05 p.m.

1. CITY ADMINISTRATOR INFORMATION ITEMS

1.A. UPDATE – City Administrator Items

General

- The utility rate study is ongoing and nearing completion.
- Airport Road Phase 2 – The right-of-way is being secured, design will begin soon, and the anticipated completion date is September 2022.

Community Development

- The City issued 93 new residential building permits in August.
- There are 14 commercial projects currently undergoing building permit review, and 14 commercial projects in active construction.
- The new Planning Manager starts on October 4.
- A new Neighborhood Improvement Officer starts October 4, bringing the City total to three full-time Neighborhood Improvement Officers.

Water

- The City submitted water-related projects to the State's American Rescue Plan grant match program. The projects include a resolution to Well #1, transmission lines preventing work on pumps, and reuse system upgrades.

- The manual read process for resident utility bills began this week.
- Staff is installing water lines at the Wastewater Treatment Plant for the new land application and rapid infiltration basins.

Wastewater

- City Streets, Stormwater, Wastewater, and Water crews are installing four new rapid infiltration basins on the eastern portion of the recently purchased 80-acre parcel. The State granted a completion extension from October 4 to November 1.

Parks

- Cory B. Wride Memorial Park Phase 2 – Punch list items are being completed, and the grand opening is tentatively scheduled for October 12.
- SilverLake Woodhaven Park – The power should be completed and connected early next week.
- Smith Ranch Community Park – The construction documents for the park are complete.

Events

- The Ties and Tierras event was held at the Ivory Clubhouse to allow more than double the number of participants from previous years.
- The community cleanup event on September 18 had a low turnout due to inclement weather.
- The most recently scheduled Movie in the Park was canceled park due to weather. The event will not be rescheduled due to other upcoming Movie in the Park events.

Engineering

- Pony Express Parkway – The areas currently having storm drain pipe and compaction completed are scheduled to be paved on September 22 and 23.
- Airport Road Phase 1 – Construction continues. The traffic signal has been installed but will not be operational until the project is completed around the end of October.
- Bobby Wren Boulevard – the traffic signal has been installed and will be operational by the end of 2021.

Streets

- Resident requests for additional school crossings are carefully considered but may not always be implemented due to decreased safety with multiple crossing points and the unfeasibility of providing a crossing guard on every corner. Staff requests residents utilize the resident portal for requests including suggestions for additional school crossings.

Mayor Pro Tempore Clark stated School Board Member Julie King requested construction traffic delays be communicated to the Alpine School District transportation department in order to adapt plans to mitigate busing delay impacts.

1.B. DISCUSSION – Oquirrh Mountain Ranch

Senior Planner Tayler Jensen presented the item. The Oquirrh Mountain Ranch Master Development Plan (MDP) and Master Development Agreement (MDA) were approved in 2011 and cover a total of 120.4 acres with 417 units and 15.5 acres of open space. In 2016, the MDA

was amended to reduce the maximum number of units to 346 units and require 5.5 acres of improved open space.

The applicant has provided two Amended Master Development Plan options for Council consideration. In Option A, the proposed lot sizes include 61 lots with 40-foot frontages, 109 lots with 45-foot frontages, and 59 lots with 50-foot frontages. Option B includes increased lot sizes with 58 lots with 45-foot frontages, 80 lots with 50-foot frontages, and 68 lots with 55-foot frontages. RC zone standards require a minimum lot size of 4,500 square feet, an average lot size of 6,000 square feet, a minimum frontage of 58 feet, a front setback of 15 feet, a garage set back of 22 feet, a rear setback of 20 feet, side setbacks of eight feet and 10 feet on the garage side, and a corner set back of 15 feet. Option A proposes modified standards to allow a minimum lot size of 4,000 square feet, an average lot size of 5,442 square feet, a minimum frontage of 40 feet, rear setbacks of 15 feet, and side setbacks of five feet. Option B's modified standards include a minimum 45-foot frontage, a 15-foot rear setback, and five-foot and ten feet on the garage-side side setbacks.

Oquirrh Mountain Ranch has a current density approval of 346 total units with up to an additional 292 units. The allowable density in unbuilt pods is 265 units; those units combined with the 54 built units result in an actual maximum density of 319 units. In contrast, if Option A were to be approved, the maximum full buildout would be 283 units. If Option B were to be approved, the maximum full buildout would be 260 units.

The Overland Village 2 development is adjacent to the south and has one-half to one-third acre lots along the northern border. The proposed lots in both options are smaller and do not meet the City's transition standards; however, the approved MDA has townhomes and apartments along the southern boundary, and the proposed lots would be a more appropriate transition than the vested units. The proposals also include a stub connection between Oquirrh Mountain Ranch and Overland Village 2.

Mr. Jensen verified that the side setbacks in the previous Tier II standards, which are the standards included in the current MDA, are five feet and ten feet on the garage side. Tier II standards include a 55-foot minimum frontage with a requirement for 20% of the project to have 60-foot frontages. He clarified the map for Overland Village 2 is intended to show the difference in the lot sizes and the roads were amended with the preliminary plat; the connections between the projects will be adjusted to align properly. The property to the west of the development will have a north-to-south collector road connecting to the Overland development. A stub road for a future connection will be provided on the west side of Oquirrh Mountain Ranch. The proposed north-to-south collector road may need to be relocated should terrain prove prohibitive. Construction phasing will begin with the eastern cul-de-sac and the western portion will be developed last. Any blasting required for the project would require Council approval and the walkout basements would not have windows on the sides of the units as the bedrooms will be placed towards the rear of the lots with windows on the back of the homes.

Discussion ensued regarding road connectivity and access to Airport Road for the development.

City Engineer Chris Trusty said the Overland development placed a stub for the north-to-south collector road in the proposed location as the terrain would not accommodate the road farther to the east, which would have been preferable.

Councilmember Curtis said that the minimum lot frontage he would consider is 50 feet; exchanging the frisbee golf course for the petroglyph park and wildlife corridor is acceptable.

Councilmember Burnham stated that the applicants gave up several lots on flat land and removed the frisbee golf course from the project due to concern with the impact of the course on wildlife. She credited the applicants for agreeing to dedicate both buildable and unbuildable land for the wildlife corridor, intermixing the lot sizes to provide variety, and their willingness to remove the 40-foot frontage lots. She said those reasons, as well as excluding window wells on the sides of the houses and increasing the grade for the runoff from the lots to drain to the front, are the reasons the Planning Commission determined to recommend approval of the project.

Mr. Jensen said the applicant has communicated that Option B, with 206 units, was the minimum number of units to make the plan financially viable. He noted there is a 20-foot open space buffer between Oquirrh Mountain Ranch and Overland Village 2. Should the lift station not be required, the applicant would have additional acreage to incorporate into the southern border lots.

Assistant City Administrator/Community Development Director Steve Mumford stated that a stipulation to increase the lot sizes along the southern border should the lift station not be required could be a part of the development agreement.

Councilmember Curtis said he would prefer a small area of multifamily housing for this area, rather than housing he views as poorly designed, to allow for some larger, more-usable lots. He recognizes sacrifices are necessary to accommodate the wildlife corridor; however, the 55-foot frontage lots in his neighborhood have a high transiency rate and he is concerned with the style of neighborhood being proposed.

Mayor Pro Tempore Clark expressed concern that introducing multifamily to the development and the associated amenity requirements would lead to failure to achieve the desired net result.

Councilmember Love stated that although the proposed lots are narrow, the greater depths and the ten-foot garage-side setbacks will help mitigate some of the issues experienced in other areas with small lot frontages.

Mr. Jensen confirmed that the average depth of the lot will be 117 feet compared to the 92- to 95-foot depths of the cluster lots in SilverLake.

Discussion ensued resulting in Council support of the Planning Commission recommendations noted in the staff report as well as additional conditions or changes to the project to address other concerns.

1.C. CONCEPT PLAN – Eagle Quest

Mr. Jensen presented the item. The applicant is seeking feedback on two parcels they own within the City; the eastern parcel is located west of Lake Mountain Road and the western parcel is located just north of the Rush Creek property and west of Overland. The applicant has included two different concepts for the eastern parcel. The first concept proposes 484 lots, dedicates arterial and collector roads to the City, and includes a mix of RC, R3, R2, R1 and half-acre lots for an average lot size of 9,050 square feet. The second concept plan proposes 428 lots and does not dedicate the full width of collector and arterial roads and includes a mix of lot sizes and zones for an average lot size of 10,477 square feet.

The current transportation plan indicates a curved road that bisects the northeast corner of the property. The applicant's preference is for a straight road to run along the east side of the project and the curve to connect to a road to the west to be placed entirely on the property to the north. The Sunset Flats development is located to the south and the Eagle Mountain Benches development is located to the east with two-and-a-half to five-acre lots.

Applicant representative Kurt Ostler said they are concerned with the road making their northwest corner an orphan parcel and their proposed alignment would provide sufficient traffic light distancing to meet the Utah Department of Transportation (UDOT) standards, even though the road is not a UDOT road. They feel changing the road would improve connectivity to Hoofbeats to Healing and the Eagle Mountain benches area and would create a 90-degree intersection. His understanding is that Aviator Avenue was planned as a 53-foot right-of-way when Sunset Flats was developed. They are willing to dedicate the additional 12 feet from their southern boundary over their requirement for the road expansion to a minor collector as now indicated in good faith in hopes the City would approve their road change proposal.
Mr. Ostler said the east concept land is designated as Neighborhood Residential One. The 428-unit plan proposes 83 R3 lots, 206 R2 lots, and 139 R1 lots resulting in an average lot size of 10,493 square feet or 0.24 acres. The property is bordered on all sides by collector roads and traffic studies indicate their development is not generating enough traffic to require the collector roads. The 484-unit plan proposal requests an additional 56 lots in exchange for the dedication of the 12.27 acres of land for road right-of-way. However, if the City determines it would prefer the lower lot count, a land purchase agreement for the additional right-of-way width could be negotiated.

Councilmember Curtis expressed concern that the 12.5 acres of land, currently zoned as Agriculture, would be equivalent to 2.5 lots, not 56 lots, and desires to evaluate the request for increased density to determine actual value gained to ensure the City trades an appropriate lot equivalent.

Discussion ensued regarding concerns with the proposed radii for the curves in the road and whether the curvature would be appropriate for the speed limit intended for the road.

City Engineer Chris Trusty said the applicant-proposed radii would meet the minimum 350-foot radius requirement for a 45 mile-per-hour arterial road, and either plan would work from a transportation standpoint. Staff's main concern is placing an undue burden on the property owner

to the north. As the road is unlikely to be a UDOT roadway, meeting the traffic light distancing would be optional.

Discussion ensued regarding concerns that moving the road would give leverage for increasing the density in the Town/Center Mixed-Use area on the northern property, the preference for the 90-degree turn created by the applicant-proposed road, clarification that increasing the Town/Center Mixed-Use area would not automatically grant additional density, and the impact of the applicant-proposed road on the northern property.

Mr. Ostler stated they originally had half-acre lots along the eastern border but reduced the lots sizes to approximately one-third acre due to the concern expressed by a Planning Commissioner regarding potential animal rights conflicts between the half-acre lots and other lots in their development.

Discussion ensued regarding lot size transition requirements and concerns due to potential animal right conflicts, the impact of the proposed road alignments to lot size transitioning and buffering, whether the eastern road should be counted as a lot size transition step, the desired total density and unit count, the use of the road curvature as presented in the future transportation plan to divide lots with and without animal rights, and possibly trading larger lots for the applicant-proposed road alignment.

Mr. Jensen presented the concept for the second Eagle Quest west property for approximately 160 acres west of Overland and north of Rush Creek with a mix of MF1, MF2, CC, MEC, and OP zones. The concept rendering excludes the necessary connections with the Overland project and would need to be revised.

Mr. Ostler explained details of the west concept plan including the medical campus area, trails, and multifamily units. The residential units were added to follow the transition buffering requirements for the adjacent properties and RC zone. The hospital user has requested to exclude single-family homes from the project due to use conflicts they've experienced in other cities.

Mr. Mumford explained that the future freeway indicated on the west of the property would likely be placed along the border of the property line. He verified that the agreement could include development triggers to ensure the multifamily and other uses were developed at appropriate intervals.

Discussion ensued expressing support for the hospital and retail uses, suggesting reductions for the multifamily units, and regarding development triggers and agreement requirements that could be included to mitigate concerns the multifamily would be built years prior to the non-residential uses.

Mr. Ostler stated that the hospital user is working with UDOT to locate the future freeway outside of their property to obtain the desired acreage they need.

1.D. DISCUSSION – Fire Station 251 Color Scheme

Unified Fire Authority Assistant Chief of Support Services Dominic Burchett and Dan Gasser with AJC Architects introduced the item and presented renderings and examples employing a dark brick exterior with wood accents and glass to doors with views of the vehicles to assist with identifying the buildings as a fire station.

The Council expressed approval of the proposed color scheme, materials, articulation, size of the Eagle Mountain signage, and a preference for the midnight black brick option.

Councilmember Love expressed concern that the right side of the building looked flat and plain compared to the left and feels like it is missing an element. Mayor Pro Tempore Clark agreed.

2. AGENDA REVIEW

The Council determined to remove item 13.A. from the consent agenda.

3. ADJOURN TO A CLOSED EXECUTIVE SESSION

MOTION: ***Councilmember Burnham moved to adjourn to a closed session for the purpose of discussing reasonably imminent litigation, the purchase, lease, or exchange of real property pursuant to Section 52-4-205(1) of the Utah Code, Annotated. Councilmember Curtis seconded the motion. Those voting aye: Donna Burnham, Melissa Clark, Colby Curtis, and Carolyn Love. The motion passed with a unanimous vote.***

7:00 P.M. POLICY SESSION – CITY COUNCIL CHAMBERS

ELECTED OFFICIALS PRESENT: Mayor Pro Tempore Melissa Clark, Councilmembers Donna Burnham, Colby Curtis, and Carolyn Love. Mayor Tom Westmoreland and Councilmember Jared Gray were excused.

CITY STAFF PRESENT: Paul Jerome, City Administrator; Steve Mumford, Assistant City Administrator/Community Development Director; Tayler Jensen, Senior Planner; Fionnuala Kofoed, Director of Administrative Services/City Recorder; Elizabeth Fewkes, Recording Secretary; Jeremy Cook, City Attorney; Brad Hickman, Parks and Recreation Director; Embret Fossum, UFA Battalion Chief; B.J. Eccles, Sergeant; and Evan Berrett, Assistant to the City Administrator.

CITY STAFF PRESENT ELECTRONICALLY: Kimberly Ruesch, Finance Director; Chris Trusty, City Engineer; Aaron Sanborn, Economic Development Director; Tyler Maffitt, Communications Manager; Zac Hilton, Streets and Storm Drain Manager; and Jeff Weber, Fleet and Facilities Operations Director.

4. CALL TO ORDER

Mayor Pro Tempore Clark called the meeting to order at 7:15 p.m.

5. PLEDGE OF ALLEGIANCE

Councilmember Curtis led the Pledge of Allegiance.

6. INFORMATION ITEMS/UPCOMING EVENTS

- The Events Department would like to thank all the residents who participated in the community cleanup. We appreciate you showing up to help keep our community clean. Thank you for being polite to staff who were working the dumpster shifts and for keeping the dumpster location clean and tidy. Thanks to all of the staff who helped with this event, we appreciate all of your hard work.
- There will be a double showing of Hocus-Pocus on October 1st and 2nd. This will be a drive-in-style event at Mid Valley Soccer Fields. To register for this event, please go to the city website: eaglemountaincity.com

To receive City notifications, including emergency info, news events, and traffic alerts, sign up at emcity.org/notifyme.

7. PUBLIC COMMENTS

Mayor Pro Tempore Clark opened public comment at 7:18 p.m.

Johnathan Penberthy expressed concern that he is not allowed to park a vehicle with business advertising in front of his home because he operates a home business, but other residents are allowed to park commercial vehicles, with decals for non-home operated businesses, in front of their homes. The business signage on his trailer is his main available method for advertising his business when he performs services offsite.

Director of Administrative Services/City Recorder Fionnuala Kofoed stated that she is unaware of the City receiving or enforcing complaints regarding vehicles with home-based business decals; however, the issue was discussed as a part of a recent Administrative Law Judge hearing regarding a local business. It is under the purview of the Council to amend Municipal Code to allow for the parking of commercial vehicles with decals in the front of or in the driveway of home-based businesses. Business equipment is currently required to be screened. The business can request a waiver for the requirements if they feel the business is not impacting their neighbors.

Mayor Pro Tempore Clark closed public comment at 7:29 p.m.

8. CITY COUNCIL/MAYOR'S ITEMS

Councilmember Love

Councilmember Love said Communities That Care has put together a suicide prevention and mental health resources magnet that will be mailed to all households within the Alpine School District area. She is excited to participate in a hot air balloon activity for a youth resident that is battling childhood cancer, and she recognized Unified Fire Authority for going above and beyond to provide special experiences for children with cancer.

Councilmember Burnham
Councilmember Burnham thanked the residents for making Eagle Mountain an amazing place to live and for resident participation in the various Eagle Mountain Serves projects and activities including celebrating an early Christmas for a child battling cancer. She requested a discussion on the work vehicle signage standards to make the requirements more equitable.

Mayor Pro Tempore Clark
Mayor Pro Tempore Clark advocated for staff to collect data for a future Council discussion regarding City parking and road standards, particularly in multifamily neighborhoods. She appreciates the Events staff for their work during the projects and activities during the past few weeks. She thanked Jeff Weber, Julie Bencomo, and Greg Stone for facilitating a CERT practice event. She is grateful to the people that donated to Tabitha's Way; City residents donated over 8,000 lbs. of food.

Councilmember Curtis
Councilmember Curtis said that he is concerned with the ramifications of reducing home-based vehicle parking standards but is open to a discussion on the item. He agreed with the need to discuss parking standards and the impact of narrow frontages on parking availability.

9. RECOGNITION

9.A. 2020 Outstanding Special Event for Silent Santa – Presented by LeAnn Powell, URPA Executive Director

Utah Recreation Parks Association Executive Director LeAnn Powell explained the nomination and voting process and presented the Events Department staff with an award for the Silent Santa event and applauded their creativity to provide an inclusionary event for children with sensory challenges and special needs.

9.B. 2020 Outstanding Department – Presented by LeAnn Powell, URPA Executive Director

Ms. Powell presented the Parks and Recreation Department staff with an award for outstanding department with the consideration of the quality and quantity of work performed by a limited number of staff members.

CONSENT AGENDA

10. AGREEMENTS

10.A. AGREEMENT – Approving a Deed of Conservation Easement.

11. CHANGE ORDERS

11.A. Lone Tree Traffic Signal Change Order #1 – B Jackson Construction

12. MINUTES

12.A. September 7, 2021 Minutes – Regular City Council Meeting

13. PRELIMINARY PLATS & SITE PLANS

13.A. SITE PLAN – Silverlake 32

MOTION: ***Councilmember Burnham moved to approve the consent agenda, removing item 10.A. at the request of the applicant and removing item 13.A. and placing it as a scheduled item. Councilmember Curtis seconded the motion. Those voting aye: Donna Burnham, Melissa Clark, Colby Curtis, and Carolyn Love. The motion passed with a unanimous vote.***

13. PRELIMINARY PLATS & SITE PLANS

13.A. SITE PLAN – SilverLake 32

Senior Planner Tayler Jensen presented the item. The area is located within Area C of the SilverLake Master Development Plan and Agreement that was last amended in January 2013 and designated for single-family, patio, garden court, cluster, and multifamily development. The preliminary plat for SilverLake South was approved on October 1, 2019, and includes this area; however, multifamily developments require individual site plan approvals. The proposal includes a total of 91 lots located on approximately 9.92 acres with 33 cluster lots and 58 townhomes.
Although this approval is strictly for the SilverLake plat 32, many of the issues including parking, open space, and roads are shared with Plat 31 which was previously approved. With 91 units in plat 32, 31 guest parking stalls are required, and 27 guest parking stalls are provided, which is 4 stalls under this requirement. The total number of units in SilverLake 31 and 32 is 115 units which require 39 guest parking stalls; currently, 34 parking stalls are provided.

The proposed 40-foot-wide private right-of-way throughout the project, which includes 27 feet of pavement and 4 feet of sidewalks, would bring it to the local right-of-way standard minus ten feet of park strips. SilverLake 31 was approved with a 43-foot right-of-way which includes 5-foot sidewalks and 28 feet of pavement. The proposed total of 1.46 acres of open space to serve SilverLake 31 and 32 includes adding benches/picnic tables, 126 trees, a tot lot, and leaving property for the City to add a natural trail. Townhomes are subject to the design standards found in 17.72 of Eagle Mountain Municipal Code. Townhomes have been built throughout the SilverLake development utilizing identical elevations. The rear elevations do not include the same materials or features as front elevations and should be updated to include the same features as the front elevations since they are backing onto improved open space.

The Planning Commission recommended approval to the City Council of the SilverLake 32 site plan with the following conditions:

1. Collector road fencing consistent with existing collector road fencing in SilverLake shall be constructed along the rear and side lot lines of any unit that does or will abut Golden Eagle Road prior to issuance of a certificate of occupancy;
2. Four additional parking stalls shall be required for SilverLake 32 and/or five additional parking stalls shall be provided for SilverLake 31 and 32;
3. The amount of water-wise landscaping shall be increased by replacing the turf behind buildings, in park strips, and other areas that are not very useable as play areas;
4. Rear and side elevations shall include similar materials as the front elevations; and
5. The right-of-way shall be consistent with the 43-foot right-of-way requirements approved for Plat 31 including 5-foot sidewalks and 28 feet of pavement.

Mr. Jensen clarified that the guest parking is distributed throughout the multifamily units.

Councilmember Curtis requested the City verify that the required masonry wrapping from the front elevations to the sides of the units has been completed on the finished units as required per the terms of the master development agreement (MDA) and Municipal Code, as the townhome elevations presented had not been updated to include the masonry wrapping. He stated that he is frustrated that good faith has not been exercised by the developer through keeping the terms of the MDA resulting in the City being required to ensure the terms of the agreement are executed.

Assistant City Administrator/Community Development Director Steven Mumford explained that the SilverLake MDA includes example elevations with masonry wrapping; however, the language in the agreement does not address masonry wrapping. As such, he recommends including a condition in the motion to clarify that masonry wrapping is required for the units.

Discussion ensued regarding the masonry wrapping requirement for townhomes and single-family units in SilverLake, differences in the elevations in the MDA and the elevations of the developed units, and the desired requirement for masonry wrapping to include as a condition of approval.

Mr. Mumford explained that the open space amenity points requirement for SilverLake 32 was calculated based upon the entire SilverLake South development, and the full development exceeds the number of points required. The gravel trail will be for vehicular maintenance access rather than a part of the parks and open space amenities.

Councilmember Love expressed disappointment that this phase did not connect to the asphalt trail system but recognized the impact of the wash on trail connectivity.

Mr. Mumford stated that SilverLake Parkway will have eight-foot asphalt trails that will connect to Saratoga Springs. The road connections to Saratoga Springs are considered system improvements which will be completed by the City. Staff is drafting new policy for road reimbursements and payments to be presented to the Council.

City Attorney Jeremy Cook explained that the reimbursement agreement with the developer requires the dedication of the land for the roads but not improvement because the roads serve the system as a whole, rather than specifically this project. The City will develop the road once the proper width is determined and connectivity has been agreed upon with Saratoga Springs.

MOTION: ***Councilmember Love moved to approve the site plan for SilverLake 32 with the following conditions:***

1. ***Collector road fencing consistent with existing collector road fencing in SilverLake shall be constructed along the rear and side lot lines of any unit that does or will abut Golden Eagle Road prior to issuance of a certificate of occupancy;***
2. ***Four additional parking stalls shall be required for SilverLake 32 and/or five additional parking stalls shall be provided for SilverLake 31 and 32;***
3. ***The amount of water-wise landscaping shall be increased by replacing the turf behind buildings, in park strips, and other areas that are not very useable as play areas;***
4. ***Rear and side elevations shall include similar materials as the front elevations;***
5. ***The right-of-way shall be consistent with the 43-foot right-of-way requirements approved for Plat 31 including five-foot sidewalks and 28 feet of pavement; and***
6. ***Eighteen inches of masonry shall wrap around to the side of the units as required by the master development agreement.***

Councilmember Curtis seconded the motion. Those voting aye: Donna Burnham, Melissa Clark, Colby Curtis, and Carolyn Love. The motion passed with a unanimous vote.

SCHEDULED ITEMS

14. ORDINANCE

14.A. ORDINANCE – An Ordinance of Eagle Mountain City, Utah, Amending the Eagle Mountain Municipal Code Section 13.20.050 Rates and Fees.

Assistant to the City Administrator Evan Berrett presented the item. The proposal adds "Accounts for utility services shall be in the name of the property owner," to EMMC 13.20.050 Rates and fees to facilitate the existing requirement that "each property connected to service shall be liable for the payment of all charges and each property owner accepts service on the terms required herein." The primary objectives of the amendment are to enable Utility Billing staff to work directly with landlords to increase communication, reduce temporary service disruptions, prevent issues with unpaid bills when renters move away, and to retain up-to-date landlord contact information to help Neighborhood Improvement officers resolve issues faster and help landlords be aware of issues with their tenants or property.

The change of account ownership will require some changes to how accounts are managed through the implementation of a new landlord utility service agreement. Landlords who still wish to have tenants pay utility bills directly will sign an agreement authorizing this arrangement. Utility applications will include questions asking if the applicant is a property owner or tenant. The answer

will create paths of tasks or information requests as necessary. Staff will create a process to allow for landlords to receive the monthly bills in addition to the tenants.

The impacts for property owners and tenants will vary depending on preference. The property owners will be more involved in the billing of utilities, may need to provide or update contact information with the City, and/or will become liable for unpaid bills. Tenants may see landlords seeking to change rental contracts, see landlords taking ownership of utilities and increasing rent to compensate, and/or will not be able to start or stop services independently. The goal of the hybrid incentive method is to turn rental dwelling licensing into a system that landlords want to participate in. Billing in the landlord names solves issues with unpaid utility bills, greatly increasing general participation.

Mr. Berrett verified that the City would allow a six-month grace period to inform landlords and bring rental properties into compliance prior to full enactment of the requirements. The Planning Department staff has assisted with identifying rental properties to assist with notification efforts.

Councilmember Love expressed support of the program as the City should not be responsible for unpaid utilities and appreciates the plans for notification to the landlords when utilities go unpaid as the landlords have better mechanisms to collect the money.

Councilmember Curtis commended staff for their work and the program.

Mayor Pro Tempore Clark stated she is excited about the program and appreciates staff efforts; however, she expressed concern regarding the burden to renters that are unaware of the process when trying to sign up for utilities, resulting in residents going several days without water.
Mr. Berrett said that the City hopes for the nonstandard rental situations to improve; unfortunately, the City is unable to do much to intervene. The new online application process provides tenants information to assist them with navigating the process.

Discussion ensued regarding tenant responsibility in obtaining information regarding the City's utility process, the process eliminating more issues than it creates, and utilities potentially remaining active during the transition of tenants due to the utilities remaining in the landowner's name.

MOTION: ***Councilmember Burnham moved to approve an ordinance of Eagle Mountain City, Utah, amending the Eagle Mountain Municipal Code Section 13.50.050 Rates and Fees. Councilmember Love seconded the motion. Those voting aye: Donna Burnham, Melissa Clark, Colby Curtis, and Carolyn Love. The motion passed with a unanimous vote.***

15. CITY COUNCIL/MAYOR'S BUSINESS

Councilmember Curtis
Councilmember Curtis apologized if he sounded accusatory during the SilverLake 32 discussion.

16. CITY COUNCIL BOARD LIAISON REPORTS

Councilmember Curtis
Councilmember Curtis said he will be attending a meeting with the American Legion in October and he was unable to attend the Library Advisory Board meeting but will review the notes.

Councilmember Burnham
Councilmember Burnham said things are going well with both the Senior Citizens Advisory Board and Planning Commission.

Mayor Pro Tempore
Mayor Pro Tempore Clark stated a Ham radio licensing exam will take place on Saturday 25th at the Spanish Fork County Fairgrounds as a part of a radio field day event. She requested to receive notifications regarding Youth Council meetings and activities as the Secondary Liaison. The City Council will be meeting with the Alpine School District on Thursday, September 23, 2021, at 7:30 a.m.

Councilmember Love
Councilmember Love said the Cemetery Advisory Board will be meeting next week. The Limitless Car Show is scheduled for October 9th and more information will be forthcoming. The Eagle Mountain Chamber of Commerce has a business after-hours event at Mountainland Technical College on October 14th.

17. COMMUNICATION ITEMS

17.A. Financial Report

17.B. Upcoming Agenda Items

MOTION: ***Councilmember Burnham moved to adjourn to a closed session for the purpose of discussing reasonably imminent litigation, the purchase, lease, or exchange of real property pursuant to Section 52-4-205(1) of the Utah Code, Annotated. Councilmember Curtis seconded the motion. Those voting aye: Donna Burnham, Melissa Clark, Colby Curtis, and Carolyn Love. The motion passed with a unanimous vote.***

The meeting was adjourned to closed session at 8:39 p.m.

18. ADJOURNMENT

MOTION: ***Councilmember Curtis moved to adjourn at 9:22 p.m. Councilmember Burnham seconded the motion. Those voting aye: Donna Burnham, Melissa Clark, Colby Curtis, and Carolyn Love. The motion passed with a unanimous vote.***

The meeting was adjourned at 9:19 p.m.

Approved by the City Council on October 5, 2021.

Fionnuala B. Kofoed, MMC
Director of Administrative Services/City Recorder

EAGLE MOUNTAIN	**EAGLE MOUNTAIN CITY** **PLANNING COMMISSION MEETING** **DECEMBER 14, 2021**
TITLE:	ACTION ITEM / PUBLIC HEARING - Atlas Tower - Sunset Flats
ITEM TYPE:	Site Plan
APPLICANT:	Carri Wullner (Atlas Tower)

ACTION ITEM:
Yes

PUBLIC HEARING:
Yes

PREPARED BY:
Tayler Jensen, Planning

BACKGROUND:

Atlas tower is proposing a 80' Wireless Cell Tower, with stealthing to appear as a grain silo, to be constructed on 2,500 SF within parcel 59:007:0077, located to the north of the Rocky Mountain Power Substation, west of Lake Mountain Road between the two powerline corridors

ITEMS FOR CONSIDERATION:

Communication facilities and towers are special uses in all zones, including the agriculture zone, and they may be permitted only where the comply with the standards of 17.75.091 EMMC as described below:

A. General: the following development standards shall be applicable to all facilities:
    1. The proposed facility shall be located on an approved structure site in conformance with this code. The applicant has submitted a required site plan application, if approved they will be in *compliance* with this provision.
    2. Any associated mechanical equipment shall be completely screened from view from ROWs and parking areas on adjacent properties with a solid fence or wall. The applicant is proposing a 6' chainlink fence around the site, staff recommends this be changed to a privacy fence.
    3. The proposed facility is not located within a public ROW which *complies* with this provision.
    4. At 80' tall the proposed facility is not required to be marked with tower lights or tower paint.
    5. Applicant shall submit copies of all required federal

permits prior to issuance of a building permit

6. The applicant is proposing to stealth the facility by making it appear as a grain silo tower, in *compliance* with 17.75.091 A 6
7. There is no lightning rod to include in the height calculation for the site.
8. Antennas and equipment boxes on the utility pole will be located inside of the silo structure thus *complying* with 17.75.091 A 8
9. Generators or noise producing venting systems shall be prohibited.

B. Location and Type Despite being located between two powerline corridors and in close proximity to large power poles the applicant is still proposing to stealth the facility by making it appear as a silo and painting it neutral colors, in *compliance* with 17.75.091 B

C. Burden of Proof: It is the opinion of staff that the applicant has worked and accomplished the highest priority site within the vicinity in *compliance* with 17.75.091 C

D. Setbacks: The proposed tower is located in excess of 200' from the property line of any residential use, and it exceeds the minimum setbacks of the Agriculture Zone.

17.75.091 I 2 C: designates the maximum height of a monopole at 60', although the city may allow an antenna structure up to 120 feet in height if the applicant demonstrates that additional height is necessary to obtain coverage and that the applicant has taken steps to mitigate adverse effects on the surrounding neighborhood. The applicant has shown that with the additional height they are able to facilitate additional colocation, and they have worked to screen the facility using stealth. It is the opinion of staff that the proposed 80' tower is appropriate in this location.

17.75.091 J Additional Requirements: No solid waste receptacles are proposed, no accessory structures are required, and any future equipment enclosures will be shorter than the screening fence and colored the same color as the main tower, there is sufficient parking in the area, in *compliance* with this provision.

REQUIRED FINDINGS:

Wireless Communication Tower approvals are based upon compliance with City Code requirements. The approval criteria for Communication Facilities and Towers can be found in 17.75.091 EMMC.

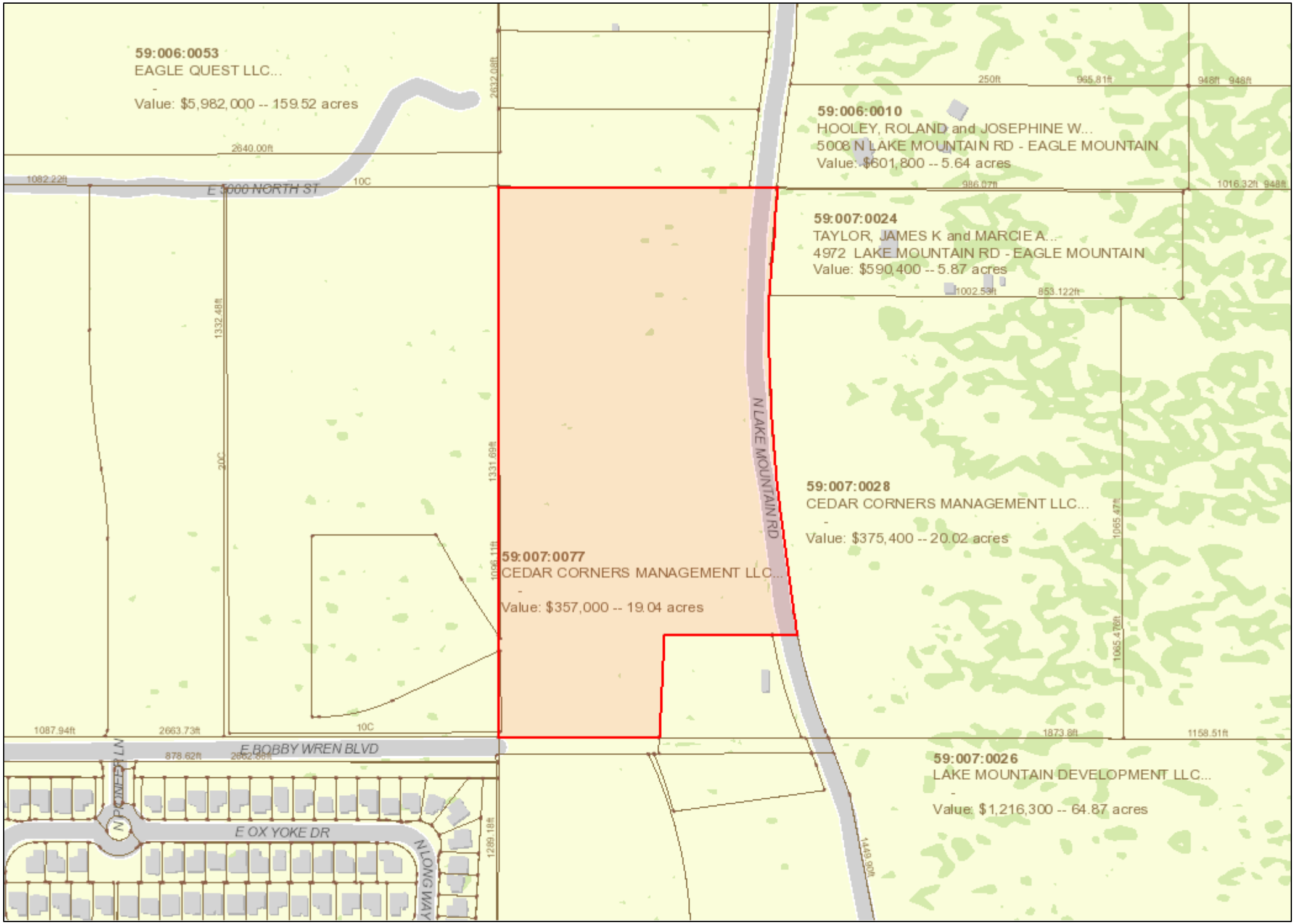
RECOMMENDATION:

We recommend the Planning Commission make a motion to recommend approval of the Atlas Tower - Sunset Flats Site Plan to the City Council, for the reasons set forth in the staff report and in the meeting with the following conditions:

1. A 6' privacy fence replace the chainlink fence in accordance with 17.75.091 A 2
2. Applicant shall submit copies of all federal permits prior to a building permit being issued.
3. Generators or Noise producing venting systems shall not be used in compliance with 17.75.091 (

ATTACHMENTS:

Site Location
Narrative
Site Plan
Silo Tower



Utah County Parcel Map

590070077

This cadastral map is generated from Utah County Recorder data. It is for reference only and no liability is assumed for any inaccuracies, incorrect data or variations with an actual survey

Date: 8/16/2021

N

Zoning Narrative – "Eagle Mtn-Sunset Flats"

December 9, 2021

Eagle Mountain City Planning & Zoning

To Whom It May Concern:

Atlas Tower 1, LLC is submitting a Conditional Use Application to Eagle Mountain City Planning & Zoning Department for a Wireless Telecommunications Facility to be located in Eagle Mountain City, UT (Parcel Number: 590070077). This facility will be roughly 2,500 square feet and house an 80'stealth grain silo telecommunications tower that can accommodate up to four wireless carriers. This request is made in an effort to bring quality voice and data services to an area lacking reliable coverage.

SITE DETAILS

Land Owner:
Cedar Corners Management LLC
947 S 500 E #100
American Fork, UT 84003

Site Address:
Sunset Flats
Eagle Mountain City, UT 84005
(Parcel Number: 590070077)

Applicant:
Atlas Tower 1, LLC
3002 Bluff St., Suite 300
Boulder, CO 80301

Coordinates:

40.318207-111.994108

Zoning:
OS-I

Lease Area:
2500 Sq. ft.

PROPOSAL SUMMARY

The purpose of this request is to build an 80' stealth grain silo telecommunications tower within 2500 sq. ft. wireless facility. This facility will provide critical wireless coverage to the surrounding area. The proposed site is within close proximity to the Eagle Mountain Road neighborhood and surrounding areas where there is very spotty coverage and the capacity of the existing infrastructure is reaching its limit. As the area develops further, and the existing users demand more data for their existing devices, existing infrastructure will reach capacity limits and be unable to meet coverage needs. This tower and facility will be used for structural support of up to four wireless providers. Each provider can install antennas and on-the-ground base-station equipment.

WIRELESS TELECOMMUNICATION FACILITY CHARACTERISTICS

Visual Effect
We strive to design our facilities and locate parcels that create the least amount of community disturbance. The proposed site is on an unused portion of the property at 40.318207-111.994108 in the Sunset Flats Development. This project will be designed to resemble a grain silo and colored to blend in with color of surrounding land. All antennas will be completely hidden from exterior view within the silo design itself.

Frequency Of Maintenance Work On The Proposed Facility
On average, after initial installation, a carrier or its contactors would likely visit the facility about one to four times a year for maintenance, though this number could vary depending on the specific circumstances of the facility.

The Average Number Of Vehicles Visiting The Facility
The average maintenance visit by a carrier or its contractors would likely involve one pickup truck. With an average of one to four visits a year and one truck a visit, there would likely be about one pickup truck visiting the site a month, per carrier, if at full capacity.

The Average Duration Work Visits On The Facility
For typical maintenance visits, a carrier or its contactors would only be at the site a few hours, but this number could increase depending on the work that needed to be completed at the site.

Expected Noise Levels
Telecommunications facilities are essentially silent. This would be true whether there were one or four carriers. A generator could be operated on site in the rare instance that power went out. The generator would create noise, but it would not be noticeable a few hundred feet away, off of the parcel.

17.75.091 Communication facilities and towers.

This section is inclusive of wireless telecommunication, radio, microwave, and other transmission towers.

Communication facilities and towers may be permitted only where:

A. General. The following development standards shall be applicable to all facilities regardless of the facility type or zone within which the facility is proposed to be located:

1. The proposed facility shall be located on an approved structure and/or site in conformance with this code. If a proposed facility site does not conform to this code, the carrier shall submit and have approved a plan to bring the structure and/or site into conformance with the code prior to completion and operation of the proposed facility.

Applicant Response: This proposed facility is in accordance with all sections found within this code, and thus does not need a plan to address conformity.

2. Any associated mechanical or electrical equipment shall be completely screened from view, from rights-of-way, on-site parking areas and adjacent properties, with a solid fence or wall.

Applicant Response: All mechanical or electrical equipment shall be obscured from view by the surrounding compound fencing.

3. The proposed facility, including associated mechanical and electrical equipment, shall not be located within a public right-of-way.

Applicant Response: This project is not proposed to be located within a public right of way.

4. The proposed facility shall conform to the requirements of this title, this code, and other laws, including pertinent federal regulations of the Federal Communications Commission (FCC) and the Federal Aviation Administration (FAA).

Applicant Response: This project shall conform to all FAA and FCC standards prior to construction.

5. Copies of required permits from pertinent federal agencies establishing compliance with applicable federal regulations shall be filed with the city prior to the issuance of any permit for a proposed facility.

Applicant Response: Applicant acknowledges and accepts this requirement.

6. The proposed facility shall conform to applicable development standards set forth in this section.

Applicant Response: This proposed facility is in accordance with all sections found within this code, and thus does not need a plan to address conformity.

7. Lightning rods shall not be included in the height calculation for any facility.

Applicant Response: Applicant acknowledges and accepts this requirement.

8. Antennas and equipment boxes on the utility poles shall be painted to match the pole to which it is attached to minimize visual impacts.

Applicant Response: Antennas and equipment boxes will largely be onscured from view and this not need to match the exterior color of the project. Color would have no bearing on any visual impacts.

9. Generators or noise producing venting systems shall not be used.

Applicant Response: Applicant acknowledges and accepts this requirement.

10. Lighting for aircraft is prohibited except where required by federal law.

Applicant Response: Applicant acknowledges and accepts this requirement.

B. Location and Type Priority. Telecommunication facilities shall be located as unobtrusively as is reasonably possible. The provider shall make a good faith effort to site antennas in the following order of priority:

1. Existing Structures or Stealth Facilities. First priority shall be granted to antennas located on existing structures or antennas qualifying as stealth facilities, as follows:

a. Existing Structures. Antennas located on lawfully existing buildings, structures, and antenna support structures; provided, that the building, structures, or support structures are: (i) located on a telecommunication facility designed and approved for collocation, (ii) located in a nonresidential zoning district, or (iii) located in a residential zoning district on property that is being used for nonresidential uses such as government, school, or church; or

Applicant Response: This does not apply as applicant is proposing a new Stealth Facility.

b. Stealth Facilities. Antennas certified as stealth facilities as set forth in this chapter.

Applicant Response: Applicant is proposing a new grain silo style Stealth Facility, which is the highest priority according to this code.

2. Monopoles on property owned by the city.

Applicant Response: This does not apply as applicant is proposing a new Stealth Facility, which is the highest priority structure according to this code.

3. Monopoles on property owned by a noncity public agency.

Applicant Response: This does not apply as applicant is proposing a new Stealth Facility, which is the highest priority structure according to this code.

4. Monopoles on Nonresidential Private Property. Monopoles constructed on private property; provided, that the private property is (a) located in a nonresidential zoning district, or (b) located in a residential zoning district on property that is used for a nonresidential use such as government, school, or church.

Applicant Response: This does not apply as applicant is proposing a new Stealth Facility, which is the highest priority structure according to this code.

5. Other. Any combination of antenna type and location other than those listed in this subsection.

Applicant Response: This does not apply as applicant is proposing a new Stealth Facility, which is the highest priority structure according to this code.

C. Burden of Proof. If the applicant desires to locate antennas on a site other than the highest priority site, the applicant shall have the burden of demonstrating to the city why it could not locate antennas on site with a higher priority than the site chosen by the applicant. The applicant shall provide the following information to the approving authority:

Applicant Response: This does not apply as applicant is proposing a new Stealth Facility, which is the highest priority structure according to this code.

D. Setbacks.

1. Communication facilities and towers shall comply with the setback requirements of the underlying zone and are further modified in subsection I of this section.

Applicant Response: Applicant acknowledges and accepts this requirement.

2. When located in a residential zone or on a nonresidential lot that is adjacent to residential zones, development, or property designated for residential land use by the general plan, communication facilities and towers shall be a minimum of 200 feet from the property line abutting residential uses. This will allow for adequate separation from residential development.

Applicant Response: This project meets all setback requirements and is setback more than 200' from abutting residential zones.

E. Collocation. Collocation of communication facilities and towers on a previously approved communication facility such as an existing building, structure, or antenna support structure, is allowed, provided:

1. No increase in the height of the existing support structure is proposed;

2. All aspects of the collocation improvements must be located within the previously approved screened area;

3. Compliance with the corresponding provisions set forth in this subsection.

Applicant Response: Applicant is proposing a new facility on behalf of T-Mobile network, who determined this location would meet their coverage needs over any existing structure. However, this project will be designed to accommodate up to four total mobile network carriers and Applicant will actively encourage collocation and accepts the requirements of this section.

F. Safety.

1. Regulation Compliance.

a. Compliance with FCC and FAA Regulations. All operators of communication facilities shall demonstrate compliance with applicable FCC and FAA regulations, including FCC radio frequency regulations, at the time of application and periodically thereafter as requested by the city. Failure to comply with the applicable regulations shall be grounds for revoking a site plan approval.

b. Other Licenses and Permits. The operator of every communication facility shall submit copies of all licenses and permits required by other agencies and governments with jurisdiction over the design, construction, location, and operation of the facility to the city, shall maintain such licenses and permits in good standing, and shall provide evidence of renewal or extension thereof upon request by the city.

Applicant Response: Applicant has reviewed and accepts all definitions as written and defined within this section.

G. Emergency. The city shall have authority to move or alter a communication facility in case of emergency. Before taking any such action, the city shall first notify the owner of the facility, if feasible.

Applicant Response: Applicant acknowledges and accepts this requirement.

H. Abandonment. The city may require the removal of all antennas and monopoles if the facility has been inoperative or out of service for more than 12 consecutive months.

1. Notice. Notice to remove shall be given in writing by personal service, or by certified mail addressed to the operator's last known address.

2. Violation. Failure to remove the antennas and monopoles after receiving written notice to remove is a violation of the terms of this chapter. The city may initiate criminal and/or civil legal proceeding against any person, firm, entity, or corporation, whether acting as principal agent, property owner, lessee, lessor, tenant, landlord, employee, employer, or otherwise, for failure to remove antennas and monopoles in accordance with this chapter. The city may seek a civil injunction requiring the removal of any structures on the site in accordance with this chapter. The city may also remove such structures itself and may bill its costs in removing such structures to the operator. Any lease agreement with the city may also stipulate failure to remove the antennas and monopoles after receiving written notice to do so pursuant to this chapter automatically transfers ownership of the antennas, support buildings, and all other structures on the site to the city.

Applicant Response: Applicant has reviewed and accepts all definitions as written and defined within this section.

I. Specific Regulations by Type. Communication facilities are characterized by the type or location of the antenna structure. There are five general types of antenna structures contemplated by this chapter: ham radio towers, monopoles, roof-mounted antennas, stealth facilities, and wall-mounted antennas. If a particular type of antenna structure is allowed by this chapter as a special use, the minimum standards for that type of antenna are as follows:

1. Ham Radio Towers. Ham radio towers or any other radio or antenna facilities are regulated by the FCC as well as individual homeowners associations (HOAs) through restrictive covenants or other regulating documents.

Applicant Response: This does not apply as applicant is proposing a new Stealth Facility.

2. Monopoles.

Applicant Response: This does not apply as applicant is proposing a new Stealth Facility.

3. Roof-Mounted Antennas.

Applicant Response: This does not apply as applicant is proposing a new Stealth Facility.

4. Stealth Facilities.

a. Maximum Height. The overall height of any structure proposed to be used for a stealth fixture antenna shall be consistent with any similar structure being used as a model for the stealth structure. A stealth fixture shall be no more than 10 feet higher than the structure to which it is attached, provided the fixture and the structure to which it is attached is consistent with the character of similar structures located in the same area.

Applicant Response: Applicant is proposing to resemble an 80' grain silo design in order to satisfy the stealth design. Typical grain silos can range between 30'-270', which this 80' proposed height easily falls within.

b. Disguise. A stealth fixture antenna shall be disguised as part of the structure to which it is attached or otherwise concealed from public view as much as reasonably possible. A stealth fixture antenna may be attached to or disguised as a flag pole, light pole, power pole, manmade tree, clock tower, steeple, or a structure used primarily for another use so long as any antenna located on the structure does not detract visually from the primary use. Stealth fixture antennas and all associated equipment visible to public view shall be painted to match the color of the structure to which it is attached. Equipment and/or equipment shelters used in connection with stealth fixture antennas shall be camouflaged.

Applicant Response: Applicant is proposing to resemble an 80' grain silo design in order to satisfy the stealth design

c. Engineered Structure. A structure to which a stealth fixture antenna is attached shall be designed by a state certified engineer to verify that the structure can support the stealth fixture antenna.

Applicant Response: Applicant acknowledges and accepts this requirement.

d. Antenna Size. A stealth fixture antenna, including the mounting structure, shall not exceed 30 inches in diameter; provided, however, that antennas exceeding 30 inches, including the mounting structure, may be permitted if the antenna is a stealth fixture antenna located on or within a clock tower, steeple, manmade tree, or other similar structure.

Applicant Response: Antennas will be completely obscured from exterior view, this this section need not apply.

e. Conversion. Stealth facilities may include the conversion of existing flagpoles, light standards, athletic field lights or other similar structures to a stealth facility provided the structure's height is not increased more than 10 feet.

Applicant Response: This does not apply as applicant is proposing a new Stealth Facility, not a light pole conversion.

f. Utility Pole Antennas. Utility pole antennas may be allowed as a stealth facility subject to the following minimum requirements:

Applicant Response: This does not apply as applicant is proposing a new Stealth Facility, not a Utility Pole Antenna.

5. Wall-Mounted Antennas.

Applicant Response: This does not apply as applicant is proposing a new Stealth Facility.

J. Additional Requirements.

1. Storage Areas and Solid Waste Receptacles. No outside storage or solid waste receptacles shall be permitted on a communication facility site.

Applicant Response: Applicant acknowledges and accepts this requirement.

2. Equipment Enclosures. All electronic and other related equipment and appurtenances necessary for the operation of any communication facility shall, whenever possible, be located within a lawfully preexisting structure. When a new structure is required to house such equipment, the structure shall be harmonious with, and blend with, the natural features, buildings, and structures surrounding such structure.

Applicant Response: Applicant acknowledges and accepts this requirement.

3. Accessory Buildings. Freestanding accessory buildings used with a communication facility shall not exceed a combined total of 450 square feet and shall comply with the setback requirements for structures in the zoning district in which the facility is located.

Applicant Response: Applicant acknowledges and accepts this requirement.

4. Parking. The city may require a minimum of one parking stall for sites containing a monopole, tower, and/or accessory buildings, if there is insufficient parking available on the site.

Applicant Response: Applicant acknowledges and accepts this requirement.

5. Maintenance Requirements. All communication facilities shall be maintained in a safe, neat, and attractive manner.

Applicant Response: Applicant acknowledges and accepts this requirement.

6. Landscaping. All communication facilities shall be adequately landscaped in order to provide visual screening as deemed necessary by the planning commission on a site-specific, case-by-case basis. For monopoles where there are no buildings immediately adjacent to the monopole and equipment facilities, the site shall be surrounded by dense tree growth to screen views of the facility in all directions. These trees may be existing on the subject property or planted as part of the site improvements. The city may require additional landscaping as part of the site plan approval.

Applicant Response: Applicant has not proposed any landscaping plan due to the stealth design, however acknowledges and accepts that landscaping may be required for this project if determined by City of Eagle Mountain.

7. Power Lines. All power lines on the lot leading to the communication facility shall be underground. [Ord. O-27-2020 § 2 (Exh. A)].

Applicant Response: Applicant has reviewed and accepts this requirement.

This narrative represents required and supplementary information to document the technological,

economic, and social necessity and benefits of a new 80’ grain silo telecommunications tower in Eagle Mountain City. The information provided highlights the advantages associated with a telecommunications facility at our proposed site.

Atlas Tower 1, LLC respectfully requests the approval of our Conditional Use Application for a communications tower facility.

Best Regards,

Carri Wullner
Atlas Tower 1, LLC
3002 Bluff St., Suite 300
Boulder, CO 80301
Office (303) 448-8896

SITE NAME:	EAGLE MOUNTAIN
PROJECT DESCRIPTION:	PROPOSED TELECOMMUNICATIONS FACILITY
TOWER TYPE:	80' FAUX SILO TOWER
SITE ADDRESS:	LAKE MOUNTAIN ROAD EAGLE MOUNTAIN, UT 84005 (UTAH COUNTY)
AREA OF CONSTRUCTION:	2,500 ± SQ. FT. (LEASE AREA)
JURISDICTION:	UTAH COUNTY
PARCEL #:	59:007:0077
ZONING:	AGRICULTURAL / RURAL DENSITY TWO

PROJECT INFORMATION

LATITUDE	N 40° 19' 05.20"	(NAD '83) *
LONGITUDE	W 111° 59' 39.98"	(NAD '83) *
GROUND ELEVATION	4934.8'	(NAVD '88) *

* INFORMATION PROVIDED BY ELECTRICAL CONSULTANTS, INC. IN THE FORM OF A 1-A CERTIFICATE, DATED SEPTEMBER 13, 2021.

1-A COORDINATES

ATLAS TOWER
USA • INTERNATIONAL

WiBlue Inc.

SITE NAME:
EAGLE MOUNTAIN

LAKE MOUNTAIN ROAD
EAGLE MOUNTAIN, UT 84005
(UTAH COUNTY)

CALL FOR UNDERGROUND UTILITIES PRIOR TO DIGGING

(800) 662-4111

EMERGENCY:

CALL 911

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

ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THE LATEST EDITIONS OF THE FOLLOWING:

1. INTERNATIONAL BUILDING CODE (2018 EDITION)
2. INTERNATIONAL CODE COUNCIL
3. ANSI/TIA/EIA-222-G
4. NATIONAL ELECTRIC CODE (2017 EDITION)
5. LOCAL BUILDING CODE
6. CITY/COUNTY ORDINANCES

CODE COMPLIANCE

CONSTRUCTION OF A TELECOMMUNICATION FACILITY, CONSISTING OF ANTENNAS & ASSOCIATED APPURTENANCES ON A PROPOSED FAUX SILO TOWER, FENCED COMPOUND & SERVICE EQUIPMENT FOR FUTURE CARRIERS. NO WATER OR SEWER IS REQUIRED.

1. FACILITY DESIGNED IN ACCORDANCE WITH UTAH COUNTY REGULATIONS.
2. THIS IS AN UNMANNED FACILITY WHICH WILL NOT REQUIRE ANY WATER OR SEWER FACILITIES.
3. TRAFFIC WILL CONSIST ONLY OF MAINTENANCE PERSONNEL, VISITING THE SITE APPROXIMATELY TWICE A MONTH.

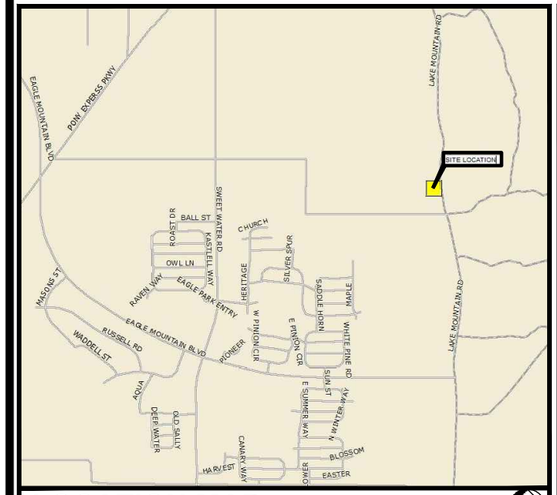
PROJECT DESCRIPTION & NOTES

PLANS PREPARED BY:

TOWER ENGINEERING PROFESSIONALS
500 E. 84TH AVE, SUITE C10
THORNTON, CO 80229
OFFICE: (303) 566-9914
www.tepgroup.net

REV	DATE	ISSUED FOR:
0	10-11-21	ZONING

DRAWN BY: JFM CHECKED BY: ARB



LOCATION MAP

FROM SALT LAKE CITY DRIVING SOUTH ON I-15 TAKE EXIT 282 TO UT-194/W 2100 N. THEN TURN RIGHT ONTO UT-194 AND STAY ON FOR 5.2 MILES. THEN TURN RIGHT ONTO UT-73 AND STAY ON FOR 5.8 MILES. THEN TURN LEFT ONTO EAGLE MOUNTAIN BLVD AND STAY ON FOR 3.4 MILES. THEN LEFT ONTO AVIATOR AVE. THEN TURN RIGHT ONTO PONY EXPRESS PKWY. THEN TURN LEFT ONTO BOBBY WREN BLVD. AND STAY ON FOR 1.1 MILES. THEN TURN LEFT ONTO N LAKE MOUNTAIN RD. THE SITE WILL BE ON THE LEFT SITE OF THE ROAD.

DRIVING DIRECTIONS

SITE CONSTRUCTION MANAGER:
NAME: WiBLUE, INC.
CONTACT: CORNELIUS WHITEHEAD
PHONE: (303) 448-8896

SITE APPLICANT:
NAME: ATLAS TOWER 1, LLC
ADDRESS: 3002 BLUFF STREET, SUITE 300
CITY, STATE, ZIP: BOULDER, CO 80301
CONTACT: CORNELIUS WHITEHEAD
PHONE: (303) 448-8896

ORIGINAL SURVEYOR:
NAME: ELECTRICAL CONSULTANTS, INC.
ADDRESS: 660 WEST 700 SOUTH
CITY, STATE, ZIP: WOODS CROSS, UT 84087
CONTACT: GARY H. HUBBS, P.L.S.
PHONE: (801) 292-9954

CIVIL ENGINEER:
NAME: TOWER ENGINEERING PROFESSIONALS
ADDRESS: 500 E 84TH AVE, SUITE C-10
CITY, STATE, ZIP: THORNTON, CO 80226
CONTACT: NICHOLAS M. CONSTANTINE, P.E.
PHONE: (303) 566-9914

ELECTRICAL ENGINEER:
NAME: TOWER ENGINEERING PROFESSIONALS
ADDRESS: 500 E 84TH AVE, SUITE C-10
CITY, STATE, ZIP: THORNTON, CO 80226
CONTACT: NICHOLAS M. CONSTANTINE, P.E.
PHONE: (303) 566-9914

PROPERTY OWNER:
NAME: CEDAR CORNERS MANAGEMENT LLC
ADDRESS: 947 S 500 E # 100
CITY, STATE, ZIP: AMERICAN FORK, UT 84003

UTILITIES:
POWER COMPANY: T.B.D.
ADDRESS: UNKNOWN
UNKNOWN
METER # NEAR SITE: T.B.D.

TELEPHONE COMPANY: T.B.D.
CONTACT: UNKNOWN
PHONE: UNKNOWN
PEDESTAL # NEAR SITE: T.B.D.

CONTACT INFORMATION

SHEET	DESCRIPTION	REV
T1	TITLE SHEET	0
Z1	OVERALL SITE PLAN	0
Z2	SITE PLAN	0
Z3	COMPOUND DETAIL	0
Z4	TOWER ELEVATON	0

INDEX OF SHEETS

SEAL:

ZONING REVIEW

SEAL:

SHEET NUMBER: T-1

REVISION: 0

TEP #: 306651.609966

TOWER 1-A COORDINATES

LATITUDE:	N 40° 19' 05.20" (NAD '83)
LONGITUDE:	W 111° 59' 39.98" (NAD '83)
GROUND ELEVATION:	4,934.8'± (AMSL NAVD '88)

TOWER SETBACKS

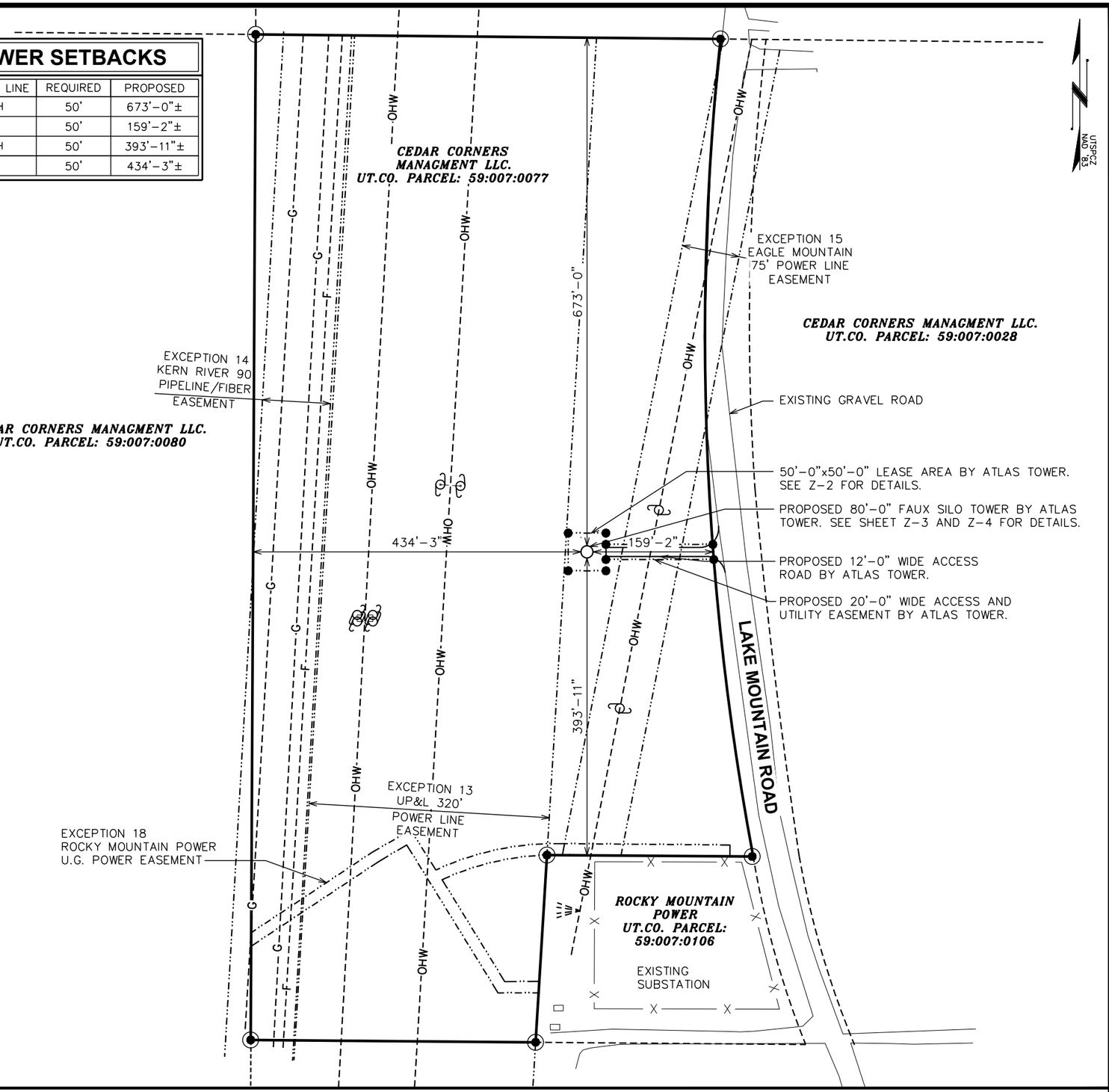
PROPERTY LINE	REQUIRED	PROPOSED
NORTH	50'	673'-0"±
EAST	50'	159'-2"±
SOUTH	50'	393'-11"±
WEST	50'	434'-3"±

LEGEND

- PARENT PROPERTY LINE
- ADJACENT PROPERTY LINE
- EASEMENT/LEASE CORNER
- EXIST. METER
- EXIST. TRANSFORMER
- EXIST. UTILITY POLE
- EXIST. TELCO PEDESTAL
- PROPERTY CORNER
- --4650-- EXIST. CONTOUR LINE
- EDGE OF PAVEMENT
- ---OHW--- OVERHEAD WIRE
- ----F---- BURIED FIBER
- ----G---- GAS LINE
- ---R/W--- RIGHT-OF-WAY
- —— X —— FENCE
- EXISTING TREE LINE

NOTES:

1. ALL BEARINGS AND DISTANCES SHOWN ARE BASED ON NAD 83 UTAH STATE PLACE CENTRAL ZONE, U.S. SURVEY GRID.
2. VERTICAL INFORMATION BASED ON THE NORTH AMERICAN VERTICAL DATUM IF 1988 (NAVD '88) AND EXPRESSED IN U.S. SURVEY FEET.
3. DISTANCES ARE HORIZONTAL GROUND UNLESS OTHERWISE NOTED.
4. PROPERTY LOCATED IN FLOOD ZONE "X", AREA DETERMINED TO BE OUTSIDE THE 0.2% CHANCE OF ANNUAL FLOOD BASED ON COMMUNITY-PANEL NO. 49049C0300F, EFFECTIVE DATE 06/19/2020.



OVERALL SITE PLAN

SCALE: 1" = 150'

0 150 300
SCALE IN FEET

PROJECT INFORMATION:

EAGLE MOUNTAIN

LAKE MOUNTAIN ROAD
EAGLE MOUNTAIN, UT 84005
(UTAH COUNTY)

PLANS PREPARED FOR:

WiBlue Inc.
Office: (888) 609-9596

PLANS PREPARED FOR:

ATLAS TOWER
USA • INTERNATIONAL
3002 BLUFF ST, SUITE 300
BOULDER, CO 80301
Office: (888) 609-9596

PLANS PREPARED BY:

TOWER ENGINEERING PROFESSIONALS
500 E. 84TH AVE, SUITE C10
THORNTON, CO 80229
OFFICE: (303) 566-9914
www.tepgroup.net

SEAL:

ZONING REVIEW

REV	DATE	ISSUED FOR:
0	10-11-21	ZONING

DRAWN BY: JFM | CHECKED BY: ARB

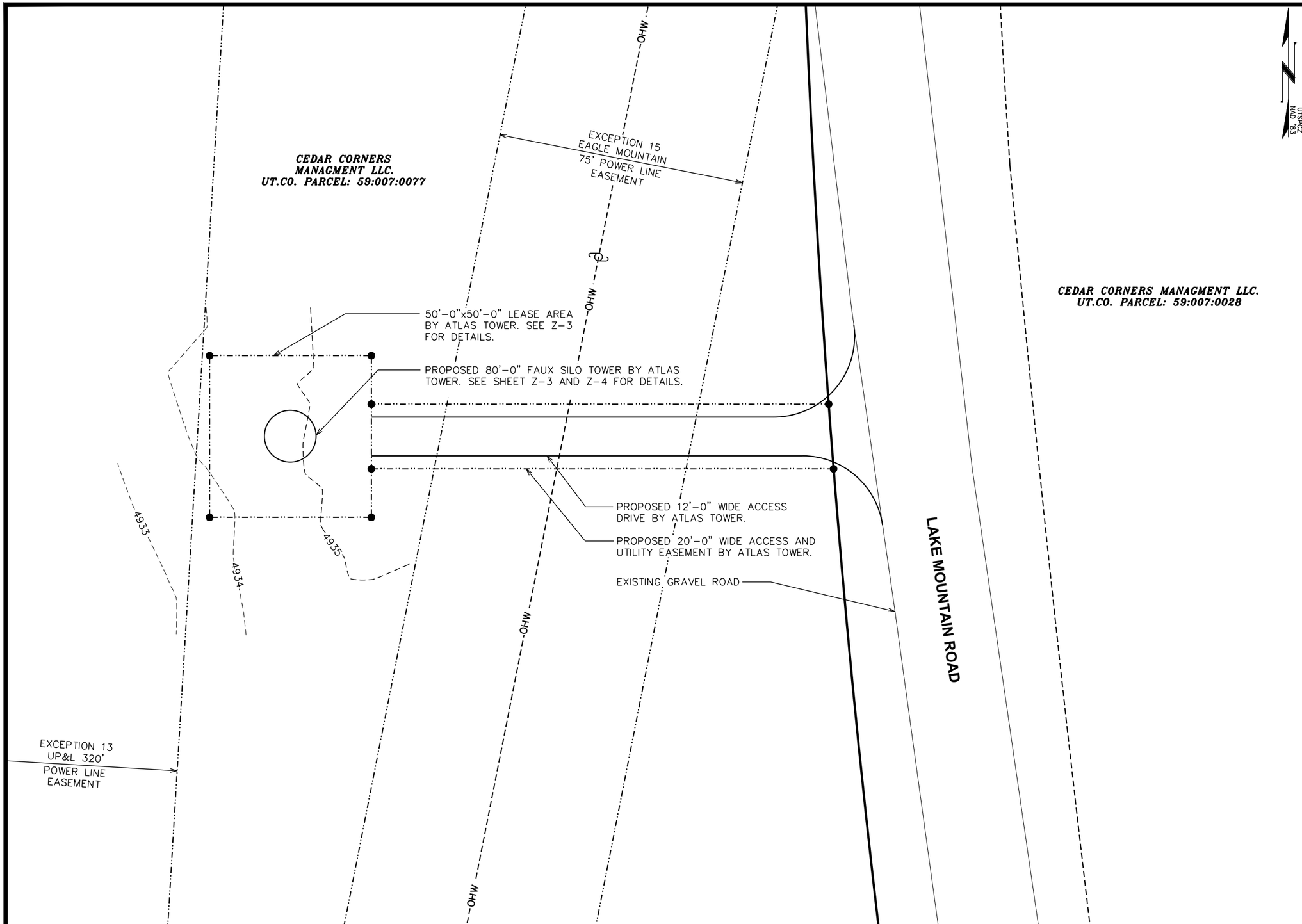
SHEET TITLE:

OVERALL SITE PLAN

SHEET NUMBER: **Z-1**

REVISION: 0

TEP#:306651.609966



SITE PLAN

SCALE: 1" =30'

0 30 60

SCALE IN FEET

PROJECT INFORMATION:

EAGLE MOUNTAIN

LAKE MOUNTAIN ROAD
EAGLE MOUNTAIN, UT 84005
(UTAH COUNTY)

PLANS PREPARED FOR:

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SEAL:

ZONING REVIEW

REV	DATE	ISSUED FOR:
0	10-11-21	ZONING

DRAWN BY: KES | CHECKED BY: ARB

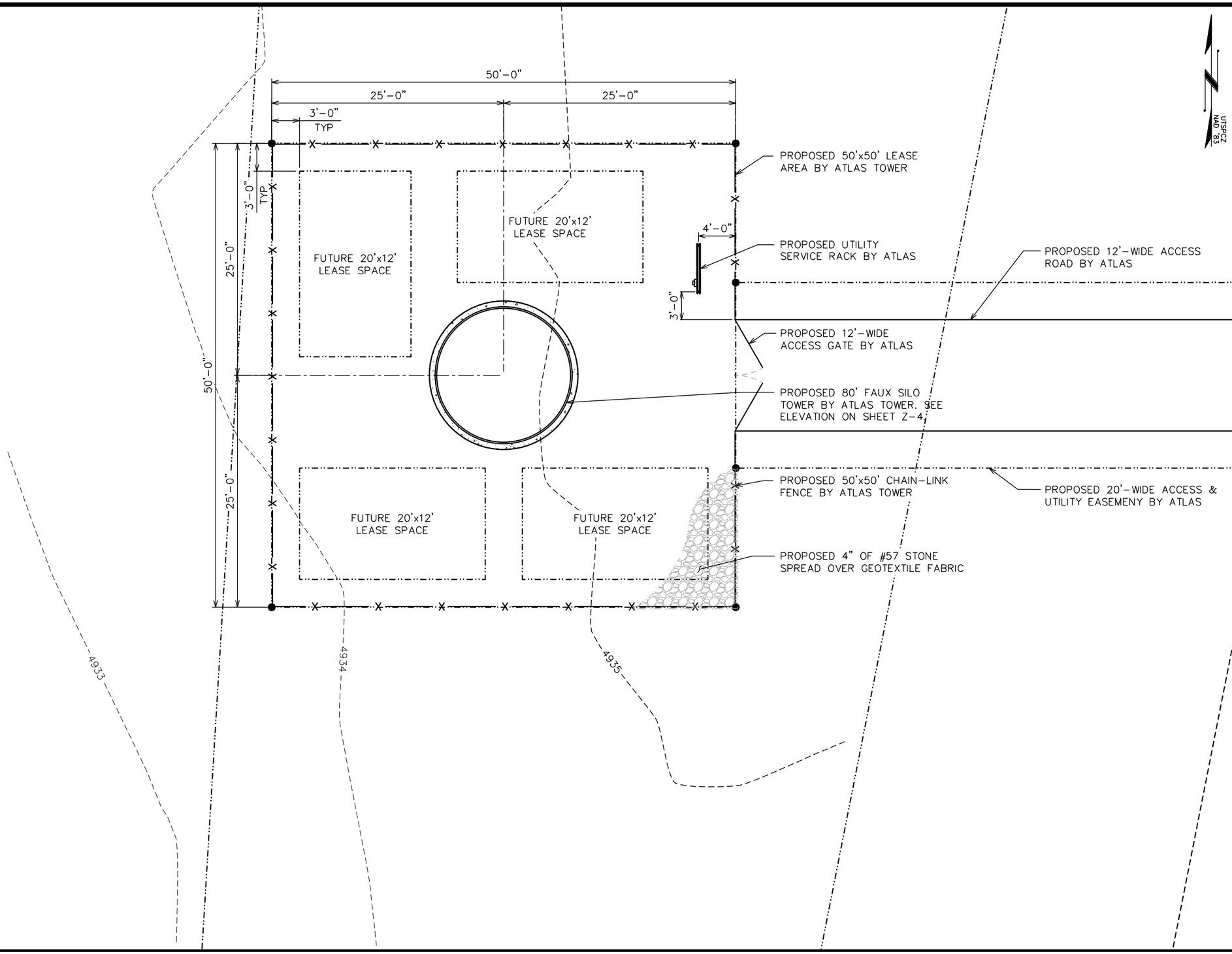
SHEET TITLE:

SITE PLAN

SHEET NUMBER: **Z-2**

REVISION: **0**

TEP#:306651.609966



COMPOUND DETAIL

SCALE: 3/32" = 1'-0"

0 8 16
SCALE IN FEET

PROJECT INFORMATION:

EAGLE MOUNTAIN

LAKE MOUNTAIN ROAD
EAGLE MOUNTAIN, UT 84005
(UTAH COUNTY)

PLANS PREPARED FOR:

WiBlue Inc.

