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SPANISH FORK
PRIDE & PROGRESS

Wednesday, September 21, 2022
Development Review Committee

DEVELOPMENT REVIEW COMMITTEE AGENDA
PUBLIC NOTICE is hereby given that the Development Review Committee of Spanish Fork, Utah, will hold a regular meeting at the Spanish Fork City Council Chamber, 40 South Main Street, Spanish Fork, Utah, commencing at 10:00 a.m. This meeting is not available to attend virtually.

1. Approval of Minutes

Subject	**A. SEPTEMBER 14, 2022.**
Meeting	Sep 21, 2022 - Development Review Committee
Category	1. Approval of Minutes
Access	Public
Type	Action, Minutes

File Attachments
minutes.drc.9-14-2022.pdf (1,410 KB)

2. Site Plan

Subject	**A. MILESTONE HOLDINGS. The proposal involves industrial development of a site located at approximately 3475 North Main Street.**
Meeting	Sep 21, 2022 - Development Review Committee
Category	2. Site Plan
Access	Public
Type	Action, Discussion

File Attachments
report.drc.milestoneholdings.9-21-2022.pdf (10,572 KB)
plans.milestoneholdings.8-23-2022.pdf (18,618 KB)
plan.elevation.floorplan.milestoneholdings.4-14-2022.pdf (1,614 KB)

3. Final Plat

Subject	**A. PARK ESTATES PLAT B. The proposal involves the platting of a subdivision with 15 single-family homes located at approximately 300 South 2800 East.**
Meeting	Sep 21, 2022 - Development Review Committee
Category	3. Final Plat

Access	Public
Type	Action, Discussion

File Attachments
report.drc.parkestatesplatb.9-21-2022.pdf (6,325 KB)
plat.parkestatesplatb.8-1-2022.pdf (721 KB)

Subject	**B. PARK ESTATES PLAT C. The proposal involves the platting of a subdivision with 11 single-family homes located at 2740 East 360 South.**
Meeting	Sep 21, 2022 - Development Review Committee
Category	3. Final Plat
Access	Public
Type	Action, Discussion

File Attachments
report.drc.parkestatesplatc.9-21-2022.pdf (5,342 KB)
plat.parkestatesplatc.8-16-2022.pdf (1,083 KB)

4. Preliminary Plat

Subject	**A. ESCALANTE TOWNHOMES. The proposal involves Preliminary Plat approval of a Master Planned Development that includes 20 residential townhome units to be located at 1060 East 400 North.**
Meeting	Sep 21, 2022 - Development Review Committee
Category	4. Preliminary Plat
Access	Public
Type	Action, Discussion

File Attachments
report.drc.escalantetownhomes.9-21-2022.pdf (8,663 KB)
plans.escalantetownhomes.9-12-2022.pdf (3,299 KB)
plans.landscape.escalantetownhomes.8-29-2022.pdf (8,898 KB)

5. Adjourn

Draft Minutes
Spanish Fork City Development Review Committee
40 South Main Street
Spanish Fork, Utah
September 14, 2022

Staff Members Present: **Chris Thompson**, Public Works Director; **Seth Perrins**, City Manager; **Dave Anderson**, Community Development Director; **Brandon Snyder**, City Planner; **Kimberly Brenneman**, Community Development Secretary; **Vaughn Pickell**, City Attorney; **Ana Burgi**, Assistant City Attorney; **John Little**, Chief Building Official; **Michael Clark**, Assistant City Engineer; **Marcie Clark,** Engineering Department Secretary; **Jered Johnson**, Engineering Division Manager; **Zach Hendrickson**, Outside Plant Manager; **Jake Theurer**, Power and Light Superintendent; **Tom Cooper,** Power and Light Senior Utility Planner; **Bart Morrill**, Parks Maintenance Supervisor; **Jason Turner,** Fire Marshall; **Eddie Hales**, Fire Chief; **Kasey Woodard**, Division Secretary.

Citizens Present: Ryan Christofferson, Ryan Simmons, Caleb Christen, AJ Del Pivo, Lonny Reed, Jenny Neilson, Cris Child, Jackie Larson

Chris Thompson called the meeting to order at 10:00 a.m.

MINUTES

September 7, 2022

Dave Anderson **moved** to approve the minutes of September 7, 2022.

Seth Perrins **seconded** and the motion **passed** all in favor.

FINAL PLAT

J6 INDUSTRIAL

Brandon Snyder gave a brief history of the property and the improvements.

Chris Thompson stated he spoke with engineering and their main concern was the storm water easement to the north.

AJ Del Pivo stated they have met the requirements as identified in the drainage study. He stated they are providing ditches and an access road in an effort to contain them and carry them out to Utah Lake. He gave a short presentation on the design plans for the ditch.

Chris Thompson asked how they have secured the drainage rights to the ditch for the City storm water to go through those ditches.

AJ Del Pivo stated they have purchased land from the Hanson family and that the agreement has been sent to Michael Clark, Engineering.

Chris Thompson stated simply owning the land does not mean the City can put their storm water on it so they need some sort of instrument or agreement in place to ensure this right.

AJ Del Pivo stated this is a new ditch.

There was discussion that this is a ditch proposed in unincorporated Utah County, and there needs to be some sort of an agreement made so that the City will have access. It was asked who would be liable if there was an overage.

Dave Anderson stated typically the City would take ownership of something like this and not just have an easement. He stated it makes sense today to only have an easement, but for future concerns that it would make the most sense if it belonged to whoever would be responsible and it was stated there should be an exclusive easement for the city.

There was a discussion on the potential of another developer acquiring the land and the possibility of sharing the financial responsibility of future concerns.

Seth Perrins talked about a hypothetical situation of this land not being annexed into Springville and it remains unincorporated for a long period of time. And he gives a

scenario where Springville decides that it is too expensive to bring into their city, and the potential land owners decide they would like to come into Spanish Fork instead.

There was a short discussion on whether there is the option for relocation of the drainage and the different options to landscape the ditch.

Chris Thompson stated he does not want there to be confusion with the wetlands until development occurs. He stated when future developers look at this ditch it should look like a stream.

Seth Perrins stated future developers will be informed there will be additional tweaks and or requirements associated with the storm drain. He then asked if there would be any impact on the neighboring properties.

Michael Clark stated on the north side of J6 it is not meandering currently, and asked if Chris Thompson would like it to meander to match and he stated yes, they need to match this design.

It was recommended to move the ditch 30 feet to the east. This would allow for the future access road to the north to align with the City street.

Chris Thompson stated this is a great suggestion and would ultimately be a business decision for the applicant. He stated Spanish Fork would require a more landscaped "stream" look. He suggested if the applicant only wants to do this once, they should build it alongside the road. He stated the City would require the ditch to be straight.

Dave Anderson stated this is not just the city, or Springville, UDOT would also require the future accesses to align.

Seth Perrins asked if the land has been acquired and if it has not he asked what happens if it does not. And it was stated there cannot be a pre-construction meeting until the easement is recorded.

Dave Anderson **moved** to approve the proposed J6 Industrial Final Plat based on the following findings and conditions:

Findings:

1. That the application conforms to the City's General Plan Designation and Zoning Map.

Conditions:

1. That the applicant meets the City's Zoning requirements and Construction Standards.
2. That the applicant addresses any red-lines.
3. That the applicant provides the proper documentation for the necessary offsite storm drainage easement.

Vaugh Pickell seconded and the motion **passed** all in favor.

PARKWAY PROFESSIONAL PLAZA PHASE 2

Brandon Snyder stated this was previously plated to allow development approvals located to the south and to the west.

Michael Clark discussed the level of improvements or bonding with the plat. He stated typically the City has had a bond or had the applicant do frontage improvements to include curb and gutter or just property dedication.

Chris Thompson asked Cris Child what the plan for curb, gutter and sidewalk is for the corner lot. Cris prefers to install the corner improvements later when the lot has a Site Plan that is approved and is ready for development.

There was discussion on the recording of plats, and it was stated when the plat is recorded it can be conveyed. It was asked if the plat can be recorded for this project, and it was stated the recording of plats was to ensure improvements have been made before lots have been created.

Dave Anderson suggested having Cris Child add a notice of development restriction stating this is not a buildable lot until there has been Site Plan approval by Spanish Fork City and improvements have been installed according to the City standards.

Dave Anderson **moved** to approve the proposed Parkway Professional Plaza Phase 2 Final Plat based on the following findings and conditions:

Findings:

1. That the application conforms to the City's General Plan Designation and Zoning Map.

Conditions:

1. That the applicant meets the City's Zoning requirements and Construction Standards.
2. That the applicant addresses any red-lines.
3. The applicant records a notice with Utah County that advises that Lot 1 cannot be developed until a Site Plan has been approved by Spanish Fork City and that all required improvements have been installed.

Vaughn Pickell seconded and the motion **passed** all in favor.

PARKWAY PROFESSIONAL PLAZA CONDOMINIUM PHASE 2

Brandon Snyder stated this is the condominium plat of the previously approved lot 2, which then allows this to be sold as multiple units.

Michael Clark in engineering has no comments.

Jake Theurer in power has no comments.

Vaughn Pickell **moved** to approve the proposed Parkway Professional Plaza Condominium Phase 2 Final Plat based on the following findings and conditions:

Findings:

1. That the application conforms to the City's General Plan Designation and Zoning Map.

Conditions:

1. That the applicant meets the City's Zoning requirements and Construction Standards.
2. That the applicant addresses any red-lines.

Jake Theurer **seconded** and the motion **passed** all in favor.

SITE PLAN

PARKWAY PROFESSIONAL PLAZA PHASE 2

Branson Snyder stated this is the Site Plan to the just approved condominium plan. He stated this is a similar design that was provided several years ago that laid out offices along the parkway.

Chris Thompson stated he likes the shared drive.

Vaughn Pickell asked if there would be a problem with the intersection being offset and being a right turn in and a right turn out and it was discussed this could cause a concern being located too close to an intersection.

Chris Thompson suggested adding a second access point along Spanish Fork Parkway. He then stated that it may not be an option if adequate spacing between the accesses cannot be met. He stated he can see potential accidents occurring due to the intersection being offset with Woodsprings Drive.

Dave Anderson suggested continuing this proposal until a Site Plan revision can be done or approving the Site Plan with a condition that a cross access easement be required and there can then be a Site Plan amendment.

Cris Child prefers to have the Site Plan approved today in order to get the plat recorded.

Dave Anderson **moved** to approve the proposed Parkway Professional Plaza Phase 2 Site Plan based on the following finding and conditions:

Finding:

1. That the application conforms to the City's General Plan Designation and Zoning Map

Conditions:

1. That the applicant meets the City's Zoning requirements and Construction Standards.

2. That the applicant addresses any red-lines.
3. The applicant provides a cross access and cross parking easement that is intended to cover all of the property included in the Parkway Professional Plaza.

John Little seconded and the motion **passed** all in favor.

OLD DOMINION FREIGHT LINE

Brandon Snyder gave a brief description of the proposal. He stated the south part of the lot will be a future phase. He asked the applicant what is to be proposed for security fencing?

Lonny Reed stated he does not know and will get the information to Brandon Snyder shortly.

Brandon Snyder stated certain types of fencing and heights will need to be approved by the DRC or CC.

Chris Thompson stated the north truck access is very close to a major arterial road and feels that if the access is moved further south it would be a better option to avoid any high-speed traffic impact.

Lonny Reed stated he will give this feedback and see if this change can be made.

Brandon Snyder stated there are multiple improvements that need to be completed with the subdivision in order to make the site function.

Seth Perrins suggested continuing until these changes can be made, and Chris Thompson stated he is comfortable with approving this today with a condition on moving the access.

There was discussion on the benefits of having two access points and it was stated the right in and right out is not the problem, it is the left in that is the problem.

Lonny Reed feels this will not work for Old Dominion's traffic pattern and onsite circulation. He stated it's important for them to have a left in access point. He feels they would be okay with moving the driveway to the south.

Chris Thompson **moved** to approve the proposed Old Dominion Freight Line Site Plan based on the following finding and conditions:

Finding:

1. That the project conforms to the City's General Plan Land Use Designation and Zoning Map.

Conditions:

1. That the applicant meets the City's Zoning requirements and Construction Standards.
2. That the applicant addresses any red-lines.
3. The north access becomes right-in right-out, and includes construction of an island in the road.
4. That a south access for trucks be added on the south side of the building for the larger trucks.
5. The subdivision improvements will need to be completed before occupancy.

Seth Perrins seconded and the motion **passed** all in favor.

SPANISH FORK INDUSTRIAL BUILDING 4

Brandon Snyder gave a brief description of the proposed building.

Michael Clark stated he has not seen a UDOT approval for the access off of SR-77.

Brandon Snyder asked if there is a shared access easement or easement noted on the plat?

Ryan Simmons stated they own the land and can give themselves an easement.

Seth Perrins states that if they ever decided to sell the property, the City would prefer to have an easement in place prior to any change in land ownership.

Michael Clark stated he is not in favor of the double access on the southeast part of the project.

Ryan Simmons stated this was requested by the tenant in order to keep the box trucks away from car traffic and away from the rest of the traffic.

There was discussion regarding the amount of traffic surrounding the Sunroc site and that it is incidental truck traffic and not public traffic, so there will not be continuous flow of large trucks coming or going.

Dave Anderson asked what the time frame is until tenants can move in and it was stated July of 2023 would be the desired move in date.

Dave Anderson **moved** to approve the proposed Spanish Fork Industrial Building 4 Site Plan based on the following finding and conditions:

Finding:

1. That the application conforms to the City's General Plan Designation and Zoning Map.

Conditions:

1. That the applicant meets the City's Zoning requirements and Construction Standards.
2. That the applicant addresses any red-lines.
3. Occupancy is contingent on the subdivision improvements being completed.
4. That the applicant provides a cross access easement throughout the entire J6 subdivision.

Seth Perrins **seconded** and the motion **passed** all in favor.

FIRE STATION 61 TEMPORARY HOUSING UNIT

There was discussion of the need for temporary and overnight housing for the firefighters. The housing will be provided for first responders who can respond at night and improve City response times.

Seth Perrins stated this will give the City 2-5 years' time to find a permanent housing solution.

There was a brief discussion regarding the type and look of the housing unit. Dave Anderson suggested that the barrier on Main Street be something more attractive than a jersey barrier. The DRC discussed the need to access the ceremonial fire truck.

Seth Perrins questioned how power will be set up to the temporary housing units. It was stated there will be a meter set attached to the unit.

Vaughn Pickell moved to approve the proposed Fire Station 61 Temporary Housing Unit Site Plan based on the following findings and conditions:

Finding:

1. That the application conforms to the City's General Plan Designation and Zoning Map.
2. That this temporary housing plan will be beneficial to Spanish Fork's Fire Department.

Conditions:

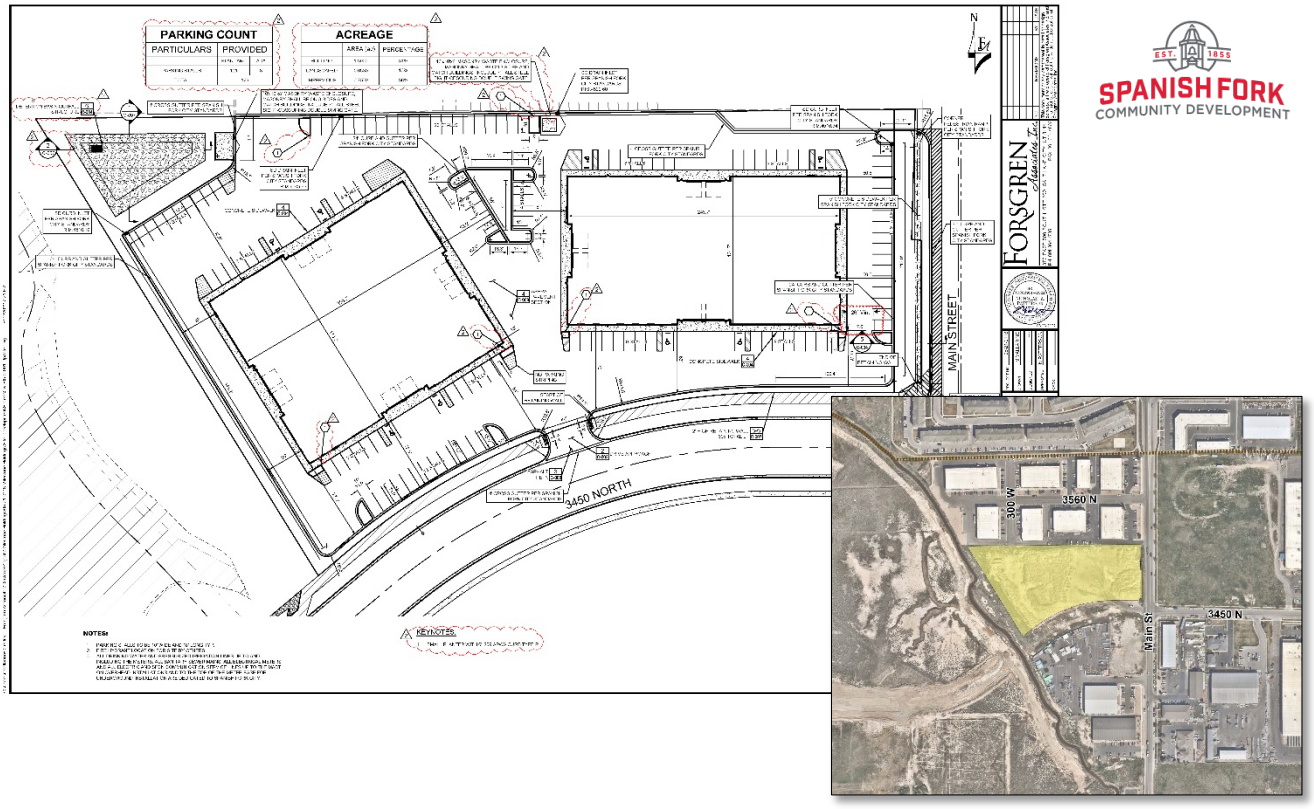
1. That the applicant meets the City's Zoning requirements and Construction Standards.
2. That the applicant addresses any red-lines.

Jake Theurer **seconded** and the motion **passed** all in favor.

Dave Anderson moved to adjourn the meeting at 11:27 a.m.

Adopted:

Kasey Woodard
Division Secretary



SPANISH FORK
COMMUNITY DEVELOPMENT

Milestone Holdings Site Plan Approval Request

September 21, 2022, Development Review Committee Meeting.

Located at approximately 3475 North Main Street, including 4.99 acres.

The subject property is zoned I-1.

The applicant has requested Site Plan approval for the construction of office and warehouse spaces on the site.

Recommendation

That the proposed Site Plan be approved based on the following findings and subject to the following conditions:

Finding

1. That the application conforms to the City's General Plan Designation and Zoning Map.

Conditions

1. That the applicant meets the City's Zoning requirements and Construction Standards.
2. That the applicant addresses any red-lines.

Key Issues

1. Subdivision Improvements.
2. Utilities.
3. Power.

Exhibits

1. Site Plan.
2. Landscaping.
3. Building Elevations.

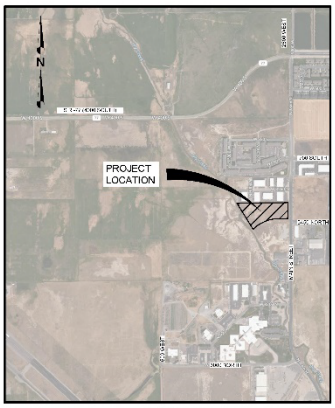
MILESTONE HOLDINGS SITE DEVELOPMENT

3450 NORTH MAIN STREET
SPANISH FORK, UTAH

PROJECT LOCATION MAP

SHEET INDEX

#	PAGE NO.	SHEET TITLE
1	G-001	COVER SHEET
2	G-002	SYMBOLS & ABBREVIATIONS
3	G-003	GENERAL NOTES
4	G-004	PLAT / ASCOT
5	C-001	GRADING AND DRAINAGE PLAN
6	C-101	TYPICAL SITE PLAN
7	C-102	UTILITY PLAN
8	C-103	CIVIL DETAILS
9	C-104	CIVIL DETAILS
10	C-105	CIVIL DETAILS
11	C-106	CIVIL DETAILS
12	C-107	CIVIL DETAILS
13	C-108	CIVIL DETAILS
14	C-109	CIVIL DETAILS
15	C-110	SWPPP DETAILS
16	C-111	SWPPP DETAILS
17	L-1	LANDSCAPE PLAN
18	L-2	LANDSCAPE PLAN

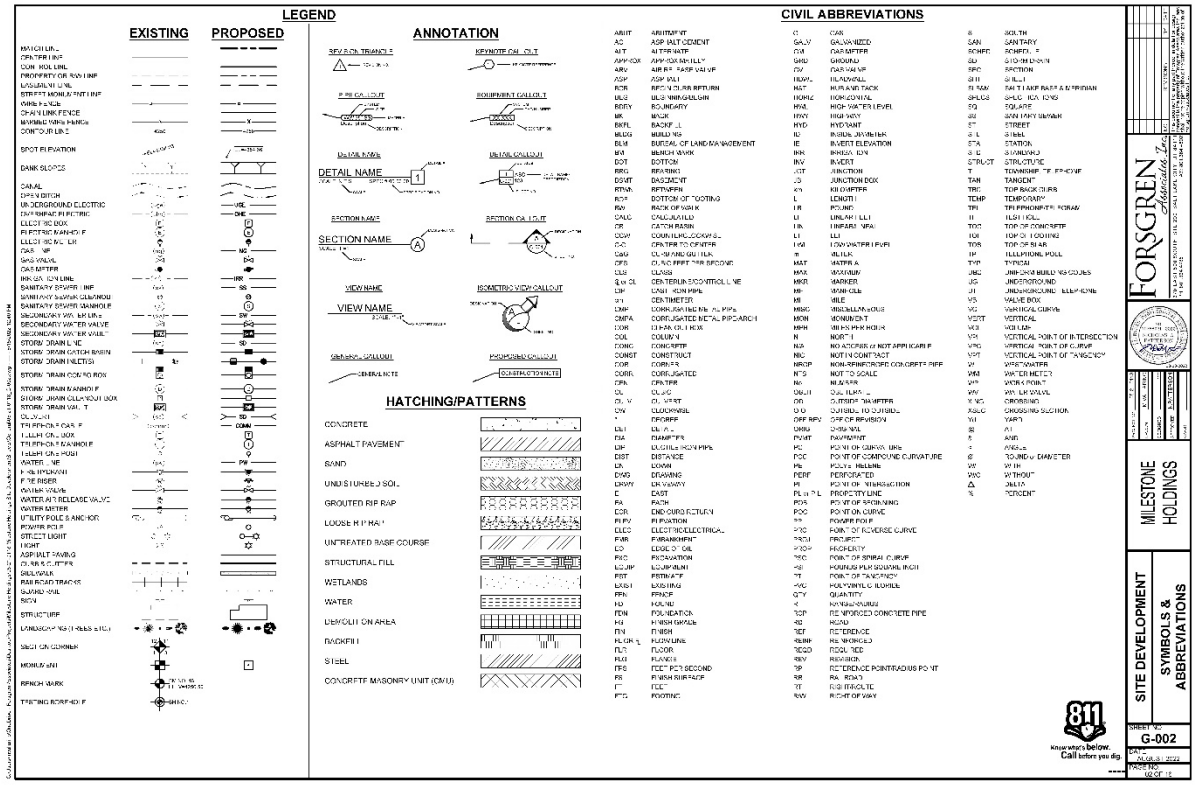


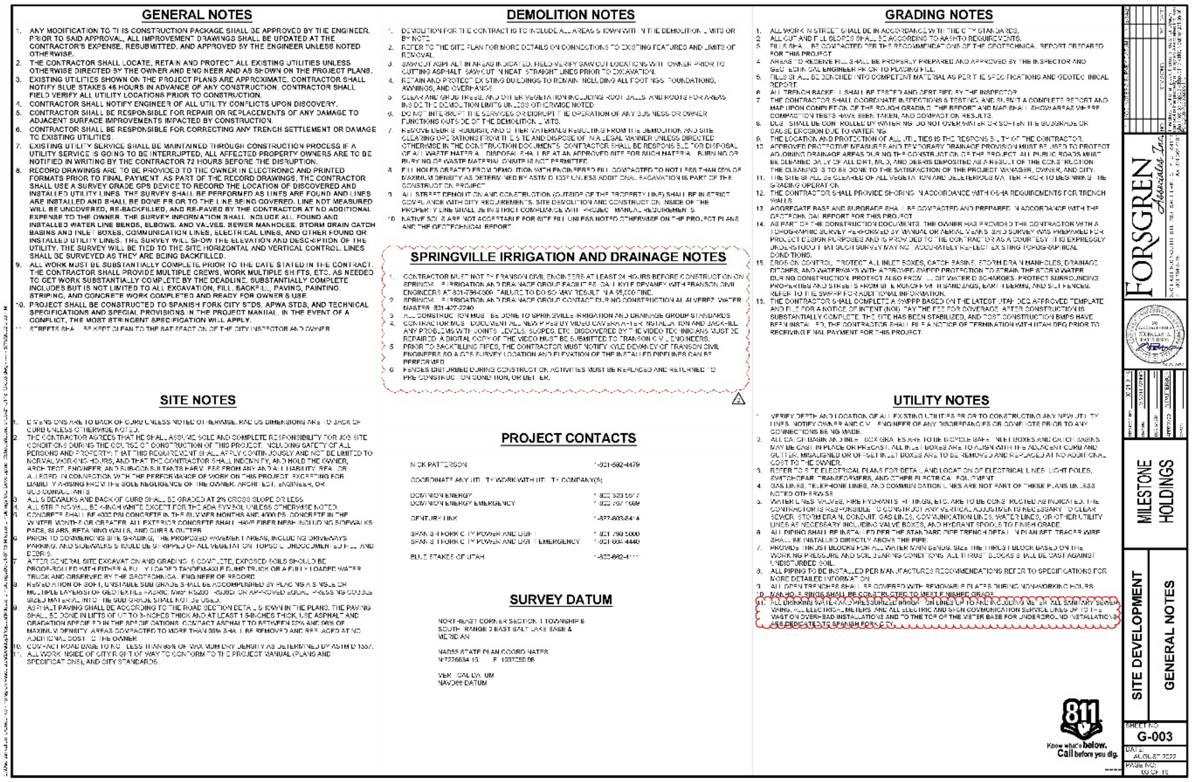
VICINITY MAP

FA PROJECT NO. 05-21-0118
AUGUST 2022

FORSGREN Associates Inc.

Know what's below. Call before you dig.




GENERAL NOTES

1. ANY MODIFICATION TO THIS CONSTRUCTION PACKAGE SHALL BE APPROVED BY THE ENGINEER. PRIOR TO SAID APPROVAL, ALL IMPROVEMENT DRAWINGS SHALL BE UPDATED AT THE CONTRACTOR'S EXPENSE, RESUBMITTED, AND APPROVED BY THE ENGINEER UNLESS NOTED OTHERWISE.
2. THE CONTRACTOR SHALL LOCATE, RETAIN AND PROTECT ALL EXISTING UTILITIES UNLESS OTHERWISE DIRECTED BY THE OWNER AND ENGINEER AND AS SHOWN ON THE PROJECT PLANS.
3. EXISTING UTILITIES SHOWN ON THE PROJECT PLANS ARE APPROXIMATE. CONTRACTOR SHALL NOTIFY BLUE STAKES 48 HOURS IN ADVANCE OF ANY CONSTRUCTION. CONTRACTOR SHALL FIELD VERIFY ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION.
4. CONTRACTOR SHALL NOTIFY ENGINEER OF ALL UTILITY CONFLICTS UPON DISCOVERY.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIR OR REPLACEMENTS OF ANY DAMAGE TO ADJACENT SURFACE IMPROVEMENTS IMPACTED BY CONSTRUCTION.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECTING ANY TRENCH SETTLEMENT OR DAMAGE TO EXISTING UTILITIES.
7. EXISTING UTILITY SERVICE SHALL BE MAINTAINED THROUGH CONSTRUCTION PROCESS IF A UTILITY SERVICE IS GOING TO BE INTERRUPTED, ALL AFFECTED PROPERTY OWNERS ARE TO BE NOTIFIED IN WRITING BY THE CONTRACTOR 72 HOURS BEFORE THE DISRUPTION.
8. RECORD DRAWINGS ARE TO BE PROVIDED TO THE OWNER IN ELECTRONIC AND PRINTED FORMATS PRIOR TO FINAL PAYMENT. AS PART OF THE RECORD DRAWINGS, THE CONTRACTOR SHALL USE A SURVEY GRADE GPS DEVICE TO RECORD THE LOCATION OF DISCOVERED AND INSTALLED UTILITY LINES. THE SURVEY SHALL BE PERFORMED AS LINES ARE FOUND AND LINES ARE INSTALLED AND SHALL BE DONE PRIOR TO THE LINE BEING COVERED. LINE NOT MEASURED WILL BE UNCOVERED, RE-BACKFILLED, AND RE-PAVED BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER. THE SURVEY INFORMATION SHALL INCLUDE ALL FOUND AND INSTALLED WATER LINE BENDS, ELBOWS, AND VALVES, SEWER MANHOLES, STORM DRAIN CATCH BASINS AND INLET BOXES, COMMUNICATION LINES, ELECTRICAL LINES, AND OTHER FOUND OR INSTALLED UTILITY LINES. THE SURVEY WILL SHOW THE ELEVATION AND DESCRIPTION OF THE UTILITY. THE SURVEY WILL BE TIED TO THE SITE HORIZONTAL AND VERTICAL CONTROL. LINES SHALL BE SURVEYED AS THEY ARE BEING BACKFILLED.
9. ALL WORK MUST BE SUBSTANTIALLY COMPLETE PRIOR TO THE DATE STATED IN THE CONTRACT. THE CONTRACTOR SHALL PROVIDE MULTIPLE CREWS, WORK MULTIPLE SHIFTS, ETC. AS NEEDED TO GET WORK SUBSTANTIALLY COMPLETE BY THE DEADLINE. SUBSTANTIALLY COMPLETE INCLUDES BUT IS NOT LIMITED TO ALL EXCAVATION, FILL, BACKFILL, PAVING, PAINTING, STRIPING, AND CONCRETE WORK COMPLETED AND READY FOR OWNER'S USE.
10. PROJECT SHALL BE CONSTRUCTED TO SPANISH FORK CITY STDS, APWA STDS, AND TECHNICAL SPECIFICATIONS AND SPECIAL PROVISIONS IN THE PROJECT MANUAL. IN THE EVENT OF A CONFLICT, THE MOST STRINGENT SPECIFICATION WILL APPLY.
11. STREETS SHALL BE KEPT CLEAN TO THE SATISFACTION OF THE CITY INSPECTOR AND OWNER.

DEMOLITION NOTES

1. DEMOLITION FOR THE CONTRACT IS TO INCLUDE ALL AREAS SHOWN WITHIN THE DEMOLITION LIMITS OR BY NOTE.
2. REFER TO THE SITE PLAN FOR MORE DETAILS ON CONNECTIONS TO EXISTING FEATURES AND LIMITS OF REMOVAL.
3. SAWCUT ASPHALT IN AREAS INDICATED. FIELD VERIFY SAWCUT LOCATIONS WITH OWNER PRIOR TO CUTTING ASPHALT. SAWCUT IN NEAT, STRAIGHT LINES PRIOR TO EXCAVATION.
4. RETAIN AND PROTECT EXISTING BUILDINGS TO REMAIN INCLUDING ALL FOOTINGS, FOUNDATIONS, AWNINGS, AND OVERHANGS.
5. CLEAR AND GRUB TREES, AND OTHER VEGETATION INCLUDING ROOT BALLS AND ROOTS FOR AREAS INSIDE THE DEMOLITION LIMITS UNLESS OTHERWISE NOTED.
6. DO NOT INTERRUPT THE SERVICES OR DISRUPT THE OPERATION OF ANY BUSINESS OR OWNER FUNCTIONS OUTSIDE OF THE DEMOLITION LIMITS.
7. REMOVE DEBRIS, RUBBISH, AND OTHER MATERIALS RESULTING FROM THE DEMOLITION AND SITE CLEARING OPERATIONS FROM THE SITE AND DISPOSE OF IN A LEGAL MANNER UNLESS DIRECTED OTHERWISE IN THE CONSTRUCTION DOCUMENTS. CONTRACTOR SHALL BE RESPONSIBLE FOR DISPOSAL OF ALL WASTE MATERIAL. DISPOSAL SHALL BE AT AN APPROVED SITE FOR SUCH MATERIAL. BURNING OR BURYING OF WASTE MATERIAL ONSITE IS NOT PERMITTED.
8. FILL HOLES CREATED FROM DEMOLITION WITH ENGINEERED FILL COMPACTED TO NOT LESS THAN 95% OF MAXIMUM DENSITY AS DETERMINED BY ASTM D 1557 UNLESS ADDITIONAL EXCAVATION IS PART OF THE CONSTRUCTION PROJECT.
9. ALL STREET DEMOLITION AND CONSTRUCTION (OUTSIDE OF THE PROPERTY LINE) SHALL BE IN STRICT COMPLIANCE WITH CITY REQUIREMENTS. SITE DEMOLITION AND CONSTRUCTION INSIDE OF THE PROPERTY LINE SHALL BE IN STRICT COMPLIANCE WITH PROJECT MANUAL REQUIREMENTS.
10. NATIVE SOILS ARE NOT ACCEPTABLE FOR SITE FILL UNLESS NOTED OTHERWISE ON THE PROJECT PLANS AND THE GEOTECHNICAL REPORT.

SPRINGVILLE IRRIGATION AND DRAINAGE NOTES

1. CONTRACTOR MUST NOTIFY FRANSON CIVIL ENGINEERS AT LEAST 24 HOURS BEFORE CONSTRUCTION ON SPRINGVILLE IRRIGATION AND DRAINAGE GROUP FACILITIES. CALL KYLE DEVANEY WITH FRANSON CIVIL ENGINEERS AT 801-756-0309. FAILURE TO DO SO MAY RESULT IN A $5,000 FINE.
2. SPRINGVILLE IRRIGATION AND DRAINAGE GROUP CONTACT DURING CONSTRUCTION AL ALVEREZ, WATER MASTER. 801-427-2240
3. ALL CONSTRUCTION MUST BE DONE TO SPRINGVILLE IRRIGATION AND DRAINAGE GROUP STANDARDS.
4. CONTRACTOR MUST DOCUMENT ALL NEW PIPES BY VIDEO CAMERA AFTER INSTALLATION AND BACK-FILL. ANY PROBLEMS WITH JOINTS, LEVELS, SLOPES, ETC. DISCOVERED BY THE VIDEO TECHNICIANS MUST BE REPAIRED. A DIGITAL COPY OF THE VIDEO MUST BE SUBMITTED TO FRANSON CIVIL ENGINEERS.
5. PRIOR TO BACKFILLING PIPES, THE CONTRACTOR MUST NOTIFY KYLE DEVANEY OF FRANSON CIVIL ENGINEERS SO A GPS SURVEY LOCATION AND ELEVATION OF THE INSTALLED PIPELINES CAN BE PERFORMED.
6. FENCES DISTURBED DURING CONSTRUCTION ACTIVITIES MUST BE REPLACED AND RETURNED TO PRE-CONSTRUCTION CONDITION, OR BETTER.

GRADING NOTES

1. ALL WORK IN STREET SHALL BE IN ACCORDANCE WITH THE CITY STANDARDS.
2. ALL CUT AND FILL SLOPES SHALL BE ACCORDING TO AASHTO REQUIREMENTS.
3. FILLS SHALL BE COMPACTED PER THE RECOMMENDATIONS OF THE GEOTECHNICAL REPORT PREPARED FOR THIS PROJECT.
4. AREAS TO RECEIVE FILL SHALL BE PROPERLY PREPARED AND APPROVED BY THE INSPECTOR AND GEOTECHNICAL ENGINEER PRIOR TO PLACING FILL.
5. FILLS SHALL BE BENCHED INTO COMPETENT MATERIAL AS PER THE SPECIFICATIONS AND GEOTECHNICAL REPORT.
6. ALL TRENCH BACKFILL SHALL BE TESTED AND CERTIFIED BY THE INSPECTOR.
7. THE CONTRACTOR SHALL COORDINATE INSPECTIONS & TESTING, AND SUBMIT A COMPLETE REPORT AND MAP UPON COMPLETION OF THE ROUGH GRADING. THE REPORT AND MAP SHALL SHOW AREAS WHERE COMPACTION TESTS HAVE BEEN TAKEN, AND COMPACTION RESULTS.
8. DUST SHALL BE CONTROLLED BY WATERING. DO NOT OVER WATER OR SOFTEN THE SUBGRADE OR CAUSE EROSION DUE TO WATERING.
9. THE LOCATION AND PROTECTION OF ALL UTILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR.
10. APPROVED PROTECTIVE MEASURES AND TEMPORARY DRAINAGE PROVISION MUST BE USED TO PROTECT ADJOINING DRAINAGE AREAS DURING THE CONSTRUCTION OF THE PROJECT. ALL PUBLIC ROADS MUST BE CLEANED DAILY OF ALL DIRT, MUD, AND DEBRIS DEPOSITED AS A RESULT OF THE CONSTRUCTION. THE CLEANING IS TO BE DONE TO THE SATISFACTION OF THE PROJECT MANAGER, OWNER, AND CITY.
11. THE SITE SHALL BE CLEARED OF ALL VEGETATION AND DELETERIOUS MATTER PRIOR TO BEGINNING THE GRADING OPERATION.
12. THE CONTRACTOR SHALL PROVIDE SHORING IN ACCORDANCE WITH OSHA REQUIREMENTS FOR TRENCH WALLS.
13. AGGREGATE BASE AND SUBGRADE SHALL BE COMPACTED AND PREPARED IN ACCORDANCE WITH THE GEOTECHNICAL REPORT FOR THIS PROJECT.
14. AS PART OF THE CONSTRUCTION DOCUMENTS, THE OWNER HAS PROVIDED THE CONTRACTOR WITH A TOPOGRAPHIC SURVEY PERFORMED BY MANUAL OR AERIAL MEANS. SAID SURVEY WAS PREPARED FOR PROJECT DESIGN PURPOSES AND IS PROVIDED TO THE CONTRACTOR AS A COURTESY. IT IS EXPRESSLY UNDERSTOOD THAT SUCH SURVEY MAY NOT ACCURATELY REFLECT EXISTING TOPOGRAPHICAL CONDITIONS.
15. EROSION CONTROL: PROTECT ALL INLET BOXES, CATCH BASINS, STORM DRAIN MANHOLES, DRAINAGE DITCHES, AND WATERWAYS WITH APPROVED SWPPP PROTECTION TO STRAIN THE STORM WATER DURING CONSTRUCTION. PROTECT ALSO FROM ILLICIT WATER DISCHARGES. PROTECT SURROUNDING PROPERTIES AND STREETS FROM SITE RUNOFF WITH SANDBAGS, EARTH BERMS, AND SILT FENCES. REFER TO THE SWPPP FOR ADDITIONAL INFORMATION.
16. THE CONTRACTOR SHALL COMPLETE A SWPPP BASED ON THE LATEST UTAH DEQ APPROVED TEMPLATE AND FILE FOR A NOTICE OF INTENT (NOI). PAY THE FEE FOR COVERAGE. AFTER CONSTRUCTION IS SUBSTANTIALLY COMPLETE, THE SITE HAS BEEN STABILIZED, AND POST CONSTRUCTION BMPS HAVE BEEN INSTALLED, THE CONTRACTOR SHALL FILE A NOTICE OF TERMINATION WITH UTAH DEQ PRIOR TO RECEIVING FINAL PAYMENT FOR THIS PROJECT.

SITE NOTES

1. DIMENSIONS ARE TO BACK OF CURB UNLESS NOTED OTHERWISE. RADIUS DIMENSIONS ARE TO BACK OF CURB UNLESS OTHERWISE NOTED.
2. THE CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND THAT THE CONTRACTOR SHALL INDEMNIFY, AND HOLD THE OWNER, ARCHITECT, ENGINEER, AND SUB-CONSULTANTS 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, ARCHITECT, ENGINEER, OR SUB-CONSULTANTS.
3. ALL SIDEWALKS AND BACK OF CURB SHALL BE GRADED AT 2% CROSS SLOPE OR LESS.
4. ALL STRIPING WILL BE 4-INCH WHITE EXCEPT FOR THE ADA SYMBOL UNLESS OTHERWISE NOTED.
5. CONCRETE SHALL BE 4000 PSI CONCRETE IN THE SUMMER MONTHS AND 4500 PSI CONCRETE IN THE WINTER MONTHS OR GREATER. ALL EXTERIOR CONCRETE SHALL HAVE FIBER MESH INCLUDING SIDEWALKS, PADS, SLABS, RETAINING WALLS, AND CURB & GUTTER.
6. PRIOR TO COMMENCING SITE GRADING, THE PROPOSED PAVEMENT AREAS, INCLUDING DRIVEWAYS, PARKING, AND SIDEWALKS SHOULD BE STRIPPED OF ALL VEGETATION, TOPSOIL, UNDOCUMENTED FILL, AND DEBRIS.
7. AFTER GENERAL SITE EXCAVATION AND GRADING IS COMPLETE, EXPOSED SOILS SHOULD BE PROOF-ROLLED WITH EITHER A FULLY LOADED TANDEM-AXLE DUMP TRUCK OR A FULLY LOADED WATER TRUCK AND OBSERVED BY THE GEOTECHNICAL ENGINEER OF RECORD.
8. REMEDIATION OF SOFT, UNSTABLE SUB GRADE SHALL BE ACCOMPLISHED BY PLACING A SINGLE OR MULTIPLE LAYER(S) OF GEOTEXTILE FABRIC (Mirafi RS280i - RS580i OR APPROVED EQUAL) PRESSING COBBLE SIZED MATERIAL INTO THE SUB GRADE SHALL NOT BE USED.
9. ASPHALT PAVING SHALL BE ACCORDING TO THE ROAD SECTION DETAIL SHOWN IN THE PLANS. THE PAVING SHALL BE DONE IN LIFTS OF UP TO 3-INCHES THICK AND AT LEAST 1.5-INCHES THICK. USE ASPHALT AND GRADATION SPECIFIED IN THE SPECIFICATIONS. COMPACT ASPHALT TO BETWEEN 92% AND 96% OF MAXIMUM DENSITY. AREAS COMPACTED TO MORE THAN 96% SHALL BE REMOVED AND REPLACED AT NO ADDITIONAL COST TO THE OWNER.
10. COMPACT ROAD BASE TO NO LESS THAN 95% OF MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D 1557.
11. ALL WORK INSIDE OF CITY RIGHT OF WAY TO CONFORM TO THE PROJECT MANUAL (PLANS AND SPECIFICATIONS), AND CITY STANDARDS.

PROJECT CONTACTS

NICK PATTERSON	1-801-592-4479
COORDINATE ANY UTILITY WORK WITH UTILITY COMPANY(S)	
DOMINION ENERGY	1-800-323-5517
DOMINION ENERGY EMERGENCY	1-800-767-1689
CENTURY LINK	1-877-603-8414
SPANISH FORK CITY POWER AND LIGHT	1-801-798-5000
SPANISH FORK CITY POWER AND LIGHT EMERGENCY	1-801-804-4440
BLUE STAKES OF UTAH	1-800-662-4111

SURVEY DATUM

NORTHEAST CORNER SECTION 1 TOWNSHIP 8 SOUTH, RANGE 2 EAST SALT LAKE BASE & MERIDIAN

NAD83 STATE PLAN COORDINATES
N:7226634.15 E:1937050.96

VERTICAL DATUM
NAVD88 DATUM

UTILITY NOTES

1. VERIFY DEPTH AND LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTING ANY NEW UTILITY LINES. NOTIFY OWNER AND CIVIL ENGINEER OF ANY DISCREPANCIES OR CONFLICTS PRIOR TO ANY CONNECTIONS BEING MADE.
2. ALL CATCH BASIN AND INLET BOX GRATES ARE TO BE BICYCLE SAFE. INLET BOXES AND CATCH BASINS MAY BE CAST IN PLACE OR PRECAST. ALL INLET BOXES ARE TO ALIGN WITH THE ADJACENT CURB AND GUTTER. MISALIGNED OR OFFSET INLET BOXES ARE TO BE REMOVED AND REPLACED AT NO ADDITIONAL COST TO THE OWNER.
3. REFER TO SITE ELECTRICAL PLANS FOR DETAIL AND LOCATION OF ELECTRICAL LINES, LIGHT POLES, SWITCHGEAR, TRANSFORMERS, AND OTHER ELECTRICAL EQUIPMENT.
4. GAS LINES, TELEPHONE LINES, AND COMMUNICATION LINES ARE NOT PART OF THESE PLANS UNLESS NOTED OTHERWISE.
5. WATER LINES, VALVES, FIRE HYDRANTS, FITTINGS, ETC. ARE TO BE CONSTRUCTED AS INDICATED. THE CONTRACTOR IS RESPONSIBLE TO CONSTRUCT ANY VERTICAL ADJUSTMENTS NECESSARY TO CLEAR SEWER, STORM DRAIN, CONDUIT, GAS LINES, COMMUNICATION LINES, WATER LINES, OR OTHER UTILITY LINES AS NECESSARY INCLUDING VALVE BOXES, AND HYDRANT SPOOLS TO FINISH GRADE.
6. ALL PIPING SHALL BE INSTALLED PER THE STANDARD PIPE TRENCH DETAIL IN PLAN SET. TRACER WIRE SHALL BE INSTALLED DIRECTLY ABOVE THE PIPE.
7. PROVIDE THRUST BLOCKS FOR ALL WATER MAIN BENDS. SIZE THE THRUST BLOCK BASED ON THE WORKING PRESSURE AND SOIL BEARING CONDITIONS. ALL THRUST BLOCKS SHALL BE CAST AGAINST UNDISTURBED SOIL.
8. ALL PIPING TO BE INSTALLED PER MANUFACTURES RECOMMENDATIONS REFER TO SPECIFICATIONS FOR MORE DETAILED INFORMATION.
9. ALL OPEN TRENCHES SHALL BE COVERED WITH REMOVABLE PLATES DURING NON-WORKING HOURS.
10. MANHOLE RINGS SHALL BE CONSTRUCTED TO MEET FINISHED GRADE.
11. ALL DRINKING WATER AND PRESSURIZED IRRIGATION LINES UP TO AND INCLUDING METER, ALL SANITARY SEWER MAINS, ALL ELECTRICAL METERS AND ALL ELECTRIC AND SPCN COMMUNICATION SERVICE LINES UP TO THE MAST ON OVERHEAD INSTALLATIONS AND TO THE TOP OF THE METER BASE FOR UNDERGROUND INSTALLATIONS ARE DEDICATED TO SPANISH FORK CITY.

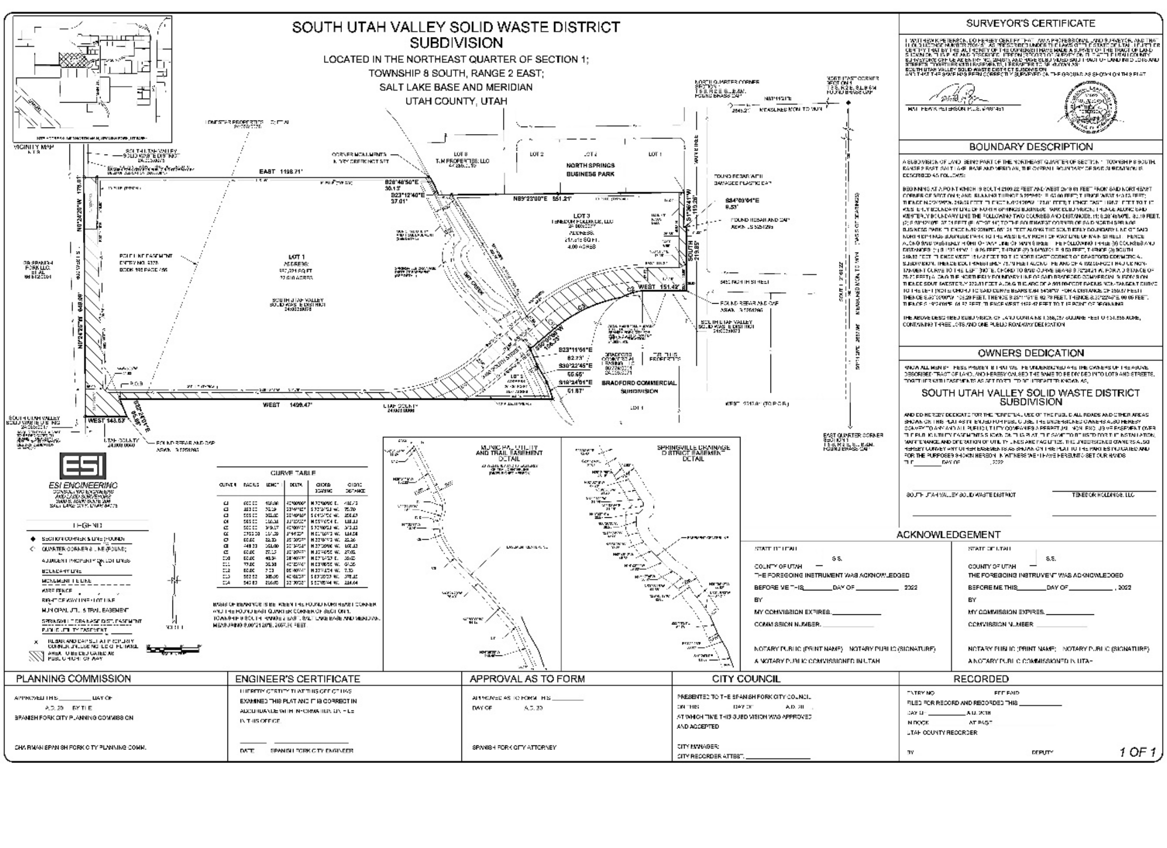
FORSGREN Associates, Inc.

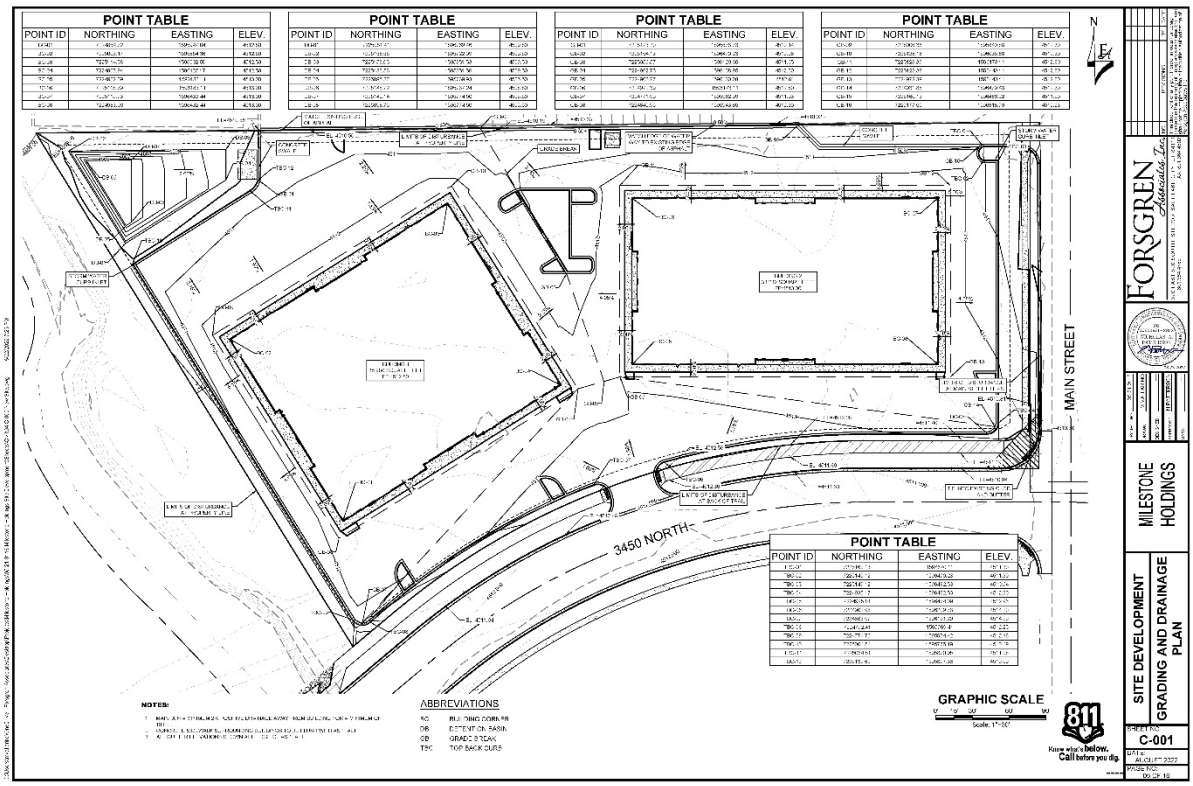
811 Know what's below. Call before you dig.

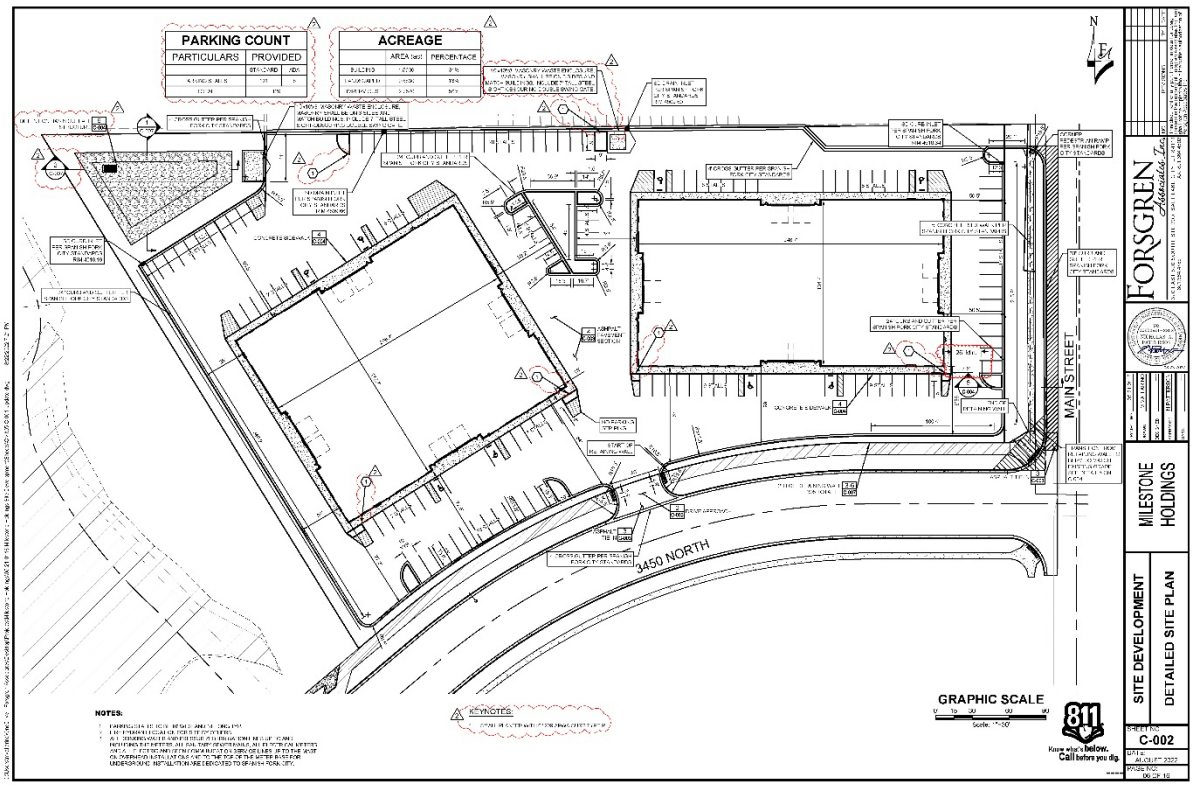
MILESTONE HOLDINGS

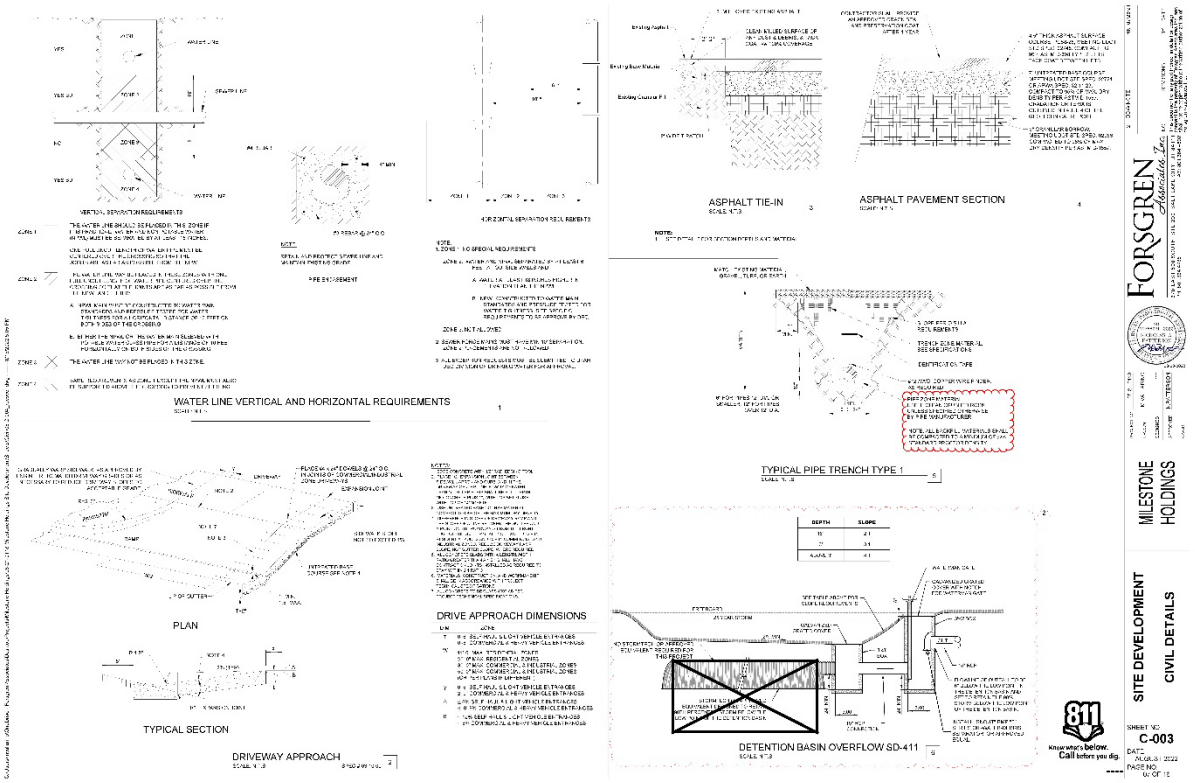
SITE DEVELOPMENT — GENERAL NOTES

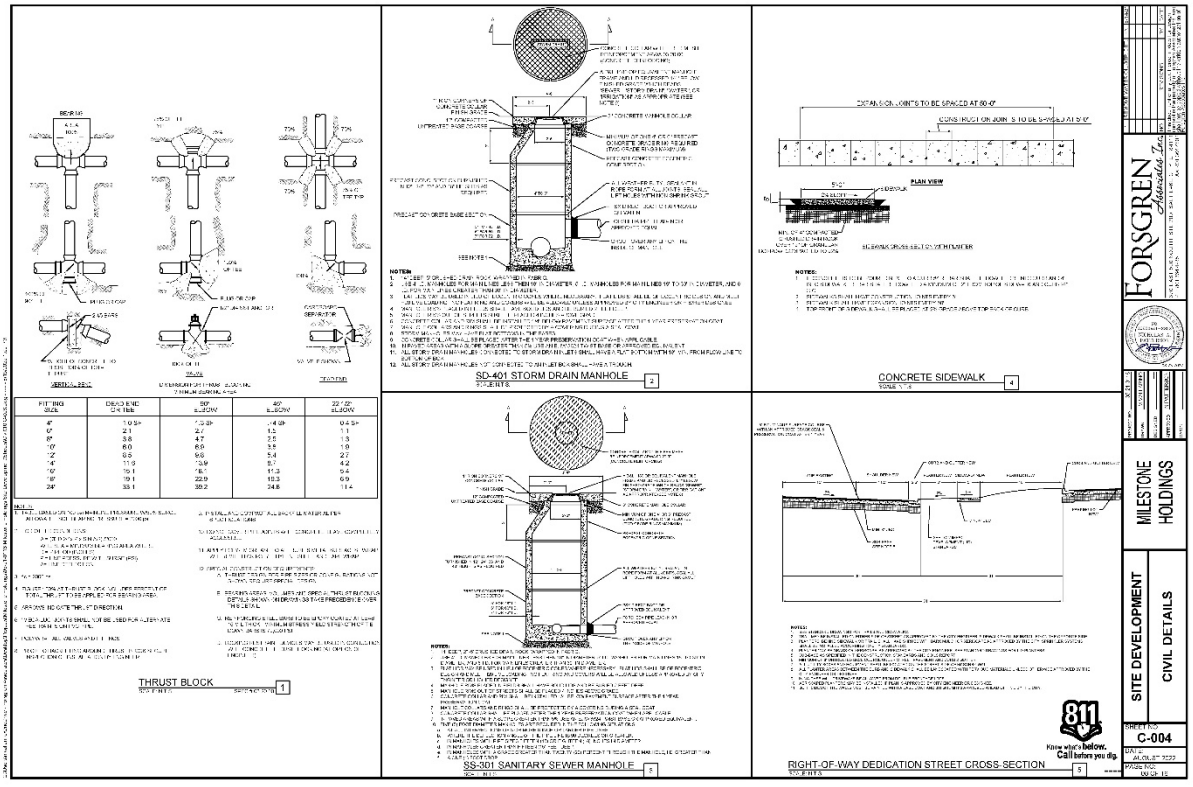
SHEET NO. G-003
DATE: AUGUST 2022
PAGE NO. 03 OF 18

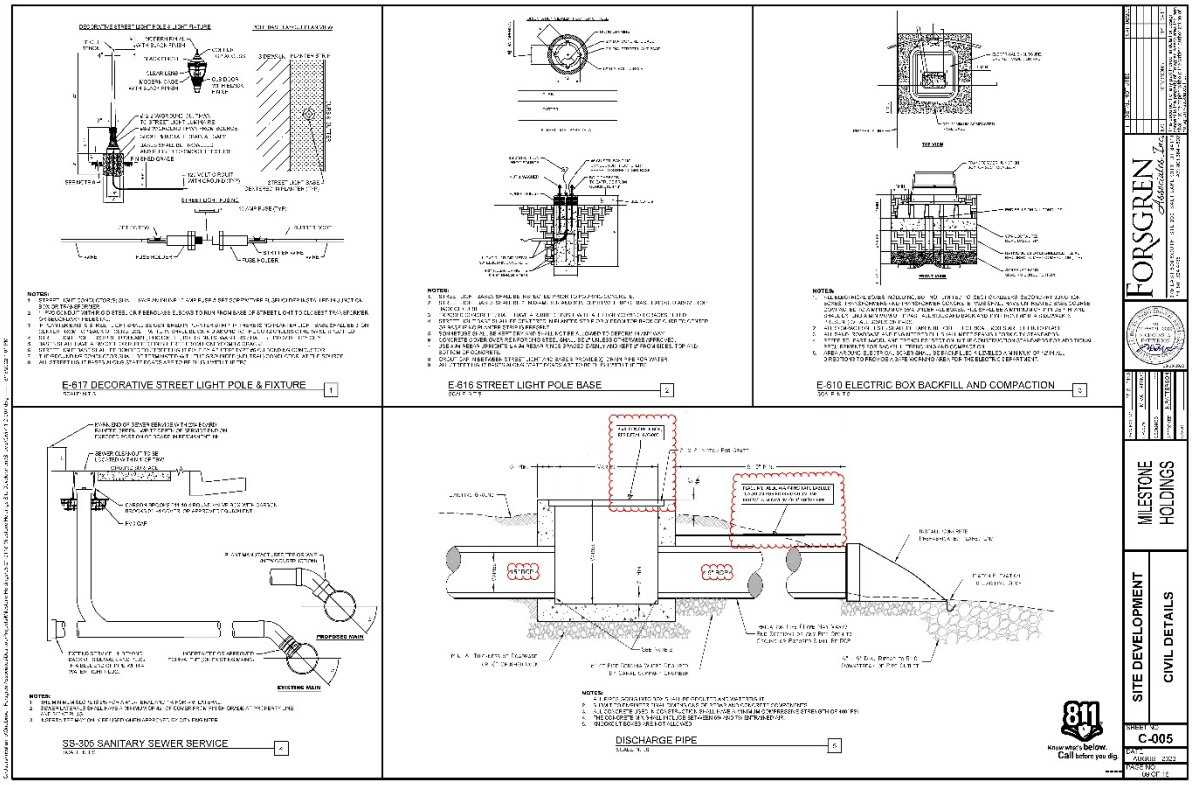


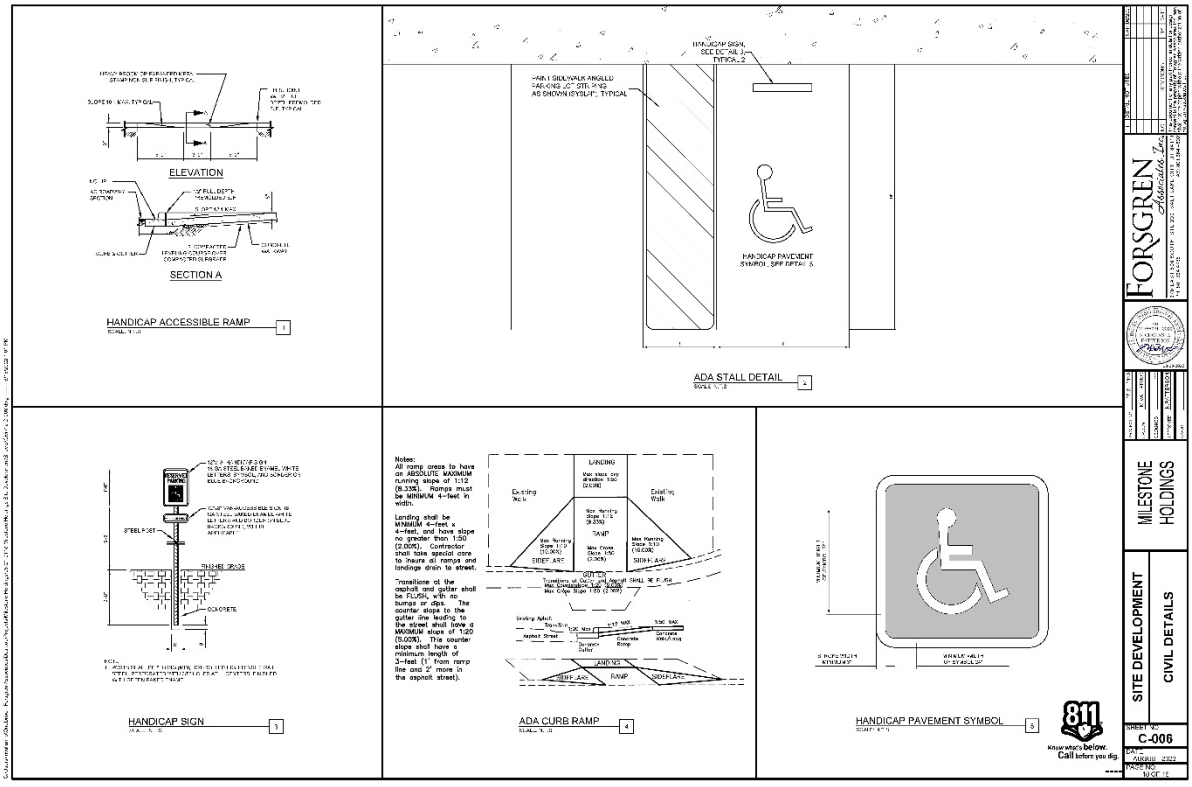

POINT TABLE
POINT ID NORTHING EASTING ELEV.
POINT TABLE
POINT ID NORTHING EASTING ELEV.
POINT TABLE
POINT ID NORTHING EASTING ELEV.
POINT TABLE
POINT ID NORTHING EASTING ELEV.
MAIN STREET
3450 NORTH
POINT TABLE
POINT ID NORTHING EASTING ELEV.
NOTES:
ABBREVIATIONS
GRAPHIC SCALE
Know what's below. Call before you dig.
MILESTONE HOLDINGS
SITE DEVELOPMENT
GRADING AND DRAINAGE PLAN
SHEET NO.
C-001