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USA • INTERNATIONAL

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SEAL:

ZONING REVIEW

REV	DATE	ISSUED FOR:
0	10-11-21	ZONING

DRAWN BY: KES | CHECKED BY: ARB

SHEET TITLE:

COMPOUND DETAIL

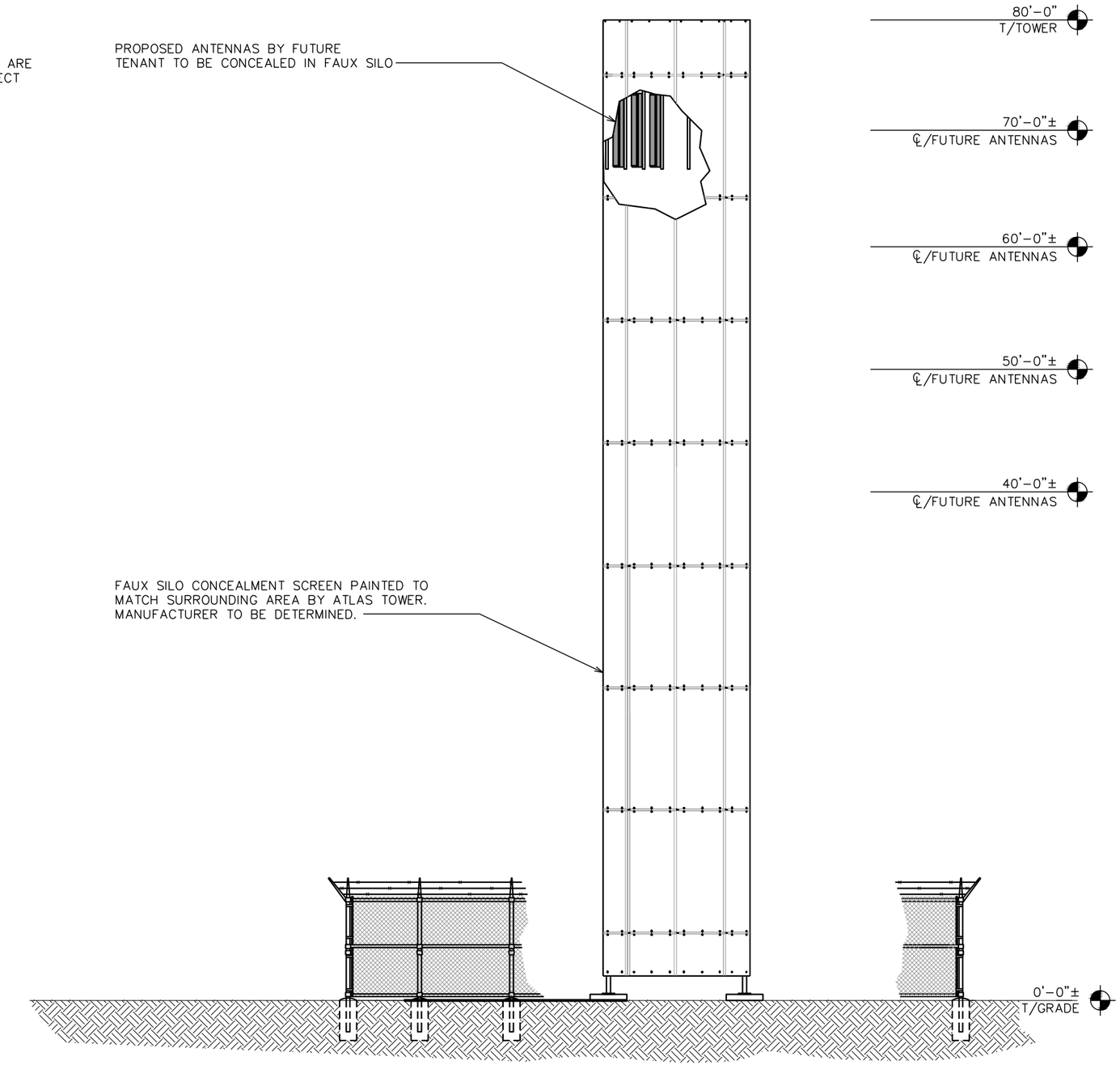
SHEET NUMBER: **Z-3**

REVISION: 0

TEP#:306651.609966

NOTES:

1. TOWER AND ANTENNAS TO BE PAINTED A NEUTRAL COLOR TO BLEND WITH SURROUNDING AREA.
2. PROPOSED COAX ROUTED INSIDE TOWER WITH HOISTING GRIPS.
3. TOWER EQUIPMENT LOADING AND CENTERLINES ARE SHOWN FOR REFERENCE ONLY AND ARE SUBJECT TO CHANGE.



TOWER ELEVATION

SCALE: 1" = 10'

0 10 20
SCALE IN FEET

PROJECT INFORMATION:

EAGLE MOUNTAIN

LAKE MOUNTAIN ROAD
EAGLE MOUNTAIN, UT 84005
(UTAH COUNTY)

PLANS PREPARED FOR:

WiBlue Inc.
Office: (888) 609-9596

PLANS PREPARED FOR:

ATLAS TOWER
USA • INTERNATIONAL
3002 BLUFF ST, SUITE 300
BOULDER, CO 80301
Office: (888) 609-9596

PLANS PREPARED BY:

TOWER ENGINEERING PROFESSIONALS
500 E. 84TH AVE, SUITE C10
THORNTON, CO 80229
OFFICE: (303) 566-9914
www.tepgroup.net

SEAL:

ZONING REVIEW

REV	DATE	ISSUED FOR:
0	10-11-21	ZONING

DRAWN BY: KES | CHECKED BY: ARB

SHEET TITLE:

TOWER ELEVATION

SHEET NUMBER: **Z-4**

REVISION: **0**

TEP#:306651.609966

EAGLE MOUNTAIN	**EAGLE MOUNTAIN CITY** **PLANNING COMMISSION MEETING** **DECEMBER 14, 2021**
TITLE:	ACTION ITEM / PUBLIC HEARING - Salt City Fitness
ITEM TYPE:	Site Plan
APPLICANT:	Scot Hazard

ACTION ITEM:
Yes

PUBLIC HEARING:
Yes

PREPARED BY:
Tayler Jensen, Planning

BACKGROUND:
The applicant is proposing a 8,000 SF fitness equipment repair facility to be located on 42,304 SF of property within parcel 59:056:0048, property that was rezoned to Industrial with the added Sweetwater Industrial Overlay Zone on April 20th 2021. As a light manufacturing and assembly use Salt City Fitness is a permitted use in the Sweetwater Industrial Overlay Zone.

ITEMS FOR CONSIDERATION:
The following items should be considered when making a recommendation to the City Council.

17.53.060 (Sweetwater Industrial Overlay Zone) Development Standards:
17.53.060 A Requires "Buildings must comply with the city's commercial design standards, except that metal may be used as a primary exterior building material and pedestrian-scaled details are not required.

Commercial Design Standards are found in 17.72.040:
17.72.040 A requires commercial buildings be similar in style to significant adjacent buildings, the only significant adjacent building is the LBI Sat building which has a similar architecture, with the main building materials being metal panel and concrete, while including a canopy on the front elevation and use of glass doors and windows. It is the opinion of staff that the elevations are similar, however, the Planning Commission shall determine if they comply.

The proposed Salt City Fitness has a sloping roof in *compliance* with 17.72.040 C

17.72.040 D requires horizontal and vertical articulation, the applicant has provided elevations that include different materials, different planes, and popouts/canopies. It shall be up to the Planning Commission to determine if the provided articulation is sufficient.

The front parking area is paved, while the rear yard is gravel which does *comply* with 17.53.050.

All lighting is proposed to comply with City Darksky standards, and there is no proposed storage within the rear yard which complies with 17.53.00

Per 17.55.120 (c) 1 parking stall shall be provided for person employed on highest employment shift, as 16 stalls are provided applicant shall confirm no shift will employ more than 16 individuals.

REQUIRED FINDINGS:

Site Plan approvals are based upon compliance with City Code requirements. The approval criteria for Site Plans can be found in EMMC 17.100.050.

Property within the Sweetwater Industrial Overlay have modified development standards that can be found in EMMC 17.53.060.

RECOMMENDATION:

We recommend the Planning Commission make a motion to recommend approval of the Salt City Fitness Site Plan to the City Council for the reasons set forth in the staff report and in the meeting with the following conditions:

1. Applicant confirms that no more than 16 individuals shall be employed within a single shift.
2. Any changes to elevations that the Planning Commission finds appropriate.

ATTACHMENTS:

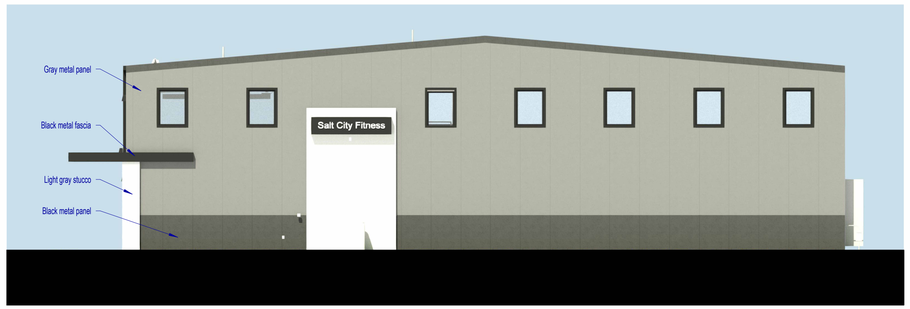
Elevations

Elevation Rendering

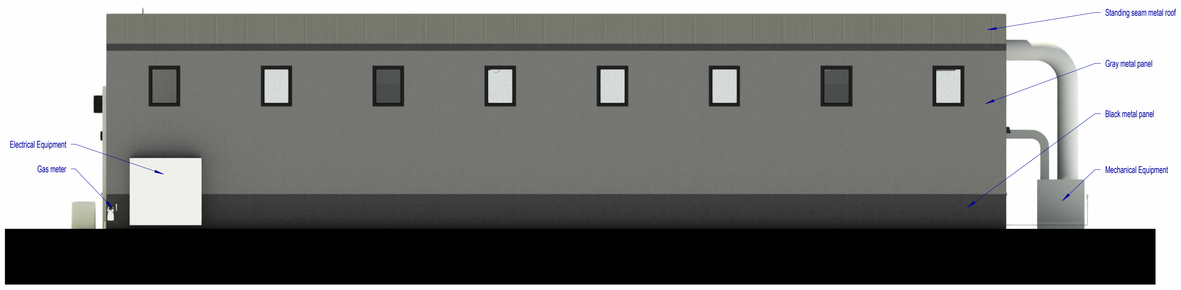
Landscaping

Civil Plans

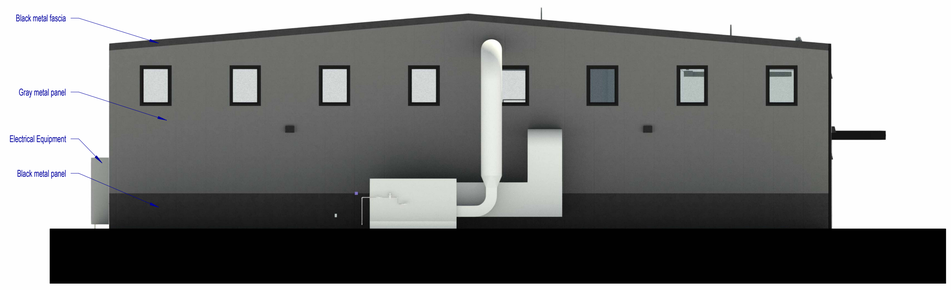
West Elevation 1
SCALE: 12" = 1'-0"



South Elevation 2
SCALE: 12" = 1'-0"



East Elevation 3
SCALE: 12" = 1'-0"



North Elevation 4
SCALE: 12" = 1'-0"

ea architecture
11576 South State Street, Suite 103b
Draper, Utah 84020

Salt City Fitness

1117 East Belladonna Drive
Eagle Mountain, Utah 84005

Project Number: 21-45

October 14, 2021

Exterior Elevations

R2.11

Salt City Fitness

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

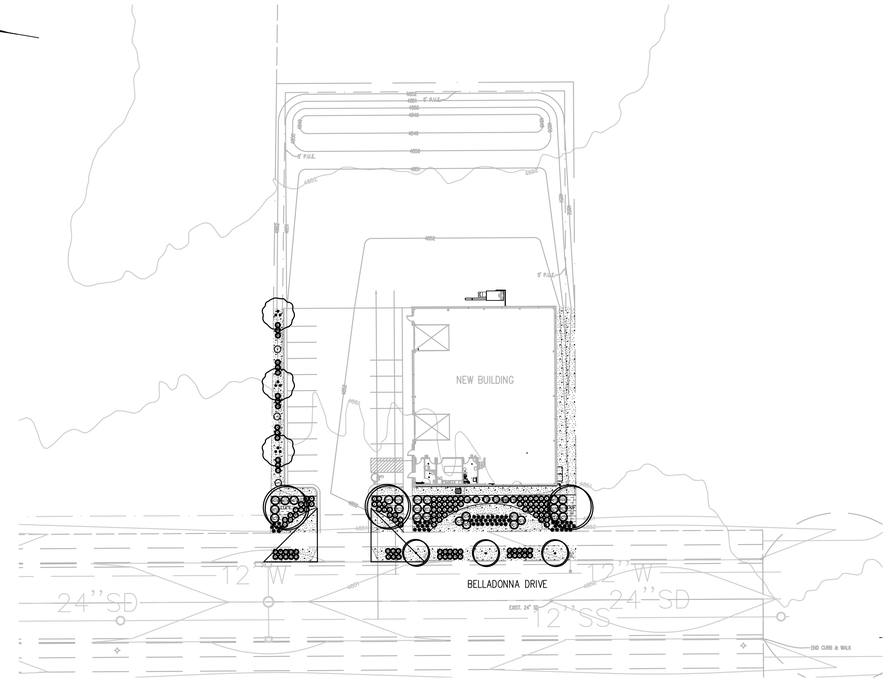
1. LANDSCAPE CONTRACTOR SHALL HAVE ALL UTILITIES BLUE STAKED PRIOR TO DIGGING. ANY DAMAGE TO UTILITIES SHALL BE REPAIRED AT CONTRACTORS EXPENSE WITH NO ADDITIONAL COST TO THE OWNER.
2. DURING THE BIDDING AND INSTALLATION PROCESS, THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR VERIFYING QUANTITIES OF ALL 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



SITE REQUIREMENT CALCULATIONS

STREET FRONTAGE	REQUIRED:	PROVIDED:
BELLADONNA DRIVE 1 TREE / 30 FT (95 LN FT)	3	3

TREE COUNT:	REQUIRED:	PROVIDED:
6,174 SQ FT INTERNAL LANDSCAPING	6	6

WHEN SHRUBS OR GROUND COVER OTHER THAN GRASS ARE USED FOR LANDSCAPING, THE SPACING, TYPE AND SIZE OF PLANTS USED SHALL BE SUCH THAT FIFTY PERCENT (50%) OF ALL LANDSCAPED AREAS SHALL BE COVERED WITH LIVING PLANT MATERIAL WITHIN THREE (3) YEARS OF PLANTING.

PLANT LEGEND

DECIDUOUS TREES	CODE	QTY	BOTANICAL / COMMON NAME	CONT	CAL
	ATG	3	Acer tataricum `GarAnn` Hot Wings Tatarian Maple	B & B	1.5"Cal
	GBP	3	Ginkgo biloba `Princeton Sentry` Princeton Sentry Gingko	B & B	1.5"Cal
UXF	UXF	3	Ulmus x `Frontier` Frontier Elm	B & B	1.5"Cal

DECIDUOUS SHRUBS	CODE	QTY	BOTANICAL / COMMON NAME	CONT
	Po'd	3	Physocarpus opulifolius First Editions `Donna May` Little Devil Ninebark	5 gal

EVERGREEN SHRUBS	CODE	QTY	BOTANICAL / COMMON NAME	CONT
	B'gv	6	Buxus x `Green Velvet` Green Velvet Boxwood	5 gal
	Je'd	26	Juniperus chinensis `Daub`s Frosted` Daub`s Frosted Juniper	5 gal

GRASSES	CODE	QTY	BOTANICAL / COMMON NAME	CONT
	Ca'k	72	Calamagrostis x acutiflora `Karl Foerster` Feather Reed Grass	1 gal
	Fm'a	51	Festuca mairei Atlas Feseue	1 gal
	HS'S	58	Helictotrichon sempervirens `Sapphire` Blue Oat Grass	1 gal

SITE MATERIALS LEGEND

SYMBOL	CODE	DESCRIPTION	QTY
	1-03	1.5" PALOMINO ROCK OR APPROVED EQUAL STONE MULCH PLANTING AREAS TO RECEIVE MIN. 6" 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.	4,482 sf
	1-08	5.5" DEEP STEEL EDGING - INSTALL PER MANUFACTURER SPECIFICATION.	339 lf
	1-12	1" STONE MULCH. COLOR: DARK GRAY/BLACK PLANTING AREAS TO RECEIVE MIN. 6" DEPTH OF QUALITY TOPSOIL. IF TOPSOIL IS PRESENT ON SITE, PROVIDE SOIL TEST TO DETERMINE APPROPRIATE SOIL QUALITY FOR PROPOSED PLANTINGS.	1,692 sf

ISSUE DATE	PROJECT NUMBER
11/12/2021	UT21115

NO.	REVISION	DATE
1	XXXX	XX-XX-XX
2		
3		
4		
5		
6		
7		

PLAN INFORMATION

811 BLUE STAKES OF UTAH
UTILITY NOTIFICATION CENTER, INC
1-800-662-4111
www.bluestakes.org

0' 20' 40' 80' 160'
GRAPHIC SCALE: 1" = 40'

PROJECT INFORMATION

SC FITNESS WAREHOUSE
EAGLE MOUNTAIN, UTAH

DEVELOPER / PROPERTY OWNER / CLIENT

SALT CITY FITNESS INC.
ATT: SUMMER MERCADO
801-898-0355
SCFITNESSWAREHOUSE@GMAIL.COM

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

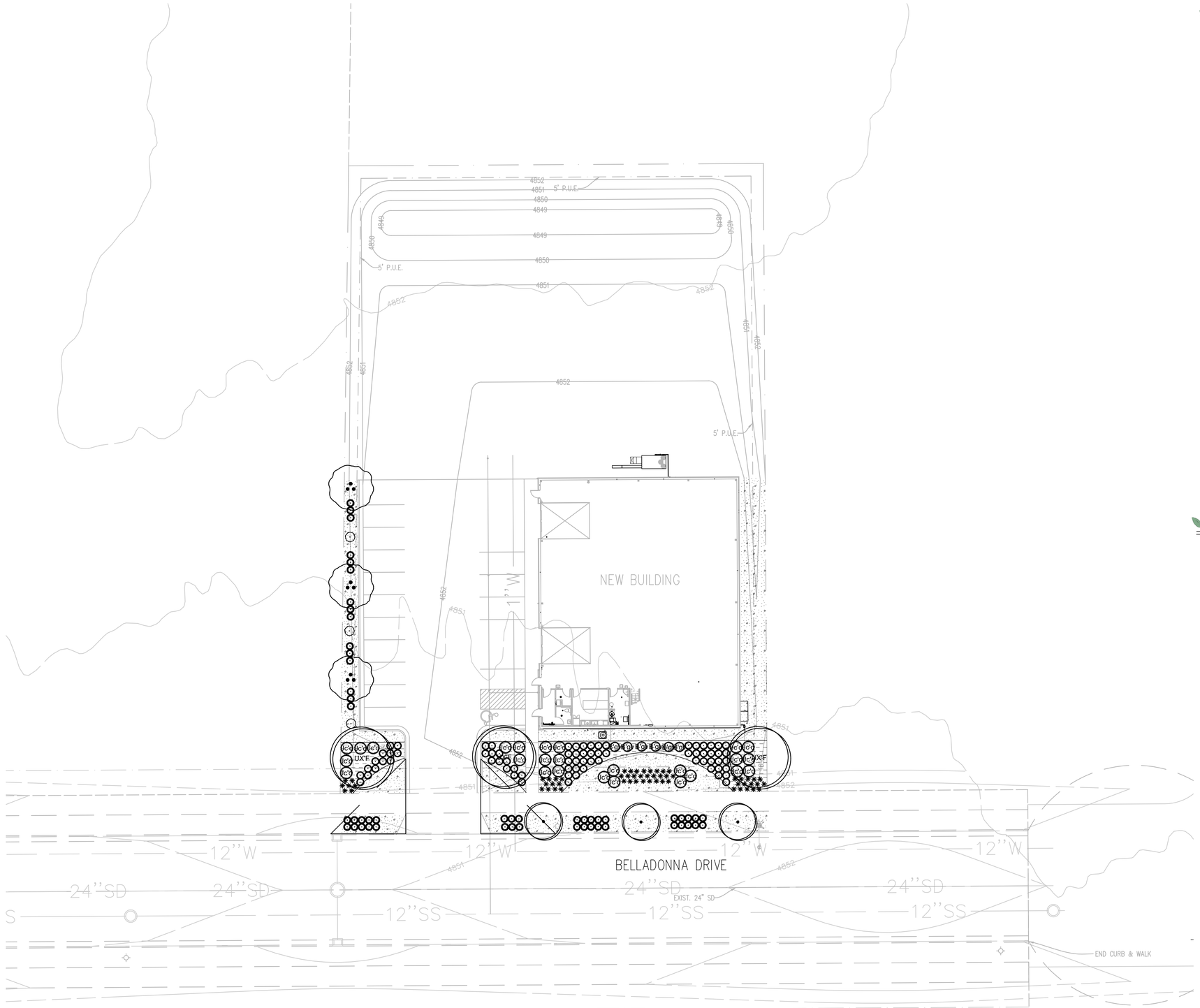
LICENSED LANDSCAPE ARCHITECT
JEREMY AINSWORTH
5128121-5301
11/12/2021
ELECTRONIC SEAL
STATE OF UTAH

DRAWING INFO	
PM:	JTA
DRAWN:	SAV
CHECKED:	JMA
PLOT DATE:	11/12/2021

LANDSCAPE PLAN COVER

PRELIMINARY PLANS NOT FOR CONSTRUCTION

LP-100



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www.bluestakes.org

N

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

PROJECT INFORMATION

SC FITNESS WAREHOUSE
EAGLE MOUNTAIN, UTAH

DEVELOPER / PROPERTY OWNER / CLIENT

SALT CITY FITNESS INC.
ATT: SUMMER MERCADO
801-898-0355
SCFITNESSWAREHOUSE@GMAIL.COM

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
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LICENSE STAMP

LICENSED LANDSCAPE ARCHITECT
JEREMY AINSWORTH
8128121-5301
11/12/2021
ELECTRONIC SEAL
STATE OF UTAH

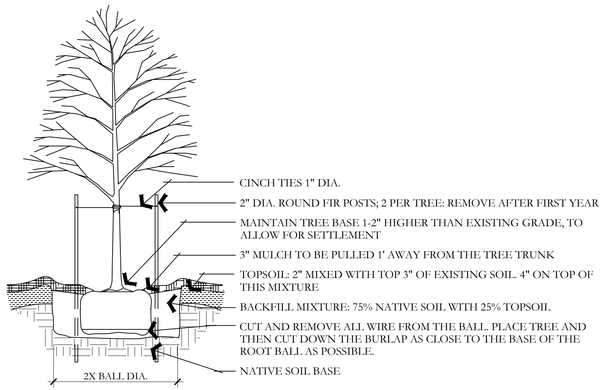
DRAWING INFO

PM:	JTA
DRAWN:	ACP
CHECKED:	JMA
PLOT DATE:	11/12/2021

LANDSCAPE PLAN

PRELIMINARY PLANS NOT FOR CONSTRUCTION

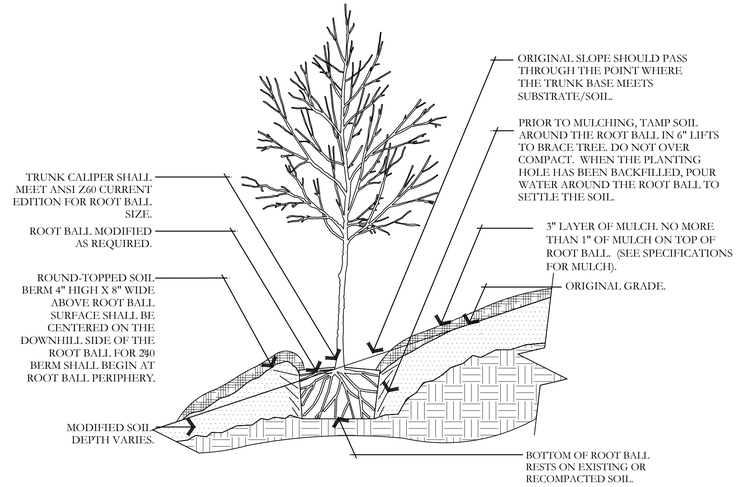
LP-101



A DECIDUOUS TREE PLANTING

NOT TO SCALE

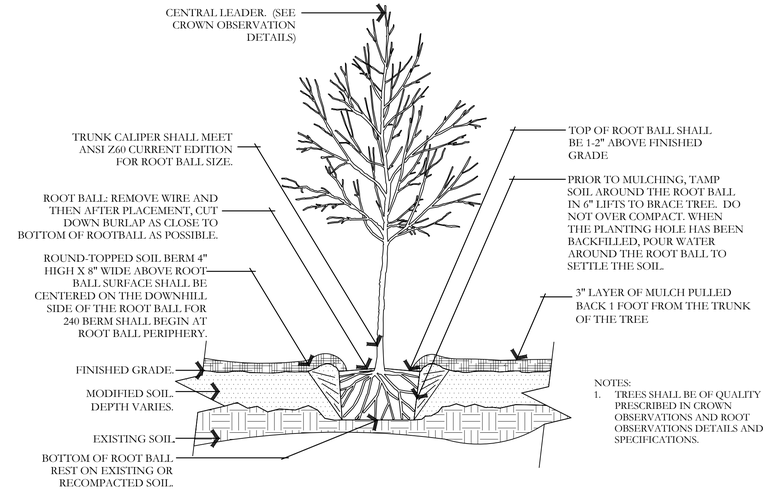
PKJ DESIGN GROUP



B TREE ON SLOPE 5% (20:1) TO 50% (2:1)

NOT TO SCALE

PKJ DESIGN GROUP

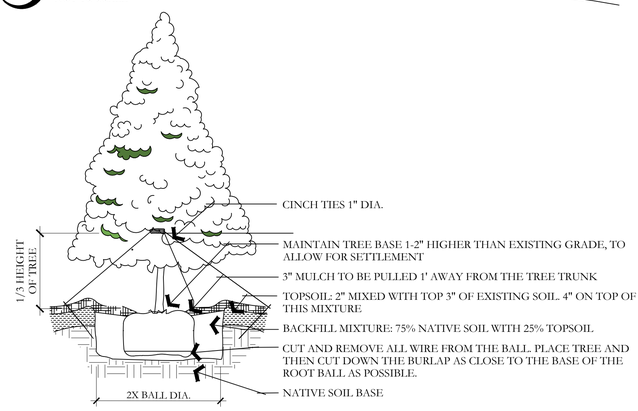


NOTES:
1. TREES SHALL BE OF QUALITY PRESCRIBED IN CROWN OBSERVATIONS AND ROOT OBSERVATIONS DETAILS AND SPECIFICATIONS.

C TREE W/ BERM (EXISTING SOIL MODIFIED)

NOT TO SCALE

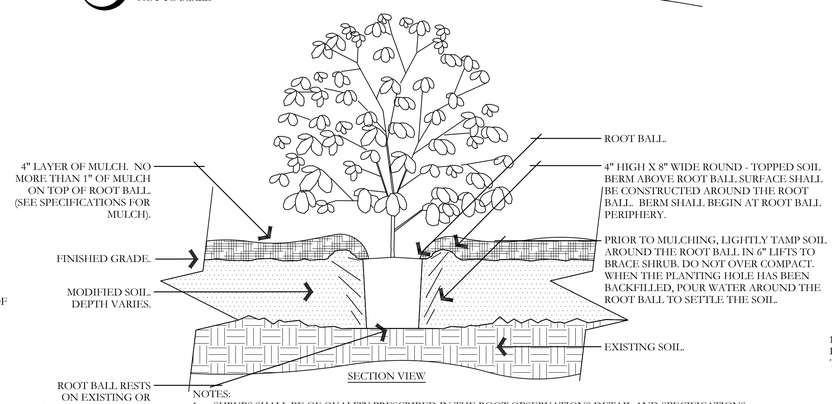
PKJ DESIGN GROUP



D EVERGREEN TREE PLANTING

NOT TO SCALE

PKJ DESIGN GROUP

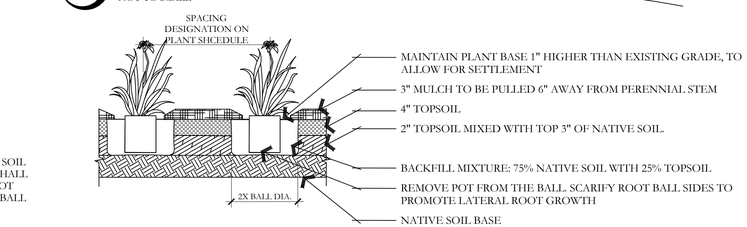


NOTES:
1. SHRUBS SHALL BE OF QUALITY PRESCRIBED IN THE ROOT OBSERVATIONS DETAIL AND SPECIFICATIONS.
2. SEE SPECIFICATIONS FOR FURTHER REQUIREMENTS RELATED TO THIS DETAIL.

E SHRUB - MODIFIED SOIL

NOT TO SCALE

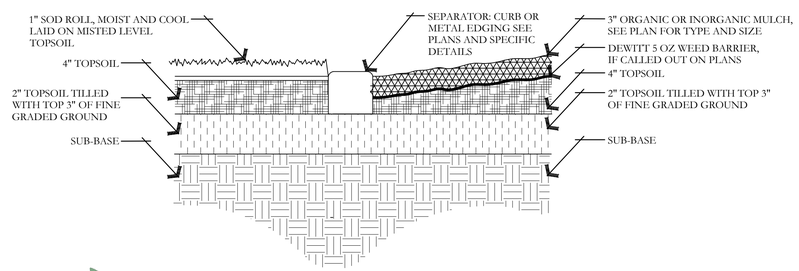
PKJ DESIGN GROUP



F PERENNIAL PLANTING

NOT TO SCALE

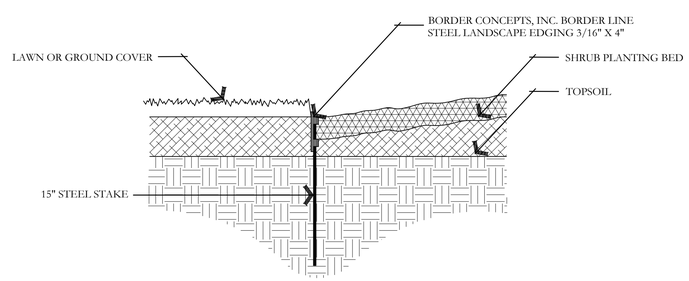
PKJ DESIGN GROUP



I SOD LAYING/MULCH DETAIL

NOT TO SCALE

PKJ DESIGN GROUP

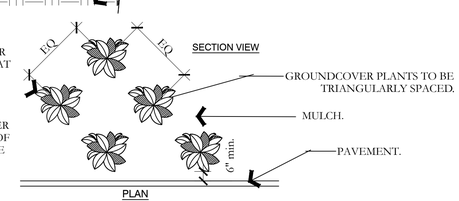


G METAL EDGING DETAIL

NOT TO SCALE

PKJ DESIGN GROUP

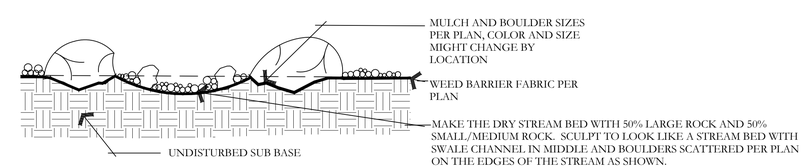
NOTES:
1- SEE PLANTING LEGEND FOR GROUNDCOVER SPECIES, SIZE, AND SPACING DIMENSION. THAT GROW
2- SMALL ROOTS AROUND, UP, OR DOWN THE ROOT BALL PERIPHERY ARE CONSIDERED A NORMAL CONDITION IN CONTAINER PRODUCTION AND ARE ACCEPTABLE HOWEVER THEY SHOULD BE ELIMINATED AT THE TIME OF PLANTING. ROOTS ON THE 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



J BOULDER AND DRY STREAM BED DETAIL

NOT TO SCALE

PKJ DESIGN GROUP

ISSUE DATE	PROJECT NUMBER	PLAN INFORMATION	PROJECT INFORMATION	DEVELOPER / PROPERTY OWNER / CLIENT	LANDSCAPE ARCHITECT / PLANNER	LICENSE STAMP	DRAWING INFO
11/12/2021	UT21115						PM: JTA
							DRAWN: SAV
							CHECKED: JMA
							PLOT DATE: 11/12/2021

NO.	REVISION	DATE
1	XXXX	XX-XX-XX
2		
3		
4		
5		
6		
7		

811 BLUE STAKES OF UTAH
UTILITY NOTIFICATION CENTER, INC
1-800-662-4111
www.bluestakes.org

SC FITNESS WAREHOUSE
EAGLE MOUNTAIN, UTAH

SALT CITY FITNESS INC.
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PKJ DESIGN GROUP
Landscape Architecture / Planning & Visualization
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LEHI, UTAH 84043 (801) 960-2698
www.pkjdesigngroup.com

LICENSED LANDSCAPE ARCHITECT JEREMY AINSWORTH 8128121-5301 11/12/2021 STATE OF UTAH

LANDSCAPE DETAILS

PRELIMINARY PLANS NOT FOR CONSTRUCTION

LP-501

SC FITNESS WAREHOUSE

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 pope and wire in sleeving under hardscapes. Actual routing of pipe, wire or other components may be altered due to site conditions not accounted for in the design process.

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

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

1.3 DEFINITIONS

A. Water Supply: Culinary water piping and components, furnished and installed by others to provide irrigation water to this Project, including but not limited to backflow preventor, saddles, nipples, spools, shut off valves, corporation stop valves, water meters, pressure regulation valves, and piping upstream of (or prior to) the Point of Connection.

B. Point of Connection: Location where the Contractor shall tie into the water supply. May require backflow preventor, saddle, nipples, spools, isolation valves or Stop and Waste valve for landscape irrigation needs and use.

C. Main Line Piping: Pressurized piping downstream of the Point of Connection to provide water to remote control valves and quick couplers. Normally under constant pressure.

D. Lateral Line Piping: Circuit piping downstream of remote control valves to provide water to sprinkler heads, 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. Culinary water shall be used on this Project. Install backflow preventor and RPZ as needed.

2.4 CONTROL SYSTEM

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

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

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

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

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

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

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

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

2.5 SLEEVING

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

2.6 MAIN LINE PIPE

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

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

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

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

2.7 MAIN LINE FITTINGS

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

2.8 ISOLATION VALVES

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

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

2.9 MANIFOLDS

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

2.10 REMOTE CONTROL VALVES

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

2.11 MANUAL CONTROL VALVES

A. Quick coupler valve shall be attached to the manifold sub-main line using a Lasco G17S212 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 ¾", 1", 1 ¼", 1 ½" or 2" in size as indicated on Construction Drawings.

2.13 LATERAL LINE FITTINGS

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

2.14 Spray Sprinklers

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

2.15 VALVE BOXES

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

2.16 IMPORT BACKFILL

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

2.17 OTHER PRODUCTS

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

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

PART 3 - EXECUTION

3.1 PREPARATION

A. Contractor shall repair or replace work damaged by irrigation system installation. If damaged work is new, 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 VTF-Strong Box Quick Pad as per manufacture's recommendations. Controllers shall be oriented such that Owner's Representative maintenance personnel may access easily and perform field system tests efficiently.

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

3.7 VALVES

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

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

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

3.8 SPRINKLER HEADS

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

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

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

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

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

3.9 FIELD QUALITY CONTROL

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

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

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

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

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

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

3.10 ADJUSTMENT

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

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

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

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

3.11 CLEANING

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

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

C. Contractor is responsible for removal and disposal of offsite trash and debris generated as a result of this Project.

D. OAR shall perform periodic as well as a final cleanliness inspection.

E. Contractor shall leave Project in at least a 'broom clean' condition.

END OF SECTION

90 Day Establishment Period Irrigation Schedule (April, May, June)

	Type	Sun	Mon	Tues	Wed	Thurs	Fri	Sat	Operating Pressure
Turf	Turf	15 min	15 min	15 min	15 min	15 min	15 min	15 min	30 psi
Shrubs	Shrubs	25 min	0	25 min	0	25 min	0	25 min	40 psi

Note: Begin irrigation 4:00 am, only 1 cycle per day.

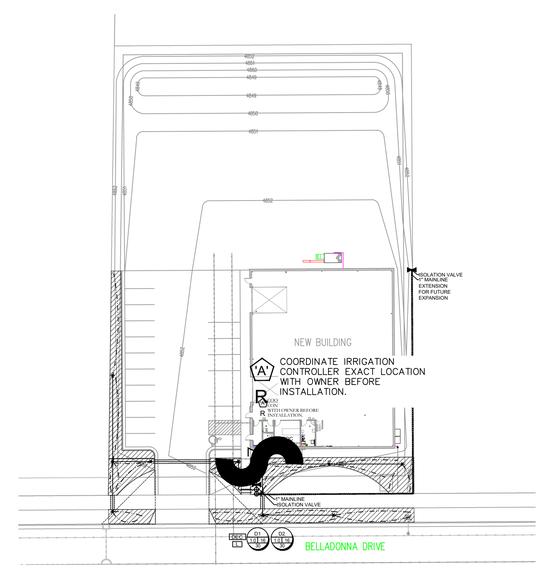
Regular Irrigation Schedule (see Seasonal Differential Chart)

	Type	Sun	Mon	Tues	Wed	Thurs	Fri	Sat	Operating Pressure
Turf	Turf	15 min	15 min		15 min		15 min		30 psi
Shrubs	Shrubs	45 min		45 min		45 min		45 min	40 psi

Note: Begin irrigation 4:00 am, only 1 cycle per day.

Seasonal Differential

	April	May	June	July	August	Sept.	October
Turf	10 min	10 min	15 min	15 min	15 min	10 min	10 min
Shrubs	30 min	30 min	45 min	45 min	45 min	30 min	30 min



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

ISSUE DATE	PROJECT NUMBER
10/21/2021	UT21115

NO.	REVISION	DATE
1	XXXX	XX-XX-XX
2		
3		
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5		
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7		

PLAN INFORMATION

811 BLUE STAKES OF UTAH
UTILITY NOTIFICATION CENTER, INC
1-800-662-4111
www.bluestakes.org

N

0' 20' 40' 80' 160'
GRAPHIC SCALE: 1" = 40'

PROJECT INFORMATION

SC FITNESS WAREHOUSE
SALT LAKE CITY, UTAH

DEVELOPER / PROPERTY OWNER / CLIENT

SALT CITY FITNESS INC.
ATT: SUMMER MERCADO
801-898-0355
SCFITNESSWAREHOUSE@GMAIL.COM

EXCEL ENGINEERING
DAVID W. PETERSON, P.E.
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LANDSCAPE ARCHITECT / PLANNER

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

LICENSE STAMP

LICENSED LANDSCAPE ARCHITECT
JASON ANDWORTH
8128121-5301
10/21/2021
ELECTRONIC SEAL
STATE OF UTAH

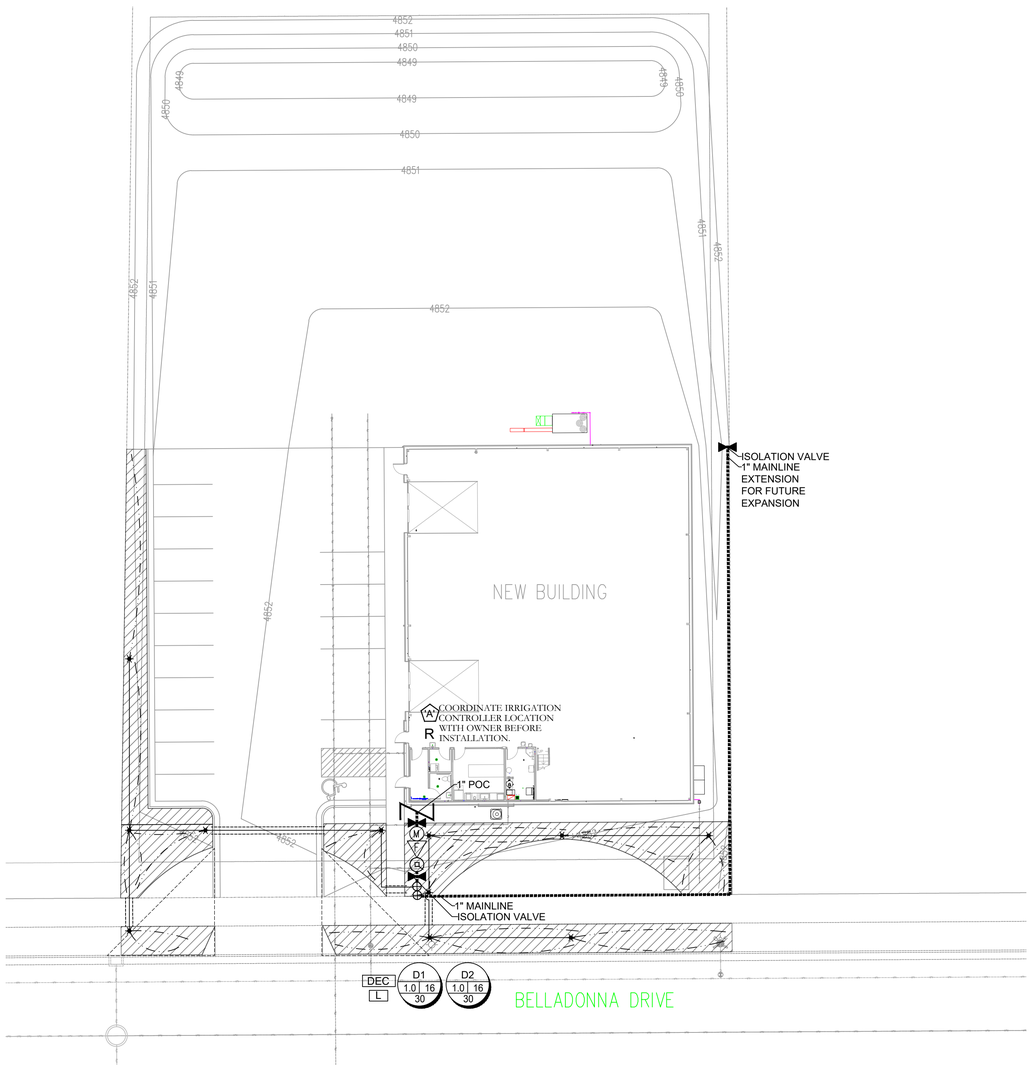
DRAWING INFO

PM: JTA
DRAWN: ACP
CHECKED: JMA
PLOT DATE: 10/21/2021

IRRIGATION PLAN COVER

PRELIMINARY PLANS NOT FOR CONSTRUCTION

IR-100



IRRIGATION LEGEND

SYMBOL	MANUFACTURER-MODEL NUMBER
	RAINBIRD RD04-S-PRS POP UP SPRAY 5 SERIES @ 30 PSI
	RAINBIRD RD04-S-PRS POP UP SPRAY 8 U-SERIES @ 30 PSI
	RAINBIRD RD04-S-PRS POP UP SPRAY 10 U-SERIES @ 30 PSI
	RAINBIRD RD04-S-PRS POP UP SPRAY 12 U-SERIES @ 30 PSI
	RAINBIRD RD04-S-PRS POP UP SPRAY 15 U-SERIES @ 30 PSI
	RAINBIRD RD04-S-PRS POP UP SPRAY 15 SST @ 30 PSI
	RAINBIRD RD04-S-PRS POP UP SPRAY 15 EST @ 30 PSI
	RAINBIRD 5000 SERIES MPR NOZZLES @ 55 PSI
	RAINBIRD 8005 SERIES Q#8-6.6 GPM, H#14-12.6 GPM, F#26-24.3 GPM NOZZLES @ 55 PSI
	IRRIGATION POINT OF CONNECTION, PRESSURE REDUCER AND RPZ BACKFLOW PREVENTION - CONNECT TO WATER SERVICE LINE AND METER. (SEE CIVIL PLANS) CONTRACTOR LOCATE AND VERIFY EXACT LOCATION ON SITE.
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.
M	MASTER VALVE
F	FLOW SENSOR
R	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)
	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" 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 CULINARY SYSTEM. IF IT IS NOT CONNECTED TO CULINARY, CONTACT THE OWNER AND LANDSCAPE ARCHITECT TO COORDINATE A SECONDARY SYSTEM AND REQUIRED COMPONENTS.
4. VERIFY THAT THE POINT OF CONNECTION IS IN THE CORRECT LOCATION BEFORE INSTALLATION. ALL CONNECTIONS ON THIS PROJECT ARE TO BE CULINARY WATER AND SHOULD BE NOTED AS SUCH; THEREFORE, ALL PARTS MUST MEET WATER STANDARDS THAT PERTAIN TO CULINARY WATER.USE A BACKFLOW PREVENTOR AND RPZ AS SPECIFIED.
5. ON OCCASION AND FOR GRAPHIC PURPOSES ONLY, THE IRRIGATION SYSTEM MIGHT BE SHOWN IN HARDSCAPE AREAS. THIS IRRIGATION IS TO BE PLACED IN LANDSCAPED AREAS ON THE PROPERTY SITE.
6. CONTRACTOR SHALL USE ONLY COMMERCIAL GRADE IRRIGATION PRODUCTS. THIS INCLUDES PIPE TO BE SCHEDULE 40 PVC OR BETTER. NO POLY PIPE IS TO BE USED. FITTINGS UP TO 1-1/2" MUST BE SCHEDULE 40 OR BETTER. FITTINGS LARGER THAN 1-1/2" SHALL BE SCHEDULE 80 OR BETTER. CONTRACTOR IS RESPONSIBLE FOR ENSURING ACCURATE COUNTS AND QUANTITIES OF ALL IRRIGATION MATERIALS FOR BIDDING AND INSTALLATION.
7. MAIN LINES SHALL BE A MINIMUM OF 24" DEEP AND LATERAL LINES A MINIMUM OF 12" DEEP. NO ROCK GREATER THAN 1/2" DIAMETER SHALL BE ALLOWED IN TRENCHES. TRENCHING BACKFILL MATERIAL SHALL BE COMPACTED TO PROPER FINISHED GRADE.
8. NO IRRIGATION MAIN LINE MAY BE LOCATED WITHIN 5 FEET OF ANY STRUCTURE.
9. TO AVOID PIPE DAMAGE, ADJUST LOCATION OF PIPE TO NOT BE DIRECTLY UNDER PLANT MATERIALS. VALVE BOXES ARE PREFERRED TO BE IN PLANTER BEDS INSTEAD OF THE LAWN.
10. PLAN INDICATES 100% OR BETTER HEAD TO HEAD COVERAGE. SHOULD CONTRACTOR FIND DISCREPANCIES DUE TO NECESSARY FIELD ADJUSTMENTS, CONTACT LANDSCAPE ARCHITECT FOR IRRIGATION CORRECTION.
11. DRIP IRRIGATION TO BE INSTALLED PER DETAILS. CONTRACTOR SHALL MAKE NECESSARY ADJUSTMENTS. TUBING SHOULD REST TOWARD OUTER EDGE OF ROOTBALL AND NOT AGAINST TRUNK OF PLANT.
12. A QUICK COUPLER SHALL BE INSTALLED AT POINT OF CONNECTION TO ALLOW BLOW OUT OF SYSTEM BY AIR COMPRESSOR AT END OF EACH SEASON.
13. INSTALL SLEEVES FOR ALL PIPES AND WIRE CONDUIT THAT ARE PLACED UNDER PAVEMENT AND SIDEWALKS. SLEEVES SHALL BE 2 SIZES LARGER THAN PIPE BEING PLACED INTERNALLY. WIRE CONDUIT SHALL BE INSTALLED IN CLASS 200 PIPE. AT ANY DIRECTIONAL CHANGE THAT OCCURS, A JUNCTION BOX IS TO PLACED.
14. CONDUITS CAN NOT BE SHARED BY WATER AND ELECTRICAL LINES. ALL WIRE TO BE PUT IN PVC CONDUIT. ALL WIRE CONNECTIONS TO BE PLACED IN A VALVE BOX. ALL WIRE CONNECTIONS TO USE WATERPROOF WIRE CONNECTORS WITH AT LEAST 3' OF EXTRA WIRE. PROVIDE PLENTY OF EXTRA WIRE AT EVERY DIRECTIONAL CHANGE. INSULATED 14 GAUGE COPPER TO BE USED FOR ALL CONTROL WIRES AND INSTALLED PER MANUFACTURER'S SPECIFICATIONS.
15. CONTRACTOR TO INSTALL LIGHTNING ARRESTOR AND GROUNDING RODS ON SITE PER MANUFACTURER'S RECOMMENDATIONS, SEE DETAILS.
16. CONTRACTOR TO SEPARATE SYSTEM (CONTROLLER, VALVES, AND DIFFERENT COLORED WIRE) FROM CITY MAINTAINED PROPERTY AND HOA/OWNER MAINTAINED PROPERTY.
17. DUCT TAPE ALL SLEEVES TO PREVENT SOIL OR OTHER DEBRIS ENTERING PIPE. IDENTIFY ALL SLEEVES BY WOOD OR PVC STAKES AND SPRAY PAINT WITH MARKING PAINT. REMOVE STAKES ONCE IRRIGATION SYSTEM IS COMPLETE.
18. TO PREVENT EROSION AND LOW POINT DRAINAGE CONTRACTOR SHALL INSTALL CHECK VALVES
19. LOCATE SPRAY HEADS NO CLOSER THAN 6" FROM WALLS, FENCES OR BUILDINGS AND 2" AWAY FROM WALKS, PATHS OR CURBS.
20. PRESSURE TEST MAINLINE FOR LEAKS PRIOR TO BACKFILLING. CONTACT LANDSCAPE ARCHITECT/OWNER AT THIS TIME FOR COMPLIANCE.
21. CONTRACTOR TO CONSULT WITH OWNER ON EXACT LOCATION OF CONTROLLER. CONTRACTOR TO COORDINATE WITH ELECTRICAL CONTRACTOR AND OWNER FOR THE POWER SUPPLY. INSTALL ALL PER MANUFACTURER'S SPECIFICATIONS. CONTRACTOR SHALL INSTALL A RAIN SENSOR WITH THE CONTROLLER UNLESS OTHERWISE DIRECTED BY OWNER OR LANDSCAPE ARCHITECT.
22. LATERAL LINES SHALL BE NO SMALLER THAN 3/4". LANDSCAPE CONTRACTOR TO ENSURE THE FOLLOWING PIPE SIZES DO NOT EXCEED THE SUGGESTED GPM LISTED BELOW:

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

VALVE ID TAG

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

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

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PLAN INFORMATION

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

N

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

PROJECT INFORMATION

SC FITNESS WAREHOUSE
SALT LAKE CITY, UTAH

DEVELOPER / PROPERTY OWNER / CLIENT

SALT CITY FITNESS INC.
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LICENSE STAMP

LICENSED LANDSCAPE ARCHITECT
JEREMY AINSWORTH
8128121-5301
10/21/2021
ELECTRONIC SEAL
STATE OF UTAH

DRAWING INFO

PM:	JTA
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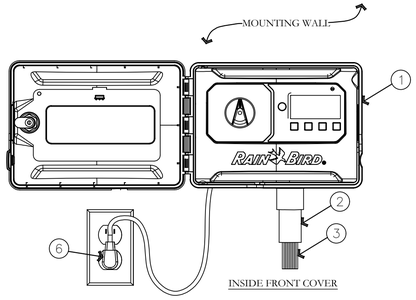
PLOT DATE:	10/21/2021

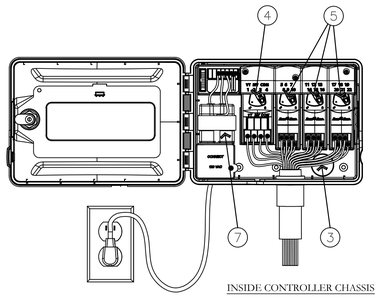
IRRIGATION PLAN

PRELIMINARY PLANS NOT FOR CONSTRUCTION

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

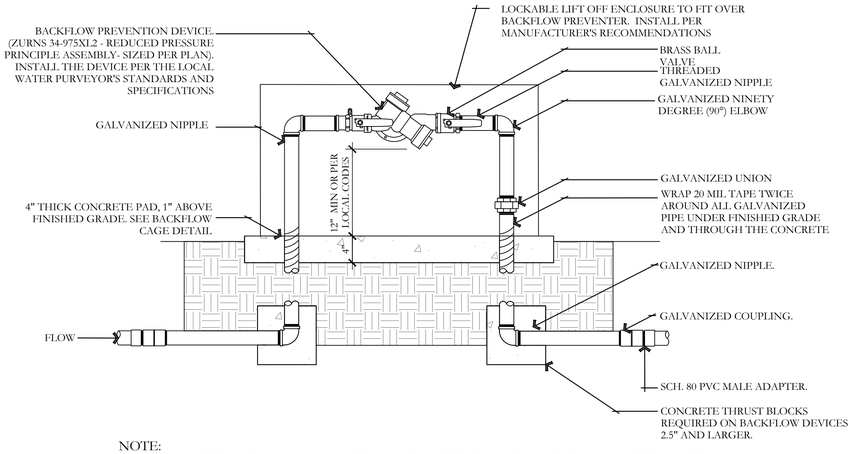
OPTION-4-STATION
OPTION-7-STATION
OPTION-10-STATION
OPTION-13-STATION
OPTION-16-STATION
OPTION-19-STATION
OPTION-22-STATION

TO TURN OFF THIS INSTRUCITON BOX,
TURN OFF LAYER "INSTRUCTION-OPTION".

A ESP-ME3 MODULAR HYBRID CONTROLLER

PKJ DESIGN GROUP

NOT TO SCALE

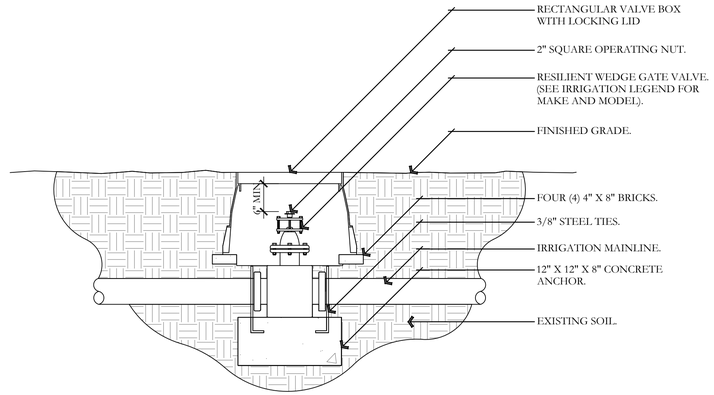


NOTE:
1. GALVANIZED NIPPLE SHALL EXTEND 12" PAST THE EDGE OF THE CONCRETE FOOTING.
2. SCH. 80 PVC MALE ADAPTER SHALL BE USED IN CONNECTION FROM GALVANIZE TO THE MAINLINE.
3. BACKFLOW PREVENTION DEVICE SHALL BE LOCATED AS CLOSE AS POSSIBLE TO THE LANDSCAPE METER.
4. BACKFLOW PREVENTION DEVICE SHALL BE LOCATED IN PLANTING AREA UNLESS APPROVED BY OWNER'S REPRESENTATIVE.
5. SEE DETAIL FOR BACKFLOW CAGE INSTALLATION.
6. ALL ASSEMBLY PARTS (THREADED NIPPLES, FITTINGS, ETC.) SHALL BE GALVANIZED OR BRASS PER LOCAL CODES AND REQUIREMENTS.
7. ALL BACKFLOW PREVENTION DEVICES SHALL HAVE FREEZE BLANKET INCLUDED UPON INSTALLATION.
8. ALL GALVANIZED CONNECTIONS SHALL TO BE MADE USING PIPE THREAD SEALANT. ALL SCH. 80 PVC TO GALVANIZED CONNECTIONS TO BE MADE USING TEFLON TAPE.

B BACKFLOW PREVENTION DETAIL

PKJ DESIGN GROUP

NOT TO SCALE

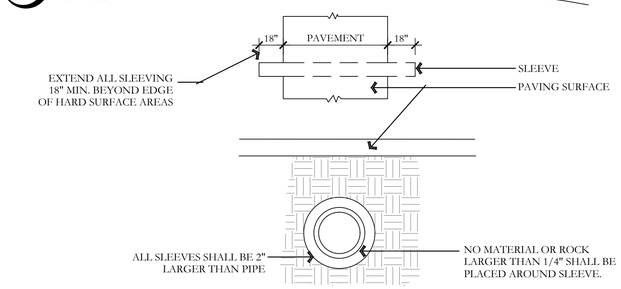


NOTES:
1. INSTALL GATE VALVE PER MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS.
2. VALVE BOX SHALL BE WRAPPED WITH MINIMUM 3 MIL. THICK PLASTIC AND SECURE IT TO VALVE BOX USING DUCT TAPE OR ELECTRICAL TAPE.
3. VALVE BOX SHALL BE LOCATED IN PLANTING AREA.

C GATE VALVE AND ANCHOR DETAIL

PKJ DESIGN GROUP

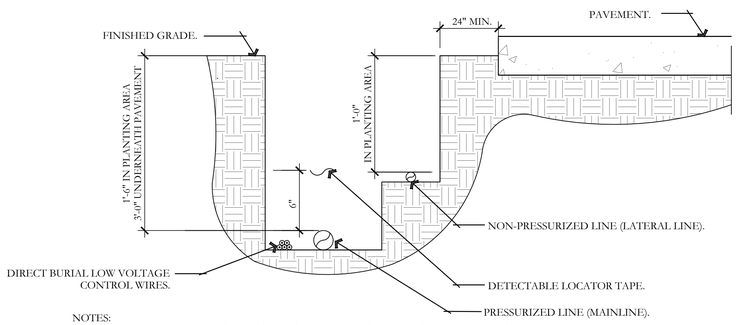
NOT TO SCALE



D TYPICAL SLEEVING DETAIL

PKJ DESIGN GROUP

NOT TO SCALE

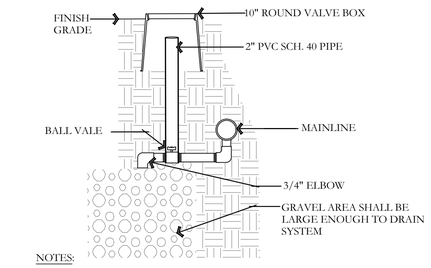


NOTES:
1. SEE IRRIGATION LEGEND FOR MAINLINE AND LATERAL LINE PIPE SIZE AND TYPE.
2. DIRECT BURIAL CONTROL WIRES SHALL BE INSTALLED IN SCH. 40 PVC ELECTRICAL CONDUIT IF REQUIRED.
3. 2-WIRE IRRIGATION WIRE SHALL BE INSTALLED IN SCH. 40 PVC ELECTRICAL CONDUIT.
4. DETECTABLE LOCATOR TAPE SHALL BE LOCATED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

E IRRIGATION TRENCHING DETAIL

PKJ DESIGN GROUP

NOT TO SCALE

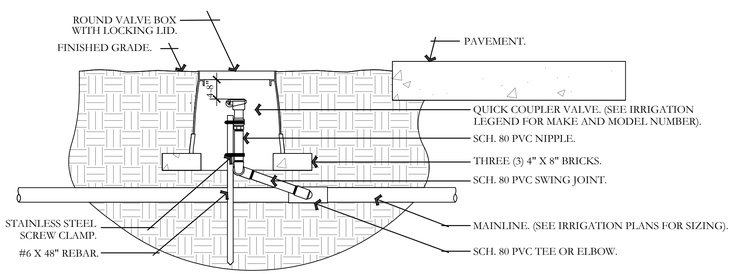


NOTES:
1. ALL FITTINGS TO BE SCH. 80 PVC
2. PROVIDE OWNER WITH KEY

F MANUAL DRAIN DETAIL

PKJ DESIGN GROUP

NOT TO SCALE

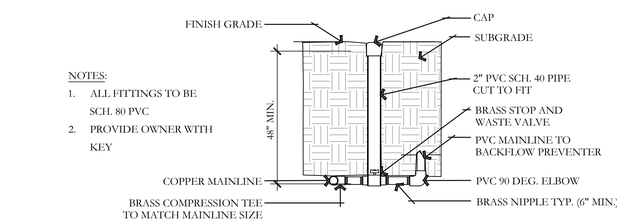


NOTES:
1. ALL THREADED CONNECTIONS SHALL BE INSTALLED USING TEFLON TAPE.
2. VALVE BOX SHALL BE WRAPPED WITH A MINIMUM 3 MIL THICK PLASTIC AND SECURED TO THE VALVE BOX USING DUCT TAPE OR ELECTRICAL TAPE.
3. ALL QUICK COUPLERS SHALL BE INSTALLED A MINIMUM OF 18" OFF OF THE MAINLINE.
4. VALVE BOXES SHALL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

G QUICK COUPLER DETAIL

PKJ DESIGN GROUP

NOT TO SCALE

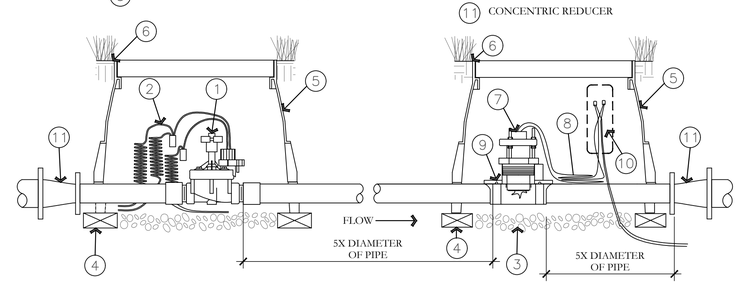


H STOP AND WASTE VALVE ASSEMBLY DETAIL

PKJ DESIGN GROUP

NOT TO SCALE

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

PKJ DESIGN GROUP

NOT TO SCALE

ISSUE DATE	PROJECT NUMBER	PLAN INFORMATION
10/21/2021	UT21115	

NO.	REVISION	DATE
1	XXXX	XX-XX-XX
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LICENSE STAMP

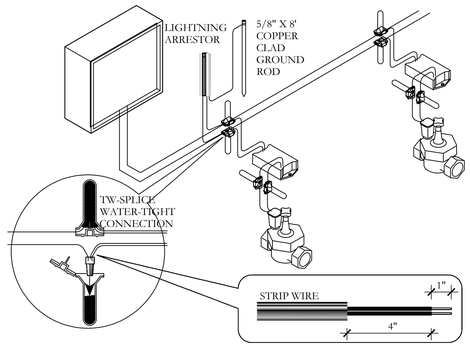
LICENSED LANDSCAPE ARCHITECT JEREMY AINSWORTH 8126121-5301 10/01/2021 ELECTRONIC SEAL STATE OF UTAH

DRAWING INFO	
PM:	JTA
DRAWN:	ACP
CHECKED:	JMA
PLOT DATE:	10/21/2021

IRRIGATION DETAILS

PRELIMINARY PLANS NOT FOR CONSTRUCTION

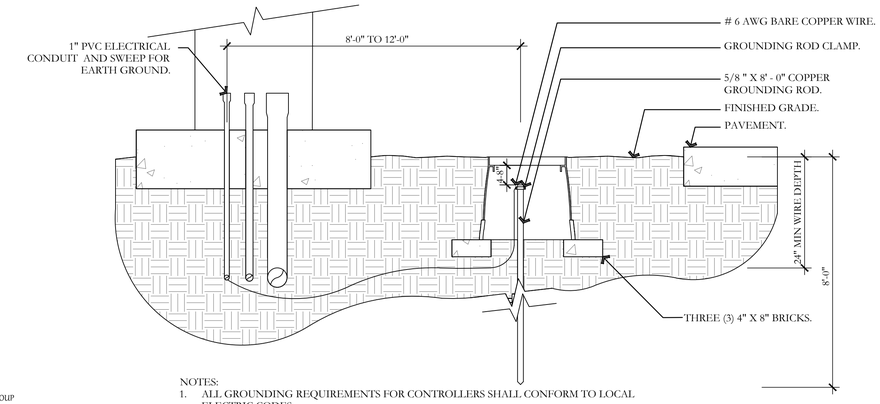
IR-501



J 2-WIRE CONNECTION DETAIL

NOT TO SCALE

PKJ DESIGN GROUP

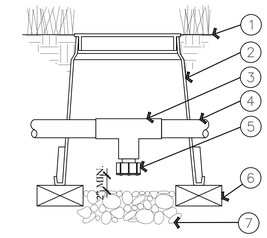


NOTES:
1. ALL GROUNDING REQUIREMENTS FOR CONTROLLERS SHALL CONFORM TO LOCAL ELECTRIC CODES.
2. GROUNDING ROD SHALL NOT BE LOCATED IN THE SAME TRENCH AS THE IRRIGATION MAINLINES OR LATERAL LINES.
3. VALVE BOX SHALL BE WRAPPED WITH A MINIMUM 3 MIL THICK PLASTIC AND SECURED TO THE VALVE BOX USING DUCT TAPE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

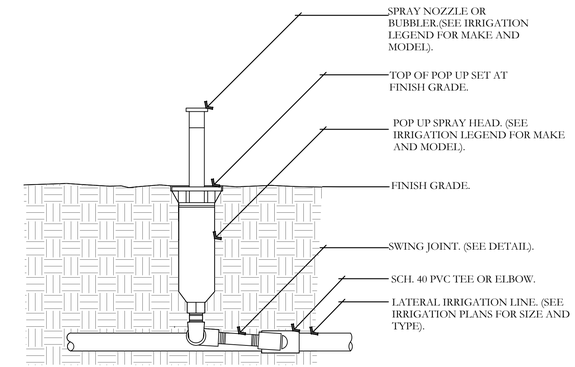


1. FINISH GRADE/TOP OF MULCH
2. VALVE BOX WITH COVER: RAIN BIRD VB-6RND
3. PVC SCH 40 TEE
4. PVC LATERAL PIPE
5. FILTERED DRAIN VALVE: RAIN BIRD 16A-FDV-075
6. BRICK (1 OF 2)
7. 6-INCH MINIMUM DEPTH OF 3/4" WASHED GRAVEL

L LATERAL LINE DRAIN VALVE DETAIL

NOT TO SCALE

PKJ DESIGN GROUP

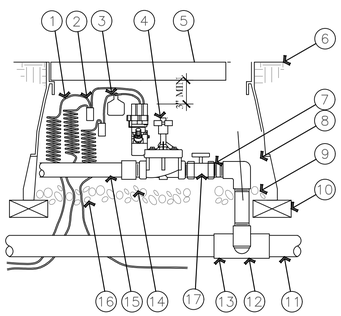


NOTE:
1. 6" POP UPS SHALL BE USED IN TURF AREAS.
2. CONTRACTOR SHALL SETTLE SOIL AROUND THE POP UP AFTER INSTALLATION.
3. ALL POP UP SPRAY HEADS SHALL HAVE CHECK VALVES.
4. ALL SCH. 40 PVC TO SCH. 80 PVC CONNECTIONS SHALL BE MADE USING TEFLON TAPE.

O POP UP-SPRAY HEAD DETAIL

NOT TO SCALE

PKJ DESIGN GROUP

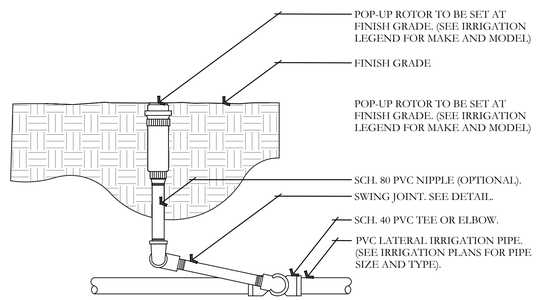


1. 30-INCH LINEAR LENGTH OF WIRE, COILED.
2. WATERPROOF CONNECTION RAIN BIRD SPLICE-1 (1 OF 2)
3. ID TAG: RAIN BIRD VID SERIES
4. REMOTE CONTROL VALVE: RAIN BIRD PESB-PRS-D WITH NP-HAN
5. VALVE BOX WITH COVER: RAIN BIRD VB-STD
6. FINISH GRADE/TOP OF MULCH
7. PVC SCH 80 NIPPLE (CLOSE)
8. PVC SCH 40 ELL
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

ISSUE DATE	PROJECT NUMBER
10/21/2021	UT21115

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

PROJECT INFORMATION

SC FITNESS WAREHOUSE
SALT LAKE CITY, UTAH

DEVELOPER / PROPERTY OWNER / CLIENT

SALT CITY FITNESS INC.
ATT: SUMMER MERCADO
801-898-0355
SCFITNESSWAREHOUSE@GMAIL.COM

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
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LICENSE STAMP

LICENSED LANDSCAPE ARCHITECT
JEREMY AINSWORTH
812812-5301
10/24/2021
REGISTERED SEAL
STATE OF UTAH

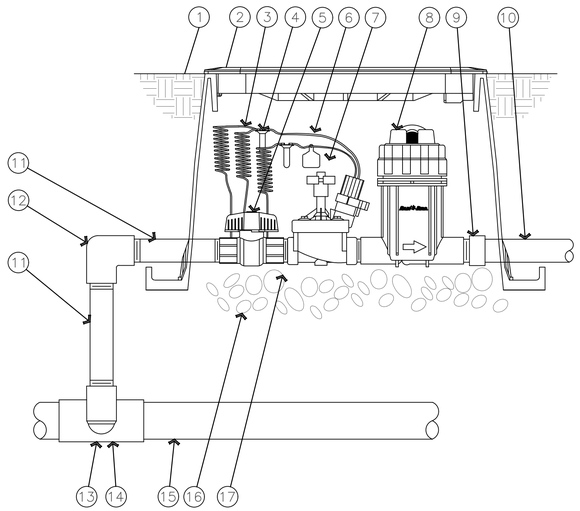
DRAWING INFO

PM:	JTA
DRAWN:	ACP
CHECKED:	JMA
PLOT DATE:	10/21/2021

IRRIGATION DETAILS

PRELIMINARY PLANS NOT FOR CONSTRUCTION

IR-502

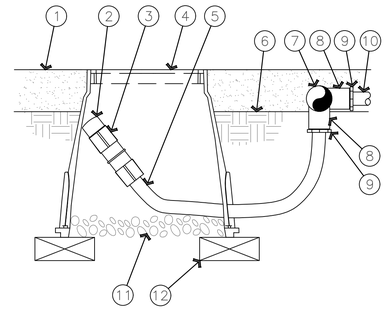


1. FINISH GRADE/TOP OF MULCH
2. VALVE BOX WITH COVER: RAIN BIRD VB-STD
3. 30-INCH LINEAR LENGTH OF WIRE, COILED
4. WATERPROOF CONNECTION: RAIN BIRD DB SERIES
5. 1-INCH BALL VALVE (INCLUDED IN XCZ-PRB-100-COM KIT)
6. ID TAG
7. REMOTE CONTROL VALVE: RAIN BIRD PESB (INCLUCED IN XCZ-PRB-100-COM KIT)
8. PRESSURE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

P DRIP CONTROL ZONE KIT DETAIL

NOT TO SCALE

PKJ DESIGN GROUP



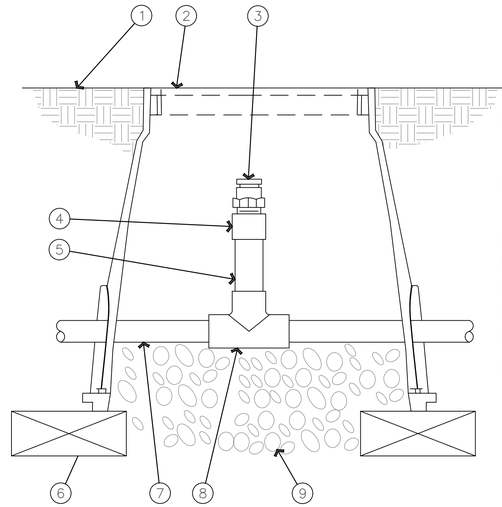
1. MULCH
2. FLUSH CAP FOR EASY FIT COMPRESSION FITTINGS: POTABLE:RAIN BIRD MDCFCAP
3. EASY FIT COUPLING: RAIN BIRD MDCFCOUP
4. SUBTERRANEAN EMITTER BOX: RAIN BIRD SEB 7XB
5. ½" POLYETHYLENE TUBING: RAIN BIRD XF BLANK TUBING
6. FINISH GRADE
7. PVC EXHAUST HEADER
8. PVC SCH 40 TEE OR EL
9. BARB X MALE 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

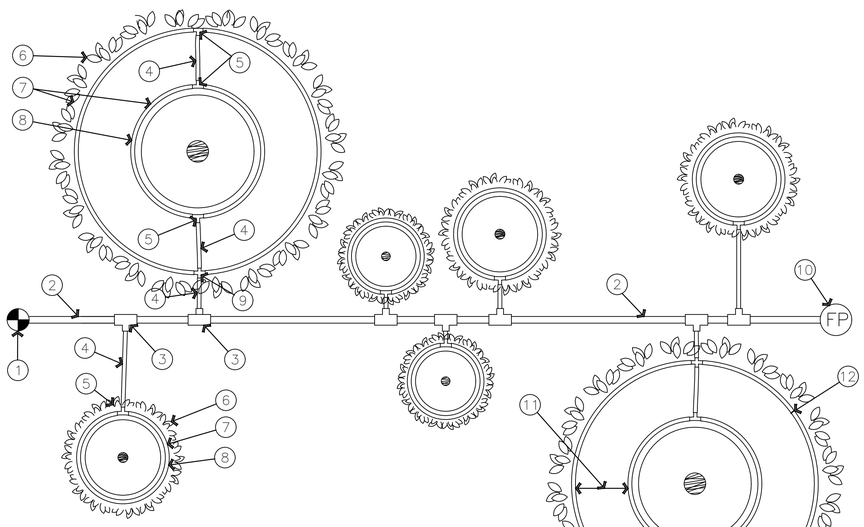


1. FINISH GRADE
2. SUBTERRANEAN EMITTER BOX: RAIN BIRD SEB 7XB
3. ½" AIR RELIEF VALVE: RAIN BIRD ARV050 TO BE INSTALLED AT HIGH POINTS IN DRIP ZONE
4. PVC SCH 40 FEMALE ADAPTER
5. PVC SCH 80 RISER
6. BRICK (1 OF 2)
7. PVC HEADER PIPE
8. PVC SCH 40 TEE
9. 3" MINIMUM DEPTH OF 3/4" WASHED GRAVEL

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. ¼" 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

ISSUE DATE	PROJECT NUMBER
10/21/2021	UT21115

NO.	REVISION	DATE
1	XXXX	XX-XX-XX
2		
3		
4		
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6		
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PLAN INFORMATION

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LANDSCAPE ARCHITECT / PLANNER

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

LICENSE STAMP

LICENSED LANDSCAPE ARCHITECT
JEREMY ANDSWORTH
8/28/21 - 5301
10/21/2021
ELECTRONIC SEAL
STATE OF UTAH

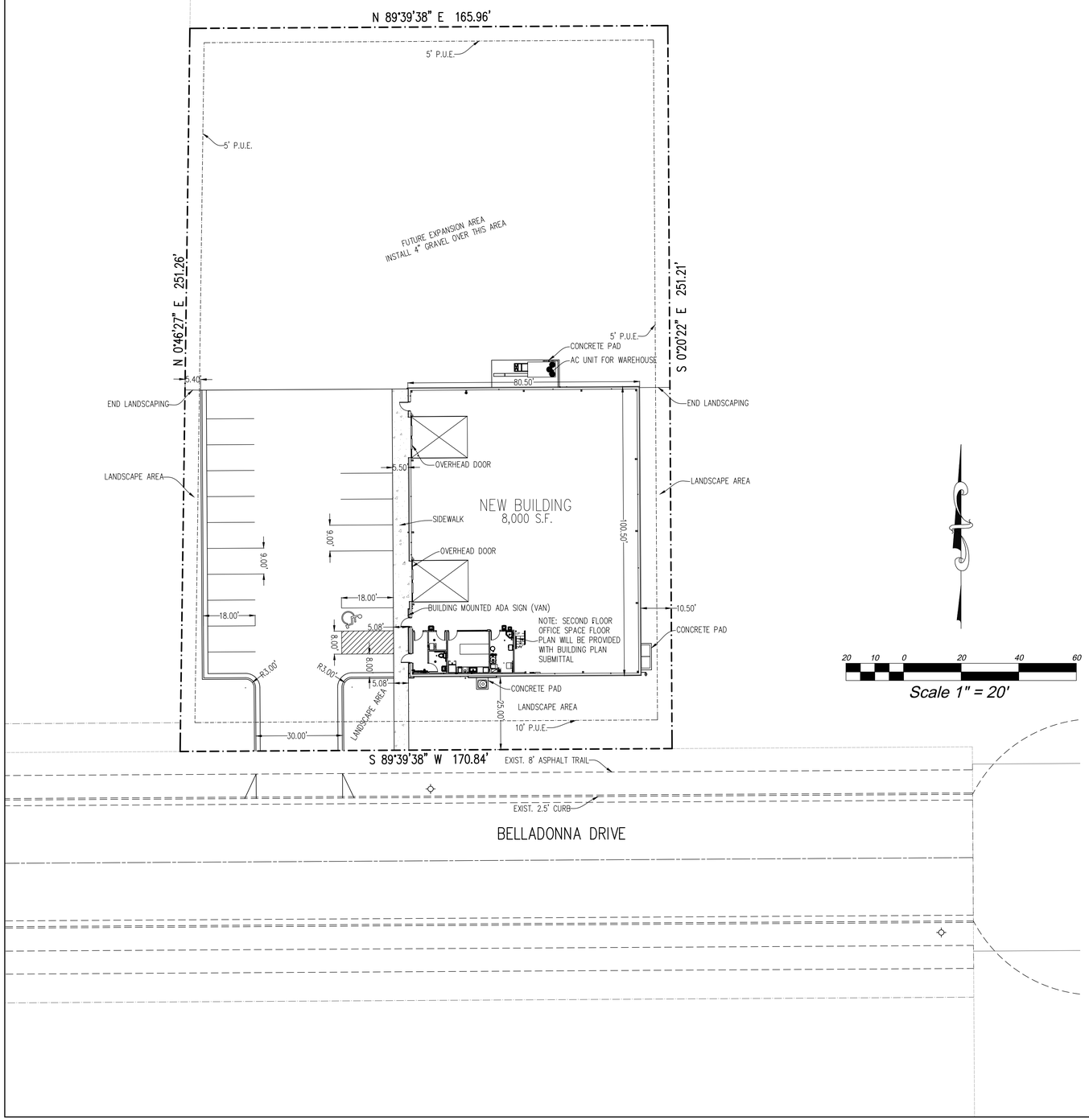
DRAWING INFO

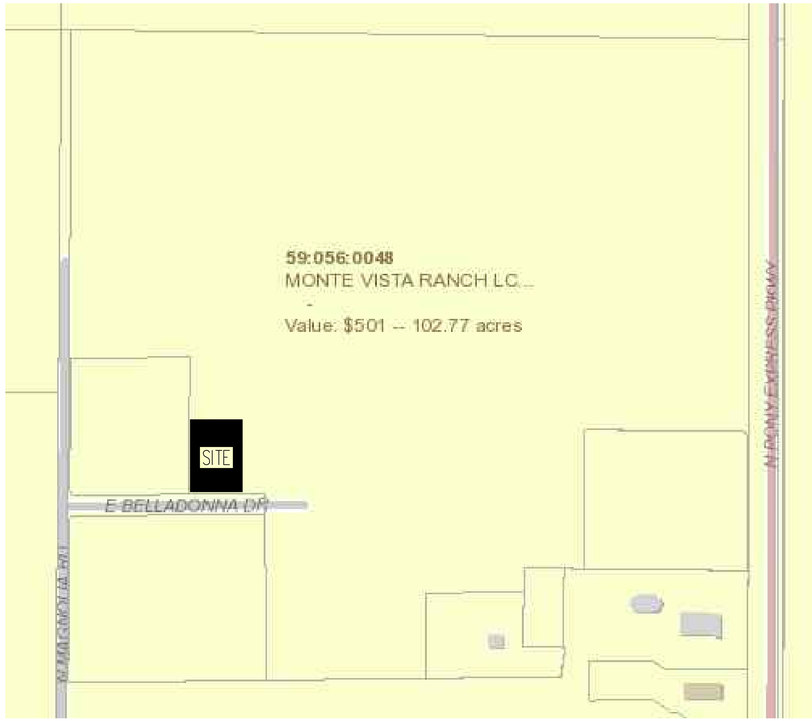
PM:	JTA
DRAWN:	ACP
CHECKED:	JMA
PLOT DATE:	10/21/2021

IRRIGATION DETAILS

PRELIMINARY PLANS NOT FOR CONSTRUCTION

IR-503





VICINITY MAP

GENERAL NOTES

1. DEVELOPER TO PROVIDE A STATE APPROVED NOTICE (NOI) FOR THE WORK TAKING PLACE WITHIN THE PROJECT (UPDES CONSTRUCTION STORM WATER PERMIT) PRIOR TO BEGINNING CONSTRUCTION.
2. ALL CONSTRUCTION TO CONFORM TO CURRENT EAGLE MOUNTAIN CITY STANDARDS AND SPECIFICATIONS.
3. CONTRACTOR TO COMPLY W/ ALL RECOMMENDATIONS IN THE GEOTECHNICAL STUDY UNLESS NOTED OTHERWISE ON THE CONSTRUCTION PLANS.

LAND TABULATIONS

ITEM	AREA	%
TOTAL AREA:	42,304 S.F.	100%
BUILDING AREA:	8,000 S.F.	18.9%
LANDSCAPE AREA:	5,045 S.F.	11.9%
IMPERVIOUS AREA:	8,163 S.F.	19.3%
GRAVEL YARD AREA:	21,096 S.F.	49.9%

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 ALL UNDERGROUND UTILITIES, WHETHER OR NOT SUCH FACILITIES ARE SHOWN ON THESE PLANS.

PARKING TABULATIONS

PARKING REQUIRED:

OFFICE AND PROFESSIONAL
1 STALL PER 300 S.F. OF GROSS FLOOR AREA
1,000 S.F./300 S.F. = 4 STALLS

WAREHOUSE
1 STALL PER 2,000 S.F. OF GROSS FLOOR AREA
7,500 S.F./2,000 S.F. = 4 STALLS

TOTAL PARKING REQUIRED: = 8 STALLS

TOTAL PARKING PROVIDED (INCLUDING 1 VAN & 1 STD. ADA STALL) = 16 STALLS

SHEET INDEX

C1 SITE PLAN
C2 UTILITY PLAN
C3 GRADING & DRAINAGE PLAN
C4 EROSION CONTROL PLAN
C5 BMP DETAILS

DUMPSTER ENCLOSURE NOTE:

OWNER TO STORE ALL TRASH INSIDE THE PROPOSED BUILDING AND THEY WILL DISPOSE OF ALL WASTE PRIVATELY. THEREFORE, NO DUMPSTER ENCLOSURE WILL BE PROVIDED.

BENCH MARK

NORTHWEST CORNER, SECTION 24, TOWNSHIP 6 SOUTH, RANGE 2 WEST, SALT LAKE BASE AND MERIDIAN
ELEVATION = 4852.37'
PSOMAS ELEV AT THIS MONUMENT=4856.02'

REVISIONS

Rev.	Date	Description
1	11/22/21	ADDED VICINITY MAP AND CITY REDLINE COMMENTS

REGISTERED PROFESSIONAL ENGINEER
10/20/21
No. 270393
DAVID W. PETERSON
STATE OF UTAH

Developer/Property Owner:
SALT CITY FITNESS
SUMMER MERCADO
Phone: (801) 859-9100

EXCEL ENGINEERING
David W. Peterson, P.E., License #270393
12 West 100 North, Suite 201, American Fork, UT 84003
P: (801) 756-4504; F: (801) 756-4511

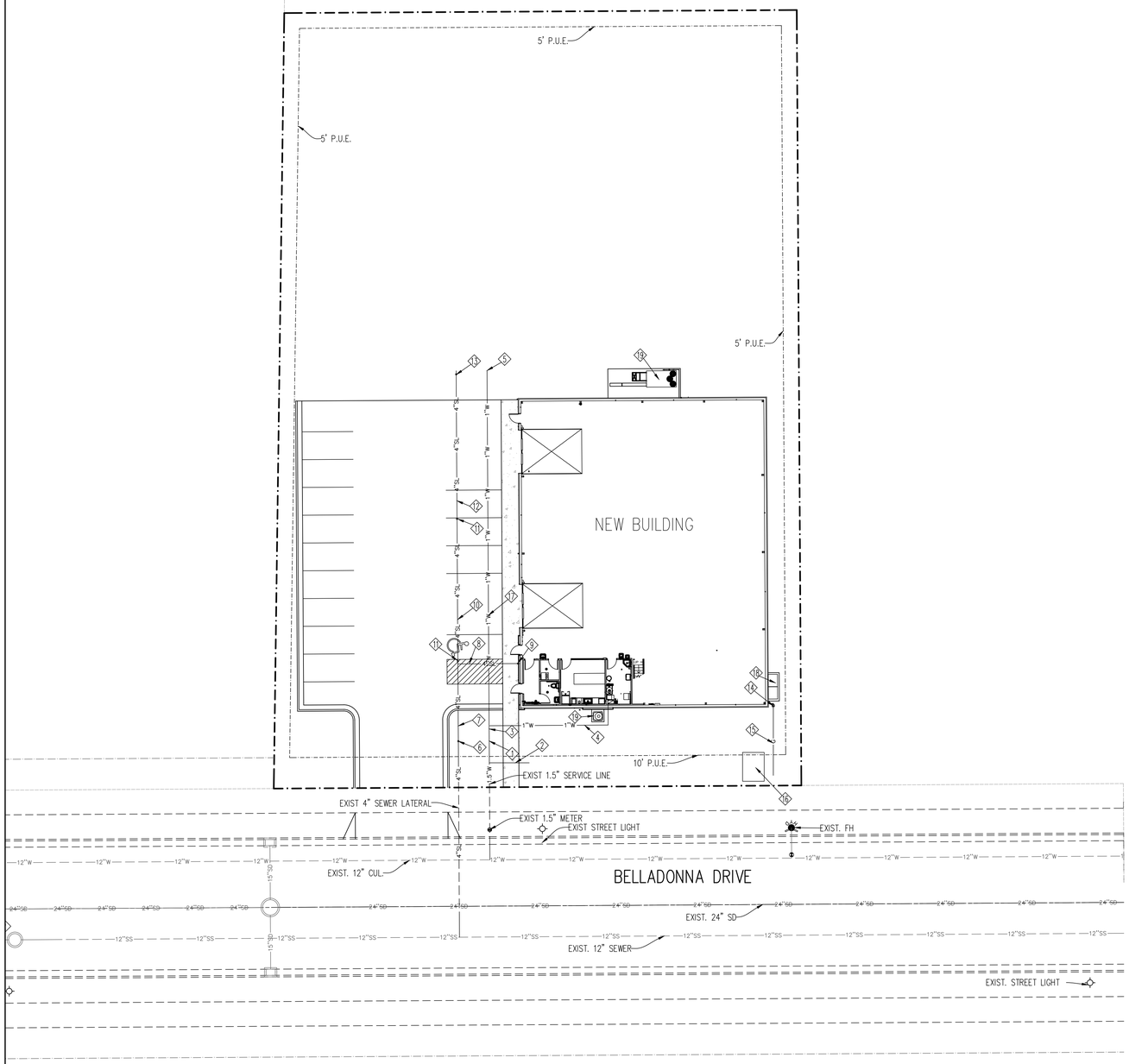
SALT CITY FITNESS

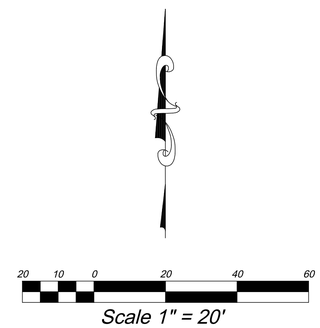
EAGLE MOUNTAIN 1109 E. BELLADONNA DR. UTAH

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

SITE PLAN

Scale: 1"=20'
Date: 10/20/21
C1





UTILITY LEGEND

- FIRE HYDRANT
- WATER VALVE
- INSTALL STREET LIGHT
- 8"W — CULINARY WATER
- 8"SS — SEWER PIPE PVC SDR-35
- 15"SD — STORM DRAIN PIPE ADS HP
- EDGE OF ASPHALT
- X — EXIST FENCE
- P — BURIED POWER LINE
- TV — TELEVISION LINE
- TEL — TELEPHONE LINE
- G — GAS LINE

UTILITY KEYED NOTES

1. FIELD LOCATE AND CONNECT TO EXISTING 1.5" WATER SERVICE LINE STUB
2. INSTALL 1" WATER STUB FOR IRRIGATION CONNECTION
3. INSTALL 1.5" WATER SERVICE LINE
4. INSTALL 1" WATER SERVICE LINE TO BUILDING. COORDINATE WITH MECHANICAL PLANS FOR BUILDING CONNECTION.
5. PLUG AND MARK END OF WATER SERVICE LINE FOR POSSIBLE FUTURE BUILDING CONNECTION.
6. FIELD LOCATE END OF EXISTING 4" SEWER LATERAL AND INSTALL SEWER CLEANOUT
7. INSTALL 25 L.F. 4" PVC SDR-35 SEWER LATERAL @ S=2% MIN.
8. INSTALL 20 L.F. 4" PVC SDR-35 SEWER LATERAL @ S=2% MIN.
9. INSTALL SEWER CLEANOUT AT BUILDING. COORDINATE WITH MECHANICAL PLANS FOR BUILDING CONNECTION.
10. INSTALL 47 L.F. 4" PVC SDR-35 SEWER LATERAL @ S=2% MIN.
11. INSTALL 4" SEWER CLEANOUT WITH TRAFFIC RATED LID.
12. INSTALL 47 L.F. 4" PVC SDR-35 SEWER LATERAL @ S=2% MIN.
13. INSTALL SEWER CLEANOUT AND PLUG & MARK END OF SEWER LATERAL FOR FUTURE BUILDING CONNECTION.
14. GAS METER
15. INSTALL GAS LINE FROM BUILDING TO CONNECTION AT ROADWAY.
16. TRANSFORMER
17. INSTALL 1" WATER SERVICE FOR FUTURE USE
18. CTM
19. MECHANICAL EQUIPMENT

Eagle Mountain City General Notes for construction drawings:

WATER–

- Valves: 1. Valves must be flanged to tee's (fittings). 2. Valves 12" and larger to be butterfly valves.
- Bedding: sand must meet AASHTO (A-3) gradation with 100% passing the #4 sieve. 6" below pipe on the sides & 12" above pipe (minimum).
- Depth: water main & laterals must maintain 4' cover from finished grade (minimum), 3' minimum from top of pipe at time of installation. Max depth 72" from finished grade.
- Services & fittings: services & fittings to maintain 3' minimum separation from pipe joints and other fittings.
- Setters: all setters to be 21" tall (minimum), have unions at the base and be dual check model, also 3/4" setters to have double braces. Setters to be set at: 18" to 22" from the top of setter to top of lid. 21" inside diameter can HDPE.
- Water can lid: all lids to say "Eagle Mountain" on them recessed with a hole for the ERT and to be set at level to 1" above the plane of the curb & sidewalk.
- Water Can: the water can for 3/4" & 1" services will need to be a 21" tall minimum and inside diameter. Water can for 1-1/2" to 2" service will need to follow APWA specification.
- Hydrants: hydrants to be 5' bury (minimum).
- Laterals: all laterals need to be GIS (shot in) at the corp. stop & setter, and also visual inspection on poly inserts before backfill. Water laterals to extend 15' into property and be marked with a 2x4 painted blue. All poly lines to have visual poly insert inspection .
- Tracer wire: run tracer wire along main & extend up setters and hydrants, do not run up valve boxes.
- Water fittings: all water fittings to be checked for thrust blocks (pre & post) and GIS (shot in) before backfill.
- Vertical separation: water main to maintain 18" minimum separation from storm drain or other obstacles/utilities.
- Water line fittings: all fittings to have mega lug followers.
- Water Main Line: NO DEFLECTION or bending of pipe will be allowed in the water lines and bend fittings will be required. All fittings to be Mega-lug fittings.

Eagle Mountain City General Notes for construction drawings:

SEWER–

- Pipe bedding: 3/4" gravel required 6" below, on the sides & 12" above the pipe (minimum).
- Depth: Sewer main/laterals to maintain 4' of cover (minimum) from finished grade, 3' minimum from top of pipe at time of installation.
- Separation: sewer mains & laterals to maintain 10' separation (minimum) from culinary water mains & laterals.
- Sewer Y's: 3' minimum separation between sewer Y's.
- Lateral stubs: A) stubs must extend 15' into property and be marked with 2x4 painted green. B) All laterals must be GIS (shot in) at the Y's and stubs. Also slopes (2% min. on 4" pipe) to be checked before backfill.
- Manholes: manholes to be within 1' of finished grade. 12" of whirly gig form (max) and no flat rings allowed. 12" of 3/4" gravel required under manholes/boxes.

STORM DRAIN–

- Bedding: 3/4" gravel 6" below and on sides of pipe & 12" above pipe (minimum).
- ADS: all ADS pipe to be "HP" brand.
- Collars: collars to be 1'x1' around pipe, 4000 psi concrete, inspection is needed pre & post collar pour.
- Manholes: manholes to be within 1' of finished grade. 12" of whirly gig form (max) and no flat rings allowed. 12" of 3/4" gravel required under manholes/boxes.

ROAD SECTION–

- Proof rolls: proof roll required on all sections of road: i.e. sub-grade, sub-base, and curb base and road base. Curb stakes required for sub-grade inspection and string line required for sub-base and road base inspection .
- UTBC: state spec. road base required for all roads, commercial base acceptable for the sidewalks & trails.
- Collars: all collars to be 1' wide by 1' deep with a 6000 psi concrete with 1.5# fiber mesh per cubic yard (3/4" monofilament) required for all street collars. Manhole covers and water valve towers to be ½" down from asphalt edge and concrete to be 1/4" to 3/8" down from asphalt edge.

REGISTERED PROFESSIONAL ENGINEER
10/20/21
No. 270393
DAVID W. PETERSON
STATE OF UTAH

Know what's below. Call before you dig.

BENCH MARK	REVISIONS		
NORTHWEST CORNER, SECTION 24, TOWNSHIP 6 SOUTH, RANGE 2 WEST, SALT LAKE BASE AND MERIDIAN ELEVATION = 4852.37' PSOMAS ELEV AT THIS MONUMENT=4856.02'	Rev.	Date	Description

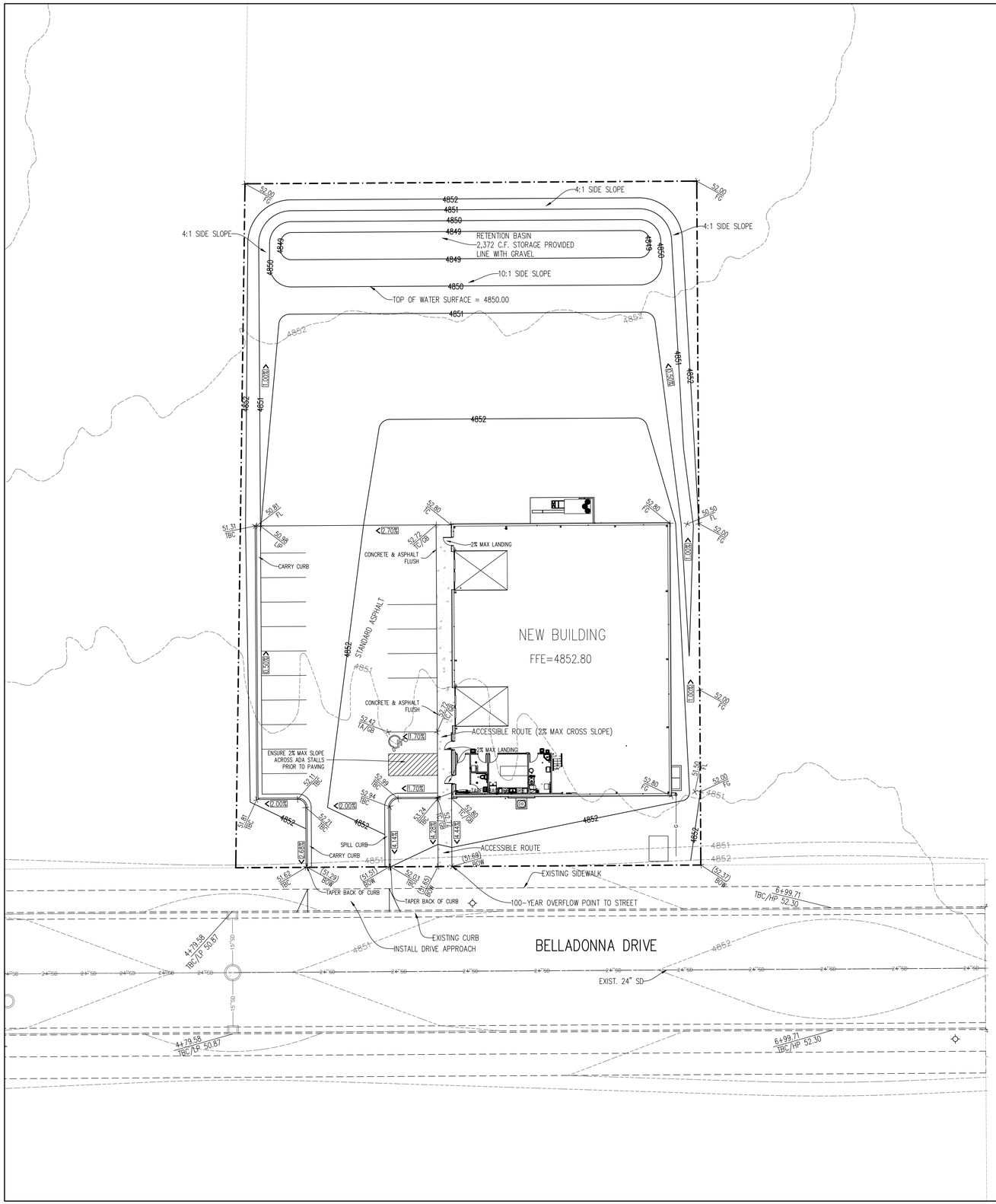
Developer/Property Owner:
SALT CITY FITNESS
SUMMER MERCADO
Phone: (801) 859-9100

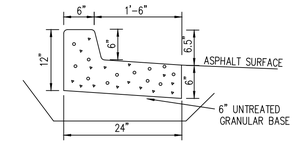
EXCEL ENGINEERING
David W. Peterson, P.E., License #270393
12 West 100 North, Suite 201, American Fork, UT 84003
P: (801) 756-4504; F: (801) 756-4511

SALT CITY FITNESS

EAGLE MOUNTAIN UTAH

Drawn by: D.W.P.	UTILITY PLAN	Scale: 1"=20'
Designed by: D.W.P.		Date: 10/20/21
Checked by: D.W.P.		C2

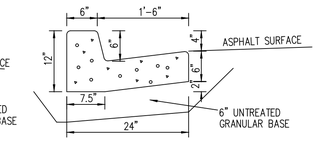




6" UNTREATED GRANULAR BASE UNDER CURB EXTENDING 6" LATERALLY IN FRONT AND BACK COMPACT TO 95% DENSITY ASTM D 1557-78

SPILL CURB

NOT TO SCALE



6" 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

20 10 0 20 40 60

Scale 1" = 20'

PAVEMENT DESIGNS

STANDARD ASPHALT:
3" ASPHALT CONCRETE
6" ROAD BASE
CONCRETE SIDEWALKS
4" PORTLAND CEMENT CONCRETE
4" AGGREGATE BASE COURSE

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
CWN	CROWN
IE	INVERT ELEVATION
0.00%	DIRECTION OF DRAINAGE
00.00 TBC	EXISTING ELEVATION
00.00 TBC	PROPOSED ELEVATION
4808	EXISTING CONTOUR
4808	PROPOSED CONTOUR
10	STORM DRAIN KEYED NOTE

BENCH MARK

NORTHWEST CORNER, SECTION 24, TOWNSHIP 6 SOUTH, RANGE 2 WEST, SALT LAKE BASE AND MERIDIAN
ELEVATION = 4852.37'
PSOMAS ELEV AT THIS MONUMENT=4856.02'

REVISIONS

Rev.	Date	Description

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SALT CITY FITNESS

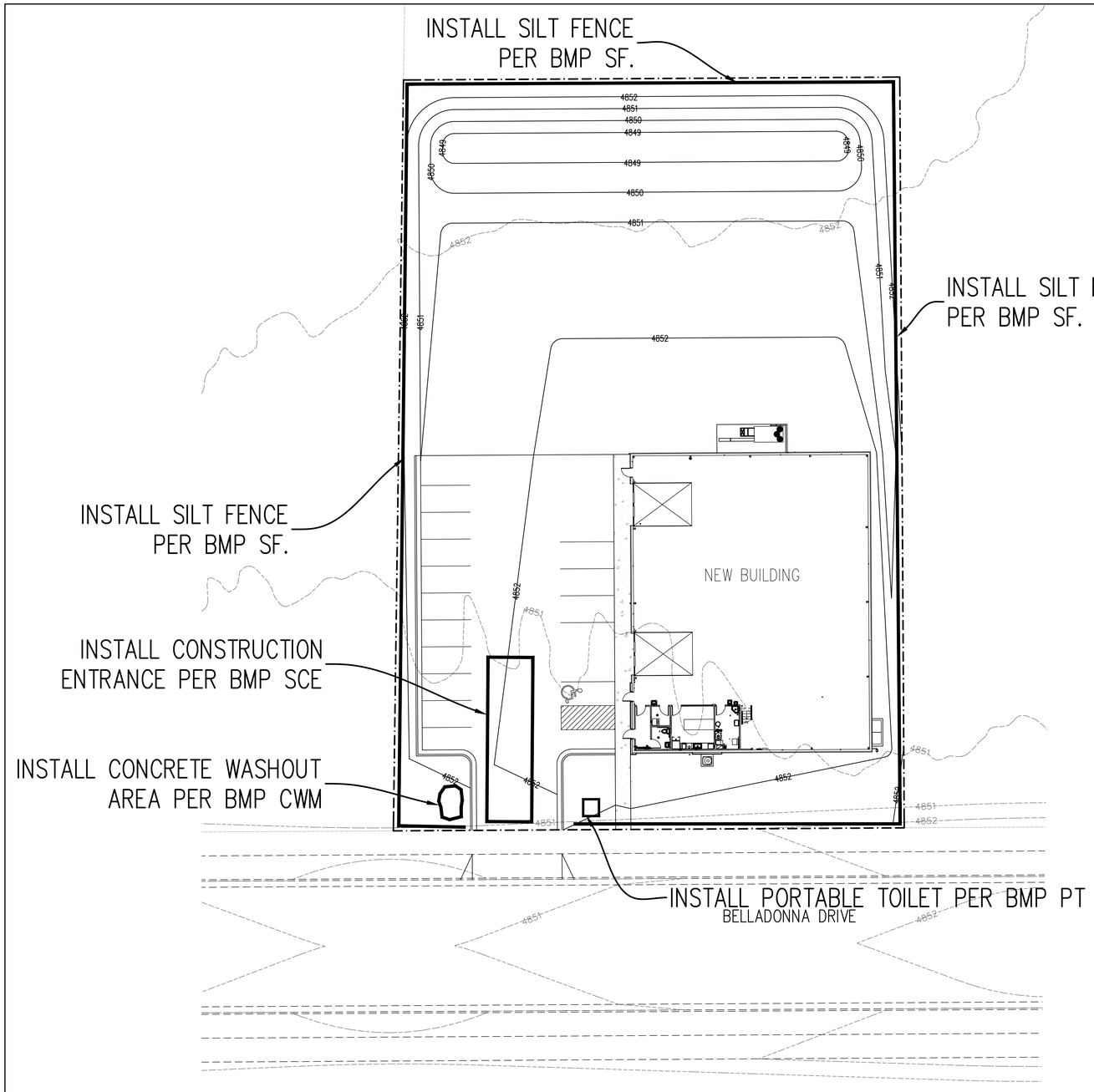
EAGLE MOUNTAIN UTAH

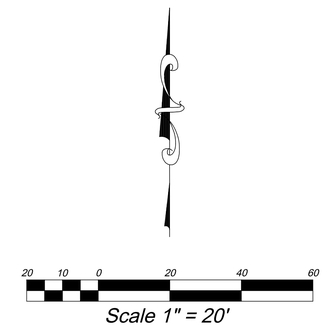
Drawn by: D.W.P.
Designed by: D.W.P.
Checked by: D.W.P.

GRADING & DRAINAGE PLAN

Scale: 1"=20'
Date: 10/20/21

C3





EROSION CONTROL NOTES:

1. CONTRACTOR IS TO READ AND UNDERSTAND ALL BMP PRACTICES PRIOR TO ANY CONSTRUCTION ON THIS SITE. CONTRACTOR IS TO FOLLOW ALL BMP PRACTICES CONTAINED IN THESE PLANS.
2. CONSTRUCT A SILT FENCE AS SHOWN ON PLAN. SEE BMP SF.
3. INSTALL A CONSTRUCTION ENTRANCE AS SHOWN ON THE PLAN PRIOR TO ANY GRADING ON THE SITE. SEE BMP SCE
4. INSTALL CONCRETE WASHOUT AREA AS PER BMP CWM.
5. INSTALL PORTABLE TOILET AS PER BMP PT
6. THE SITE IS TO BE WATERED AT LEAST ONCE A WEEK TO CONTROL DUST OR MORE FREQUENT AS DETERMINED BY THE CONTRACTOR.
7. CONTRACTOR IS TO REMOVE INLET PROTECTION FROM CATCH BASINS AND CLEAN-OUT ALL CATCH BASINS BEFORE LEAVING THE SITE.
8. CONTRACTOR WILL BE RESPONSIBLE FOR THE IMPLEMENTATION AND MAINTENANCE OF BMP'S DURING CONSTRUCTION.
9. ALL CONSTRUCTION PERIOD BEST MANAGEMENT PRACTICES ARE TO BE INSPECTED & MAINTAINED AT LEAST WEEKLY, ALSO BEFORE AND AFTER EACH STORM EVENT.
10. CONTRACTOR SHALL BE REQUIRED TO KEEP A RECORD OF ALL INSPECTIONS AND MAINTENANCE ON SITE WITH THE STORM WATER POLLUTION PREVENTION PLAN.

BENCH MARK

NORTHWEST CORNER, SECTION 24,
TOWNSHIP 6 SOUTH, RANGE 2 WEST,
SALT LAKE BASE AND MERIDIAN
ELEVATION = 4852.37'
PSOMAS ELEV AT THIS
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SALT CITY FITNESS

EAGLE MOUNTAIN UTAH

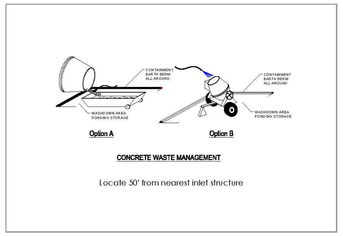
Drawn by: D.W.P.
Designed by: D.W.P.
Checked by: D.W.P.

EROSION CONTROL PLAN

Scale: 1"=20'
Date: 10/20/21
C4

BMP: Concrete Waste Management

CWM
Construction



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.

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

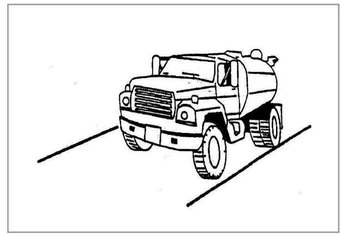
INSTALLATION/APPLICATION CRITERIA:
- Store dry materials under cover, away from drainage areas.
- Minimize excess mixing of fresh concrete, mortar or cement on-site.
- Perform washout of concrete trucks off-site or in designated areas only.
- Do not wash out concrete trucks into storm drains, open ditches, 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. (6" tall by 6" wide).
- 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.

BMP: Dust Controls

DC
Construction



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.

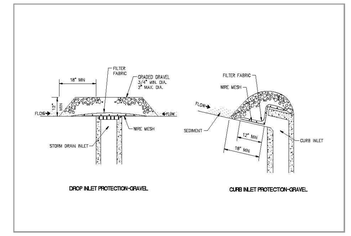
INSTALLATION/APPLICATION CRITERIA:
- Mechanical dust collection systems are designed according to the size of dust particles and the amount of air to be processed. Manufacturers' recommendations should be followed for installation (as well as the design of the equipment).
- Two kinds of street weepers 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.

LIMITATIONS:
- Generally more expensive than manual systems.
- May be impossible to maintain by plant personnel (the more elaborate equipment).
- Labor and equipment intensive and may not be effective for all pollutants (street sweepers).

MAINTENANCE:
If water sprayers are used, dust-contaminated waters should be collected and taken for treatment. Areas will probably need to be respray ed to keep dust from spreading.

BMP: Inlet Protection-Gravel

IP-G
Construction



DESCRIPTION:
Placement of gravel filter over inlet to storm drain to filter storm water runoff.

APPLICATION:
Construct at inlets in paved or unpaved areas where upgradient area is to be disturbed by construction activities.

INSTALLATION/APPLICATION CRITERIA:
- Place wire mesh (with 1/2 inch openings) over the inlet grate extending one foot past the grate in all directions.
- Place filter fabric over the mesh. Filter fabric should be selected based on soil type.
- Place graded gravel, to a minimum depth of 12-inches, over the filter fabric and extending 18-inches past the grate in all directions.

LIMITATIONS:
- Recommended for maximum drainage area of one acre.
- Excess flows may bypass the inlet requiring down gradient controls.
- Ponding will occur at inlet.

MAINTENANCE:
- Inspect inlet protection after every large storm event and at a minimum of once monthly.
- Remove sediment accumulated when it reaches 4-inches in depth.
- Replace filter fabric and clean or replace gravel if clogging is apparent.

BMP: Land Grading

LG
Construction

DESCRIPTION:
Land grading involves reshaping the ground surface to planned grades as determined by an engineering survey, evaluation, and layout. Land grading provides more suitable topography for buildings, facilities, and other land uses and helps to control surface runoff, soil erosion, and sedimentation during and after construction.

APPLICATIONS:
Land grading is applicable to sites with uneven or steep topography or easily erodible soils, because it stabilizes slopes and decreases runoff velocity. Grading activities should maintain existing drainage patterns as much as possible.

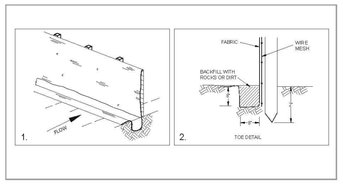
INSTALLATION/APPLICATION CRITERIA:
Before grading activities begin, a construction site operator must make decisions regarding the steepness of cut-and-fill slopes and how the slopes will be: Protected from runoff, stabilized and maintained.

LIMITATIONS:
Improper grading practices that disrupt natural stormwater patterns might lead to poor drainage, high-runoff velocities, and increased peak flows during storm events. Clearing and grading the entire site without vegetated buffers promotes offsite transport of sediments and other pollutants. Design the grading plan with erosion and sediment control and stormwater management goals in mind; to ensure that the plan is implemented as intended, carefully supervise grading crews.

MAINTENANCE:
- Check all graded areas and supporting erosion and sediment control practices periodically, especially after heavy rainfalls.
- Promptly remove all sediment from diversions or other stormwater conveyances, and if washouts or breaks occur, repair them immediately.
- To prevent small-scale eroded areas from becoming significant gullies, maintain them promptly.

BMP: Silt Fence

SF
Construction



DESCRIPTION:
A temporary sediment barrier consisting of entrenched filter fabric stretched across and secured to supporting posts.
Application:
- Perimeter control: place barrier at down-gradient 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 catchbasins

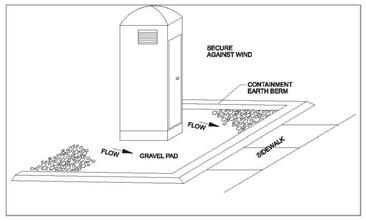
INSTALLATION/APPLICATION CRITERIA:
- Place posts 6 feet apart on center along contour (or use preassembled unit) and drive 2 feet minimum into ground. Excavate an anchor trench immediately up-gradient of posts.
- Secure wire mesh (14 gage min. with 6-inch openings) to upslope side of posts. Attach with 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 up-gradient 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.

BMP: Portable Toilets

PT
Construction



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.

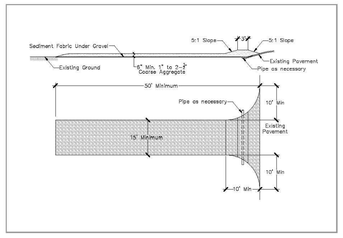
INSTALLATION/APPLICATION CRITERIA:
- Locate portable toilets in convenient locations throughout the site.
- Prepare level, gravel surface and provide clear access to the toilets for servicing and for on-site personnel.
- Construct earth berm perimeter (6" tall by 6" wide), control for spill/protection 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.

BMP: Stabilized Construction Entrance

SCE
Construction



DESCRIPTION:
A stabilized pad of crushed stone located where construction traffic enters or leaves the site from or to paved surface.

APPLICATION:
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.

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.

BMP: Street Sweeping

SS
Construction

DESCRIPTION:
Reduce the discharges of pollutants to stormwater from street surfaces by conducting street cleaning on a regular basis.

APPROACH:
- Prioritize cleaning to use the most sophisticated sweepers, at the highest frequency, and in areas with the highest pollutant loading.
- Restrict street parking prior to and during sweeping.
- Increase sweeping frequency just before the rainy season.
- Proper maintenance and operation of sweepers greatly increase their efficiency.
- Keep accurate operation logs to track programs.
- Sweepers effective at removing smaller particles (less than 10 microns) may generate dust that would lead to concerns over worker and public safety.
- 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). Many communities find it useful to have a compliment of both types in their fleet.

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 street conditions, traffic congestion, presence of construction projects, climatic conditions and condition of curbs.

MAINTENANCE:
- Replace worn parts as necessary.
- Install main and gutter brooms of the appropriate weight.

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10/20/21
No. 270393
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STATE OF UTAH

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SALT CITY FITNESS
EAGLE MOUNTAIN UTAH

Drawn by: D.W.P.	BMP DETAILS	Scale: NTS
Designed by: D.W.P.		Date: 10/20/21
Checked by: D.W.P.		C5

EAGLE MOUNTAIN	**EAGLE MOUNTAIN CITY** **PLANNING COMMISSION MEETING** **DECEMBER 14, 2021**
TITLE:	ACTION ITEM / PUBLIC HEARING - Antelope Meadows Pool and Clubhouse
ITEM TYPE:	Site Plan
APPLICANT:	Robert Lusk (Fieldstone Homes)

ACTION ITEM:
Yes

PUBLIC HEARING:
Yes

PREPARED BY:
Tayler Jensen, Planning

BACKGROUND:

The applicant is proposing to add a Pool and a Clubhouse, that will be open to the residents of the Antelope Meadows HOA on property owned by the applicant adjacent to Autumn Ridge Park parcel 59:044:0509.

ITEMS FOR CONSIDERATION:

The following standards found in 17.100.050 shall be considered when making a motion to the City Council:

A. Use of Property: The applicant is proposing to develop most of the site, leaving a portion as in its current grassed state, leaving in it's current condition. Staff recommends that the portion of the property to being left in its current condition to be dedicated to the City and added to Autumn Ridge Park for future development.
B. Screening Requirements: The proposed use for a swimming pool and clubhouse does not require any screening, but the applicant is proposing fencing around the pool deck, and landscaping between the clubhouse and lots in Antelope Meadows.
C. Access Requirements: The applicant is proposing access off the Roundabout at Searle lane, they have moved the access as far to the east as possible, to line maximize distances between entrances/exits on the roundabout.

Commercial Design Standards

Clubhouses are reviewed as commercial buildings, as such they are required to meet commercial design standards which are addressed in 17.72 of EMMC.

17.72.030 B Requires commercial parking to be located to the rear or side of commercial buildings and the street. The proposal does have all parking between the Clubhouse and the street, however, this is common for clubhouses, with clubhouses in Evans Ranch, SilverLake, Brylee Farms, Rock Creek all having parking in front or on the side of the Clubhouse.

17.72.040: The main entry is clearly identifiable, the clubhouse proposes four sided design and all sides include both horizontal and vertical articulation. The elevations use multiple roof planes, wood trellis structures, popouts, decorative windows and doors. decorative trim and moldings, decorative masonry patterns, as such it is the opinion of staff that the design *complies* with the commercial design standards.

Future Development

It is worth noting that in the Antelope Meadows Preliminary Plat there are two LDS Church sites, the first one has been developed, but the second site, a 3.1 acre parcel, is not desired by the Church and will not be developed as a Church. It is the intent of the applicant to amend the Preliminary Plat to convert that Church site into approximately 10 residential lots that will meet all current development standards. The applicant intends to ask that the Pool and Clubhouse be allowed to serve as the amenity points for these new lots if/when they are approved. (The pool and clubhouse are not required for the current approval, and would not be required if an amended plat was approved).

It should be noted that granting approval of the Pool and Clubhouse site plan ***WILL NOT VEST ANY APPROVAL*** to the future amended preliminary plat, and the applicant has made it clear that their intent is to develop the pool and clubhouse regardless of the status of any future preliminary plat approvals

REQUIRED FINDINGS:

Site Plan approvals are based upon compliance with City Code requirements, the approval criteria for a Site Plan can be found in EMMC 17.100.050.

RECOMMENDATION:

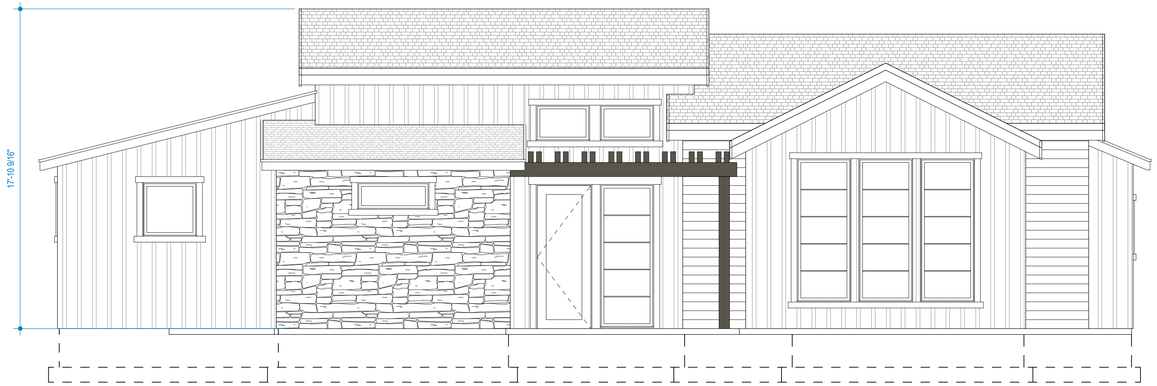
We recommend the Planning Commission make a motion to recommend approval of the Antelope Meadows Pool and Clubhouse to the City Council, for the reasons set forth in the staff report and in the meeting with the following condition:

1. Portion of property to be left in current state shall be dedicated to the City as open space.
2. Pool and Clubhouse shall be permitted to count toward required amenity points for any future amended preliminary plat.

ATTACHMENTS:

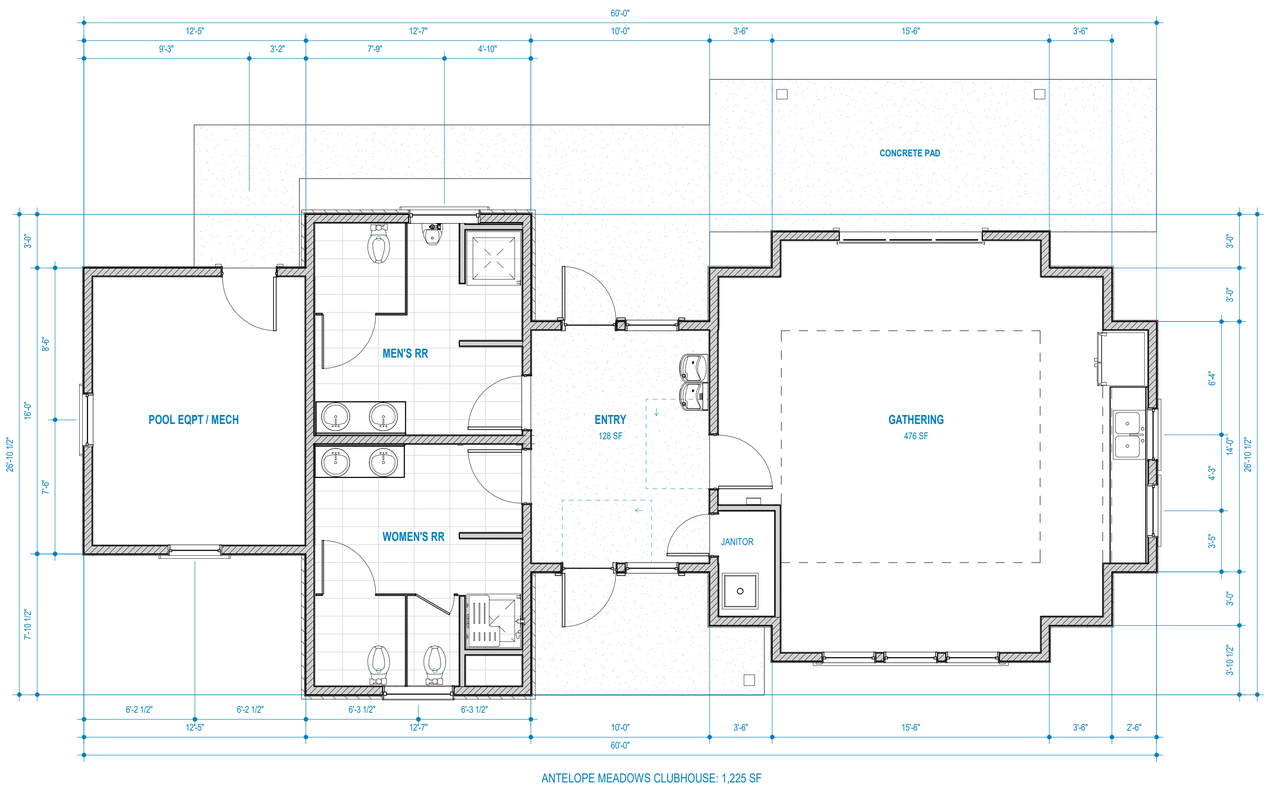
Elevations

Landscape and Site Plans



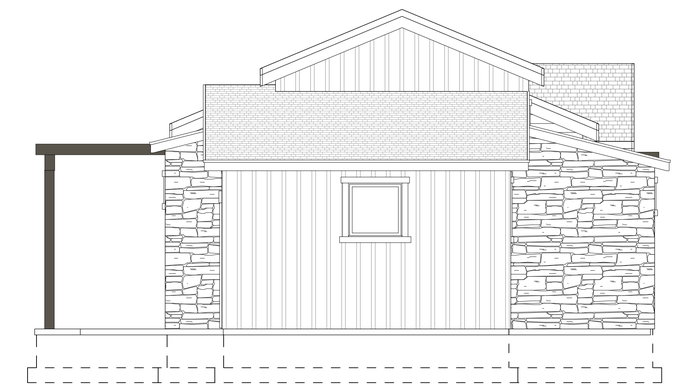
1 FRONT ELEVATION
1/4" = 1'-0"

4 REAR ELEVATION
1/4" = 1'-0"



ANTELOPE MEADOWS CLUBHOUSE: 1,225 SF

5 LEVEL 1 - FLOOR PLAN
1/4" = 1'-0"



2 LEFT ELEVATION
1/4" = 1'-0"

3 RIGHT ELEVATION
1/4" = 1'-0"

LMnt ARCHITECTURE

ANTELOPE MEADOWS CLUBHOUSE
CONCEPT PLAN & ELEVATIONS

PL-1

10.14.2021

1 LEFT - FRONT

2 FRONT - RIGHT

4 REAR LEFT

3 RIGHT - REAR

LMnt ARCHITECTURE

ANTELOPE MEADOWS CLUBHOUSE
CONCEPT 3-D

PL-2

10.14.2021

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

Know what's below. Call before you dig.

ANTELOPE MEADOWS CLUBHOUSE

4500 EAGLE MOUNTAIN BOULEVARD
EAGLE MOUNTAIN, UTAH

INDEX OF DRAWINGS

1 OF 3	ALTA/NSPS LAND TITLE SURVEY
2 OF 3	ALTA/NSPS LAND TITLE SURVEY
3 OF 3	ALTA/NSPS LAND TITLE SURVEY
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C-002	DEMOLITION PLAN
C-100	SITE PLAN
C-200	GRADING AND DRAINAGE PLAN
C-300	UTILITY PLAN
C-400	EROSION CONTROL PLAN
C-500	DETAILS
LP-EX	LANDSCAPE PLAN COLOR
LP-100	LANDSCAPE PLAN COVER
LP-101	LANDSCAPE PLAN
LP-501	LANDSCAPE DETAILS
IR-100	IRRIGATION PLAN COVER
IR-101	IRRIGATION PLAN
IR-501	IRRIGATION DETAILS
IR-502	IRRIGATION DETAILS
IR-503	IRRIGATION DETAILS

DATE PRINTED
December 3, 2021

EAGLE MOUNTAIN CITY GENERAL NOTES

SEWER-

- Pipe bedding: ¾" gravel required 6" below, on the sides & 12" above the pipe (minimum).
- Depth: Sewer main/laterals to maintain 4' of cover (minimum) from finished grade, 3' minimum from top of pipe at time of installation.
- Separation: sewer mains & laterals to maintain 10' separation (minimum) from culinary water mains & laterals.
- Sewer Y's: 3' minimum separation between sewer Y's.
- Lateral stubs: A) stubs must extend 15' into property and be marked with 2x4 painted green. B) All laterals must be GIS (shot in) at the Y's and stubs. Also slopes (2% min. on 4" pipe) to be checked before backfill.
- Manholes: manholes to be within 1' of finished grade. 12" of whirly gig form (max) and no flat rings allowed. 12" of ¾" gravel required under manholes/boxes.

WATER-

- Valves: 1. Valves must be flanged to tee's (fittings). 2. Valves 12" and larger to be butterfly valves.
- Bedding: sand must meet AASHTO (A-3) gradation with 100% passing the #4 sieve. 6" below pipe on the sides & 12" above pipe (minimum).
- Depth: water main & laterals must maintain 4' cover from finished grade (minimum), 3' minimum from top of pipe at time of installation. Max depth 72" from finished grade.
- Services & fittings: services & fittings to maintain 3' minimum separation from pipe joints and other fittings.
- Setters: all setters to be 21" tall (minimum), have unions at the base and be dual check model, also ¾" setters to have double braces. Setters to be set at: 18" to 22" from the top of setter to top of lid.
- Water can lid: all lids to say "Eagle Mountain" on them recessed with a hole for the ERT and to be set at level to 1" above the plane of the curb & sidewalk.
- Water Can: the water can for ¾" & 1" services will need to be a 36" tall minimum and 21" inside diameter. Water can for 1-1/2" to 2" service will need to follow APWA specification.
- Hydrants: hydrants to be 5' bury (minimum).
- Laterals: all laterals need to be GIS (shot in) at the corp. stop & setter, and also visual inspection on poly inserts before backfill. Water laterals to extend 15' into property and be marked with a 2x4 painted blue. All poly lines to have visual poly insert inspection.
- Tracer wire: run tracer wire along main & extend up setters and hydrants, do not run up valve boxes.
- Water fittings: all water fittings to be checked for thrust blocks (pre & post) and GIS (shot in) before backfill.
- Vertical separation: water main to maintain 18" minimum separation from storm drain or other obstacles/utilities.
- Water line fittings: all fittings to have mega lug followers.
- Water Main Line: NO DEFLECTION or bending of pipe will be allowed in the water lines and bend fittings will be required. All fittings to be Mega-lug fittings.

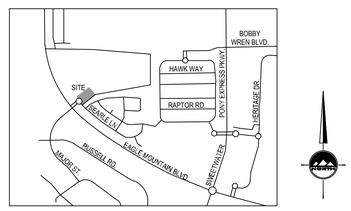
STORM DRAIN-

- Bedding: ¾" gravel 6" below and on sides of pipe & 12" above pipe (minimum).
- ADS: all ADS pipe to be "HP" brand.
- Collars: collars to be 1'x1' around pipe, 4000 psi concrete, inspection is needed pre & post collar pour.
- Manholes: manholes to be within 1' of finished grade. 12" of whirly gig form (max) and no flat rings allowed. 12" of ¾" gravel required under manholes/boxes.

ROAD SECTION-

- Proof rolls: proof roll required on all sections of road: i.e. sub-grade, sub-base, and curb base and road base. Curb stakes required for sub-grade inspection and string line required for sub-base and road base inspection.
- UTBC: state spec. road base required for all roads, commercial base acceptable for the sidewalks & trails.
- Collars: all collars to be 1' wide by 1' deep with a 6000 psi concrete with 1.5# fiber mesh per cubic yard (3/4" monofilament) required for all street collars. Manhole covers and water valve towers to be ½" down from asphalt edge and concrete to be ¼" to 3/8" down from asphalt edge.

VICINITY MAP



NO SCALE

GENERAL NOTES

1. ALL WORK SHALL CONFORM TO EAGLE MOUNTAIN CITY STANDARDS & SPECIFICATIONS.
2. CALL BLUE STAKES AT LEAST 48 HOURS PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES.
3. BENCHMARK ELEVATION = EAST QUARTER CORNER SECTION 12, T6S, R2W SALT LAKE BASE & MERIDIAN ELEV. = 4875.89.

NOTICE TO DEVELOPER/ CONTRACTOR

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

UTILITY DISCLAIMER

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

NOTICE TO CONTRACTOR

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

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

ENSIGN
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TOOELE
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CEDAR CITY
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RICHFIELD
Phone: 435.896.2983

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FOR:
FIELDSTONE ANTELOPE MEADOWS, LLC
1757 EAST AMERICAN WAY, #6
EAGLE MOUNTAIN, UT, 84005
CONTACT:
PHONE: 801-789-2828

ANTELOPE MEADOWS CLUBHOUSE
4500 EAGLE MOUNTAIN BOULEVARD
EAGLE MOUNTAIN, UTAH

LICENSED PROFESSIONAL ENGINEER
No. 10885882-2202
QUINTIN E. ELDER
2021-12-03
STATE OF UTAH

COVER SHEET

PROJECT NUMBER 10776C	PRINT DATE 2021/12/03
DRAWN BY J. HALLIN	CHECKED BY Q. ELDER
PROJECT MANAGER Q. ELDER	

C-000

SURVEYOR'S NARRATIVE

I, Patrick M. Harris do hereby state that I am a Professional Land Surveyor and that I hold certificate no. 286882 as prescribed by the laws of the State of Utah and represent that I have made a survey of the following described property. The Purpose of this survey is to provide an ALTA/NSPS Land Title Survey for use by the client. The Basis of Bearing is the line between the Northwest Corner of Section 12, Township 6 South, Range 2 West, Salt Lake Base and Meridian and the West Quarter Corner of Section 12, Township 6 South, Range 2 West, Salt Lake Base and Meridian, measuring South 2°17'03" West 3,012.96 feet.

COMMITMENT DESCRIPTIONS

Commencing North 2°17'02" East 515.29 Feet from the West 1/4 Corner of Section 12, Township 6 South, Range 2 West, Salt Lake Base & Meridian; Thence South 49°48' 34" West 264.31 Feet; Along a 91 Foot Radius Curve To the Left (Chord Bears: North 63°53'34" West 73.16 Feet); Along a 100 Foot Radius Curve To the Right (Chord Bears: North 67°2'3" West 70.24 Feet); South 53°11' 35" West 51.39 Feet; Along an 80 Foot Radius Curve to the Right (Chord Bears: South 6°31'48" West 110.42 Feet); Thence South 49°48'34" West 89.59 Feet; Along a 20 Foot Radius Curve to the Right (Chord Bears: South 85°0'54" West 23.06 Feet); Along a 2656.69 Foot Radius Curve to the Right (Chord Bears: North 33°45' 1" West 455.86 Feet); Thence North 66°58'43" East 377.26 Feet; Thence North 22°27'32" West 544.47 Feet; Thence South 72°15'8" West 379.63 Feet; Along a 2656.69 Foot Radius Curve to the Right (Chord Bears: North 11°38' 24" West 432.5 Feet); Along a 2656.69 Foot Radius Curve to the Right (Chord Bears: North 6°58'9" West 0.16 Feet); Thence South 88°5'18" East 1080.33 Feet; Thence North 88°46'8" East 1369.69 Feet; Thence South 1°21'47" West 0.2 Feet; Thence South 1°21'47" West 15.11 Feet; Thence South 1°21'47" West 1.21 Feet; Thence South 88°50'0" West 2.77 Feet; Thence South 1°11'46" East 62.01 Feet; Thence South 1°21'47" West 30.71 Feet; Thence South 1°21'47" West 918.76 Feet; Thence South 1°21'47" West 2.84 Feet; Thence South 89°33'56" West 101.97 Feet; Thence North 74°29'21" West 182 Feet; Thence South 89°33'56" West 1072.63 Feet; Thence South 49°48'34" West 44.99 Feet to the Point of the Beginning.

LESS AND EXCEPTING a Deed of Dedication recorded July 8, 2019 as Entry No. 62812:2019

To: (I) Fieldstone Construction and Management Services, (ii) Lake Mountain Development, LLC, (iii) First American Title Insurance Company, and (iv) United West Title Insurance Agency.

This is to certify that this map or plat and the survey on which it is based were made in accordance with 2021 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, 5, 8, 9, 13, 14, and 19 of Table A hereof.

The field work was completed on May 13, 2021

Date of Plat or Map: June 28, 2021

6/28/21
Date

T:\Cody Anderson\pats stamp 2.jpg

Patrick M. Harris
License No. 286882

Note: For conditions of record not shown hereon as well as specific references to items in the title report, please refer to a title report supplied by First American Title Insurance Company of Salt Lake City, Utah under Commitment No. UW-8935 dated effective March 8, 2021

SURVEY CERTIFICATION

To: Fieldstone Antelope Meadows, LLC, a Delaware limited liability company, and IHP Capital Partners VI, LLC, a Delaware limited liability company, and each of their successors, assigns and lenders, First American Title Insurance Company and United West Title Insurance Agency.

I, Patrick M. Harris, a registered land surveyor, hereby certifies to the above parties, as of the date set forth below, as follows:

1. This map or plat and the survey on which it is based were made in accordance with the 2021 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, 5, 8, 13, 14, 16, and 19 of Table A thereof. The field work was completed on May 13, 2021.
2. The accompanying survey was made on the ground and correctly shows the location of all buildings, structures and other improvements situated on the subject property; there are no visible encroachments on the subject property or upon adjacent land abutting the subject property, except as shown hereon; and the survey was made in accordance with laws and/or Minimum Standards of the State of Utah.
3. The property surveyed and described hereon is the same as the property described in First American Title Insurance Company of Salt Lake City, Utah under Commitment No. UW-8935 dated as of March 8, 2021, and all easements, covenants and restrictions referenced in said Commitment, or apparent from a physical inspection of the site or otherwise known to me, have been plotted hereon or otherwise noted as to their effect on the subject property.
4. The subject property is located within an area having a Flood Zone Designation X by the Federal Emergency Management Agency (FEMA), on Flood Insurance Rate Map No. 49049C0275F, with a date of identification of June 18, 2020, for Community No. 490258, in Utah County, State of Utah, which is the current Flood Insurance Rate Map for the community in which the subject property is situated.
5. The subject property is not located within an area identified as an "Earthquake Special Studies Zone" as designated under the "Alquist-Priolo Special Studies Zone Act," Sections 2621-2630, inclusive, of the California Public Resources Code.
6. The subject property has direct access to Searle Lane, a paved and dedicated public street or highway.
7. Intentionally Omitted
8. The street address of the subject property is 4750 Eagle Mountain Boulevard.