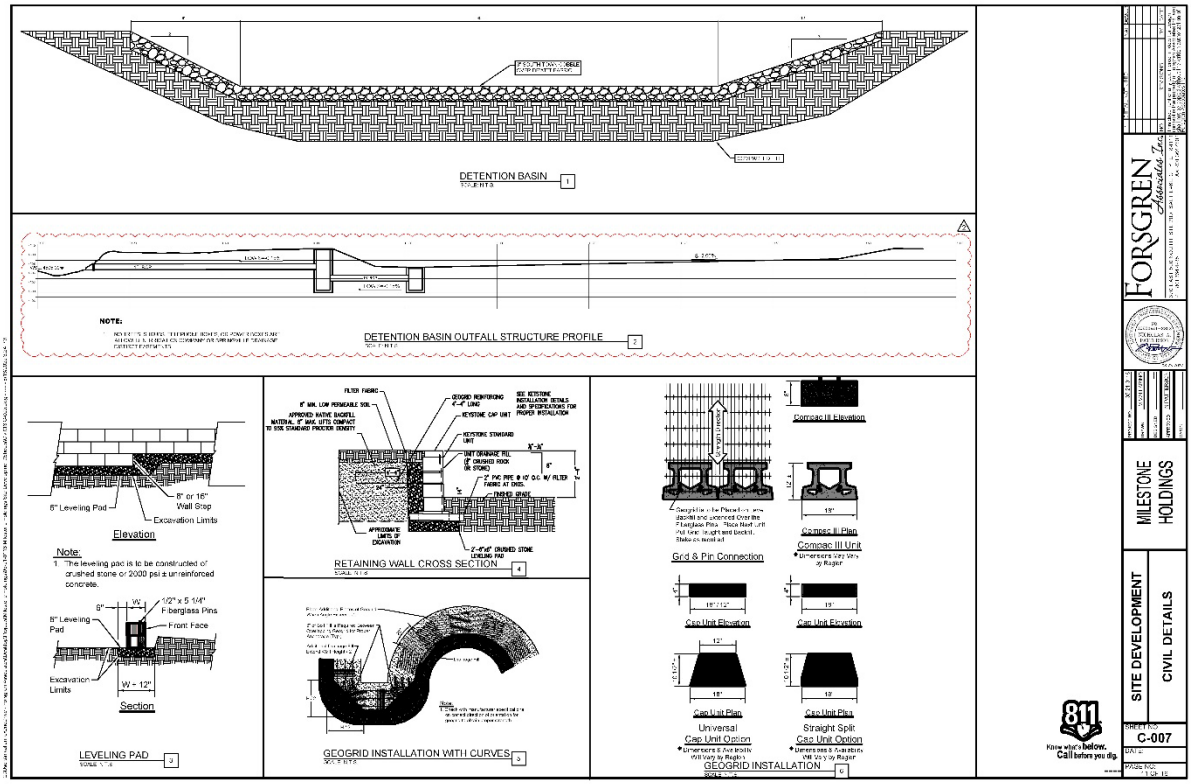

PARKING COUNT
PARTICULARS PROVIDED
ACREAGE
AREA (sq) PERCENTAGE
MAIN STREET
3450 NORTH
NOTES:
KEYNOTES:
GRAPHIC SCALE
Know what's below. Call before you dig.
MILESTONE HOLDINGS
SITE DEVELOPMENT
DETAILED SITE PLAN
SHEET NO.
C-002

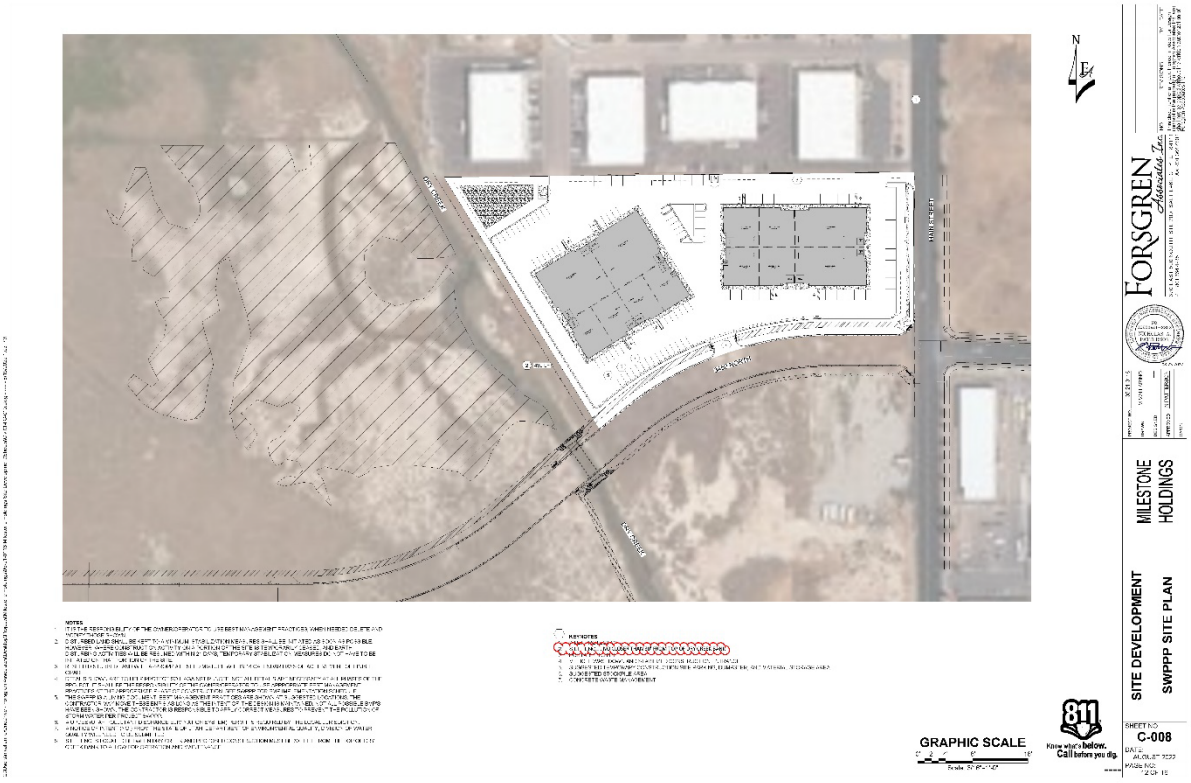

WATER LINE VERTICAL AND HORIZONTAL REQUIREMENTS
ASPHALT TIE-IN
ASPHALT PAVEMENT SECTION
TYPICAL PIPE TRENCH TYPE 1
PLAN
TYPICAL SECTION
DRIVE APPROACH DIMENSIONS
DRIVEWAY APPROACH
DETENTION BASIN OVERFLOW SD-411
FORSGREN Associates Inc
MILESTONE HOLDINGS
SITE DEVELOPMENT
CIVIL DETAILS
SHEET NO C-003
DATE AUGUST 2022
PAGE NO 10 OF 12

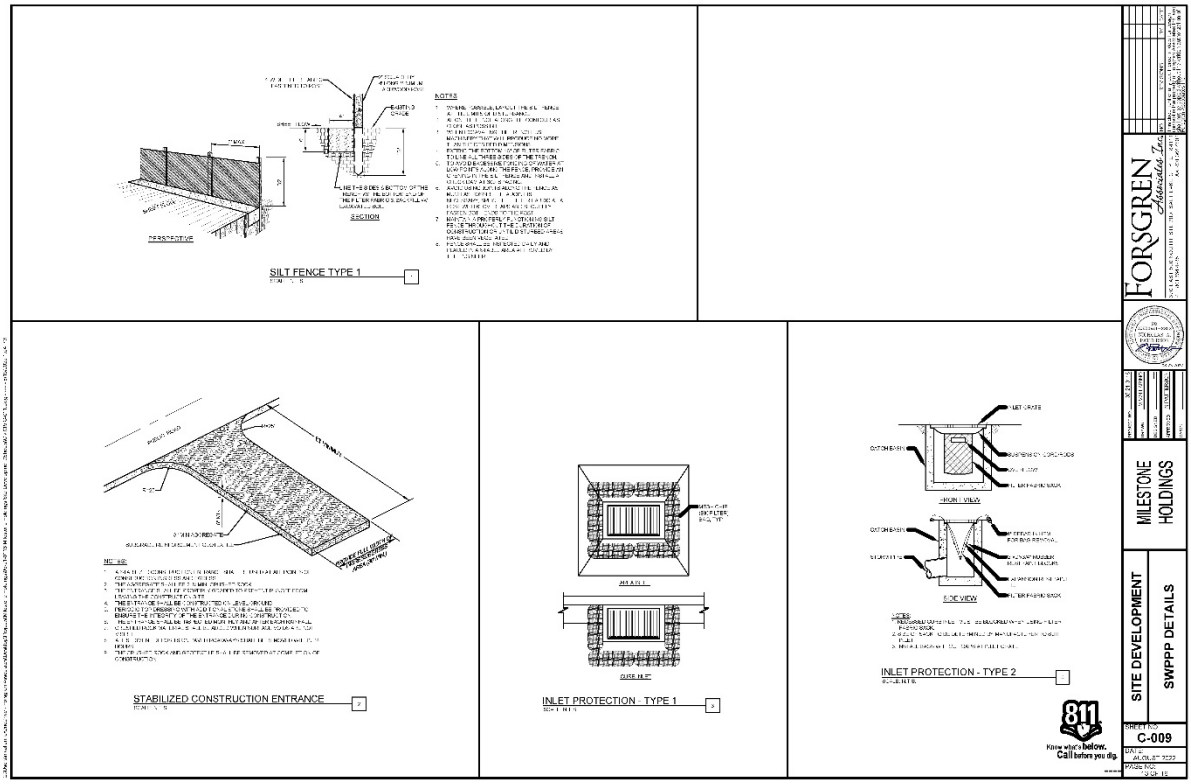

SD-401 STORM DRAIN MANHOLE
CONCRETE SIDEWALK
THRUST BLOCK
SS-301 SANITARY SEWER MANHOLE
RIGHT-OF-WAY DEDICATION STREET CROSS-SECTION
FORSGREN Associates Inc
MILESTONE HOLDINGS
SITE DEVELOPMENT
CIVIL DETAILS
SHEET NO C-004
DATE AUGUST 2022
PAGE NO 09 OF 12

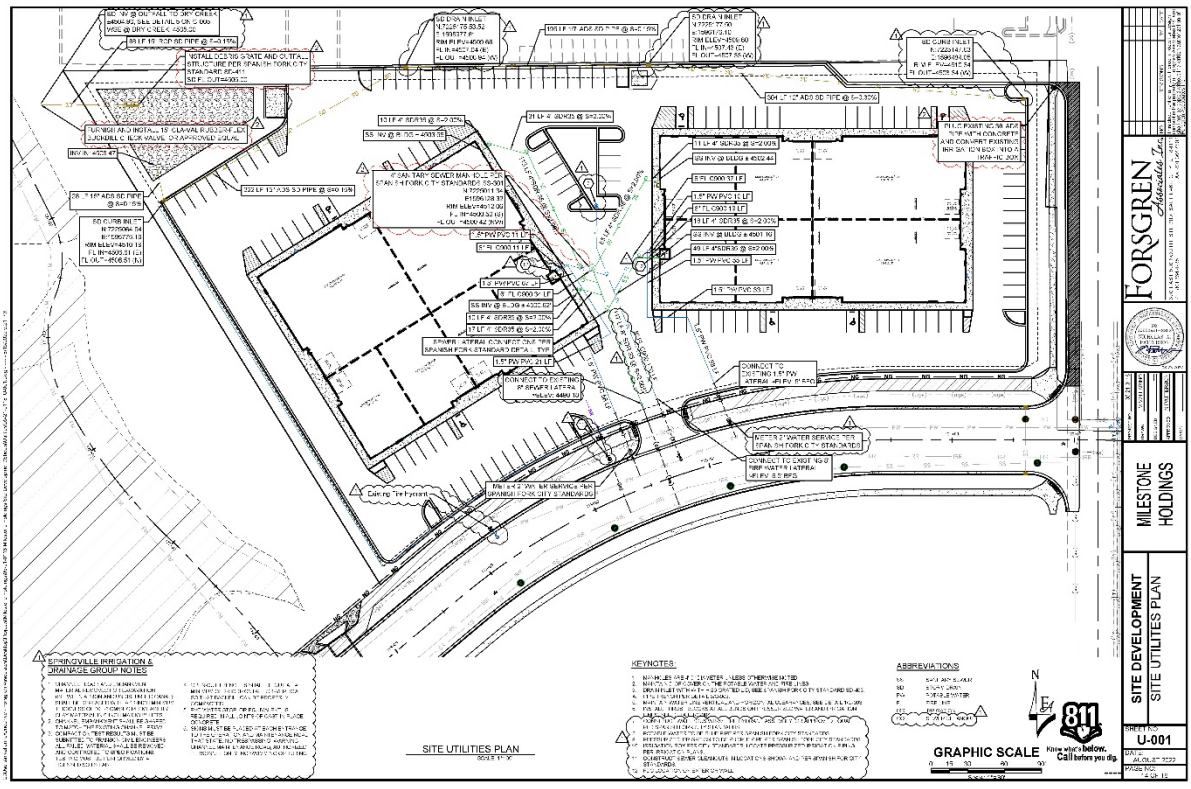

E-617 DECORATIVE STREET LIGHT POLE & FIXTURE
E-616 STREET LIGHT POLE BASE
E-610 ELECTRIC BOX BACKFILL AND COMPACTION
SS-305 SANITARY SEWER SERVICE
DISCHARGE PIPE
FORSGREN Associates Inc.
MILESTONE HOLDINGS
SITE DEVELOPMENT
CIVIL DETAILS
C-005
Know what's below. Call before you dig.

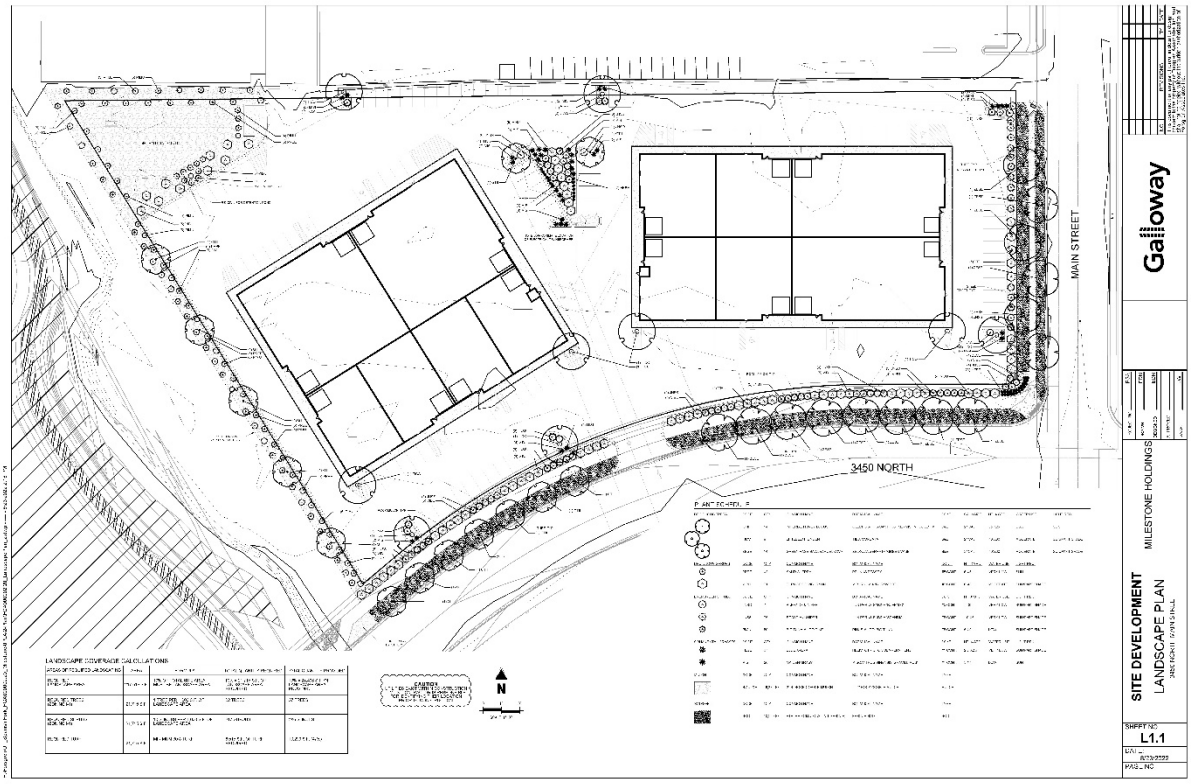

ELEVATION
SECTION A
HANDICAP ACCESSIBLE RAMP
HANDICAP SIGN, SEE DETAIL 2 TYPICAL
HANDICAP PAVEMENT SYMBOL, SEE DETAIL 5
ADA STALL DETAIL
HANDICAP SIGN
Notes:
All ramp areas to have an ABSOLUTE MAXIMUM running slope of 1:12 (8.33%). Ramps must be MINIMUM 4-feet in width.
Landing shall be MINIMUM 4-feet x 4-feet, and have slope no greater than 1:50 (2.00%). Contractor shall take special care to insure all ramps and landings drain to street.
Transitions at the asphalt and gutter shall be FLUSH, with no bumps or dips. The counter slope to the gutter line leading to the street shall have a MAXIMUM slope of 1:20 (5.00%). This counter slope shall have a minimum length of 3-feet (1' from ramp line and 2' more in the asphalt street).
LANDING
RAMP
ADA CURB RAMP
HANDICAP PAVEMENT SYMBOL
FORSGREN Associates Inc.
MILESTONE HOLDINGS
SITE DEVELOPMENT
CIVIL DETAILS
C-006
Know what's below. Call before you dig.

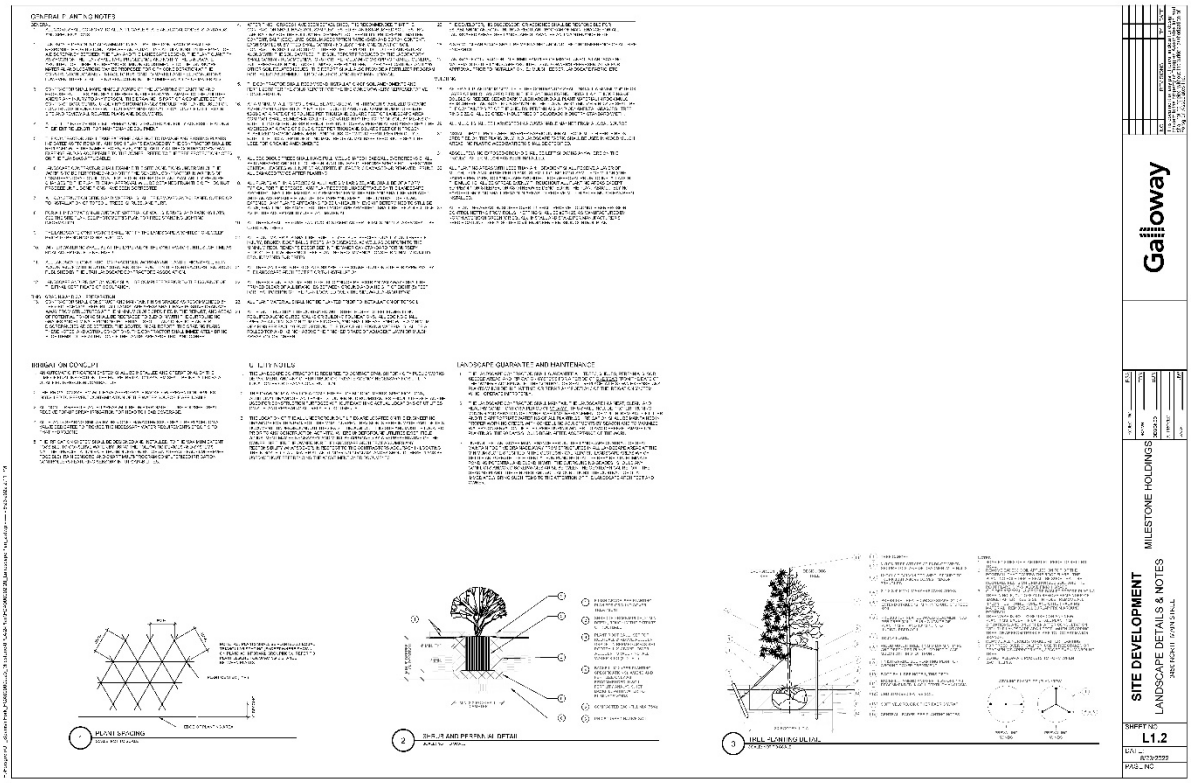

DETENTION BASIN
DETENTION BASIN OUTFALL STRUCTURE PROFILE
NOTE:
Elevation
Note:
1. The leveling pad is to be constructed of crushed stone or 2000 psi ± unreinforced concrete.
Section
LEVELING PAD
RETAINING WALL CROSS SECTION
GEOGRID INSTALLATION WITH CURVES
Grid & Pin Connection
Compac III Elevation
Compac III Plan
Compac III Unit
Cap Unit Elevation
Cap Unit Plan
Universal Cap Unit Option
Straight Split Cap Unit Option
GEOGRID INSTALLATION
FORSGREN Associates Inc.
MILESTONE HOLDINGS
SITE DEVELOPMENT
CIVIL DETAILS
C-007
Know what's below. Call before you dig.

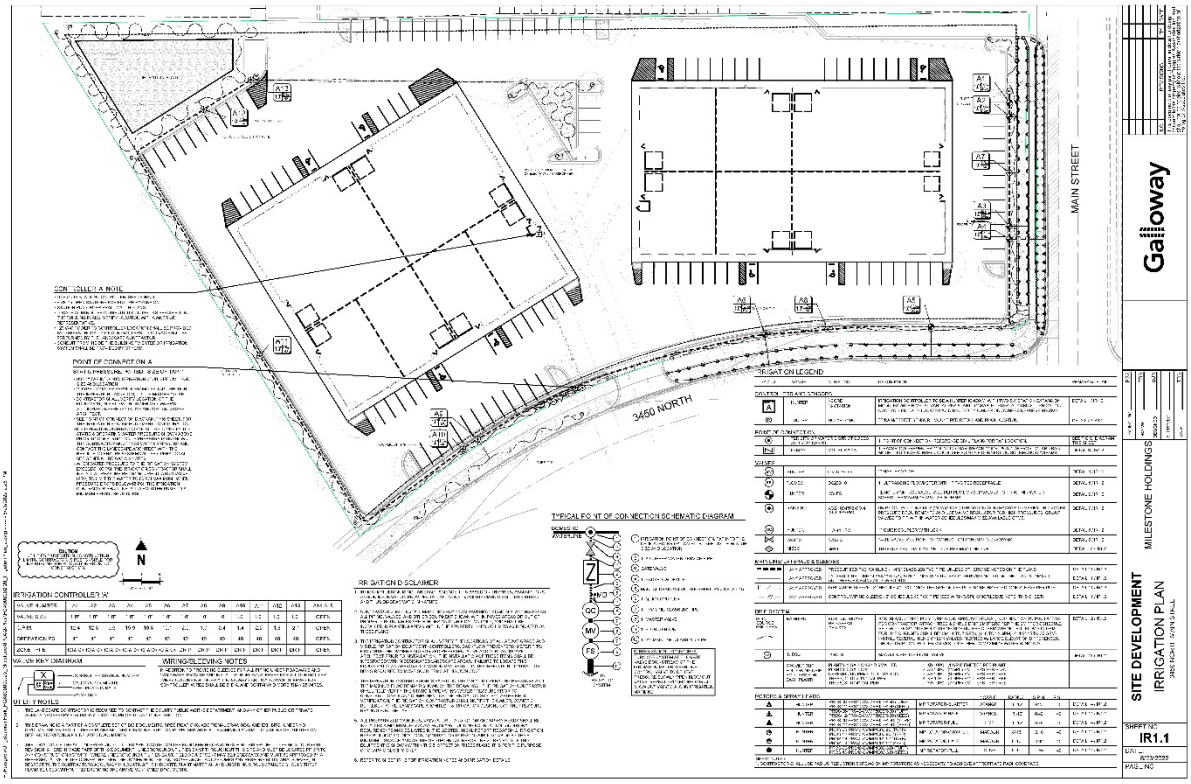

GRAPHIC SCALE
FORSGREN Associates Inc.
MILESTONE HOLDINGS
SITE DEVELOPMENT
SWPPP SITE PLAN
C-008
Know what's below. Call before you dig.

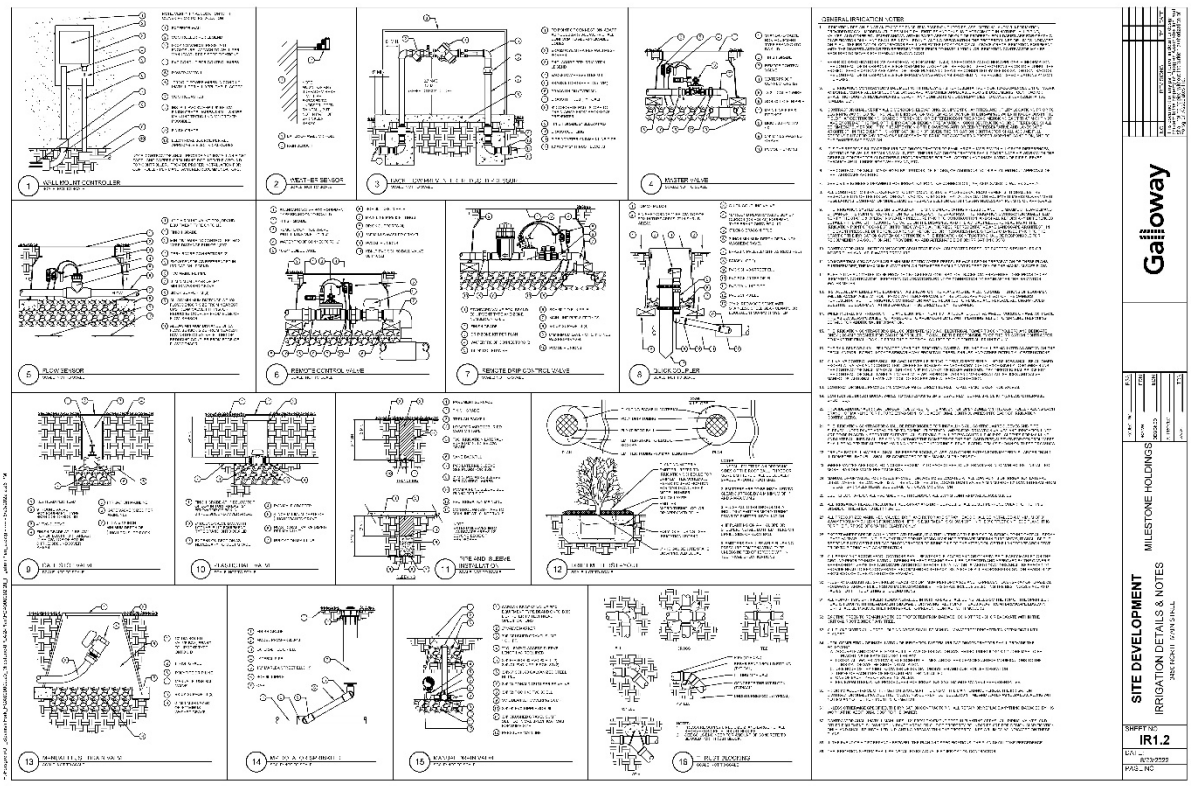

SILT FENCE TYPE 1
STABILIZED CONSTRUCTION ENTRANCE
INLET PROTECTION - TYPE 1
INLET PROTECTION - TYPE 2
FORSGREN
MILESTONE HOLDINGS
SITE DEVELOPMENT
SWPPP DETAILS
C-009

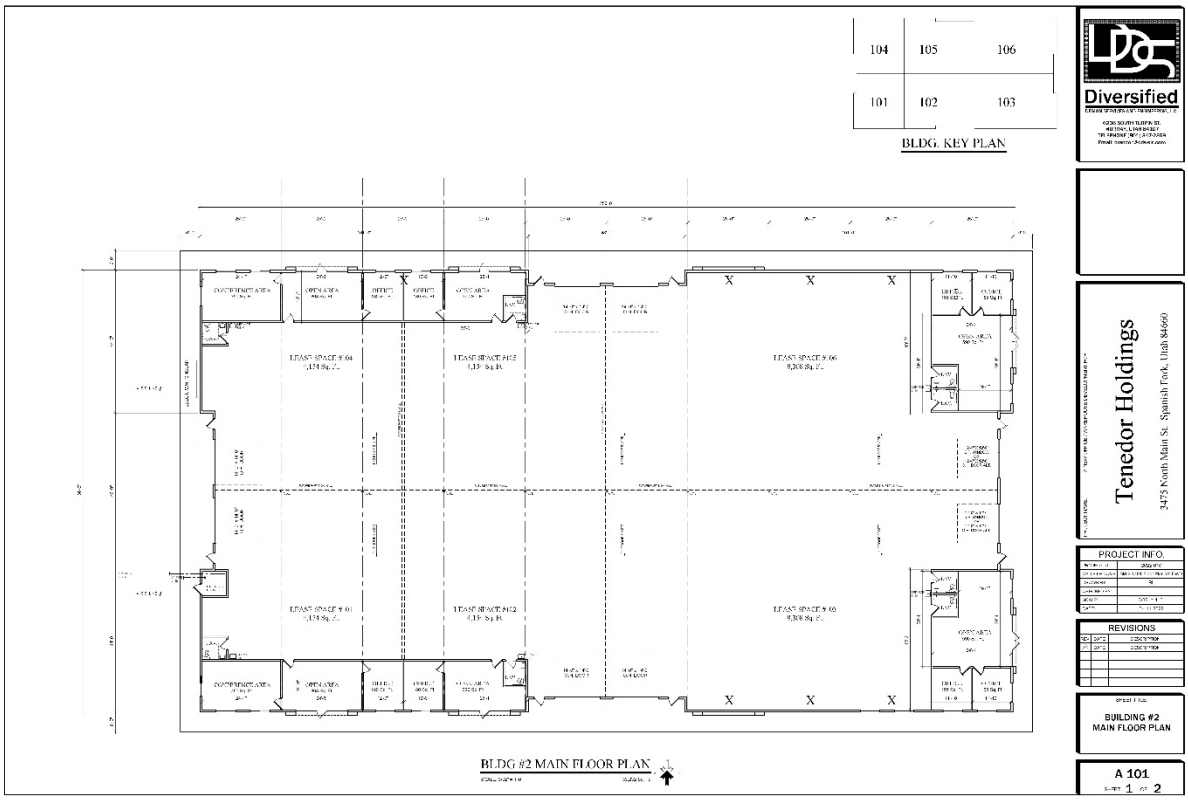

SITE UTILITIES PLAN
GRAPHIC SCALE
FORSGREN
MILESTONE HOLDINGS
SITE DEVELOPMENT
SITE UTILITIES PLAN
U-001


MAIN STREET
3450 NORTH
Galloway
SITE DEVELOPMENT
LANDSCAPE PLAN
MILESTONE HOLDINGS
SHEET NO.
L1.1

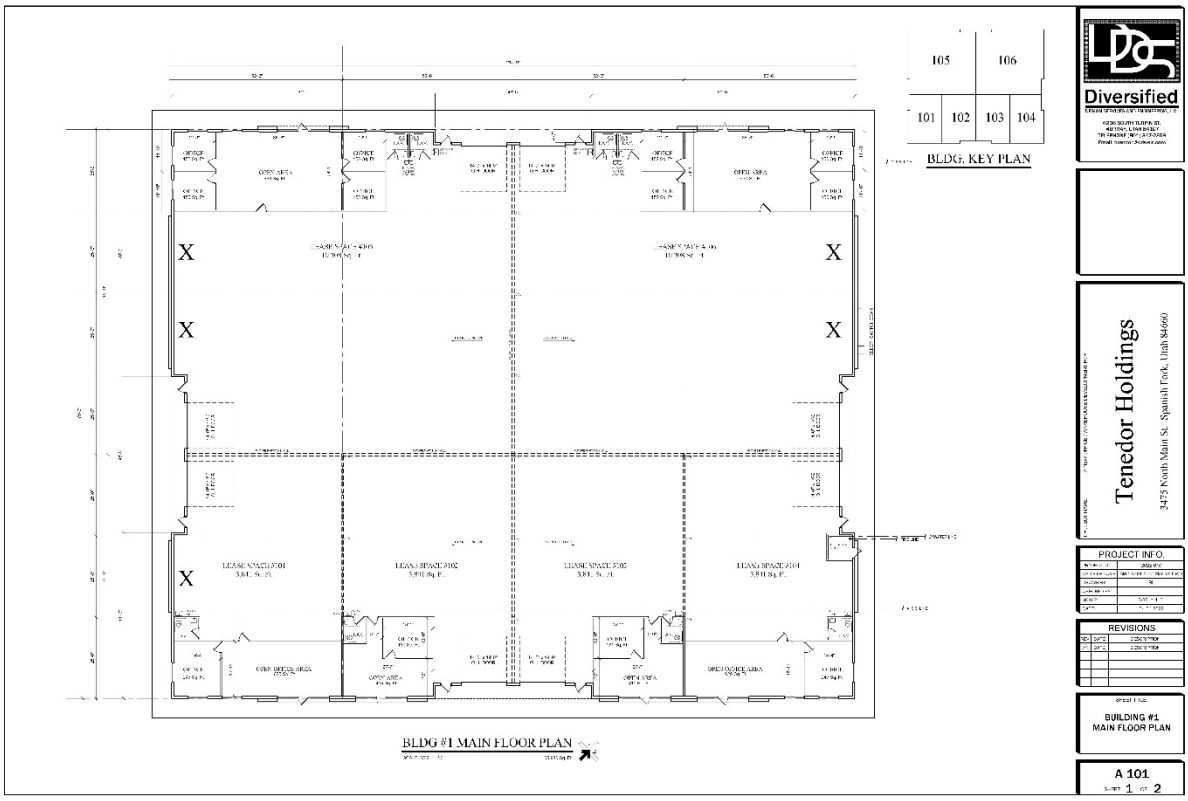

Galloway
SITE DEVELOPMENT
LANDSCAPE DETAILS & NOTES
MILESTONE HOLDINGS
SHEET NO.
L1.2


MAIN STREET
3460 NORTH
IRRIGATION LEGEND
TYPICAL POINT OF CONNECTION SCHEMATIC DIAGRAM
IRRIGATION CONTROLLER 'A'
Galloway
MILESTONE HOLDINGS
SITE DEVELOPMENT
IRRIGATION PLAN
SHEET NO.
IR1.1


GENERAL IRRIGATION NOTES
Galloway
MILESTONE HOLDINGS
SITE DEVELOPMENT
IRRIGATION DETAILS & NOTES
SHEET NO.
IR1.2


104
105
106
101
102
103
BLDG. KEY PLAN
BLDG #2 MAIN FLOOR PLAN
Diversified
Tenedor Holdings
3475 North Main St. Spanish Fork, Utah 84660
PROJECT INFO.
REVISIONS
BUILDING #2
MAIN FLOOR PLAN
A 101
SHEET 1 OF 2

BLDG #1 SOUTH ELEVATION
BLDG #1 EAST ELEVATION
BLDG #1 WEST ELEVATION
BLDG #1 NORTH ELEVATION
Diversified
Tenedor Holdings
3475 North Main St. Spanish Fork, Utah 84660
PROJECT INFO.
REVISIONS
BUILDING #1
EXT. ELEVATIONS
A 201
SHEET 2 OF 2