ENSIGN

By Patrick M. Harris Date: May 25, 2021
Registered Land Surveyor No. 286882

Date of Survey: May 18, 2021
Date of Last Revision: June 2, 2021

Schedule B-2 Exceptions

8. Taxes for the year 2020 are PAID in the amount of $2.72. Tax Serial No. 59-044-0509.

   Taxes for the year 2021 now a lien, not yet due. Tax Serial No. 59-044-0509. (not survey related)

9. Said Property is included within the boundaries of Eagle Mountain City; Unified Fire Service Area; Utah Special Improvement District 97-1; Utah Special Improvement District 98-3; Utah Transit Authority and is subject to the charges and assessments thereof. (blanket in nature)

10. The land described in this Commitment may be serviced by services provided by Cities, Towns, public utility companies and other firms providing municipal type services, which do not constitute liens upon the land and for which no notice of the existence of such service charges are in evidence in the Public Records. The applicant should directly contact all entities providing such services and make the necessary arrangements. (not survey related)

11. Covenants, Conditions, Restrictions and/or Easements, except those based on Race, Color, Creed or National Origin, contained in Instrument dated October 22, 2009, and recorded October 29, 2009, as Entry No. 113261:2009, of Official Record. (blanket in nature)
    (view)

    Amendment to said Covenants dated December 1, 2010, and recorded December 13, 2010, as Entry No. 108314:2010, of Official Records.
    (view)

    Amendment to said Covenants dated 5/23/18, and recorded 5/25/18, as Entry No. 49096:2018, of Official Records. (view)

    Amendment to said Covenants dated 6/13/19, and recorded 6/14/19, as Entry No. 54420:2019, of Official Records. (view)

    Amendment to said Covenants dated 9/17/19, and recorded 9/17/19, as Entry No. 92248:2019, of Official Records. (view)

    Amendment to said Covenants dated 11/7/19, and recorded 11/8/19, as Entry No. 117084:2019, of Official Records. (view)

12. Easement and conditions contained therein with Monte Vista Ranch, L.C.; Eagle Mountain Properties Communities Master Association, Inc; Cedar Valley White Ranch, LC; MVR Management, LLC; ZJT Management, LAC; TI Mortgage Company; Lake Mountain Development, LAC, Grantor and FirstDigital Telecom, LLC, Grantee for the purpose of Communications Easement Agreement, dated August 14, 2018, and recorded August 15, 2018, as Entry No. 77533:2018. (blanket in nature)
    (view)

13. Resolution No. 1996-82, dated November 26, 1996, and recorded 12/4/96, as Entry No. 97761, in Book 4137, at Page 224, of Official Records. (not survey related)
    (view)

14. Notice of Reinvestment Fee Covenant, dated 5/4/10, and recorded 5/20/10, as Entry No. 41553:2010, of Official Records. (not survey related)
    (view)

15. Application for Assessment and Taxation of Agricultural Land under the Farmland Assessment Act, dated May 8, 2017, and recorded June 29, 2017, as Entry No. 62744:2017, of Official Records. (not survey related)
    (view)

16. A Deed of Trust in the amount of $596,508.00 by and between Lake Mountain Development LLC, a Utah limited liability company as Trustor and United West Title Insurance Agency, Inc. as Trustee for the benefit of Cedar Valley-White Ranch, L.C., a Utah limited liability company, dated 3/14/18, and recorded March 7, 2018 as Entry No. 42538:2018 of Official Records. (not survey related)
    (view)

17. NOTE: Judgments were checked as to Lake Mountain Development, LLC; Fieldstone Construction and Management Services, Inc. and none were found of record except as shown herein.

18. CHAIN OF TITLE

    According to the Official Records, there have been no documents conveying the land described herein with a period of 36 months prior to the date of this commitment, except as follows:

    General Warranty Deed between Cedar Valley-White Ranch, L.C. a Utah Limited Liability Company, as Grantor, and Lake Mountain Development LLC, a Utah limited liability company, as Grantee, dated March 14, 2018, and recorded March 7, 2018, as Entry No. 42537:2018 of Official Records.
    (view)

Table A

1. All monuments used are shown on the survey.
2. The address Eagle Mountain Boulevard, Eagle Mountain, Utah 84005
3. The subject parcel is in FEMA Flood Zone X, Area of Minimal Flood Hazard, as per FIRM Panel 49049C0275F, dated effective June 18, 2020.
4. The subject parcel contains 2,165,303 square feet or 49.709 acres.
5. Vertical relief is shown with 1 foot contours on the suvey.
8. All substantial features are shown on the survey.
13. Names of adjoining owners are shown on the survey.
16. There is no evidence of recent earthwork .
14. The distance nearest intersecting street is shown on the survey.
19. All professional liability insurance minimums have been met.

Possible Encroachments

A. Sidewalk in Autumn Ridge Park is a possible encroachment on the subject parcel.

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CONTACT:
RANDY SMITH
PHONE: 801-568-2350

ANTELOPE MEADOWS
ALTA/NSPS LAND TITLE SURVEY
4750 EAGLE MOUNTAIN BOULEVARD
EAGLE MOUNTAIN, UTAH

PROFESSIONAL LAND SURVEYOR
6/28/21
No. 286882
PATRICK M. HARRIS
T:\Cody Anderson\pats stamp 2.jpg
STATE OF UTAH

ALTA/NSPS
LAND TITLE
SURVEY

PROJECT NUMBER 10776	PRINT DATE 5/18/21
DRAWN BY D. KORZEP	CHECKED BY P. HARRIS
PROJECT MANAGER P. HARRIS	

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

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

BENCHMARK

EAST QUARTER CORNER OF SECTION 12, TOWNSHIP 6 SOUTH, RANGE 2 WEST, SALT LAKE BASE AND MERIDIAN

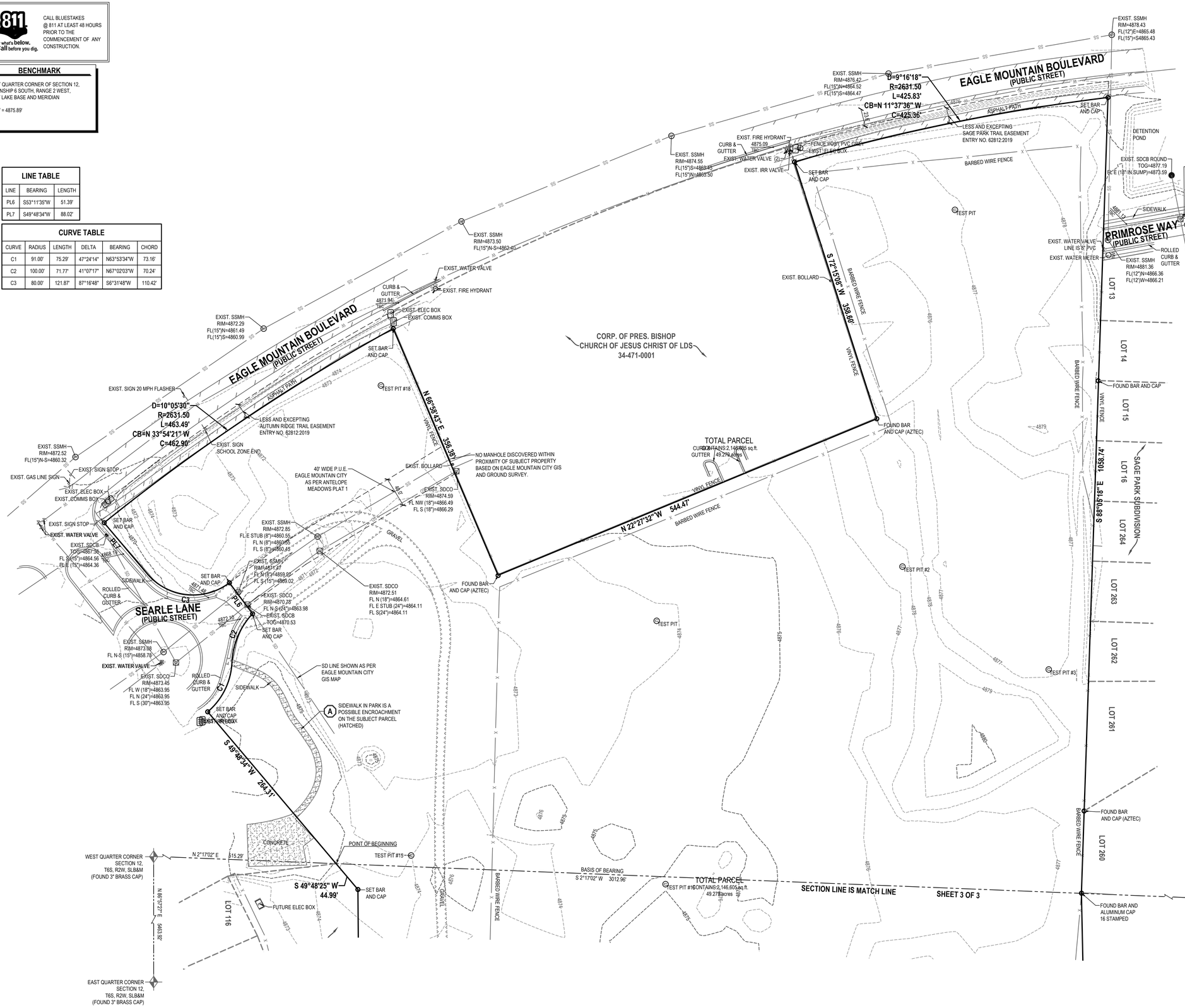
ELEV = 4875.89'

LINE TABLE

LINE	BEARING	LENGTH
PL6	S53°11'35"W	51.39'
PL7	S49°48'34"W	88.02'

CURVE TABLE

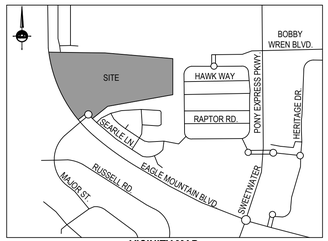
CURVE	RADIUS	LENGTH	DELTA	BEARING	CHORD
C1	91.00'	75.29'	47°24'14"	N63°53'34"W	73.16'
C2	100.00'	71.77'	41°07'17"	N67°02'03"W	70.24'
C3	80.00'	121.87'	87°16'48"	S6°31'48"W	110.42'



LEGEND

- SECTION CORNER
- MONUMENT
- SET NAIL & WASHER
- SET ENSIGN REBAR AND CAP
- WATER METER
- WATER MANHOLE
- WATER VALVE
- FIRE HYDRANT
- IRRIGATION VALVE
- SANITARY SEWER MANHOLE
- STORM DRAIN CLEAN OUT
- STORM DRAIN CATCH BASIN
- STORM DRAIN COMBO BOX
- SIGN
- UTILITY MANHOLE
- UTILITY POLE
- GAS METER
- GAS LINE
- MINOR CONTOURS 1' INCREMENT
- MAJOR CONTOURS 5' INCREMENT
- CONCRETE
- ADJACENT RIGHT OF WAY
- RIGHT OF WAY
- SECTION LINE
- PROPERTY LINE
- ADJACENT PROPERTY LINE
- DEED LINE
- TANGENT LINE
- FENCE
- EDGE OF ASPHALT
- SANITARY SEWER
- STORM DRAIN LINE
- WATER LINE
- IRRIGATION LINE
- TELEPHONE LINE
- OVERHEAD POWER

ENSIGN ENG. LAND SURV.



VICINITY MAP
(NOT TO SCALE)

NORTH

HORIZONTAL GRAPHIC SCALE

60 0 30 60 120

(IN FEET)
HORZ: 1 inch = 60 ft.

LOCATED IN THE NORTHWEST QUATER OF SECTION 12 AND THE NORTHEAST QUARTER OF SECTION 11, TOWNSHIP 6 SOUTH, RANGE 2 WEST, SALT LAKE BASE AND MERIDIAN, EAGLE MOUNTAIN, UTAH COUNTY, UTAH

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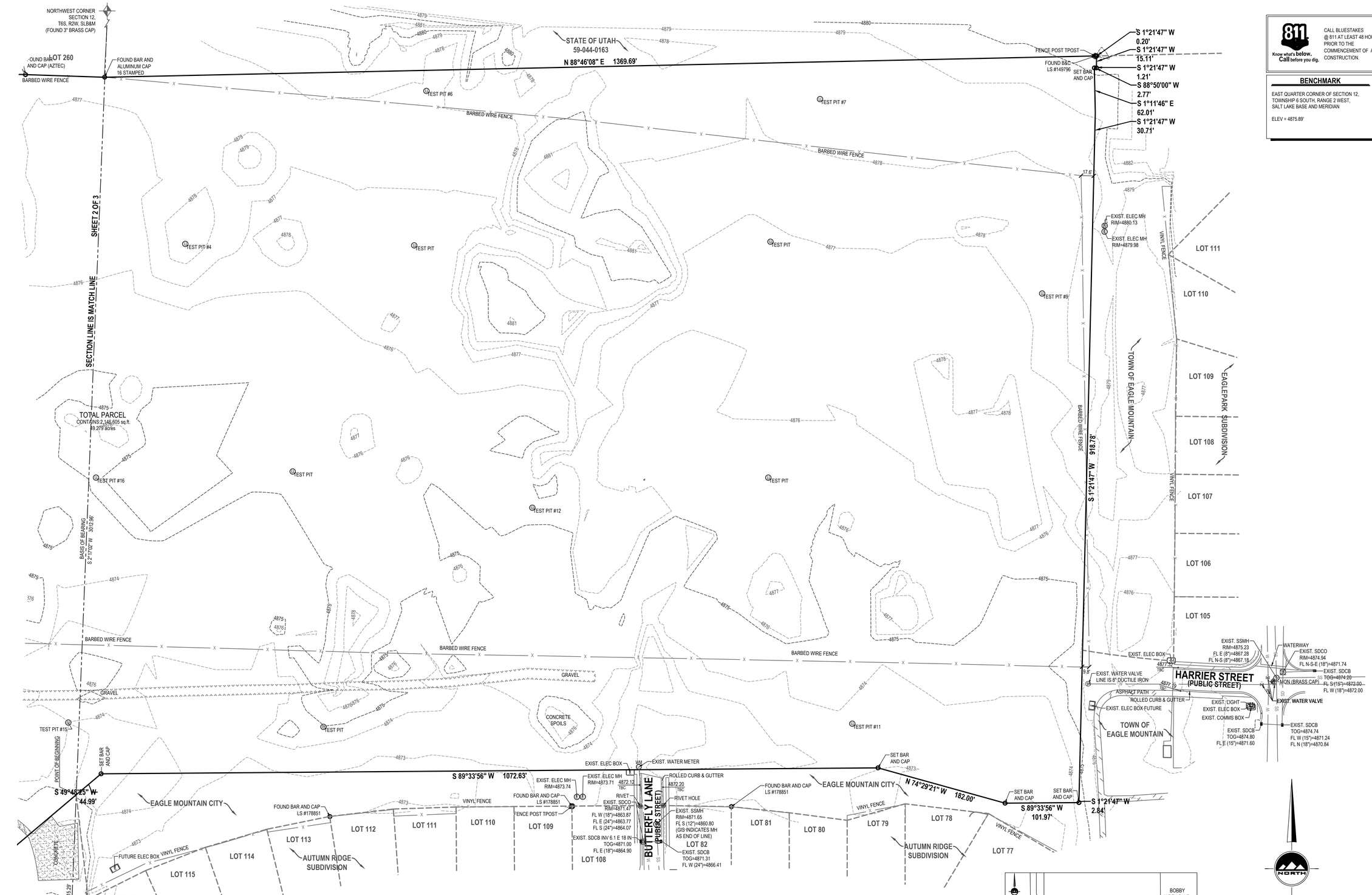
PROFESSIONAL LAND SURVEYOR
5/18/21
No. 286882
PATRICK M. HARRIS
STATE OF UTAH

ALTA/NSPS LAND TITLE SURVEY

PROJECT NUMBER 10776	PRINT DATE 5/18/21
DRAWN BY D. KORZEP	CHECKED BY P. HARRIS
PROJECT MANAGER P. HARRIS	

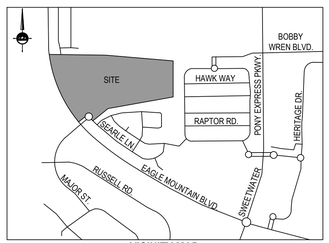


LEGEND

	SECTION CORNER		STORM DRAIN CATCH BASIN		MINOR CONTOURS 1' INCREMENT		DEED LINE
	MONUMENT		STORM DRAIN COMBO BOX		MAJOR CONTOURS 5' INCREMENT		TANGENT LINE
	EXIST REBAR AND CAP		STORM DRAIN CULVERT		CONCRETE		EXIST DITCH FLOW LINE
	SET ENSIGN REBAR AND CAP		SIGN		ELECTRIC METER		FENCE
	SET RIVET		UTILITY MANHOLE		STORM DRAIN CLEAN OUT		EDGE OF ASPHALT
	WATER METER		UTILITY POLE		SANITARY SEWER MANHOLE		SANITARY SEWER
	WATER MANHOLE		GAS METER		WATER LINE		STORM DRAIN LINE
	WATER VALVE		TREE		ADJACENT RIGHT OF WAY		GAS LINE
	FIRE HYDRANT		OVERHEAD POWER LINE		RIGHT OF WAY		

ENSIGN ENG. LAND SURV.

SW	SECONDARY WATERLINE	
IRR	IRRIGATION LINE	
	CENTERLINE	
	PROPERTY LINE	
	ADJACENT PROPERTY LINE	
E	ELECTRIC POWERLINE	
T	TELEPHONE LINE	
	IRRIGATION VALVE	



VICINITY MAP
(NOT TO SCALE)

HORIZONTAL GRAPHIC SCALE

60 0 30 60 120
(IN FEET)
HORZ: 1 inch = 60 ft.

LOCATED IN THE NORTHWEST QUATER OF SECTION 12 AND THE NORTHEAST QUARTER OF SECTION 11, TOWNSHIP 6 SOUTH, RANGE 2 WEST, SALT LAKE BASE AND MERIDIAN, EAGLE MOUNTAIN, UTAH COUNTY, UTAH

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EAST QUARTER CORNER OF SECTION 12, TOWNSHIP 6 SOUTH, RANGE 2 WEST, SALT LAKE BASE AND MERIDIAN

ELEV = 4875.89'

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EAGLE MOUNTAIN, UTAH

PROFESSIONAL LAND SURVEYOR
6/29/21
No. 286882
PATRICK M. HARRIS
STATE OF UTAH

ALTA/NSPS LAND TITLE SURVEY

PROJECT NUMBER 10776	PRINT DATE 5/18/21
DRAWN BY D. KORZEP	CHECKED BY P. HARRIS
PROJECT MANAGER P. HARRIS	

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GENERAL NOTES

1. ALL CONSTRUCTION MUST STRICTLY FOLLOW THE STANDARDS AND SPECIFICATIONS SET FORTH BY: THE DESIGN ENGINEER, LOCAL AGENCY JURISDICTION, APWA (CURRENT EDITION), AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.). THE ORDER LISTED ABOVE IS ARRANGED BY SENIORITY. THE LATEST EDITION OF ALL STANDARDS AND SPECIFICATIONS MUST BE ADHERED TO. IF A CONSTRUCTION PRACTICE IS NOT SPECIFIED BY ANY OF THE LISTED SOURCES, CONTRACTOR MUST CONTACT DESIGN ENGINEER FOR DIRECTION.
2. CONTRACTOR TO STRICTLY FOLLOW THE MOST CURRENT COPY OF THE SOILS REPORT FOR THIS PROJECT. ALL GRADING INCLUDING BUT NOT LIMITED TO CUT, FILL, COMPACTION, ASPHALT SECTION, SUBBASE, TRENCH EXCAVATION/BACKFILL, SITE GRUBBING, AND FOOTINGS MUST BE COORDINATED DIRECTLY WITH SOILS REPORT.
3. CONTRACTOR MUST VERIFY ALL EXISTING CONDITIONS BEFORE BIDDING, AND BRING UP ANY QUESTIONS BEFORE SUBMITTING BID.
4. CONTRACTOR SHALL PROVIDE A CONSTRUCTION SCHEDULE IN ACCORDANCE WITH THE CITY, STATE, OR COUNTY REGULATIONS FOR WORKING IN THE PUBLIC WAY.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR DUST CONTROL ACCORDING TO GOVERNING AGENCY STANDARDS. WET DOWN DRY MATERIALS AND RUBBISH TO PREVENT BLOWING.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO ADJACENT SURFACE IMPROVEMENTS.
7. CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECTING ANY SETTLEMENT OF OR DAMAGE TO EXISTING UTILITIES.
8. THE CONTRACTOR IS RESPONSIBLE TO FURNISH ALL MATERIALS TO COMPLETE THE PROJECT.
9. ALL EXPOSED SURFACES WILL HAVE A TEXTURED FINISH, RUBBED, OR BROOMED. ANY "PLASTERING" OF NEW CONCRETE WILL BE DONE WHILE IT IS STILL "GREEN".
10. PRIOR TO STARTING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED AND THOROUGHLY REVIEWED ALL PLANS AND OTHER DOCUMENTS APPROVED BY ALL OF THE PERMITTING AUTHORITIES.
11. THE LOCATIONS OF UNDERGROUND FACILITIES SHOWN ON THESE PLANS ARE BASED ON FIELD SURVEYS AND LOCAL UTILITY COMPANY RECORDS. IT SHALL BE THE CONTRACTOR'S FULL RESPONSIBILITY TO CONTACT THE VARIOUS UTILITY COMPANIES TO LOCATE THEIR FACILITIES PRIOR TO PROCEEDING WITH CONSTRUCTION. NO ADDITIONAL COMPENSATION SHALL BE PAID TO THE CONTRACTOR FOR DAMAGE AND REPAIR TO THESE FACILITIES CAUSED BY HIS WORK FORCE. CONTRACTOR SHALL START INSTALLATION AT LOW POINT OF ALL NEW GRAVITY UTILITY LINES.
12. ALL DIMENSIONS, GRADES, AND UTILITY DESIGN SHOWN ON THE PLANS SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE ENGINEER IF ANY DISCREPANCIES EXIST, PRIOR TO PROCEEDING WITH CONSTRUCTION FOR NECESSARY PLAN OR GRADE CHANGES. NO EXTRA COMPENSATION SHALL BE PAID TO THE CONTRACTOR FOR WORK HAVING TO BE REDONE DUE TO THE DIMENSIONS OR GRADES SHOWN INCORRECTLY ON THESE PLANS, IF SUCH NOTIFICATION HAS NOT BEEN GIVEN.
13. NO CHANGE IN DESIGN LOCATION OR GRADE WILL BE MADE BY THE CONTRACTOR WITHOUT THE WRITTEN APPROVAL OF THE PROJECT ENGINEER.
14. NATURAL VEGETATION AND SOIL COVER SHALL NOT BE DISTURBED PRIOR TO ACTUAL CONSTRUCTION OF A REQUIRED FACILITY OR IMPROVEMENT. MASS CLEARING OF THE SITE IN ANTICIPATION OF CONSTRUCTION SHALL BE AVOIDED.
15. CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING, MAINTAINING, OR RESTORING ALL MONUMENTS AND MONUMENT REFERENCE MARKS WITHIN THE PROJECT SITE. CONTACT THE CITY OR COUNTY SURVEYOR FOR MONUMENT LOCATIONS AND CONSTRUCTION DETAILS.
16. EXISTING UTILITY INFORMATION SHOWN IS FOR INFORMATIONAL PURPOSES ONLY. IT IS DERIVED FROM ON-SITE SURVEY AND/OR UTILITY MAPPING PROVIDED TO THE ENGINEER, AND THEREFORE UTILITIES MAY NOT BE LOCATED CORRECTLY, EITHER HORIZONTALLY OR VERTICALLY, AND MAY NOT BE ALL INCLUSIVE. CONTRACTOR IS REQUIRED TO FOLLOW THE PROCEDURE OUTLINED BELOW:
    - 16.1. CONTRACTOR IS REQUIRED TO LOCATE AND POTHOLE ALL EXISTING UTILITY LINES (BOTH HORIZONTALLY AND VERTICALLY) THAT AFFECT THE PROJECT CONSTRUCTION, EITHER ON-SITE OR OFF-SITE, AND DETERMINE IF THERE ARE ANY CONFLICTS WITH THE DESIGN OF THE SITE AS SHOWN ON THE APPROVED PLANS PRIOR TO ANY CONSTRUCTION. IF IT IS DETERMINED THAT CONFLICTS EXIST BETWEEN EXISTING UTILITIES AND DESIGN UTILITIES (OR ANOTHER ASPECT OF PROPOSED CONSTRUCTION) THE ENGINEER MUST BE NOTIFIED IMMEDIATELY TO CORRECT THE CONFLICTS BEFORE ANY WORK CAN BEGIN. IF THE CONTRACTOR FAILS TO FOLLOW THIS ABSOLUTE REQUIREMENT AND CONFLICTS ARISE DURING CONSTRUCTION THE CONTRACTOR WILL BEAR THE SOLE RESPONSIBILITY TO FIX THE CONFLICTS.
    - 16.2. CONTRACTOR IS REQUIRED TO VERIFY THAT PROPER COVER AND PROTECTION OF EXISTING UTILITY LINES IS MAINTAINED OR ATTAINED WITHIN THE DESIGN ONCE VERIFICATION OF THE EXISTING UTILITIES IS COMPLETED AS OUTLINED IN 16.1 ABOVE.
    - 16.3. IN ADDITION TO 16.1 AND 16.2 ABOVE THE CONTRACTOR WILL VERIFY DEPTHS OF UTILITIES IN THE FIELD BY "POTHOLING" A MINIMUM OF 300 FEET AHEAD OF PROPOSED PIPELINE CONSTRUCTION TO AVOID POTENTIAL CONFLICTS WITH DESIGNED PIPELINE ALIGNMENT AND GRADE AND EXISTING UTILITIES.
    - 16.4. IF A CONFLICT ARISES BETWEEN EXISTING UTILITIES AND DESIGN UTILITIES (OR ANOTHER ASPECT OF PROPOSED CONSTRUCTION) AS DETERMINED UNDER 16.1, 16.2 OR 16.3 THE CONTRACTOR WILL NOTIFY THE ENGINEER IMMEDIATELY TO RESOLVE THE CONFLICT.
    - 16.5. IF A CONFLICT ARISES BETWEEN EXISTING UTILITIES AND DESIGN UTILITIES (OR ANOTHER ASPECT OF PROPOSED CONSTRUCTION) RESULTING FROM THE CONTRACTOR'S NEGLIGENCE TO IDENTIFY AND/OR "POTHOLE" EXISTING UTILITIES AS REQUIRED IN 16.1, 16.2 AND 16.3 ABOVE, THE CONTRACTOR WILL BE REQUIRED TO RESOLVE THE CONFLICT WITHOUT ADDITIONAL COST OR CLAIM TO THE OWNER OR ENGINEER.
17. ANY AREA OUTSIDE THE LIMIT OF WORK THAT IS DISTURBED SHALL BE RESTORED TO ITS ORIGINAL CONDITION AT NO COST TO OWNER.
18. CONSULT ALL OF THE DRAWINGS AND SPECIFICATIONS FOR COORDINATION REQUIREMENTS BEFORE COMMENCING CONSTRUCTION.
19. AT ALL LOCATIONS WHERE EXISTING PAVEMENT ABUTS NEW CONSTRUCTION, THE EDGE OF THE EXISTING PAVEMENT SHALL BE SAWCUT TO A CLEAN, SMOOTH EDGE.
20. ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE MOST RECENT, ADOPTED EDITION OF ADA ACCESSIBILITY GUIDELINES.
21. CONTRACTOR SHALL, AT THE TIME OF BIDDING AND THROUGHOUT THE PERIOD OF THE CONTRACT, BE LICENSED IN THE STATE OF UTAH AND SHALL BE BONDABLE FOR AN AMOUNT REQUIRED BY THE OWNER.
22. CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE ALL WATER, POWER, SANITARY FACILITIES AND TELEPHONE SERVICES AS REQUIRED FOR THE CONTRACTOR'S USE DURING CONSTRUCTION.
23. CONTRACTOR SHALL BE RESPONSIBLE FOR ADEQUATELY SCHEDULING INSPECTION AND TESTING OF ALL FACILITIES CONSTRUCTED UNDER THIS CONTRACT. ALL TESTING SHALL CONFORM TO THE REGULATORY AGENCY'S STANDARD SPECIFICATIONS. ALL RE-TESTING AND/OR RE-INSPECTION SHALL BE PAID FOR BY THE CONTRACTOR.
24. IF EXISTING IMPROVEMENTS NEED TO BE DISTURBED AND/OR REMOVED FOR THE PROPER PLACEMENT OF IMPROVEMENTS TO BE CONSTRUCTED BY THESE PLANS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING EXISTING IMPROVEMENTS FROM DAMAGE. COST OF REPLACING OR REPAIRING EXISTING IMPROVEMENTS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEMS REQUIRING REMOVAL AND/OR REPLACEMENT. THERE WILL BE NO EXTRA COST DUE TO THE CONTRACTOR FOR REPLACING OR REPAIRING EXISTING IMPROVEMENTS.
25. WHENEVER EXISTING FACILITIES ARE REMOVED, DAMAGED, BROKEN, OR CUT IN THE INSTALLATION OF THE WORK COVERED BY THESE PLANS OR SPECIFICATIONS, SAID FACILITIES SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE WITH MATERIALS EQUAL TO OR BETTER THAN THE MATERIALS USED IN THE ORIGINAL EXISTING FACILITIES. THE FINISHED PRODUCT SHALL BE SUBJECT TO THE APPROVAL OF THE OWNER, THE ENGINEER, AND THE RESPECTIVE REGULATORY AGENCY.
26. CONTRACTOR SHALL MAINTAIN A NEATLY MARKED SET OF FULL-SIZE RECORD DRAWINGS SHOWING THE FINAL LOCATION AND LAYOUT OF ALL STRUCTURES AND OTHER FACILITIES. RECORD DRAWINGS SHALL REFLECT CHANGE ORDERS, ACCOMMODATIONS, AND ADJUSTMENTS TO ALL IMPROVEMENTS CONSTRUCTED. WHERE NECESSARY, SUPPLEMENTAL DRAWINGS SHALL BE PREPARED AND SUBMITTED BY THE CONTRACTOR. PRIOR TO ACCEPTANCE OF THE PROJECT, THE CONTRACTOR SHALL DELIVER TO THE ENGINEER ONE SET OF NEATLY MARKED RECORD DRAWINGS SHOWING THE INFORMATION REQUIRED ABOVE. RECORD DRAWINGS SHALL BE REVIEWED AND THE COMPLETE RECORD DRAWING SET SHALL BE CURRENT WITH ALL CHANGES AND DEVIATIONS REDLINED AS A PRECONDITION TO THE FINAL PROGRESS PAYMENT APPROVAL AND/OR FINAL ACCEPTANCE.
27. WHERE THE PLANS OR SPECIFICATIONS DESCRIBE PORTIONS OF THE WORK IN GENERAL TERMS BUT NOT IN COMPLETE DETAIL, IT IS UNDERSTOOD THAT ONLY THE BEST GENERAL PRACTICE IS TO PREVAIL AND THAT ONLY MATERIALS AND WORKMANSHIP OF THE FIRST QUALITY ARE TO BE USED.
28. ALL EXISTING GATES AND FENCES TO REMAIN UNLESS OTHERWISE NOTED ON PLANS. PROTECT ALL GATES AND FENCES FROM DAMAGE.
29. ALL EXISTING TREES ARE TO REMAIN UNLESS OTHERWISE NOTED ON PLANS. PROTECT ALL TREES FROM DAMAGE.
30. ASPHALT MIX DESIGN MUST BE SUBMITTED AND APPROVED BY THE GOVERNING AGENCY PRIOR TO THE PLACEMENT.
31. CONTRACTORS ARE RESPONSIBLE FOR ALL OSHA REQUIREMENTS ON THE PROJECT SITE.
32. A UPDES (UTAH POLLUTANT DISCHARGE ELIMINATION SYSTEM) PERMIT IS REQUIRED FOR ALL CONSTRUCTION ACTIVITIES 1 ACRE OR MORE AS WELL AS A STORM WATER POLLUTION PREVENTION PLAN.

UTILITY NOTES

1. ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THESE CONTRACT DOCUMENTS, CITY AND STATE REQUIREMENTS AND THE MOST RECENT EDITIONS OF THE FOLLOWING: THE INTERNATIONAL PLUMBING CODE, UTAH DRINKING WATER REGULATIONS, APWA MANUAL OF STANDARD PLANS AND SPECIFICATIONS. THE CONTRACTOR IS REQUIRED TO ADHERE TO ALL OF THE ABOVE-MENTIONED DOCUMENTS UNLESS OTHERWISE NOTED AND APPROVED BY THE ENGINEER.
2. CONTRACTOR SHALL COORDINATE LOCATION OF NEW "DRY UTILITIES" WITH THE APPROPRIATE UTILITY COMPANY, INCLUDING BUT NOT LIMITED TO: TELEPHONE & INTERNET SERVICE, GAS SERVICE, CABLE, AND POWER.
3. EXISTING UTILITIES HAVE BEEN SHOWN ON THE PLANS BASED ON ON-SITE SURVEY. PRIOR TO COMMENCING ANY WORK, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO HAVE EACH UTILITY COMPANY LOCATE, IN THE FIELD, THEIR MAIN AND SERVICE LINES. THE CONTRACTOR SHALL NOTIFY BLUE STAKES AT 1-800-662-4111 48 HOURS IN ADVANCE OF PERFORMING ANY EXCAVATION WORK. THE CONTRACTOR SHALL RECORD THE BLUE STAKES ORDER NUMBER AND FURNISH ORDER NUMBER TO OWNER AND ENGINEER PRIOR TO ANY EXCAVATION. IT WILL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO DIRECTLY CONTACT ANY OTHER UTILITY COMPANIES THAT ARE NOT MEMBERS OF BLUE STAKES. IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO PROTECT ALL EXISTING UTILITIES SO THAT NO DAMAGE RESULTS TO THEM DURING THE PERFORMANCE OF THIS CONTRACT. ANY REPAIRS NECESSARY TO DAMAGED UTILITIES SHALL BE PAID FOR BY THE CONTRACTOR. THE CONTRACTOR SHALL BE REQUIRED TO COOPERATE WITH OTHER CONTRACTORS AND UTILITY COMPANIES INSTALLING NEW STRUCTURES, UTILITIES AND SERVICE TO THE PROJECT.
4. CARE SHOULD BE TAKEN IN ALL EXCAVATIONS DUE TO POSSIBLE EXISTENCE OF UNRECORDED UTILITY LINES. EXCAVATION REQUIRED WITHIN PROXIMITY OF EXISTING UTILITY LINES SHALL BE DONE BY HAND. CONTRACTOR SHALL REPAIR ANY DAMAGE TO EXISTING UTILITY LINES OR STRUCTURES INCURRED DURING CONSTRUCTION OPERATIONS AT CONTRACTOR'S EXPENSE.
5. TRENCH BACKFILL MATERIAL AND COMPACTION TESTS ARE TO BE TAKEN PER APWA STANDARD SPECIFICATIONS (CURRENT EDITION), SECTION 02320 - BACKFILLING TRENCHES, OR AS REQUIRED BY THE GEOTECHNICAL REPORT IF NATIVE MATERIALS ARE USED. NO NATIVE MATERIALS ARE ALLOWED IN THE PIPE ZONE. THE MAXIMUM LIFT FOR BACKFILLING EXCAVATIONS IS DETERMINED BY THE GEOTECHNICAL RECOMMENDATIONS.
6. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR CONFORMING TO LOCAL AND FEDERAL CODES GOVERNING SHORING AND BRACING OF EXCAVATIONS AND TRENCHES AND FOR THE PROTECTION OF WORKERS.
7. THE CONTRACTOR IS REQUIRED TO KEEP ALL CONSTRUCTION ACTIVITIES WITHIN THE APPROVED PROJECT LIMITS. THIS INCLUDES, BUT IS NOT LIMITED TO VEHICLE AND EQUIPMENT STAGING, MATERIAL STORAGE AND LIMITS OF TRENCH EXCAVATION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN PERMISSION AND/OR EASEMENTS FROM THE APPROPRIATE GOVERNING ENTITY AND/OR INDIVIDUAL PROPERTY OWNER(S) FOR WORK OR STAGING OUTSIDE OF THE PROJECT LIMITS.
8. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE, CAUSED BY ANY CONDITION INCLUDING SETTLEMENT, TO EXISTING UTILITIES FROM WORK PERFORMED AT OR NEAR EXISTING UTILITIES. THE CONTRACTOR SHALL TAKE ALL MEASURES NECESSARY TO PROTECT ALL EXISTING PUBLIC AND PRIVATE ROADWAY AND UTILITY FACILITIES. DAMAGE TO EXISTING FACILITIES CAUSED BY THE CONTRACTOR MUST BE REPAIRED BY THE CONTRACTOR AT HIS/HER EXPENSE TO THE SATISFACTION OF THE OWNER OF SAID FACILITIES.
9. ALL WATER LINE AND SEWER LINE INSTALLATION AND TESTING TO BE IN ACCORDANCE WITH LOCAL GOVERNING AGENCY'S STANDARDS AND SPECIFICATIONS.
10. ALL MANHOLES, HYDRANTS, VALVES, CLEANOUT BOXES, CATCH BASINS, METERS, ETC. MUST BE RAISED OR LOWERED TO FINAL GRADE PER APWA (CURRENT EDITION) STANDARDS AND INSPECTOR REQUIREMENTS. CONCRETE COLLARS MUST BE CONSTRUCTED ON ALL MANHOLES, CLEANOUT BOXES, CATCH BASINS, AND VALVES PER APWA STANDARDS. ALL MANHOLE, CATCH BASIN, OR CLEANOUT BOX CONNECTIONS MUST BE MADE WITH THE PIPE CUT FLUSH WITH THE INSIDE OF THE BOX AND GROUTED OR SEALED.
11. CONTRACTOR SHALL NOT ALLOW ANY GROUNDWATER OR DEBRIS TO ENTER THE NEW OR EXISTING PIPE DURING CONSTRUCTION.
12. SILT AND DEBRIS ARE TO BE CLEANED OUT OF ALL STORM DRAIN BOXES. CATCH BASINS ARE TO BE MAINTAINED IN A CLEANED CONDITION AS NEEDED UNTIL AFTER THE FINAL BOND RELEASE INSPECTION.
13. CONTRACTOR SHALL CLEAN ASPHALT, TAR OR OTHER ADHESIVES OFF OF ALL MANHOLE LIDS AND INLET GRATES TO ALLOW ACCESS.
14. EACH TRENCH SHALL BE EXCAVATED SO THAT THE PIPE CAN BE LAID TO THE ALIGNMENT AND GRADE AS REQUIRED. THE TRENCH WALL SHALL BE SO BRACED THAT THE WORKMEN MAY WORK SAFELY AND EFFICIENTLY. ALL TRENCHES SHALL BE DRAINED SO THE PIPE LAYING MAY TAKE PLACE IN DEWATERED CONDITIONS.
15. CONTRACTOR SHALL PROVIDE AND MAINTAIN AT ALL TIMES AMPLE MEANS AND DEVICES WITH WHICH TO REMOVE PROMPTLY AND TO PROPERLY DISPOSE OF ALL WATER ENTERING THE TRENCH EXCAVATION.
16. ALL SEWER LINES AND SEWER SERVICES SHALL HAVE A MINIMUM SEPARATION OF 10 FEET, EDGE TO EDGE, FROM THE WATER LINES. IF A 10 FOOT SEPARATION CAN NOT BE MAINTAINED, CONSTRUCT PER GOVERNING AGENCY'S MINIMUM SEPARATION STANDARDS.
17. CONTRACTOR SHALL INSTALL THRUST BLOCKING AT ALL WATERLINE ANGLE POINTS AND TEES.
18. ALL UNDERGROUND UTILITIES SHALL BE IN PLACE PRIOR TO INSTALLATION OF CURB, GUTTER, SIDEWALK AND STREET PAVING.
19. CONTRACTOR SHALL INSTALL MAGNETIC LOCATING TAPE CONTINUOUSLY OVER ALL NONMETALLIC PIPE.

TRAFFIC CONTROL AND SAFETY NOTES

1. TRAFFIC CONTROL AND STRIPING TO CONFORM TO THE CURRENT MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.).
2. BARRICADING AND DETOURING SHALL BE IN CONFORMANCE WITH THE REQUIREMENTS OF THE CURRENT M.U.T.C.D.
3. NO STREET SHALL BE CLOSED TO TRAFFIC WITHOUT WRITTEN PERMISSION FROM THE APPROPRIATE AGENCY, EXCEPT WHEN DIRECTED BY LAW ENFORCEMENT OR FIRE OFFICIALS.
4. THE CONTRACTOR SHALL MAKE EVERY EFFORT TO PROVIDE FOR SMOOTH TRAFFIC FLOW AND SAFETY. ACCESS SHALL BE MAINTAINED FOR ALL PROPERTIES ADJACENT TO THE WORK.
5. DETOURING OPERATIONS FOR A PERIOD OF SIX CONSECUTIVE CALENDAR DAYS, OR MORE, REQUIRE THE INSTALLATION OF TEMPORARY STREET STRIPING AND REMOVAL OF INTERFERING STRIPING BY SANDBLASTING. THE DETOURING STRIPING PLAN OR CONSTRUCTION TRAFFIC CONTROL PLAN MUST BE SUBMITTED TO THE GOVERNING AGENCY FOR REVIEW AND APPROVAL.
6. ALL TRAFFIC CONTROL DEVICES SHALL BE RESTORED TO THEIR ORIGINAL CONDITION AT THE END OF THE WORK TO THE SATISFACTION OF THE GOVERNING AGENCY.
7. TRAFFIC CONTROL DEVICES (TCDs) SHALL REMAIN VISIBLE AND OPERATIONAL AT ALL TIMES.
8. ALL PERMANENT TRAFFIC CONTROL DEVICES CALLED FOR HEREON SHALL BE IN PLACE AND IN FINAL POSITION PRIOR TO ALLOWING ANY PUBLIC TRAFFIC ONTO THE PORTIONS OF THE ROAD(S) BEING IMPROVED HEREUNDER, REGARDLESS OF THE STATUS OF COMPLETION OF PAVING OR OTHER OFF-SITE IMPROVEMENTS CALLED FOR BY THESE PLANS.
9. THE CONTRACTOR SHALL PROVIDE BARRICADES, SIGNS, FLASHERS, OTHER EQUIPMENT AND FLAG PERSONS NECESSARY TO INSURE THE SAFETY OF WORKERS AND VISITORS.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING UTAH TRANSIT AUTHORITY (UTA) IF THE CONSTRUCTION INTERRUPTS OR RELOCATES A BUS STOP OR HAS AN ADVERSE EFFECT ON BUS SERVICE ON THAT STREET TO ARRANGE FOR TEMPORARY RELOCATION OF STOP.

DEMOLITION NOTES

1. EXISTING UTILITY INFORMATION SHOWN IS FOR INFORMATIONAL PURPOSES ONLY. IT IS DERIVED FROM ON-SITE SURVEY AND MAY NOT BE LOCATED CORRECTLY AND IS NOT ALL INCLUSIVE. CONTRACTOR SHALL FIELD LOCATE ALL UTILITIES WITHIN THE PROJECT LIMITS BEFORE BEGINNING DEMOLITION/CONSTRUCTION.
2. THERE MAY BE BURIED UTILITIES WITHIN THE LIMITS OF DISTURBANCE THAT ARE NOT SHOWN ON THE PLANS DUE TO LACK OF MAPPING OR RECORD INFORMATION. CONTRACTOR SHALL NOTIFY THE ENGINEER WHEN UNEXPECTED UTILITIES ARE DISCOVERED.
3. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR LOCATING AND PROTECTING FROM DAMAGE ALL EXISTING UTILITIES AND IMPROVEMENTS WHETHER OR NOT SHOWN ON THESE PLANS. THE FACILITIES AND IMPROVEMENTS ARE BELIEVED TO BE CORRECTLY SHOWN BUT THE CONTRACTOR IS REQUIRED TO SATISFY HIMSELF AS TO THE COMPLETENESS AND ACCURACY OF THE LOCATIONS. ANY CONTRACTOR PERFORMING WORK ON THIS PROJECT SHALL FAMILIARIZE HIMSELF WITH THE SITE AND SHALL BE HELD SOLELY RESPONSIBLE FOR ANY DAMAGE TO EXISTING FACILITIES RESULTING DIRECTLY, OR INDIRECTLY, FROM HIS OPERATIONS, WHETHER OR NOT SAID FACILITIES ARE SHOWN ON THESE PLANS.

GRADING AND DRAINAGE NOTES

1. SITE GRADING SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE RECOMMENDATIONS SET FORTH IN THE GEOTECHNICAL REPORT AND ALL RELATED ADDENDUMS.
2. THE CONTRACTOR SHALL STRIP AND CLEAR THE TOPSOIL, MAJOR ROOTS AND ORGANIC MATERIAL FROM ALL PROPOSED BUILDING AND PAVEMENT AREAS PRIOR TO SITE GRADING. (THE TOPSOIL MAY BE STOCKPILED FOR LATER USE IN LANDSCAPED AREAS.)
3. THE CONTRACTOR SHALL REMOVE ALL ORGANIC MATERIAL AND OTHER DELETERIOUS MATERIALS PRIOR TO PLACING GRADING FILL OR BASE COURSE. THE AREA SHOULD BE PROOF-ROLLED TO IDENTIFY ANY SOFT AREAS. WHERE SOFT AREAS ARE ENCOUNTERED, THE CONTRACTOR SHALL REMOVE THE SOIL AND REPLACE WITH COMPACTED FILL.
4. ALL DEBRIS PILES AND BERMS SHOULD BE REMOVED AND HAULED AWAY FROM SITE OR USED AS GENERAL FILL IN LANDSCAPED AREAS.
5. THE CONTRACTOR SHALL CONSTRUCT THE BUILDING PAD TO THESE DESIGN PLANS AS PART OF THE SITE GRADING CONTRACT, AND STRICTLY ADHERE TO THE SITE PREPARATION AND GRADING REQUIREMENTS OUTLINED IN THE GEOTECHNICAL REPORT.
6. THE CONTRACTOR SHALL GRADE THE PROJECT SITE TO PROVIDE A SMOOTH TRANSITION BETWEEN NEW AND EXISTING ASPHALT, CURB AND GUTTER, AND ADJOINING SITE IMPROVEMENTS.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE AND DEBRIS ON ADJACENT STREETS WHEN EQUIPMENT IS TRAVELING THOSE STREETS.
8. THE CONTRACTOR SHALL BE FAMILIAR WITH ALL CONDITIONS AND RECOMMENDATIONS OUTLINED IN THE GEOTECHNICAL REPORT AND TAKE ALL NECESSARY PRECAUTIONS AND RECOMMENDED PROCEDURES TO ASSURE SOUND GRADING PRACTICES.
9. THE CONTRACTOR SHALL TAKE APPROPRIATE GRADING MEASURES TO DIRECT STORM SURFACE RUNOFF TOWARDS CATCH BASINS.
10. THE LOCATIONS OF UNDERGROUND FACILITIES SHOWN ON THESE PLANS ARE BASED ON ON-SITE SURVEY. IT SHALL BE THE CONTRACTORS' FULL RESPONSIBILITY TO CONTACT THE VARIOUS UTILITY COMPANIES TO LOCATE THEIR FACILITIES PRIOR TO PROCEEDING WITH CONSTRUCTION. NO ADDITIONAL COMPENSATION SHALL BE PAID TO THE CONTRACTOR FOR DAMAGE AND REPAIR TO THESE FACILITIES CAUSED BY HIS WORK FORCE.
11. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PERFORM ALL NECESSARY CUTS AND FILLS WITHIN THE LIMITS OF THIS PROJECT AND THE RELATED OFF-SITE WORK, SO AS TO GENERATE THE DESIRED SUBGRADE, FINISH GRADES, AND SLOPES SHOWN.
12. THE CONTRACTOR IS WARNED THAT AN EARTHWORK BALANCE WAS NOT NECESSARILY THE INTENT OF THIS PROJECT. ANY ADDITIONAL MATERIAL REQUIRED OR LEFTOVER MATERIAL FOLLOWING EARTHWORK OPERATIONS BECOMES THE RESPONSIBILITY OF THE CONTRACTOR.
13. THE GRADING CONTRACTOR IS RESPONSIBLE TO COORDINATE WITH THE OWNER TO PROVIDE FOR THE REQUIREMENTS OF THE PROJECT STORM WATER POLLUTION PREVENTION PLAN (SWPPP) AND ASSOCIATED PERMIT. ALL CONTRACTOR ACTIVITIES 1 ACRE OR MORE IN SIZE ARE REQUIRED TO PROVIDE A STORM WATER POLLUTION PREVENTION PLAN.
14. ALL CUT AND FILL SLOPES SHALL BE PROTECTED UNTIL EFFECTIVE EROSION CONTROL HAS BEEN ESTABLISHED.
15. THE USE OF POTABLE WATER WITHOUT A SPECIAL PERMIT FOR BUILDING OR CONSTRUCTION PURPOSES INCLUDING CONSOLIDATION OF BACKFILL OR DUST CONTROL IS PROHIBITED. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS FOR CONSTRUCTION WATER FROM GOVERNING AGENCY.
16. THE CONTRACTOR SHALL MAINTAIN THE STREETS, SIDEWALKS, AND ALL OTHER PUBLIC RIGHT-OF-WAYS IN A CLEAN, SAFE AND USABLE CONDITION. ALL SPILLS OF SOIL, ROCK OR CONSTRUCTION DEBRIS SHALL BE PROMPTLY REMOVED FROM THE PUBLICLY-OWNED PROPERTY DURING CONSTRUCTION AND UPON COMPLETION OF THE PROJECT. ALL ADJACENT PROPERTY, PRIVATE OR PUBLIC, SHALL BE MAINTAINED IN A CLEAN, SAFE, AND USABLE CONDITION.

ABBREVIATIONS

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

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

LEGEND

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

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

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EAGLE MOUNTAIN, UTAH

LICENSED PROFESSIONAL ENGINEER
No. 10885882-2202
QUINTIN E. ELDER
2021-12-03
STATE OF UTAH

GENERAL NOTES

PROJECT NUMBER 10776C
PRINT DATE 2021/12/03
DRAWN BY J. HALLIN
CHECKED BY Q. ELDER
PROJECT MANAGER Q. ELDER

C-001

BENCHMARK

EAST QUARTER CORNER OF SECTION 12, TOWNSHIP 5 SOUTH, RANGE 2 WEST, SALT LAKE BASE AND MERIDIAN

ELEV = 4875.89'

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

GENERAL NOTES

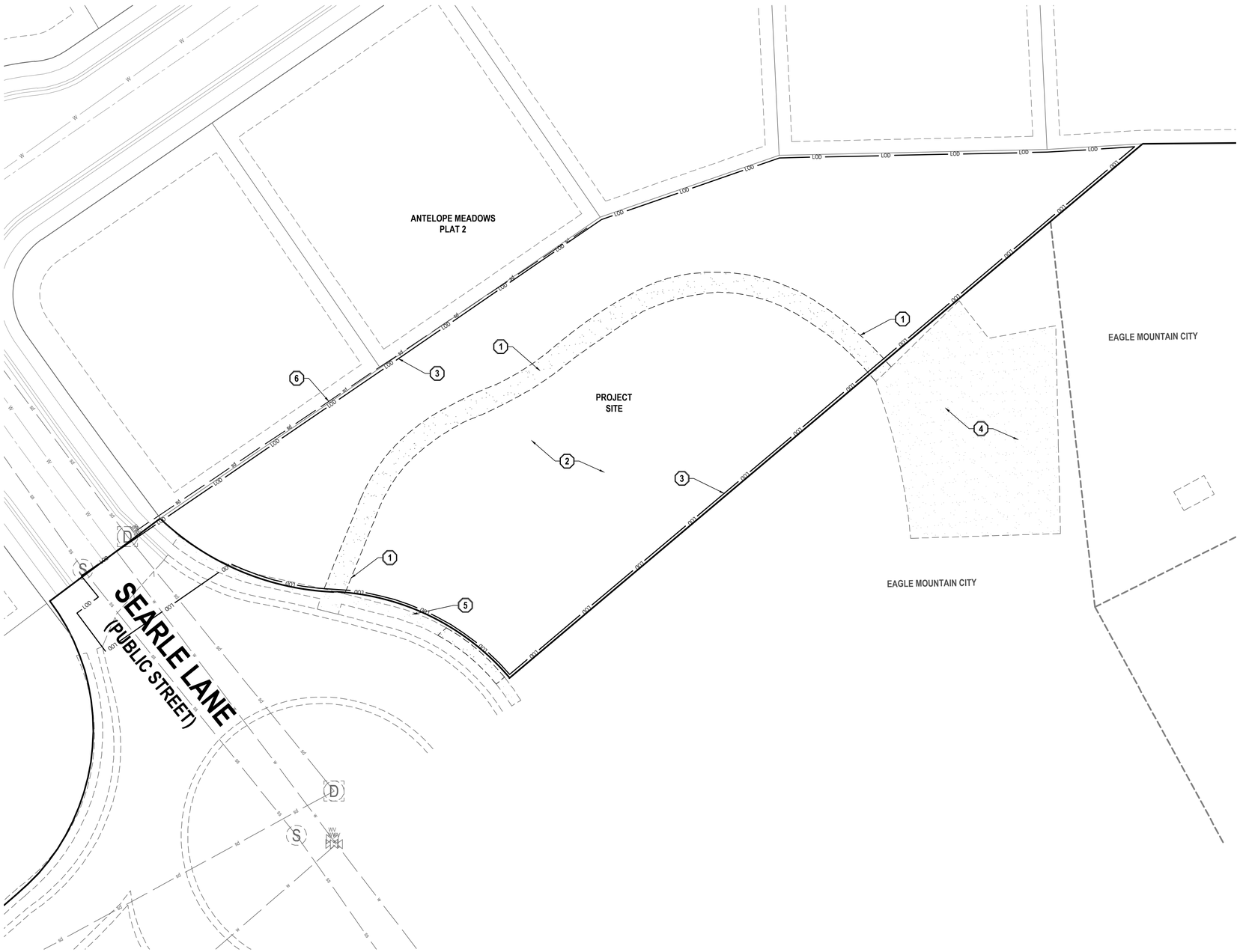
1. ALL WORK TO COMPLY WITH THE GOVERNING AGENCY'S STANDARDS AND SPECIFICATIONS.
2. EXISTING UNDERGROUND UTILITIES AND IMPROVEMENTS ARE SHOWN IN THEIR APPROXIMATE LOCATIONS BASED UPON RECORD INFORMATION AVAILABLE AT THE TIME OF PREPARATION OF THESE PLANS. LOCATIONS MAY NOT HAVE BEEN VERIFIED IN THE FIELD AND NO GUARANTEE IS MADE AS TO THE ACCURACY OR COMPLETENESS OF THE INFORMATION SHOWN. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE EXISTENCE AND LOCATION OF THE UTILITIES SHOWN ON THESE PLANS OR INDICATED IN THE FIELD BY LOCATING SERVICES. ANY ADDITIONAL COSTS INCURRED AS A RESULT OF THE CONTRACTOR'S FAILURE TO VERIFY THE LOCATIONS OF EXISTING UTILITIES PRIOR TO THE BEGINNING OF CONSTRUCTION IN THEIR VICINITY SHALL BE BORNE BY THE CONTRACTOR AND ASSUMED INCLUDED IN THE CONTRACT. THE CONTRACTOR IS TO VERIFY ALL CONNECTION POINTS WITH THE EXISTING UTILITIES. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE CAUSED TO THE EXISTING UTILITIES AND UTILITY STRUCTURES THAT ARE TO REMAIN. IF CONFLICTS WITH EXISTING UTILITIES OCCUR, THE CONTRACTOR SHALL NOTIFY THE ENGINEER PRIOR TO CONSTRUCTION TO DETERMINE IF ANY FIELD ADJUSTMENTS SHOULD BE MADE.
3. ALL SURFACE IMPROVEMENTS DISTURBED BY CONSTRUCTION SHALL BE RESTORED OR REPLACED, INCLUDING TREES AND DECORATIVE SHRUBS, SOD, FENCES, WALLS AND STRUCTURES, WHETHER OR NOT THEY ARE SPECIFICALLY SHOWN ON THE CONTRACT DOCUMENTS.
4. ALL CONSTRUCTION SIGNAGE, BARRICADES, TRAFFIC CONTROL DEVICES, ETC. SHALL CONFORM TO THE LATEST EDITION OF THE M.U.T.C.D. THE CONTRACTOR WILL MAINTAIN SUCH SO THAT THEY ARE PROPERLY PLACED AND VISIBLE AT ALL TIMES.
5. SIDEWALKS AND CURBS DESIGNATED TO BE DEMOLISHED SHALL BE DEMOLISHED TO THE NEAREST EXPANSION JOINT, MATCHING THESE PLANS AS CLOSELY AS POSSIBLE.
6. THE CONTRACTOR IS TO PROTECT AND PRESERVE ALL EXISTING IMPROVEMENTS, UTILITIES, AND SIGNS, ETC. UNLESS OTHERWISE NOTED ON THESE PLANS.

SCOPE OF WORK:

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

1. SAWCUT, REMOVE, AND PROPERLY DISPOSE OF EXISTING CONCRETE SIDEWALK.
2. REMOVE EXISTING LANDSCAPING IN THIS AREA. RETROFIT AND REPAIR IRRIGATION SYSTEM AS NEEDED. SEE LANDSCAPE PLANS FOR ADDITIONAL INFORMATION.
3. LIMIT OF DISTURBANCE.
4. EXISTING CONCRETE PAD TO BE PROTECTED IN PLACE.
5. EXISTING SIDEWALK TO BE PROTECTED IN PLACE.
6. STORM DRAIN LINE SHOWN AS PER EAGLE MOUNTAIN CITY GIS MAP. FIELD SURVEY DID NOT INDICATE THAT THIS LINE EXISTS. CONTRACTOR TO POTHOLE TO CONFIRM LOCATION AND EXISTENCE OF STORM DRAIN LINE. CONTACT ENGINEER OF RECORD TO COORDINATE FINDINGS.

PROTECT AND PRESERVE ALL EXISTING IMPROVEMENTS, UTILITIES, SIGNS, ETC. (TYPICAL UNLESS OTHERWISE NOTED).



HORIZONTAL GRAPHIC SCALE

20 0 10 20 40

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

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EAGLE MOUNTAIN, UTAH

LICENSED PROFESSIONAL ENGINEER
No. 10885882-2202
QUINTIN E. ELDER
2021-12-03
STATE OF UTAH

DEMOLITION PLAN

PROJECT NUMBER 10776C	PRINT DATE 2021/12/03
DRAWN BY J. HALLIN	CHECKED BY Q. ELDER
PROJECT MANAGER Q. ELDER	

C-002

BENCHMARK

EAST QUARTER CORNER OF SECTION 12, TOWNSHIP 6 SOUTH, RANGE 2 WEST, SALT LAKE BASE AND MERIDIAN

ELEV = 4875.89'

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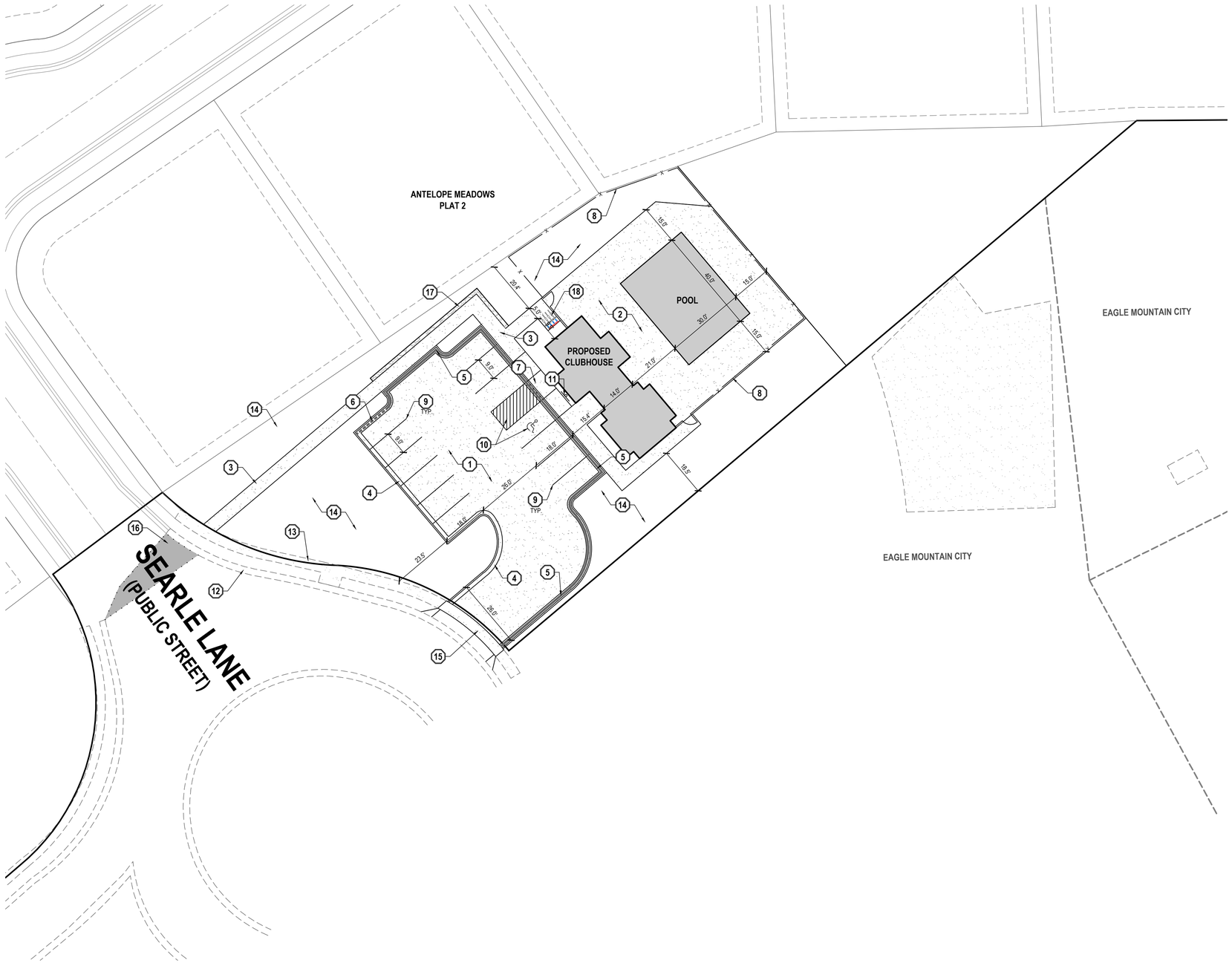
GENERAL NOTES

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

SCOPE OF WORK:

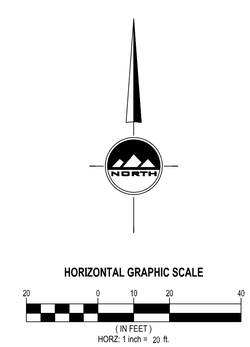
PROVIDE, INSTALL AND/OR CONSTRUCT THE FOLLOWING PER THE SPECIFICATIONS GIVEN OR REFERENCED, THE DETAILS NOTED, AND/OR AS SHOWN ON THE CONSTRUCTION DRAWINGS:

1. ASPHALT PAVEMENT PER GEOTECHNICAL REPORT AND DETAIL 1/C-500.
2. CONCRETE PAVEMENT PER GEOTECHNICAL REPORT AND DETAIL 2/C-500.
3. 4" THICK CONCRETE SIDEWALK PER APWA STANDARD PLAN NO. 231.
4. 24" COLLECTION CURB AND GUTTER PER DETAIL 4/C-500.
5. 24" REVERSE PAN CURB AND GUTTER PER DETAIL 5/C-500.
6. TRANSITION BETWEEN COLLECTION CURB AND GUTTER AND REVERSE PAN CURB AND GUTTER.
7. HANDICAP ACCESS RAMP PER APWA STANDARD PLAN NO. 235 WITH DETECTABLE WARNING SURFACE PER APWA STANDARD PLAN NO. 238.
8. FENCE. SEE ARCHITECTURAL PLANS FOR ADDITIONAL INFORMATION.
9. 4" WIDE SOLID YELLOW PAVEMENT MARKING PER M.U.T.C.D. STANDARD PLANS.
10. PAINTED ADA SYMBOL AND ASSOCIATED HATCHING PER M.U.T.C.D. STANDARD PLANS.
11. "HANDICAP PARKING" SIGN PER M.U.T.C.D. STANDARD PLANS.
12. EXISTING CONCRETE CURB AND GUTTER TO BE PROTECTED IN PLACE.
13. EXISTING CONCRETE SIDEWALK TO BE PROTECTED IN PLACE.
14. LANDSCAPING. SEE LANDSCAPE PLANS FOR ADDITIONAL INFORMATION.
15. FLARED DRIVEWAY PER APWA STANDARD PLAN NO. 221.1 SAWCUT, REMOVE, AND PROPERLY DISPOSE OF EXISTING CONCRETE SIDEWALK.
16. ASPHALT PAVEMENT TO MATCH EXISTING CONDITIONS. SAWCUT, REMOVE, AND PROPERLY DISPOSE OF EXISTING ASPHALT.
17. INSTALL LANDSCAPE WALL.
18. BICYCLE PARKING.



SITE SUMMARY TABLE

DESCRIPTION	AREA (SF)	PERCENTAGE
HARDSCAPE	11,676	52%
BUILDING	1,160	5%
LANDSCAPING	9,736	43%
TOTAL SITE	22,572 0.52 ACRES	100%



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LICENSED PROFESSIONAL ENGINEER
No. 10885882-2202
QUINTIN E. ELDER
2021-12-03
STATE OF UTAH

SITE PLAN

PROJECT NUMBER 10776C
PRINT DATE 2021/12/03
DRAWN BY J. HALLIN
CHECKED BY Q. ELDER
PROJECT MANAGER Q. ELDER

C-100

BENCHMARK

EAST QUARTER CORNER OF SECTION 12, TOWNSHIP 6 SOUTH, RANGE 2 WEST, SALT LAKE BASE AND MERIDIAN

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GENERAL NOTES

1. ALL WORK TO COMPLY WITH THE GOVERNING AGENCY'S STANDARDS AND SPECIFICATIONS.
2. ALL IMPROVEMENTS MUST COMPLY WITH ADA STANDARDS AND RECOMMENDATIONS.
3. ALL WORK SHALL COMPLY WITH THE RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER POSSIBLY INCLUDING, BUT NOT LIMITED TO, REMOVAL OF UNCONSOLIDATED FILL, ORGANICS, AND DEBRIS, PLACEMENT OF SUBSURFACE DRAIN LINES AND GEOTEXTILE, AND OVEREXCAVATION OF UNSUITABLE BEARING MATERIALS AND PLACEMENT OF ACCEPTABLE FILL MATERIAL.
4. THE CONTRACTOR SHALL BECOME FAMILIAR WITH THE EXISTING SOIL CONDITIONS.
5. ELEVATIONS HAVE BEEN TRUNCATED FOR CLARITY. XX.XX REPRESENTS AN ELEVATION OF 48XX.XX ON THESE PLANS.
6. LANDSCAPED AREAS REQUIRE SUBGRADE TO BE MAINTAINED AT A SPECIFIC ELEVATION BELOW FINISHED GRADE AND REQUIRE SUBGRADE TO BE PROPERLY PREPARED AND SCARIFIED. SEE LANDSCAPE PLANS FOR ADDITIONAL INFORMATION.
7. SLOPE ALL LANDSCAPED AREAS AWAY FROM BUILDING FOUNDATIONS TOWARD CURB AND GUTTER OR STORM DRAIN INLETS.
8. EXISTING UNDERGROUND UTILITIES AND IMPROVEMENTS ARE SHOWN IN THEIR APPROXIMATE LOCATIONS BASED UPON RECORD INFORMATION AVAILABLE AT THE TIME OF PREPARATION OF THESE PLANS. LOCATIONS MAY NOT HAVE BEEN VERIFIED IN THE FIELD AND NO GUARANTEE IS MADE AS TO THE ACCURACY OR COMPLETENESS OF THE INFORMATION SHOWN. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE EXISTENCE AND LOCATION OF THE UTILITIES SHOWN ON THESE PLANS OR INDICATED IN THE FIELD BY LOCATING SERVICES. ANY ADDITIONAL COSTS INCURRED AS A RESULT OF THE CONTRACTOR'S FAILURE TO VERIFY THE LOCATIONS OF EXISTING UTILITIES PRIOR TO THE BEGINNING OF CONSTRUCTION IN THEIR VICINITY SHALL BE BORNE BY THE CONTRACTOR AND ASSUMED INCLUDED IN THE CONTRACT. THE CONTRACTOR IS TO VERIFY ALL CONNECTION POINTS WITH THE EXISTING UTILITIES. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE CAUSED TO THE EXISTING UTILITIES AND UTILITY STRUCTURES THAT ARE TO REMAIN. IF CONFLICTS WITH EXISTING UTILITIES OCCUR, THE CONTRACTOR SHALL NOTIFY THE ENGINEER PRIOR TO CONSTRUCTION TO DETERMINE IF ANY FIELD ADJUSTMENTS SHOULD BE MADE.
9. ALL STORM DRAIN INFRASTRUCTURE TO BE INSTALLED PER GOVERNING AGENCY OR APWA STANDARD PLANS AND SPECIFICATIONS.
10. ENSURE MINIMUM COVER OVER ALL STORM DRAIN PIPES PER MANUFACTURER'S RECOMMENDATIONS. NOTIFY ENGINEER IF MINIMUM COVER CANNOT BE ATTAINED.
11. ALL FACILITIES WITH DOWNSPOUTS/ROOF DRAINS SHALL BE CONNECTED TO THE STORM DRAIN SYSTEM. SEE PLUMBING PLANS FOR DOWNSPOUT/ROOF DRAIN LOCATIONS AND SIZES. ALL ROOF DRAINS TO HAVE MINIMUM 1% SLOPE.
12. THE CONTRACTOR SHALL ADJUST TO GRADE ALL EXISTING UTILITIES AS NEEDED PER LOCAL GOVERNING AGENCY'S STANDARDS AND SPECIFICATIONS.
13. NOTIFY ENGINEER OF ANY DISCREPANCIES IN DESIGN OR STAKING BEFORE PLACING CONCRETE, ASPHALT, OR STORM DRAIN STRUCTURES OR PIPES.
14. THE CONTRACTOR IS TO PROTECT AND PRESERVE ALL EXISTING IMPROVEMENTS, UTILITIES, AND SIGNS, ETC. UNLESS OTHERWISE NOTED ON THESE PLANS.

SCOPE OF WORK:

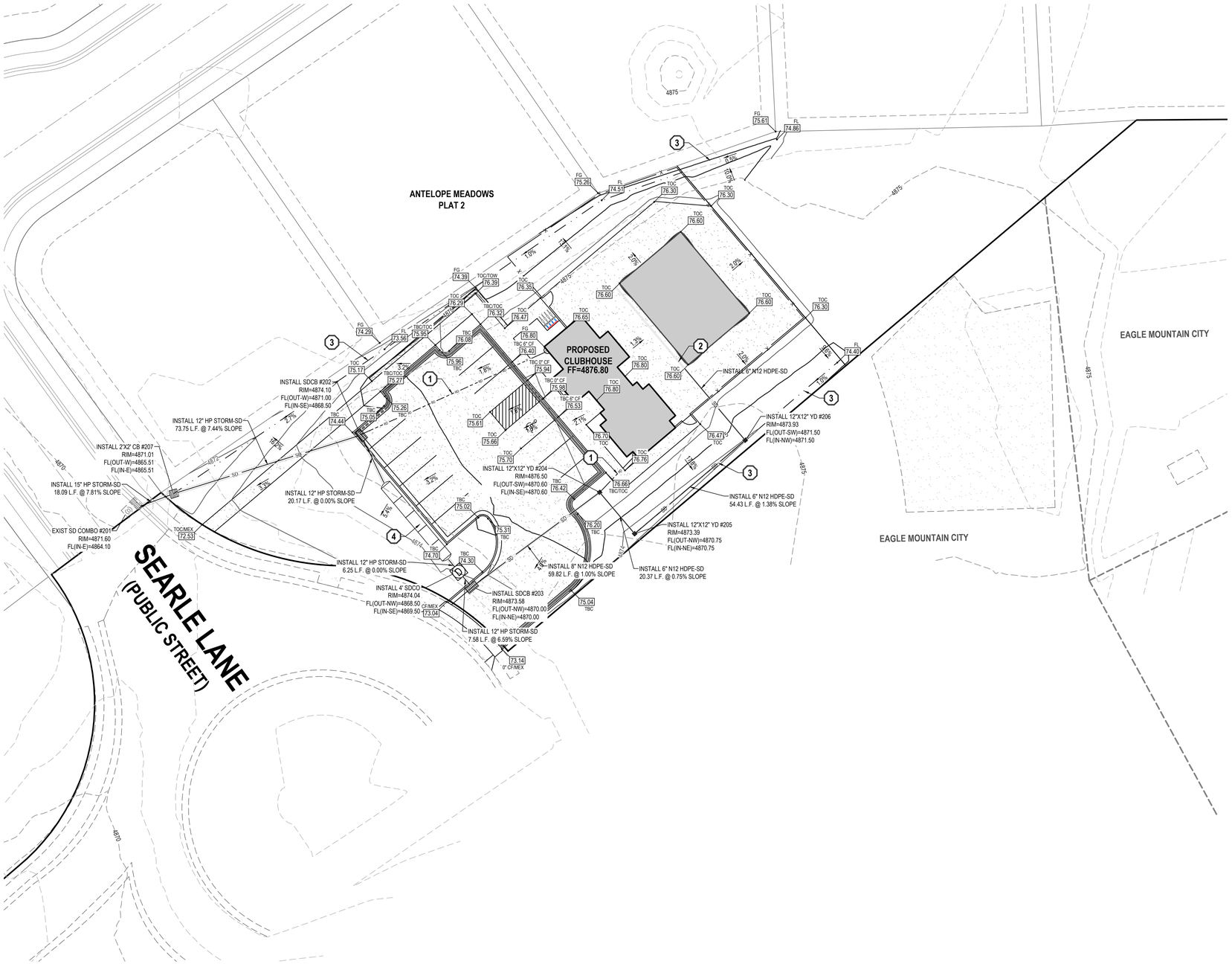
PROVIDE, INSTALL AND/OR CONSTRUCT THE FOLLOWING PER THE SPECIFICATIONS GIVEN OR REFERENCED, THE DETAILS NOTED, AND/OR AS SHOWN ON THE CONSTRUCTION DRAWINGS:

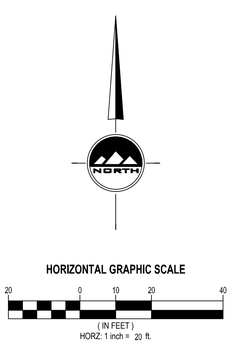
1. ROOF DRAIN PIPE. 4" SDR-35 PVC @ 1.00% SLOPE MINIMUM. INSTALL CLEANOUT AT END OF PIPE AND PROVIDE "Y" CONNECTION FOR EACH ROOF DRAIN AT BUILDING AND EXTEND 3" PVC PIPE TO ROOF DRAIN CONNECTION.
2. LINEAR SHOWER DRAIN PER POOL SPECIALIST DESIGN.
3. SWALE PER DETAIL 3/C-500.
4. INSTALL 5 STORMTECH SC-740 CHAMBERS. STORAGE CHAMBERS TO BE INSTALLED PER MANUFACTURER'S DRAWINGS AND SPECIFICATIONS. SUBMITTAL MUST BE PROVIDED TO ENGINEER OF RECORD FOR REVIEW PRIOR TO ORDERING MATERIALS OR BEGINNING CONSTRUCTION. CONTRACTOR SHALL HOLD A PRE-CONSTRUCTION MEETING WITH THE MANUFACTURER PRIOR TO STARTING CONSTRUCTION.

TOP OF GRAVEL	= 4871.75
TOP OF CHAMBER	= 4871.00
BOTTOM OF CHAMBER	= 4868.50
BOTTOM OF GRAVEL	= 4867.75
80th PERCENTILE LID STORAGE REQUIRED	= 492 CU. FT.
STORAGE PROVIDED	= 505 CU. FT.

80th Percentile Retention

i =	0.59	
d =	0.50	in
d =	0.04	ft
R_v =	0.52	
A =	22,778	sf
V_{goal} =	**492**	cf





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LICENSED PROFESSIONAL ENGINEER
No. 10885882-2202
QUINTIN E. ELDER
2021-12-03
STATE OF UTAH

GRADING AND DRAINAGE PLAN

PROJECT NUMBER 10776C	PRINT DATE 2021/12/03
DRAWN BY J. HALLIN	CHECKED BY Q. ELDER
PROJECT MANAGER Q. ELDER	

C-200

BENCHMARK

EAST QUARTER CORNER OF SECTION 12, TOWNSHIP 6 SOUTH, RANGE 2 WEST, SALT LAKE BASE AND MERIDIAN

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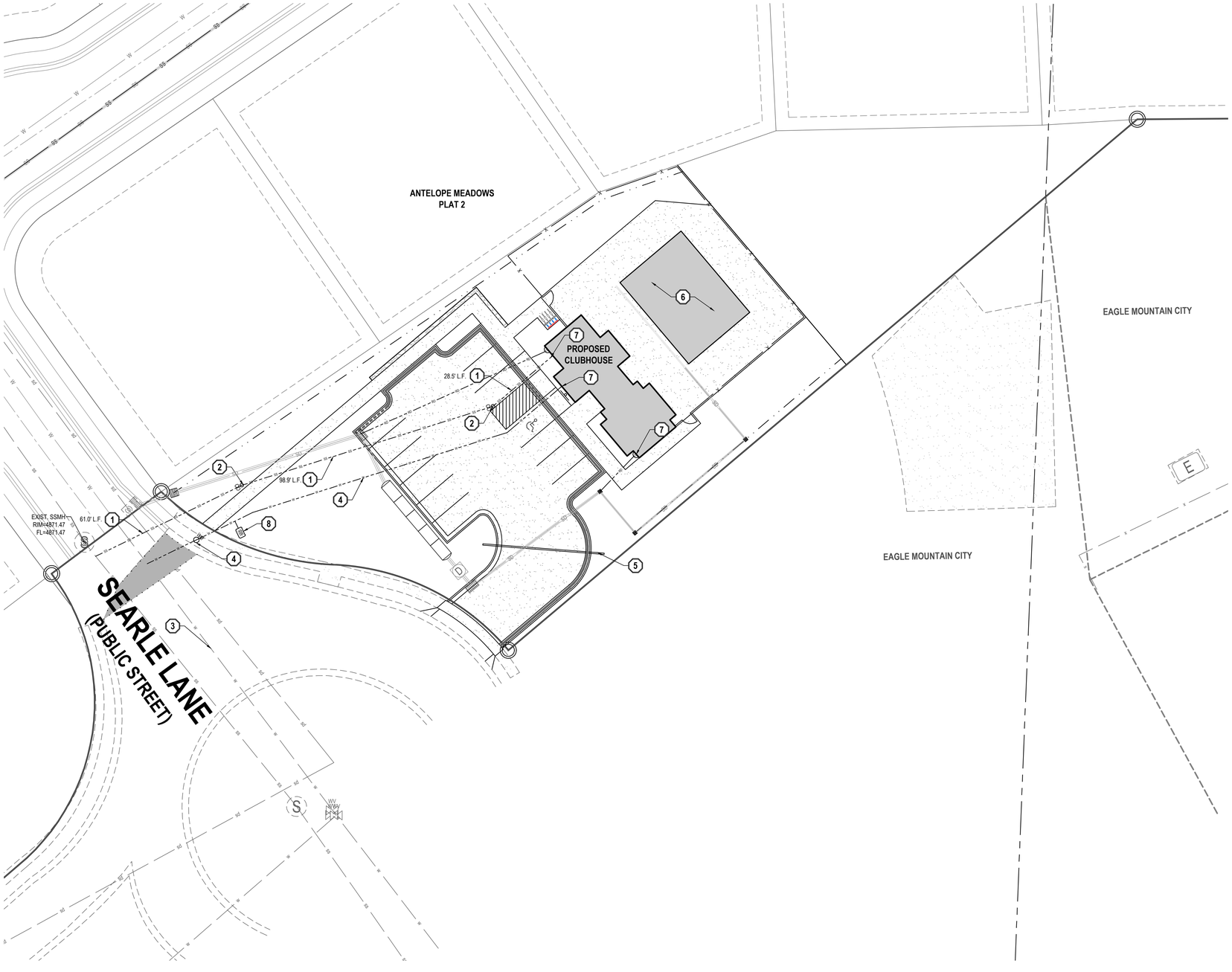
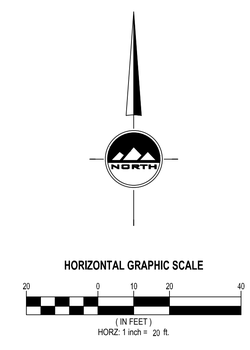
3. ALL SANITARY SEWER INFRASTRUCTURE TO BE INSTALLED PER GOVERNING AGENCY STANDARD PLANS AND SPECIFICATIONS.
4. ALL WATER INFRASTRUCTURE TO BE INSTALLED PER GOVERNING AGENCY OR APWA STANDARD PLANS AND SPECIFICATIONS.
6. DEFLECT OR LOOP ALL WATERLINES TO AVOID CONFLICTS WITH OTHER UTILITIES PER GOVERNING AGENCY'S STANDARDS AND SPECIFICATIONS.
7. PROJECT SHALL COMPLY WITH ALL UTAH DIVISION OF DRINKING WATER RULES AND REGULATIONS INCLUDING, BUT NOT LIMITED TO, THOSE PERTAINING TO BACKFLOW PROTECTION AND CROSS CONNECTION PREVENTION.
8. THE CONTRACTOR IS TO COORDINATE ALL UTILITIES WITH MECHANICAL/PLUMBING PLANS.
9. NOTIFY ENGINEER OF ANY DISCREPANCIES IN DESIGN OR STAKING BEFORE PLACING UTILITY STRUCTURES OR PIPES.
10. THE CONTRACTOR SHALL ADJUST TO GRADE ALL EXISTING UTILITIES AS NEEDED PER LOCAL GOVERNING AGENCY'S STANDARDS AND SPECIFICATIONS.
11. THE CONTRACTOR IS TO PROTECT AND PRESERVE ALL EXISTING IMPROVEMENTS, UTILITIES, AND SIGNS, ETC. UNLESS OTHERWISE NOTED ON THESE PLANS.

SCOPE OF WORK:

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

1. 6" SDR-35 PVC SANITARY SEWER LATERAL @ 1.00% MIN. SLOPE, INCLUDING CLEANOUTS AT MAXIMUM 100-FOOT SPACING, PER EAGLE MOUNTAIN CITY STANDARDS AND SPECIFICATIONS. LENGTH PER PLAN. CONTRACTOR TO COORDINATE CONNECTIONS W/ POOL DESIGN.
2. SANITARY SEWER CLEANOUT PER EAGLE MOUNTAIN CITY STANDARDS AND SPECIFICATIONS.
3. EXISTING 8" C-900 PVC POTABLE WATER LINE.
4. 1" CULINARY WATER SERVICE AND METER PER EAGLE MOUNTAIN CITY STANDARDS AND SPECIFICATIONS. INSTALL 1" CTS POLY CULINARY WATER LINE FROM MAIN TO METER AND 1.5" CTS POLY CULINARY WATER LINE FROM METER TO THE BUILDING.
5. 4" IRRIGATION SLEEVE. CONTRACTOR TO PROVIDE 2' MIN. COVER.
6. SEE POOL DESIGN FOR UTILITY CONNECTIONS AND SIZING.
7. SEE MECHANICAL/PLUMBING PLANS FOR CONTINUATION.
8. 1-INCH IRRIGATION POC.





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EAGLE MOUNTAIN, UTAH

LICENSED PROFESSIONAL ENGINEER
No. 10885882-2202
QUINTIN E. ELDER
2021-12-03
STATE OF UTAH

UTILITY PLAN

PROJECT NUMBER 10776C	PRINT DATE 2021/12/03
DRAWN BY J. HALLIN	CHECKED BY Q. ELDER
PROJECT MANAGER Q. ELDER	

C-300

BENCHMARK

EAST QUARTER CORNER OF SECTION 12, TOWNSHIP 6 SOUTH, RANGE 2 WEST, SALT LAKE BASE AND MERIDIAN

ELEV = 4875.89'

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

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

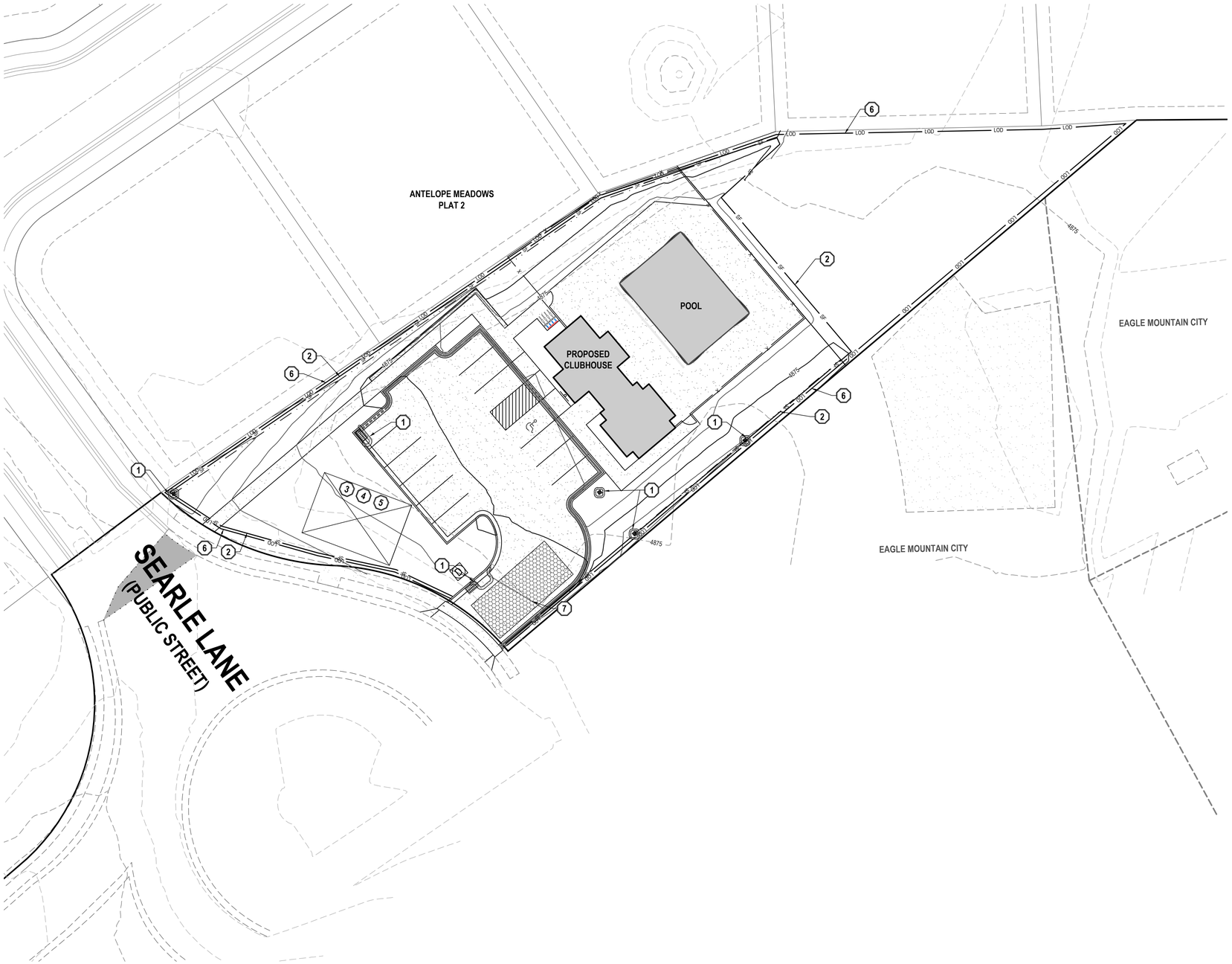
GENERAL NOTES

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

SCOPE OF WORK:

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

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



HORIZONTAL GRAPHIC SCALE

20 0 10 20 40

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

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No. 10885882-2202
QUINTIN E. ELDER
2021-12-03
STATE OF UTAH

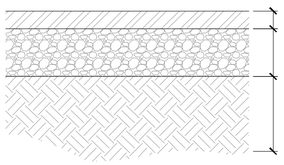
EROSION CONTROL PLAN

PROJECT NUMBER 10776C	PRINT DATE 2021/12/03
DRAWN BY J. HALLIN	CHECKED BY Q. ELDER
PROJECT MANAGER Q. ELDER	

C-400

ASPHALT NOTES

1. ALL PAVING TO BE PLACED OVER PROPERLY PREPARED NATURAL SOILS AND/OR PROPERLY PREPARED EXISTING FILL SOILS AND PROPERLY COMPACTED STRUCTURAL FILL WHERE SPECIFIED.
2. ALL STRUCTURAL FILL TO BE PLACED AND COMPACTED PER THE PROJECT GEOTECHNICAL REPORT OR TO A MINIMUM OF 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE AASHTO T-180 (D-1557) METHOD OF COMPACTION. LIFTS SHOULD BE PLACED PER GEOTECHNICAL RECOMMENDATIONS BUT SHOULD NOT EXCEED 8" IN LOOSE THICKNESS.
3. REMOVE SURFACE VEGETATION AND OTHER DELETERIOUS MATERIALS OVER THE ENTIRE SITE IN PREPARATION OF PROPOSED IMPROVEMENTS.

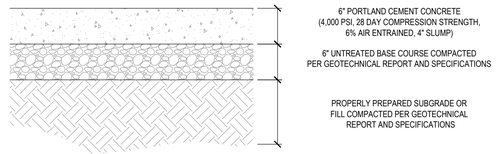


1 STANDARD ASPHALT SECTION

SCALE: NONE

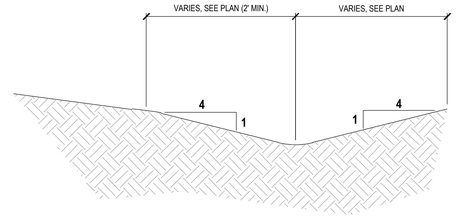
CONCRETE NOTES

1. ALL PAVING TO BE PLACED OVER PROPERLY PREPARED NATURAL SOILS AND/OR PROPERLY PREPARED EXISTING FILL SOILS AND PROPERLY COMPACTED STRUCTURAL FILL WHERE SPECIFIED.
2. ALL STRUCTURAL FILL TO BE PLACED AND COMPACTED PER THE PROJECT GEOTECHNICAL REPORT OR TO A MINIMUM OF 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE AASHTO T-180 (D-1557) METHOD OF COMPACTION. LIFTS SHOULD BE PLACED PER GEOTECHNICAL RECOMMENDATIONS BUT SHOULD NOT EXCEED 8" IN LOOSE THICKNESS.
3. REMOVE SURFACE VEGETATION AND OTHER DELETERIOUS MATERIALS OVER THE ENTIRE SITE IN PREPARATION OF PROPOSED IMPROVEMENTS.



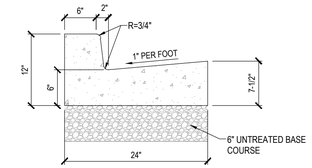
2 CONCRETE PAVEMENT SECTION

SCALE: NONE



3 SWALE CROSS SECTION

SCALE: NONE

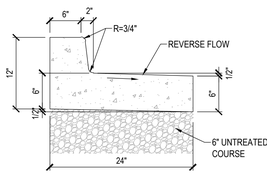


NOTE:

1. CONSTRUCT PER NOTES AND SPECIFICATIONS ASSOCIATED WITH APWA STANDARD PLAN NO. 205.

4 24" COLLECTION CURB AND GUTTER

SCALE: NONE

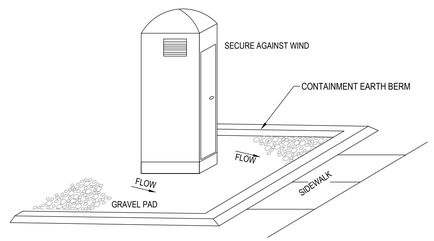


NOTE:

1. CONSTRUCT PER NOTES AND SPECIFICATIONS ASSOCIATED WITH APWA STANDARD PLAN NO. 205.

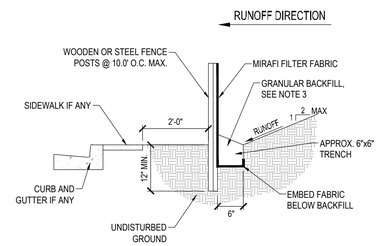
5 24" REVERSE PAN CURB AND GUTTER

SCALE: NONE



6 PORTABLE TOILET

SCALE: NONE

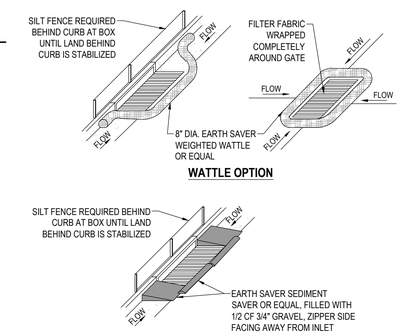


NOTES:

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

7 TEMPORARY SILT FENCE

SCALE: NONE

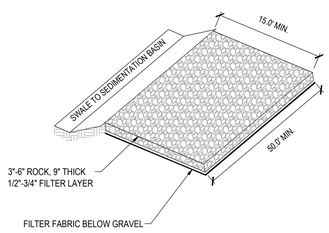


NOTES:

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

8 SAG INLET PROTECTION

SCALE: NONE

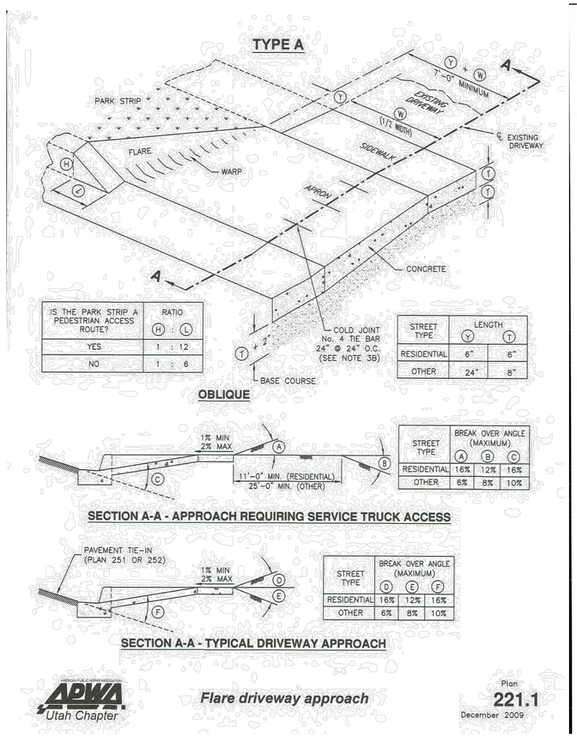


NOTE:

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

9 STABILIZED CONSTRUCTION ENTRANCE

SCALE: NONE



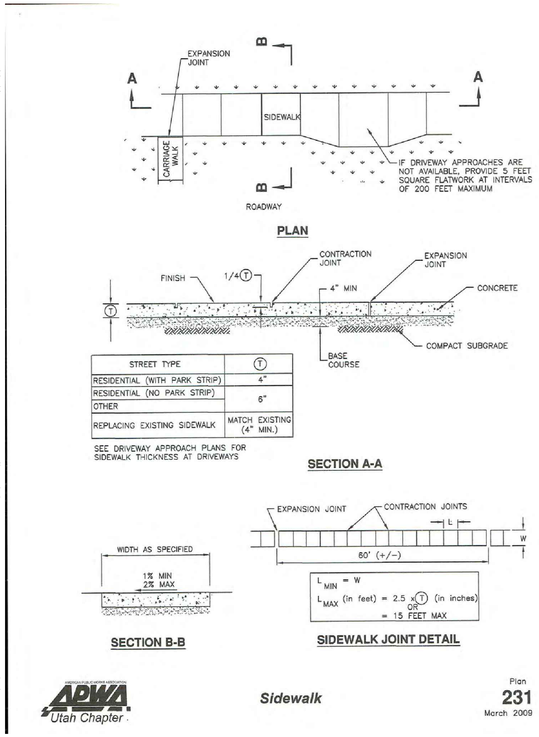
IS THE PARK STRIP A PEDESTRIAN ACCESS ROUTE?	RATIO (H) : (L)
YES	1 : 12
NO	1 : 6

STREET TYPE	LENGTH (Y)	(T)
RESIDENTIAL	6"	6"
OTHER	24"	8"

STREET TYPE	BREAK OVER ANGLE (MAXIMUM) (A)	(B)	(C)
RESIDENTIAL	16%	12%	16%
OTHER	6%	8%	10%

STREET TYPE	BREAK OVER ANGLE (MAXIMUM) (D)	(E)	(F)
RESIDENTIAL	16%	12%	16%
OTHER	6%	8%	10%

APWA Utah Chapter — *Flare driveway approach* — Plan 221.1 December 2009



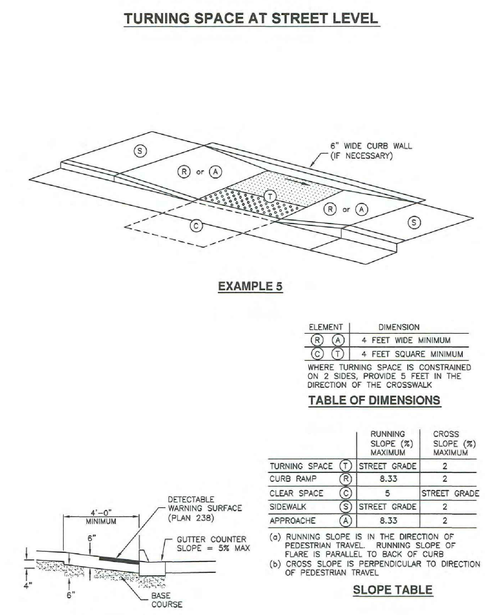
STREET TYPE	(T)
RESIDENTIAL (WITH PARK STRIP)	4"
RESIDENTIAL (NO PARK STRIP)	6"
OTHER	
REPLACING EXISTING SIDEWALK	MATCH EXISTING (4" MIN.)

SEE DRIVEWAY APPROACH PLANS FOR SIDEWALK THICKNESS AT DRIVEWAYS

$L_{MIN} = W$

L_{MAX} (in feet) = 2.5 x (T) (in inches) OR = 15 FEET MAX

APWA Utah Chapter — *Sidewalk* — Plan 231 March 2009



ELEMENT	DIMENSION
(R) (A)	4 FEET WIDE MINIMUM
(C) (T)	4 FEET SQUARE MINIMUM

WHERE TURNING SPACE IS CONSTRAINED ON 2 SIDES, PROVIDE 5 FEET IN THE DIRECTION OF THE CROSSWALK

TABLE OF DIMENSIONS

	RUNNING SLOPE (%) MAXIMUM	CROSS SLOPE (%) MAXIMUM
TURNING SPACE (T)	STREET GRADE	2
CURB RAMP (R)	8.33	2
CLEAR SPACE (C)	5	STREET GRADE
SIDEWALK (S)	STREET GRADE	2
APPROACHE (A)	8.33	2

(a) RUNNING SLOPE IS IN THE DIRECTION OF PEDESTRIAN TRAVEL. RUNNING SLOPE OF FLARE IS PARALLEL TO BACK OF CURB
(b) CROSS SLOPE IS PERPENDICULAR TO DIRECTION OF PEDESTRIAN TRAVEL

SLOPE TABLE

APWA Utah Chapter — *Mid-block curb cut assembly* — Plan 236.3 September 2011

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LICENSED PROFESSIONAL ENGINEER
No. 10885882-2202
QUINTIN E. ELDER
2021-12-03
STATE OF UTAH

DETAILS

PROJECT NUMBER	PRINT DATE
10776C	2021/12/03
DRAWN BY: J. HALLIN	CHECKED BY: Q. ELDER
PROJECT MANAGER: Q. ELDER	

C-500

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

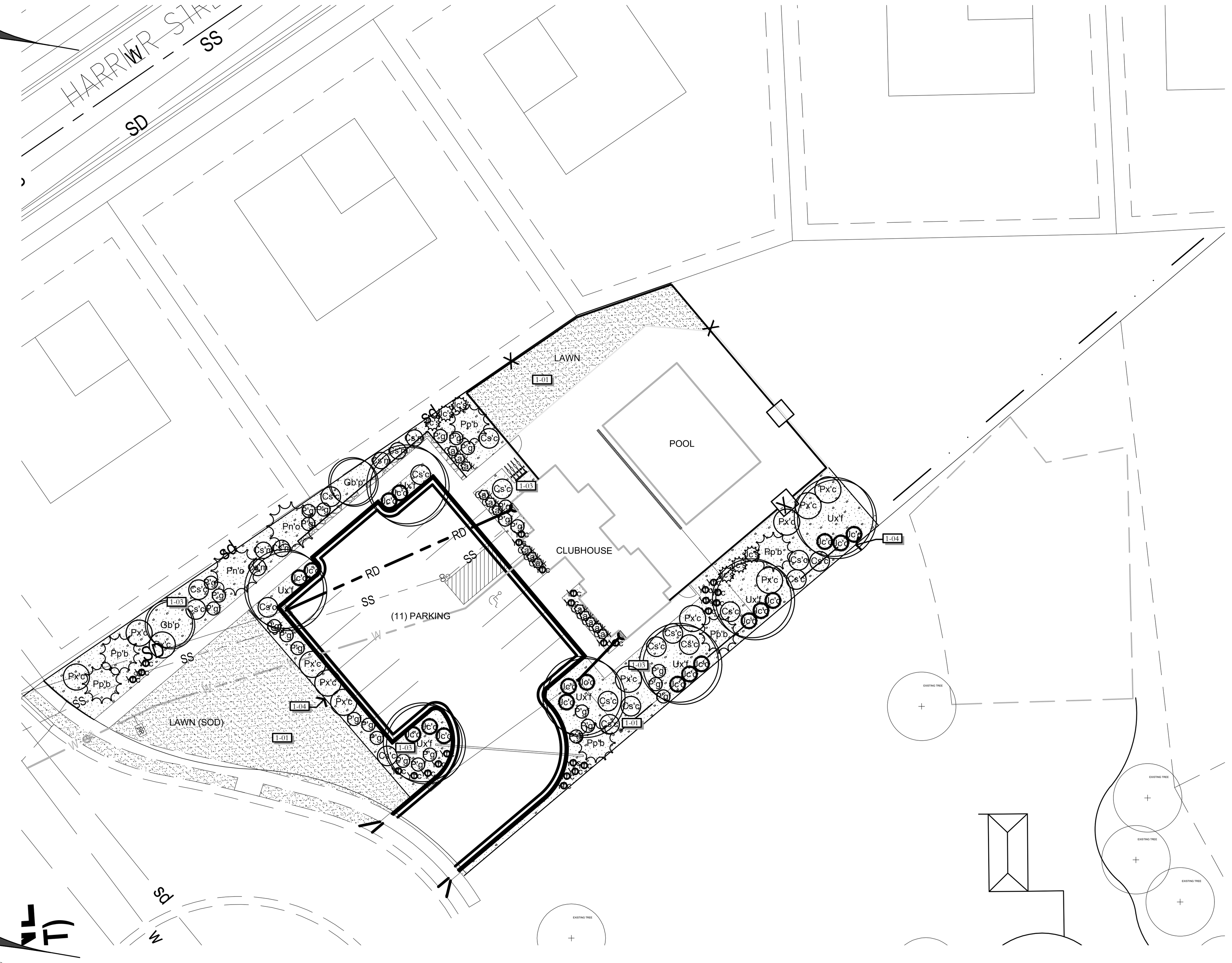
1. LANDSCAPE CONTRACTOR SHALL HAVE ALL UTILITIES BLUE STAKED PRIOR TO DIGGING. ANY DAMAGE TO UTILITIES SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE WITH NO ADDITIONAL COST TO THE OWNER.
2. DURING THE BIDDING AND INSTALLATION PROCESS, THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR VERIFYING QUANTITIES OF ALL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

INSTALLER RESPONSIBILITIES AND LIABILITIES

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

GRADING AND DRAINAGE REQUIREMENTS

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



PLANT LEGEND

DECIDUOUS TREES	CODE	QTY	BOTANICAL / COMMON NAME	CONT	CAL	SIZE
Gb'p	Gb'p	2	Ginkgo biloba `Princeton Sentry` Princeton Sentry Gingko	B & B	2"Cal	
Ux'f	Ux'f	7	Ulmus x `Frontier` Frontier Elm	B & B	2"Cal	

EVERGREEN TREES	CODE	QTY	BOTANICAL / COMMON NAME	CONT	CAL	SIZE
Jc's	Jc's	6	Juniperus chinensis `Spartan` Spartan Juniper	B & B		5`-6`
Pp'b	Pp'b	6	Picea pungens `Bakeri` Baker`s Colorado Blue Spruce	B & B		5`-6`
Pn'o	Pn'o	2	Pinus nigra `Oregon Green` Oregon Green Pine	B & B		5`-6`

DECIDUOUS SHRUBS	CODE	QTY	BOTANICAL / COMMON NAME	CONT
Cs'c	Cs'c	18	Cornus sericea `Cardinal` Cardinal Red-twig Dogwood	5 gal
Cs'm	Cs'm	6	Cytisus scoparius `Moonlight` Moonlight Broom	5 gal
P'gf	P'gf	27	Potentilla fruticosa `Goldfinger` Goldfinger Potentilla	5 gal
Px'c	Px'c	12	Prunus x cistena Purple Leaf Sand Cherry	5 gal

EVERGREEN SHRUBS	CODE	QTY	BOTANICAL / COMMON NAME	CONT
Jc'd	Jc'd	19	Juniperus chinensis `Daub`s Frosted` Daub`s Frosted Juniper	5 gal
Yf'c	Yf'c	26	Yucca filamentosa `Color Guard` Color Guard Adam`s Needle	5 gal

GRASSES	CODE	QTY	BOTANICAL / COMMON NAME	CONT
Ca'k	Ca'k	14	Calamagrostis x acutiflora `Karl Foerster` Feather Reed Grass	1 gal

SITE MATERIALS LEGEND

	SYMBOL	1 LANDSCAPE DESCRIPTION	QTY
	1-01	SODDED LAWN AREA LAWN AREAS SHALL BE SOD. NEW TURF AREAS TO BE SODDED WITH 18% "BLUESTAR KENTUCKY BLUEGRASS, 19% "MARQUIS" KENTUCKY BLUEGRASS, 17% "NEWPORT" KENTUCKY BLUEGRASS, 17% "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.	3,945 sf
	1-03	1.5" TAN STONE MULCH PLANTING AREAS TO RECEIVE MIN. 6" 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.	5,965 sf
	1-04	5" METAL EDGING: INSTALL PER MANUFACTURER`S RECOMMENDATIONS.	267 lf

ISSUE DATE: 12/3/2021

PROJECT NUMBER: UT21112

NO.	REVISION	DATE
1	XXXX	XX-XX-XX
2		
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PLAN INFORMATION

811 BLUE STAKES OF UTAH
UTILITY NOTIFICATION CENTER, INC
1-800-662-4111
www.bluestakes.org

N

0' 15' 30' 60' 120'

GRAPHIC SCALE: 1" = 30'

PROJECT INFORMATION

ANTELOPE MEADOWS
EAGLE MOUNTAIN, UTAH

DEVELOPER / PROPERTY OWNER / CLIENT

FIELDSTONE HOMES
C/O RANDY SMITH

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
12/03/2021
ELECTRONIC SEAL
STATE OF UTAH

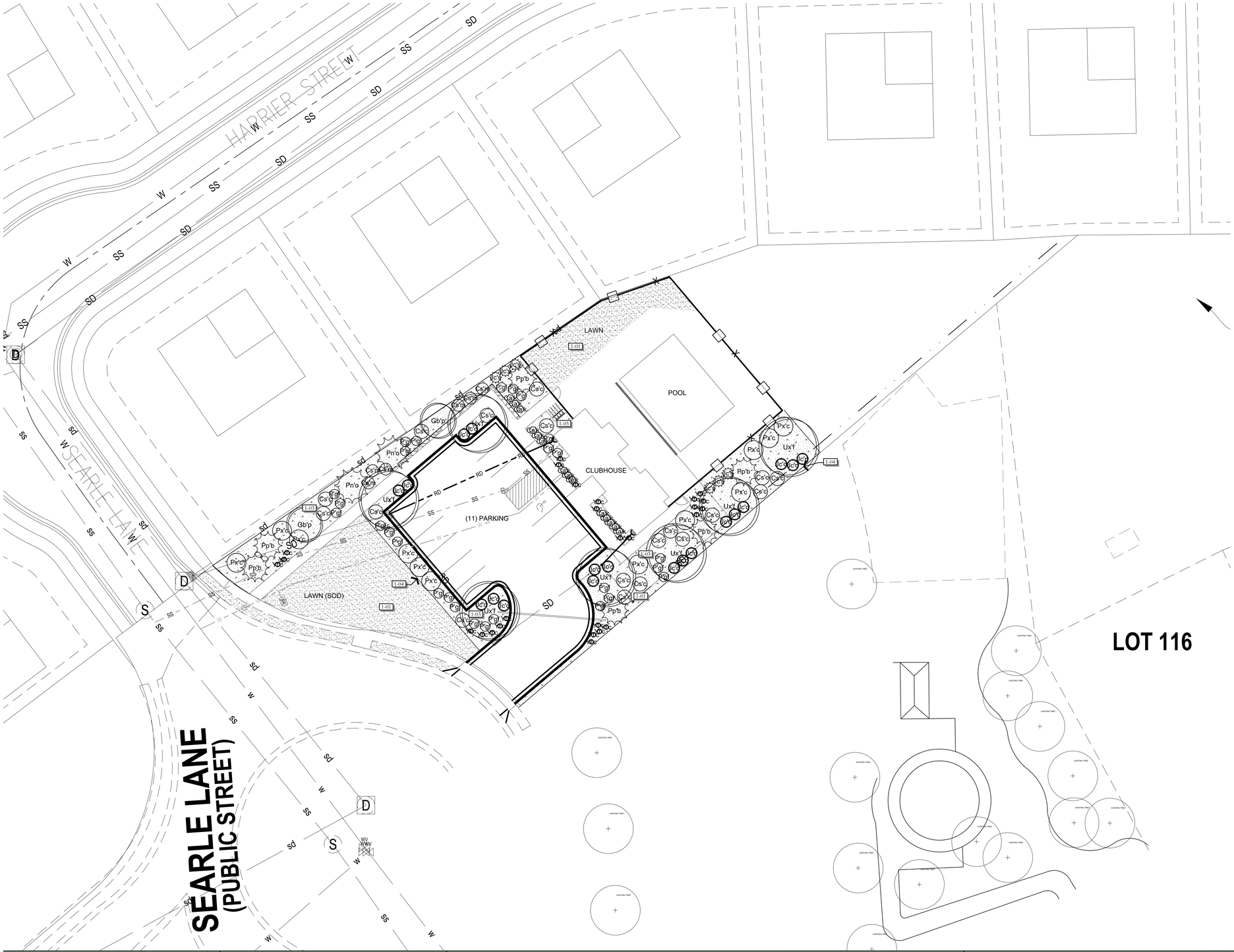
DRAWING INFO

PM: JTA
DRAWN: ACP
CHECKED: JMA
PLOT DATE: 12/3/2021

LANDSCAPE PLAN COVER

PRELIMINARY PLANS NOT FOR CONSTRUCTION

LP-100



PLANT LEGEND

DECIDUOUS TREES	CODE	QTY	BOTANICAL / COMMON NAME	CONT	CAL	SIZE
Gb'p	Gb'p	2	Ginkgo biloba 'Princeton Sentry' Princeton Sentry Gingko	B & B	2"Cal	
Ux	Ux'f	7	Ulmus x 'Frontier' Frontier Elm	B & B	2"Cal	

EVERGREEN TREES	CODE	QTY	BOTANICAL / COMMON NAME	CONT	CAL	SIZE
Jc's	Jc's	6	Juniperus chinensis 'Spartan' Spartan Juniper	B & B		5'-6'
Pp'b	Pp'b	6	Picea pungens 'Bakeri' Baker's Colorado Blue Spruce	B & B		5'-6'
Pn'o	Pn'o	2	Pinus nigra 'Oregon Green' Oregon Green Pine	B & B		5'-6'

DECIDUOUS SHRUBS	CODE	QTY	BOTANICAL / COMMON NAME	CONT
Cs'c	Cs'c	18	Cornus sericea 'Cardinal' Cardinal Red-twig Dogwood	5 gal
Cs'm	Cs'm	6	Cytisus scoparius 'Moonlight' Moonlight Broom	5 gal
P'gf	P'gf	27	Potentilla fruticosa 'Goldfinger' Goldfinger Potentilla	5 gal
Px'c	Px'c	12	Prunus x cistena Purple Leaf Sand Cherry	5 gal

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Jc'd	Jc'd	19	Juniperus chinensis 'Daub's Frosted' Daub's Frosted Juniper	5 gal
Yf'c	Yf'c	26	Yucca filamentosa 'Color Guard' Color Guard Adam's Needle	5 gal

GRASSES	CODE	QTY	BOTANICAL / COMMON NAME	CONT
Ca'k	Ca'k	14	Calamagrostis x acutiflora 'Karl Foerster' Feather Reed Grass	1 gal

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SYMBOL	1 LANDSCAPE DESCRIPTION	QTY
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1-03	1.5" TAN STONE MULCH PLANTING AREAS TO RECEIVE MIN. 6" 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.	5,965 sf
1-04	5" METAL EDGING: INSTALL PER MANUFACTURER'S RECOMMENDATIONS.	267 lf

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PLAN INFORMATION

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N

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

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PM:	JTA
DRAWN:	ACP
CHECKED:	JMA
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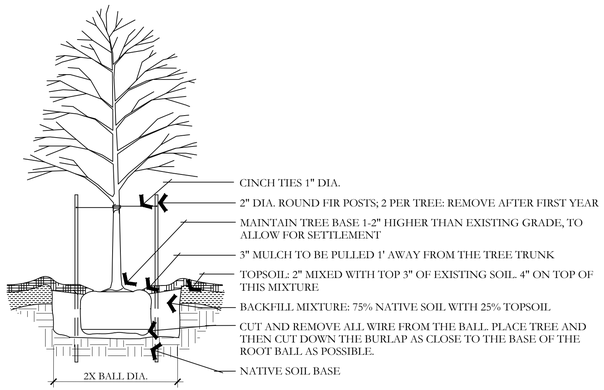
LANDSCAPE PLAN

PRELIMINARY PLANS NOT FOR CONSTRUCTION

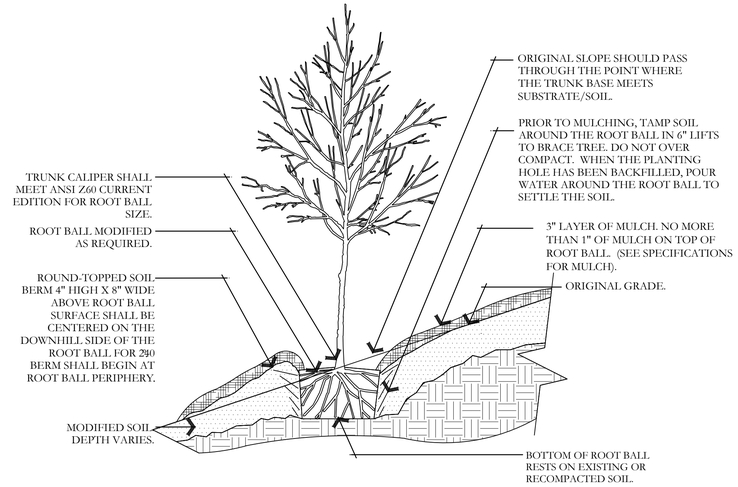
LP-101



A DECIDUOUS TREE PLANTING

NOT TO SCALE

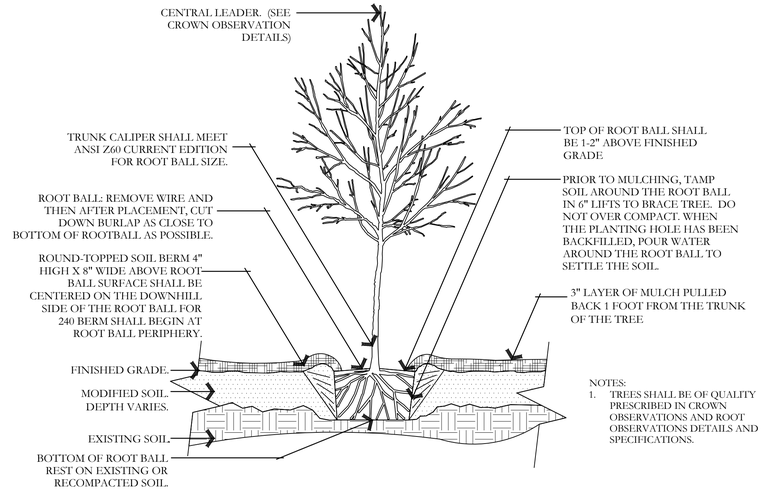
PKJ DESIGN GROUP



B TREE ON SLOPE 5% (20:1) TO 50% (2:1)

NOT TO SCALE

PKJ DESIGN GROUP

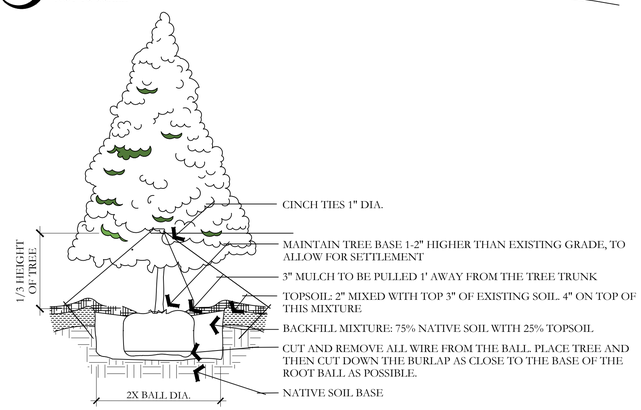


NOTES:
1. TREES SHALL BE OF QUALITY PRESCRIBED IN CROWN OBSERVATIONS AND ROOT OBSERVATIONS DETAILS AND SPECIFICATIONS.

C TREE W/ BERM (EXISTING SOIL MODIFIED)

NOT TO SCALE

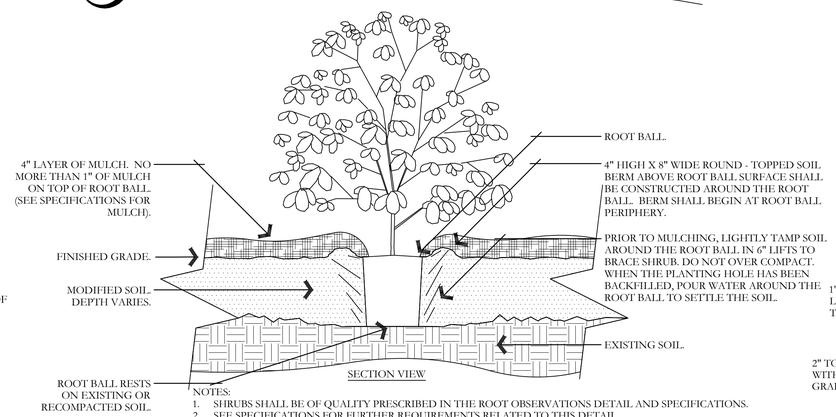
PKJ DESIGN GROUP



D EVERGREEN TREE PLANTING

NOT TO SCALE

PKJ DESIGN GROUP

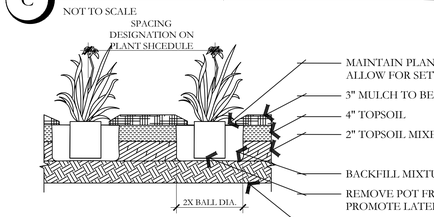


NOTES:
1. SHRUBS SHALL BE OF QUALITY PRESCRIBED IN THE ROOT OBSERVATIONS DETAIL AND SPECIFICATIONS.
2. SEE SPECIFICATIONS FOR FURTHER REQUIREMENTS RELATED TO THIS DETAIL.

E SHRUB - MODIFIED SOIL

NOT TO SCALE

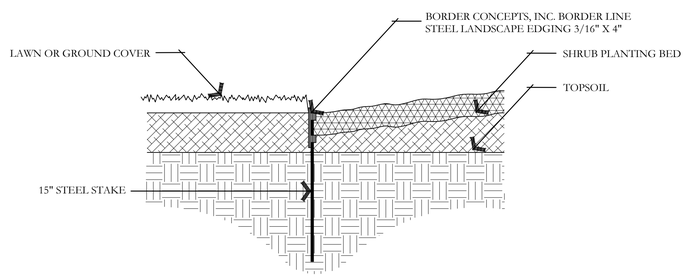
PKJ DESIGN GROUP



F PERENNIAL PLANTING

NOT TO SCALE

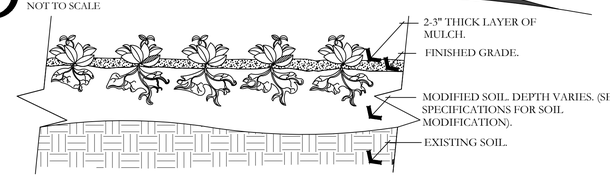
PKJ DESIGN GROUP



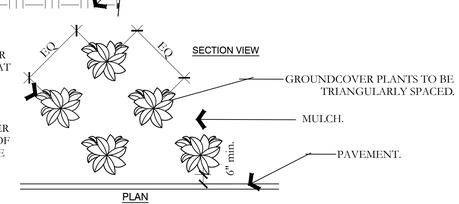
G METAL EDGING DETAIL

NOT TO SCALE

PKJ DESIGN GROUP



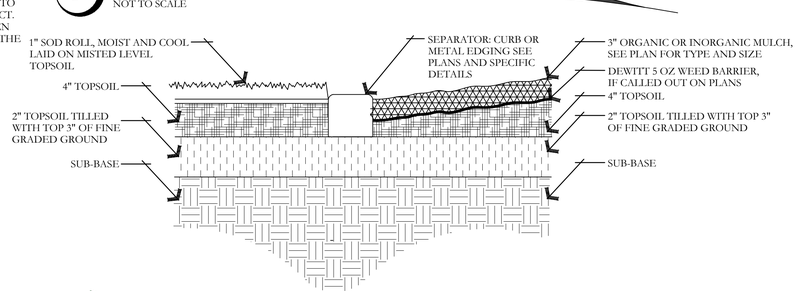
NOTES:
1- SEE PLANTING LEGEND FOR GROUNDCOVER SPECIES, SIZE, AND SPACING DIMENSION. THAT GROW
2- SMALL ROOTS AROUND, UP, OR DOWN THE ROOT BALL PERIPHERY ARE CONSIDERED A NORMAL CONDITION IN CONTAINER PRODUCTION AND ARE ACCEPTABLE HOWEVER THEY SHOULD BE ELIMINATED AT THE TIME OF PLANTING. ROOTS ON THE 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

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J BIKE RACK: DUMOR 125-20

NOT TO SCALE

PKJ DESIGN GROUP

ISSUE DATE	PROJECT NUMBER	PLAN INFORMATION
12/3/2021	UT21112	

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ELECTRONIC SEAL
STATE OF UTAH

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PM:	JTA
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LANDSCAPE DETAILS

PRELIMINARY PLANS NOT FOR CONSTRUCTION

LP-501

ANTELOPE MEADOWS

EAGLE MOUNTAIN, UTAH

IRRIGATION PLAN SPECIFICATIONS

IRRIGATION SPECIFICATIONS

PART I - GENERAL

1.1 SUMMARY

Work to be done includes all labor, materials, equipment and services required to complete the Project irrigation system as indicated on the Construction Drawings, and as specified herein. Includes but is not limited to: Furnishing and installing underground and above ground sprinkler system complete with any accessories necessary for proper function and operation of the system. All plant material on the Project shall be irrigated. 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 pope and wire in sleeving under hardscapes. Actual routing of pipe, wire or other components may be altered due to site conditions not accounted for in the design process.

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

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

1.3 DEFINITIONS

A. Water Supply: Culinary water piping and components, furnished and installed by others to provide irrigation water to this Project, including but not limited to backflow preventor, saddles, nipples, spools, shut off valves, corporation stop valves, water meters, pressure regulation valves, and piping upstream of (or prior to) the Point of Connection.

B. Point of Connection: Location where the Contractor shall tie into the water supply. May require backflow preventor, saddle, nipples, spools, isolation valves or Stop and Waste valve for landscape irrigation needs and use.

C. Main Line Piping: Pressurized piping downstream of the Point of Connection to provide water to remote control valves and quick couplers. Normally under constant pressure.

D. Lateral Line Piping: Circuit piping downstream of remote control valves to provide water to sprinkler heads, 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 repaining 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. Culinary water shall be used on this Project. Install backflow preventor and RPZ as needed.

2.4 CONTROL SYSTEM

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

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

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

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

C. Wires connecting the remote control valves to the irrigation controller are single conductors, type PE. Wire construction shall incorporate a solid copper conductor and polyethylene (PE) insulation with a minimum thickness of 0.045 inches. The wires shall be UL listed for direct burial in irrigation systems and be rated at a minimum of 30 VAC. Paige Electric Co., LP specification number P70705D.

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

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

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

2.5 SLEEVING

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

2.6 MAIN LINE PIPE

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

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

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

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

2.7 MAIN LINE FITTINGS

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

2.8 ISOLATION VALVES

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

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

2.9 MANIFOLDS

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

2.10 REMOTE CONTROL VALVES

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

2.11 MANUAL CONTROL VALVES

A. Quick coupler valve shall be attached to the manifold sub-main line using a Lasco G17S212 swing joint assembly with snap-lock outlet and brass stabilizer elbow. Quick coupler valve shall be placed within a Carson 10" round valve box. Top of quick coupler valve cover shall allow for complete installation of valve box lid, but also allow for insertion and operation of key. Base of quick coupler valve and top of quick coupler swing joint shall be encased in ¾" gravel. Contractor shall not place quick coupler valves further than 200 feet apart, to allow for spot watering or supplemental irrigation of new plant material. Quick coupler valve at POC shall not be eliminated or relocated.

2.12 LATERAL LINE PIPE

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

2.13 LATERAL LINE FITTINGS

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

2.14 Spray Sprinklers

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

2.15 VALVE BOXES

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

2.16 IMPORT BACKFILL

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

2.17 OTHER PRODUCTS

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

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

PART 3 - EXECUTION

3.1 PREPARATION

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

3.2 TRENCHING AND BACKFILLING

A. Pulling of pipe shall not be permitted on this project. Over excavate trenches both in width and depth. Ensure base of trench is rock or debris free to protect pipe and wire. Grade trench base to ensure flat, even support of piping. Backfill with clean soil or import material. Contractor shall backfill no less than 2" around entire pipe with clean, rock free fill. Main line piping and fittings shall not be backfilled until OAR has inspected and pipe has passed pressure testing. Perform balance of backfill operation to eliminate any settling.

3.3 SLEEVING

A. Sleeve all piping and wiring that pass under paving or hardscape features. Wiring shall be placed in separate sleeving from piping. Sleeves shall be positioned relative to structures or obstructions to allow for pipe or wire within to be removed if necessary.

3.4 GRADES AND DRAINAGE

A. Place irrigation pipe and other elements at uniform grades. Winterization shall be by evacuation with compressed air. Automatic drains shall not be installed on this Project. Manual drains shall only be installed at POC where designated on Construction Drawings.

3.5 PVC PIPE

A. Install pipe to allow for expansion and contraction as recommended by pipe manufacturer.

B. Install main line pipes with 18" of cover, lateral line pipes with 12" of cover.

C. Drawings show diagrammatic or conceptual location of piping - Contractor shall install piping to minimize change of direction, avoid placement under large trees or large shrubs, avoid placement under hardscape features.

D. Plastic pipe shall be cut squarely. Burrs shall be removed. Spigot ends of pipes 3" and larger shall be beveled.

E. Pipe shall not be glued unless ambient temperature is at least 50 degress F. Pipe shall not be glued in rainy conditions unless properly tented. All solvent weld joints shall be assembled using IPS 711 glue and P70 primer according to manufacturer's specification, no exceptions. All workers performing glue operations shall provide evidence of certification. Glued main line pipe shall cure a minimum of 24 hours prior to being energized. Lateral lines shall cure a minimum of 2 hours prior to being energized and shall not remain under constant pressure unless cured for 24 hours.

F. Appropriate thrust blocking shall be performed on fittings 3" and larger. All threaded joints shall be wrapped with Teflon tape or paste unless directed by product manufacturer or sealing by o-ring.

3.6 CONTROLLERS

A. All grounding for pedestal controllers shall be as directed by controller manufacturer and ASIC guidelines, not to exceed a resistance reading of 5 OHMs.

B. Locate controllers in protected, inconspicuous places, when possible. Coordinate location of pedestal controllers with Landscape Architect to minimize visibility.

C. Coordinate location of wall mount controllers with building or electrical Contractor to facilitate electrical service and future maintenance needs. Wall mount shall be securely fastened to surface. If exterior mounted, wall mount controllers shall have electrical service wire and field control wire in separate, appropriate sized weatherproof electrical conduit, PVC pipe shall not be used.

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

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

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

3.7 VALVES

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

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

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

3.8 SPRINKLER HEADS

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

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

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

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

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

3.9 FIELD QUALITY CONTROL

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

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

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

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

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

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

3.10 ADJUSTMENT

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

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

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

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

3.11 CLEANING

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

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

C. Contractor is responsible for removal and disposal of offsite trash and debris generated as a result of this Project.

D. OAR shall perform periodic as well as a final cleanliness inspection.

E. Contractor shall leave Project in at least a 'broom clean' condition.

END OF SECTION

90 Day Establishment Period Irrigation Schedule (April, May, June)

	Type	Sun	Mon	Tues	Wed	Thurs	Fri	Sat	Operating Pressure
Turf	Turf	15 min	15 min	15 min	15 min	15 min	15 min	15 min	30 psi
Shrubs	Shrubs	25 min	0	25 min	0	25 min	0	25 min	40 psi

Note: Begin irrigation 4:00 am, only 1 cycle per day.

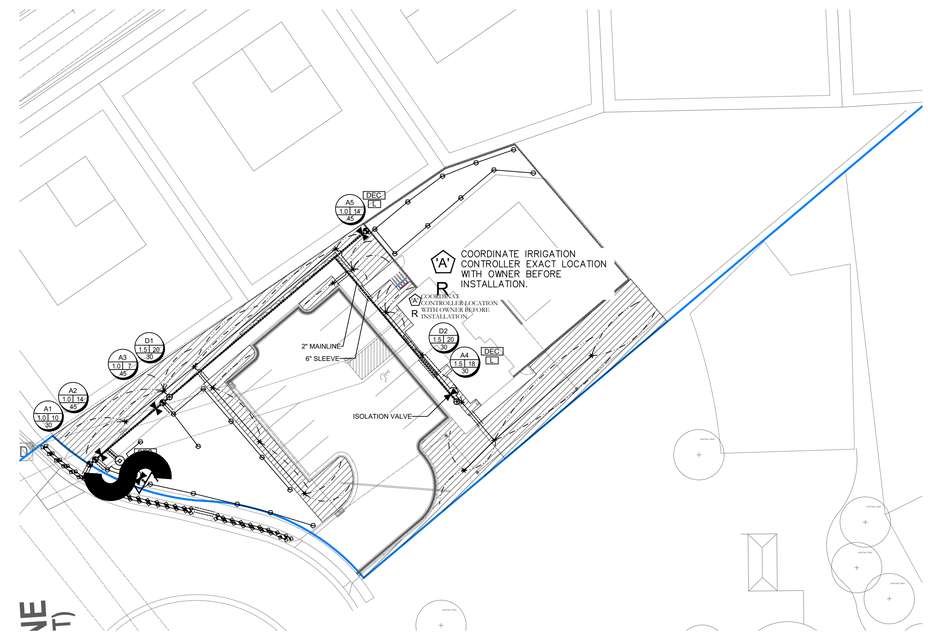
Regular Irrigation Schedule (see Seasonal Differential Chart)

	Type	Sun	Mon	Tues	Wed	Thurs	Fri	Sat	Operating Pressure
Turf	Turf	15 min	15 min		15 min		15 min		30 psi
Shrubs	Shrubs	45 min		45 min		45 min		45 min	40 psi

Note: Begin irrigation 4:00 am, only 1 cycle per day.

Seasonal Differential

	April	May	June	July	August	Sept.	October
Turf	10 min	10 min	15 min	15 min	15 min	10 min	10 min
Shrubs	30 min	30 min	45 min	45 min	45 min	30 min	30 min



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

ISSUE DATE	PROJECT NUMBER	PLAN INFORMATION
12/3/2021	UT21112	

NO.	REVISION	DATE
1	XXXX	XX-XX-XX
2		
3		
4		
5		
6		
7		

811 BLUE STAKES OF UTAH
UTILITY NOTIFICATION CENTER, INC
1-800-662-4111
www.bluestakes.org

N

0' 15' 30' 60' 120'
GRAPHIC SCALE: 1" = 30'

PROJECT INFORMATION

ANTELOPE MEADOWS
EAGLE MOUNTAIN, UTAH

DEVELOPER / PROPERTY OWNER / CLIENT

FIELDSTONE HOMES
C/O RANDY SMITH

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 ANDSWORTH
812812-5301
12/03/2021
ELECTRONIC SEAL
STATE OF UTAH

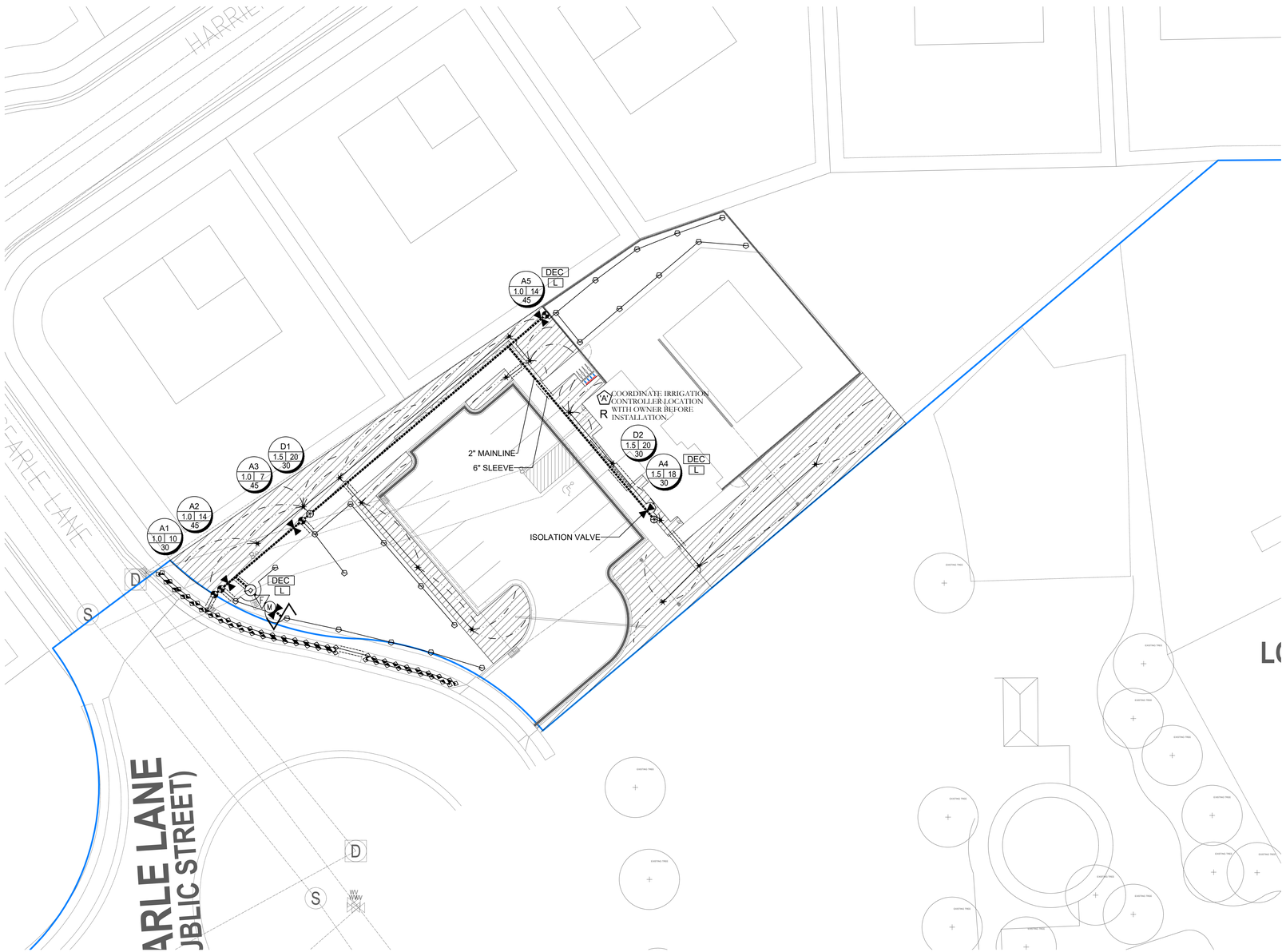
DRAWING INFO

PM: JTA
DRAWN: ACP
CHECKED: JMA
PLOT DATE: 12/3/2021

IRRIGATION PLAN COVER

PRELIMINARY PLANS NOT FOR CONSTRUCTION

IR-100



IRRIGATION LEGEND

SYMBOL	MANUFACTURER-MODEL NUMBER
	RAINBIRD RD04-S-PRS POP UP SPRAY 5 SERIES @ 30 PSI
	RAINBIRD RD04-S-PRS POP UP SPRAY 8 U-SERIES @ 30 PSI
	RAINBIRD RD04-S-PRS POP UP SPRAY 10 U-SERIES @ 30 PSI
	RAINBIRD RD04-S-PRS POP UP SPRAY 12 U-SERIES @ 30 PSI
	RAINBIRD RD04-S-PRS POP UP SPRAY 15 U-SERIES @ 30 PSI
	RAINBIRD RD04-S-PRS POP UP SPRAY 15 SST @ 30 PSI
	RAINBIRD RD04-S-PRS POP UP SPRAY 15 EST @ 30 PSI
	RAINBIRD 5000 SERIES MPR NOZZLES @ 55 PSI
	RAINBIRD 8005 SERIES Q#8-6.6 GPM, H#14-12.6 GPM, F#26-24.3 GPM NOZZLES @ 55 PSI
	IRRIGATION POINT OF CONNECTION, PRESSURE REDUCER AND RPZ BACKFLOW PREVENTION - CONNECT TO WATER SERVICE LINE AND METER. (SEE CIVIL PLANS) CONTRACTOR LOCATE AND VERIFY EXACT LOCATION ON SITE.
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.
M	MASTER VALVE
F	FLOW SENSOR
Q	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)
	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 CULINARY SYSTEM. IF IT IS NOT CONNECTED TO CULINARY, CONTACT THE OWNER AND LANDSCAPE ARCHITECT TO COORDINATE A SECONDARY SYSTEM AND REQUIRED COMPONENTS.
4. VERIFY THAT THE POINT OF CONNECTION IS IN THE CORRECT LOCATION BEFORE INSTALLATION. ALL CONNECTIONS ON THIS PROJECT ARE TO BE CULINARY WATER AND SHOULD BE NOTED AS SUCH; THEREFORE, ALL PARTS MUST MEET WATER STANDARDS THAT PERTAIN TO CULINARY WATER.USE A BACKFLOW PREVENTOR AND RPZ AS SPECIFIED.
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"	55 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
12/3/2021	UT21112						PM: JTA
							DRAWN: ACP
							CHECKED: JMA
							PLOT DATE: 12/3/2021

NO.	REVISION	DATE
1	XXXX	XX-XX-XX
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N

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

ANTELOPE MEADOWS
EAGLE MOUNTAIN, UTAH

FIELDSTONE HOMES
C/O RANDY SMITH

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Landscape Architecture Planning & Visualization
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LEHI, UTAH 84043 (801) 960-2698
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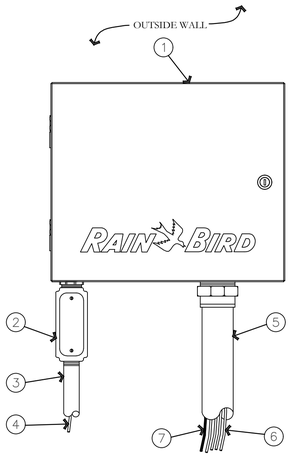
LICENSED LANDSCAPE ARCHITECT
JEREMY AINSWORTH
8128121-5301
12/03/2021
ELECTRONIC SEAL
STATE OF UTAH

IRRIGATION PLAN

PRELIMINARY PLANS NOT FOR CONSTRUCTION

IR-101



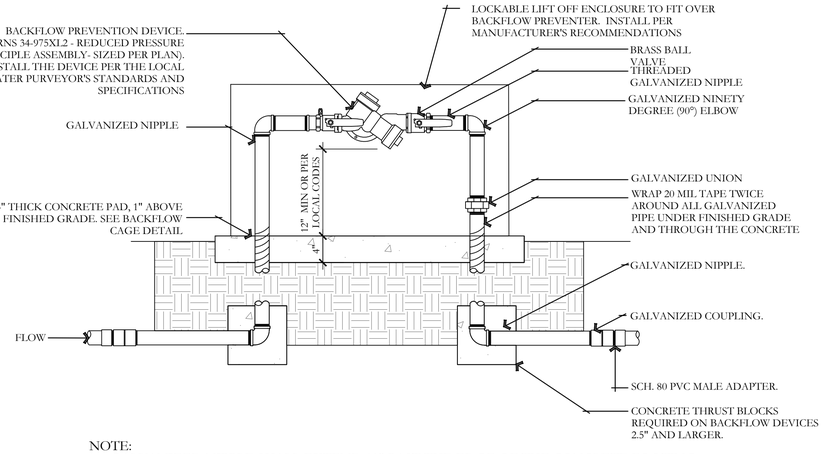
1. IRRIGATION CONTROLLER: RAIN BIRD ESP-LXMEF CONTROLLER WITH FLOW SMART MODULE IN LXMM METAL CABINET WITH OUTSIDE WALL MOUNT. INSTALL CONTROLLER AND CABINET ON WALL PER MANUFACTURER'S RECOMMENDATIONS.
2. JUNCTION BOX
3. 1-INCH CONDUIT AND FITTINGS TO POWER SUPPLY
4. POWER SUPPLY WIRE
5. 2-INCH CONDUIT AND FITTINGS FOR STATION WIRES
6. MASTER VALVE AND REMOTE CONTROL VALVE WIRES
7. FLOW SENSOR WIRE (PE 39, 89 OR 54) TO FLOW SENSOR

NOTES:
1. ESP-LXMEF CONTROLLER IS AVAILABLE IN 8- OR 12-STATION BASE MODELS. ADDITIONAL MODULES IN 4-, 8- AND 12-STATION VERSIONS MAY BE ADDED TO BRING THE CONTROLLER UP TO 48 STATIONS MAXIMUM.
2. FOR EASE OF INSTALLATION INTO A CONTROLLER WITH MORE THAN 24 STATIONS, INSTALL A JUNCTION BOX AT THE BASE OF CONTROLLER AND TRANSITION LARGER VALVE AND COMMON WIRES FROM FIELD TO 18 AWG MULTI CONDUCTOR WIRE TO BE USED IN CONTROLLER.
3. USE STEEL CONDUIT FOR ABOVE GRADE AND SCH 40 PVC CONDUIT FOR BELOW GRADE CONDITIONS.
4. PROVIDE PROPER GROUNDING COMPONENTS TO ACHIEVE GROUND RESISTANCE OF 10 OHMS OR LESS.