105
106
101
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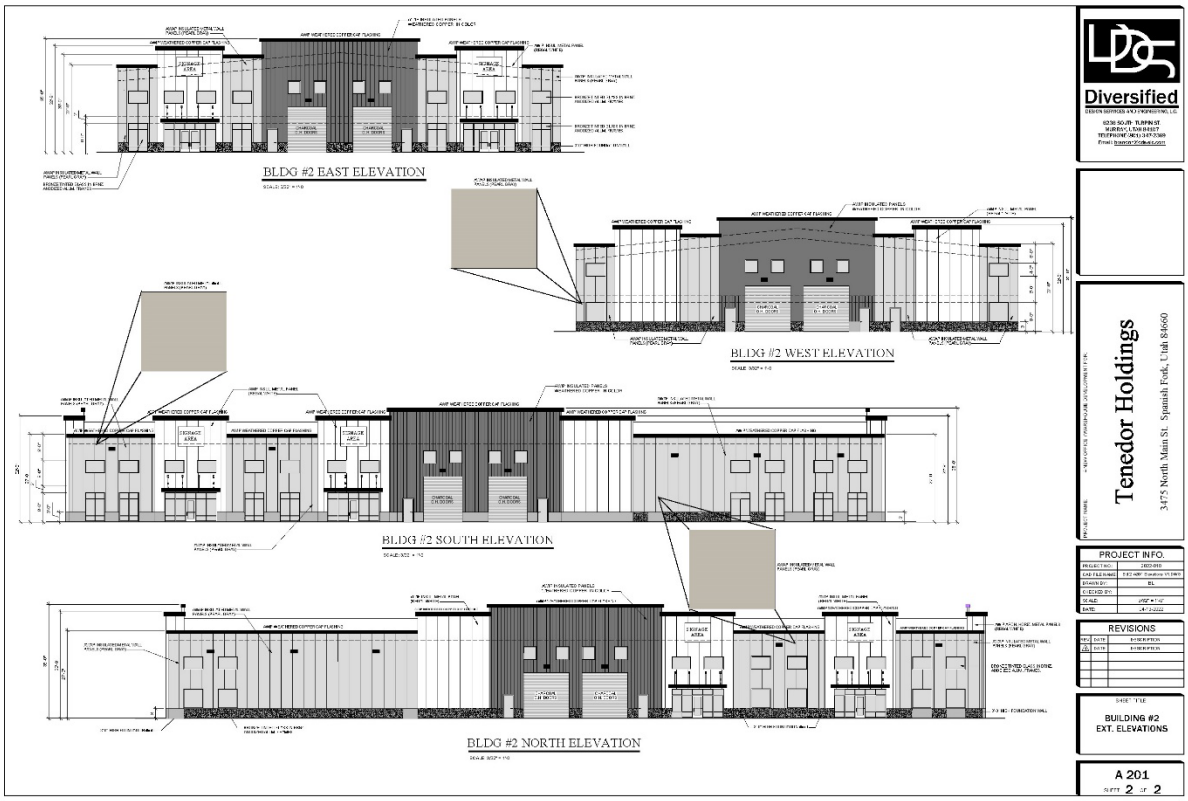
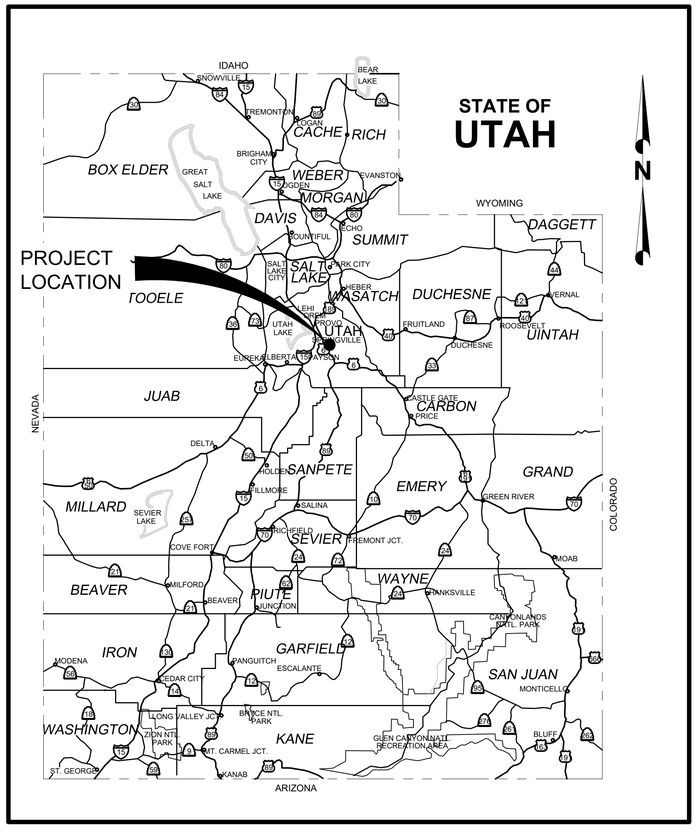
103
104
BLDG. KEY PLAN
BLDG #1 MAIN FLOOR PLAN
Diversified
Tenedor Holdings
3475 North Main St. Spanish Fork, Utah 84660
PROJECT INFO.
REVISIONS
BUILDING #1
MAIN FLOOR PLAN
A 101
SHEET 1 OF 2


BLDG #2 EAST ELEVATION
BLDG #2 WEST ELEVATION
BLDG #2 SOUTH ELEVATION
BLDG #2 NORTH ELEVATION
Diversified
Tenedor Holdings
3475 North Main St. Spanish Fork, Utah 84660
PROJECT INFO.
REVISIONS
BUILDING #2
EXT. ELEVATIONS
A 201
SHEET 2 OF 2

MILESTONE HOLDINGS SITE DEVELOPMENT

3450 NORTH MAIN STREET
SPANISH FORK, UTAH

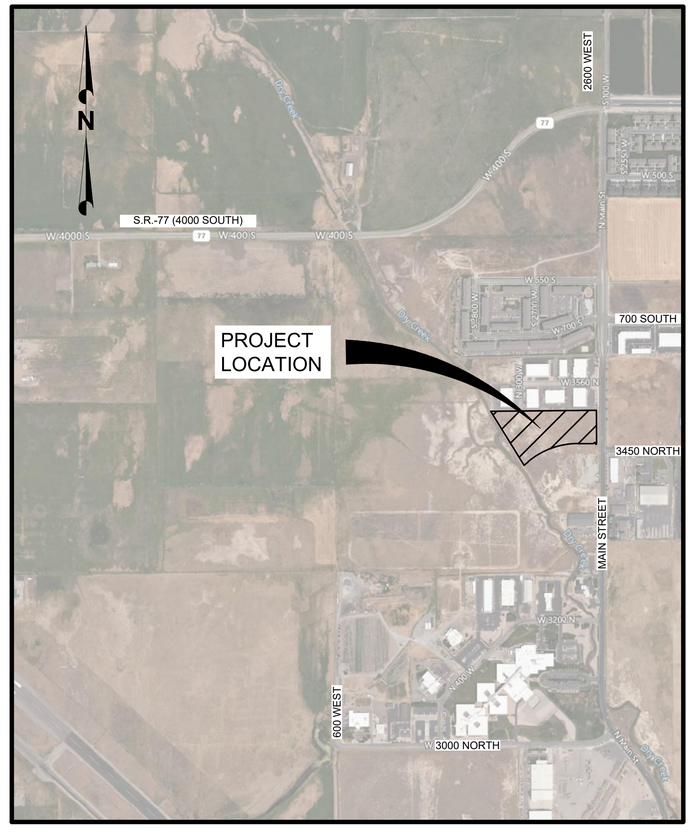


PROJECT LOCATION MAP

N.T.S.

SHEET INDEX

#	PAGE NO.	SHEET TITLE
01	G-001	COVER SHEET
02	G-002	SYMBOLS & ABBREVIATIONS
03	G-003	GENERAL NOTES
04	G-004	PLAT LAYOUT
05	C-001	GRADING AND DRAINAGE PLAN
06	C-002	DETAILED SITE PLAN
07	C-003	CIVIL DETAILS
08	C-004	CIVIL DETAILS
09	C-005	CIVIL DETAILS
10	C-006	CIVIL DETAILS
11	C-007	CIVIL DETAILS
12	C-008	SWPPP SITE PLAN
13	C-009	SWPPP DETAILS
14	U-001	SITE UTILITIES PLAN
15	L-1.1	LANDSCAPING PLAN
16	L-1.2	LANDSCAPING PLAN



VICINITY MAP

N.T.S.

FA PROJECT NO. 05-21-0118
AUGUST 2022

LICENSED PROFESSIONAL ENGINEER
NO. 10288921-2202
NICHOLAS A. PATTERSON
STATE OF UTAH
08-23-2022

FORSGREN Associates Inc.
370 EAST 500 SOUTH, STE 200, SALT LAKE CITY, UT 84111
PH: 801.364.4785 FAX: 801.364.4802

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C:\Users\nvallarino\OneDrive - Forsgren Associates\Desktop\Projects\Milestone Holdings Site Development\05-21-0118 Milestone Holdings Site Development\Sheets\General\05-21-0118_G-001.dwg - MVALLARINO - 8/15/2022 12:40 PM

LEGEND

EXISTING / PROPOSED

	EXISTING	PROPOSED
MATCH LINE		
CENTER LINE		
CONTROL LINE		
PROPERTY OR R/W LINE		
EASEMENT LINE		
STREET MONUMENT LINE		
WIRE FENCE		
CHAIN LINK FENCE		
BARBED WIRE FENCE		X
CONTOUR LINE	4250	4250
SPOT ELEVATION	+EL=4354.63	EL=4354.66
BANK SLOPES		
CANAL		
OPEN DITCH		
UNDERGROUND ELECTRIC	(uge)	UGE
OVERHEAD ELECTRIC	(ohe)	OHE
ELECTRIC BOX	E	E
ELECTRIC MANHOLE	E	E
ELECTRIC METER		
GAS LINE	(ng)	NG
GAS VALVE	GAS	GAS
GAS METER		
IRRIGATION LINE	(irr)	IRR
SANITARY SEWER LINE	(ss)	SS
SANITARY SEWER CLEANOUT	CO	
SANITARY SEWER MANHOLE	S	S
SECONDARY WATER LINE	(sw)	SW
SECONDARY WATER VALVE	SWV	SWV
SECONDARY WATER VAULT	SWV	SWV
STORM DRAIN LINE	(sd)	SD
STORM DRAIN CATCH BASIN		
STORM DRAIN INLET(S)		
STORM DRAIN COMBO BOX		
STORM DRAIN MANHOLE	D	D
STORM DRAIN CLEANOUT BOX	D	D
STORM DRAIN VAULT	SDV	SDV
CULVERT	(sd)	SD
TELEPHONE CABLE	(comm)	COMM
TELEPHONE BOX	T	T
TELEPHONE MANHOLE	T	T
TELEPHONE POST		
WATER LINE	(pw)	PW
FIRE HYDRANT		
FIRE RISER	FR	FR
WATER VALVE	WV	WV
WATER AIR RELEASE VALVE	ARV	ARV
WATER METER	WM	WM
UTILITY POLE & ANCHOR		
POWER POLE		
STREET LIGHT		
LIGHT		
ASPHALT PAVING		
CURB & GUTTER		
SIDEWALK		
RAILROAD TRACKS		
GUARD RAIL		
SIGN		
STRUCTURE		
LANDSCAPING (TREES ETC.)		
SECTION CORNER	12 11 4 3	
MONUMENT		
BENCH MARK	BM NO. 46 ELEV=4256.50	
TESTING BOREHOLE	BH NO.1	

ANNOTATION

REVISION TRIANGLE
1 — REVISION NO.

KEYNOTE CALLOUT
1 — KEYNOTE REFERENCE

PIPE CALLOUT
SYSTEM, SIZE, WW 55" SS, MATERIAL, Description, DESCRIPTION

EQUIPMENT CALLOUT
SYSTEM, TAG NUMBER, XX-XXX, Description, DESCRIPTION

DETAIL NAME
DETAIL NAME
SCALE: N.T.S. SPEC # 00 00 00 1
SCALE, SPECIFICATION NO., DETAIL #

DETAIL CALLOUT
DETAIL #, 1, ABC, C-001 123, DETAIL NAME/ DESCRIPTION, SHEET NO.

SECTION NAME
SECTION NAME
SCALE: 1"=1"
SCALE, DESIGNATION, A

SECTION CALLOUT
DESIGNATION, A, C-001, SHEET NO.

VIEW NAME
VIEW NAME
SCALE: 1"=1"
VIEWPORT SCALE

ISOMETRIC VIEW CALLOUT
DESIGNATION, A, SHEET NO.

GENERAL CALLOUT
GENERAL NOTE

PROPOSED CALLOUT
CONSTRUCTION NOTE

HATCHING/PATTERNS

- CONCRETE
- ASPHALT PAVEMENT
- SAND
- UNDISTURBED SOIL
- GROUTED RIP RAP
- LOOSE RIP RAP
- UNTREATED BASE COURSE
- STRUCTURAL FILL
- WETLANDS
- WATER
- DEMOLITION AREA
- BACKFILL
- STEEL
- CONCRETE MASONRY UNIT (CMU)

CIVIL ABBREVIATIONS

ABUT	ABUTMENT	G	GAS	S	SOUTH
AC	ASPHALT CEMENT	GALV	GALVANIZED	SAN	SANITARY
ALT	ALTERNATE	GM	GAS METER	SCHED	SCHEDULE
APPROX	APPROXIMATELY	GRD	GROUND	SD	STORM DRAIN
ARV	AIR RELEASE VALVE	GV	GAS VALVE	SEC	SECTION
ASP	ASPHALT	HDWL	HEADWALL	SHT	SHEET
BCR	BEGIN CURB RETURN	H&T	HUB AND TACK	SLB&M	SALT LAKE BASE & MERIDIAN
BEG	BEGINNING/BEGIN	HORIZ	HORIZONTAL	SPECS	SPECIFICATIONS
BDRY	BOUNDARY	HWL	HIGH WATER LEVEL	SQ	SQUARE
BK	BACK	HWY	HIGHWAY	SS	SANITARY SEWER
BKFL	BACKFILL	HYD	HYDRANT	ST	STREET
BLDG	BUILDING	ID	INSIDE DIAMETER	STL	STEEL
BLM	BUREAU OF LAND MANAGEMENT	IE	INVERT ELEVATION	STA	STATION
BM	BENCH MARK	IRR	IRRIGATION	STD	STANDARD
BOT	BOTTOM	INV	INVERT	STRUCT	STRUCTURE
BRG	BEARING	JCT	JUNCTION	T	TOWNSHIP, TELEPHONE
BSMT	BASEMENT	JB	JUNCTION BOX	TAN	TANGENT
BTWN	BETWEEN	km	KILOMETER	TBC	TOP BACK CURB
BOF	BOTTOM OF FOOTING	L	LENGTH	TEMP	TEMPORARY
BW	BACK OF WALK	LB	POUND	TEL	TELEPHONE/TELEGRAM
CALC	CALCULATED	LF	LINEAR FEET	TH	TEST HOLE
CB	CATCH BASIN	LIN	LINEAR/LINEAL	TOC	TOP OF CONCRETE
CCW	COUNTERCLOCKWISE	LT	LEFT	TOF	TOP OF FOOTING
C-C	CENTER TO CENTER	LWL	LOW WATER LEVEL	TOS	TOP OF SLAB
C&G	CURB AND GUTTER	m	METER	TP	TELEPHONE POLE
CFS	CUBIC FEET PER SECOND	MATL	MATERIAL	TYP	TYPICAL
CLS	CLASS	MAX	MAXIMUM	UBC	UNIFORM BUILDING CODES
℄ or CL	CENTERLINE/CONTROL LINE	MKR	MARKER	UG	UNDERGROUND
CIP	CAST IRON PIPE	MH	MANHOLE	UT	UNDERGROUND TELEPHONE
cm	CENTIMETER	MI	MILE	VB	VALVE BOX
CMP	CORRUGATED METAL PIPE	MISC	MISCELLANEOUS	VC	VERTICAL CURVE
CMPA	CORRUGATED METAL PIPE-ARCH	MON	MONUMENT	VERT	VERTICAL
COB	CLEAN OUT BOX	MPH	MILES PER HOUR	VOL	VOLUME
COL	COLUMN	N	NORTH	VPI	VERTICAL POINT OF INTERSECTION
CONC	CONCRETE	N/A	NO ACCESS or NOT APPLICABLE	VPC	VERTICAL POINT OF CURVE
CONST	CONSTRUCT	NIC	NOT IN CONTRACT	VPT	VERTICAL POINT OF TANGENCY
COR	CORNER	NRCP	NON-REINFORCED CONCRETE PIPE	W	WEST/WATER
CORR	CORRUGATED	NTS	NOT TO SCALE	WM	WATER METER
CEN	CENTER	No	NUMBER	WP	WORK POINT
CU	CUBIC	OBLIT	OBLITERATE	WV	WATER VALVE
CULV	CULVERT	OD	OUTSIDE DIAMETER	XING	CROSSING
CW	CLOCKWISE	O-O	OUTSIDE TO OUTSIDE	XSEC	CROSSING SECTION
°	DEGREE	OFF REV	OFFICE REVISION	Yd	YARD
DET	DETAIL	ORIG	ORIGINAL	@	AT
DIA	DIAMETER	PVMT	PAVEMENT	&	AND
DIP	DUCTILE IRON PIPE	PC	POINT OF CURVATURE	<	ANGLE
DIST	DISTANCE	PCC	POINT OF COMPOUND CURVATURE	Ø	ROUND or DIAMETER
DN	DOWN	PE	POLYETHELENE	W/	WITH
DWG	DRAWING	PERF	PERFORATED	W/O	WITHOUT
DRWY	DRIVEWAY	PI	POINT OF INTERSECTION	△	DELTA
E	EAST	PL or P L	PROPERTY LINE	%	PERCENT
EA	EACH	POB	POINT OF BEGINNING		
ECR	END CURB RETURN	POC	POINT ON CURVE		
ELEV	ELEVATION	PP	POWER POLE		
ELEC	ELECTRIC/ELECTRICAL	PRC	POINT OF REVERSE CURVE		
EMB	EMBANKMENT	PROJ	PROJECT		
EO	EDGE OF OIL	PROP	PROPERTY		
EXC	EXCAVATION	PSC	POINT OF SPIRAL CURVE		
EQUIP	EQUIPMENT	PSI	POUNDS PER SQUARE INCH		
EST	ESTIMATE	PT	POINT OF TANGENCY		
EXIST	EXISTING	PVC	POLYVINYL CHLORIDE		
FEN	FENCE	QTY	QUANTITY		
FD	FOUND	R	RANGE/RADIUS		
FDN	FOUNDATION	RCP	REINFORCED CONCRETE PIPE		
FG	FINISH GRADE	RD	ROAD		
FIN	FINISH	REF	REFERENCE		
FL OR ℉	FLOW LINE	REINF	REINFORCED		
FLR	FLOOR	REQD	REQUIRED		
FLG	FLANGE	REV	REVISION		
FPS	FEET PER SECOND	RP	REFERENCE POINT/RADIUS POINT		
FS	FINISH SURFACE	RR	RAILROAD		
FT	FEET	RT	RIGHT/ROUTE		
FTG	FOOTING	R/W	RIGHT OF WAY		

Know what's below. Call before you dig.

NO.	REVISIONS	BY	DATE

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FORSGREN Associates Inc
370 EAST 500 SOUTH, STE 200, SALT LAKE CITY, UT 84111
PH: 801.364.4785
FAX: 801.364.4802

LICENSED PROFESSIONAL ENGINEER
NO. 10288921-2202
NICHOLAS A. PATTERSON
STATE OF UTAH
08-23-2022

PROJECT NO.	05-21-0118
DRAWN	M.VALLARINO
DESIGNED	----
APPROVED	N.PATTERSON
QA/QC	----

MILESTONE HOLDINGS

SITE DEVELOPMENT

SYMBOLS & ABBREVIATIONS

SHEET NO: G-002

DATE: AUGUST 2022

PAGE NO: 02 OF 16

C:\Users\mvallarino\OneDrive - Forsgren Associates\Desktop\Projects\Milestone Holdings\05-21-0118 Milestone Holdings Site Development\Sheets\General\05-21-0118_G-002.dwg ----- 8/15/2022 12:40 PM

GENERAL NOTES

1. ANY MODIFICATION TO THIS CONSTRUCTION PACKAGE SHALL BE APPROVED BY THE ENGINEER. PRIOR TO SAID APPROVAL, ALL IMPROVEMENT DRAWINGS SHALL BE UPDATED AT THE CONTRACTOR'S EXPENSE, RESUBMITTED, AND APPROVED BY THE ENGINEER UNLESS NOTED OTHERWISE.
2. THE CONTRACTOR SHALL LOCATE, RETAIN AND PROTECT ALL EXISTING UTILITIES UNLESS OTHERWISE DIRECTED BY THE OWNER AND ENGINEER AND AS SHOWN ON THE PROJECT PLANS.
3. EXISTING UTILITIES SHOWN ON THE PROJECT PLANS ARE APPROXIMATE. CONTRACTOR SHALL NOTIFY BLUE STAKES 48 HOURS IN ADVANCE OF ANY CONSTRUCTION. CONTRACTOR SHALL FIELD VERIFY ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION.
4. CONTRACTOR SHALL NOTIFY ENGINEER OF ALL UTILITY CONFLICTS UPON DISCOVERY.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIR OR REPLACEMENTS OF ANY DAMAGE TO ADJACENT SURFACE IMPROVEMENTS IMPACTED BY CONSTRUCTION.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECTING ANY TRENCH SETTLEMENT OR DAMAGE TO EXISTING UTILITIES.
7. EXISTING UTILITY SERVICE SHALL BE MAINTAINED THROUGH CONSTRUCTION PROCESS IF A UTILITY SERVICE IS GOING TO BE INTERRUPTED, ALL AFFECTED PROPERTY OWNERS ARE TO BE NOTIFIED IN WRITING BY THE CONTRACTOR 72 HOURS BEFORE THE DISRUPTION.
8. RECORD DRAWINGS ARE TO BE PROVIDED TO THE OWNER IN ELECTRONIC AND PRINTED FORMATS PRIOR TO FINAL PAYMENT. AS PART OF THE RECORD DRAWINGS, THE CONTRACTOR SHALL USE A SURVEY GRADE GPS DEVICE TO RECORD THE LOCATION OF DISCOVERED AND INSTALLED UTILITY LINES. THE SURVEY SHALL BE PERFORMED AS LINES ARE FOUND AND LINES ARE INSTALLED AND SHALL BE DONE PRIOR TO THE LINE BEING COVERED. LINE NOT MEASURED WILL BE UNCOVERED, RE-BACKFILLED, AND RE-PAVED BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER. THE SURVEY INFORMATION SHALL INCLUDE ALL FOUND AND INSTALLED WATER LINE BENDS, ELBOWS, AND VALVES, SEWER MANHOLES, STORM DRAIN CATCH BASINS AND INLET BOXES, COMMUNICATION LINES, ELECTRICAL LINES, AND OTHER FOUND OR INSTALLED UTILITY LINES. THE SURVEY WILL SHOW THE ELEVATION AND DESCRIPTION OF THE UTILITY. THE SURVEY WILL BE TIED TO THE SITE HORIZONTAL AND VERTICAL CONTROL. LINES SHALL BE SURVEYED AS THEY ARE BEING BACKFILLED.
9. ALL WORK MUST BE SUBSTANTIALLY COMPLETE PRIOR TO THE DATE STATED IN THE CONTRACT. THE CONTRACTOR SHALL PROVIDE MULTIPLE CREWS, WORK MULTIPLE SHIFTS, ETC. AS NEEDED TO GET WORK SUBSTANTIALLY COMPLETE BY THE DEADLINE. SUBSTANTIALLY COMPLETE INCLUDES BUT IS NOT LIMITED TO ALL EXCAVATION, FILL, BACKFILL, PAVING, PAINTING, STRIPING, AND CONCRETE WORK COMPLETED AND READY FOR OWNER'S USE.
10. PROJECT SHALL BE CONSTRUCTED TO SPANISH FORK CITY STDS, APWA STDS, AND TECHNICAL SPECIFICATIONS AND SPECIAL PROVISIONS IN THE PROJECT MANUAL. IN THE EVENT OF A CONFLICT, THE MOST STRINGENT SPECIFICATION WILL APPLY.
11. STREETS SHALL BE KEPT CLEAN TO THE SATISFACTION OF THE CITY INSPECTOR AND OWNER.

SITE NOTES

1. DIMENSIONS ARE TO BACK OF CURB UNLESS NOTED OTHERWISE. RADIUS DIMENSIONS ARE TO BACK OF CURB UNLESS OTHERWISE NOTED.
2. THE CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY: THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL INDEMNIFY, AND HOLD THE OWNER, ARCHITECT, ENGINEER, AND SUB-CONSULTANTS 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, ARCHITECT, ENGINEER, OR SUB-CONSULTANTS.
3. ALL SIDEWALKS AND BACK OF CURB SHALL BE GRADED AT 2% CROSS SLOPE OR LESS.
4. ALL STRIPING WILL BE 4-INCH WHITE EXCEPT FOR THE ADA SYMBOL UNLESS OTHERWISE NOTED.
5. CONCRETE SHALL BE 4000 PSI CONCRETE IN THE SUMMER MONTHS AND 4500 PSI CONCRETE IN THE WINTER MONTHS OR GREATER. ALL EXTERIOR CONCRETE SHALL HAVE FIBER MESH INCLUDING SIDEWALKS, PADS, SLABS, RETAINING WALLS, AND CURB & GUTTER.
6. PRIOR TO COMMENCING SITE GRADING, THE PROPOSED PAVEMENT AREAS, INCLUDING DRIVEWAYS, PARKING, AND SIDEWALKS SHOULD BE STRIPPED OF ALL VEGETATION, TOPSOIL, UNDOCUMENTED FILL, AND DEBRIS.
7. AFTER GENERAL SITE EXCAVATION AND GRADING IS COMPLETE, EXPOSED SOILS SHOULD BE PROOF-ROLLED WITH EITHER A FULLY LOADED TANDEM-AXLE DUMP TRUCK OR A FULLY LOADED WATER TRUCK AND OBSERVED BY THE GEOTECHNICAL ENGINEER OF RECORD.
8. REMEDIATION OF SOFT, UNSTABLE SUB-GRADE SHALL BE ACCOMPLISHED BY PLACING A SINGLE OR MULTIPLE LAYER(S) OF GEOTEXTILE FABRIC, Mirafi RS280i, RS380i, OR APPROVED EQUAL. PRESSING COBBLE SIZED MATERIAL INTO THE SUB-GRADE SHALL NOT BE USED.
9. ASPHALT PAVING SHALL BE ACCORDING TO THE ROAD SECTION DETAIL SHOWN IN THE PLANS. THE PAVING SHALL BE DONE IN LIFTS OF UP TO 3-INCHES THICK AND AT LEAST 1.5-INCHES THICK. USE ASPHALT AND GRADATION SPECIFIED IN THE SPECIFICATIONS. COMPACT ASPHALT TO BETWEEN 92% AND 96% OF MAXIMUM DENSITY. AREAS COMPACTED TO MORE THAN 96% SHALL BE REMOVED AND REPLACED AT NO ADDITIONAL COST TO THE OWNER.
10. COMPACT ROAD BASE TO NOT LESS THAN 95% OF MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D 1557.
11. ALL WORK INSIDE OF CITY RIGHT OF WAY TO CONFORM TO THE PROJECT MANUAL (PLANS AND SPECIFICATIONS), AND CITY STANDARDS.

DEMOLITION NOTES

1. DEMOLITION FOR THE CONTRACT IS TO INCLUDE ALL AREAS SHOWN WITHIN THE DEMOLITION LIMITS OR BY NOTE.
2. REFER TO THE SITE PLAN FOR MORE DETAILS ON CONNECTIONS TO EXISTING FEATURES AND LIMITS OF REMOVAL.
3. SAW CUT ASPHALT IN AREAS INDICATED. FIELD VERIFY SAW CUT LOCATIONS WITH OWNER PRIOR TO CUTTING ASPHALT. SAW CUT IN NEAT, STRAIGHT LINES PRIOR TO EXCAVATION.
4. RETAIN AND PROTECT EXISTING BUILDINGS TO REMAIN INCLUDING ALL FOOTINGS, FOUNDATIONS, AWNINGS, AND OVERHANGS.
5. CLEAR AND GRUB TREES, AND OTHER VEGETATION INCLUDING ROOT BALLS, AND ROOTS FOR AREAS INSIDE THE DEMOLITION LIMITS UNLESS OTHERWISE NOTED.
6. DO NOT INTERRUPT THE SERVICES OR DISRUPT THE OPERATION OF ANY BUSINESS OR OWNER FUNCTIONS OUTSIDE OF THE DEMOLITION LIMITS.
7. REMOVE DEBRIS, RUBBISH, AND OTHER MATERIALS RESULTING FROM THE DEMOLITION AND SITE CLEARING OPERATIONS FROM THE SITE AND DISPOSE OF IN A LEGAL MANNER UNLESS DIRECTED OTHERWISE IN THE CONSTRUCTION DOCUMENTS. CONTRACTOR SHALL BE RESPONSIBLE FOR DISPOSAL OF ALL WASTE MATERIAL. DISPOSAL SHALL BE AT AN APPROVED SITE FOR SUCH MATERIAL. BURNING OR BURYING OF WASTE MATERIAL ONSITE IS NOT PERMITTED.
8. FILL HOLES CREATED FROM DEMOLITION WITH ENGINEERED FILL COMPACTED TO NOT LESS THAN 95% OF MAXIMUM DENSITY AS DETERMINED BY ASTM D 1557 UNLESS ADDITIONAL EXCAVATION IS PART OF THE CONSTRUCTION PROJECT.
9. ALL STREET DEMOLITION AND CONSTRUCTION (OUTSIDE OF THE PROPERTY LINE) SHALL BE IN STRICT COMPLIANCE WITH CITY REQUIREMENTS. SITE DEMOLITION AND CONSTRUCTION INSIDE OF THE PROPERTY LINE SHALL BE IN STRICT COMPLIANCE WITH PROJECT MANUAL REQUIREMENTS.
10. NATIVE SOILS ARE NOT ACCEPTABLE FOR SITE FILL UNLESS NOTED OTHERWISE ON THE PROJECT PLANS AND THE GEOTECHNICAL REPORT.

SPRINGVILLE IRRIGATION AND DRAINAGE NOTES

1. CONTRACTOR MUST NOTIFY FRANSON CIVIL ENGINEERS AT LEAST 24 HOURS BEFORE CONSTRUCTION ON SPRINGVILLE IRRIGATION AND DRAINAGE GROUP FACILITIES. CALL KYLE DEVANEY WITH FRANSON CIVIL ENGINEERS AT 801-756-0309. FAILURE TO DO SO MAY RESULT IN A $5,000 FINE.
2. SPRINGVILLE IRRIGATION AND DRAINAGE GROUP CONTACT DURING CONSTRUCTION AL ALVEREZ, WATER MASTER, 801-427-2240.
3. ALL CONSTRUCTION MUST BE DONE TO SPRINGVILLE IRRIGATION AND DRAINAGE GROUP STANDARDS.
4. CONTRACTOR MUST DOCUMENT ALL NEW PIPES BY VIDEO CAMERA AFTER INSTALLATION AND BACKFILL. ANY PROBLEMS WITH JOINTS, LEVELS, SLOPES, ETC. DISCOVERED BY THE VIDEO TECHNICIANS MUST BE REPAIRED. A DIGITAL COPY OF THE VIDEO MUST BE SUBMITTED TO FRANSON CIVIL ENGINEERS.
5. PRIOR TO BACKFILLING PIPES, THE CONTRACTOR MUST NOTIFY KYLE DEVANEY OF FRANSON CIVIL ENGINEERS SO A GPS SURVEY LOCATION AND ELEVATION OF THE INSTALLED PIPELINES CAN BE PERFORMED
6. FENCES DISTURBED DURING CONSTRUCTION ACTIVITIES MUST BE REPLACED AND RETURNED TO PRE-CONSTRUCTION CONDITION, OR BETTER.