A ESP-LXMEF CONTROLLER WITH FLOW SMART MODULE IN METAL CABINET

NOT TO SCALE

PKJ DESIGN GROUP

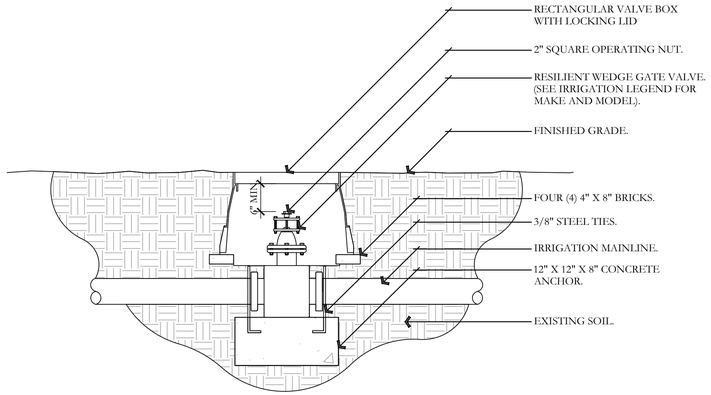


NOTE:
1. GALVANIZED NIPPLE SHALL EXTEND 12" PAST THE EDGE OF THE CONCRETE FOOTING.
2. SCH. 80 PVC MALE ADAPTER SHALL BE USED IN CONNECTION FROM GALVANIZE TO THE MAINLINE.
3. BACKFLOW PREVENTION DEVICE SHALL BE LOCATED AS CLOSE AS POSSIBLE TO THE LANDSCAPE METER.
4. BACKFLOW PREVENTION DEVICE SHALL BE LOCATED IN PLANTING AREA UNLESS APPROVED BY OWNER'S REPRESENTATIVE.
5. SEE DETAIL FOR BACKFLOW CAGE INSTALLATION.
6. ALL ASSEMBLY PARTS (THREADED NIPPLES, FITTINGS, ETC.) SHALL BE GALVANIZED OR BRASS PER LOCAL CODES AND REQUIREMENTS.
7. ALL BACKFLOW PREVENTION DEVICES SHALL HAVE FREEZE BLANKET INCLUDED UPON INSTALLATION.
8. ALL GALVANIZED CONNECTIONS SHALL TO BE MADE USING PIPE THREAD SEALANT. ALL SCH. 80 PVC TO GALVANIZED CONNECTIONS TO BE MADE USING TEFLON TAPE.

B BACKFLOW PREVENTION DETAIL

NOT TO SCALE

PKJ DESIGN GROUP

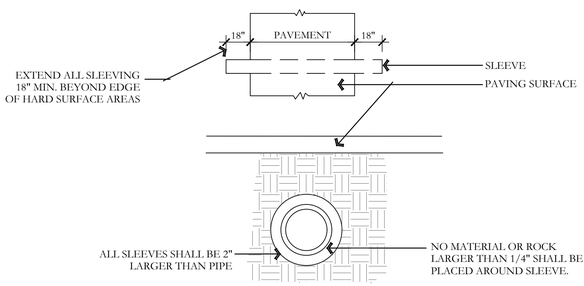


NOTES:
1. INSTALL GATE VALVE PER MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS.
2. VALVE BOX SHALL BE WRAPPED WITH MINIMUM 3 MIL. THICK PLASTIC AND SECURE IT TO VALVE BOX USING DUCT TAPE OR ELECTRICAL TAPE.
3. VALVE BOX SHALL BE LOCATED IN PLANTING AREA.

C GATE VALVE AND ANCHOR DETAIL

NOT TO SCALE

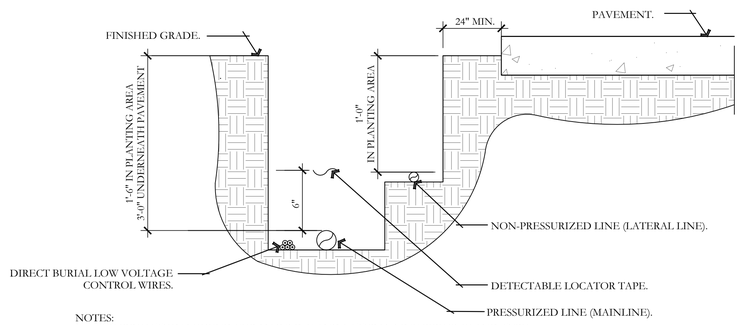
PKJ DESIGN GROUP



D TYPICAL SLEEVING DETAIL

NOT TO SCALE

PKJ DESIGN GROUP

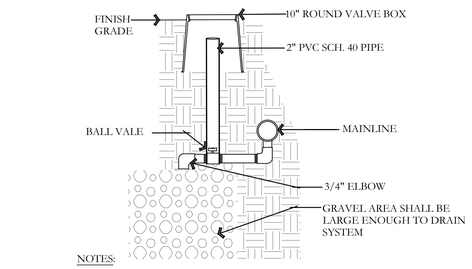


NOTES:
1. SEE IRRIGATION LEGEND FOR MAINLINE AND LATERAL LINE PIPE SIZE AND TYPE.
2. DIRECT BURIAL CONTROL WIRES SHALL BE INSTALLED IN SCH. 40 PVC ELECTRICAL CONDUIT IF REQUIRED.
3. 2-WIRE IRRIGATION WIRE SHALL BE INSTALLED IN SCH. 40 PVC ELECTRICAL CONDUIT.
4. DETECTABLE LOCATOR TAPE SHALL BE LOCATED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

E IRRIGATION TRENCHING DETAIL

NOT TO SCALE

PKJ DESIGN GROUP

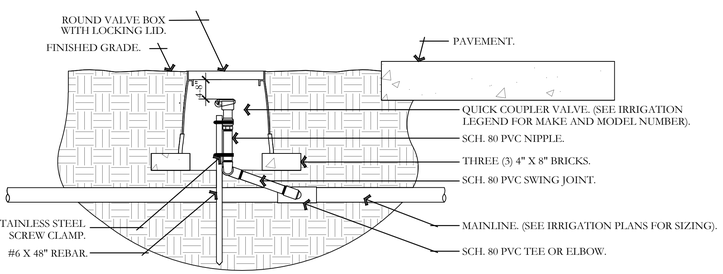


NOTES:
1. ALL FITTINGS TO BE SCH. 80 PVC
2. PROVIDE OWNER WITH KEY

F MANUAL DRAIN DETAIL

NOT TO SCALE

PKJ DESIGN GROUP

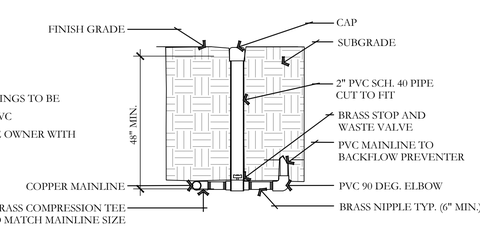


NOTES:
1. ALL THREADED CONNECTIONS SHALL BE INSTALLED USING TEFLON TAPE.
2. VALVE BOX SHALL BE WRAPPED WITH A MINIMUM 3 MIL THICK PLASTIC AND SECURED TO THE VALVE BOX USING DUCT TAPE OR ELECTRICAL TAPE.
3. ALL QUICK COUPLERS SHALL BE INSTALLED A MINIMUM OF 18" OFF OF THE MAINLINE.
4. VALVE BOXES SHALL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

G QUICK COUPLER DETAIL

NOT TO SCALE

PKJ DESIGN GROUP



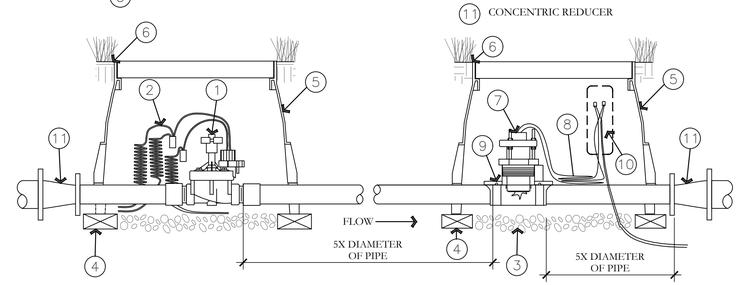
NOTES:
1. ALL FITTINGS TO BE SCH. 80 PVC
2. PROVIDE OWNER WITH KEY

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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ISSUE DATE	PROJECT NUMBER	PLAN INFORMATION
12/3/2021	UT21112	

NO.	REVISION	DATE
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EAGLE MOUNTAIN, UTAH

DEVELOPER / PROPERTY OWNER / CLIENT

FIELDSTONE HOMES
C/O RANDY SMITH

LANDSCAPE ARCHITECT / PLANNER

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

LICENSED LANDSCAPE ARCHITECT JEREMY AINSWORTH 8126127-5301 12/03/2021 ELECTRONIC SEAL STATE OF UTAH

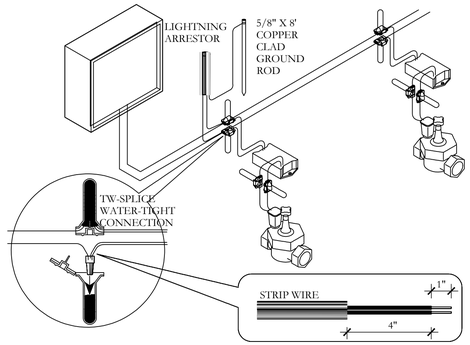
DRAWING INFO

PM:	JTA
DRAWN:	ACP
CHECKED:	JMA
PLOT DATE:	12/3/2021

IRRIGATION DETAILS

PRELIMINARY PLANS NOT FOR CONSTRUCTION

IR-501



J 2-WIRE CONNECTION DETAIL

NOT TO SCALE

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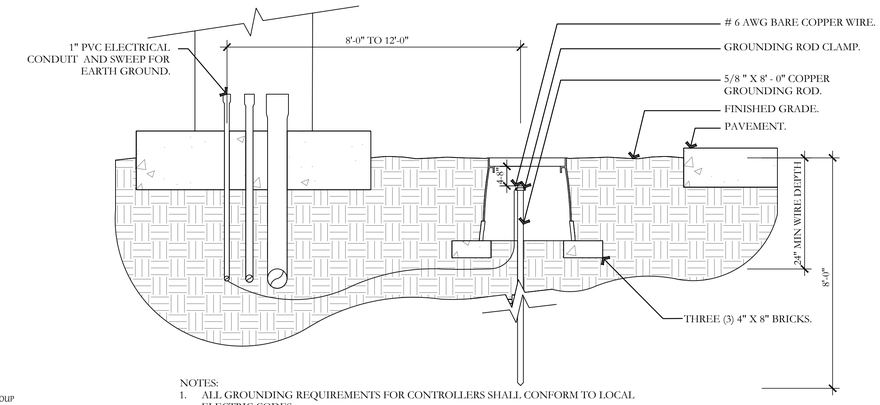
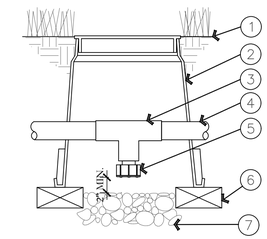


NOTES:
1. ALL GROUNDING REQUIREMENTS FOR CONTROLLERS SHALL CONFORM TO LOCAL ELECTRIC CODES.
2. GROUNDING ROD SHALL NOT BE LOCATED IN THE SAME TRENCH AS THE IRRIGATION MAINLINES OR LATERAL LINES.
3. VALVE BOX SHALL BE WRAPPED WITH A MINIMUM 3 MIL THICK PLASTIC AND SECURED TO THE VALVE BOX USING DUCT TAPE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

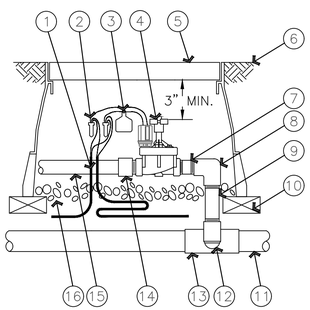


1. FINISH GRADE/TOP OF MULCH
2. VALVE BOX WITH COVER: RAIN BIRD VB-6RND
3. PVC SCH 40 TEE
4. PVC LATERAL PIPE
5. FILTERED DRAIN VALVE: RAIN BIRD 16A-FDV-075
6. BRICK (1 OF 2)
7. 6-INCH MINIMUM DEPTH OF 3/4" WASHED GRAVEL

L LATERAL LINE DRAIN VALVE DETAIL

NOT TO SCALE

PKJ DESIGN GROUP



1. 30-INCH LENGTH OF 2-WIRE CABLE
2. WATERPROOF CONNECTION RAIN BIRD WC20 (TWO REQUIRED)
3. ID TAG: RAIN BIRD VID SERIES
4. REMOTE CONTROL VALVE: RAIN BIRD PEB/PESB/PESB-R WITH IVM
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 SCH 80 NIPPLE (2-INCH LENGTH, HIDDEN) AND SCH 40 ELL
12. PVC SCH 40 TEE OR ELL
13. PVC SCH 40 MALE ADAPTER
14. PVC LATERAL PIPE
15. 3-INCH MINIMUM DEPTH OF 3/4-INCH WASHED GRAVEL

M ELECTRIC REMOTE-CONTROL VALVE PEB OR PESB SERIES WITH IVM

NOT TO SCALE

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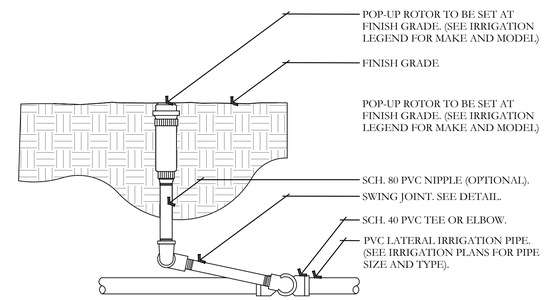

NOTES:
1. ALL THREADED CONNECTION POINTS BETWEEN SCH. 40 PVC AND SCH. 80 PVC FITTING SHALL BE INSTALLED USING TEFLON TAPE.
2. CONTRACTOR SHALL COMPACT SOIL AROUND ROTOR AND RISER PRIOR TO PLANTING, PLUGGING, SEEDING, OR LAYING OF SOD.

N ROTOR SPRAYHEAD DETAIL

NOT TO SCALE

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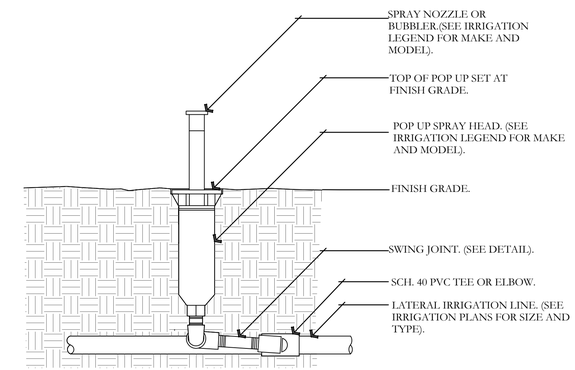

NOTE:
1. 6" POP UPS SHALL BE USED IN TURF AREAS.
2. CONTRACTOR SHALL SETTLE SOIL AROUND THE POP UP AFTER INSTALLATION.
3. ALL POP UP SPRAY HEADS SHALL HAVE CHECK VALVES.
4. ALL SCH. 40 PVC TO SCH. 80 PVC CONNECTIONS SHALL BE MADE USING TEFLON TAPE.

O POP UP-SPRAY HEAD DETAIL

NOT TO SCALE

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ISSUE DATE	PROJECT NUMBER
12/3/2021	UT21112

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LICENSED LANDSCAPE ARCHITECT
JEREMY AINSWORTH
8128121-5301
12/03/2021
ELECTRONIC SEAL
STATE OF UTAH

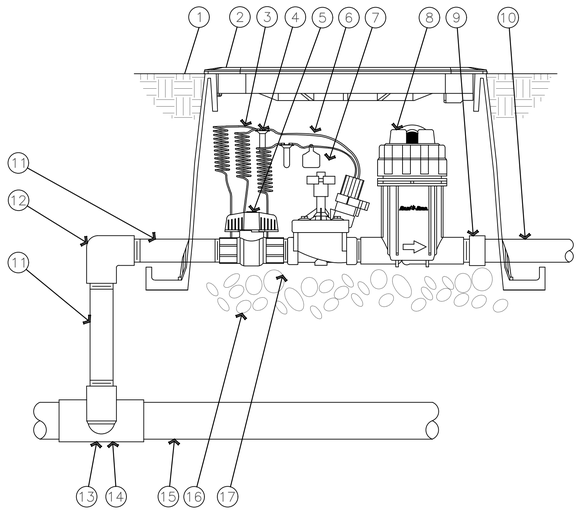
DRAWING INFO

PM:	JTA
DRAWN:	ACP
CHECKED:	JMA
PLOT DATE:	12/3/2021

IRRIGATION DETAILS

PRELIMINARY PLANS NOT FOR CONSTRUCTION

IR-502

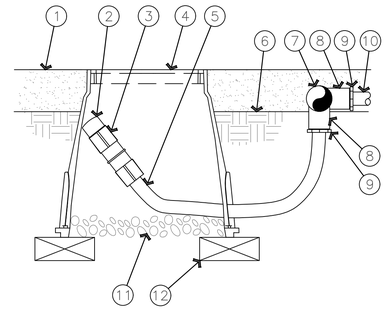


1. FINISH GRADE/TOP OF MULCH
2. VALVE BOX WITH COVER: RAIN BIRD VB-STD
3. 30-INCH LINEAR LENGTH OF WIRE, COILED
4. WATERPROOF CONNECTION: RAIN BIRD DB SERIES
5. 1-INCH BALL VALVE (INCLUDED IN XCZ-PRB-100-COM KIT)
6. ID TAG
7. REMOTE CONTROL VALVE: RAIN BIRD PESB (INCLUCED IN XCZ-PRB-100-COM KIT)
8. PRESSURE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

P DRIP CONTROL ZONE KIT DETAIL

NOT TO SCALE

PKJ DESIGN GROUP



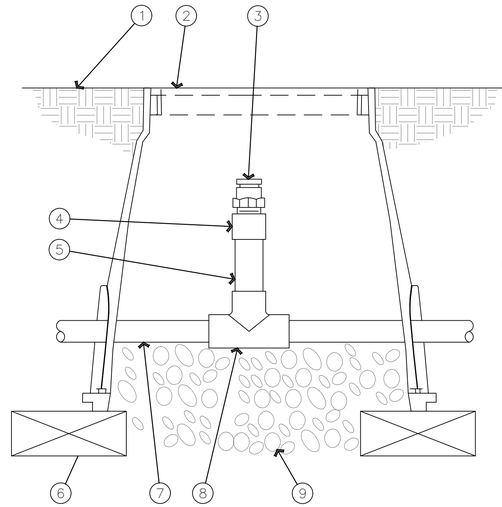
1. MULCH
2. FLUSH CAP FOR EASY FIT COMPRESSION FITTINGS: POTABLE:RAIN BIRD MDCFCAP
3. EASY FIT COUPLING: RAIN BIRD MDCFCOUP
4. SUBTERRANEAN EMITTER BOX: RAIN BIRD SEB 7XB
5. ½" POLYETHYLENE TUBING: RAIN BIRD XF BLANK TUBING
6. FINISH GRADE
7. PVC EXHAUST HEADER
8. PVC SCH 40 TEE OR EL
9. BARB X MALE 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

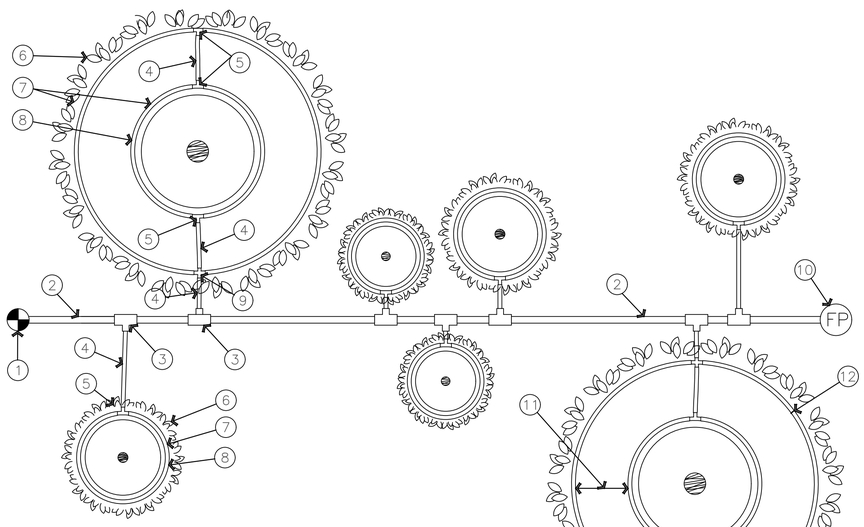


1. FINISH GRADE
2. SUBTERRANEAN EMITTER BOX: RAIN BIRD SEB 7XB
3. ½" AIR RELIEF VALVE: RAIN BIRD ARV050 TO BE INSTALLED AT HIGH POINTS IN DRIP ZONE
4. PVC SCH 40 FEMALE ADAPTER
5. PVC SCH 80 RISER
6. BRICK (1 OF 2)
7. PVC HEADER PIPE
8. PVC SCH 40 TEE
9. 3" MINIMUM DEPTH OF 3/4" WASHED GRAVEL

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

ISSUE DATE	PROJECT NUMBER
12/3/2021	UT21112

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

PROJECT INFORMATION

ANTELOPE MEADOWS
EAGLE MOUNTAIN, UTAH

DEVELOPER / PROPERTY OWNER / CLIENT

FIELDSTONE HOMES
C/O RANDY SMITH

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
8/28/21 - 5301
12/03/2021
ELECTRONIC SEAL
STATE OF UTAH

DRAWING INFO

PM:	JTA
DRAWN:	ACP
CHECKED:	JMA
PLOT DATE:	12/3/2021

IRRIGATION DETAILS

PRELIMINARY PLANS NOT FOR CONSTRUCTION

IR-503

EAGLE MOUNTAIN	**EAGLE MOUNTAIN CITY** **PLANNING COMMISSION MEETING** **DECEMBER 14, 2021**
TITLE:	ACTION ITEM / PUBLIC HEARING - Eagle Ridge
ITEM TYPE:	General Plan Amendment, Rezone, and Preliminary Plat
APPLICANT:	Braiden

ACTION ITEM:
Yes

PUBLIC HEARING:
Yes

PREPARED BY:
Tayler Jensen, Planning

BACKGROUND:

Parcel 58:044:0011 was annexed into Eagle Mountain on November 17th 2020, as agriculturally zoned property with a future land use designation of *Agriculture/Rural Density One.*

The applicant is proposing a general plan amendment to designate the property *Agriculture/Rural Density Two*, along with this general plan amendment the applicant is proposing to rezone the property to the **RD1** zone, and is proposing a 17 unit preliminary plat.

ITEMS FOR CONSIDERATION:

The following items should be considered when making a recommendation to the City Council.

General Plan Amendment

The applicant is proposing an amendment to the General Plan Land Use Map from *Agriculture Rural Density One* to *Agriculture Rural Density Two* for the 22.049 acres of parcel 58:044:0011 that are included in this development. Arrival which is located directly to the east of the parcel is designated as *Agriculture Rural Density Two.*

Rezone

The following criteria, found in 17.90.060 shall be considered when considering a rezone:

A. Compliance with General Plan: Assuming the General Plan is amended changing the properties future land use designation to *Agriculture Rural Density Two,* the proposal to rezone from Agriculture to **RD1** would be appropriate as **RD1** is an appropriate zone in the *Agriculture Rural Density Two* land use.

B. Compatibility Determination: The property to the east (Arrival) was approved under a previous zoning district as a *Base Density Residential* development, that most closely matches the **RD2** designation in our current ordinance. Property to the North, South, and West of the proposal are zoned open space and have sold their development rights to Camp Williams and will not develop.
C. City Services: The proposed development is not anticipated to overburden the City's service capacity.
D. Traffic Generation: The proposed plat is not expected to generate significant traffic.
E. Property Values: The proposed use is not expected to have a significant negative impact on surrounding property values.

Preliminary Plat
The following shall be considered when reviewing the preliminary plat.

Connectivity: The proposed preliminary plat doesn't meet connectivity code, as it exceeds maximum block lengths, is a cul-de-sac, which does not connect to any other property or road. However, per 16.30.090 4 the Planning Commission may waive this requirement as the plat creates no new nodes, and can be considered landlocked since the surrounding properties have no remaining development rights, and there is not another access into Arrival to create a loop road. It should be noted the Fire Marshal has reviewed this proposal, and with the inclusion of a fire approved turnaround (the cul-de-sac) they have no concern with the block length in this location.

Development Standards:
The following development standards apply to properties zoned **RD1**:

- Minimum Lot Size: 1 Acre
- Park requirements: n/a
- Minimum Lot Frontage: 125'
- Minimum Lot Frontage Curves and Circles: 75'
- Front Setback: 30'
- Front Garage Setback: 40'
- Rear Setback: 35'
- Side Setback: 15'
- Garage Side Setback: 15'

- Street Side Setback (Corner Lot): 25'

REQUIRED FINDINGS:

Amendments to the General Plan are legislative actions and do not require approval based upon findings of facts. The Commission should consider the health, safety, and welfare of the Community. Rezones are legislative decisions and are considered valid if reasonably debatable and not illegal. The criteria for a Rezone approval can be found in EMMC 17.90.060. Preliminary Plat approvals are based upon compliance with City Code requirements. The approval criteria for a Preliminary Plat can be found in EMMC 16.20.050.

RECOMMENDATION:

We recommend the Planning Commission make a motion to recommend approval of the General Plan Amendment, Rezone, and Preliminary Plat to the City Council for the reasons set forth in the staff report an din the meeting with any conditions the Planning Commission finds appropriate.

ATTACHMENTS:

Vicinity Map
Compatibility Statement
Preliminary Plat

Scenic Estates
Arrival Development
Highway 73
City Hall

SCENIC
DEVELOPMENT
GROUP

Eagle Mountain City

1650 E Stagecoach Run

Eagle Mountain, UT 84005

RE: Scenic Estates – Compatibility Statement and Zoning Districts

Scenic Estates is a proposed 17 lot subdivision consisting of approximately 22 acres. The current zoning is Agricultural, and we are requesting a rezone to Rural Density 1. The neighboring development to the east is zoned Rural Density with .8 acres to the acre and the 182 acres to the west will remain as open space.

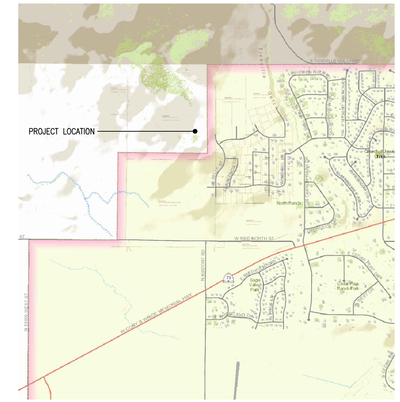
The lot size for our proposed development is 1 acre minimum.

The surrounding land uses, and the proposed development makes Scenic Estates compatible with the Zoning Districts and Eagle Mountain City requirements.

Thank you for your consideration,

Braiden Rindlisbacher

Scenic Development Group



NOTES

1. PARCEL DATA WAS OBTAINED FROM THE UTAH AGRC WEBSITE.
2. PARCEL OWNER INFORMATION WAS OBTAINED FROM THE ONLINE UTAH COUNTY PARCEL MAP.
3. THE LOT LAYOUT FOR ARRIVAL SUBDIVISION IS PER DRAWINGS PREPARED BY FOCUS ENGINEERING.
4. TOTAL AREA UTILIZED FOR THIS 17 LOT PROJECT IS 22.049 ACRES.
5. BENCH DRAINS TO BE PROVIDED ALONG UPHILL SIDE OF LOTS TO DIRECT FLOW DOWN LOT LINES.
6. THE DRAINAGE CHANNEL UPHILL OF LOTS 1 THROUGH 3 WILL BE ADJUSTED TO FLOW ALONG THE EAST SIDE OF LOT 3. A DETAILED ANALYSIS WILL BE DONE AT A LATER DATE AND THE DRAINAGE MAY NEED TO FLOW THROUGH EITHER LOT 1 OR LOT 2, DEPENDING ON TOPOGRAPHY.
7. LOTS 12 THROUGH 16 WILL BE REQUIRED TO RETAIN WATER ON THEIR LOT.
8. LOT 17 MAY DISCHARGE INTO THE DETENTION BASIN.
9. THE STREET AND LOTS 1 THROUGH 11 WILL DRAIN TO THE STREET AND BE COLLECTED IN STORM DRAIN PIPING AND DETAINED IN A DETENTION BASIN IN PARCEL A.

GRAPHIC SCALE

100 0 50 100 200 400

(IN FEET)
1 inch = 100 ft.

Know what's below. Call 811 before you dig.
BLUE STAKES OF UTAH
UTILITY NOTIFICATION CENTER, INC.
www.bluestakes.org
1-800-662-4111

JT ENGINEERING
JT Engineering, PC
7955 South 2325 East
South Weber, Utah
ph 801.866.7702

LICENSED PROFESSIONAL ENGINEER
No. 4944049-2202
JASON H. THOMPSON
STATE OF UTAH

#	DATE	BY	DESCRIPTION

REVISIONS

BUTTERFIELD 17 LOT SUBDIVISION

CONCEPT PLAN

EAGLE MOUNTAIN, UTAH

SHEET SIZE: ARCH D
H. SCALE: 1" = 100'
V. SCALE: N/A
DATE: SEPT. 14, 2021
© COPYRIGHT 2021

SHEET NO.
C1
1 of 1

PATH: EM-20 SF Concept v7.0.dwg PLOTTED: September 14, 2021 3:13PM

EAGLE MOUNTAIN	**EAGLE MOUNTAIN CITY** **PLANNING COMMISSION MEETING** **DECEMBER 14, 2021**
TITLE:	ACTION ITEM / PUBLIC HEARING - RTI Overlay Zone (Code Amendment)
ITEM TYPE:	Development Code Amendment
APPLICANT:	Staff

ACTION ITEM:
Yes

PUBLIC HEARING:
Yes

PREPARED BY:
Steve Mumford, Planning

BACKGROUND:

The Regional Technology and Industry Overlay Zone (RTI) has been a valuable economic development tool for the City to attract and land some large technology and industrial businesses. The City received an award several years ago from the Utah Chapter of the American Planning Association for the creation of the ordinance, as it was a cutting edge planning strategy that was the first of its kind in Utah.

The overlay zone was created with an automatic sunset date of May 31, 2022, to incentivize the Commission and Council to review it prior to that time to examine the ordinance, to review the land uses and processes defined in the ordinance, and to consider renewal, renewal with tweaks/changes, or to remove the sunset date altogether.

Some of the benefits or positives of the overlay zone have included:

- The approval process in the RTI Overlay has been listed by major companies (facebook, Tyson, Google) as a key reason for them choosing Eagle Mountain for their business.
- More certainty in the approval process and development standards goes a long way in our economic development efforts, in efforts of property owners, and efforts of industrial and business park real estate brokers.
- Administrative reviews/approvals (site plans) don't get caught up in legislative review or create controversy for the approval authority.
- The overlay zone has given us an economic development edge over competing cities.

See the attached letter from the City's Economic Development

Director for his perspective on the overlay zone and the proposed changes.

ITEMS FOR CONSIDERATION:

DRC Liaison

As the City does not currently have an active Economic Development Board, this amendment states that the City Council liaison to the DRC (Development Review Committee) is the liaison to the Planning Commission.

Final Plat Application

The current ordinance allows DRC approval of a preliminary plat for RTI projects; however, the preliminary plat has been an unnecessary step for the RTI projects that have been approved in the city, just creating extra work for both the applicant and the staff. This amendment clarifies that RTI projects that require subdividing of property can move right to the final plat application along with their RTI site plan application.

Prohibited Uses

Now that several RTI projects have been approved that each have a large demand and/or impact to the City's utilities, the City would like to discourage additional projects that create a significant impact on the City's utilities or infrastructure. This amendment allows the City to prohibit a proposed project if the impacts are too significant.

Architectural Standards

An additional photo/rendering of an industrial building was added as an architectural example.

Repeal Date

An automatic repeal date was included in the RTI code to force the City Council to evaluate the zone's effectiveness after a specific time period. We believe the overlay zone and it's streamlined approval process has been instrumental in solidifying deals with facebook, Tyson, and Google, and thus has been very effective. The City has been in discussions with those representing potential RTI projects recently, and they have been unwilling to move forward due to the existence of an automatic repeal date, and the fear of the repeal negating significant time and money spent to secure a site and begin the approval process for a project. The repeal date accomplishes the

opposite of the intent of the ordinance, and discourages businesses from seriously considering the city. The City Council can repeal this overlay zone chapter at any time if the need arises, with or without an automatic repeal date, making the repeal date unnecessary. This proposed amendment removes the automatic repeal date.

REQUIRED FINDINGS:

Development code amendments are legislative decisions and are considered valid if reasonably debatable and not illegal.

RECOMMENDATION:

We recommend that the Planning Commission recommend approval of the proposed amendments to EMMC 17.48 as proposed (*or as revised in the meeting*).

ATTACHMENTS:

17.48 RTI Overlay Zone - Amendments

RTI Overlay Expansion Support Letter

Chapter 17.48
REGIONAL TECHNOLOGY AND INDUSTRY OVERLAY ZONE[1]

Sections:

17.48.010 Purpose.
17.48.020 Definitions.
17.48.030 Special approval process.
17.48.040 Allowed uses.
17.48.050 Nonallowed uses.
17.48.060 Temporary uses.
17.48.070 Setbacks.
17.48.080 Building height.
17.48.090 Development standards.
17.48.100 Landscaping and screening.
17.48.110 Building facade architectural standards.
~~**17.48.120 Repeal date.**~~

17.48.010 Purpose.

The regional technology and industry overlay zone (RTI Overlay Zone) is intended to provide for the development and operation of large-scale technological, clean industrial, distribution, and high-tech manufacturing uses that will increase the tax base and provide jobs for the city's residents. The standards and processes of the base or underlying zone shall be applicable unless modified or replaced by this overlay zone.

17.48.020 Definitions.

Development review committee or "DRC" shall be chaired by the planning director, or his designee, and shall include, at a minimum, the city attorney, the department heads or an assigned representative from public works, community development, and engineering, and a representative of Unified Fire Authority. The planning director shall have authority to issue decisions or approvals on behalf of the DRC once the planning director has consulted with all the DRC members. The City Council member that is appointed as the board liaison to the Planning Commission ~~appointed economic development board liaison~~ will serve as DRC liaison for projects within the RTI Overlay Zone ~~to city council~~.

17.48.030 Special approval process.

Projects that will include a minimum of 100 or more permanent jobs after construction or that include a minimum of 100,000 square feet of building floor area in a building or buildings within a single phase of development. Projects that meet this requirement shall follow the special approval process outlined below. All other projects shall follow the approval process outlined in Chapter 17.100 EMMC and other applicable chapters. The regional technology and industry overlay zone special approval process shall be as follows:

A. Application. Project applicants shall submit a complete RTI (regional technology and industry) site plan application and a final ~~preliminary~~ plat application (if subdividing property as part of the project).

B. Development Review Committee (DRC) Review. Upon receipt of a complete application, the ~~development review committee (~~DRC~~)~~ shall review all aspects of the application and provide the applicant with required changes within five business days. The DRC shall provide feedback or a final decision within five business days of each submittal or resubmittal, and may approve the application with conditions to be completed during construction or require resubmittal with changes prior to approval.

C. Grading and Excavation. A permit for grading and excavation may be issued, at the applicant's risk, prior to project approval by the DRC.

D. Approval Authority. The DRC has final approval authority for RTI applications. No public hearings are required.

17.48.040 Allowed uses.

Except as provided in EMMC 17.48.050, the following land uses shall be permitted uses in the regional technology and industry overlay zone:

A. Aircraft sales, manufacturing, assembly and service;

B. Automotive, truck, and heavy equipment sales and associated services;

C. Bottling and canning plants;

D. Building materials manufacturing or other construction-related business (lumber, hardware, etc.);

E. Corporate campuses or offices;

F. Electronic data management businesses;

G. Facilities for the development and production of movies, film, television, and similar visual media;

H. Food processing, packaging, and manufacturing (not including on-site slaughter, killing, or harvesting of animals);

I. Laboratory and testing services (the use of animal testing and experimentation is prohibited);

J. Clean manufacturing businesses (no negative impacts on air quality);

K. Research and development uses including medical or electronic assembly and associated light manufacturing;

L. Trade and craftsman industries, including furniture and carpentry, upholstery shops, monument works, welding shops;

M. Indoor shooting ranges;

N. Warehouses.

17.48.050 ~~Nonallowed~~ Prohibited uses.

Any use that produces gas, smoke, odor, dust, vibration of earth, or soot that in the opinion of the city council will negatively impact commercial or residential areas that are currently existing or that are proposed in the city's general plan. Uses included as "allowed uses" in 17.48.040 that, in the opinion of the City have a significant impact on the City's utilities or infrastructure, may be prohibited at the discretion of the City.

17.48.060 Temporary uses.

Temporary concrete batch plants, materials processing equipment, and other similar temporary uses may be approved by the DRC as part of the RTI site plan approval if the batch plant or materials processing is located at least one-half mile (2,640 feet) from any existing residence. The temporary uses will only be allowed during active construction of the site and construction of buildings with an active building permit, and only to provide materials for use on the property or for off-site public or private improvements related to the construction on the property. The DRC may impose conditions or restrictions on the batch plant or materials processing to protect the health, safety, and welfare of the public.

17.48.070 Setbacks.

All buildings in this zone, including accessory buildings, are required to comply with the setback provisions in the underlying zone, unless modified setbacks are determined by the development review committee to be reasonable, and maintain a reasonable minimum distance from property lines as determined by the development review committee, based upon the specific use and potential impacts to neighboring properties. Any building that complies with the setback provisions in the underlying zone shall not be required to have setbacks approved by DRC.

17.48.080 Building height.

~~Permitted building height is five stories or approximately 50 feet.~~ The development review committee may approve any building height that is reasonable based upon the specific use and potential impacts to neighboring properties.

17.48.090 Development standards.

The base zoning or underlying zoning shall be applicable, unless modified or replaced as follows:

A. Buildings must comply with the architectural standards found in EMMC 17.48.110.

B. Public roads that are on the city's master transportation plan must be improved to the level of standard designated on that plan (major arterial, minor arterial, major collector, minor collector, etc.).

C. Public roads within projects must comply, at a minimum, with the industrial road standard found below. Private roads are allowed if they are contained completely within a project and also comply with the road standard below.

D. Front parking lots and driveway entrances shall be asphalt or concrete in accordance with city standards. Equipment and rear parking areas may be graveled. Parking shall be provided in accordance with Chapter 17.55 EMMC.

E. Outdoor storage areas do not need to comply with city landscaping requirements if they comply with EMMC 17.48.100.

F. The minimum number of parking stalls may be approved by the DRC based upon information provided by the applicant relative to trip generation, hours of operation, shared parking, peak demands, or other applicable information.

Figure 1. 62' Industrial ROW

17.48.100 Landscaping and screening.

Development within this overlay zone by its nature and intensity may not be compatible with other uses or zones. Proper screening techniques should be used to mitigate potential negative impacts to surrounding land uses. The following shall be applicable:

A. Walls or fences as defined in EMMC 17.60.110(B) shall be required adjacent to residential or agricultural zones. Such fencing or walls may also be required around the entire perimeter of large-scale industrial or technological parks.

B. A 20-foot landscaped buffer (water-wise landscaping is acceptable, with a mix of trees and shrubs) shall be required adjacent to residential ~~or agricultural~~ zones and along all roads. Landscaping is not required behind walls or where it is not visible from a street.

C. All lighting shall be compliant with Chapter 17.56 EMMC, Outdoor Lighting Standards. Street lights shall be required in accordance with EMMC 15.10.390.

17.48.110 Building facade architectural standards.

The following standards are intended to provide detail regarding the facade appearance of structures located within the regional technology and industry overlay zone.

A. Buildings shall maintain a contemporary appearance.

1. Architecture of industrial buildings where size predominates over artistic detailing shall feature clean lines and elements, vertical and horizontal articulation or modulation (stepping portions of the facade), and use of textures and materials to reduce the apparent scale of large building walls. Metal may be used along with other building materials.

2. Professional office buildings shall meet the commercial design standards found in Chapter 17.72 EMMC.

3. Where more than one structure is built in a complex or unit, structures shall have a similar style or theme, including colors, materials, and design elements.

4. Pedestrian-scaled architectural details are not required except for facades directly facing residential zones and/or main entryways to the project.

5. The main pedestrian or customer entrance shall be clearly identifiable, and consist of a sheltering element such as a porch, stoop, awning, arcade, or portico.

6. Buildings shall include facade articulation/modulation (stepping portions of the facade) and horizontal and vertical divisions (textures or materials) to avoid large, featureless and/or panelized surfaces on buildings. Large uninterrupted expanses of a building wall without facade modulation or divisions are prohibited.

B. Architectural features should be simple with careful attention given to concentrate details and fenestration along main street elevations and at building entries.

C. It is recognized that the function and use of particularly large buildings and buildings used for manufacturing and warehousing purposes will dictate the style and other appearance of the structure. In these cases strict adherence to the provisions of this chapter may not be advisable or possible. In such cases where function and use of building and site dictate design and exterior appearance, the need to accommodate function and use shall be the higher priority over design and appearance. The DRC shall still have the authority to require a variation in color and materials, and street-facing articulation.

~~17.48.120 Repeal date.~~

~~This chapter shall be automatically repealed on May 31, 2022.~~

December 10, 2021

Planning Commissioners,

It is my pleasure to share my thoughts regarding the impact of the Regional Technology & Industry Overlay Zone (RTIO) and the proposed changes. There are three main categories I feel we experience tremendous benefits with the RTIO:

- Time
- Reduce Uncertainty
- Perception

Background

Several years ago, our team traveled to visit the Reno-Tahoe Industrial Center (RTIC) to learn from their experience. This currently 30,000-acre industrial park sits in a total area of 107,000 acres. It has seen massive success with tenants including Tesla, Walmart, FedEx, Blockchain, and Google. Our goal was to discover what we could do to enhance our economic development efforts and improve the processes that we require of businesses. The RTIO was modelled after the approval process we saw at the RTIC.

Time

In economic development, time is one of the most important factors for development. For a city to be competitive, they need to reduce the time that it takes for a project to get approval and to begin operations. Days and weeks are best, and months can convince projects to move to other locations. With the RTIO, we can shave time off a project's schedule by receiving key approvals at the staff level. This ultimately helps them to reduce their costs. With both Facebook and Tyson, this was vital to those company's final decision to locate in Eagle Mountain.

Reduction of Uncertainty

A second important factor for successful economic development departments is their ability to reduce the uncertainty or risk for business investment. As economic developers, we strive to help businesses see a clear path forward and help to reduce obstacles wherever we can. The RTIO helps to reduce

uncertainty by creating a well-defined path forward, with clear expectations and requirements for businesses that qualify. This is invaluable for these businesses as they know exactly what to expect from their approval process, which in many areas can be one of the most arduous and difficult processes to navigate.

Perception

It has been amazing to see the response that the RTIO has created in businesses exploring development in Eagle Mountain City. In part thanks to the RTIO, we have been viewed as a business-friendly community that understands the needs of business. There are many examples of projects coming to a screeching halt because a city was viewed as difficult to work with or as an impediment to development. Due to the efforts of prior Planning Commissioners and City Councilors, we have been praised for our forward-thinking efforts by businesses and other economic developers. This perception, combined with our advantages in developable land, sets us apart from surrounding communities and aids in our efforts to increase both the financial stability of the City, but also the employment opportunities for our residents.

Proposed Changes

I am in support of the changes being proposed by the Planning Department for the RTIO. Although we have seen tremendous success in the past few years with our efforts, we are always watching for trends or challenges that will put the City at risk. An example of a challenge would be a project that is going to place an extreme burden on our infrastructure or utilities. Although they may otherwise qualify for the RTIO, it would benefit the City to have these projects go through the traditional approval process, to ensure that it has public support.

I am also in support in allowing the RTIO to continue past the originally approved repeal date. This would allow for the benefits I have previously detailed to continue.

I am grateful for the efforts of our Planning Commission and City Council to consider this important tool in our economic development toolbox. By creating this code, you have allowed key projects to move forward more easily

EAGLE MOUNTAIN

in Eagle Mountain City, while still ensuring they maintain the high standards we expect from businesses. There have been several projects that would not have looked at developing in Eagle Mountain initially but did so when they learned of the RTIO process. Even if they ultimately choose to develop elsewhere, this increases our positive perception as a place that businesses want to develop.

If you have any additional questions regarding the RTIO's impact on our efforts, please do not hesitate to contact me.

Sincerely,

Aaron Sanborn
Economic Development Director

www.emcity.org
asanborn@emcity.org
801-789-6621
801-789-6649
1650 Stagecoach Run
Eagle Mountain, Utah 84005

EAGLE MOUNTAIN	**EAGLE MOUNTAIN CITY** **PLANNING COMMISSION MEETING** **DECEMBER 14, 2021**
TITLE:	ACTION ITEM / PUBLIC HEARING - Triumph
ITEM TYPE:	General Plan Amendment, Rezone, Master Development Plan, & Preliminary Plat
APPLICANT:	Scot Hazard

ACTION ITEM:
Yes

PUBLIC HEARING:
Yes

PREPARED BY:
Robert Hobbs, Planning

BACKGROUND:

Applicant Scot Hazard, representing Belle Street Investments, has submitted a package entitlement and plat application set appertaining to the afore-noted property – it being approximately 160 acres of raw ground currently zoned "Agriculture/Rural Density" and located within an "Agricultural/Rural Density 2" "setting" per the City's adopted General Plan Future Land Use Map. The Applicant proposes emplacement of a/the "Foothills Residential" General Plan setting, and, assignment of Foothill Residential (FR) zoning to the land to facilitate development of a 235-lot (233 single-family detached residential homesites) subdivision (1/3 to 1-acre sized lots) thereupon (the "Project" or "Triumph Subdivision"). The land (the "Property") made the subject of his application package comprises some 161.99 acres of land addressed as 2400 N. Lake Road (further identified as County Parcel/Lot # 59-019-0013.

Conceptual review of the Project was conducted in the summer of 2020. The Applicant has furnished a copy of a 2020 dated Staff letter reviewing the results of the Planning Commission and Council's comments, along with a narrated response to that item of correspondence (see attachments). Initial Planning Staff review comments stated that they recommended, "a zone request to RD1 to comply with the [existing] General Plan [setting for the area] or to FR requesting a General Plan [M]ap [A]mendment but one that would be more attainable".

ITEMS FOR CONSIDERATION:

(The Conclusions of Law, required findings, standards and requirements for the proposed Rezone, Master Development Plan, Preliminary Plat may be found in/at EMMC §§ 17.090.060, 16.10.070 and 16.20 respectively.) Standards for General Plan Map amendments are not stated in Eagle Mountain's adopted municipal code. Nevertheless, in evaluating such requests, the City applies common planning principles and reasoning to the evaluation of such applications.

General Plan Future Land Use Map

The Property abuts lands on its north and east that lie in the Foothills Residential plan setting ["category"], to the south, Agricultural/Residential Density Two, to the west Business Park/Light Industry and Neighborhood Residential One. Imposition of a Foothills Residential Plan setting upon the Property represents an extension of that setting as opposed to creating a stand-alone [island] area. The zoning it supports, in turn, allows a density comparable (but less) than intended for one of its future neighbor developments – Ault Farms and one that is comparable to [a transition to] Scarlet Ridge…

Rezoning (EMMC § 17.90.060):

1. **Compliance with General Plan:** Property zoning will harmonize with the General Plan Future Land Use Map if that map is amended as proposed by the Applicant. Alternative zoning districts that could be applied to the Property include R1, RD2, etc. though they require less open space. A Master Development Agreement could be executed to affect open space, lot sizes and/or the ability to re-subdivide if desired; and,
2. **Compatibility Determination:** As noted in Applicant's "compatibility statement", the Property is bordered on west by a power line corridor and then on the west and north by the

Ault Farms development "which contains significantly smaller lots and greater density than the proposed Triumph Plan." To the east of the Project lies the approved Scarlet Ridge Master Plan (one-half to one-acre lots)."

Triumph proposes 1.46 dwelling units per acre (du/a). Ault Farms has a zoning mix which includes FR, R1, R2, R3 as well as MF1, MF1 (townhomes), MF2 and Commercial land(s). Areas zoned FR, R1, R2, R3 and open space areas of that development are juxtaposed against the west/northwest portion of Triumph. It's overall density ranges from 1.5 to 14.4 du/a. To the east, Scarlet Ridge's RD 2 zoning establishes the ability to populate its area with an overall residential density (1.09) slightly less than proposed by Triumph.

Moreover, a regional utility corridor, approximately 600' wide, abuts the Project along its entire western side. The corridor serves as a sort of buffer and barrier. The corridor tapers, but is circa 600' wide; and,

1. **City Services:** Utility and emergency services are, or will be made, available to the Property.
2. **Traffic Generation:** Applicant has affirmed that a regional impact study was conducted by Hales Engineering, evaluated by Chris Trusty (City Engineer) and, "paid for by Flagship Homes" that contemplated the impact of traffic for the developing areas of Ault Farms, Triumph, and Scarlet Ridge. In discussions with the City Engineer, this TIS is sufficient for the City to evaluate the impact of the proposed Triumph Master Plan, and no additional TIS is required." Per the City Engineer, the fore-going statement is accurate and no TIS or traffic analysis is at this time needful. Traffic to be generated by the Project will readily be absorbed into the street network system.

Master Development Plan (EMMC § 16.10.070)

1. **General Criteria:** (slope, natural hazards, storm water runoff, protection of natural water channels and ridgelines, flooding,

soil characteristics): Property is unremarkable, relatively flat ground save for a ridgeline/slope along its eastern side with no known, especially environmentally sensitive areas or terrain features unique to itself associated therewith; and,

2. **Criteria Related to Infrastructure (utilities, streets, water rights):** City utility capacity exists to serve the Project, outside sourced utility providers have been provided with plans and notification about the Project (see attachments), the developer is providing dedication of land(s) as required by the City's Future Transportation Plan, substantiation of water rights still required; and,
3. **Criteria Related to Compatibility (adjacent properties, internal properties):** The Project is externally compatible (in terms of proposed zoning and residential lot density) to east/west flanking, already approved development(s) as already noted, and, is internally compatible given proposed lot sizes. As afore-stated, serving as a sort of buffer and barrier, a regional north/south utility corridor abuts the entire western side of the Project. The corridor [width] tapers, but is circa 600' wide; and,
4. **Criteria Related to Design: (open space, public facilities):** The proposed use is not expected to have a significant negative impact on surrounding property values being of similar character and less density than developments to which it will/would abut when built out.
5. **Property Values:** The proposed residential portion of the Property will be in care and keeping with neighboring developments – in fact expectedly less dense than at least one adjoining single-family subdivision (Ault Farms) not yet constructed. Accordingly, the proposed use is not expected to have a significant negative impact on surrounding property values but have comparable value expressions to appraisals [that will be] done in nearby [to be developed] subdivisions.

Preliminary Plat (EMMC §16.20):

The Project has been reviewed by the DRC Committee. Given the plat's present configuration (post revisions), the Project's design has been found to be in conformance with platting and zoning bulk regulation (i.e., lot sizes [including required average], frontages, block lengths, etc.) appertaining to the R 1 Zone and EMC

preliminary plat standards -- including submittal requirements.

Provided/proposed plat calculations:

Total Acreage --	161.99
Total Lot Count –	235 (includes 2 common lots)
Total Acreage in Lots –	118.67
Total Acreage in ROW –	36.98
Total [Acreage] of Open Space –	6.34
Average [Building] Lot Size -- allowed/required)	.5 (min. 1/3 acre
Largest (Building] Lot Size –	1.06
Smallest [Building] Lot Size -- allowed/required)	.25 (min. ¼ acre
Overall Density –	1.45 du/a
Open Space Provided – (min. 176.250 sq. ft. required)	6.34 acres or 276,170.4 sq. ft.

Right-of-way width(s), alignment and dedication needs have been evaluated and changes made to plat drawings to accommodate DRC comments.

Correspondence:

Any correspondence from agencies or the citizenry is hereafter attached to this document for perusal. Agency comments may express opinions regarding the plat application or be geared towards recommending Conditions of Approval for a development should it be approved, or, directing corrections to the final plat or related construction drawings.

REQUIRED FINDINGS:

Legislative type and plat approvals are based upon compliance with City code requirements and requirements of any applicable Development Agreement(s). Approval criteria [Conclusions of Law] for a Master Development Plan or Plan Amendment, Rezone, and, Preliminary Plat Approval review are iterated in EMMC §§ 16.10.070, 17.90.060, 16.20. (Any Master Development Agreement in force and of effect against the Property should also be considered when reviewing this application package.)

Rezones are legislative decisions and are considered valid if reasonably debatable and not illegal. Plats are effectually checklist items to be approved if all required elements and proper design are provided in their drawings.

RECOMMENDATION:

Staff recommends that the Planning Commission motion to recommend approval of the General Plan Map Amendment, Master Development Plan, Rezone, Preliminary Plat application set to City Council for the reasons [findings] set forth in this Staff report and in the meeting, subject to Applicant/Project compliance with the following condition(s):

1. Project shall be developed in accordance with the approved preliminary plat of/for the same, including dedication of requisite, City required right-of-way; and,
2. Open space develop in the Project's common lots shall comply with requirements listed in EMMC § 16.35.105; and,
3. The Developer's engineer shall correct any spelling, grammar and punctuation and numbering errors that may be evident on the plat face and/or in the proposed Project plat development notes; and,

< 4. The Developer/Development shall comply with any other conditions as may be levied by the Planning Commission….>

ATTACHMENTS:

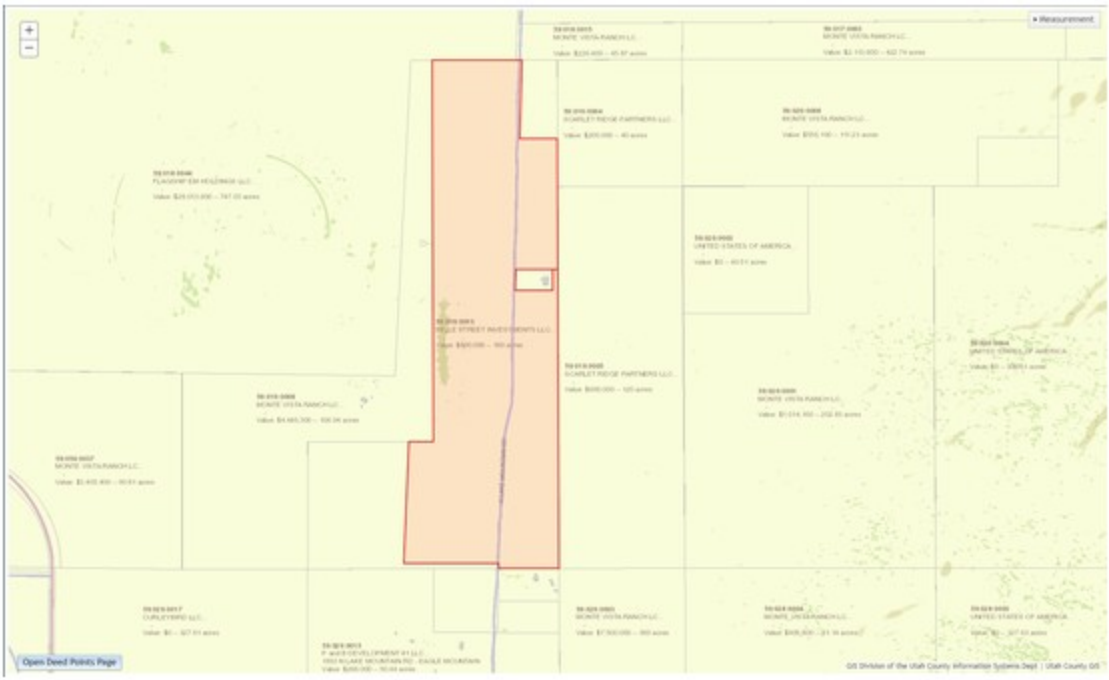
Utah County Parcel Map.Triumph Subdivision Vicinity.Screenshot 2021-11-30 131226.jpg

General Plan Future Land Use Map snippet.Triumph Subdivision.Nov 2021.jpg

20-0055 Triumph Preliminary 120321.pdf

2021_1027 - Triumph - Traffic Plan Memo.docx

2021_1027 - Triumph - Compatibility Statement.docx


Measurement
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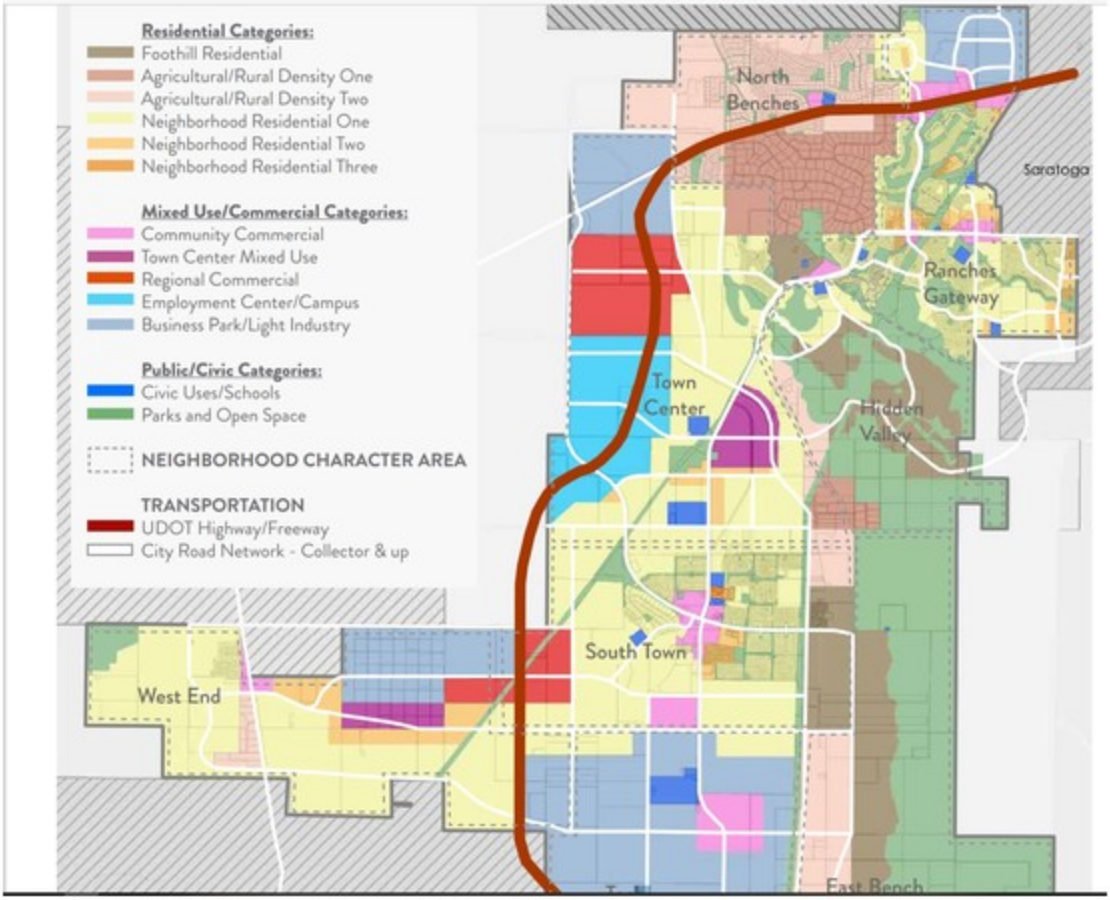
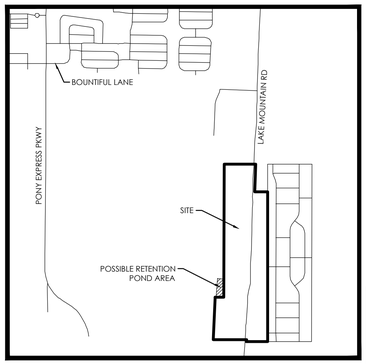
GIS Division of the Utah County Information Systems Dept | Utah County GIS


Residential Categories:
Foothill Residential
Agricultural/Rural Density One
Agricultural/Rural Density Two
Neighborhood Residential One
Neighborhood Residential Two
Neighborhood Residential Three
Mixed Use/Commercial Categories:
Community Commercial
Town Center Mixed Use
Regional Commercial
Employment Center/Campus
Business Park/Light Industry
Public/Civic Categories:
Civic Uses/Schools
Parks and Open Space
NEIGHBORHOOD CHARACTER AREA
TRANSPORTATION
UDOT Highway/Freeway
City Road Network - Collector & up
North Benches
Saratoga
Ranches Gateway
Town Center
Hidden Valley
South Town
West End
East Bench

TRIUMPH PRELIMINARY

PREPARED FOR:
THE REAL ESTATE GROUP
LOCATED IN:
EAGLE MOUNTAIN CITY, UTAH



VICINITY MAP
NTS

Sheet List Table

Sheet Number	Sheet Title
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C2.1	PRELIMINARY PLAT
C2.2	PRELIMINARY PLAT
C2.3	PRELIMINARY PLAT
C2.4	PRELIMINARY PLAT
C3	OVERALL SITE PLAN
C3.1	SITE PLAN
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C4.1	GRADING AND DRAINAGE PLAN
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C6	EROSION CONTROL PLAN
L1	LANDSCAPE PLAN
L2	LANDSCAPE DETAILS

SITE MAP

ROAD SECTION NOTES

1. **PROOF ROLLS:** PROOF ROLL REQUIRED ON ALL SECTIONS OF ROAD: I.E. SUB-GRADE, SUB-BASE, CURB BASE, AND ROAD BASE. CURB STAKES REQUIRED FOR SUB-GRADE INSPECTION AND STRING LINE REQUIRED FOR SUB-BASE AND ROAD BASE INSPECTION
2. **UTBC:** STATE SPEC. ROAD BASE REQUIRED FOR ALL ROADS, COMMERCIAL BASE ACCEPTABLE FOR SIDEWALKS & TRAILS.
3. **COLLARS:** COLLARS TO BE 1' WIDE BY 1' DEEP WITH A 6000 PSI CONCRETE WITH 1.5# FIBER MESH PER CUBIC YARD (3/4" MONOFILAMENT) REQUIRED FOR ALL STREET COLLARS. MANHOLE COVERS AND WATER VALVE TOWERS TO BE 1/2" DOWN FROM ASPHALT EDGE AND CONCRETE TO BE 1/4" TO 3/8" DOWN FROM ASPHALT EDGE.

WATER NOTES

1. **VALVES:**
A. VALVES MUST BE FLANGED TO TEE'S (FITTINGS)
B. VALVES 12" AND LARGER TO BE BUTTERFLY VALVES
2. **BEDDING:** SAND MUST MEET AASHTO (A-3) GRADATION WITH 100% PASSING THE #4 SIEVE. 6" BELOW PIPE ON THE SIDES & 12" ABOVE PIPE (MINIMUM)
3. **DEPTH:** WATER MAIN & LATERALS MUST MAINTAIN 4' COVER FROM FINISHED GRADE (MINIMUM), 3' MINIMUM FROM TOP OF PIPE AT TIME OF INSTALLATION. MAX DEPTH 72" FROM FINISHED GRADE.
4. **SERVICES & FITTINGS:** SERVICES & FITTINGS TO MAINTAIN 3' MINIMUM SEPARATION FROM PIPE JOINTS AND OTHER FITTINGS
5. **SETTERS:** ALL SETTERS TO BE 21" TALL (MINIMUM), HAVE UNIONS AT THE BASE AND BE DUAL CHECK MODEL, ALSO 3/4" SETTERS TO HAVE DOUBLE BRACES. SETTERS TO BE AT 18" TO 22" FROM THE TOP OF SETTER TO TOP OF LID.
6. **WATER CAN LID:** ALL LIDS TO SAY "EAGLE MOUNTAIN" ON THEM RECESSED IN A HOLE FOR THE ERT AND TO BE SET AT LEVEL TO 1"ABOVE THE PLANE OF THE CURB & SIDEWALK
7. **WATER CAN:** THE WATER CAN FOR 3/4" & 1" SERVICES WILL NEED TO BE A 36" TALL MINIMUM AND 21" INSIDE DIAMETER. WATER CAN FOR 1-1/2" TO 2" SERVICE WILL NEED TO FOLLOW APWA SPECIFICATION.
8. **HYDRANTS:** HYDRANTS TO BE 5" BURY (MINIMUM)
9. **LATERALS:** ALL LATERALS NEED TO BE GIS (SHOT IN) AT THE CORP. STOP & SETTER, AND ALSO VISUAL INSPECTION ON POLY INSERTS BEFORE BACKFILL. WATER LATERALS TO EXTEND 15" INTO PROPERTY AND BE MARKED WITH A 2X4 PAINTED BLUE. ALL POLY LINES TO HAVE VISUAL POLY INSERT INSPECTION.
10. **TRACER WIRE:** RUN TRACER WIRE ALONG MAIN & EXTEND UP SETTERS AND HYDRANTS, DO NOT RUN UP VALVE BOXES.
11. **WATER FITTINGS:** ALL WATER FITTINGS TO BE CHECKED FOR THRUST BLOCKS (PRE & POST) AND GIS (SHOT IN) BEFORE BACKFILL
12. **VERTICAL SEPARATION:** WATER MAIN TO MAINTAIN 18" MINIMUM SEPARATION FROM STORM DRAIN OR OTHER OBSTACLES/UTILITIES
13. **WATER LINE FITTINGS:** ALL FITTINGS TO HAVE MEGA LUG FOLLOWERS
14. **WATER MAIN LINE:** NO DEFLECTION OR BENDING OF PIPE WILL BE ALLOWED IN THE WATER LINES AND BEND FITTINGS WILL BE REQUIRED. ALL FITTINGS TO BE MEGA-LUG FITTINGS.

SEWER NOTES

1. **PIPE BEDDING:** 3/4" GRAVEL REQUIRED 6" BELOW, ON THE SIDES & 12" ABOVE THE PIPE (MINIMUM)
2. **DEPTH:** SEWER MAIN/LATERALS TO MAINTAIN 4' COVER (MINIMUM) FROM FINISHED GRADE, 3' MINIMUM FROM TOP OF PIPE AT TIME OF INSTALLATION
3. **SEPARATION:** SEWER MAINS & LATERALS TO MAINTAIN 10' SEPARATION (MINIMUM) FROM CULINARY WATER MAINS & LATERALS
4. **SEWER Y'S:** 3' MINIMUM SEPARATION BETWEEN SEWER Y'S
5. **LATERAL STUBS:**
A. STUBS MUST EXTEND 15' INTO PROPERTY AND BE MARKED WITH 2X4 PAINTED GREEN.
B. ALL LATERALS MUST BE GIS (SHOT IN) AT THE Y'S AND STUBS. ALSO, SLOPES (2% MIN. ON 4" PIPE) TO BE CHECKED BEFORE BACKFILL
6. **MANHOLES:** MANHOLES TO BE WITHIN 1' OF FINISHED GRADE. 12" OF WHIRLY GIG FORM (MAX) AND NO FLAT RINGS ALLOWED. 12" OF 3/4" GRAVEL REQUIRED UNDER MANHOLES/BOXES.

STORM DRAIN NOTES

1. **BEDDING:** 3/4" GRAVEL 6" BELOW AND ON SIDES OF PIPE & 12" ABOVE PIPE (MINIMUM)
2. **ADS:** ALL ADS PIPE TO BE "HP" BRAND
3. **COLLARS:** COLLARS TO BE 1'X1' AROUND PIPE, 4000 PSI CONCRETE, INSPECTION IS NEEDED PRE & POST COLLAR POUR.
4. **MANHOLES:** MANHOLES TO BE WITHIN 1' OF FINISHED GRADE. 12" OF WHIRLY GIG FORM (MAX) AND NO FLAT RINGS ALLOWED. 12" OF 3/4" GRAVEL REQUIRED UNDER MANHOLES/BOXES.

GENERAL NOTES

1. CONTRACTOR TO FIELD VERIFY HORIZONTAL AND VERTICAL LOCATIONS OF ALL EXISTING UTILITIES PRIOR TO COMMENCEMENT OF CONSTRUCTION, AND REPORT ANY DISCREPANCIES TO THE ENGINEER.

2. ANY AND ALL DISCREPANCIES IN THESE PLANS ARE TO BE BROUGHT TO THE ENGINEER'S ATTENTION PRIOR TO COMMENCEMENT OF CONSTRUCTION.

3. ALL CONSTRUCTION SHALL ADHERE TO EAGLE MOUNTAIN CITY STANDARD PLANS AND SPECIFICATIONS.

4. ALL UTILITIES AND ROAD IMPROVEMENTS SHOWN ON THE PLANS HEREIN SHALL BE CONSTRUCTED USING REFERENCE TO SURVEY CONSTRUCTION STAKES PLACED UNDER THE SUPERVISION OF A PROFESSIONAL LICENSED SURVEYOR WITH A CURRENT LICENSE ISSUED BY THE STATE OF UTAH. ANY IMPROVEMENTS INSTALLED BY ANY OTHER VERTICAL OR HORIZONTAL REFERENCE WILL NOT BE ACCEPTED OR CERTIFIED BY THE ENGINEER OF RECORD.

5. THIS DRAWING SET IS SCALED TO BE PRINTED ON A 24" X 36" SIZE OF PAPER (ARCH. D). IF PRINTED ON A SMALLER PAPER SIZE, THE DRAWING WILL NOT BE TO SCALE AND SHOULD NOT BE USED TO SCALE MEASUREMENTS FROM THE PAPER DRAWING. ALSO USE CAUTION, AS THERE MAY BE TEXT OR DETAIL THAT MAY BE OVERLOOKED DUE TO THE SMALL SIZE OF THE DRAWING.

NOTICE

BEFORE PROCEEDING WITH THIS WORK, THE CONTRACTOR SHALL CAREFULLY CHECK AND VERIFY ALL CONDITIONS, QUANTITIES, DIMENSIONS, AND GRADE ELEVATIONS, AND SHALL REPORT ALL DISCREPANCIES TO THE ENGINEER.

ENGINEER'S NOTES TO CONTRACTOR

1. THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPES, CONDUITS OR STRUCTURES SHOWN ON THESE PLANS WERE OBTAINED BY A SEARCH OF THE AVAILABLE RECORDS, TO THE BEST OF OUR KNOWLEDGE, THERE ARE NO EXISTING UTILITIES EXCEPT AS SHOWN ON THESE PLANS. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT THE UTILITY LINES SHOWN ON THESE DRAWINGS. THE CONTRACTOR FURTHER ASSUMES ALL LIABILITY AND RESPONSIBILITY FOR THE UTILITY PIPES, CONDUITS OR STRUCTURES SHOWN OR NOT SHOWN ON THESE DRAWINGS. IF UTILITY LINES ARE ENCOUNTERED DURING CONSTRUCTION THAT ARE NOT IDENTIFIED BY THESE PLANS, CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY.

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

3. UNAUTHORIZED CHANGES & USES: THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE FOR, OR LIABLE FOR, UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE PREPARER OF THESE PLANS.

4. ALL CONTOUR LINES SHOWN ON THE PLANS ARE AN INTERPRETATION BY CAD SOFTWARE OF FIELD SURVEY WORK PERFORMED BY A LICENSED SURVEYOR. DUE TO THE POTENTIAL DIFFERENCES IN INTERPRETATION OF CONTOURS BY VARIOUS TYPES OF GRADING SOFTWARE BY OTHER ENGINEERS OR CONTRACTORS, FOCUS DOES NOT GUARANTEE OR WARRANTY THE ACCURACY OF SUCH LINEWORK. FOR THIS REASON, FOCUS WILL NOT PROVIDE ANY GRADING CONTOURS IN CAD FOR ANY TYPE OF USE BY THE CONTRACTOR. SPOT ELEVATIONS AND PROFILE ELEVATIONS SHOWN IN THE DESIGN DRAWINGS GOVERN ALL DESIGN INFORMATION ILLUSTRATED ON THE APPROVED CONSTRUCTION SET. CONSTRUCTION EXPERTISE AND JUDGMENT BY THE CONTRACTOR IS ANTICIPATED BY THE ENGINEER TO COMPLETE BUILD-OUT OF THE INTENDED IMPROVEMENTS.

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

CONTACTS

ENGINEER & SURVEYOR
FOCUS ENGINEERING & SURVEYING, LLC
6949 S. HIGH TECH DRIVE SUITE 200
MIDVALE, UTAH 84047
(801) 352-0075
PROJECT MANAGER: MAT WANGSGAARD, PE
SURVEY MANAGER: EVAN WOOD

OWNER/DEVELOPER
BELLE STREET PARTNERS, LLC
3688 EAST CAMPUS DRIVE SUITE #100
EAGLE MOUNTAIN, UTAH 84005
(801) 789-84005
CONTACT: SCOT HAZARD

N S

GRAPHIC SCALE
200 0 100 200 400 800
(IN FEET)
1 inch = 200ft.

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FOR REVIEW ONLY

TRIUMPH PRELIMINARY
EAGLE MOUNTAIN CITY, UTAH
COVER SHEET

REVISION BLOCK

#	DATE	DESCRIPTION
1	*****	*****
2	*****	*****
3	*****	*****
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COVER SHEET

Scale: 1"=200'
Drawn: CSA
Date: 12/03/21
Job #: 20-0055
Sheet: C1

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PRELIMINARY PLAT

TRIUMPH PRELIMINARY

LOCATED IN THE NE$\frac{1}{4}$ AND NW $\frac{1}{4}$ OF SECTION 36, T5S, R12W, SLB&M
EAGLE MOUNTAIN CITY, UTAH COUNTY, UTAH

VICINITY MAP
N.T.S

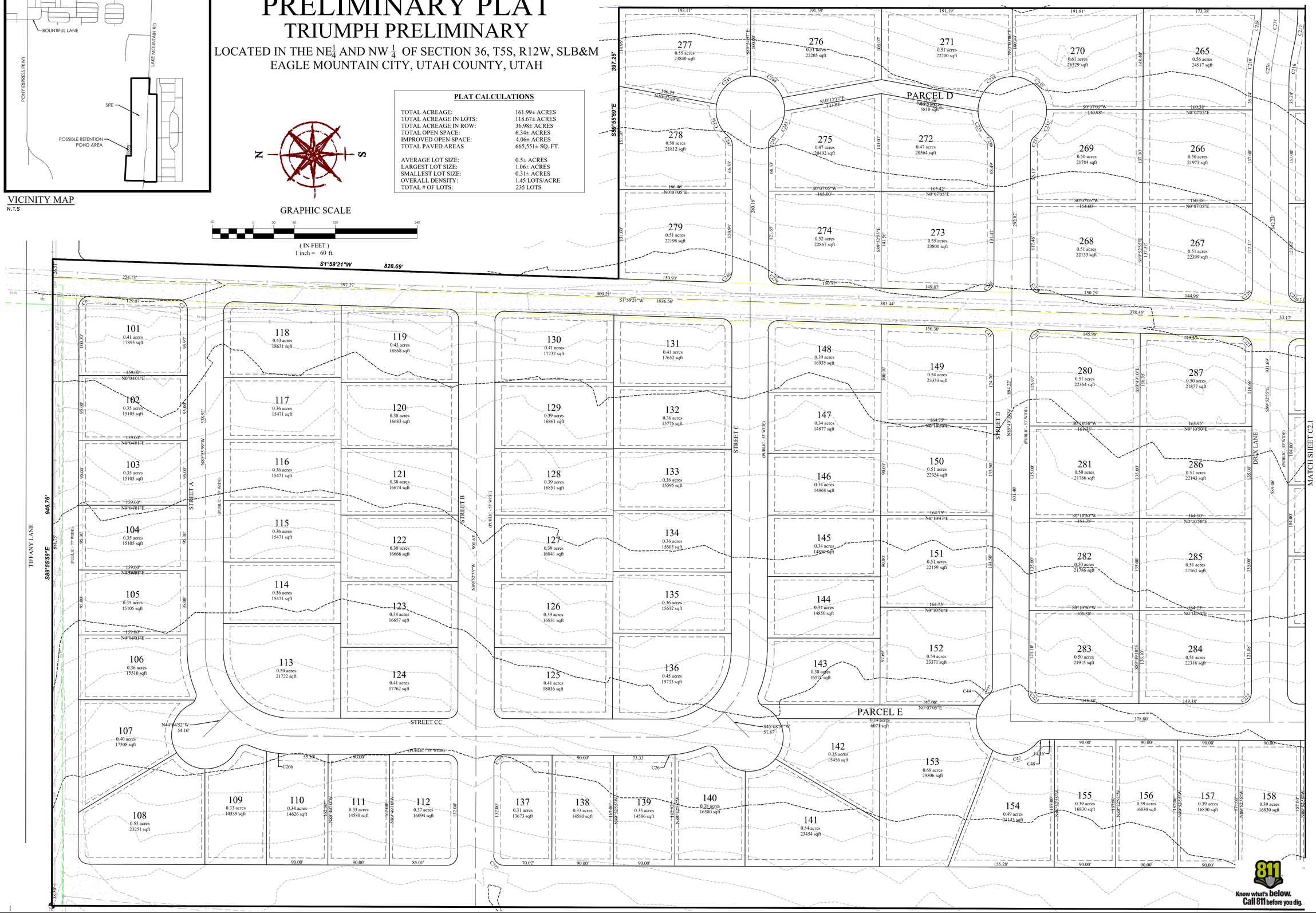
PLAT CALCULATIONS

TOTAL ACREAGE:	161.99± ACRES
TOTAL ACREAGE IN LOTS:	118.67± ACRES
TOTAL ACREAGE IN ROW:	36.98± ACRES
TOTAL OPEN SPACE:	6.34± ACRES
IMPROVED OPEN SPACE:	4.06± ACRES
TOTAL PAVED AREAS	665,551± SQ. FT.
AVERAGE LOT SIZE:	0.5± ACRES
LARGEST LOT SIZE:	1.06± ACRES
SMALLEST LOT SIZE:	0.31± ACRES
OVERALL DENSITY:	1.45 LOTS/ACRE
TOTAL # OF LOTS:	235 LOTS

N S

GRAPHIC SCALE

(IN FEET)
1 inch = 60 ft.



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FOR REVIEW ONLY

TRIUMPH PRELIMINARY
EAGLE MOUNTAIN CITY, UTAH
PRELIMINARY PLAT

REVISION BLOCK

#	DATE	DESCRIPTION
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PRELIMINARY PLAT

Scale:	1"=60'	Drawn:	CSA
Date:	12/03/21	Job #:	20-0055
Sheet:	C2		

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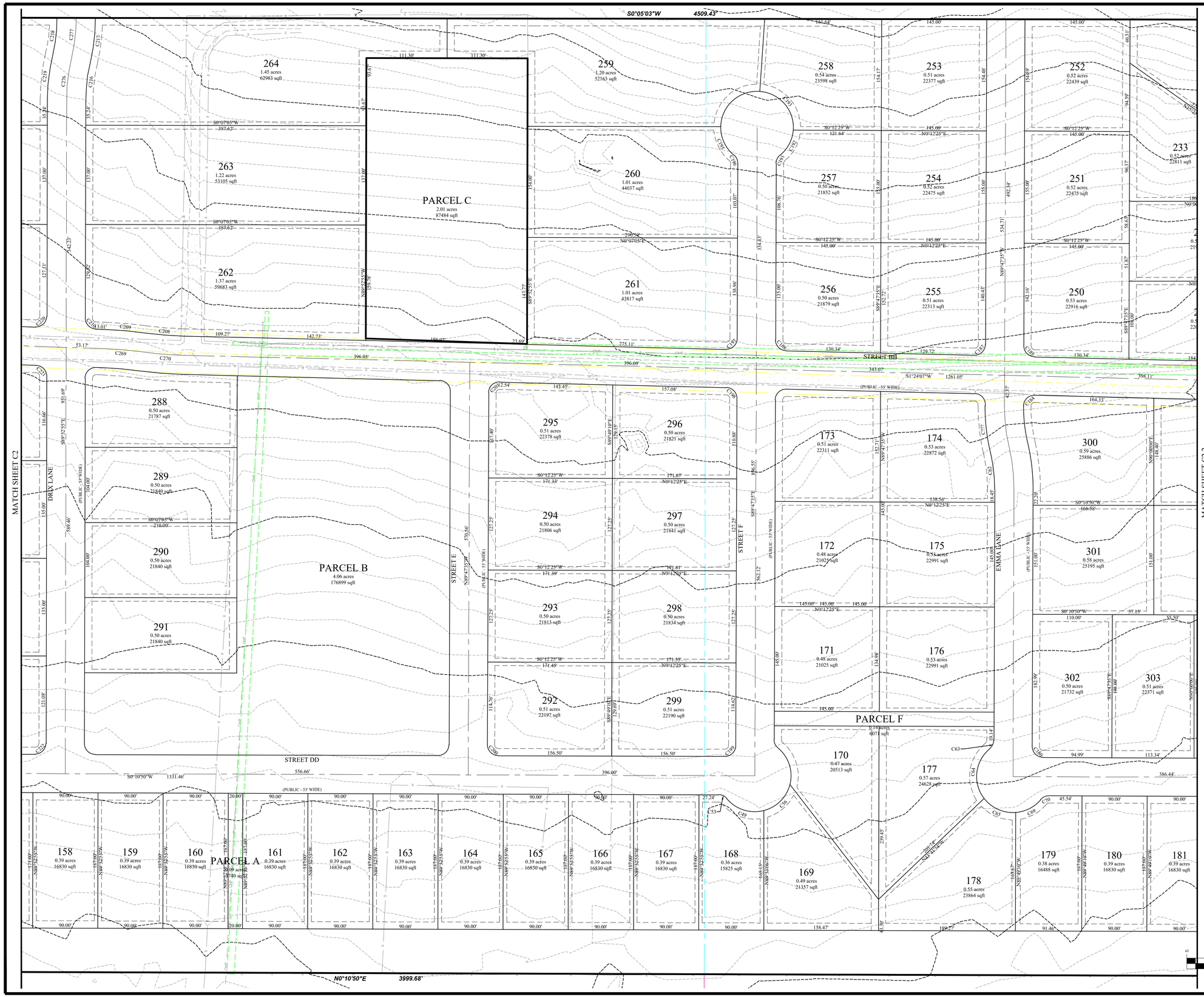

LEGEND

- BOUNDARY
- ROW
- CENTERLINE
- LOT LINE
- EASEMENT
- 15" STORM DRAIN
- 8" SANITARY SEWER
- 8" CULINARY WATER
- 8" SECONDARY WATER
- CONTOUR MAJOR
- CONTOUR MINOR
- EXIST. STORM DRAIN
- EXIST. SANITARY SEWER
- EXIST. CULINARY WATER
- EXIST. FENCE
- EXIST. CONTOUR MAJOR
- EXIST. CONTOUR MINOR
- SIGN
- STREET LIGHT
- SD MH, INLET, AND COMBO
- SEWER MANHOLE
- VALVE, TEE & BEND
- WATER BLOW-OFF
- FIRE HYDRANT
- STREET MONUMENT (TO BE SET)
- EXIST. STREET MONUMENT
- EXIST. SD INLET & MH
- EXIST. SEWER MH
- EXIST. VALVE, TEE, & BEND
- EXIST. FIRE HYDRANT
- SPOT ELEVATION

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GRAPHIC SCALE

(IN FEET)
1 inch = 60 ft.

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FOR REVIEW ONLY

TRIUMPH PRELIMINARY

EAGLE MOUNTAIN CITY, UTAH

PRELIMINARY PLAT

REVISION BLOCK

#	DATE	DESCRIPTION
1	----	----
2	----	----
3	----	----
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PRELIMINARY PLAT

Scale:	1"=60'	Drawn:	CSA
Date:	12/03/21	Job #:	20-0055
Sheet:	C2.1		

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LEGEND

- BOUNDARY
- SECTION LINE
- EASEMENT
- RIGHT-OF-WAY LINE
- BUILDING SETBACK
- EXISTING PROPERTY LINE
- #5 REBAR AND CAP (PLS#XXXXXXX) TO BE SET
- SECTION MONUMENT (FOUND)
- STREET MONUMENT (TO BE SET)
- BOUNDARY MARKERS

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

N S

GRAPHIC SCALE

60 0 30 60 120 240

(IN FEET)
1 inch = 60 ft.

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FOR REVIEW ONLY

TRIUMPH PRELIMINARY

EAGLE MOUNTAIN CITY, UTAH
PRELIMINARY PLAT

REVISION BLOCK

#	DATE	DESCRIPTION
1	----	----
2	----	----
3	----	----
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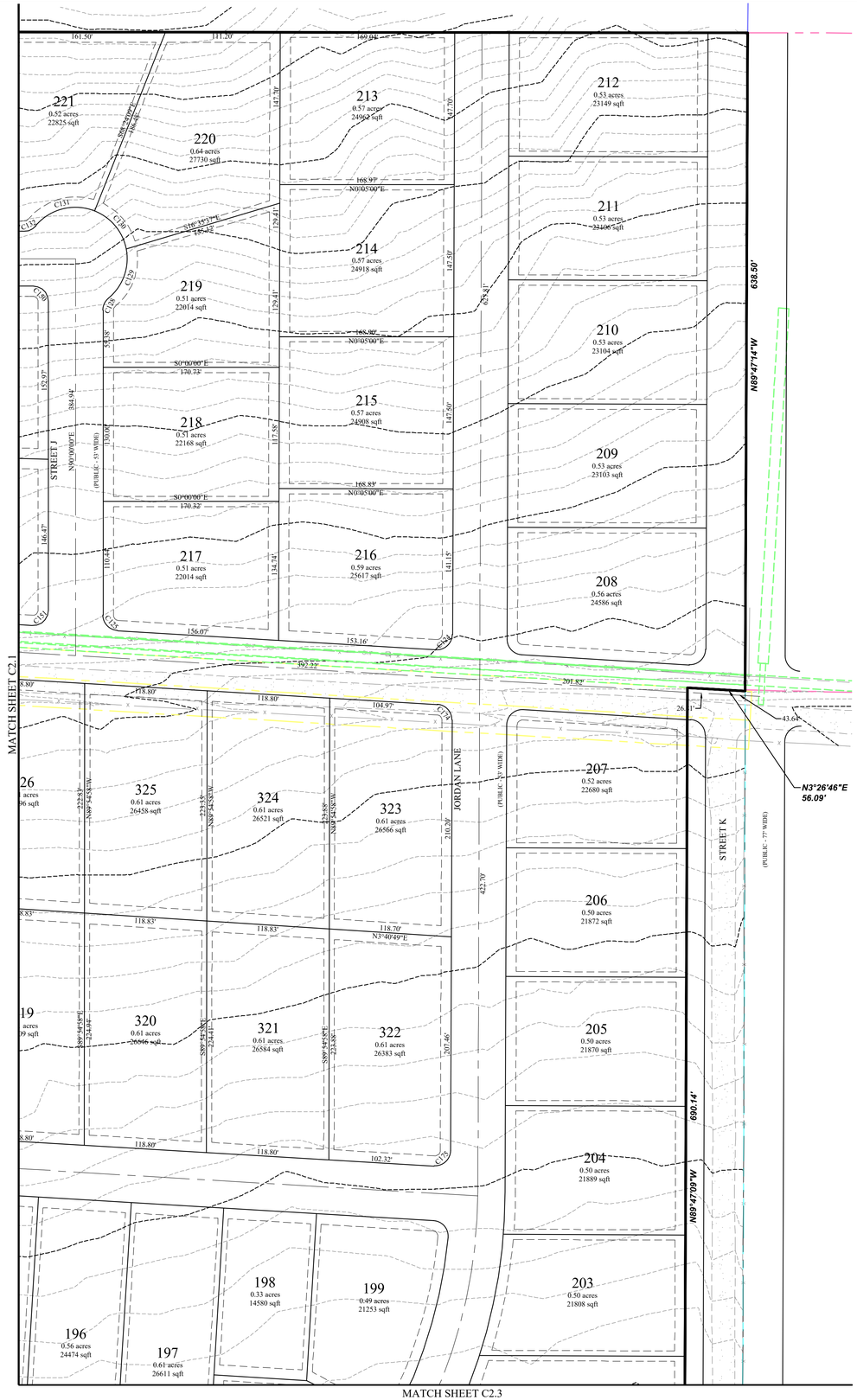
5	----	----
6	----	----

PRELIMINARY PLAT

Scale: 1"=60'	Drawn: CSA
Date: 12/03/21	Job #: 20-0055
Sheet: C2.2	

Z:_2020\20-0055 Hazard Acres\design 20-0055\dwg\sheets\C2.2 - PRELIMINARY PLAT.dwg

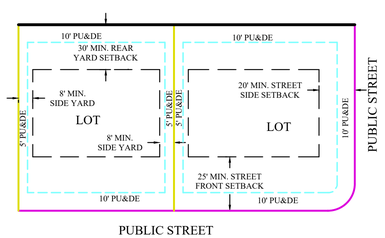


LEGAL DESCRIPTION
PREPARED FOR
TRIUMPH
EAGLE MOUNTAIN CITY, UTAH
(Rev February 19, 2020)
20-0055

PRELIMINARY PLAT BOUNDARY

Land located in Utah County, State of Utah, more particularly described as follows: Beginning at the North quarter corner of Section 19, Township 6 South, Range 1 West, Salt Lake Base and Meridian; thence South 89°56'03" East along the North line of said Section 19, a distance of 946.76 feet more or less, to the East line of the Lake Mountain Road, a public graveled roadway; thence along the East line of said Lake Mountain Road, South 1°59'17" West 828.69 feet; thence South 89°56'03" East 397.28 feet to the North-South 1/16th Section line (the East line of the West one-half of the East one-half of said Section 19); thence along said 1/16th line South 0°04'56" West 4509.60 feet, more or less to the South line of said Section 19; thence along the South line of said Section 19, North 89°47'09" West 638.33 feet, more or less, to the East line of said Lake Mountain Road; thence along the East line of said Lake Mountain Road North 3°26'42" East
56.09 feet; thence North 89°47'09" West 690.28 feet, thence North 89°48'33" West 315.30 feet to the East line of a 320 feet wide easement granted to Utah Power and Light Company, recorded as Entry No. 4642:1970 in the office of the Utah County Recorder, Provo, Utah; thence along the East line of said easement North 2°54' East 1279.16 feet; more or less to the North line of the Southeast quarter of the Southwest quarter of said Section 19; thence South 89°51'18" East along said line 254.49 feet to the North-South mid-section line (the center of section line); thence along said mid-section line North 0°10'45" East 4000.468 feet to the point of beginning. LESS AND EXCEPTING therefrom a 2.00 acre parcel described as follows: Beginning at a point South 89°56'03" East along the Section line 946.76 feet and South 1°59'17" West along the East line of the Lake Mountain Road, 2197.76 feet from the North quarter corner of Section 19, Township 6 South, Range 1 West, Salt Lake Base and Meridian; thence South 89°52'59" East 387.68 feet; thence South 0°04'56" West 222.60 feet; thence North 89°52'59" West 395.02 feet; thence North 1°58'17" East along the East line of said Lake Mountain Road 222.717 feet to the point of beginning.

Contains: 161.99 acres+/-



TYPICAL BUILDING SETBACKS
N.T.S.

LEGEND

- BOUNDARY
- SECTION LINE
- EASEMENT
- RIGHT-OF-WAY LINE
- BUILDING SETBACK
- EXISTING PROPERTY LINE
- #5 REBAR AND CAP (PLS#XXXXXXX) TO BE SET
- SECTION MONUMENT (FOUND)
- STREET MONUMENT (TO BE SET)
- BOUNDARY MARKERS

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GRAPHIC SCALE

60 0 30 60 120 240

(IN FEET)
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TRIUMPH PRELIMINARY

EAGLE MOUNTAIN CITY, UTAH

PRELIMINARY PLAT

REVISION BLOCK

#	DATE	DESCRIPTION
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PRELIMINARY PLAT

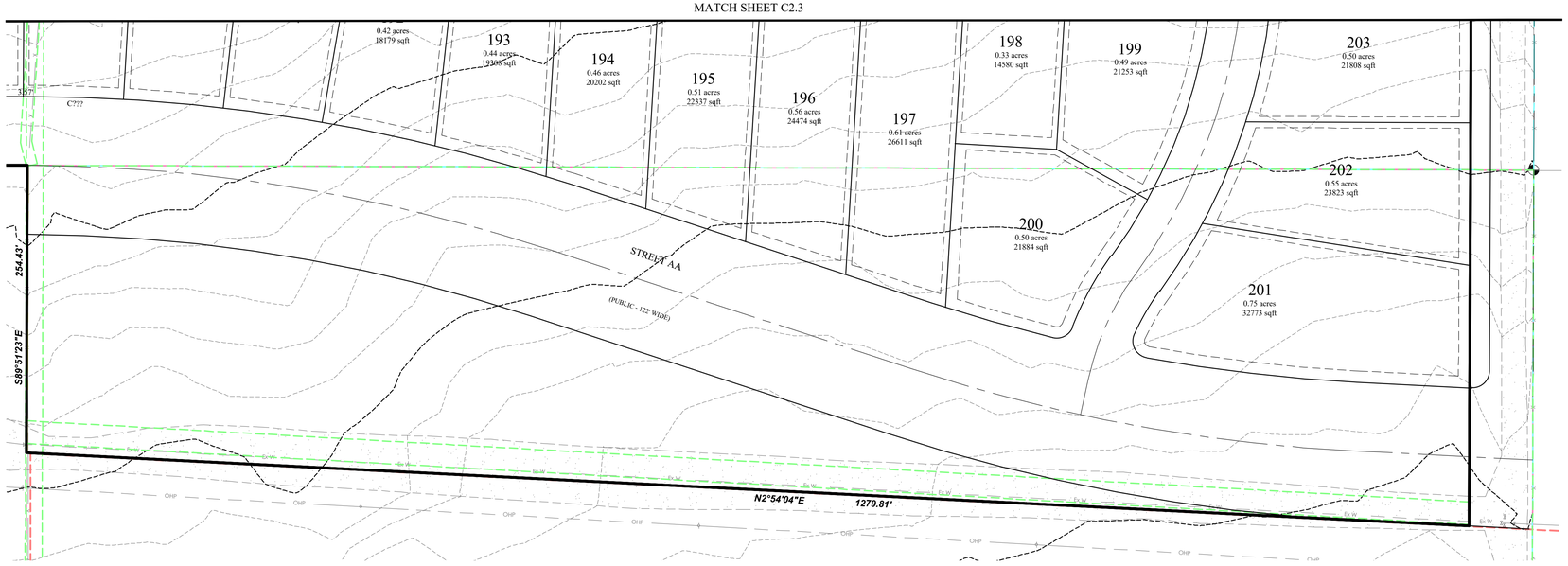
Scale:	1"=60'	Drawn:	CSA
Date:	12/03/21	Job #:	20-0055
Sheet:	C2.3		

Z:_2020\20-0055 Hazard Acres\design 20-0055\dwg\sheets\C2.3 - PRELIMINARY PLAT.dwg

LEGEND

- BOUNDARY
- SECTION LINE
- EASEMENT
- RIGHT-OF-WAY LINE
- BUILDING SETBACK
- EXISTING PROPERTY LINE
- #5 REBAR AND CAP (PLS#XXXXXXX) TO BE SET
- SECTION MONUMENT (FOUND)
- STREET MONUMENT (TO BE SET)
- BOUNDARY MARKERS

MATCH SHEET C2.3



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TRIUMPH PRELIMINARY

EAGLE MOUNTAIN CITY, UTAH
PRELIMINARY PLAT

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PRELIMINARY PLAT

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Date:	12/03/21	Job #:	20-0055
Sheet:	C2.4		

Z:_2020\20-0055 Hazard Acres\design 20-0055\dwg\sheets\C2.4 - PRELIMINARY PLAT.dwg

NOTE

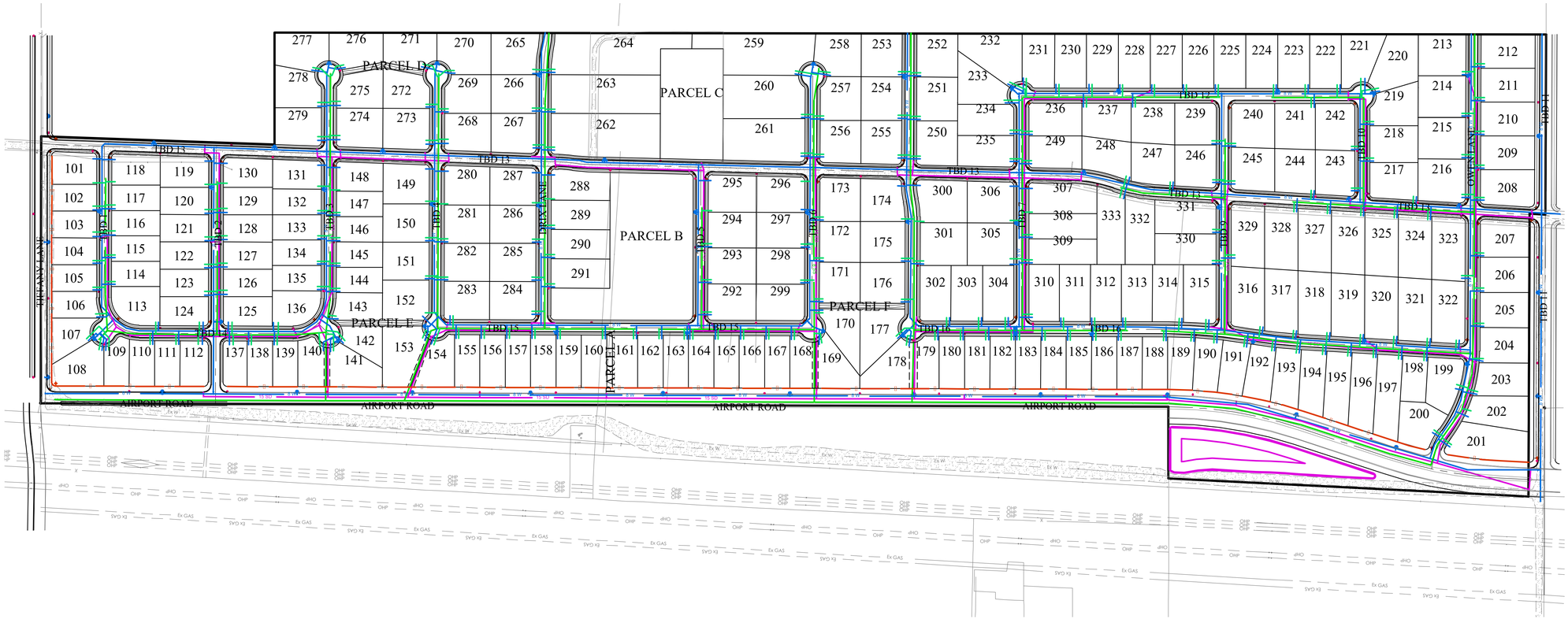
MAILBOX LOCATIONS TO BE SHOWN AT FINAL DESIGN.

SITE PLAN TABLE

233 SINGLE FAMILY UNITS

LEGEND

- BOUNDARY
- ROW
- CENTERLINE
- LOT LINE
- EASEMENT
- 15" STORM DRAIN
- 8" SANITARY SEWER
- 8" CULINARY WATER
- 8" SECONDARY WATER
- CONTOUR MAJOR
- CONTOUR MINOR
- EXIST. STORM DRAIN
- EXIST. SANITARY SEWER
- EXIST. CULINARY WATER
- EXIST. FENCE
- EXIST. CONTOUR MAJOR
- EXIST. CONTOUR MINOR
- SIGN
- STREET LIGHT
- SD MH, INLET, AND COMBO
- SEWER MANHOLE
- VALVE, TEE & BEND
- WATER BLOW-OFF
- FIRE HYDRANT
- STREET MONUMENT (TO BE SET)
- EXIST. STREET MONUMENT
- EXIST. SD INLET & MH
- EXIST. SEWER MH
- EXIST. VALVE, TEE, & BEND
- EXIST. FIRE HYDRANT
- o XXXX.XX SPOT ELEVATION



N S

GRAPHIC SCALE

200 0 100 200 400 800

(IN FEET)
1 inch = 200ft.

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EAGLE MOUNTAIN CITY, UTAH

OVERALL SITE PLAN

REVISION BLOCK		
#	DATE	DESCRIPTION
1	----	----
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OVERALL SITE PLAN

Scale:	1"=200'	Drawn:	CSA
Date:	12/03/21	Job #:	20-0055
Sheet:	C3		

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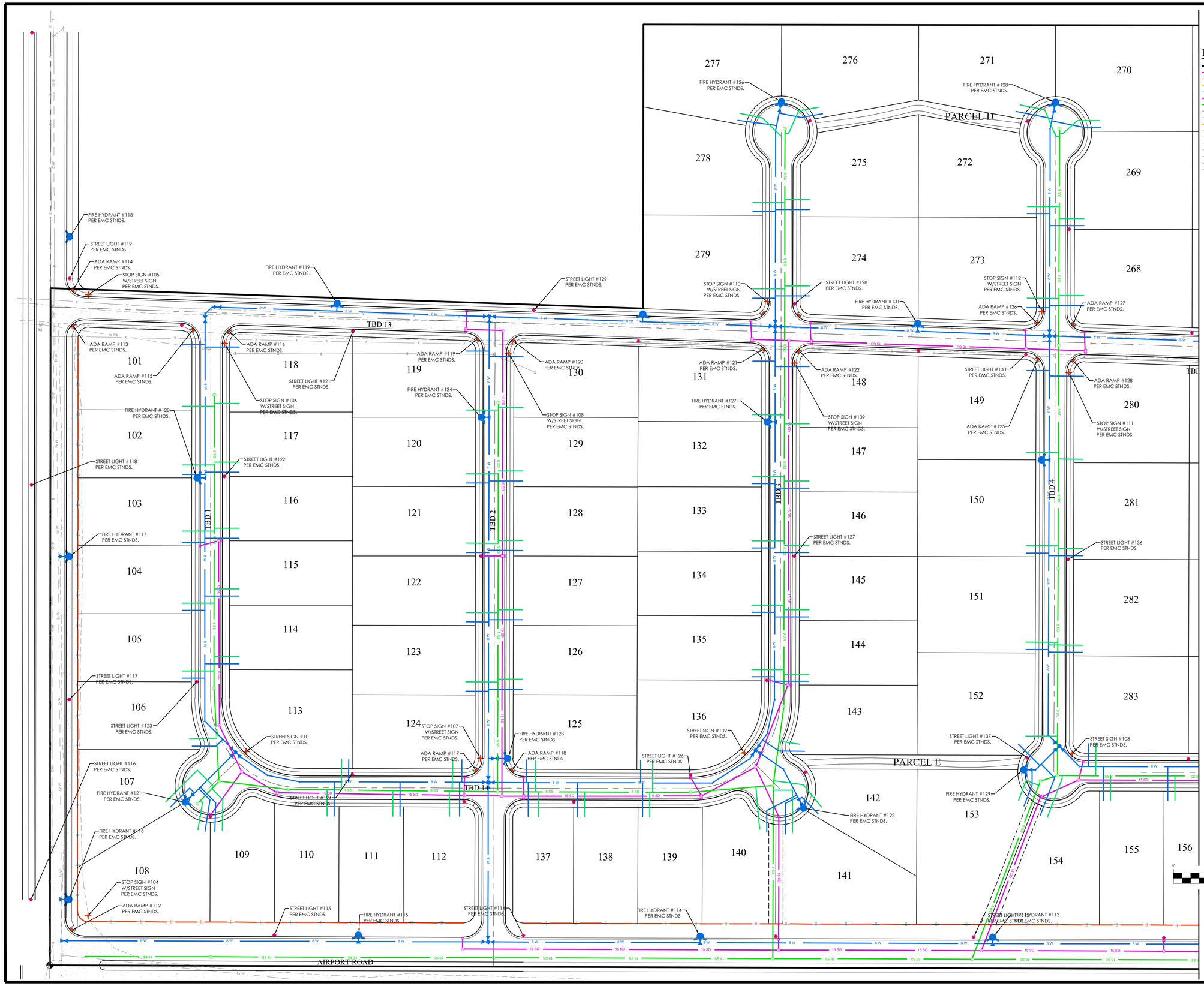

LEGEND

- BOUNDARY
- ROW
- CENTERLINE
- LOT LINE
- EASEMENT
- 15" STORM DRAIN
- 8" SANITARY SEWER
- 8" CULINARY WATER
- 8" SECONDARY WATER
- CONTOUR MAJOR
- CONTOUR MINOR
- EXIST. STORM DRAIN
- EXIST. SANITARY SEWER
- EXIST. CULINARY WATER
- EXIST. FENCE
- EXIST. CONTOUR MAJOR
- EXIST. CONTOUR MINOR
- SIGN
- STREET LIGHT
- SD MH, INLET, AND COMBO
- SEWER MANHOLE
- VALVE, TEE & BEND
- WATER BLOW-OFF
- FIRE HYDRANT
- STREET MONUMENT (TO BE SET)
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- EXIST. SEWER MH
- EXIST. VALVE, TEE, & BEND
- EXIST. FIRE HYDRANT
- o XXXX.XX SPOT ELEVATION

GRAPHIC SCALE

(IN FEET)
1 inch = 60 ft.

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TRIUMPH PRELIMINARY

EAGLE MOUNTAIN CITY, UTAH
SITE PLAN

REVISION BLOCK

#	DATE	DESCRIPTION
1	----	----
2	----	----
3	----	----
4	----	----
5	----	----
6	----	----

SITE PLAN

Scale:	1"=60'	Drawn:	CSA
Date:	12/03/21	Job #:	20-0055
Sheet:	C3.1		

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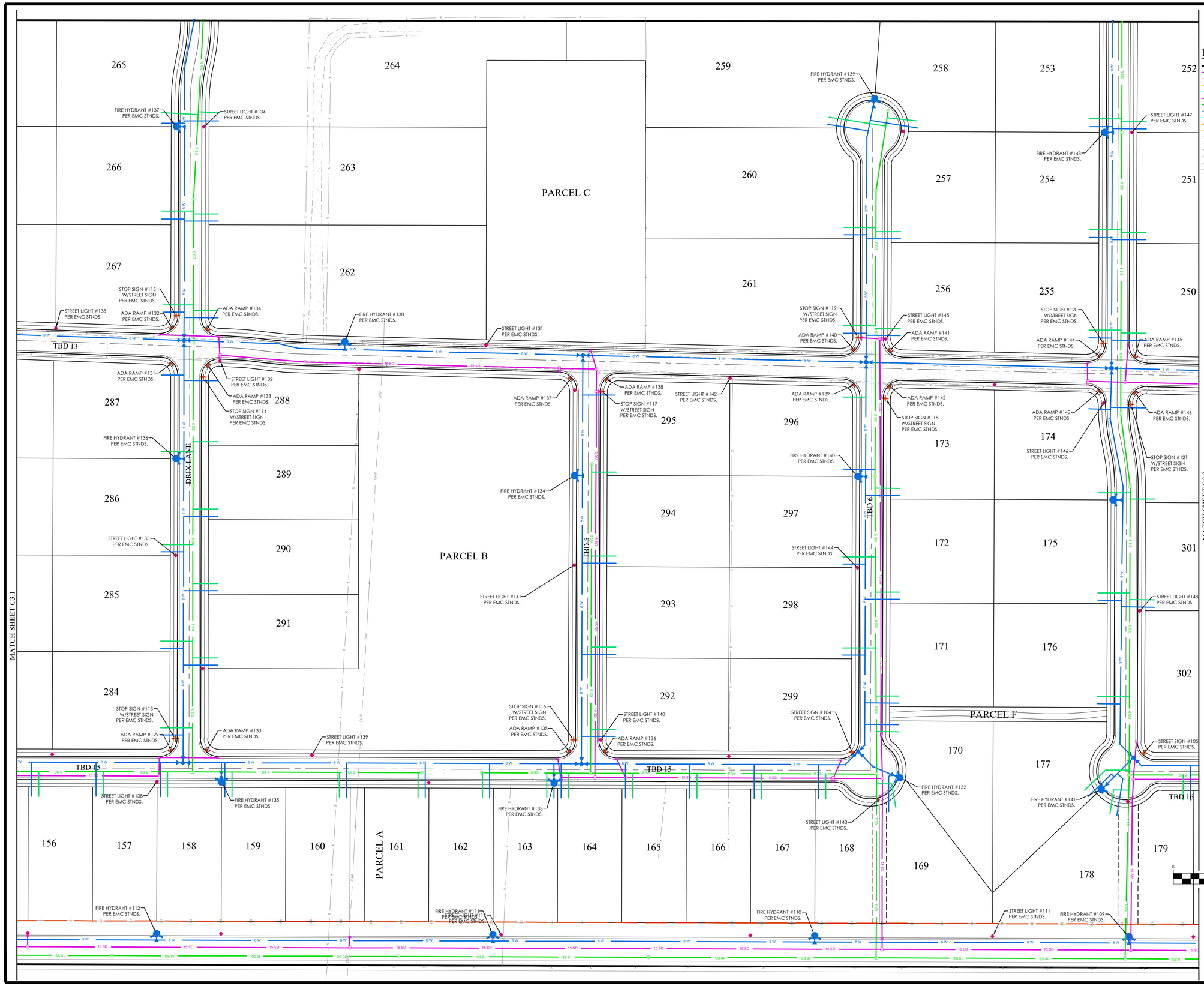

LEGEND

	BOUNDARY
	ROW
	CENTERLINE
	LOT LINE
	EASEMENT
15 SD	15" STORM DRAIN
8 SS	8" SANITARY SEWER
8 W	8" CULINARY WATER
8 SW	8" SECONDARY WATER
XXXX	CONTOUR MAJOR
XXXX	CONTOUR MINOR
Ex SD	EXIST. STORM DRAIN
Ex SS	EXIST. SANITARY SEWER
Ex W	EXIST. CULINARY WATER
X	EXIST. FENCE
(XXXX)	EXIST. CONTOUR MAJOR
(XXXX)	EXIST. CONTOUR MINOR
	SIGN
	STREET LIGHT
SD	SD MH, INLET, AND COMBO
	SEWER MANHOLE
	VALVE, TEE & BEND
	WATER BLOW-OFF
	FIRE HYDRANT
	STREET MONUMENT (TO BE SET)
	EXIST. STREET MONUMENT
SD	EXIST. SD INLET & MH
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	EXIST. VALVE, TEE, & BEND
	EXIST. FIRE HYDRANT
o XXXX.XX	SPOT ELEVATION

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EAGLE MOUNTAIN CITY, UTAH

SITE PLAN

REVISION BLOCK

#	DATE	DESCRIPTION
1	----	----
2	----	----
3	----	----
4	----	----
5	----	----
6	----	----

SITE PLAN

Scale:	1"=60'	Drawn:	CSA
Date:	12/03/21	Job #:	20-0055
Sheet:	C3.2		

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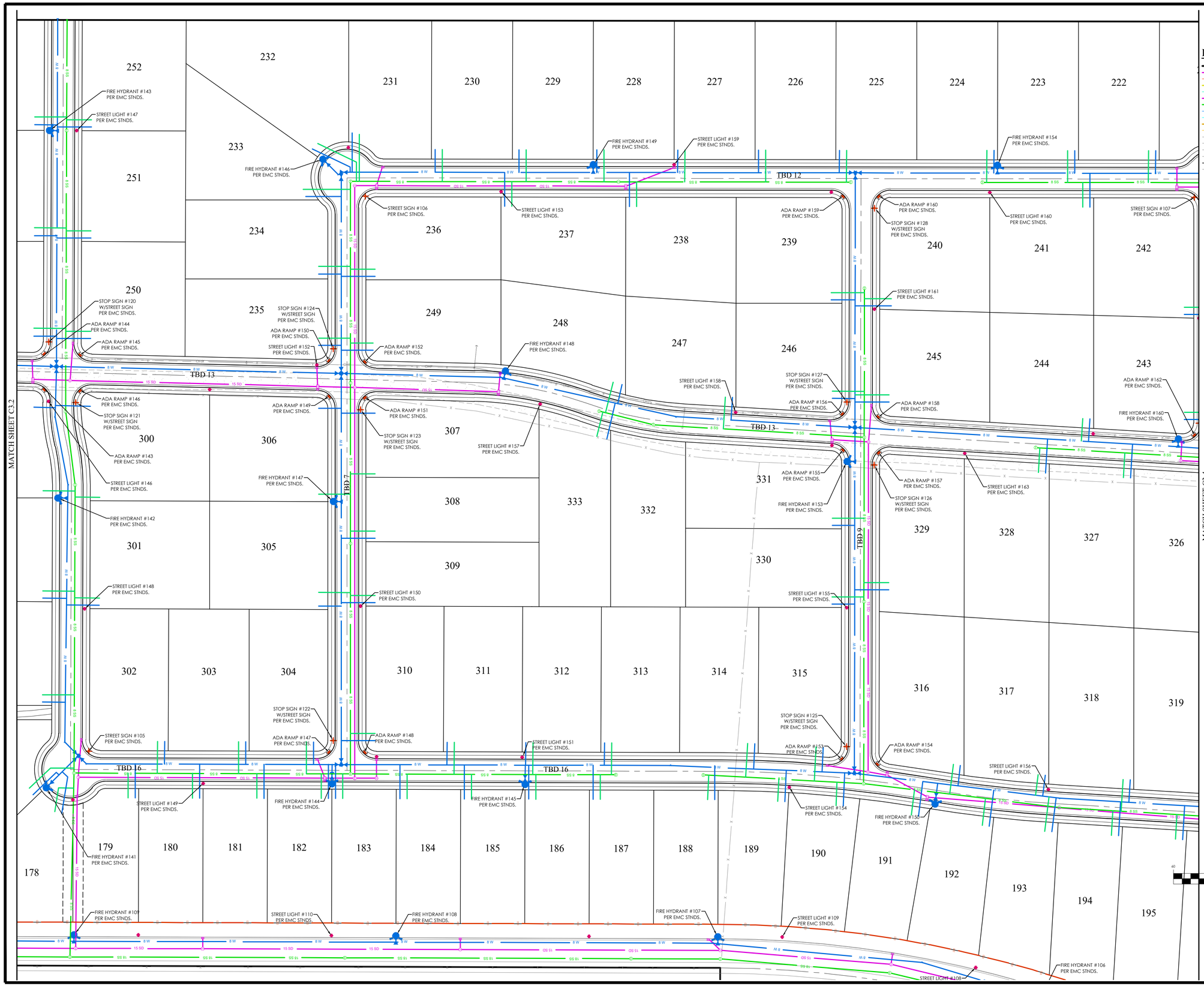

LEGEND

- BOUNDARY
- ROW
- CENTERLINE
- LOT LINE
- EASEMENT
- 15" STORM DRAIN
- 8" SANITARY SEWER
- 8" CULINARY WATER
- 8" SECONDARY WATER
- CONTOUR MAJOR
- CONTOUR MINOR
- EXIST. STORM DRAIN
- EXIST. SANITARY SEWER
- EXIST. CULINARY WATER
- EXIST. FENCE
- EXIST. CONTOUR MAJOR
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- EXIST. FIRE HYDRANT
- o XXXX.XX SPOT ELEVATION

GRAPHIC SCALE

(IN FEET)
1 inch = 60 ft.

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EAGLE MOUNTAIN CITY, UTAH
SITE PLAN

REVISION BLOCK

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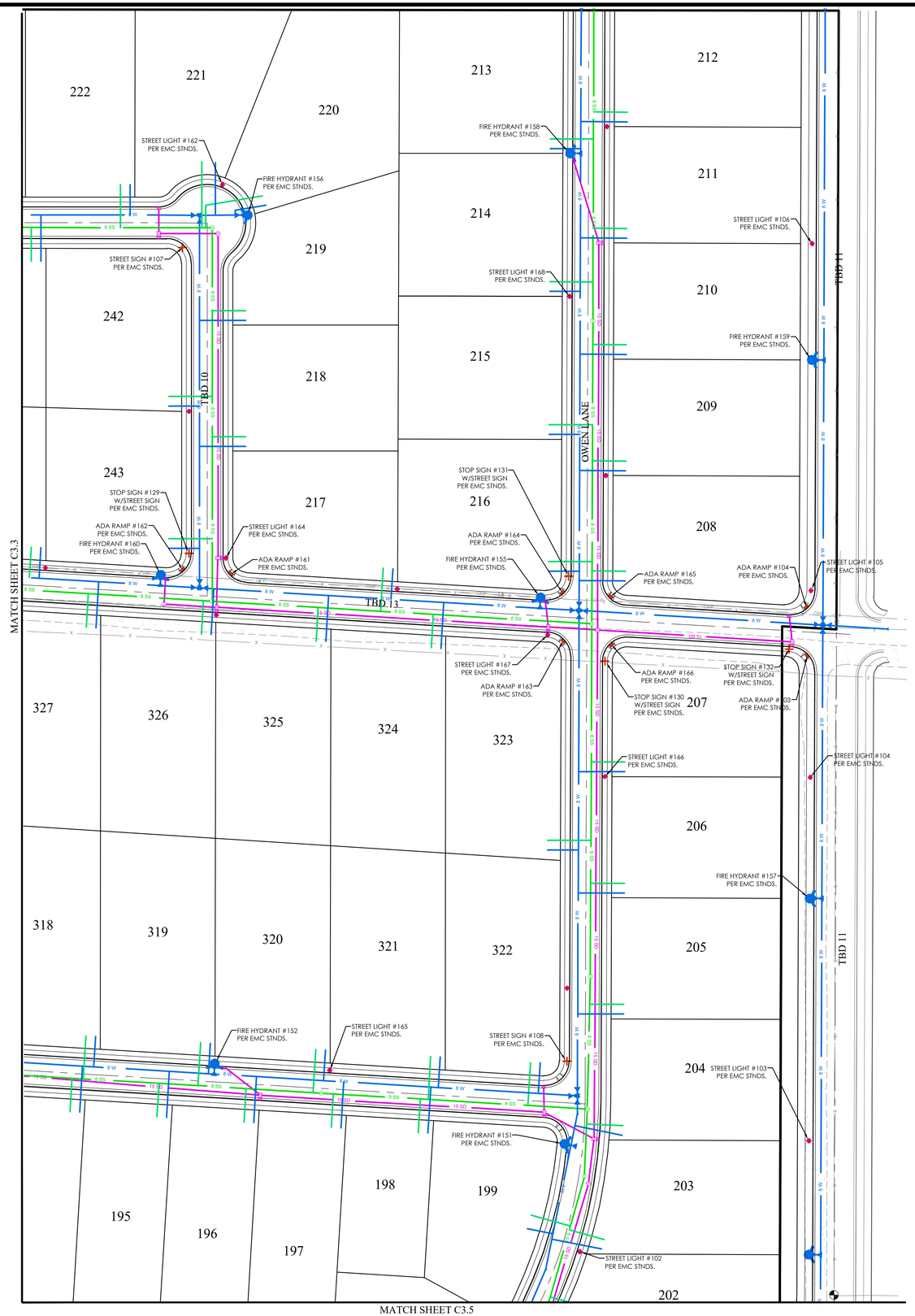
SITE PLAN

Scale:	1"=60'	Drawn:	CSA
Date:	12/03/21	Job #:	20-0055
Sheet:	C3.3		

Z:_2020\20-0055 Hazard Acres\design 20-0055\dwg\sheets\C3.3 - SITE PLAN.dwg



LEGEND

- BOUNDARY
- ROW
- CENTERLINE
- LOT LINE
- EASEMENT
- 15 SD — 15" STORM DRAIN
- 8 SS — 8" SANITARY SEWER
- 8 W — 8" CULINARY WATER
- 8 SW — 8" SECONDARY WATER
- XXXX — CONTOUR MAJOR
- XXXX — CONTOUR MINOR
- Ex SD — EXIST. STORM DRAIN
- Ex SS — EXIST. SANITARY SEWER
- Ex W — EXIST. CULINARY WATER
- X — EXIST. FENCE
- (XXXX) — EXIST. CONTOUR MAJOR
- (XXXX) — EXIST. CONTOUR MINOR
- SIGN
- STREET LIGHT
- SD MH, INLET, AND COMBO
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EAGLE MOUNTAIN CITY, UTAH
SITE PLAN

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N S

GRAPHIC SCALE

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(IN FEET)
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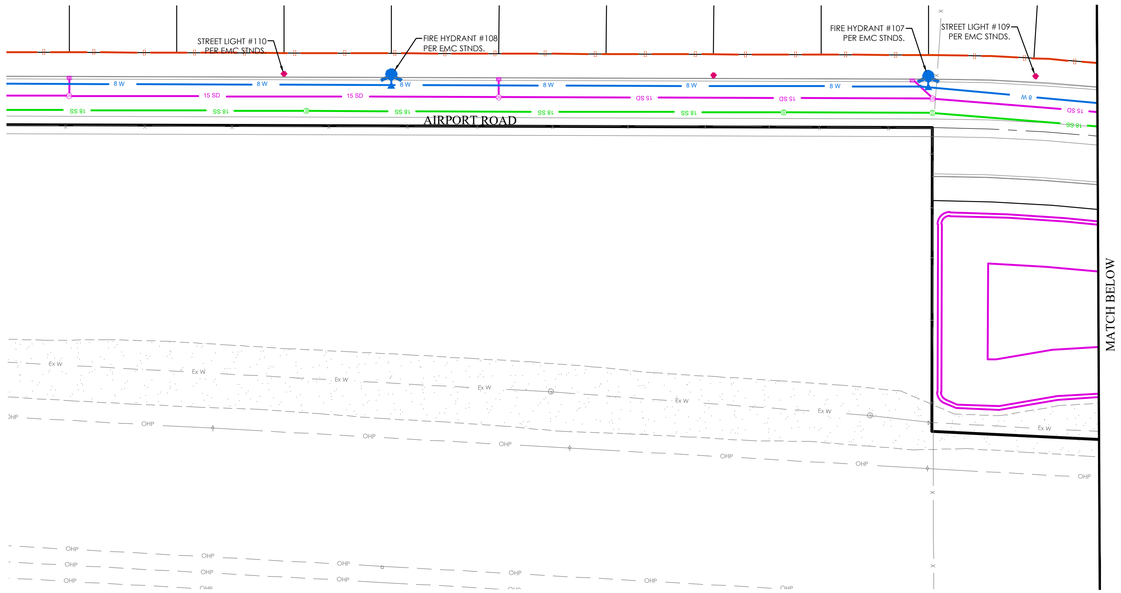
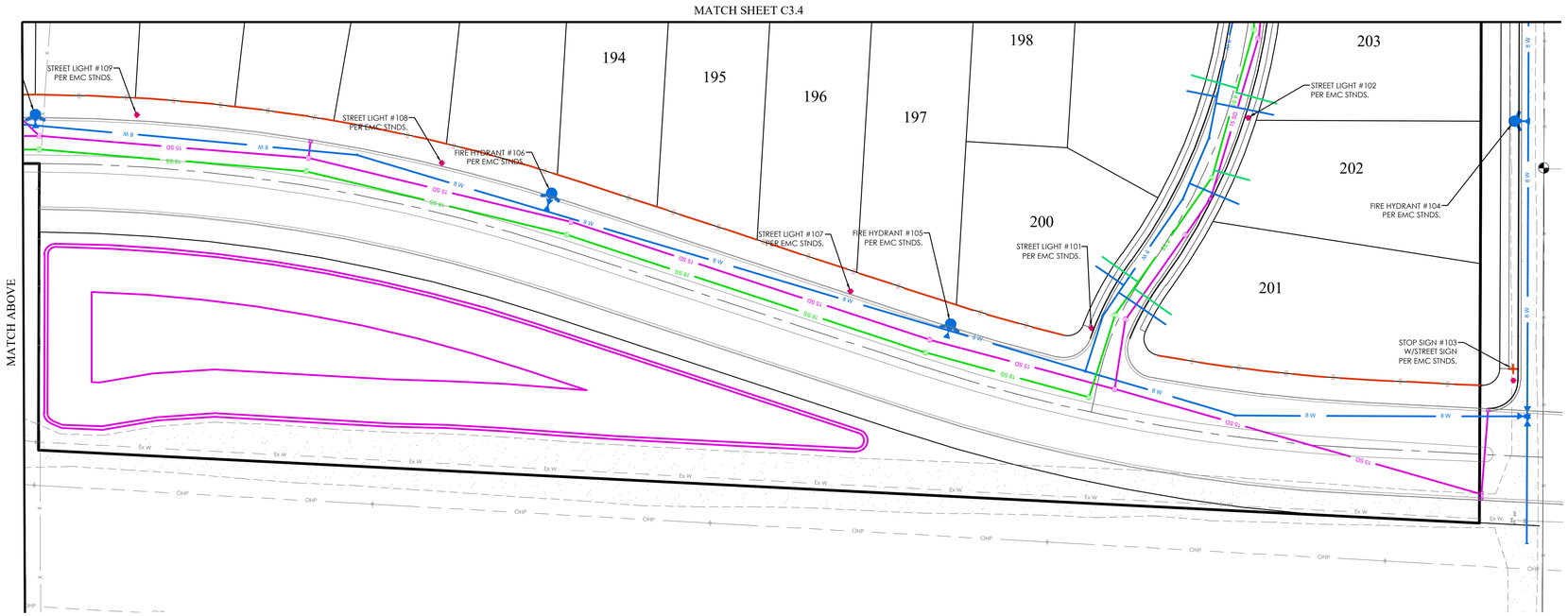
SITE PLAN

Scale:	1"=60'	Drawn:	CSA
Date:	12/03/21	Job #:	20-0055
Sheet:	C3.4		

Z:_2020\20-0055 Hazard Acres\design 20-0055\dwg\sheets\C3.4 - SITE PLAN.dwg





LEGEND

- BOUNDARY
- ROW
- CENTERLINE
- LOT LINE
- EASEMENT
- 15" STORM DRAIN
- 8" SANITARY SEWER
- 8" CULINARY WATER
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SITE PLAN

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SITE PLAN

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Sheet:	C3.5		

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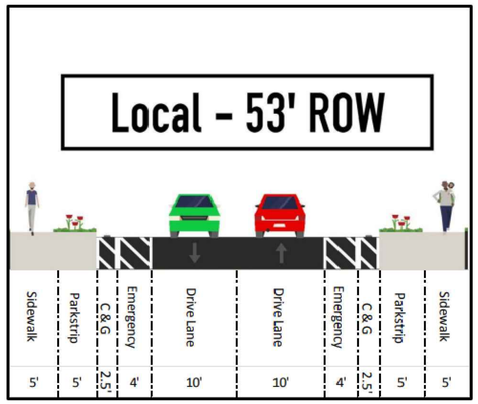

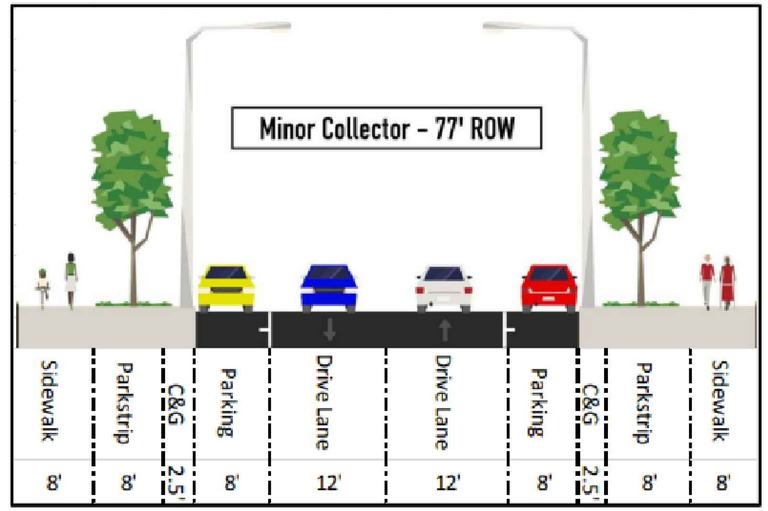

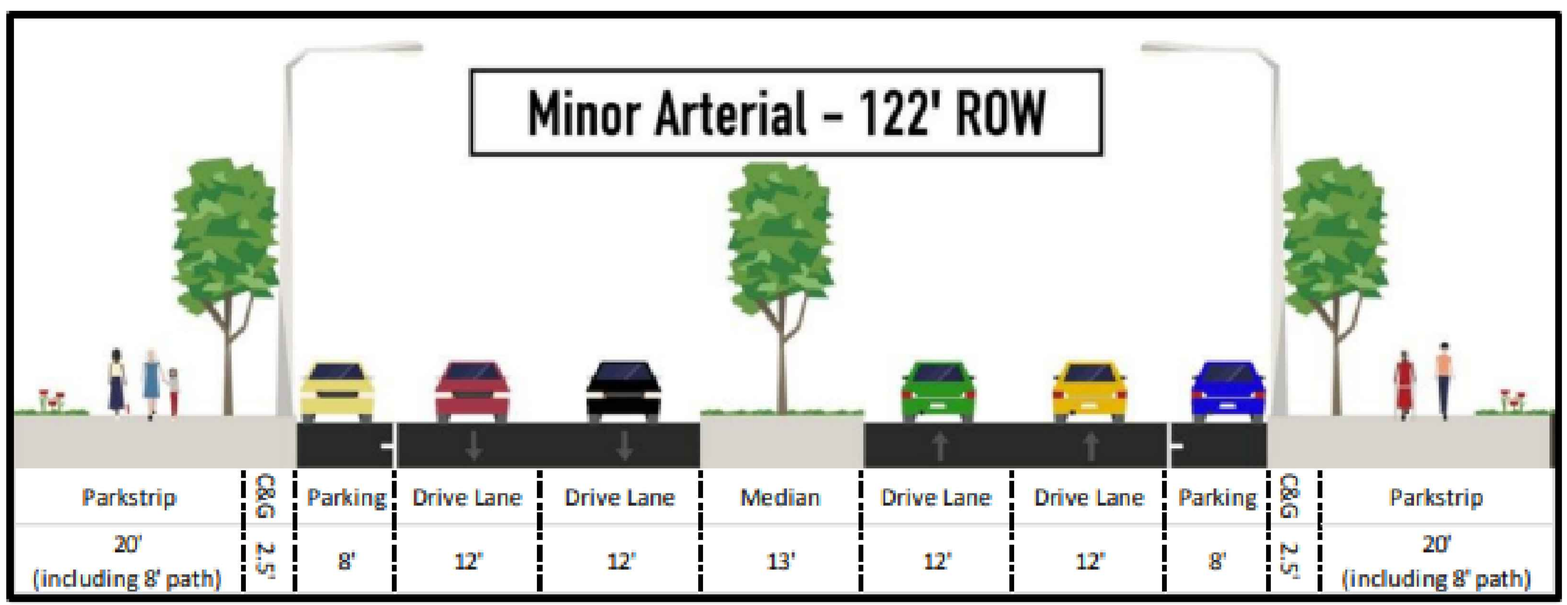

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EAGLE MOUNTAIN CITY, UTAH

SITE PLAN

REVISION BLOCK

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SITE PLAN

Scale:	1"=60'	Drawn:	CSA
Date:	12/03/21	Job #:	20-0055
Sheet:	C3.6		

Z:_2020\20-0055 Hazard Acres\design 20-0055\dwg\sheets\C3.6 - SITE PLAN.dwg

NOTES

1) PROPOSED CONTOURS ARE AT 2.0' INTERVALS
2) ALL LOTS TO DRAIN TO STREET OR CONTAIN WATER ON OWN LOT
3) ALL LOTS MEET EAGLE MOUNTAIN CITY MAXIMUM LOT SLOPE REQUIREMENTS

LEGEND

- BOUNDARY
- ROW
- CENTERLINE
- LOT LINE
- EASEMENT
- 15" STORM DRAIN
- 8" SANITARY SEWER
- 8" CULINARY WATER
- 8" SECONDARY WATER
- CONTOUR MAJOR
- CONTOUR MINOR
- EXIST. STORM DRAIN
- EXIST. SANITARY SEWER
- EXIST. CULINARY WATER
- EXIST. FENCE
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- STREET LIGHT
- SD MH, INLET, AND COMBO
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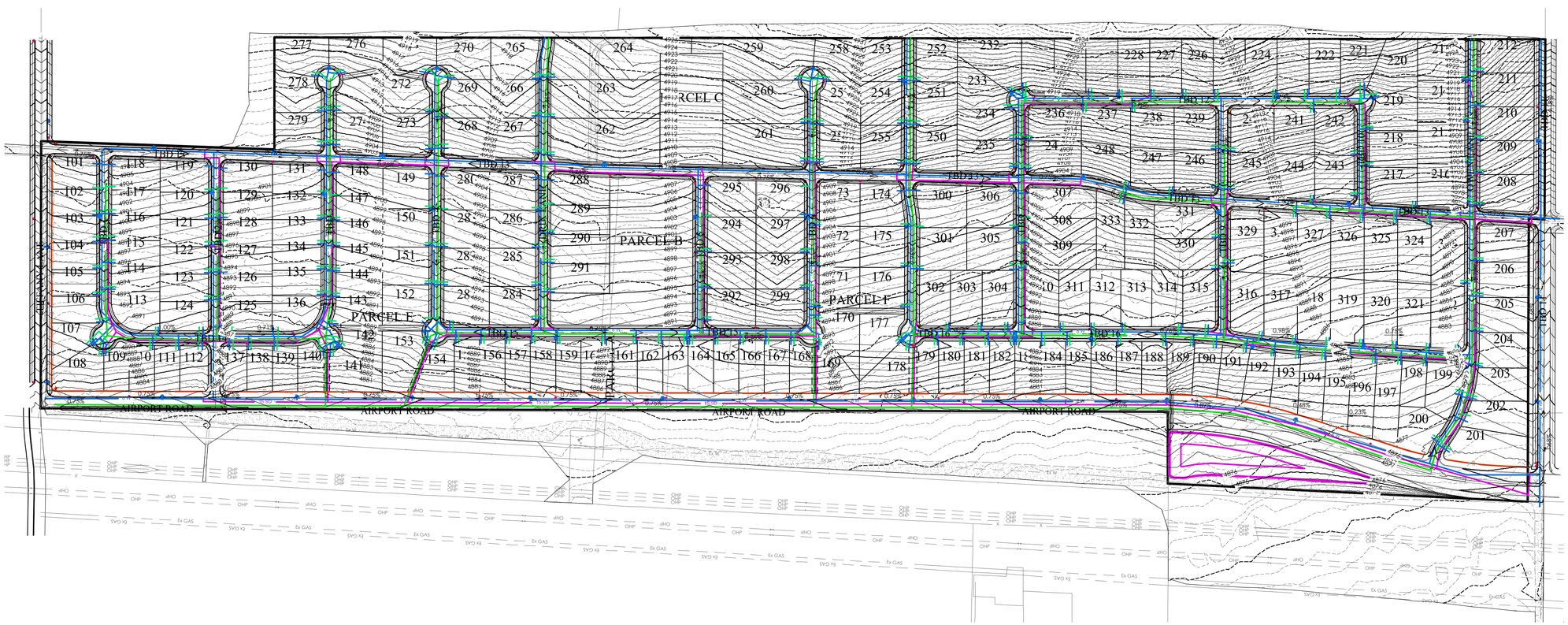
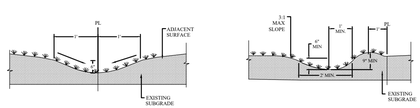
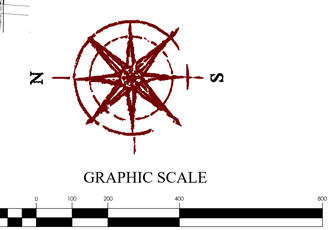
- o XXXX.XX SPOT ELEVATION





DRAINAGE SWALE DETAIL
NTS

DRAINAGE BERM DETAIL
NTS



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TRIUMPH PRELIMINARY

EAGLE MOUNTAIN CITY, UTAH

GRADING AND DRAINAGE PLAN

REVISION BLOCK

#	DATE	DESCRIPTION
1	----	----
2	----	----
3	----	----
4	----	----
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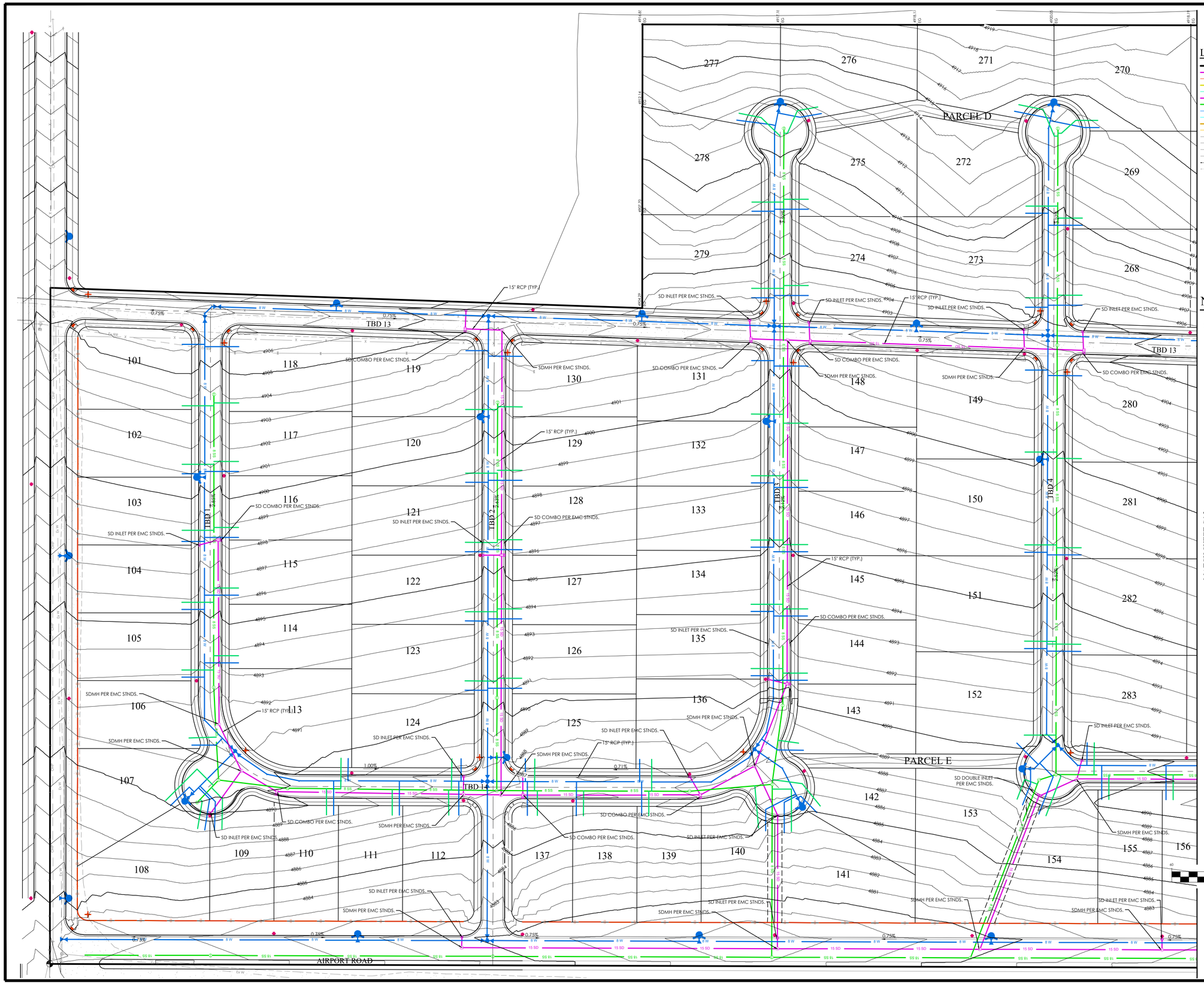
GRADING AND DRAINAGE PLAN

Scale:	1"=200'	Drawn:	CSA
Date:	12/03/21	Job #:	20-0055
Sheet:	C4		

Z:_2020\20-0055 Hazard Acres\design 20-0055\dwg\sheet\C4 - GRADING AND DRAINAGE PLAN.dwg



LEGEND

- BOUNDARY
- ROW
- CENTERLINE
- LOT LINE
- EASEMENT
- 15" STORM DRAIN
- 8" SANITARY SEWER
- 8" CULINARY WATER
- 8" SECONDARY WATER
- CONTOUR MAJOR
- CONTOUR MINOR
- EXIST. STORM DRAIN
- EXIST. SANITARY SEWER
- EXIST. CULINARY WATER
- EXIST. FENCE
- EXIST. CONTOUR MAJOR
- EXIST. CONTOUR MINOR
- SIGN
- STREET LIGHT
- SD MH, INLET, AND COMBO
- SEWER MANHOLE
- VALVE, TEE & BEND
- WATER BLOW-OFF
- FIRE HYDRANT
- STREET MONUMENT (TO BE SET)
- EXIST. STREET MONUMENT
- EXIST. SD INLET & MH
- EXIST. SEWER MH
- EXIST. VALVE, TEE, & BEND
- EXIST. FIRE HYDRANT
- o XXXX.XX SPOT ELEVATION

NOTES

1) PROPOSED CONTOURS ARE AT 2.0' INTERVALS
2) ALL LOTS TO DRAIN TO STREET OR CONTAIN WATER ON OWN LOT

GRAPHIC SCALE

(IN FEET)
1 inch = 60 ft.