2

PROJECT CONTACTS

NICK PATTERSON	1-801-592-4479
COORDINATE ANY UTILITY WORK WITH UTILITY COMPANY(S)	
DOMINION ENERGY	1-800-323-5517
DOMINION ENERGY EMERGENCY	1-800-767-1689
CENTURY LINK	1-877-803-8414
SPANISH FORK CITY POWER AND LIGHT	1-801-798-5000
SPANISH FORK CITY POWER AND LIGHT EMERGENCY	1-801-804-4440
BLUE STAKES OF UTAH	1-800-662-4111

SURVEY DATUM

NORTHEAST CORNER SECTION 1 TOWNSHIP 8 SOUTH, RANGE 2 EAST SALT LAKE BASE & MERIDIAN

NAD83 STATE PLAN COORDINATES
N:7226634.15 E: 1597060.98

VERTICAL DATUM
NAVD88 DATUM

GRADING NOTES

1. ALL WORK IN STREET SHALL BE IN ACCORDANCE WITH THE CITY STANDARDS.
2. ALL CUT AND FILL SLOPES SHALL BE ACCORDING TO AASHTO REQUIREMENTS.
3. FILLS SHALL BE COMPACTED PER THE RECOMMENDATIONS OF THE GEOTECHNICAL REPORT PREPARED FOR THIS PROJECT.
4. AREAS TO RECEIVE FILL SHALL BE PROPERLY PREPARED AND APPROVED BY THE INSPECTOR AND GEOTECHNICAL ENGINEER PRIOR TO PLACING FILL.
5. FILLS SHALL BE BENCHED INTO COMPETENT MATERIAL AS PER THE SPECIFICATIONS AND GEOTECHNICAL REPORT.
6. ALL TRENCH BACKFILL SHALL BE TESTED AND CERTIFIED BY THE INSPECTOR.
7. THE CONTRACTOR SHALL COORDINATE INSPECTIONS & TESTING, AND SUBMIT A COMPLETE REPORT AND MAP UPON COMPLETION OF THE ROUGH GRADING. THE REPORT AND MAP SHALL SHOW AREAS WHERE COMPACTION TESTS HAVE BEEN TAKEN, AND COMPACTION RESULTS.
8. DUST SHALL BE CONTROLLED BY WATERING. DO NOT OVER WATER OR SOFTEN THE SUBGRADE OR CAUSE EROSION DUE TO WATERING.
9. THE LOCATION AND PROTECTION OF ALL UTILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR.
10. APPROVED PROTECTIVE MEASURES AND TEMPORARY DRAINAGE PROVISION MUST BE USED TO PROTECT ADJOINING DRAINAGE AREAS DURING THE CONSTRUCTION OF THE PROJECT. ALL PUBLIC ROADS MUST BE CLEANED DAILY OF ALL DIRT, MUD, AND DEBRIS DEPOSITED AS A RESULT OF THE CONSTRUCTION. THE CLEANING IS TO BE DONE TO THE SATISFACTION OF THE PROJECT MANAGER, OWNER, AND CITY.
11. THE SITE SHALL BE CLEARED OF ALL VEGETATION AND DELETERIOUS MATTER PRIOR TO BEGINNING THE GRADING OPERATION.
12. THE CONTRACTOR SHALL PROVIDE SHORING IN ACCORDANCE WITH OSHA REQUIREMENTS FOR TRENCH WALLS.
13. AGGREGATE BASE AND SUBGRADE SHALL BE COMPACTED AND PREPARED IN ACCORDANCE WITH THE GEOTECHNICAL REPORT FOR THIS PROJECT.
14. AS PART OF THE CONSTRUCTION DOCUMENTS, THE OWNER HAS PROVIDED THE CONTRACTOR WITH A TOPOGRAPHIC SURVEY PERFORMED BY MANUAL OR AERIAL MEANS. SAID SURVEY WAS PREPARED FOR PROJECT DESIGN PURPOSES AND IS PROVIDED TO THE CONTRACTOR AS A COURTESY. IT IS EXPRESSLY UNDERSTOOD THAT SUCH SURVEY MAY NOT ACCURATELY REFLECT EXISTING TOPOGRAPHICAL CONDITIONS.
15. EROSION CONTROL; PROTECT ALL INLET BOXES, CATCH BASINS, STORM DRAIN MANHOLES, DRAINAGE DITCHES, AND WATERWAYS WITH APPROVED SWPPP PROTECTION TO STRAIN THE STORM WATER DURING CONSTRUCTION. PROTECT ALSO FROM ILLICIT WATER DISCHARGES. PROTECT SURROUNDING PROPERTIES AND STREETS FROM SITE RUNOFF WITH SANDBAGS, EARTH BERMS, AND SILT FENCES. REFER TO THE SWPPP FOR ADDITIONAL INFORMATION.
16. THE CONTRACTOR SHALL COMPLETE A SWPPP BASED ON THE LATEST UTAH DEQ APPROVED TEMPLATE AND FILE FOR A NOTICE OF INTENT (NOI), PAY THE FEE FOR COVERAGE. AFTER CONSTRUCTION IS SUBSTANTIALLY COMPLETE, THE SITE HAS BEEN STABILIZED, AND POST CONSTRUCTION BMPS HAVE BEEN INSTALLED, THE CONTRACTOR SHALL FILE A NOTICE OF TERMINATION WITH UTAH DEQ PRIOR TO RECEIVING FINAL PAYMENT FOR THIS PROJECT.

UTILITY NOTES

1. VERIFY DEPTH AND LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTING ANY NEW UTILITY LINES. NOTIFY OWNER AND CIVIL ENGINEER OF ANY DISCREPANCIES OR CONFLICTS PRIOR TO ANY CONNECTIONS BEING MADE.
2. ALL CATCH BASIN AND INLET BOX GRATES ARE TO BE BICYCLE SAFE. INLET BOXES AND CATCH BASINS MAY BE CAST IN PLACE OR PRECAST. ALL INLET BOXES ARE TO ALIGN WITH THE ADJACENT CURB AND GUTTER. MISALIGNED OR OFFSET INLET BOXES ARE TO BE REMOVED AND REPLACED AT NO ADDITIONAL COST TO THE OWNER.
3. REFER TO SITE ELECTRICAL PLANS FOR DETAIL AND LOCATION OF ELECTRICAL LINES, LIGHT POLES, SWITCHGEAR, TRANSFORMERS, AND OTHER ELECTRICAL EQUIPMENT.
4. GAS LINES, TELEPHONE LINES, AND COMMUNICATION LINES ARE NOT PART OF THESE PLANS UNLESS NOTED OTHERWISE.
5. WATER LINES, VALVES, FIRE HYDRANTS, FITTINGS, ETC. ARE TO BE CONSTRUCTED AS INDICATED. THE CONTRACTOR IS RESPONSIBLE TO CONSTRUCT ANY VERTICAL ADJUSTMENTS NECESSARY TO CLEAR SEWER, STORM DRAIN, CONDUIT, GAS LINES, COMMUNICATION LINES, WATER LINES, OR OTHER UTILITY LINES AS NECESSARY INCLUDING VALVE BOXES, AND HYDRANT SPOOLS TO FINISH GRADE.
6. ALL PIPING SHALL BE INSTALLED PER THE STANDARD PIPE TRENCH DETAIL IN PLAN SET. TRACER WIRE SHALL BE INSTALLED DIRECTLY ABOVE THE PIPE.
7. PROVIDE THRUST BLOCKS FOR ALL WATER MAIN BENDS. SIZE THE THRUST BLOCK BASED ON THE WORKING PRESSURE AND SOIL BEARING CONDITIONS. ALL THRUST BLOCKS SHALL BE CAST AGAINST UNDISTURBED SOIL.
8. ALL PIPING TO BE INSTALLED PER MANUFACTURES RECOMMENDATIONS REFER TO SPECIFICATIONS FOR MORE DETAILED INFORMATION.
9. ALL OPEN TRENCHES SHALL BE COVERED WITH REMOVABLE PLATES DURING NON-WORKING HOURS.
10. MANHOLE RINGS SHALL BE CONSTRUCTED TO MEET FINISHED GRADE.
11. ALL DRINKING WATER AND PRESSURIZED IRRIGATION LINES UP TO AND INCLUDING METER, ALL SANITARY SEWER MAINS, ALL ELECTRICAL METERS, AND ALL ELECTRIC AND SFCN COMMUNICATION SERVICE LINES UP TO THE MAST ON OVERHEAD INSTALLATIONS AND TO THE TOP OF THE METER BASE FOR UNDERGROUND INSTALLATIONS ARE DEDICATED TO SPANISH FORK CITY.

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

NO.	REVISIONS	BY	DATE
1	ADD NOTES & SURVEY DATUM	HN	6-14-22

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FORSGREN Associates Inc
370 EAST 500 SOUTH. STE 200. SALT LAKE CITY. UT 84111
PH: 801.364.4785 FAX: 801.364.4802

LICENSED PROFESSIONAL ENGINEER
NO. 10288921-2202
NICHOLAS A. PATTERSON
STATE OF UTAH
08-23-2022

PROJECT NO.	DRAWN	DESIGNED	APPROVED	QA/QC
05-21-0118	M.VALLARINO	---	N.PATTERSON	---

MILESTONE HOLDINGS

SITE DEVELOPMENT

GENERAL NOTES

SHEET NO: G-003

DATE: AUGUST 2022

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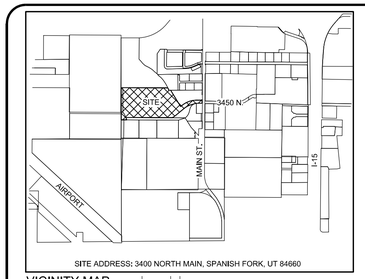
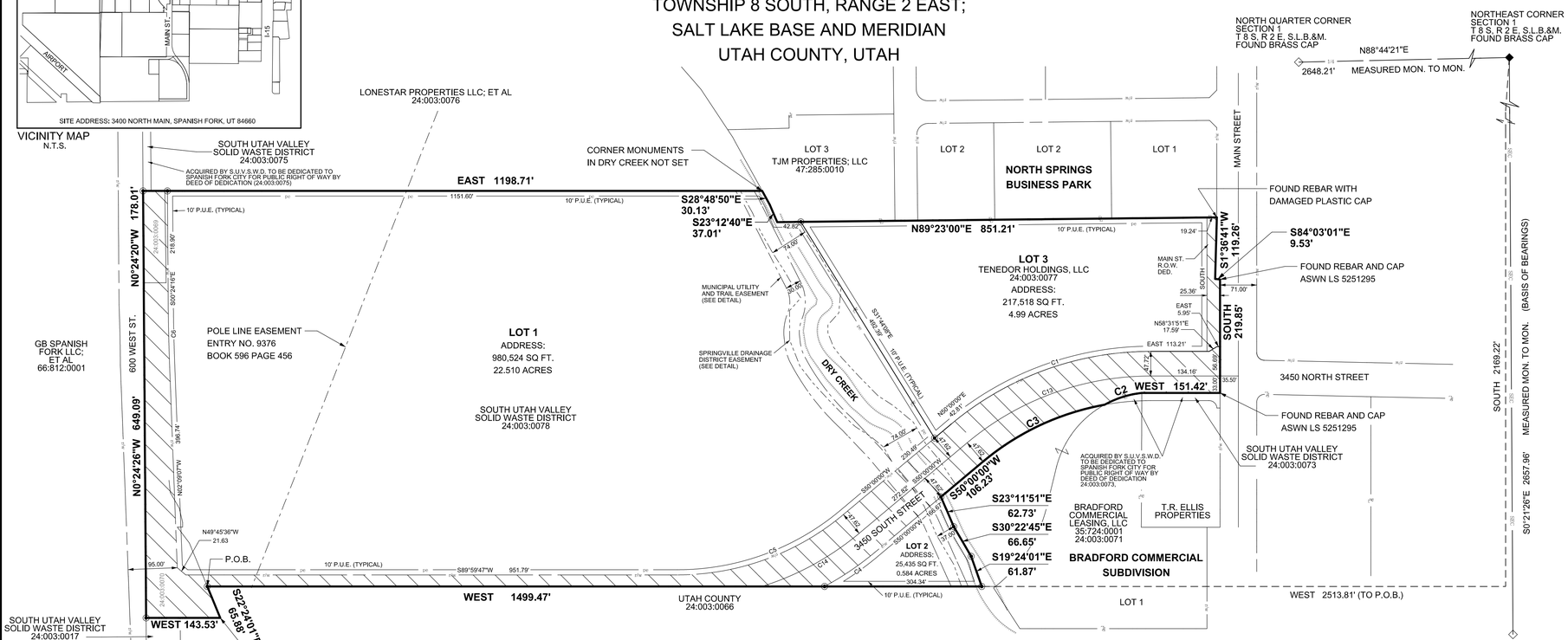
SOUTH UTAH VALLEY SOLID WASTE DISTRICT SUBDIVISION

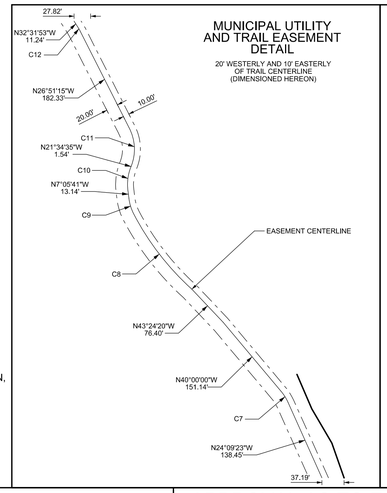
LOCATED IN THE NORTHEAST QUARTER OF SECTION 1;
TOWNSHIP 8 SOUTH, RANGE 2 EAST;
SALT LAKE BASE AND MERIDIAN
UTAH COUNTY, UTAH

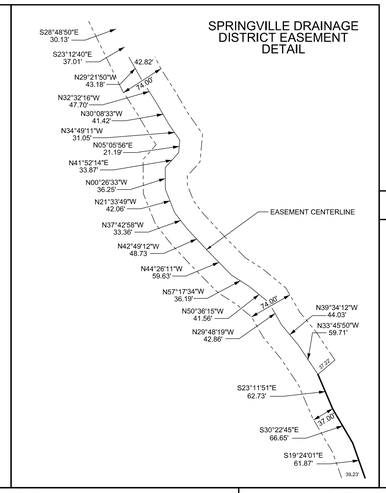


SITE ADDRESS: 3400 NORTH MAIN, SPANISH FORK, UT 84660

VICINITY MAP
N.T.S.







CURVE TABLE					
CURVE #	RADIUS	LENGTH	DELTA	CHORD BEARING	CHORD DISTANCE
C1	600.00	418.88	40°00'00"	N.70°00'00"E.	410.42
C2	192.00	76.19	22°44'15"	S.72°24'21"W.	75.70
C3	505.00	262.83	29°49'10"	S.64°54'36"W.	259.87
C4	595.00	118.31	11°23'33"	N.55°48'34"E.	118.11
C5	500.00	349.17	40°00'43"	S.70°00'21"W.	342.12
C6	3756.00	114.59	1°44'53"	N.01°16'42"W.	114.58
C7	80.80	22.33	15°50'37"	N.32°04'42"W.	22.26
C8	448.33	161.00	20°34'31"	N.37°39'06"W.	160.13
C9	80.00	27.15	19°26'47"	N.16°48'55"W.	27.02
C10	80.00	40.04	28°40'47"	N.07°14'27"E.	39.63
C11	77.00	66.38	49°23'46"	N.03°08'59"W.	64.35
C12	80.00	7.93	05°40'44"	N.29°41'34"W.	7.93
C13	552.52	385.99	40°01'37"	S.69°59'37"W.	378.19
C14	549.89	216.03	22°30'33"	S.50°05'44"W.	214.64

BASIS OF BEARINGS IS BETWEEN THE FOUND NORTHEAST CORNER AND THE FOUND EAST QUARTER CORNER OF SECTION 1, TOWNSHIP 8 SOUTH, RANGE 2 EAST, SALT LAKE BASE AND MERIDIAN, MEASURING S.00°21'26"E. 2657.96 FEET.

ESI ENGINEERING
CONSULTING ENGINEERS
AND LAND SURVEYORS
3560 S. MAIN SUITE 206
SALT LAKE CITY, UTAH 84115

LEGEND

- SECTION CORNER & LINE (FOUND)
- QUARTER CORNER & LINE (FOUND)
- ADJACENT PROPERTY OR LOT LINES
- BOUNDARY LINE
- MONUMENT TIE LINE
- WIRE FENCE
- RIGHT OF WAY LINE / LOT LINE
- MUNICIPAL UTIL. & TRAIL EASEMENT
- SPRINGVILLE DRAINAGE DIST. EASEMENT
- PUBLIC UTILITY EASEMENT
- REBAR AND CAP SET AT PROPERTY CORNER UNLESS NOTED OTHERWISE
- AREA TO BE DEDICATED AS PUBLIC RIGHT OF WAY

NORTH

60' 0' 60' 120'
SCALE IN FEET

SURVEYOR'S CERTIFICATE

I, MATTHEW K PETERSON, DO HEREBY CERTIFY THAT I AM A PROFESSIONAL LAND SURVEYOR, AND THAT I HOLD LICENSE NUMBER 7031451, AS PRESCRIBED UNDER THE LAWS OF THE STATE OF UTAH. I FURTHER CERTIFY THAT BY THE AUTHORITY OF THE OWNER(S) I HAVE MADE A SURVEY OF THE TRACT OF LAND SHOWN ON THIS PLAT AND DESCRIBED HEREON (RECORD OF SURVEY ON FILE AT THE UTAH COUNTY SURVEYOR'S OFFICE AS ENTRY NO. 20-031), AND HAVE SUBDIVIDED SAID TRACT OF LAND INTO LOTS AND STREETS, TOGETHER WITH EASEMENTS, HEREAFTER TO BE KNOWN AS:
SOUTH UTAH VALLEY SOLID WASTE DISTRICT SUBDIVISION
AND THAT THE SAME HAS BEEN CORRECTLY SURVEYED ON THE GROUND AS SHOWN ON THIS PLAT.

MATTHEW K PETERSON, P.L.S. #7031451

PROFESSIONAL LAND SURVEYOR — 7031451 — MATTHEW K. PETERSON — STATE OF UTAH

BOUNDARY DESCRIPTION

A SUBDIVISION OF LAND, BEING PART OF THE NORTHEAST QUARTER OF SECTION 1, TOWNSHIP 8 SOUTH, RANGE 2 EAST, SALT LAKE BASE AND MERIDIAN, THE OVERALL BOUNDARY OF SAID SUBDIVISION IS DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT WHICH IS SOUTH 2169.22 FEET AND WEST 2513.81 FEET FROM SAID NORTHEAST CORNER OF SECTION 1; AND RUNNING THENCE S.22°24'01"E. 65.88 FEET; THENCE WEST 143.53 FEET; THENCE N.0°24'26"W. 649.09 FEET; THENCE N.0°24'20"W. 178.01 FEET; THENCE EAST 1198.71 FEET TO THE WESTERLY BOUNDARY LINE OF NORTH SPRINGS BUSINESS PARK SUBDIVISION; THENCE ALONG SAID WESTERLY BOUNDARY LINE THE FOLLOWING TWO COURSES AND DISTANCES: (1) S.28°48'50"E. 30.13 FEET; (2) S.23°12'40"E. 37.01 FEET (PLAT=37.14') TO THE SOUTHWEST CORNER OF SAID NORTH SPRINGS BUSINESS PARK; THENCE N.89°23'00"E. 851.21 FEET ALONG THE SOUTHERLY BOUNDARY LINE OF SAID NORTH SPRINGS BUSINESS PARK TO THE WESTERLY RIGHT OF WAY LINE OF MAIN STREET; THENCE ALONG SAID WESTERLY RIGHT OF WAY LINE OF MAIN STREET THE FOLLOWING THREE (3) COURSES AND DISTANCES: (1) S.1°36'41"W. 119.26 FEET, THENCE (2) S.84°03'01"E. 9.53 FEET, THENCE (3) SOUTH 219.85 FEET; THENCE WEST 151.42 FEET TO THE NORTHEAST CORNER OF BRADFORD COMMERCIAL SUBDIVISION; THENCE SOUTHWESTERLY 76.19 FEET ALONG THE ARC OF A 192.00-FOOT RADIUS NON-TANGENT CURVE TO THE LEFT (NOTE: CHORD TO SAID CURVE BEARS S.72°24'21"W. FOR A DISTANCE OF 75.70 FEET) ALONG THE NORTHERLY BOUNDARY LINE OF SAID BRADFORD COMMERCIAL SUBDIVISION; THENCE SOUTHWESTERLY 262.83 FEET ALONG THE ARC OF A 505.00-FOOT RADIUS NON-TANGENT CURVE TO THE LEFT (NOTE: CHORD TO SAID CURVE BEARS S.64°54'36"W. FOR A DISTANCE OF 259.87 FEET); THENCE S.50°00'00"W. 106.23 FEET; THENCE S.23°11'51"E. 62.73 FEET; THENCE S.30°22'45"E. 66.65 FEET; THENCE S.19°24'01"E. 61.87 FEET; THENCE WEST 1499.47 FEET TO THE POINT OF BEGINNING.

THE ABOVE DESCRIBED SUBDIVISION OF LAND CONTAINS 1,388,067 SQUARE FEET OR 31.866 ACRE, CONTAINING THREE LOTS AND ONE PUBLIC ROADWAY DEDICATION.

OWNERS DEDICATION

KNOW ALL MEN BY THESE PRESENTS THAT WE THE UNDERSIGNED ARE THE OWNERS OF THE ABOVE DESCRIBED TRACT OF LAND, AND HEREBY CAUSED THE SAME TO BE DIVIDED INTO LOTS AND STREETS, TOGETHER WITH EASEMENTS AS SET FORTH TO BE HEREAFTER KNOWN AS,

SOUTH UTAH VALLEY SOLID WASTE DISTRICT SUBDIVISION

AND DO HEREBY DEDICATE FOR THE PERPETUAL USE OF THE PUBLIC ALL ROADS AND OTHER AREAS SHOWN ON THIS PLAT AS INTENDED FOR PUBLIC USE. THE UNDERSIGNED OWNERS ALSO HEREBY CONVEY TO ANY AND ALL PUBLIC UTILITY COMPANIES A PERPETUAL, NON -EXCLUSIVE EASEMENT OVER THE PUBLIC UTILITY EASEMENTS SHOWN ON THIS PLAT, THE SAME TO BE USED FOR THE INSTALLATION, MAINTENANCE AND OPERATION OF UTILITY LINES AND FACILITIES. THE UNDERSIGNED OWNERS ALSO HEREBY CONVEY ANY OTHER EASEMENTS AS SHOWN ON THIS PLAT TO THE PARTIES INDICATED AND FOR THE PURPOSES SHOWN HEREON. IN WITNESS WE / I HAVE HEREUNTO SET OUR HANDS
THE _____ DAY OF _____, 2022.

SOUTH UTAH VALLEY SOLID WASTE DISTRICT

TENEDOR HOLDINGS, LLC

ACKNOWLEDGEMENT

STATE OF UTAH] S.S.
COUNTY OF UTAH
THE FOREGOING INSTRUMENT WAS ACKNOWLEDGED
BEFORE ME THIS_____DAY OF _____ , 2022
BY_____
MY COMMISSION EXPIRES: _____
COMMISSION NUMBER: _____

NOTARY PUBLIC (PRINT NAME) NOTARY PUBLIC (SIGNATURE)
A NOTARY PUBLIC COMMISSIONED IN UTAH

STATE OF UTAH] S.S.
COUNTY OF UTAH
THE FOREGOING INSTRUMENT WAS ACKNOWLEDGED
BEFORE ME THIS_____DAY OF _____ , 2022
BY_____
MY COMMISSION EXPIRES: _____
COMMISSION NUMBER: _____

NOTARY PUBLIC (PRINT NAME) NOTARY PUBLIC (SIGNATURE)
A NOTARY PUBLIC COMMISSIONED IN UTAH

PLANNING COMMISSION

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

_____
CHAIRMAN SPANISH FORK CITY PLANNING COMM.

ENGINEER'S CERTIFICATE

I HEREBY CERTIFY THAT THIS OFFICE HAS EXAMINED THIS PLAT AND IT IS CORRECT IN ACCORDANCE WITH INFORMATION ON FILE IN THIS OFFICE.

_____ _____
DATE SPANISH FORK CITY ENGINEER

APPROVAL AS TO FORM

APPROVED AS TO FORM THIS _____
DAY OF _____ A.D. 20___

_____
SPANISH FORK CITY ATTORNEY

CITY COUNCIL

PRESENTED TO THE SPANISH FORK CITY COUNCIL
ON THIS _____ DAY OF _____ A.D. 20___,
AT WHICH TIME THIS SUBDIVISION WAS APPROVED
AND ACCEPTED.

CITY MANAGER:_____
CITY RECORDER ATTEST: _____

RECORDED

ENTRY NO. _____ FEE PAID _____
FILED FOR RECORD AND RECORDED THIS _____
DAY OF _____ A.D. 2018
IN BOOK _____ AT PAGE _____
UTAH COUNTY RECORDER

BY : _____ DEPUTY

POINT TABLE

POINT ID	NORTHING	EASTING	ELEV.
BC-01	7224854.72	1595947.04	4512.50
BC-02	7225003.17	1595854.36	4512.50
BC-03	7225114.38	1596032.50	4512.50
BC-04	7224965.94	1596125.17	4512.50
BC-05	7224982.39	1596183.11	4513.00
BC-06	7225118.39	1596183.11	4513.00
BC-07	7225117.73	1596432.44	4513.00
BC-08	7224983.06	1596432.44	4513.00

POINT TABLE

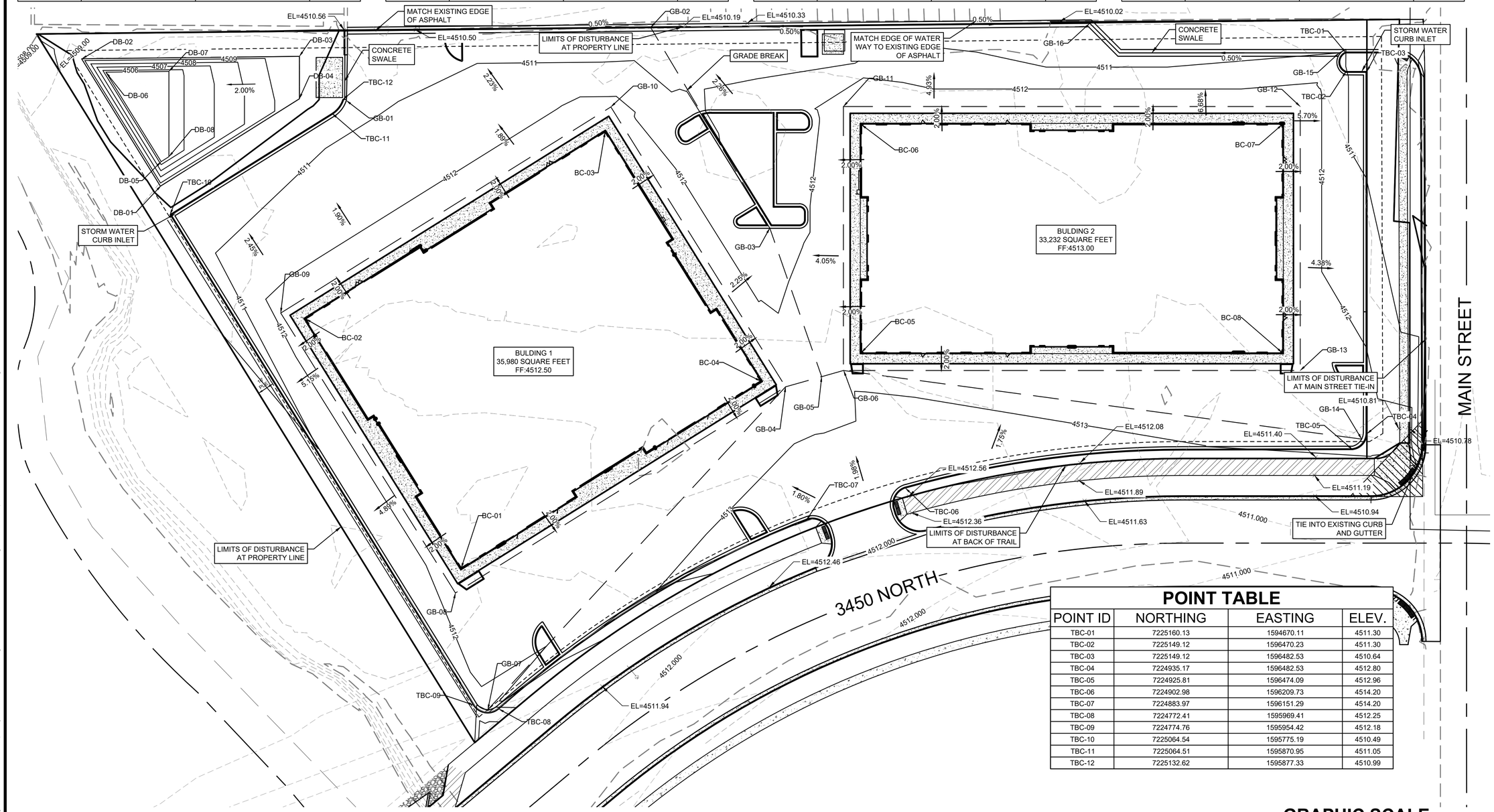
POINT ID	NORTHING	EASTING	ELEV.
DB-01	7225081.41	1596769.46	4509.50
DB-02	7225156.55	1595722.99	4509.50
DB-03	7225158.03	1595851.53	4509.50
DB-04	7225133.56	1595851.56	4509.50
DB-05	7225095.87	1595769.93	4505.50
DB-06	7225148.72	1595737.24	4505.50
DB-07	7225149.14	1595774.50	4505.50
DB-08	7225098.75	1595774.50	4505.50

POINT TABLE

POINT ID	NORTHING	EASTING	ELEV.
GB-01	7225173.20	1595878.73	4510.14
GB-02	7225154.13	1596470.23	4510.08
GB-03	7225056.57	1596129.60	4511.65
GB-04	7224962.75	1596138.95	4512.30
GB-05	7224968.77	1596160.28	4512.61
GB-06	7224972.39	1596173.11	4512.80
GB-07	7224771.99	1595962.99	4511.93
GB-08	7224840.95	1595943.85	4512.30

POINT TABLE

POINT ID	NORTHING	EASTING	ELEV.
GB-09	7225006.36	1595840.58	4512.30
GB-10	7225128.16	1596035.68	4512.30
GB-11	7225128.39	1596173.11	4512.80
GB-12	7225128.39	1596443.11	4512.80
GB-13	7224972.39	1596443.11	4512.80
GB-14	7224931.88	1596479.43	4512.30
GB-15	7225160.13	1596466.22	4511.00
GB-16	7225177.55	1596318.79	4510.23



POINT TABLE

POINT ID	NORTHING	EASTING	ELEV.
TBC-01	7225160.13	1594670.11	4511.30
TBC-02	7225149.12	1596470.23	4511.30
TBC-03	7225149.12	1596482.53	4510.64
TBC-04	7224935.17	1596482.53	4512.80
TBC-05	7224925.81	1596474.09	4512.96
TBC-06	7224902.98	1596209.73	4514.20
TBC-07	7224883.97	1596151.29	4514.20
TBC-08	7224772.41	1595969.41	4512.25
TBC-09	7224774.76	1595954.42	4512.18
TBC-10	7225064.54	1595775.19	4510.49
TBC-11	7225064.51	1595870.95	4511.05
TBC-12	7225132.62	1595877.33	4510.99

NOTES:

1. MAINTAIN A MINIMUM 2% POSITIVE DRAINAGE AWAY FROM BUILDING FOR A MINIMUM OF 10 FEET.
2. CONCRETE SIDEWALK SURROUNDING BUILDINGS TO BE FLUSH WITH ASPHALT
3. ALL GUTTER ELEVATIONS SHOWN ARE EDGE OF ASPHALT

ABBREVIATIONS

BC	BUILDING CORNER
DB	DETENTION BASIN
GB	GRADE BREAK
TBC	TOP BACK CURB

GRAPHIC SCALE

0' 15' 30' 60' 90'

Scale: 1"=30'

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

NO.	REVISIONS	BY	DATE

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FORSGREN Associates Inc.
370 EAST 500 SOUTH, STE 200, SALT LAKE CITY, UT 84111
PH: 801.364.4785 FAX: 801.364.4802

LICENSED PROFESSIONAL ENGINEER
NO. 10288921-2202
NICHOLAS A. PATTERSON
STATE OF UTAH
08-23-2022

PROJECT NO.	05-21-0118
DRAWN	M.VALLARINO
DESIGNED	----
APPROVED	N.PATTERSON
QA/QC	----

MILESTONE HOLDINGS

SITE DEVELOPMENT

GRADING AND DRAINAGE PLAN

SHEET NO: C-001

DATE: AUGUST 2022

PAGE NO: 05 OF 16

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PARKING COUNT		
PARTICULARS	PROVIDED	
	STANDARD	ADA
PARKING STALLS	121	8
TOTAL	129	

ACREAGE		
	AREA (ac)	PERCENTAGE
BUILDING	1.5900	31%
LANDSCAPED	0.6530	13%
IMPERVIOUS	2.7570	56%

10'x10'x8' MASONRY WASTE ENCLOSURE. MASONRY SHALL BE ON 3 SIDES AND MATCH BUILDINGS. INCLUDE 7' TALL STEEL SIGHT-OBSCURING DOUBLE SWING GATE.

DETENTION BASIN OUTFALL STRUCTURE 6 C-004

1 C-007

4' CROSS GUTTER PER SPANISH FORK CITY STANDARDS

10'x10'x8' MASONRY WASTE ENCLOSURE, MASONRY SHALL BE ON 3 SIDES AND MATCH BUILDINGS. INCLUDE 7' TALL STEEL SIGHT-OBSCURING DOUBLE SWING GATE.

SD DRAIN INLET PER SPANISH FORK CITY STANDARDS RIM:4509.60

SD CURB INLET PER SPANISH FORK CITY STANDARDS RIM:4510.34

CORNER PEDESTRIAN RAMP PER SPANISH FORK CITY STANDARDS

20 STALLS

24" CURB AND GUTTER PER SPANISH FORK CITY STANDARDS

SD DRAIN INLET PER SPANISH FORK CITY STANDARDS RIM:4509.66

SD CURB INLET PER SPANISH FORK CITY STANDARDS RIM:4510.19

24" CURB AND GUTTER PER SPANISH FORK CITY STANDARDS

CONCRETE SIDEWALK 4 C-004

4 C-003 ASHPALT PAVEMENT SECTION

NO PARKING STRIPING

START OF RETAINING WALL

4' CROSS GUTTER PER SPANISH FORK CITY STANDARDS

8 STALLS

248.7'

134.7'

5' CONCRETE SIDEWALK PER SPANISH FORK CITY STANDARDS

17 STALLS

30" CURB AND GUTTER PER SPANISH FORK CITY STANDARDS

24" CURB AND GUTTER PER SPANISH FORK CITY STANDARDS

26' Min.

9 STALLS

CONCRETE SIDEWALK 4 C-004

END OF RETAINING WALL 5 C-004

100.4'

2' HIGH RETAINING WALL 3-6 C-007
305 TOTAL LF

TRANSITION FROM RETAINING WALL TO BERM TO MATCH EXISTING GRADE SEE DETAIL 5 ON C-004

ASPHALT TIE-IN 3 C-003

2 C-003 DRIVE APPROACH

ASPHALT TIE-IN 3 C-003

MAIN STREET

3450 NORTH

NOTES:

1. PARKING STALLS TO BE 10' WIDE AND 18' LONG TYP.
2. FIRE HYDRANT LOCATION FOR SITE BY OTHERS.
3. ALL DRINKING WATER AND PRESSURIZED IRRIGATION LINES UP TO AND INCLUDING THE METERS, ALL SANITARY SEWER MAINS, ALL ELECTRICAL METERS AND ALL ELECTRIC AND SFCN COMMUNICATION SERVICE LINES UP TO THE MAST ON OVERHEAD INSTALLATIONS AND TO THE TOP OF THE METER BASE FOR UNDERGROUND INSTALLATION ARE DEDICATED TO SPANISH FORK CITY.

KEYNOTES:

1. SMALL PLANTER WITH 6" 209 APWA CURB TYPE P.

GRAPHIC SCALE

0' 15' 30' 60' 90'

Scale: 1"=30'

Know what's below. Call before you dig.

NO.	REVISIONS	BY	DATE

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DRAWN	M.VALLARINO
DESIGNED	----
APPROVED	N.PATTERSON
QA/QC	----

MILESTONE HOLDINGS

SITE DEVELOPMENT

DETAILED SITE PLAN

SHEET NO: C-002

DATE: AUGUST 2022

PAGE NO: 06 OF 16

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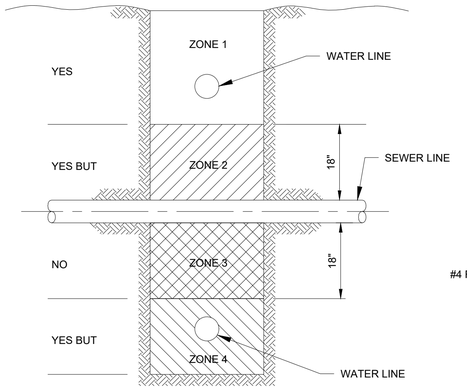


VERTICAL SEPARATION REQUIREMENTS

ZONE 1 — THE WATER LINE SHOULD BE PLACED IN THIS ZONE IF IT IS PRACTICAL. WATER AND NON POTABLE WATER (NPWL) MUST BE SEPARATED BY AT LEAST 18 INCHES.

ONE FULL UNCUT LENGTH OF WATER PIPE MUST BE CENTERED OVER THE CROSSING SO THAT THE JOINTS ARE AS FAR AS POSSIBLE FROM THE NPWL.

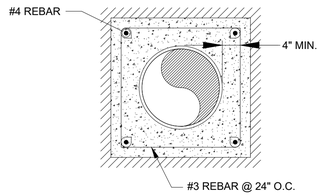
ZONE 2 — THE WATER LINE MAY BE PLACED IN THESE ZONES WITH ONE FULL UNCUT LENGTH OF WATER PIPE CENTERED OVER THE CROSSING SO THAT THE JOINTS ARE AS FAR AS POSSIBLE FROM THE NPWL AND EITHER:

A. NPWL MAIN MUST BE CONSTRUCTED TO WATER MAIN STANDARDS AND PRESSURE TESTED FOR WATER TIGHTNESS FOR A HORIZONTAL DISTANCE OF 10 FEET ON BOTH SIDES OF THE CROSSING

B. EITHER THE NPWL OR THE WATER MAIN SLEEVED WITH POTABLE WATER CLASS PIPE FOR A DISTANCE OF 10 FEET HORIZONTALLY ON BOTH SIDES OF THE CROSSING.

ZONE 3 — THE WATER LINE MAY NOT BE PLACED IN THIS ZONE.

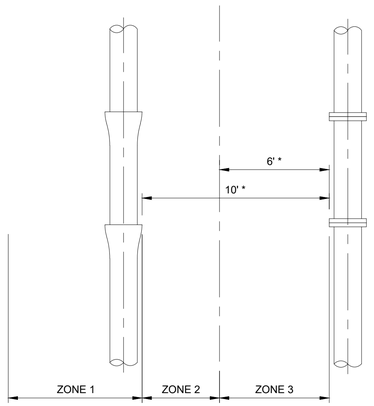
ZONE 4 — SAME REQUIREMENTS AS ZONE 1 EXCEPT THE NPWL MUST ALSO BE SUPPORTED ABOVE THE CROSSING TO PREVENT SETTLING.



NOTE:

RETAIN AND PROTECT SEWER LINE AND MAINTAIN EXISTING GRADE.

PIPE ENCASEMENT



HORIZONTAL SEPARATION REQUIREMENTS

NOTE:
1. ZONE 1: NO SPECIAL REQUIREMENTS

ZONE 2: WATER AND NPWL SEPARATED BY AT LEAST 6 FEET AT OUTSIDE WALLS AND:

A. WATER AT LEAST 18 INCHES HIGHER IN ELEVATION THAN THE NPWL.

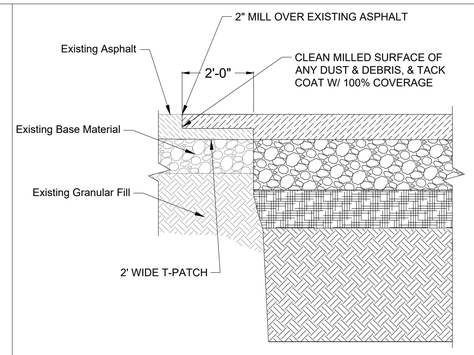
B. NPWL CONSTRUCTED TO WATER MAIN STANDARDS AND PRESSURE TESTED FOR WATER TIGHTNESS. SITE SPECIFIC REQUIREMENTS TO BE APPROVE BY DEQ.

ZONE 3: NOT ALLOWED

2. SEWER FORCE MAINS MUST HAVE MIN 10' SEPARATION. ZONE 2 PLACEMENTS ARE NOT ALLOWED.

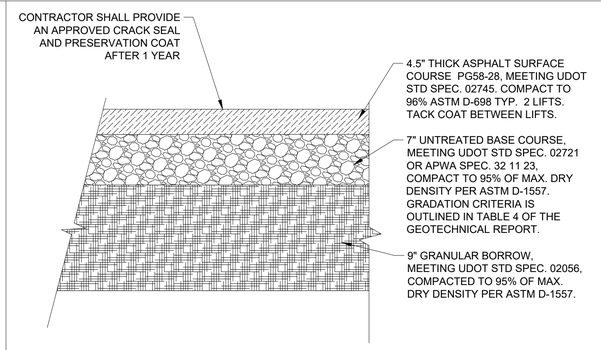
3. ALL EXCEPTION REQUESTS MUST BE SUBMITTED TO UTAH DEQ DIVISION OF DRINKING WATER FOR APPROVAL.

WATER LINE VERTICAL AND HORIZONTAL REQUIREMENTS
SCALE: N.T.S. — 1

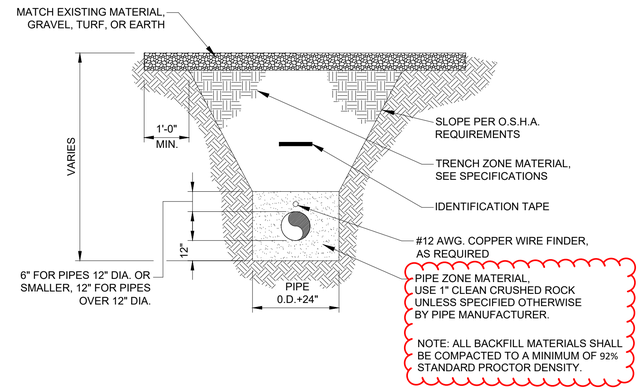


ASPHALT TIE-IN
SCALE: N.T.S. — 3

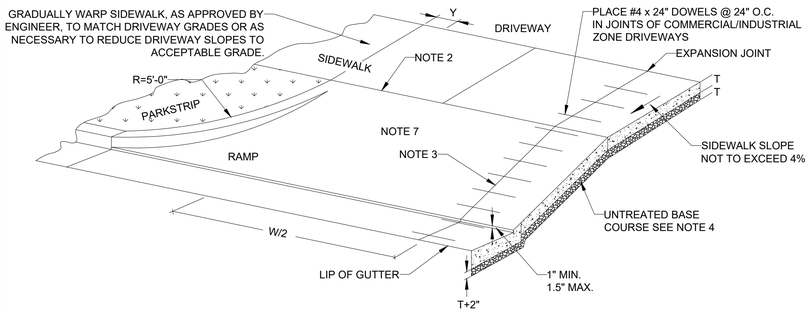
NOTE:
1. SEE DETAIL 2 FOR SECTION DEPTHS AND MATERIAL.



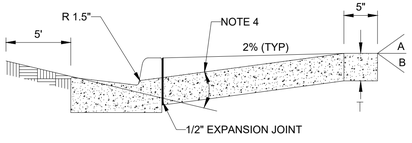
ASPHALT PAVEMENT SECTION
SCALE: N.T.S. — 4



TYPICAL PIPE TRENCH TYPE 1
SCALE: N.T.S. — 5



PLAN



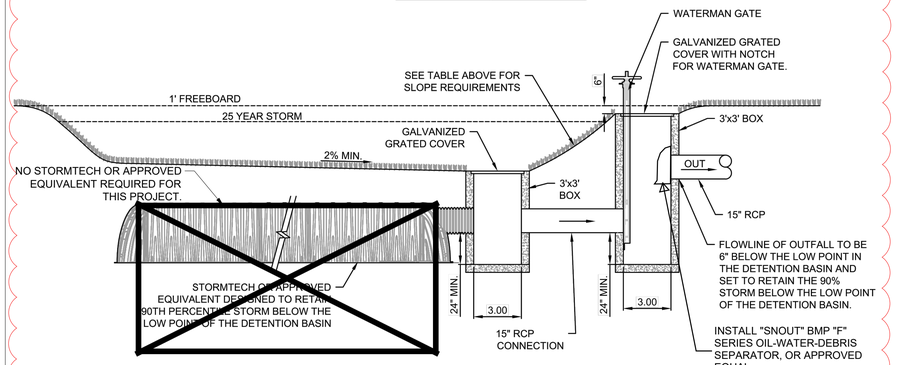
TYPICAL SECTION

NOTES:
1. EDGE CONCRETE WITH 1/2" RAD. EDGING TOOL.
2. PLACE 1/2" EXPANSION JOINT BETWEEN SIDEWALK APRON AND CURB; AND IN THE DRIVEWAY CENTER-LINE IF "W" IS GREATER THAN 15'. FILLER STRIP SHALL BE FULL DEPTH OF CONCRETE PLUS 1", WITH TOP SET FLUSH WITH TOP OF CONCRETE.
3. USE UNTREATED BASE COURSE MATERIAL. COMPACT TO 96% OF THE MAXIMUM DRY DENSITY.
4. DIFFERENCE IN SLOPE OF DRIVEWAY RAMP AND THE SLOPE OF A LINE BETWEEN THE GUTTER AND A POINT ON THE ROADWAY 5' FROM THE FRONT EDGE OF THE GUTTER SHALL NOT EXCEED 12% IN RESIDENTIAL ZONES AND 10% IN COMMERCIAL AND INDUSTRIAL ZONES. REDUCE DRIVEWAY RAMP SLOPE, NOT GUTTER SLOPE, WHERE REQUIRED.
5. ALL CONCRETE SLABS WITH A LENGTH/WIDTH RATIO GREATER THAN A 1.5:1 SHALL HAVE CONTRACTION JOINTS INSTALLED AS REQUIRED TO STAY WITHIN 2:1 RATIO.
6. MATERIALS, CONSTRUCTION, AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH PROJECT TECHNICAL SPECIFICATIONS.
7. ALL CONCRETE TO BE CLASS 4000 AS PER PROJECT TECHENICAL SPECIFICATIONS.

DRIVE APPROACH DIMENSIONS	
DIM	ZONE
T	0'-6" SELF-HAUL & LIGHT VEHICLE ENTRANCES 0'-8" COMMERCIAL & HEAVY VEHICLE ENTRANCES
W	11'-0" MAX. RESIDENTIAL ZONES 20'-0" MAX. RESIDENTIAL ZONES 30'-0" MAX. COMMERCIAL & INDUSTRIAL ZONES 50'-0" MAX. COMMERCIAL & INDUSTRIAL ZONES (OR PER PLANS IF DIFFERENT)
Y	0'-6" SELF-HAUL & LIGHT VEHICLE ENTRANCES 2'-0" COMMERCIAL & HEAVY VEHICLE ENTRANCES
A	≤ 6% SELF-HAUL & LIGHT VEHICLE ENTRANCES ≤ 0'-8% COMMERCIAL & HEAVY VEHICLE ENTRANCES
B	≤ 12% SELF-HAUL & LIGHT VEHICLE ENTRANCES ≤ 8% COMMERCIAL & HEAVY VEHICLE ENTRANCES

DRIVEWAY APPROACH
SCALE: N.T.S. SPEC # 03 10 00 — 2

DEPTH	SLOPE
18"	2:1
3'	3:1
ABOVE 3'	4:1



DETENTION BASIN OVERFLOW SD-411
SCALE: N.T.S. — 6

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NO.	REVISIONS	BY	DATE
2	DDW NOTE		
		HN	07/26/21

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PH: 801.364.4785 FAX: 801.364.4802

LICENSED PROFESSIONAL ENGINEER — NO. 10288921-2202 — NICHOLAS A. PATTERSON — STATE OF UTAH — 08-23-2022

PROJECT NO.	05-21-0118
DRAWN	M.VALLARINO
DESIGNED	----
APPROVED	N.PATTERSON
QA/QC	----

MILESTONE HOLDINGS

SITE DEVELOPMENT

CIVIL DETAILS

SHEET NO: C-003

DATE: AUGUST 2022

PAGE NO: 07 OF 16

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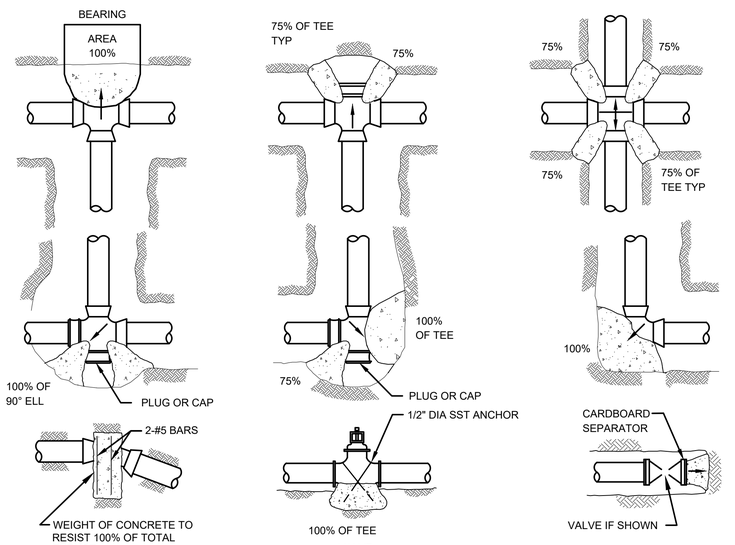


VERTICAL BEND | VALVE | DEAD-END

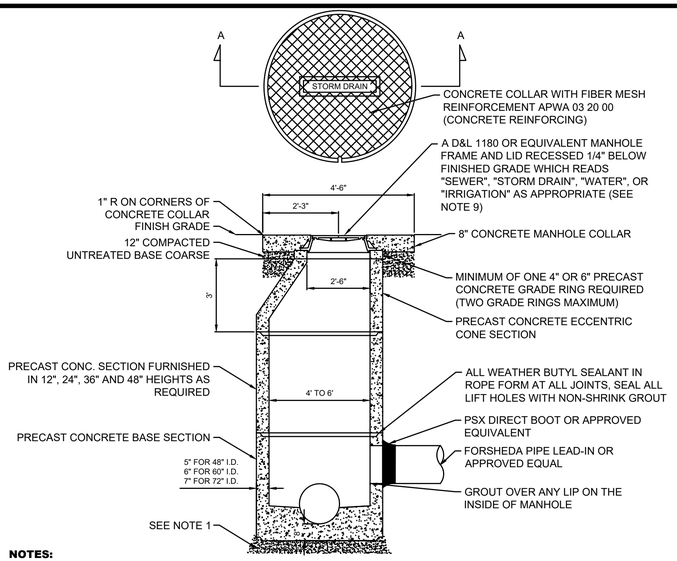
DIMENSION FOR THRUST BLOCKING
MINIMUM BEARING AREA

FITTING SIZE	DEAD END OR TEE	90° ELBOW	45° ELBOW	22 1/2° ELBOW
4"	1.0 SF	1.3 SF	.74 SF	0.4 SF
6"	2.1	2.7	1.5	1.1
8"	3.8	4.7	2.5	1.3
10"	6.0	6.9	3.8	1.9
12"	8.5	9.8	5.4	2.7
14"	11.6	13.9	8.7	4.2
16"	15.1	18.1	11.3	5.4
18"	19.1	22.9	19.3	6.9
24"	33.1	39.2	24.8	11.4

NOTES:
1. TABLE BASED ON 100 psi MAINLINE PRESSURE W/50% SURGE ALLOWABLE SOIL BEARING PRESSURE = 2000 psf.
2. FOR OTHER CONDITIONS:
   A = (π D 2/4x P x SIN Δ/2) /2000
   WHERE A = MINIMUM BEARING AREA WHERE
   D = PIPE OD (INCHES)
   P = LINE PRESSURE WITH SURGE (PSI)
   Δ= LINE DEFLECTION
3. f'c = 2000 psi.
4. FIGURE 100% AT THRUST BLOCK INCLUDES PERCENT OF TOTAL THRUST TO BE APPLIED FOR BEARING AREA.
5. ARROWS INDICATE THRUST DIRECTION.
6. "MEGA-LUG" JOINTS SHALL NOT BE USED FOR ALTERNATE RESTRAINTS ON PVC PIPE.
7. POLYWRAP ALL VALVES AND FITTINGS.
8. PRIOR TO BACKFILLING AROUND THRUST BLOCK SECURE INSPECTION OF INSTALLATION BY ENGINEER.
9. INSTALL AND COMPACT ALL BACKFILL MATERIAL PER SPECIFICEATIONS.
10. DO NOT COVER PIPE JOINTS WITH CONCRETE, LEAVE COMPLETELY ACCESSIBLE.
11. APPLY POLY-FM GREASE TO ALL BURIES METAL SURFACES. WRAP WITH 8 MIL THICK POLYETHYLENE SHEET AND TAPE WRAP.
12. SPECIAL CONSTRUCTION REQUIREMENTS:
    A. THRUST DESIGN FOR PIPE SIZES OR CONFIGURATIONS NOT SHOWN REQUIRE SPECIAL DESIGN.
    B. BEARING AREAS, VOLUMES AND SPECIAL THRUST BLOCKING DETAILS SHOWN ON DRAWINGS TAKE PRECEDENCE OVER THIS DETAIL.
    C. REINFORCING STELL BARS TO BE EPOXY COATED AT LEAST 15 MIL THICK. MINIMUM STRESS YIELD STRENGTH OF TIE DOWN BARS IS 70,000 PSI.
    D. LOCKING RESTRAINT DEVICES MAY BE USED IN CONJUCTION WITH CONCRETE THRUST BLOCKING (AT OPTION OF ENGINEER).

THRUST BLOCK 1

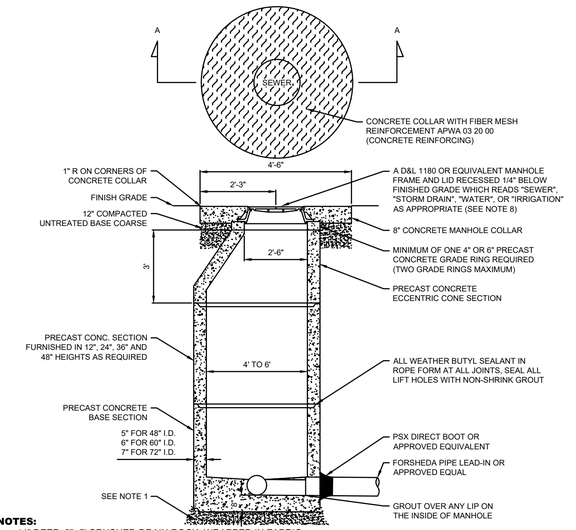
SCALE: N.T.S. SPEC # 03 20 00



NOTES:
1. 14" DEEP, 5' CRUSHED DRAIN ROCK, WRAPPED IN FABRIC.
2. USE 4' I.D. MANHOLES FOR MAIN LINES LESS THEN 18" IN DIAMETER; 5' I.D. MANHOLES FOR MAIN LINES 18" TO 30" IN DIAMETER, AND 6' I.D. FOR MAIN LINES GREATER THAN 30" IN DIAMETER.
3. FLAT LIDS MAY BE USED IN LIEU OF ECCENTRIC CONES WHERE NECESSARY. FLAT LIDS SHALL BE OF ECCENTRIC DESIGN AND MEET H20 LIVE LOADING. NO FLAT RING AND COVERS WILL BE ALLOWED UNLESS APPROVED BY CITY ENGINEER OR HIS/HER DESIGNEE.
4. MANHOLE RIMS PLACED IN FIELDS SHALL HAVE SOLID LIDS AND BE BURIED 2 FEET DEEP.
5. MANHOLE RIMS OUT OF STREETS SHALL BE PLACED 4 INCHES ABOVE GRADE.
6. CONCRETE COLLAR AND RIM SHALL BE INSTALLED 1/4" BELOW PAVEMENT SURFACE AFTER THE 1 YEAR PRESERVATION COAT.
7. MANHOLE COLLARS AND RINGS SHALL BE PROTECTED BY A COVERING DURING A SEAL COAT.
8. STORM MANHOLES MAY HAVE FLAT BOTTOMS IN THE BASES.
9. CONCRETE COLLAR SHALL BE PLACED AFTER THE 1 YEAR PRESERVATION COAT WHEN APPLICABLE.
10. IN PAVED AREAS WITH A SLOPE GREATER THAN 5% USE AN EJIW 3624 TWIST BASE OR APPROVED EQUIVALENT.
11. ALL STORM DRAIN MANHOLES CONNECTED TO STORM DRAIN INLETS SHALL HAVE A FLAT BOTTOM WITH 18" MIN. FROM FLOW LINE TO BOTTOM OF BOX.
12. ALL STORM DRAIN MANHOLES NOT CONNECTED TO AN INLET BOX SHALL HAVE A TROUGH.

SD-401 STORM DRAIN MANHOLE 2

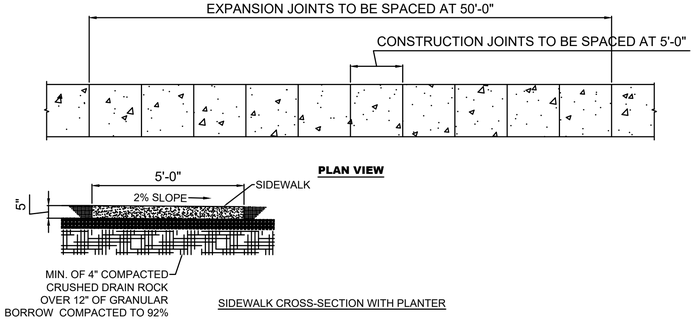
SCALE: N.T.S.



NOTES:
1. 14" DEEP, 2" -5' CRUSHED DRAIN ROCK, WRAPPED IN FABRIC.
2. USE 4' I.D. MANHOLES FOR MAIN LINES LESS THEN 18" IN DIAMETER; 5' I.D. MANHOLES FOR MAIN LINES 18" TO 30" IN DIAMETER, AND 6' I.D. FOR MAIN LINES GREATER THAN 30" IN DIAMETER.
3. FLAT LIDS MAY BE USED IN LIEU OF ECCENTRIC CONES WHERE NECESSARY. FLAT LIDS SHALL BE OF ECCENTRIC DESIGN AND MEET H20 LIVE LOADING. NO FLAT RING AND COVERS WILL BE ALLOWED UNLESS APPROVED BY CITY ENGINEER OR HIS/HER DESIGNEE.
4. MANHOLE RIMS PLACED IN FIELDS SHALL HAVE SOLID LIDS AND BE BURIED 2 FEET DEEP.
5. MANHOLE RIMS OUT OF STREETS SHALL BE PLACED 4 INCHES ABOVE GRADE.
6. CONCRETE COLLAR AND RIM SHALL BE INSTALLED 1/4" BELOW PAVEMENT SURFACE AFTER THE 1 YEAR PRESERVATION COAT.
7. MANHOLE COLLARS AND RINGS SHALL BE PROTECTED BY A COVERING DURING A SEAL COAT.
8. CONCRETE COLLAR SHALL BE PLACED AFTER THE 1 YEAR PRESERVATION COAT WHEN APPLICABLE.
9. IN PAVED AREAS WITH A SLOPE GREATER THAN 5% USE AN EJIW 3624 TWIST BASE OR APPROVED EQUIVALENT.
10. FIVE (5) FOOT DIAMETER MANHOLES ARE REQUIRED IN THE FOLLOWING SITUATIONS:
    a. AT ALL INTERSECTIONS OF 3 OR MORE 8-INCH OR LARGER PIPE LINES.
    b. WHERE THE DEFLECTION ANGLE OF THE PIPE LINE IS 90 DEGREES OR GREATER.
    c. IN MANHOLES WITH PIPE SIZES FIFTEEN (15) OR EIGHTEEN (18) INCHES IN DIAMETER.
    d. IN MANHOLES GREATER THAN FIFTEEN (15) FEET DEEP.
    e. IN MANHOLES WITH A GRADE GREATER THAN TWENTY (20) PERCENT THROUGH THE MANHOLE, I.E. GREATER THAN
    f. A ONE (1) FOOT DROP.

SS-301 SANITARY SEWER MANHOLE 3

SCALE: N.T.S.

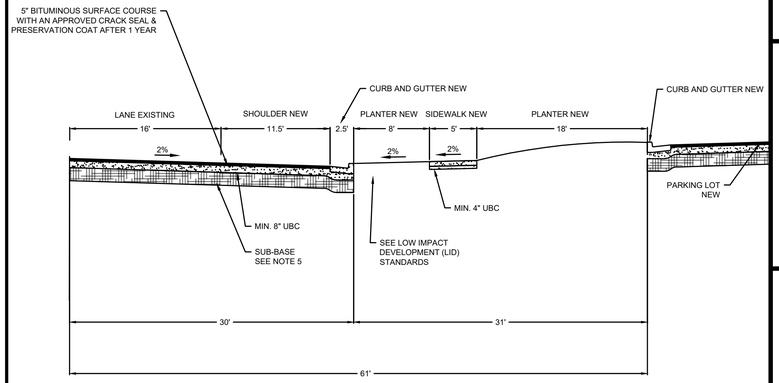


SIDEWALK CROSS-SECTION WITH PLANTER

NOTES:
1. IF CONCRETE IS TO BE POURED NEXT TO A CURB #4 REBAR SHALL BE DOWELED 3" INTO CURB AND 4" INTO SIDEWALK. REBAR SHALL BE DOWELED A MINIMUM OF 2" FROM TOP OF SIDEWALK AND CURB 24" O.C.
2. SIDEWALKS SHALL HAVE CONSTRUCTION JOINTS EVERY 5'.
3. SIDEWALK SHALL HAVE EXPANSION JOINTS EVERY 50'
4. TOP FRONT OF SIDEWALK SHALL BE PLACED AT 2% GRADE ABOVE TOP BACK OF CURB.

CONCRETE SIDEWALK 4

SCALE: N.T.S.



NOTES:
1. SEE STANDARD DRAWINGS FOR TRAILS AND SIDEWALKS.
2. TRAIL MAY BE INSTALLED ON EITHER SIDE OF STREET AS APPROVED BY THE CITY ENGINEER. SIDEWALK SHALL BE INSTALLED ON THE OPPOSITE SIDE.
3. PLANTERS, BEHIND SIDEWALK OR TRAIL, SHALL HAVE SHRUBS WITH BARK MULCH OR XERISCAPE AS APPROVED BY THE CITY. SPRINKLER SYSTEMS SHALL BE INSTALLED ACCORDING TO CITY STANDARDS.
4. PLANTER MAY BE GRASS OR XERISCAPE, AS APPROVED BY THE CITY ENGINEER. SEE STANDARD DRAWINGS FOR LID PLANTERS.
5. SUB-BASE AS SPECIFIED IN THE CONSTRUCTION STANDARDS AND SOILS REPORT.
6. MINIMUM OF 8" UNTREATED BASE COURSE UNDER STREET PAVEMENT AND CURB & GUTTER.
7. ALL UTILITY BOXES AND EQUIPMENT SHALL BE LOCATED ON THE STREET SIDE OF MASONRY WALL.
8. ALL PLANTER AREAS BETWEEN THE CURB AND SIDEWALK SHALL BE LANDSCAPED WITH PERVIOUS MATERIALS UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER OR DESIGNEE.
9. IN NO CASE WILL DRIVEWAYS BE ALLOWED FROM DOUBLE FRONTAGE LOTS.
10. XERISCAPED PLANTERS MAY BE INSTALLED IF PLAN IS APPROVED BY CITY ENGINEER OR DESIGNEE.
11. BOTH SIDES OF THE WALLS MUST BE PAINTED WITH A BASE COAT AND 3 HIGHLIGHTS APPROVED AHEAD OF TIME BY THE CITY.

Know what's below. Call before you dig.

RIGHT-OF-WAY DEDICATION STREET CROSS-SECTION 5

SCALE: N.T.S.

NO.	REVISIONS	BY	DATE
1	REMOVE WATER OIL SEP. DET.	HN	6-14-22

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PH: 801.364.4785 FAX: 801.364.4802

LICENSED PROFESSIONAL ENGINEER
NO. 10288921-2202
NICHOLAS A. PATTERSON
STATE OF UTAH
08-23-2022

PROJECT NO. 05-21-0118
DRAWN M.VALLARINO
DESIGNED ---
APPROVED N.PATTERSON
QA/QC ---

MILESTONE HOLDINGS

SITE DEVELOPMENT

CIVIL DETAILS

SHEET NO: C-004
DATE: AUGUST 2022
PAGE NO: 08 OF 16

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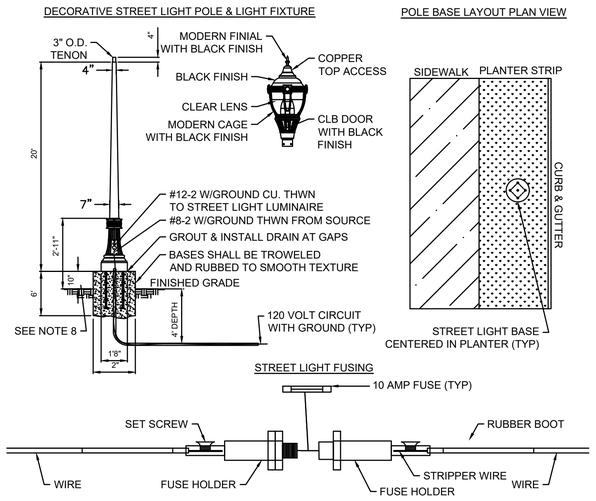
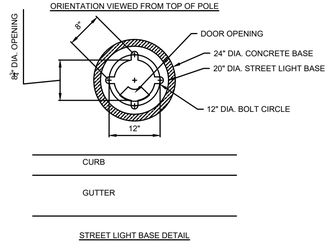


NOTES:

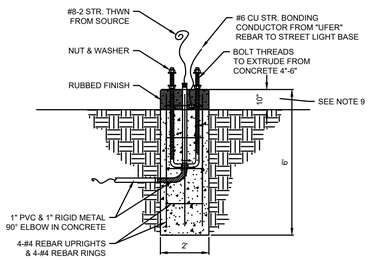
1. STREET LIGHT CONDUCTOR(S) SHALL HAVE AN INLINE 10 AMP FUSE & SET SCREW TYPE FUSEHOLDER INSTALLED IN JUNCTION BOX OR TRANSFORMER.
2. 1" PVC CONDUIT WITH RIGID STEEL OR FIBERGLASS ELBOWS TO RUN FROM BASE OF STREET LIGHT TO CLOSEST TRANSFORMER OR SECONDARY PEDESTAL.
3. IF PLANTER EXISTS STREET LIGHT SHALL BE CENTERED IN PLANTER STRIP. IF THERE IS NO PLANTER LIGHT BASE SHALL BE 3' ON CENTER FROM TOP BACK OF CURB. BOLT PATTERN SHALL BE ON A DIAMOND TO THE CURB UNLESS OTHERWISE SPECIFIED.
4. STREET LIGHT POLE, FIXTURE, LUMINAIRE, PHOTOCELL, BOLTS, NUTS, WASHERS SHALL BE PROVIDED BY CITY.
5. BASES SHALL HAVE A SMOOTH OR RUBBED FINISH, FREE FROM HONEYCOMB & CRACKS.
6. STREET LIGHT BASE SHALL BE BONDED TO STREET LIGHT POLE BY A "UFER" TYPE #6 CU BONDING CONDUCTOR.
7. THE GROUNDING CONDUCTOR SHALL BE TERMINATED WITH THE GROUNDED (NEUTRAL) CONDUCTOR AT THE SOURCE.
8. ALL STREET LIGHT BASES ALONG STATE ROADS ARE TO BE FLUSH WITH THE TBC.

E-617 DECORATIVE STREET LIGHT POLE & FIXTURE

SCALE: N.T.S. — 1



STREET LIGHT BASE DETAIL

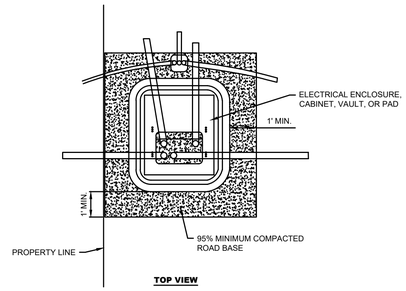


NOTES:

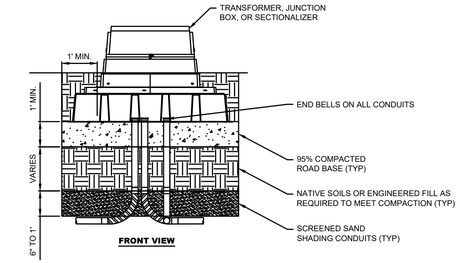
1. STREET LIGHT BASES SHALL BE INSPECTED PRIOR TO POURING CONCRETE.
2. STREET LIGHT BASES SHALL BE 2' IN DIAMETER AND 6' IN DEPTH WITH 10" OF BASE EXPOSED ABOVE TOP BACK OF CURB.
3. EXPOSED CONCRETE SHALL HAVE A RUBBED FINISH, WITH ALL HONEYCOMB OR CRACKS FILLED.
4. STREET LIGHT BASE SHALL BE CENTERED IN PLANTER STRIP OR 3' FROM TOP BACK OF CURB TO CENTER OF BASE IF NO PLANTER STRIP IS PRESENT.
5. SONNETUBE SHALL BE KEPT DRY AND SHALL NOT BE ALLOWED TO DEFORM IN ANY WAY.
6. CONCRETE COVER OVER REINFORCING STEEL SHALL BE 2" UNLESS OTHERWISE APPROVED.
7. USE 4-#4 REBAR UPRIGHTS & 4-#4 REBAR RINGS SPACED EVENLY AND KEPT 2" FROM SIDES, TOP AND BOTTOM OF CONCRETE.
8. GROUT GAP IN BETWEEN STREET LIGHT AND BASE & PROVIDE ¼" DRAIN PIPE FOR WATER.
9. ALL STREET LIGHT BASES ALONG STATE ROADS ARE TO BE FLUSH WITH THE TBC.