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EAGLE MOUNTAIN CITY, UTAH

GRADING AND DRAINAGE PLAN

REVISION BLOCK

#	DATE	DESCRIPTION
1	----	----
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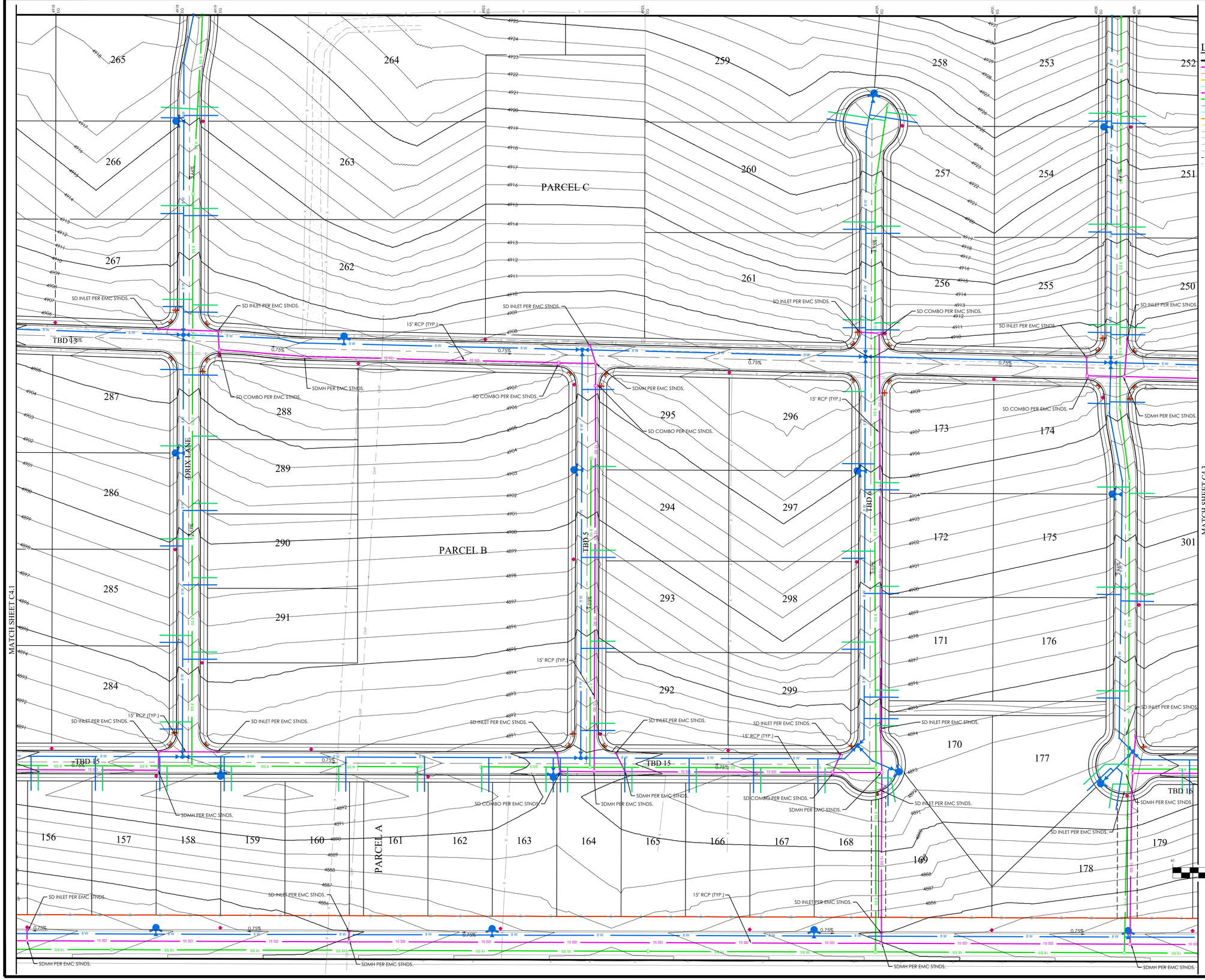
GRADING AND DRAINAGE PLAN

Scale:	1"=60'	Drawn:	CSA
Date:	12/03/21	Job #:	20-0055
Sheet:	C4.1		

Z:_2020\20-0055 Hazard Acres\design 20-0055\dwg\sheets\C4.1 - GRADING AND DRAINAGE PLAN.dwg



LEGEND

- BOUNDARY
- ROW
- CENTERLINE
- LOT LINE
- EASEMENT
- 15" STORM DRAIN
- 8" SANITARY SEWER
- 8" CULINARY WATER
- 8" SECONDARY WATER
- CONTOUR MAJOR
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- EXIST. STORM DRAIN
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EAGLE MOUNTAIN CITY, UTAH

GRADING AND DRAINAGE PLAN

REVISION BLOCK

#	DATE	DESCRIPTION
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GRADING AND DRAINAGE PLAN

Scale:	1"=60'	Drawn:	CSA
Date:	12/03/21	Job #:	20-0055
Sheet:	C4.2		

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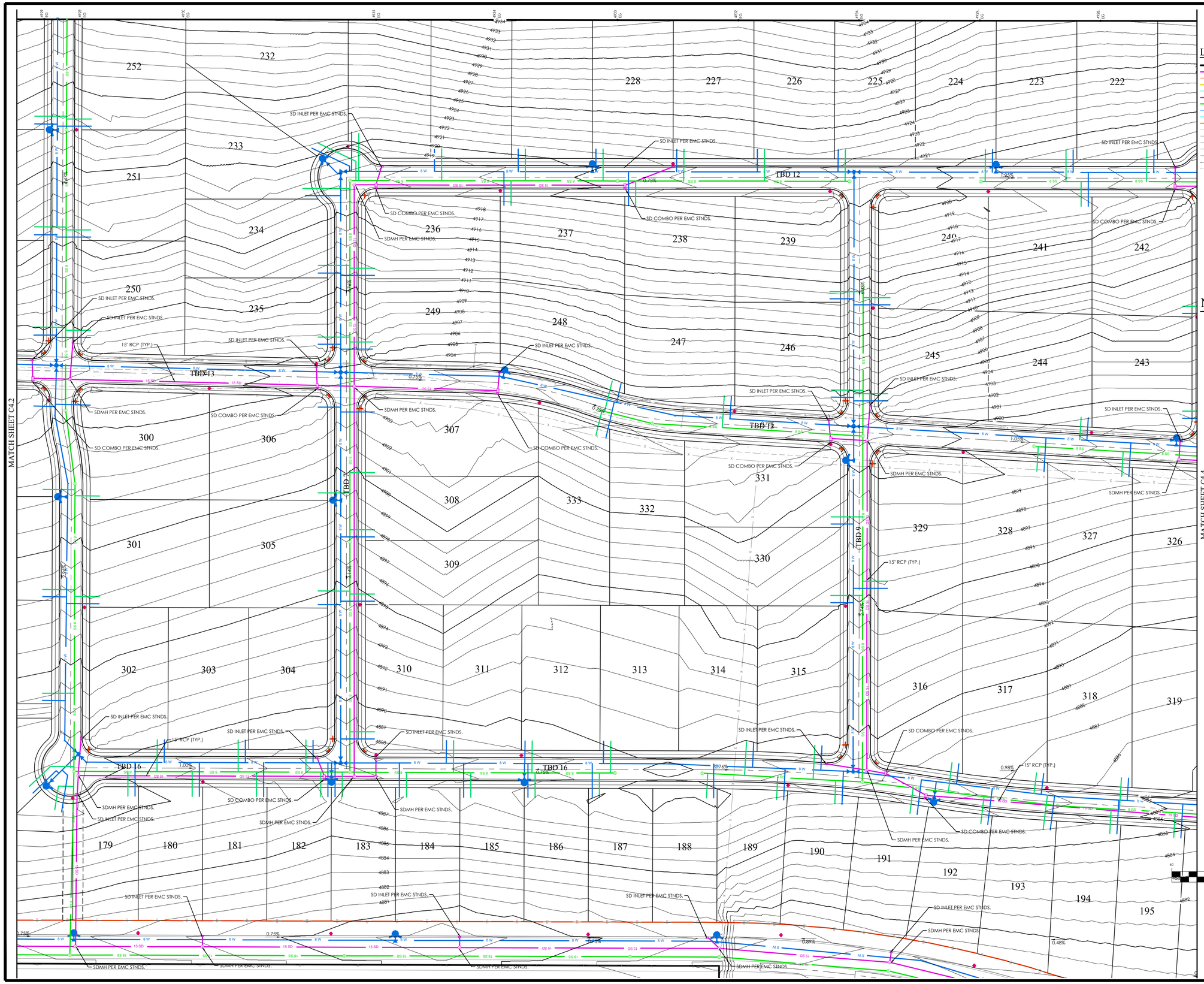

LEGEND

- BOUNDARY
- ROW
- CENTERLINE
- LOT LINE
- EASEMENT
- 15" STORM DRAIN
- 8" SANITARY SEWER
- 8" CULINARY WATER
- 8" SECONDARY WATER
- CONTOUR MAJOR
- CONTOUR MINOR
- EXIST. STORM DRAIN
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- EXIST. FIRE HYDRANT
- o XXXX.XX SPOT ELEVATION

NOTES

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GRADING AND DRAINAGE PLAN

REVISION BLOCK

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GRADING AND DRAINAGE PLAN

Scale:	1"=60'	Drawn:	CSA
Date:	12/03/21	Job #:	20-0055
Sheet:	C4.3		

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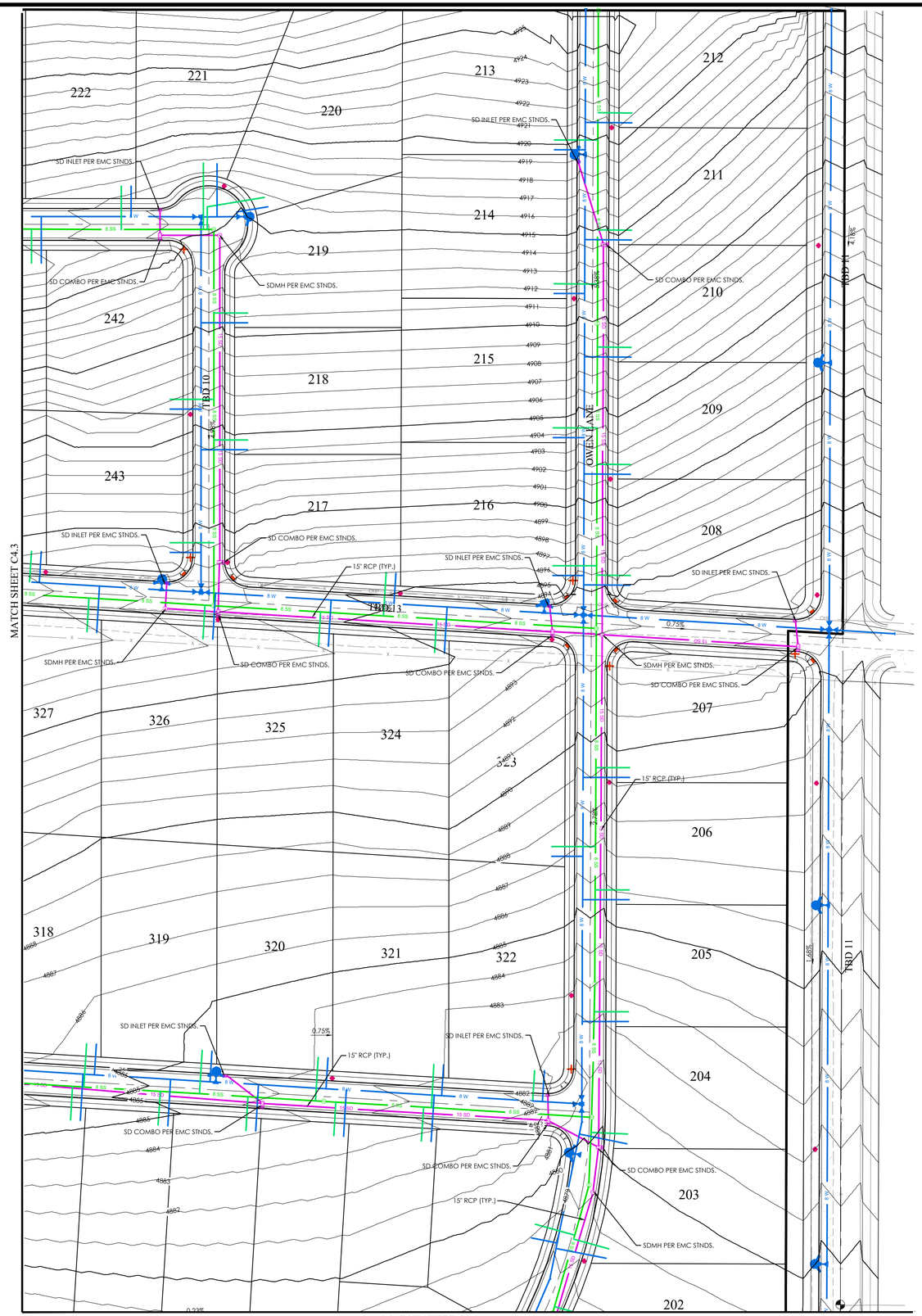

LEGEND

- BOUNDARY
- ROW
- CENTERLINE
- LOT LINE
- EASEMENT
- 15" STORM DRAIN
- 8" SANITARY SEWER
- 8" CULINARY WATER
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- CONTOUR MAJOR
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- EXIST. FIRE HYDRANT
- SPOT ELEVATION

NOTES

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N S

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GRADING AND DRAINAGE PLAN

REVISION BLOCK

#	DATE	DESCRIPTION
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GRADING AND DRAINAGE PLAN

Scale:	1"=60'	Drawn:	CSA
Date:	12/03/21	Job #:	20-0055
Sheet:	C4.4		

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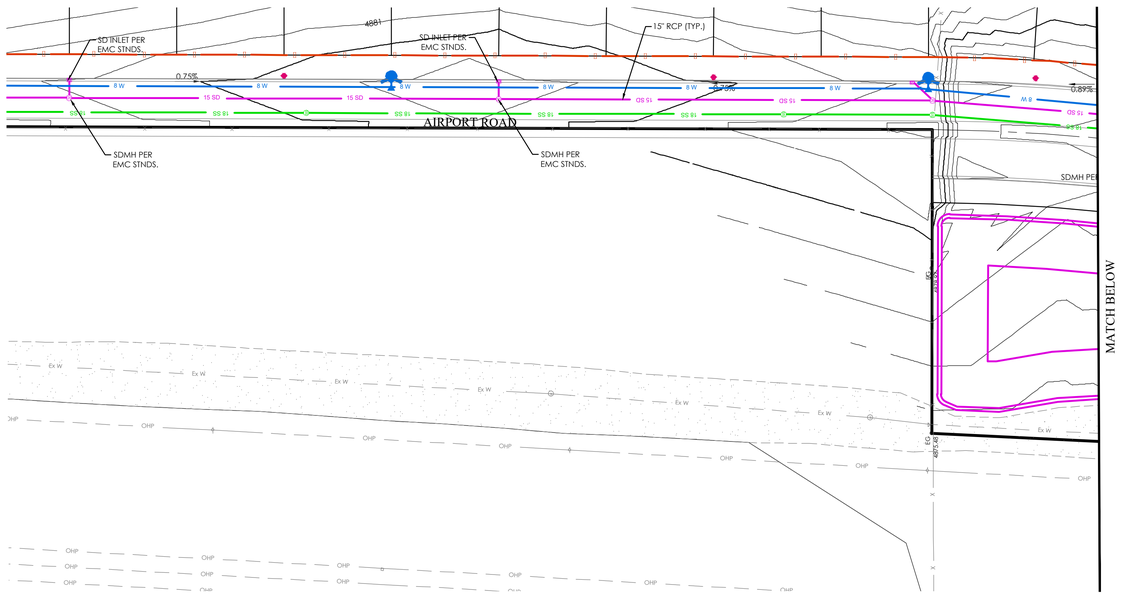

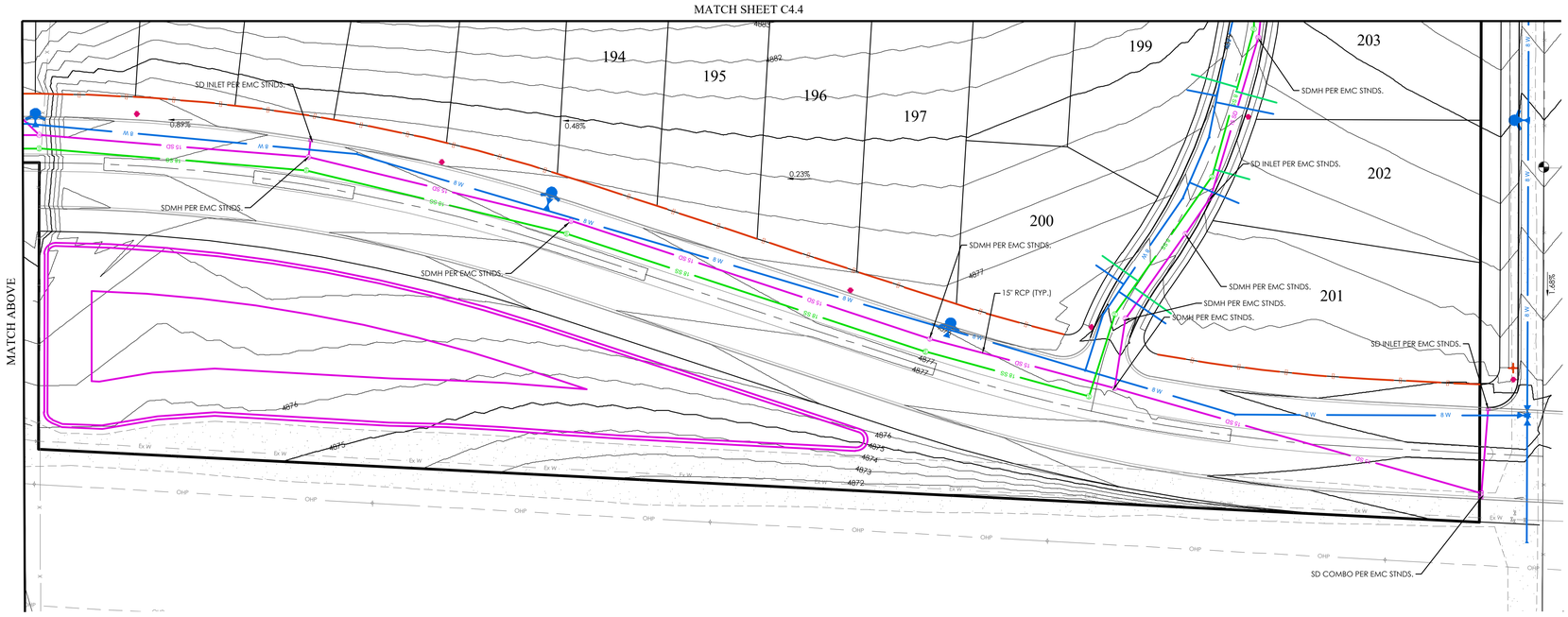

LEGEND

- BOUNDARY
- ROW
- CENTERLINE
- LOT LINE
- EASEMENT
- 15" STORM DRAIN
- 8" SANITARY SEWER
- 8" CULINARY WATER
- 8" SECONDARY WATER
- CONTOUR MAJOR
- CONTOUR MINOR
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NOTES

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GRAPHIC SCALE

60 0 30 60 120 240

(IN FEET)
1 inch = 60 ft.

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GRADING AND DRAINAGE PLAN

REVISION BLOCK

#	DATE	DESCRIPTION
1	----	----
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GRADING AND DRAINAGE PLAN

Scale:	1"=60'	Drawn:	CSA
Date:	12/03/21	Job #:	20-0055
Sheet:	C4.5		

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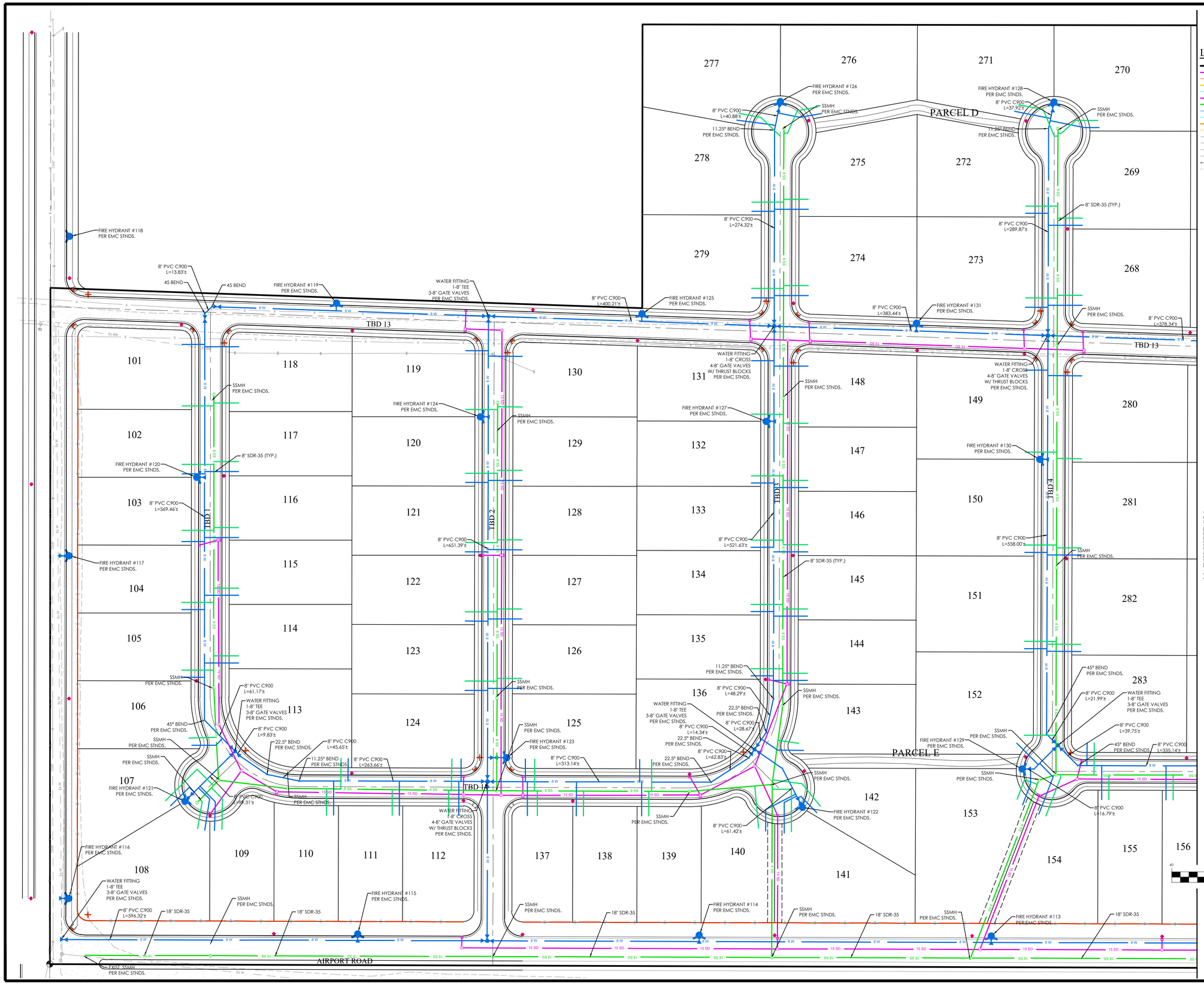

LEGEND

- BOUNDARY
- ROW
- CENTERLINE
- LOT LINE
- EASEMENT
- 15" STORM DRAIN
- 8" SANITARY SEWER
- 8" CULINARY WATER
- 8" SECONDARY WATER
- CONTOUR MAJOR
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EAGLE MOUNTAIN CITY, UTAH
UTILITY PLAN

REVISION BLOCK

#	DATE	DESCRIPTION
1	####	
2	####	
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5	####	
6	####	

UTILITY PLAN

Scale:	1"=60'	Drawn:	CSA
Date:	12/03/21	Job #:	20-0055
Sheet:	C5		

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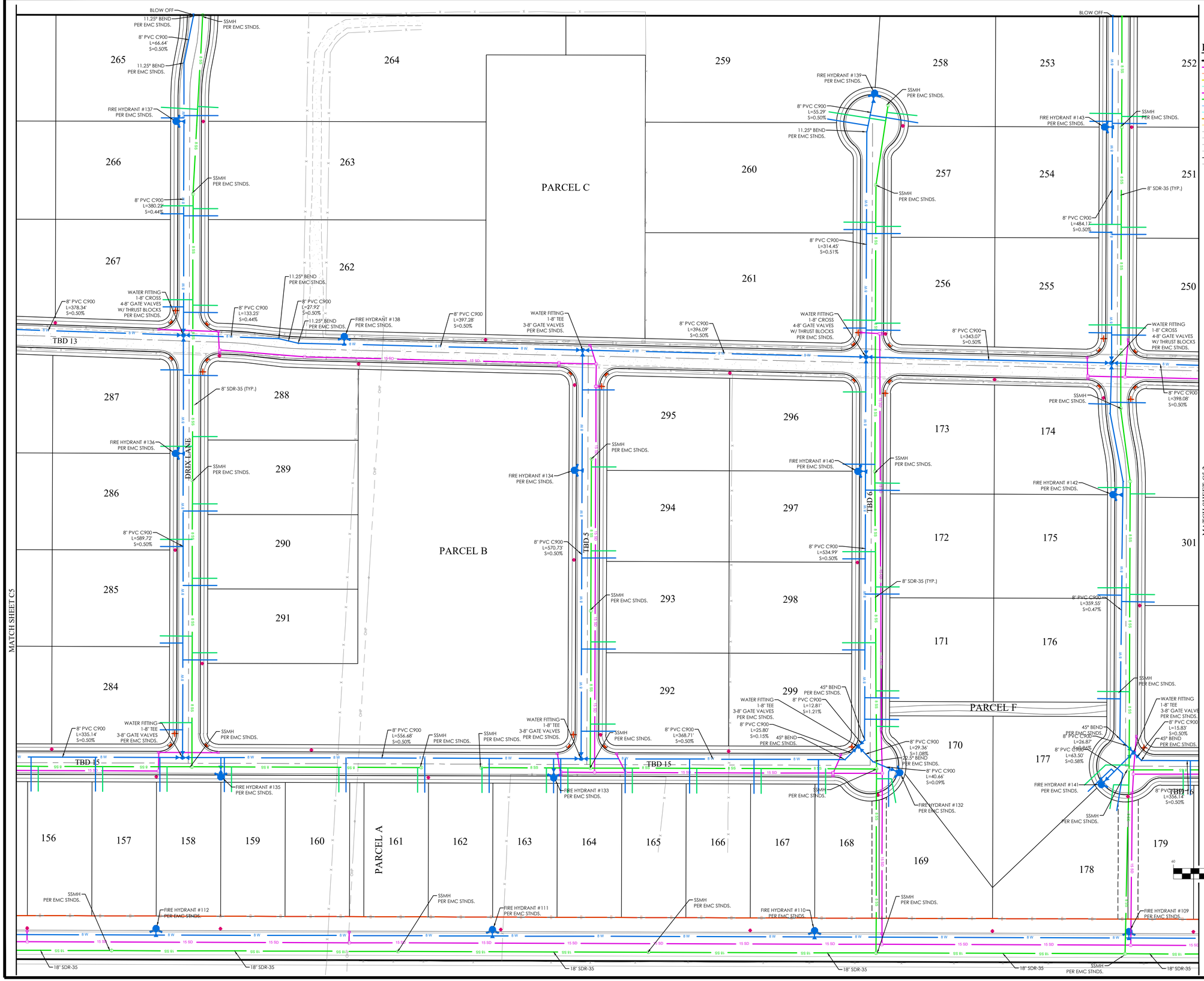

LEGEND

- BOUNDARY
- ROW
- CENTERLINE
- LOT LINE
- EASEMENT
- 15" STORM DRAIN
- 8" SANITARY SEWER
- 8" CULINARY WATER
- 8" SECONDARY WATER
- CONTOUR MAJOR
- CONTOUR MINOR
- EXIST. STORM DRAIN
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- EXIST. CULINARY WATER
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GRAPHIC SCALE

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TRIUMPH PRELIMINARY

EAGLE MOUNTAIN CITY, UTAH

UTILITY PLAN

REVISION BLOCK

#	DATE	DESCRIPTION
1	----	----
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3	----	----
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UTILITY PLAN

Scale:	1"=60'	Drawn:	CSA
Date:	12/03/21	Job #:	20-0055
Sheet:	C5.1		

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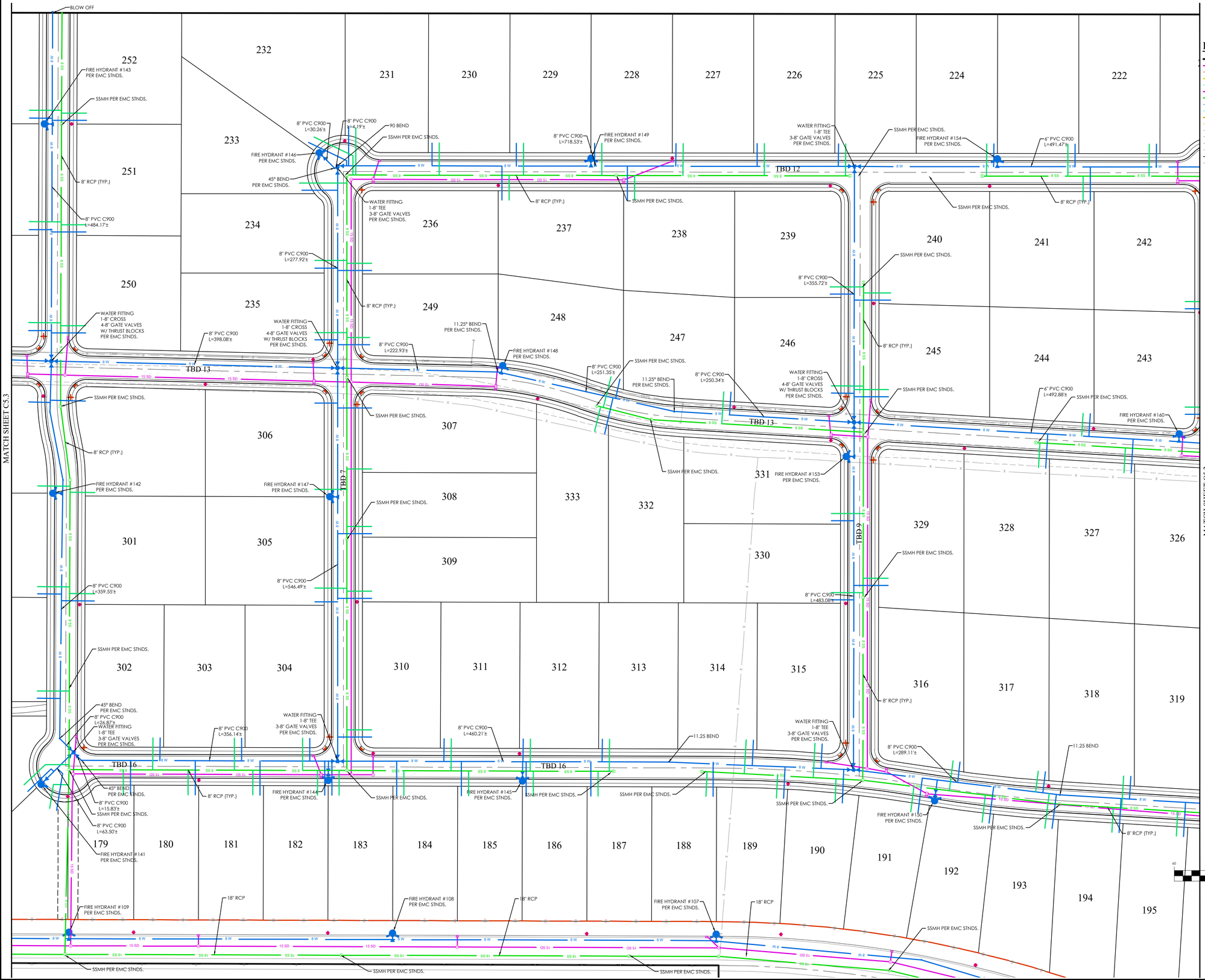

LEGEND

- BOUNDARY
- ROW
- CENTERLINE
- LOT LINE
- EASEMENT
- 15" STORM DRAIN
- 8" SANITARY SEWER
- 8" CULINARY WATER
- 8" SECONDARY WATER
- CONTOUR MAJOR
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- EXIST. STORM DRAIN
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EAGLE MOUNTAIN CITY, UTAH

UTILITY PLAN

REVISION BLOCK

#	DATE	DESCRIPTION
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5	----	----
6	----	----

UTILITY PLAN

Scale:	1"=60'	Drawn:	CSA
Date:	12/03/21	Job #:	20-0055
Sheet:	C5.2		

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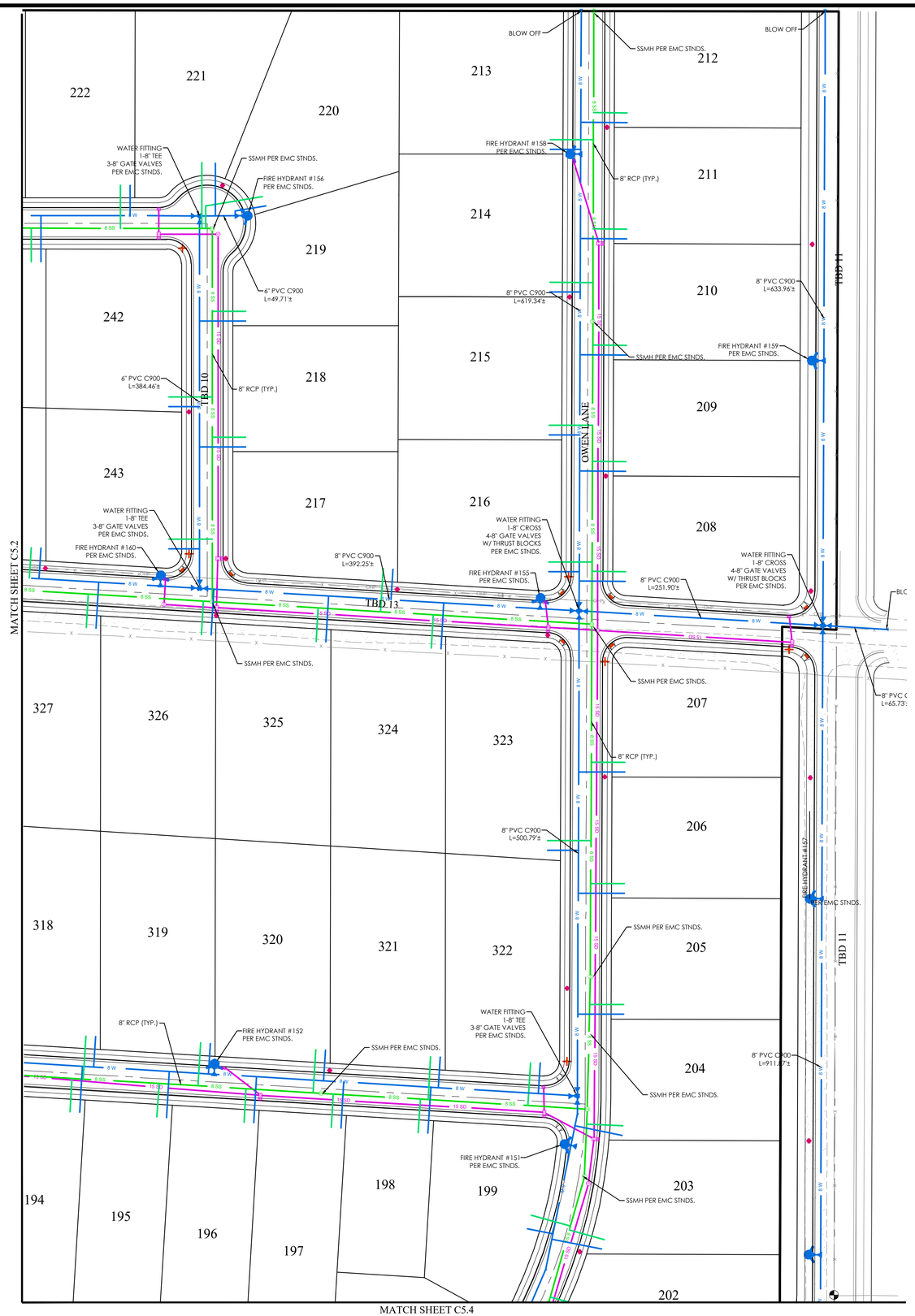

LEGEND

	BOUNDARY
	ROW
	CENTERLINE
	LOT LINE
	EASEMENT
15 SD	15" STORM DRAIN
8 SS	8" SANITARY SEWER
8 W	8" CULINARY WATER
8 SW	8" SECONDARY WATER
XXXX	CONTOUR MAJOR
XXXX	CONTOUR MINOR
Ex SD	EXIST. STORM DRAIN
Ex SS	EXIST. SANITARY SEWER
Ex W	EXIST. CULINARY WATER
X X X	EXIST. FENCE
(XXXX)	EXIST. CONTOUR MAJOR
(XXXX)	EXIST. CONTOUR MINOR
	SIGN
	STREET LIGHT
SD	SD MH, INLET, AND COMBO
	SEWER MANHOLE
	VALVE, TEE & BEND
	WATER BLOW-OFF
	FIRE HYDRANT
	STREET MONUMENT (TO BE SET)
	EXIST. STREET MONUMENT
SD	EXIST. SD INLET & MH
	EXIST. SEWER MH
	EXIST. VALVE, TEE, & BEND
	EXIST. FIRE HYDRANT
o XXXX.XX	SPOT ELEVATION

N S

GRAPHIC SCALE

60 0 30 60 120 240

(IN FEET)
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UTILITY PLAN

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UTILITY PLAN

Scale:	1"=60'	Drawn:	CSA
Date:	12/03/21	Job #:	20-0055
Sheet:	C5.3		

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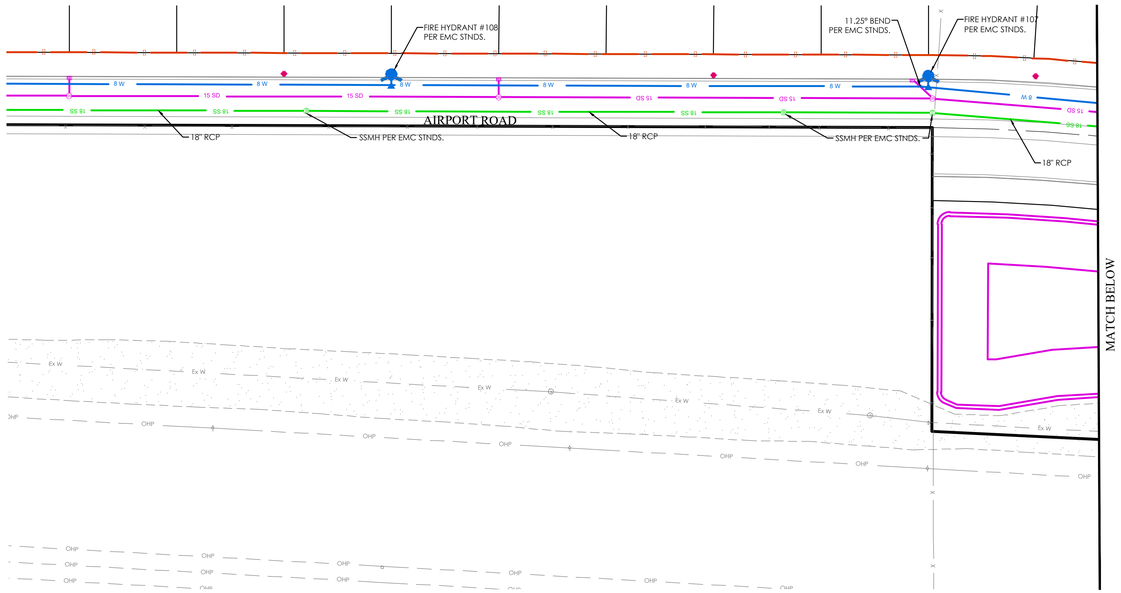
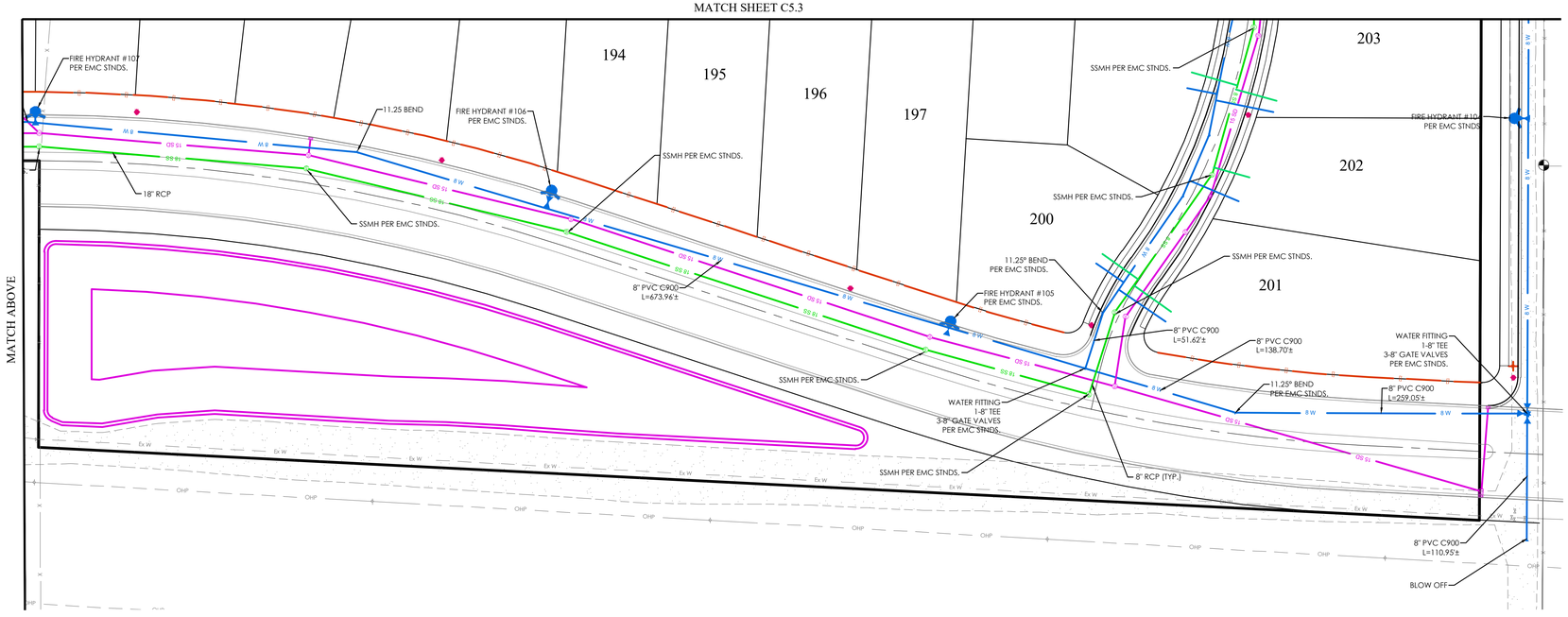


MATCH SHEET C5.3



LEGEND

- BOUNDARY
- ROW
- CENTERLINE
- LOT LINE
- EASEMENT
- 15" STORM DRAIN
- 8" SANITARY SEWER
- 8" CULINARY WATER
- 8" SECONDARY WATER
- CONTOUR MAJOR
- CONTOUR MINOR
- EXIST. STORM DRAIN
- EXIST. SANITARY SEWER
- EXIST. CULINARY WATER
- EXIST. FENCE
- EXIST. CONTOUR MAJOR
- EXIST. CONTOUR MINOR
- SIGN
- STREET LIGHT
- SD MH, INLET, AND COMBO
- SEWER MANHOLE
- VALVE, TEE & BEND
- WATER BLOW-OFF
- FIRE HYDRANT
- STREET MONUMENT (TO BE SET)
- EXIST. STREET MONUMENT
- EXIST. SD INLET & MH
- EXIST. SEWER MH
- EXIST. VALVE, TEE, & BEND
- EXIST. FIRE HYDRANT
- o XXXX.XX SPOT ELEVATION

N S

GRAPHIC SCALE

60 0 30 60 120 240

(IN FEET)
1 inch = 60 ft.

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TRIUMPH PRELIMINARY

EAGLE MOUNTAIN CITY, UTAH
UTILITY PLAN

REVISION BLOCK

#	DATE	DESCRIPTION
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UTILITY PLAN

Scale:	1"=60'	Drawn:	CSA
Date:	12/03/21	Job #:	20-0055
Sheet:	C5.4		

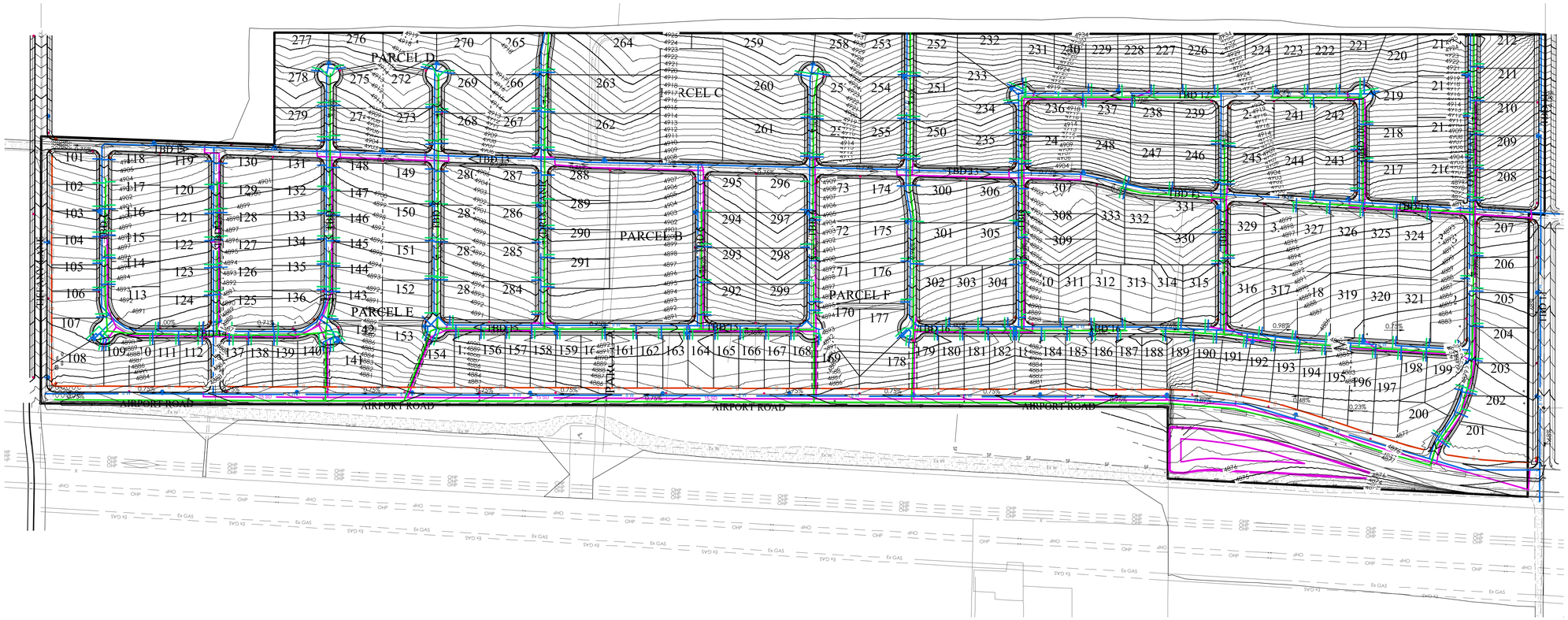
Z:_2020\20-0055 Hazard Acres\design 20-0055\dwg\sheets\C5.4 - UTILITY PLAN.dwg

NOTE

PROPOSED CONTOURS ARE AT 2.0' INTERVALS

EROSION CONTROL LEGEND

- CONSTRUCTION ENTRANCE
- MATERIALS STORAGE
- FUEL TANKS
- CONCRETE WASHOUT
- TRASH BIN
- PORTABLE TOILET
- CONSTRUCTION TRAILER
- INLET PROTECTION
- SURFACE WATERS
- OUTFALL
- SILT FENCE
- CUTBACK CURB
- FIBER ROLL



GRAPHIC SCALE

200 0 100 200 400 800

(IN FEET)
1 inch = 200ft.

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EAGLE MOUNTAIN CITY, UTAH

EROSION CONTROL PLAN

REVISION BLOCK

#	DATE	DESCRIPTION
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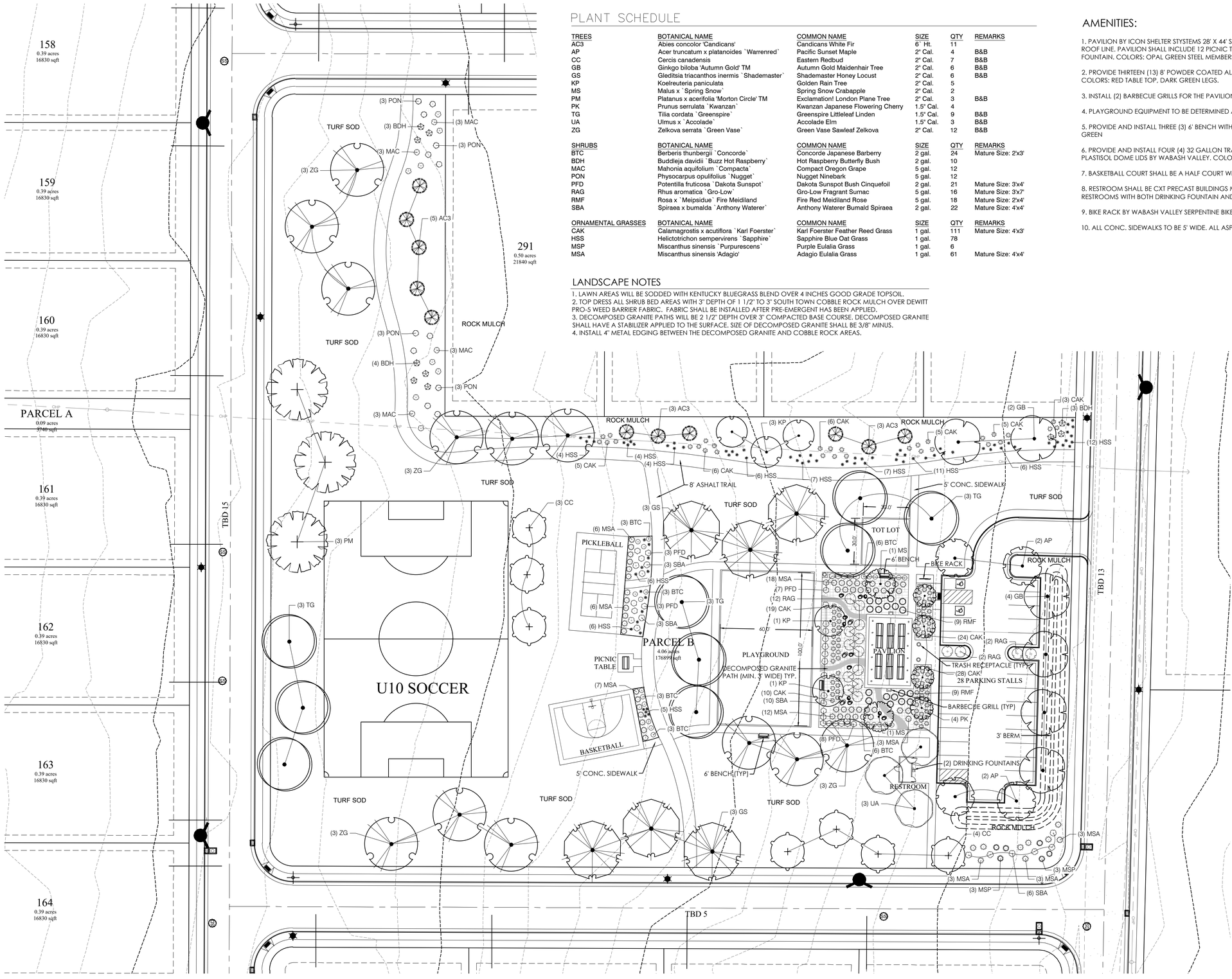
EROSION CONTROL PLAN

Scale:	1"=200'	Drawn:	CSA
Date:	12/03/21	Job #:	20-0055
Sheet:	C6		

Z:_2020\20-0055 Hazard Acres\design 20-0055\dwg\sheet\C6 - EROSION CONTROL PLAN.dwg



PLANT SCHEDULE

TREES	BOTANICAL NAME	COMMON NAME	SIZE	QTY	REMARKS
AC3	Abies concolor `Candicans'	Candicans White Fir	6` Ht.	11	
AP	Acer truncatum x platanoides `Warrenred`	Pacific Sunset Maple	2" Cal.	4	B&B
CC	Cercis canadensis	Eastern Redbud	2" Cal.	7	B&B
GB	Ginkgo biloba 'Autumn Gold' TM	Autumn Gold Maidenhair Tree	2" Cal.	6	B&B
GS	Gleditsia triacanthos inermis `Shademaster`	Shademaster Honey Locust	2" Cal.	6	B&B
KP	Koelreuteria paniculata	Golden Rain Tree	2" Cal.	5	
MS	Malus x `Spring Snow`	Spring Snow Crabapple	2" Cal.	2	
PM	Platanus x acerifolia 'Morton Circle' TM	Exclamation! London Plane Tree	2" Cal.	3	B&B
PK	Prunus serrulata `Kwanzan`	Kwanzan Japanese Flowering Cherry	1.5" Cal.	4	
TG	Tilia cordata `Greenspire`	Greenspire Littleleaf Linden	1.5" Cal.	9	B&B
UA	Ulmus x `Accolade`	Accolade Elm	1.5" Cal.	3	B&B
ZG	Zelkova serrata `Green Vase`	Green Vase Sawleaf Zelkova	2" Cal.	12	B&B

SHRUBS	BOTANICAL NAME	COMMON NAME	SIZE	QTY	REMARKS
BTC	Berberis thunbergii `Concorde`	Concorde Japanese Barberry	2 gal.	24	Mature Size: 2'x3'
BDH	Buddleja davidii `Buzz Hot Raspberry`	Hot Raspberry Butterfly Bush	2 gal.	10	
MAC	Mahonia aquifolium `Compacta`	Compact Oregon Grape	5 gal.	12	
PON	Physocarpus opulifolius `Nugget`	Nugget Ninebark	5 gal.	12	
PFD	Potentilla fruticosa `Dakota Sunspot`	Dakota Sunspot Bush Cinquefoil	2 gal.	21	Mature Size: 3'x4'
RAG	Rhus aromatica `Gro-Low`	Gro-Low Fragrant Sumac	5 gal.	16	Mature Size: 3'x7'
RMF	Rosa x `Meipsidue` Fire Meidiland	Fire Red Meidiland Rose	5 gal.	18	Mature Size: 2'x4'
SBA	Spiraea x bumalda `Anthony Waterer`	Anthony Waterer Bumald Spiraea	2 gal.	22	Mature Size: 4'x4'

ORNAMENTAL GRASSES	BOTANICAL NAME	COMMON NAME	SIZE	QTY	REMARKS
CAK	Calamagrostis x acutiflora `Karl Foerster`	Karl Foerster Feather Reed Grass	1 gal.	111	Mature Size: 4'x3'
HSS	Helictotrichon sempervirens `Sapphire`	Sapphire Blue Oat Grass	1 gal.	78	
MSP	Miscanthus sinensis `Purpurescens`	Purple Eulalia Grass	1 gal.	6	
MSA	Miscanthus sinensis 'Adagio'	Adagio Eulalia Grass	1 gal.	61	Mature Size: 4'x4'

LANDSCAPE NOTES

1. LAWN AREAS WILL BE SODDED WITH KENTUCKY BLUEGRASS BLEND OVER 4 INCHES GOOD GRADE TOPSOIL.
2. TOP DRESS ALL SHRUB BED AREAS WITH 3" DEPTH OF 1 1/2" TO 3" SOUTH TOWN COBBLE ROCK MULCH OVER DEWITT PRO-5 WEED BARRIER FABRIC. FABRIC SHALL BE INSTALLED AFTER PRE-EMERGENT HAS BEEN APPLIED.
3. DECOMPOSED GRANITE PATHS WILL BE 2 1/2" DEPTH OVER 3" COMPACTED BASE COURSE. DECOMPOSED GRANITE SHALL HAVE A STABILIZER APPLIED TO THE SURFACE. SIZE OF DECOMPOSED GRANITE SHALL BE 3/8" MINUS.
4. INSTALL 4" METAL EDGING BETWEEN THE DECOMPOSED GRANITE AND COBBLE ROCK AREAS.

AMENITIES:

1. PAVILION BY ICON SHELTER STYSTEMS 28' X 44' SIZE. MODEL # RG28X44M-P4. CONCRETE PAD TO EXTEND 2' BEYOND ROOF LINE. PAVILION SHALL INCLUDE 12 PICNIC TABLES, 2 TRASH RECEPTACLES, 2 BARBECUE GRILLS, AND A DRINKING FOUNTAIN. COLORS: OPAL GREEN STEEL MEMBERS, BRITE RED ROOF.

2. PROVIDE THIRTEEN (13) 8' POWDER COATED ALUMINUM PICNIC TABLES MODEL # S800P BY PREMIER SITE FURNITURE. COLORS: RED TABLE TOP, DARK GREEN LEGS.

3. INSTALL (2) BARBECUE GRILLS FOR THE PAVILION (ONE AT EACH END AS SHOWN) MODEL SB16 BY KAY PARK.

4. PLAYGROUND EQUIPMENT TO BE DETERMINED AT FINAL DESIGN.

5. PROVIDE AND INSTALL THREE (3) 6' BENCH WITH BACK MODEL # UP420(R) RIB PATTERN BY WABASH VALLEY. COLOR: GREEN

6. PROVIDE AND INSTALL FOUR (4) 32 GALLON TRASH RECEPTACLE WHERE SHOWN ON PLAN MODEL # LR355DWITH PLASTISOL DOME LIDS BY WABASH VALLEY. COLOR: GREEN

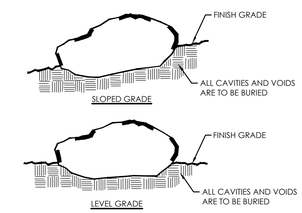
7. BASKETBALL COURT SHALL BE A HALF COURT WITH A CONCRETE SURFACE AND ONE BASKETBALL STANDARD.

8. RESTROOM SHALL BE CXT PRECAST BUILDINGS MODEL: CORTEZ. INCLUDE WATER, SEWER, AND ELECTRICAL TO RESTROOMS WITH BOTH DRINKING FOUNTAIN AND ADA DRINKING FOUNTAIN FOR RESTROOM.

9. BIKE RACK BY WABASH VALLEY SERPENTINE BIKE LOOP-9 (POWDER-COATED). COLOR: GREEN

10. ALL CONC. SIDEWALKS TO BE 5' WIDE. ALL ASPHALT TRAILS TO BE 8' WIDE.

BOULDER NOTES:
1. INSTALLER IS TO BE RESPONSIBLE TO PREVENT ANY SEVERE CHIPPING OR DAMAGE TO BOULDERS DURING THE PLACEMENT PROCESS.
2. BOULDERS ARE TO BE PLACED USING CABLES FROM A LOADER BOOM OR A BOULDER PLACEMENT BOOM.
3. BOULDER IS TO ULTIMATELY BE SET TO A MINIMUM OF 1/3 BURIED (SEE DETAIL).
4. ALL CAVITIES AND VOIDS NEAR THE BOTTOM OF THE BOULDER ARE TO BE SET BELOW FINISH GRADE.



NOTE: BOULDERS IN CLUSTERS ARE TO BE SET AT VARIED HEIGHTS

A BOULDER DETAIL
NOT TO SCALE

N
S

GRAPHIC SCALE
30 0 15 30 60 120
(IN FEET)
1 inch = 30 ft.

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LANDSCAPE PLAN

REVISION BLOCK

#	DATE	DESCRIPTION
1	####	
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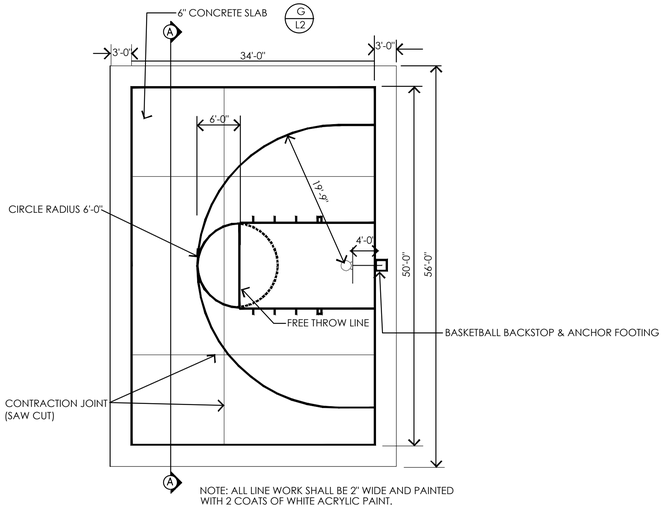
LANDSCAPE PLAN

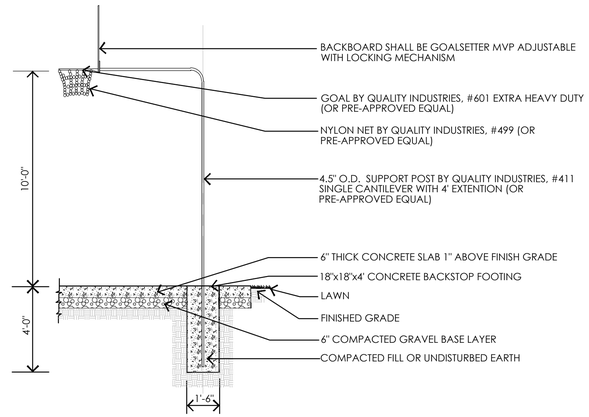
Scale:	1"=30'	Drawn:	AW/MI
Date:	12/03/2021	Job #:	20-0055
Sheet:	L1		

Z:_2020\20-0055-Hazard Acres\drawings\Sheets\L1 - LANDSCAPE PLAN.dwg



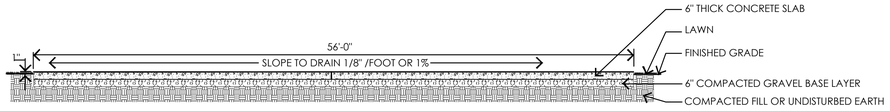
OUTDOOR HALF BASKETBALL COURT PLAN

SCALE: 1" = 10'



BASKETBALL BACKSTOP DETAIL

NO SCALE

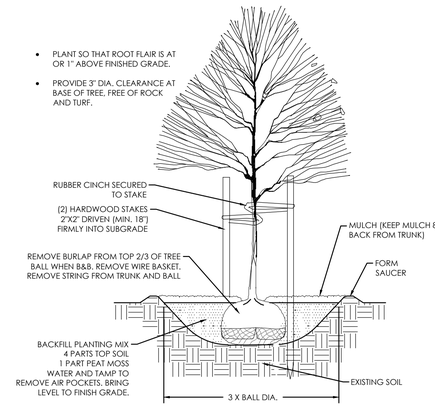


BASKETBALL COURT CROSS SECTION A-A

NO SCALE

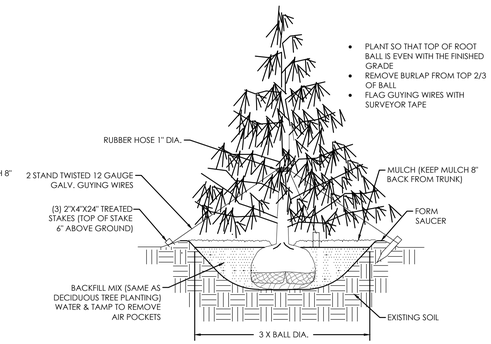
A OUTDOOR BASKETBALL COURT PLAN AND DETAILS

SCALE: 1" = 10'



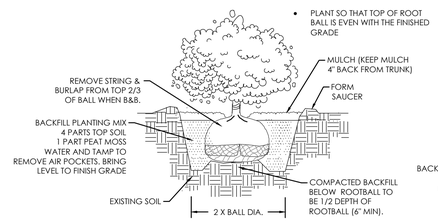
B TREE PLANTING & STAKING

NOT TO SCALE



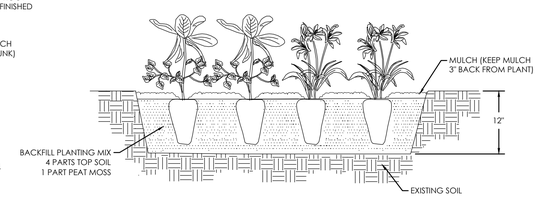
C EVERGREEN PLANTING & GUYING

NOT TO SCALE



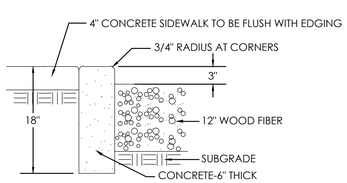
D SHRUB PLANTING

NOT TO SCALE



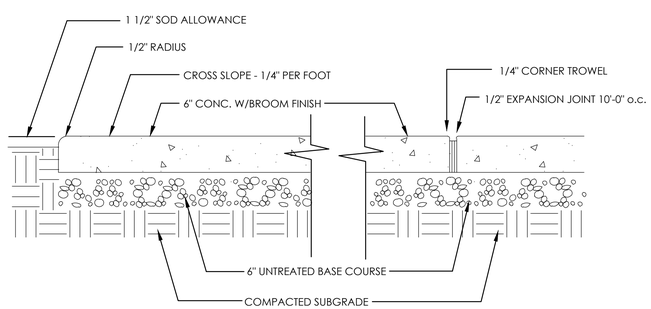
E PERENNIAL PLANTING

NOT TO SCALE



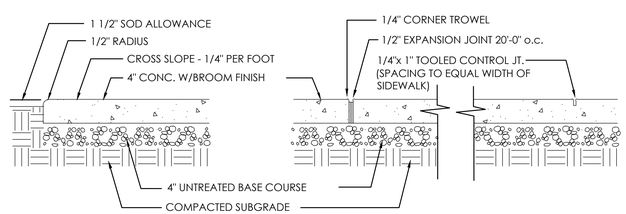
F PLAYGROUND CONC. CURB

NTS



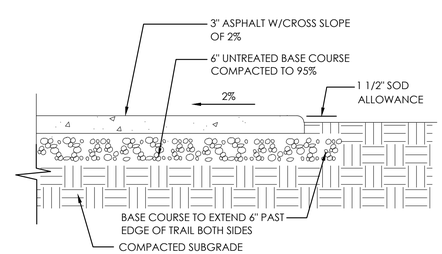
G CONCRETE BASKETBALL COURT SLAB & SHELTER

NTS



H CONCRETE WALK

NTS



I ASPHALT TRAIL

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EAGLE MOUNTAIN CITY, UTAH

LANDSCAPE DETAILS

REVISION BLOCK

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LANDSCAPE DETAILS

Scale:	NTS	Drawn:	AW
Date:	12/03/2021	Job #:	20-0055
Sheet:	L2		

Z:_2020\20-0055 Historic Acres\design 20-0055\dwg\Sheets\L2 - LANDSCAPE DETAILS.dwg

TRAFFIC PLAN – TRAFFIC IMPACT STUDY

A regional impact study was conducted by Chris Trusty, City Engineer, and paid for Flagship Homes that contemplated the impact of traffic for the developing areas of Ault Farms, Triumph, and Scarlet Ridge. In discussions with the City Engineer, this TIS is sufficient for the City to evaluate the impact of the proposed Triumph Master Plan, and no additional TIS is required.

COMPATIBILITY STATEMENT

The proposed Triumph Master Plan is located adjacent to the main power line corridor that transects the City generally from north to south. Pursuant to the City's Master Transportation Plan, land for collector roads is being dedicated on the north AND south end of the property, together with land for the future extension of the Airport Road arterial road on the west boundary of the master plan. Opposite the power line corridor to the east is the Ault Farms Master Plan, which contains significantly smaller lots and greater density than the proposed Triumph plan. Similarly, the property immediately north of Triumph is part of the Ault Farm plan, and is zoned Foothill Residential, consistent with the proposed rezone application that accompanies this submittal. To the east is the approved Scarlet Ridge Master Plan, which contains one half to one-acre lots.

The concept of blending from smaller lots to larger lots as development progresses up the east bench of the Cedar Valley (Ault Farms to Triumph to Scarlet Ridge) is demonstrative of sound planning principles and consistent with the demands and expectations of typical real estate market forces. Triumph is a well-designed appropriate transition plan between arterial roadways/utility corridor/high density neighborhoods and the slightly larger lots of Scarlet Ridge. Notwithstanding the proposed average lot size of Triumph is just under one-half acre at a total density of 1.46 units per acre.

EAGLE MOUNTAIN	**EAGLE MOUNTAIN CITY** **PLANNING COMMISSION MEETING** **DECEMBER 14, 2021**
TITLE:	2022 Planning Commission Schedule
ITEM TYPE:	Minutes
APPLICANT:	Staff

ACTION ITEM:
Yes

PUBLIC HEARING:
No

PREPARED BY:
Tayler Jensen, Planning

BACKGROUND:

Eagle Mountain City Council Chambers, 1650 E Stagecoach Run, Eagle Mountain, Utah

The Eagle Mountain Planning Commission, at its regularly scheduled meeting on December 14, 2021, adopted the following meeting schedule for the year 2022.

Work Sessions: 5:30 PM

Policy Sessions: 6:30 PM

January 11, 25	July 12, 26
February 8, 22	August 9, 23
March 8, 22	September 13, 27
April 12, 26 (Spring Break 4th – 8th)	October 11, 25 (Fall Break 13th – 17th)
May 10, 24	November 22 (Election Day 8th)
June 14 (Primary Election 28th)	December 13

The public is invited to participate in all Planning Commission meetings or listen to open potions of electronic meetings at

https://eaglemountaincity.com/cityrecorder/citymeetings-portal#meeting

IF you need a special accommodation to participate in a Planning Commission meeting, please call the City Recorder's Office at least 3 working days prior to the meeting at 801-789-6610.

ITEMS FOR CONSIDERATION:

REQUIRED FINDINGS:

RECOMMENDATION:

ATTACHMENTS:

2022 Meeting Calendar

EAGLE MOUNTAIN PLANNING COMMISSION
2022 MEETING SCHEDULE

Eagle Mountain City Council Chambers, 1650 E Stagecoach Run, Eagle Mountain, Utah

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