E-616 STREET LIGHT POLE BASE

SCALE: N.T.S. — 2



TOP VIEW



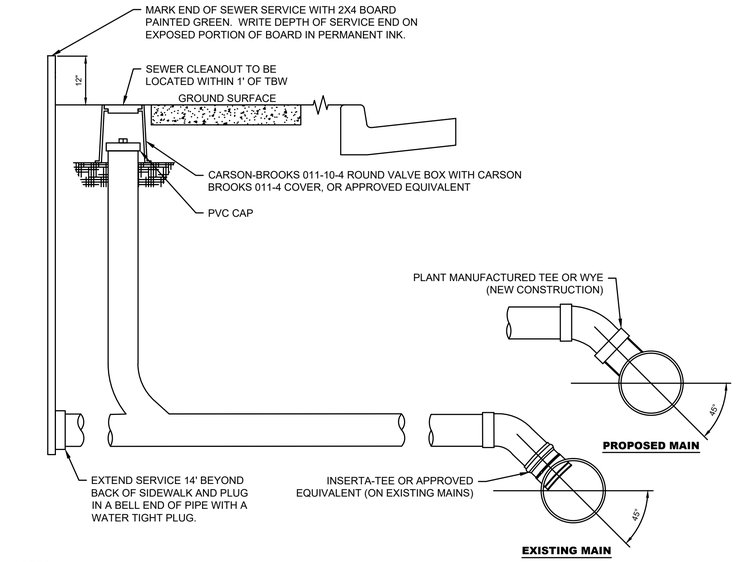
FRONT VIEW

NOTES:

1. ALL ELECTRICAL BOXES INCLUDING, BUT NOT LIMITED TO, SECTIONALIZERS, SECONDARY JUNCTION BOXES, TRANSFORMERS AND TRANSFORMER CONCRETE PADS SHALL HAVE UNTREATED BASE COURSE COMPACTED TO A MINIMUM OF 95% UNDER ALL BOXES. FILL SHALL BE A MINIMUM OF 1' IN DEPTH, AND SHALL EXTEND A MINIMUM OF 1' PAST ALL SIDES AND BACK AND 1' IN FRONT (6" IF A SIDEWALK IS PRESENT) OF ALL BOXES OR PADS.
2. ALL COMPACTION TESTS SHALL BE TAKEN BEFORE ELECTRICAL BOXES ARE SET INTO PLACE.
3. ALL SAND, ROADBASE AND ENGINEERED FILL SHALL MEET SPANISH FORK CITY STANDARDS.
4. REFER TO "EARTHWORK AND TRENCHES" SECTION IN THE CONSTRUCTION STANDARDS FOR ADDITIONAL REQUIREMENTS FOR BACKFILL, TRENCHING AND COMPACTION.
5. AREA AROUND ELECTRICAL BOXES SHALL BE BACKFILLED & LEVELED A MINIMUM OF 12' IN ALL DIRECTIONS TO PROVIDE A SAFE WORKING AREA FOR THE ELECTRIC DEPARTMENT.

E-610 ELECTRIC BOX BACKFILL AND COMPACTION

SCALE: N.T.S. — 3

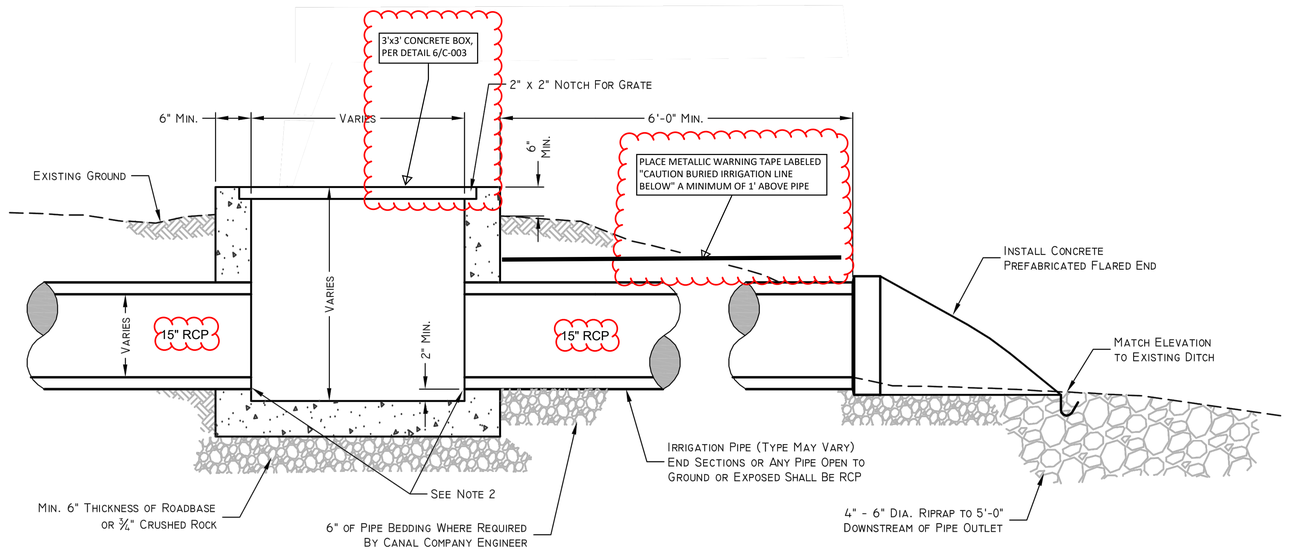


NOTES:

1. THE MINIMUM SLOPE IS 2% FOR A 4" LATERAL AND 1% FOR A 6" LATERAL.
2. SEWER LATERALS SHALL HAVE A MINIMUM OF 42" OF COVER FROM FINISH GRADE AT PROPERTY LINE AND 36" AT PLUG.
3. INSERTA-TEE MAY ONLY BE USED WHEN APPROVED BY CITY ENGINEER.

SS-305 SANITARY SEWER SERVICE

SCALE: N.T.S. — 4



NOTES:

1. ALL PIPES GOING INTO BOX SHALL BE GROUTED AND WATERTIGHT.
2. SUBMIT TO ENGINEER FINAL DIMENSIONS OF REBAR AND CONCRETE COMPONENTS.
3. ALL CONCRETE USED IN CONSTRUCTION SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000PSI.
4. THE CONCRETE MIX SHALL INCLUDE BETWEEN 5% AND 7% ENTRAINED AIR.
5. KNOCKOUT BOXES ARE NOT ALLOWED.

DISCHARGE PIPE

SCALE: N.T.S. — 5

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PH: 801.364.4785
FAX: 801.364.4802

LICENSED PROFESSIONAL ENGINEER
NO. 10288921-2202
NICHOLAS A. PATTERSON
STATE OF UTAH
08-23-2022

PROJECT NO.	DRAWN	DESIGNED	APPROVED	QA/QC
05-21-0118	M.VALLARINO	----	N.PATTERSON	----

MILESTONE HOLDINGS

SITE DEVELOPMENT

CIVIL DETAILS

SHEET NO: C-005

DATE: AUGUST 2022

PAGE NO: 09 OF 16

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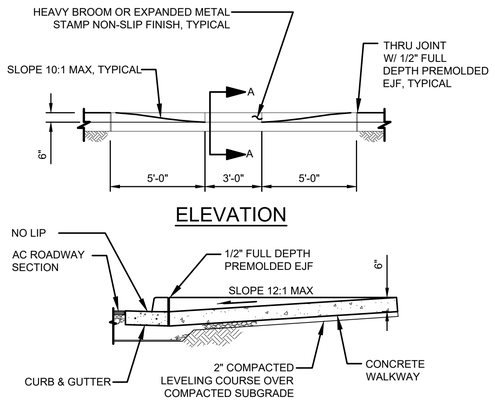
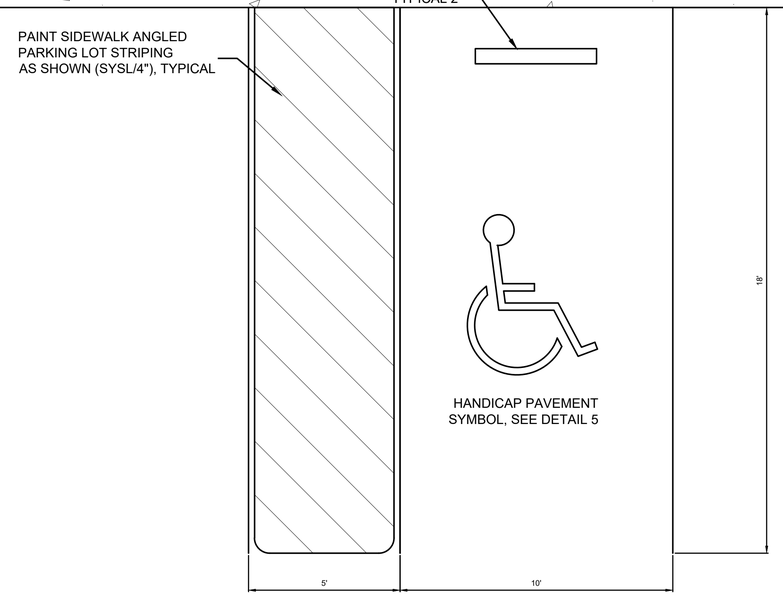


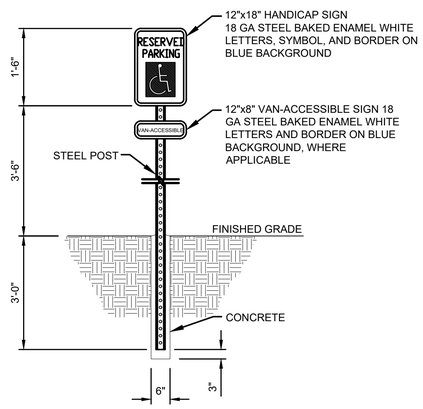
HANDICAP ACCESSIBLE RAMP 1

SCALE: N.T.S.



ADA STALL DETAIL 2

SCALE: N.T.S.



NOTE:
1. POSTS SHALL BE 8' LONG (MIN) HOT-ROLLED HIGH TENSILE RAIL STEEL, PERFORATED WITH 3/8" HOLES AT 1" CENTERS, FINISHED WITH GREEN BAKED ENAMEL.

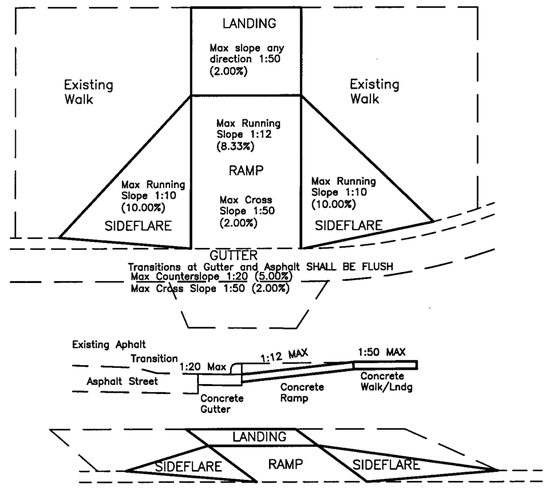
HANDICAP SIGN 3

SCALE: N.T.S.

Notes:
All ramp areas to have an ABSOLUTE MAXIMUM running slope of 1:12 (8.33%). Ramps must be MINIMUM 4–feet in width.

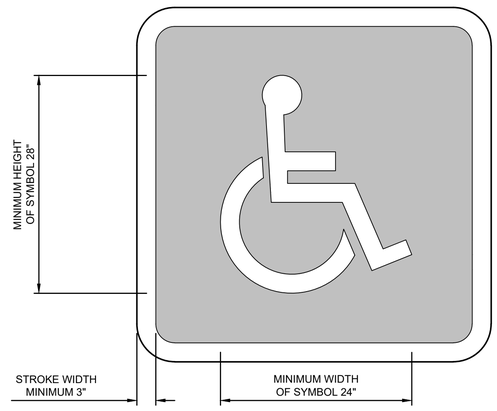
Landing shall be MINIMUM 4–feet x 4–feet, and have slope no greater than 1:50 (2.00%). Contractor shall take special care to insure all ramps and landings drain to street.

Transitions at the asphalt and gutter shall be FLUSH, with no bumps or dips. The counter slope to the gutter line leading to the street shall have a MAXIMUM slope of 1:20 (5.00%). This counter slope shall have a minimum length of 3–feet (1' from ramp line and 2' more in the asphalt street).



ADA CURB RAMP 4

SCALE: N.T.S.



HANDICAP PAVEMENT SYMBOL 5

SCALE: N.T.S.

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1	DETAIL NOT USED	NAP	06/2022

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MILESTONE HOLDINGS

SITE DEVELOPMENT

CIVIL DETAILS

SHEET NO: C-006

DATE: AUGUST 2022

PAGE NO: 10 OF 16

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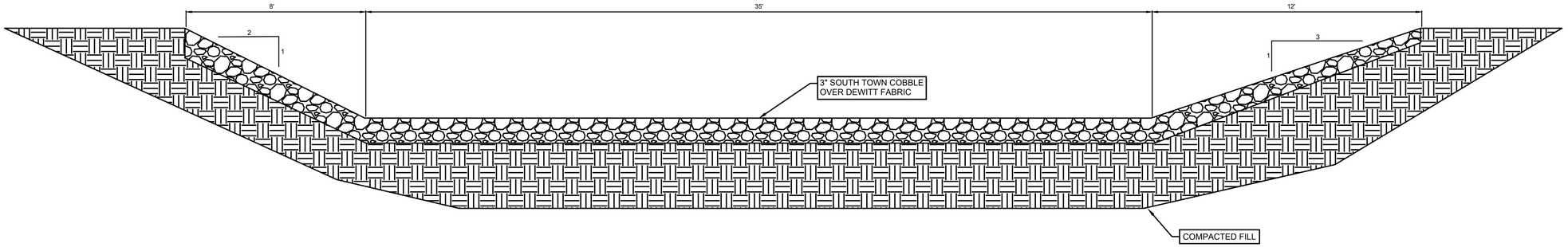
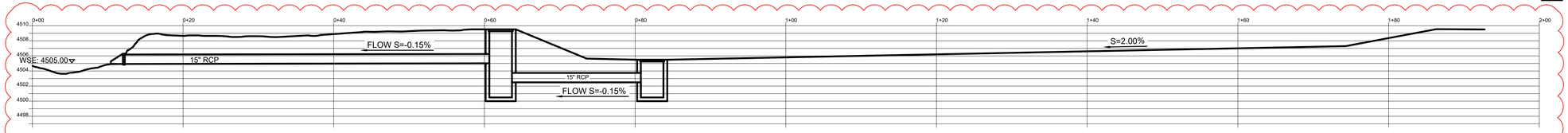


DETENTION BASIN
SCALE: N.T.S.

1

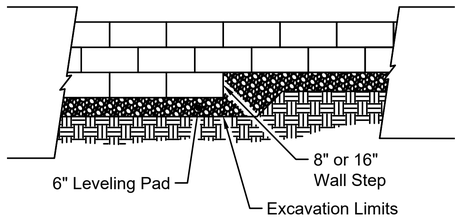


NOTE:

1. NO TREES, SHRUBS, TELEPHONE BOXES, OR POWER BOXES ARE ALLOWED IN IRRIGATION COMPANY OR SPRINGVILLE DRAINAGE DISTIRCT EASEMENTS.

DETENTION BASIN OUTFALL STRUCTURE PROFILE
SCALE: N.T.S.

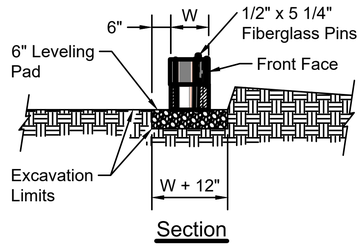
2



Elevation

Note:

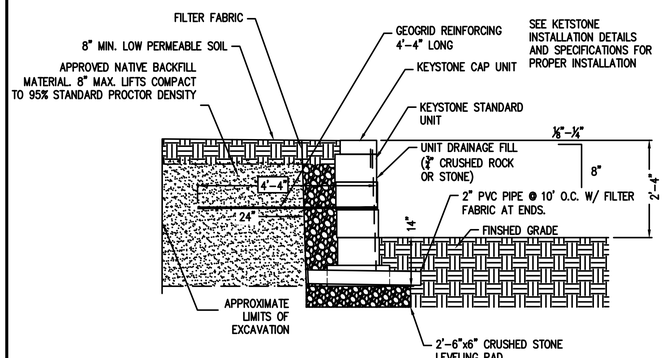
1. The leveling pad is to be constructed of crushed stone or 2000 psi ± unreinforced concrete.



Section

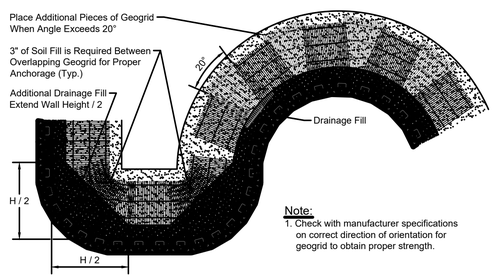
LEVELING PAD
SCALE: N.T.S.

3



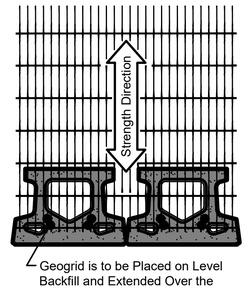
RETAINING WALL CROSS SECTION
SCALE: N.T.S.

4



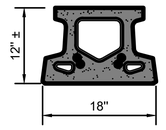
GEOGRID INSTALLATION WITH CURVES
SCALE: N.T.S.

5



Grid & Pin Connection

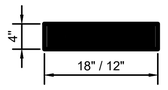
Compac III Elevation



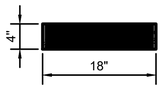
Compac III Plan

Compac III Unit

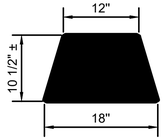
✱ Dimensions May Vary by Region



Cap Unit Elevation



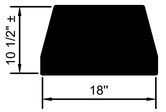
Cap Unit Elevation



Cap Unit Plan

Universal
Cap Unit Option

✱ Dimensions & Availability Will Vary by Region



Cap Unit Plan

Straight Split
Cap Unit Option

✱ Dimensions & Availability Will Vary by Region

GEOGRID INSTALLATION
SCALE: N.T.S.

6

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370 EAST 500 SOUTH, STE 200, SALT LAKE CITY, UT 84111
PH: 801.364.4785
FAX: 801.364.4802

LICENSED PROFESSIONAL ENGINEER
NO. 10288921-2202
NICHOLAS A. PATTERSON
STATE OF UTAH
08-23-2022

PROJECT NO.	05-21-0118
DRAWN	M.VALLARINO
DESIGNED	----
APPROVED	N.PATTERSON
QA/QC	----

MILESTONE HOLDINGS

SITE DEVELOPMENT

CIVIL DETAILS

SHEET NO: C-007

DATE:

PAGE NO: 11 OF 16

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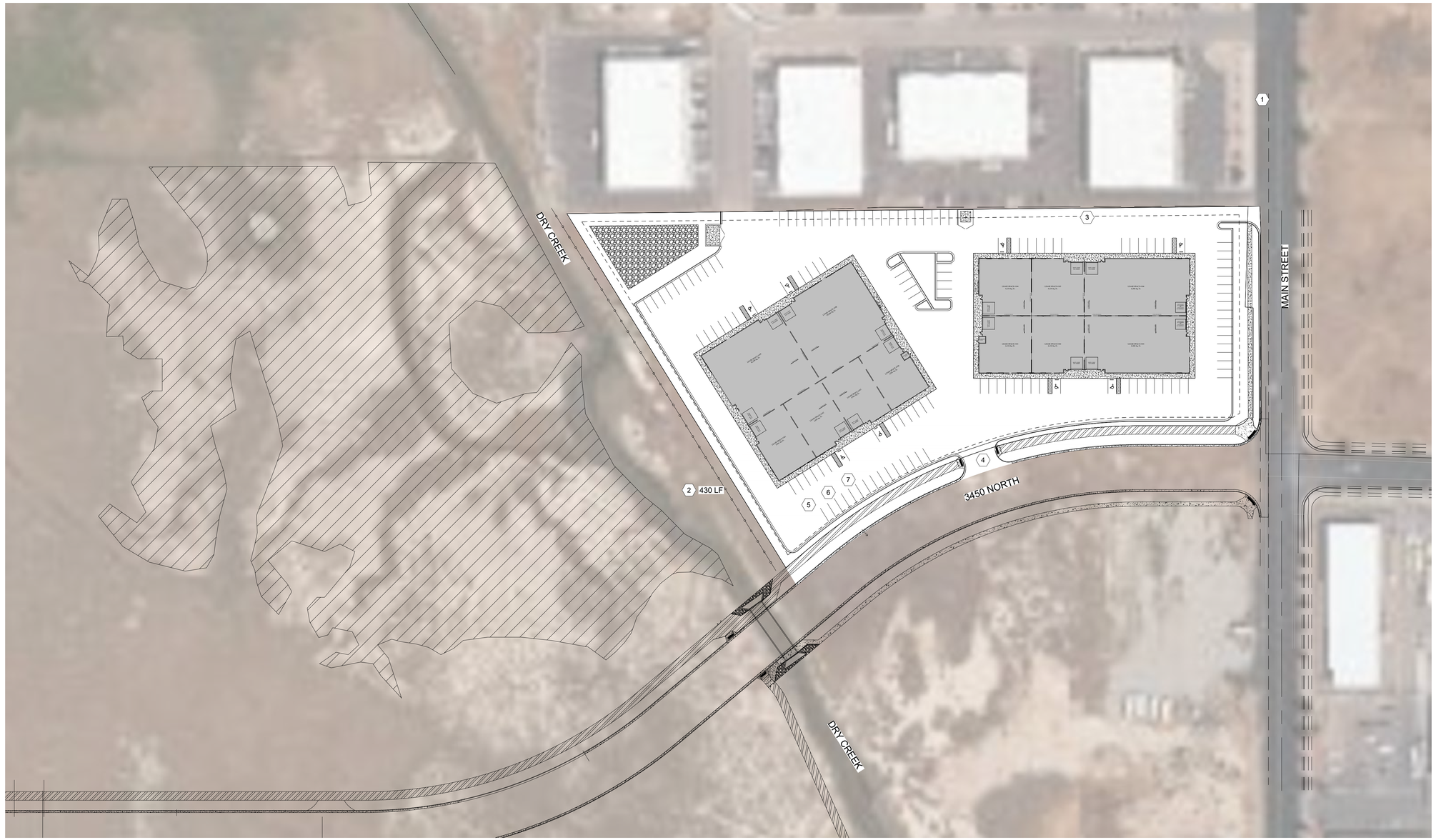

NOTES

1. IT IS THE RESPONSIBILITY OF THE OWNER/OPERATOR TO USE BEST MANAGEMENT PRACTICES, WHEN NEEDED DELETE AND MODIFY THOSE SHOWN.
2. DISTURBED LAND SHALL BE KEPT TO A MINIMUM. STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS POSSIBLE. 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 APPROPRIATE SEED MIXTURE WITHIN 14 CALENDAR DAYS OF ACHIEVEMENT OF FINISH GRADE.
4. DETAILS SHOWN ARE TO HELP PROTECT SOIL AGAINST RUNOFF. 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. THE SWPPP IS A LIVING DOCUMENT, BEST MANAGEMENT PRACTICES ARE SHOWN AT SUGGESTED LOCATIONS. THE CONTRACTOR MAY MOVE THESE BMP'S AS LONG AS THE INTENT OF THE DESIGN IS MAINTAINED. 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.
6. A UPDES (UTAH POLLUTANT DISCHARGE ELIMINATION SYSTEM) PERMIT IS REQUIRED BY THE LOCAL JURISDICTION.
7. A NOTICE OF INTENT (NOI) FROM THE STATE OF UTAH, DEPARTMENT OF ENVIRONMENTAL QUALITY, DIVISION OF WATER QUALITY WILL NEED TO BE SUBMITTED.
8. SILT FENCES LOCATED BETWEEN DRY CREEK AND PROPOSED CONSTRUCTION MUST BE 30 FEET FROM THE TOP OF DRY CREEK BANK TO ALLOW FOR OPERATION AND MAINTENANCE

KEYNOTES

1. INLET PROTECTION
2. SILT FENCE, NO CLOSER THAN 30' FROM TOP OF DRY CREEK BANK
3. PORTABLE TOILET
4. VEHICLE WASHDOWN AND STABILIZED CONSTRUCTION ENTRANCE
5. SUGGESTED TEMPORARY CONSTRUCTION SITE PARKING, DUMPSTER, AND MATERIAL STORAGE AREA
6. SUGGESTED STOCKPILE AREA
7. CONCRETE WASTE MANAGEMENT

GRAPHIC SCALE

0' 2' 4' 8' 16'

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

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DESIGNED	----
APPROVED	N.PATTERSON
QA/QC	----

MILESTONE HOLDINGS

SITE DEVELOPMENT

SWPPP SITE PLAN

SHEET NO: C-008

DATE: AUGUST 2022

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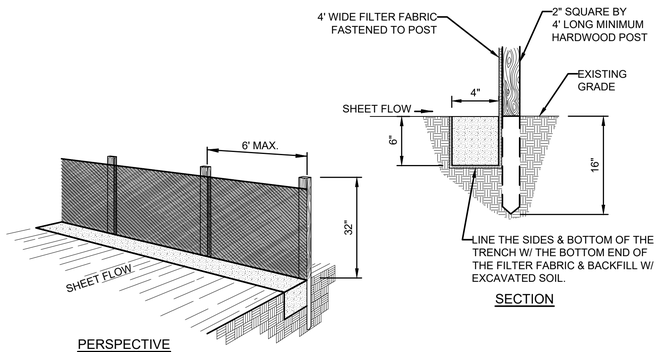


PERSPECTIVE

SECTION

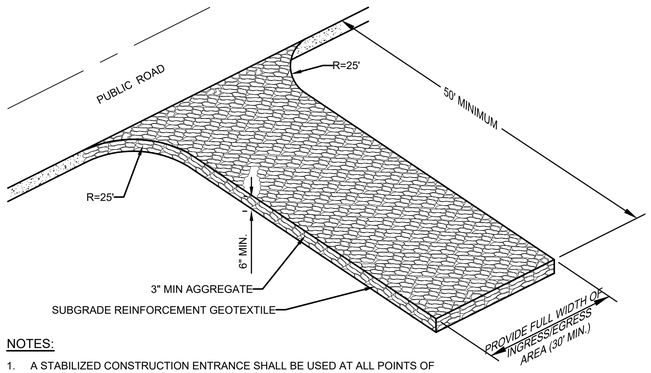
NOTES

1. WHERE POSSIBLE, LAYOUT THE SILT FENCE AT THE LIMITS OF DISTURBANCE.
2. ALIGN THE FENCE ALONG THE CONTOUR AS CLOSE AS POSSIBLE.
3. WHEN EXCAVATING THE TRENCH, USE MACHINERY THAT WILL PRODUCE NO MORE THAN THE DESIRED DIMENSIONS.
4. EXTEND THE BOTTOM 16" OF FILTER FABRIC TO LINE ALL THREE SIDES OF THE TRENCH.
5. TO AVOID EXCESSIVE PONDING OF WATER AT LOW POINTS ALONG THE FENCE, PROVIDE AN OPENING IN THE SILT FENCE AND INSTALL A CHECK DAM AT 300' SPACING.
6. AVOID USING JOINTS ALONG THE FENCE AS MUCH AS POSSIBLE. IF A JOINT IS NECESSARY, SPLICE THE FILTER FABRIC AT A POST WITH 6" OVERLAPS AND SECURELY FASTEN BOTH ENDS TO THE POST.
7. MAINTAIN A PROPERLY FUNCTIONING SILT FENCE THROUGHOUT THE DURATION OF CONSTRUCTION OR UNTIL DISTURBED AREAS HAVE BEEN VEGETATED.
8. FENCE SHALL BE INSPECTED DAILY AND PLACED IN A STABLE AREA APPROVED BY THE ENGINEER.

SILT FENCE TYPE 1

SCALE: N.T.S.

1



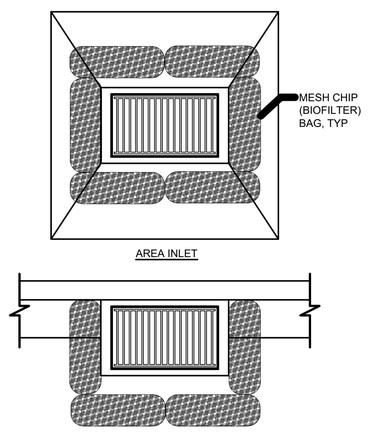
NOTES:

1. A STABILIZED CONSTRUCTION ENTRANCE SHALL BE USED AT ALL POINTS OF CONSTRUCTION INGRESS AND EGRESS.
2. THE AGGREGATE SHALL BE 2 IN MIN. CRUSHED ROCK.
3. THE ENTRANCE SHALL BE PROPERLY GRADED TO PREVENT RUNOFF FROM LEAVING THE CONSTRUCTION SITE.
4. THE ENTRANCE SHALL BE CONSTRUCTED ON LEVEL GROUND.
5. PERIODIC TOP DRESSING WITH ADDITIONAL STONE SHALL BE PROVIDED TO ENSURE THE INTEGRITY OF THE ENTRANCE DURING CONSTRUCTION.
6. THE ENTRANCE SHALL BE INSPECTED MONTHLY AND AFTER EACH RAINFALL.
7. CRUSHED ROCK MATERIAL SHALL BE ADDED WHEN SURFACE VOIDS ARE NOT VISIBLE.
8. ALL SEDIMENT DEPOSITS ON PAVED ROADWAYS SHALL BE REMOVED WITHIN 24 HOURS.
9. THE CRUSHED ROCK AND GEOTEXTILE SHALL BE REMOVED AT COMPLETION OF CONSTRUCTION.

STABILIZED CONSTRUCTION ENTRANCE

SCALE: N.T.S.

2



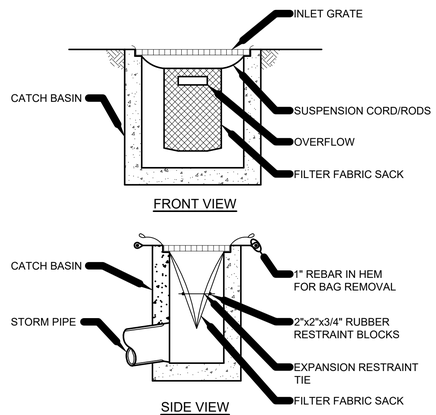
AREA INLET

CURB INLET

INLET PROTECTION - TYPE 1

SCALE: N.T.S.

3



NOTES:
1. RECESSED CURB INLET MUST BE BLOCKED WHEN USING FILTER FABRIC SACK.
2. SIZE OF SACK TO BE DETERMINED BY MANUFACTURER TO SUIT INLET.
3. INSTALL BAGS WITHOUT GAPS AT INLET GRATE.

INLET PROTECTION - TYPE 2

SCALE: N.T.S.

4

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370 EAST 500 SOUTH, STE 200, SALT LAKE CITY, UT 84111
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NICHOLAS A. PATTERSON
STATE OF UTAH
08-23-2022

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DRAWN	M.VALLARINO
DESIGNED	----
APPROVED	N.PATTERSON
QA/QC	----

MILESTONE HOLDINGS

SITE DEVELOPMENT

SWPPP DETAILS

SHEET NO: C-009

DATE: AUGUST 2022

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SD INV @ OUTFALL TO DRY CREEK
±4504.90, SEE DETAIL 5 ON C-005
WSE @ DRY CREEK: 4505.00

68 LF 15" RCP SD PIPE @ S=0.15%

INSTALL DEBRIS GRATE AND OUTFALL STRUCTURE PER SPANISH FORK CITY STANDARD SD-411.
SD FL OUT=4505.00

FURNISH AND INSTALL 15" CLA-VAL RUBBER-FLEX BUCKBILL CHECK VALVE, OR APPROVED EQUAL

INV IN: 4506.47

28 LF 15" ADS SD PIPE @ S=0.15%

SD CURB INLET
N:7225064.54
E:1595775.19
RIM ELEV=4510.19
FL IN=4506.61 (E)
FL OUT=4506.51 (N)

222 LF 15" ADS SD PIPE @ S=0.15%

SD DRAIN INLET
N:7225175.53.52
E:1595977.61
RIM ELEV=4509.66
FL IN=4507.04 (E)
FL OUT=4506.94 (W)

195 LF 15" ADS SD PIPE @ S=0.15%

SD DRAIN INLET
N:7225177.50
E:1596176.10
RIM ELEV=4509.60
FL IN=4507.43 (E)
FL OUT=4507.33 (W)

SD CURB INLET
N:7225147.63
E:1596484.05
RIM ELEV=4510.34
FL OUT=4508.34 (W)

304 LF 12" ADS SD PIPE @ S=0.30%

PLUG EXISTING 36' ADS PIPE WITH CONCRETE AND CONVERT EXISTING IRRIGATION BOX INTO A TRAFFIC BOX

10 LF 4" SDR35 @ S=2.00%

SS INV @ BLDG ± 4503.56

4' SANITARY SEWER MANHOLE PER SPANISH FORK CITY STANDARDS SS-301
N:7225011.34
E1596128.32
RIM ELEV=4512.06
FL IN=4500.52 (S)
FL OUT=4500.42 (NW)

31 LF 4" SDR35 @ S=2.00%

115 LF 4" SDR 35 @ S=2.00%

85 LF 4" SDR 35 @ S=2.00%

11 LF 4" SDR35 @ S=2.00%

SS INV @ BLDG ± 4502.44

6"FL C900 37 LF

1.5" PW PVC 10 LF

6" FL C900 19 LF

18 LF 4" SDR35 @ S=2.00%

SS INV @ BLDG ± 4501.16'

49 LF 4"SDR35 @ S=2.00%

1.5" PW PVC 55 LF

1.5" PW PVC 33 LF

1.5" PW PVC 11 LF

6" FL C900 11 LF

1.5" PW PVC 67 LF

6" FL C900 34 LF

SS INV @ BLDG ± 4500.62'

10 LF 4" SDR35 @ S=2.00%

17 LF 4" SDR35 @ S=2.00%

SEWER LATERAL CONNECTIONS PER SPANISH FORK STANDARD DETAIL, TYP.

1.5" PW PVC 21 LF

117 LF 8" SDR 35 @ S=2.00%

8"-FL C900 170 LF

1.5" PW PVC 58 LF

CONNECT TO EXISTING 8" SEWER LATERAL ≈ELEV: 4498.18

CONNECT TO EXISTING 1.5" PW LATERAL ≈ELEV: 5' BFG

METER 2" WATER SERVICE PER SPANISH FORK CITY STANDARDS

CONNECT TO EXISTING 8" FIRE WATER LATERAL ≈ELEV: 6.5' BFG

Existing Fire Hydrant

METER 2" WATER SERVICE PER SPANISH FORK CITY STANDARDS

LEASE SPACE #105 4,154 Sq. Ft.
LEASE SPACE #106 8,308 Sq. Ft.
LEASE SPACE #102 4,154 Sq. Ft.
LEASE SPACE #103 8,308 Sq. Ft.
LEASE SPACE #101 3,845 Sq. Ft.
LEASE SPACE #101 5,000 Sq. Ft.

SPRINGVILLE IRRIGATION & DRAINAGE GROUP NOTES

1. CHANNEL FLOOR AND EMBANKMENT MATERIAL REMOVED FOR EXCAVATION (BETWEEN APRON AND UNDISTURBED CANAL) SHALL BE REPLACED WITH A 12-INCH MINIMUM THICKNESS OF 10E-6 CM/SEC PERMEABILITY CLAY MATERIAL IN 6-INCH MAXIMUM LIFTS.
2. CHANNEL EMBANKMENT SHALL BE SHAPED TO MATCH THE EXISTING CHANNEL PRISM.
3. COMPACTION TEST RESULTS MUST BE SUBMITTED TO FRANSON CIVIL ENGINEERS. ALL FAILED MATERIAL SHALL BE REMOVED AND COMPACTED TO SPECIFICATIONS. TESTING MUST BE PERFORMED BY A LICENSED SOILS LAB.
4. OPEN-CUT TRENCHES SHALL BE CUT AT A MINIMUM OF 2-HORIZONTAL TO 1-VERTICAL SO THAT BACKFILL CAN BE PROPERLY COMPACTED.
5. PVC WATER STOP, OR EQUIVALENT, IS REQUIRED IN ALL JOINTS OF CAST-IN-PLACE CONCRETE.
6. SIGNS MUST BE PLACED AT EACH ENTRANCE TO THE OPERATION AND MAINTENANCE ROAD THAT STATE: NO TRESPASSING. WARNING: CHANNEL MAINTENANCE ROAD, AUTHORIZED PERSONNEL ONLY. NO SWIMMING OR TUBING.

KEYNOTES:

1. MANHOLES ARE 4'-0" DIAMETER UNLESS OTHERWISE NOTED.
2. MAINTAIN 5' OF COVER ON THE POTABLE WATER AND FIRE LINES.
3. DRAIN INLET WITH WITH H-20 GRATED LID, SEE SPANISH FORK CITY STANDARD SD-403.
4. PIPE TRENCH PER DETAIL 5/C-003.
5. MAINTAIN WATER LINE VERTICAL AND HORIZONTAL CLEARANCES, SEE DETAIL 1/C-003.
6. INSTALL THRUST BLOCKS AT ALL BENDS ON PRESSURIZED WATER AND IRRIGATION LINES. SEE DETAIL 1/C-004.
7. CONSTRUCT WATEROUS WB-67 FIRE HYDRANT ASSEMBLY, OR APPROVED EQUAL, PER SPANISH FORK CITY STANDARDS.
8. POTABLE WATER TO BE BLUE PIPE PER SPANISH FORK CITY STANDARDS.
9. PRESSURIZED IRRIGATION TO BE PURPLE PIPE PER SPANISH FORK CITY STANDARDS.
10. IRRIGATION BOX PER CITY STANDARDS, LOCATE PRESSURIZED IRRIGATION PIPING PER IRRIGATION PLANS.
11. CONSTRUCT SEWER CLEANOUTS IN LOCATIONS SHOWN AND PER SPANISH FOR CITY STANDARDS.
12. FDC LOCATION ON EXTERIOR WALL.

ABBREVIATIONS

SS	SANITARY SEWER
SD	STORM DRAIN
PW	POTABLE WATER
FL	FIRE LINE
IRR	IRRIGATION
CO	SEWER CLEANOUT

SITE UTILITIES PLAN
SCALE: 1"= 30'

GRAPHIC SCALE
0' 15' 30' 60' 90'
Scale: 1"=30'

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MILESTONE HOLDINGS

SITE DEVELOPMENT
SITE UTILITES PLAN

SHEET NO: U-001
DATE: AUGUST 2022
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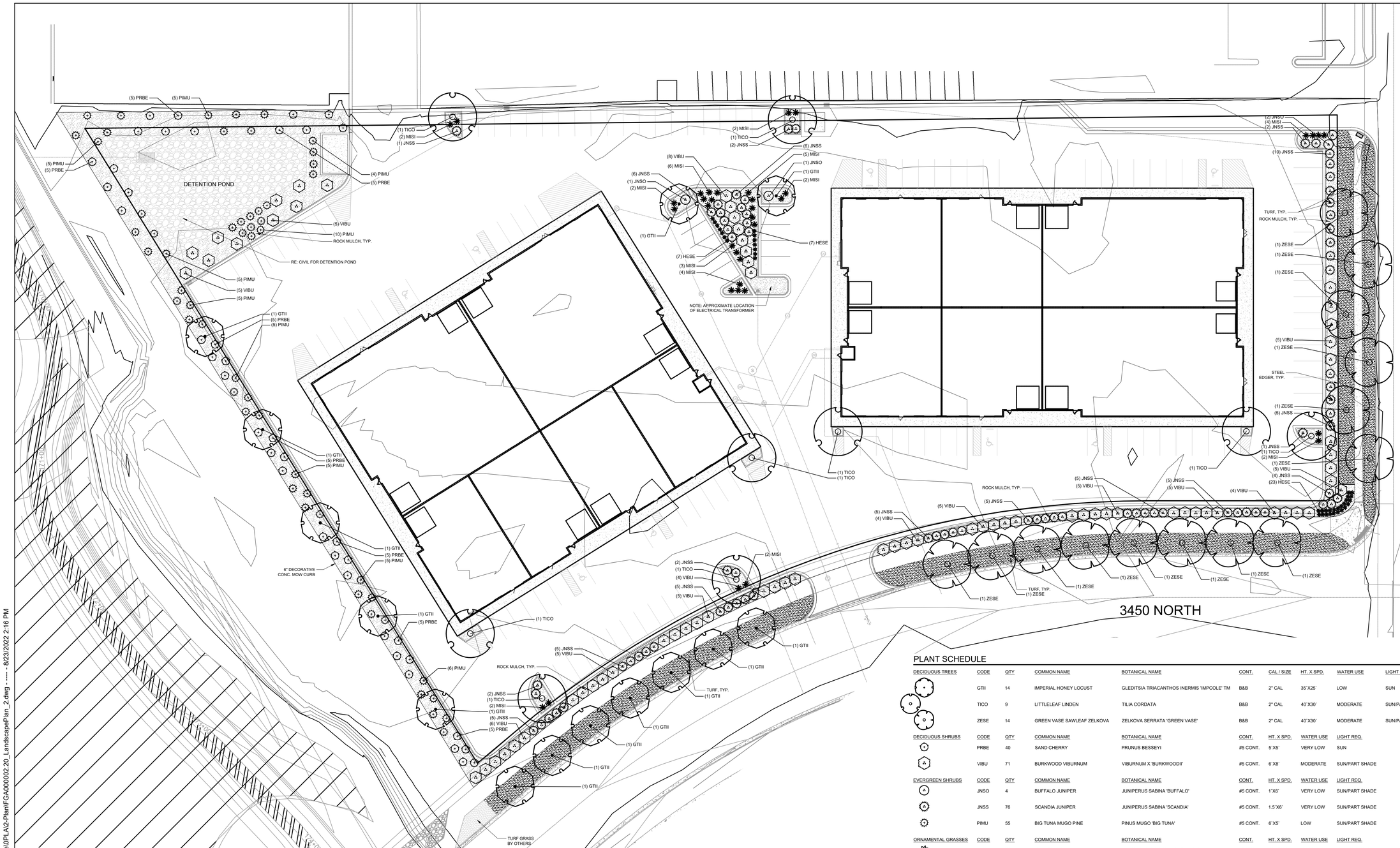

LANDSCAPE COVERAGE CALCULATIONS

AREAS OF REQUIRED LANDSCAPING	AREA	FORMULA	TOTAL QUANTITY REQUIRED	TOTAL QUANTITY PROVIDED
REQUIRED LANDSCAPE AREA	217,518 S.F.	10% OF TOTAL SITE AREA MUST BE LANDSCAPE AREA	10% = 21,715 S.F. OF LANDSCAPE AREA REQUIRED	13% = 28,498 S.F. OF LANDSCAPE AREA PROVIDED
REQUIRED TREES (ZONING I-1)	21,715 S.F.	1 TREE PER 1,000 S.F. OF LANDSCAPE AREA	22 TREES	37 TREES
REQUIRED SHRUBS (ZONING I-1)	21,715 S.F.	10 SHRUBS PER 1,000 S.F. OF LANDSCAPE AREA	217 SHRUBS	246 SHRUBS
REQUIRED TURF	21,715 S.F.	MINIMUM 30% TURF	6,515 S.F. OF TURF REQUIRED	10,299 S.F. (47%)

CAUTION
UTILITIES EXIST WITHIN CONSTRUCTION LIMITS. CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING THEIR LOCATION PRIOR TO CONSTRUCTION.

N

0 15 30

SCALE: 1"=30'

PLANT SCHEDULE

DECIDUOUS TREES	CODE	QTY	COMMON NAME	BOTANICAL NAME	CONT.	CAL / SIZE	HT. X SPD.	WATER USE	LIGHT REQ.
	GTII	14	IMPERIAL HONEY LOCUST	GLEDITSIA TRIACANTHOS INERMIS 'IMPCOLE' TM	B&B	2" CAL	35`X25`	LOW	SUN
	TICO	9	LITTLELEAF LINDEN	TILIA CORDATA	B&B	2" CAL	40`X30`	MODERATE	SUN/PART SHADE
	ZESE	14	GREEN VASE SAWLEAF ZELKOVA	ZELKOVA SERRATA 'GREEN VASE'	B&B	2" CAL	40`X30`	MODERATE	SUN/PART SHADE
DECIDUOUS SHRUBS	**CODE**	**QTY**	**COMMON NAME**	**BOTANICAL NAME**	**CONT.**	**HT. X SPD.**	**WATER USE**	**LIGHT REQ.**	
	PRBE	40	SAND CHERRY	PRUNUS BESSEYI	#5 CONT.	5`X5`	VERY LOW	SUN	
	VIBU	71	BURKWOOD VIBURNUM	VIBURNUM X 'BURKWOODII'	#5 CONT.	6`X8`	MODERATE	SUN/PART SHADE	
EVERGREEN SHRUBS	**CODE**	**QTY**	**COMMON NAME**	**BOTANICAL NAME**	**CONT.**	**HT. X SPD.**	**WATER USE**	**LIGHT REQ.**	
	JNSO	4	BUFFALO JUNIPER	JUNIPERUS SABINA 'BUFFALO'	#5 CONT.	1`X6`	VERY LOW	SUN/PART SHADE	
	JNSS	76	SCANDIA JUNIPER	JUNIPERUS SABINA 'SCANDIA'	#5 CONT.	1.5`X6`	VERY LOW	SUN/PART SHADE	
	PIMU	55	BIG TUNA MUGO PINE	PINUS MUGO 'BIG TUNA'	#5 CONT.	6`X5`	LOW	SUN/PART SHADE	
ORNAMENTAL GRASSES	**CODE**	**QTY**	**COMMON NAME**	**BOTANICAL NAME**	**CONT.**	**HT. X SPD.**	**WATER USE**	**LIGHT REQ.**	
	HESE	37	BLUE AVENA	HELICTOTRICHON SEMPERVIRENS	#1 CONT.	2.5`X2.5`	VERY LOW	SUN/PART SHADE	
	MISI	36	MAIDEN GRASS	MISCANTHUS SINENSIS 'GRACILLIMUS'	#1 CONT.	5`X4`	LOW	SUN	
MULCH	**CODE**	**QTY**	**COMMON NAME**	**BOTANICAL NAME**	**TYPE**				
	RMULCH	18,336 SF	2"-4" ROCK COBBLE MULCH	2"-4" ROCK COBBLE MULCH	MULCH				
SOD/SEED	**CODE**	**QTY**	**COMMON NAME**	**BOTANICAL NAME**	**TYPE**				
	SOD	10,299 SF	RTF (RHIZOMATOUS TALL FESCUE)	FESCUE SOD	SOD				

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PROJECT NO.	FGA
DRAWN	EDN
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QA/QC	JW

MILESTONE HOLDINGS

SITE DEVELOPMENT

LANDSCAPE PLAN

3450 NORTH MAIN STREET

SHEET NO: **L1.1**

DATE: 8/23/2022

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GENERAL PLANTING NOTES

GENERAL

1. ALL WORK SHALL CONFORM TO ALL APPLICABLE STATE AND LOCAL CODES, STANDARDS, AND SPECIFICATIONS.
2. LANDSCAPE DESIGN IS DIAGRAMMATIC IN NATURE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR HIS OWN TAKEOFFS AND QUANTITY CALCULATIONS. IN THE EVENT OF A DISCREPANCY BETWEEN THE PLAN AND THE LANDSCAPE LEGEND, THE PLANT QUANTITY AS SHOWN ON THE PLAN SHALL TAKE PRECEDENCE AND NOTIFY THE LANDSCAPE ARCHITECT OF THESE DISCREPANCIES. MINOR ADJUSTMENTS TO THE LANDSCAPE MATERIAL AND LOCATIONS MAY BE PROPOSED FOR CITY CONSIDERATION AT THE CONSTRUCTION DOCUMENT STAGE TO RESPOND TO MARKET AND FIELD CONDITIONS. HOWEVER, THERE SHALL BE NO REDUCTION IN THE NUMBER AND SIZE OF MATERIALS.
3. CONTRACTOR SHALL MAKE HIMSELF AWARE OF THE LOCATIONS OF EXISTING AND PROPOSED UTILITIES, AND SHALL BE RESPONSIBLE FOR ANY DAMAGE TO THE UTILITIES AND/OR ANY INJURY TO ANY PERSON. THIS DRAWING IS PART OF A COMPLETE SET OF CONTRACT DOCUMENTS. UNDER NO CIRCUMSTANCES SHOULD THIS PLAN BE USED FOR CONSTRUCTION PURPOSES WITHOUT EXAMINING ACTUAL LOCATIONS OF UTILITIES ON SITE AND REVIEW ALL RELATED PLANS AND DOCUMENTS.
4. ALL UTILITY EASEMENTS SHALL REMAIN UNOBSTRUCTED AND FULLY ACCESSIBLE ALONG THEIR ENTIRE LENGTH FOR MAINTENANCE EQUIPMENT.
5. THE CONTRACTOR SHALL TAKE EXTREME CARE NOT TO DAMAGE ANY EXISTING PLANTS INDICATED AS "TO REMAIN". ANY SUCH PLANTS DAMAGED BY THE CONTRACTOR SHALL BE REPLACED WITH THE SAME SPECIES, SIZE, AND QUANTITY AT THE CONTRACTOR'S OWN EXPENSE, AND AS ACCEPTABLE TO THE OWNER. REFER TO THE TREE PROTECTION NOTES ON THE PLANS (AS APPLICABLE).
6. LANDSCAPE CONTRACTOR SHALL EXAMINE THE SITE CONDITIONS UNDER WHICH THE WORK IS TO BE PERFORMED AND NOTIFY THE GENERAL CONTRACTOR IN WRITING OF UNSATISFACTORY CONDITIONS. IF SITE CONDITIONS OR PLANT AVAILABILITY REQUIRE CHANGES TO THE PLAN, THEN AN APPROVAL WILL BE OBTAINED FROM THE CITY. DO NOT PROCEED UNTIL CONDITIONS HAVE BEEN CORRECTED.
7. ALL CONSTRUCTION DEBRIS AND MATERIAL SHALL BE REMOVED AND CLEANED OUT PRIOR TO INSTALLATION OF TOPSOIL, TREES, SHRUBS, AND TURF.
8. FOR ALL INFORMATION ON SURFACE MATERIAL OF WALKS, DRIVES, AND PARKING LOTS, SEE THE SITE PLAN. SEE PHOTOMETRIC PLAN FOR FREE STANDING LIGHTING INFORMATION.
9. THE LANDSCAPE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT ONE WEEK PRIOR TO BEGINNING CONSTRUCTION.
10. WINTER WATERING SHALL BE AT THE EXPENSE OF THE CONTRACTOR UNTIL SUCH TIME AS FINAL ACCEPTANCE IS RECEIVED.
11. ALL LANDSCAPE CONSTRUCTION PRACTICES, WORKMANSHIP, AND ETHICS SHALL, BE IN ACCORDANCE WITH INDUSTRY STANDARDS SET FORTH IN THE CONTRACTORS HANDBOOK PUBLISHED BY THE UTAH LANDSCAPE CONTRACTORS ASSOCIATION.
12. LANDSCAPE AND IRRIGATION WORK SHALL BE COMPLETED PRIOR TO THE ISSUANCE OF THE FINAL CERTIFICATE OF OCCUPANCY.

FINISH GRADING AND SOIL PREPARATION

13. CONTRACTOR SHALL CONSTRUCT AND MAINTAIN FINISH GRADES AS RECOMMENDED BY THE GEOTECHNICAL REPORT. ALL LANDSCAPE AREAS SHALL HAVE POSITIVE DRAINAGE AWAY FROM STRUCTURES AT THE MINIMUM SLOPE SPECIFIED IN THE REPORT, AND AREAS OF POTENTIAL PONDING SHALL BE REGRADED TO BLEND IN WITH THE SURROUNDING GRADES AND ELIMINATE PONDING POTENTIAL. SHOULD ANY CONFLICTS AND/OR DISCREPANCIES ARISE BETWEEN THE GEOTECHNICAL REPORT, THE GRADING PLANS, THESE NOTES, AND ACTUAL CONDITIONS, THE CONTRACTOR SHALL IMMEDIATELY BRING SUCH ITEMS TO THE ATTENTION OF THE LANDSCAPE ARCHITECT AND OWNER.
14. AFTER FINISH GRADES HAVE BEEN ESTABLISHED, IT IS RECOMMENDED THAT THE CONTRACTOR SHALL HAVE SOIL SAMPLES TESTED BY AN ESTABLISHED SOIL TESTING LABORATORY FOR THE FOLLOWING: GENERAL SOIL FERTILITY, PH, ORGANIC MATTER CONTENT, SALT (CEC), LIME, SODIUM ADSORPTION RATIO (SAR) AND BORON CONTENT. EACH SAMPLE SUBMITTED SHALL CONTAIN NO LESS THAN ONE QUART OF SOIL. CONTRACTOR SHALL ALSO SUBMIT THE PROJECT'S PLANT LIST TO THE LABORATORY ALONG WITH THE SOIL SAMPLES. THE SOIL REPORT PRODUCED BY THE LABORATORY SHALL CONTAIN RECOMMENDATIONS FOR THE FOLLOWING (AS APPROPRIATE): GENERAL SOIL PREPARATION AND BACKFILL MIXES, PRE-PLANT FERTILIZER APPLICATIONS, AND ANY OTHER SOIL RELATED ISSUES. THE REPORT SHALL ALSO PROVIDE A FERTILIZER PROGRAM FOR THE ESTABLISHMENT PERIOD AND FOR LONG-TERM MAINTENANCE.
15. THE CONTRACTOR SHALL RECOMMEND INSTALLATION OF SOIL AMENDMENTS AND FERTILIZERS PER THE SOILS REPORT FOR THE THE OWNER/OWNER'S REPRESENTATIVE CONSIDERATION.
16. AT A MINIMUM, ALL TOPSOIL SHALL BE AMENDED WITH NITROGEN STABILIZED ORGANIC AMENDMENT COMPOST AT A RATE OF 5.0 CUBIC YARDS AND AMMONIUM PHOSPHATE 16-20-0 AT A RATE OF 15 POUNDS PER THOUSAND SQUARE FEET OF LANDSCAPE AREA. COMPOST SHALL BE MECHANICALLY INTEGRATED INTO THE TOP 6" OF SOIL BY MEANS OF ROTOTILLING AFTER CROSS-RIPPING. GROUND COVER & PERENNIAL BED AREAS SHALL BE AMENDED AT A RATE OF 8 CUBIC FEET PER THOUSAND SQUARE FEET OF NITROGEN STABILIZED ORGANIC AMENDMENT AND 10 LBS. OF 12-12-12 FERTILIZER PER CU. YD., ROTOTILLED TO A DEPTH OF 8". NO MANURE OR ANIMAL-BASED PRODUCTS SHALL BE USED FOR ORGANIC AMENDMENTS.
17. ALL DECIDUOUS TREES SHALL HAVE FULL, WELL-SHAPED HEADS/ALL EVERGREENS SHALL BE UNSHEARED AND FULL TO THE GROUND; UNLESS OTHERWISE SPECIFIED. TREES WITH CENTRAL LEADERS WILL NOT BE ACCEPTED IF LEADER IS DAMAGED OR REMOVED. PRUNE ALL DAMAGED TWIGS AFTER PLANTING.
18. ALL PLANTS WITHIN A SPECIES SHALL HAVE SIMILAR SIZE, AND SHALL BE OF A FORM TYPICAL FOR THE SPECIES. ANY PLANT DEEMED UNACCEPTABLE BY THE LANDSCAPE ARCHITECT SHALL BE IMMEDIATELY REMOVED FROM THE SITE AND SHALL BE REPLACED WITH AN ACCEPTABLE PLANT OF LIKE TYPE AND SIZE AT THE CONTRACTOR'S OWN EXPENSE. ANY PLANTS APPEARING TO BE UNHEALTHY, EVEN IF DETERMINED TO STILL BE ALIVE, SHALL NOT BE ACCEPTED. THE LANDSCAPE ARCHITECT SHALL BE THE SOLE JUDGE AS TO THE ACCEPTABILITY OF PLANT MATERIAL.
19. ALL TREES SHALL BE GUYED AND WOOD STAKED AS PER DETAILS. NO 'T-STAKES' SHALL BE USED FOR TREES.
20. ALL PLANT MATERIALS SHALL BE TRUE TO TYPE, SIZE, SPECIES, QUALITY, AND FREE OF INJURY, BROKEN ROOT BALLS, PESTS, AND DISEASES, AS WELL AS CONFORM TO THE MINIMUM REQUIREMENTS DESCRIBED IN THE "AMERICAN STANDARD FOR NURSERY STOCK". FOLLOW GREENCO TREE PLANTING RECOMMENDATIONS FOR MINIMUM QUALITY REQUIREMENTS FOR TREES.
21. ALL TREE AND SHRUB BED LOCATIONS ARE TO BE STAKED OUT ON SITE FOR APPROVAL BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
22. ALL TREES PLANTED ADJACENT TO PUBLIC AND/OR PEDESTRIAN WALKWAYS SHALL BE PRUNED CLEAR OF ALL BRANCHES BETWEEN GROUND AND A HEIGHT OF EIGHT (8) FEET FOR THAT PORTION OF THE PLAN LOCATED OVER THE SIDEWALK AND/OR ROAD.
23. ALL PLANT MATERIAL SHALL NOT BE PLANTED PRIOR TO INSTALLATION OF TOPSOIL.
24. ALL PLANT BEDS SHALL BE CONTAINED WITH STEEL EDGER. STEEL EDGER IS NOT REQUIRED ALONG CURBS, WALKS OR BUILDING FOUNDATIONS. ALL EDGING SHALL OVERLAP AT JOINTS A MINIMUM OF 6-INCHES, AND SHALL BE FASTENED WITH A MINIMUM OF 4 PINS PER EACH 10 FOOT SECTION. THE TOP OF ALL EDGING MATERIAL SHALL BE A ROLLED TOP AND 1/2 INCH ABOVE THE FINISHED GRADE OF ADJACENT LAWN OR MULCH AREAS. COLOR: GREEN.
25. THE DEVELOPER, HIS SUCCESSOR, OR ASSIGNEE SHALL BE RESPONSIBLE FOR ESTABLISHING AND CONTINUING A REGULAR PROGRAM OF MAINTENANCE FOR ALL LANDSCAPED AREAS. SEE LANDSCAPE GUARANTEE AND MAINTENANCE NOTE.
26. A 3-FOOT CLEAR SPACE SHALL BE MAINTAINED AROUND THE CIRCUMFERENCE OF ALL FIRE HYDRANTS.
27. LANDSCAPE CONTRACTOR TO SUBMIT SAMPLES OF MISCELLANEOUS LANDSCAPING MATERIALS TO THE LANDSCAPE ARCHITECTS AND OWNER'S REPRESENTATIVE FOR APPROVAL PRIOR TO INSTALLATION, IE.; MULCH, EDGER, LANDSCAPE FABRIC, ETC.

MULCHING

28. AFTER ALL PLANTING IS COMPLETE, THE CONTRACTOR SHALL INSTALL A MINIMUM 4" THICK LAYER OF MULCH AS SPECIFIED IN THE PLANTING LEGEND. INSTALL A 4" THICK RING OF DOUBLE SHREDDED CEDAR BARK MULCH AROUND ALL PLANT MATERIAL IN ROCK MULCH BEDS WHERE LANDSCAPING IS SHOWN ON THE PLANS. WOOD MULCH RING SIZE SHALL BE THE CONTAINER SIZE OF THE SHRUBS, PERENNIALS, AND ORNAMENTAL GRASSES. TREE RING SIZE SHALL BE GREEN INDUSTRIES OF COLORADO INDUSTRY STANDARD WIDTH.
29. ALL MULCH SHALL BE HARVESTED IN A SUSTAINABLE MANNER FROM A LOCAL SOURCE.
30. INSTALL DEWITT PRO-5 WEED BARRIER FABRIC UNDER ALL ROCK MULCH SHRUB BEDS SPECIFIED ON THE PLANS ONLY. NO LANDSCAPE FABRIC SHALL BE USED IN WOOD MULCH AREAS. NO PLASTIC WEED BARRIERS SHALL BE SPECIFIED.
31. ABSOLUTELY NO EXPOSED GROUND SHALL BE LEFT SHOWING ANYWHERE ON THE PROJECT AFTER MULCH HAS BEEN INSTALLED.
32. ALL PLANTING AREAS WITH LESS THAN A 4:1 GRADIENT SHALL RECEIVE A LAYER OF MULCH, TYPE AND DEPTH PER PLANS. SUBMIT 1 CUBIC FOOT SAMPLE OF MULCH (ONE SAMPLE PER TYPE) TO LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO INSTALLATION. THE MULCH SHALL BE SPREAD EVENLY THROUGHOUT ALL PLANTING AREAS EXCEPT SLOPES 4:1 OR STEEPER, OR AS OTHERWISE DENOTED ON THE PLAN. ABSOLUTELY NO EXPOSED GROUND SHALL REMAIN IN AREAS TO RECEIVE MULCH AFTER MULCH HAS BEEN INSTALLED.
33. ALL PLANTING AREAS ON SLOPES OVER 4:1 SHALL RECEIVE COCONUT FIBER EROSION CONTROL NETTING FROM ROLLS. NETTING SHALL BE #CT-125, AS MANUFACTURED BY NORTH AMERICAN GREEN (OR EQUAL). INSTALL AND STAKE PER MANUFACTURER'S SPECIFICATIONS. SEE ALSO THE CIVIL ENGINEER'S EROSION CONTROL PLAN.

IRRIGATION CONCEPT

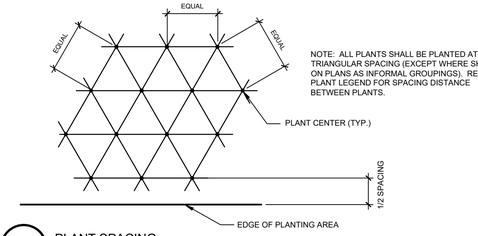
1. AN AUTOMATIC IRRIGATION SYSTEM SHALL BE INSTALLED AND OPERATIONAL BY THE TIME OF FINAL INSPECTION. THE ENTIRE IRRIGATION SYSTEM SHALL BE INSTALLED BY A QUALIFIED IRRIGATION CONTRACTOR.
2. THE IRRIGATION SYSTEM WILL HAVE APPROPRIATE BACKFLOW PREVENTION DEVICES INSTALLED TO PREVENT CONTAMINATION OF THE WATER SOURCE IF APPLICABLE.
3. ALL NON-TURF/SEED PLANTED AREAS WILL BE DRIP IRRIGATED. TURF SOD/SEED SHALL RECEIVE POP-UP SPRAY IRRIGATION FOR HEAD TO HEAD COVERAGE.
4. ALL PLANTS SHARING SIMILAR HYDROZONE CHARACTERISTICS SHALL BE PLACED ON A VALVE DEDICATED TO PROVIDE THE NECESSARY WATER REQUIREMENTS SPECIFIC TO THAT HYDROZONE.
5. THE IRRIGATION SYSTEM SHALL BE DESIGNED AND INSTALLED, TO THE MAXIMUM EXTENT POSSIBLE, TO CONSERVE WATER BY USING THE FOLLOWING DEVICES AND SYSTEMS: MATCHED PRECIPITATION RATE TECHNOLOGY ON ROTOR AND SPRAY HEADS (WHEREVER POSSIBLE), RAIN SENSORS, AND SMART MULTI-PROGRAM COMPUTERIZED IRRIGATION CONTROLLERS FEATURING SENSORY INPUT CAPABILITIES.

UTILITY NOTES

1. THE LANDSCAPE CONTRACTOR IS REQUIRED TO CONTACT SPANISH FORK CITY PUBLIC WORKS DEPARTMENT, AND ANY OTHER PUBLIC OR PRIVATE AGENCY NECESSARY FOR UTILITY LOCATION PRIOR TO ANY CONSTRUCTION.
2. THIS DRAWING IS A PART OF A COMPLETE SET OF BID DOCUMENTS, SPECIFICATIONS, ADDITIONAL DRAWINGS, AND EXHIBITS. UNDER NO CIRCUMSTANCES SHOULD THESE PLANS BE USED FOR CONSTRUCTION PURPOSES WITHOUT EXAMINING ACTUAL LOCATIONS OF UTILITIES ON SITE, AND REVIEWING ALL RELATED DOCUMENTS.
3. THE LOCATION OF THE ALL UNDERGROUND UTILITIES ARE LOCATED ON THE ENGINEERING DRAWINGS FOR THIS PROJECT. THE MOST CURRENT REVISION IS HERE IN MADE PART OF THIS DOCUMENT. UNDERGROUND UTILITIES EXIST THROUGHOUT THIS SITE AND MUST BE LOCATED PRIOR TO ANY CONSTRUCTION ACTIVITY. WHERE UNDERGROUND UTILITIES EXIST, FIELD ADJUSTMENT MAY BE NECESSARY AND MUST BE APPROVED BY A REPRESENTATIVE OF THE OWNER. NEITHER THE OWNER NOR THE LANDSCAPE ARCHITECT ASSUMES ANY RESPONSIBILITY WHATSOEVER, IN RESPECT TO THE CONTRACTORS ACCURACY IN LOCATING THE INDICATED PLANT MATERIAL, AND UNDER NO CIRCUMSTANCES SHOULD THESE PLANS BE USED WITHOUT REFERENCING THE ABOVE MENTIONED DOCUMENTS.

LANDSCAPE GUARANTEE AND MAINTENANCE

1. THE LANDSCAPE CONTRACTOR SHALL GUARANTEE ALL TREES, SHRUBS, PERENNIALS, SOD, SEEDED AREAS, AND IRRIGATION SYSTEMS FOR A PERIOD OF ONE YEAR FROM THE DATE OF THE OWNER'S ACCEPTANCE. THE CONTRACTOR SHALL REPLACE, AT HIS OWN EXPENSE, ANY PLANTS WHICH DIE IN THAT TIME, OR REPAIR ANY PORTIONS OF THE IRRIGATION SYSTEM WHICH OPERATE IMPROPERLY.
2. THE LANDSCAPE CONTRACTOR SHALL MAINTAIN THE LANDSCAPE IN A NEAT, CLEAN, AND HEALTHY CONDITION FOR A PERIOD OF 90 DAYS. THIS SHALL INCLUDE PROPER PRUNING, MOWING AND AERATION OF LAWNS, WEEDING, REPLACEMENT OF MULCH, REMOVAL OF LITTER, AND THE APPROPRIATE WATERING OF ALL PLANTINGS. IRRIGATION SHALL BE MAINTAINED IN PROPER WORKING ORDER, WITH SCHEDULING ADJUSTMENTS BY SEASON AND TO MAXIMIZE WATER CONSERVATION. IF SITE OPENS DURING WINTER, TO AVOID FREEZE DAMAGE ON PLANTINGS, THE 90 DAYS SHOULD BEGIN AFTER ACCEPTANCE OF THE WORK.
3. DURING THE LANDSCAPE MAINTENANCE PERIOD, THE LANDSCAPE CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AWAY FROM STRUCTURES IN ALL LANDSCAPE AREAS AT THE MINIMUM SLOPE SPECIFIED IN THE GEOTECHNICAL REPORT. LANDSCAPE AREAS WHICH SETTLE AND CREATE THE POTENTIAL FOR PONDING SHALL BE REPAIRED TO ELIMINATE PONDING POTENTIAL AND BLEND IN WITH THE SURROUNDING GRADES. SHOULD ANY CONFLICTS AND/OR DISCREPANCIES ARISE BETWEEN THE GEOTECHNICAL REPORT, THE GRADING PLANS, THESE NOTES, AND ACTUAL CONDITIONS, THE CONTRACTOR SHALL IMMEDIATELY BRING SUCH ITEMS TO THE ATTENTION OF THE LANDSCAPE ARCHITECT AND OWNER.



NOTE: ALL PLANTS SHALL BE PLANTED AT EQUAL TRIANGULAR SPACING (EXCEPT WHERE SHOWN ON PLANS AS INFORMAL GROUPINGS). REFER TO PLANT LEGEND FOR SPACING DISTANCE BETWEEN PLANTS.

1 PLANT SPACING
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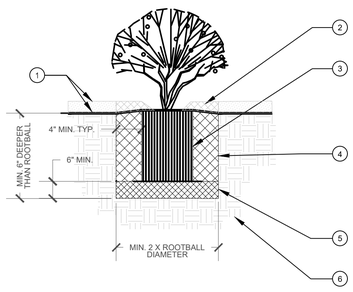
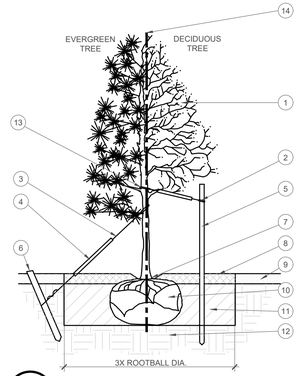


1. FINISH GRADE. SEE PLANTING PLAN FOR GROUND COVER TREATMENT
2. SHREDDED BARK MULCH, 3" MIN. DEPTH, ROUGHLY THE EXTENTS OF ROOTBALL
3. PLANT ROOT BALL. SET TOP ROOTBALL 2" ABOVE ADJECENT GRADE. IN BERMED AREAS SET ROOTBALL 2" ABOVE LOWER ADJECENT GRADE - INSTALL WATER RING (2 - 3" HT.)
4. BACKFILL MIX (PER PLANTING SPECIFICATIONS). AMEND AND FERTILIZE ONLY AS RECOMMENDED IN SOIL FERTILITY ANALYSIS. JET BACKFILL WITH WATER TO ELIMINATE VOIDS.
5. COMPACTED BACKFILL MIX (75%).
6. UNDISTURBED NATIVE SOIL.

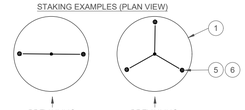
2 SHRUB AND PERENNIAL DETAIL
SCALE: NOT TO SCALE



1. TREE CANOPY.
2. NYLON TREE STRAPS AT ENDS OF WIRES - SECURE TO STAKE OR DEADMEN WITH NAILS.
3. 12 GAUGE GALVANIZED WIRE. SECURE TO TRUNK JUST ABOVE LOWEST MAJOR BRANCHES.
4. 24" X 3/4" P.V.C. MARKERS OVER WIRES.
5. PRESSURE-TREATED WOOD STAKE, 2" DIA. EXTEND STAKES 12" MIN. INTO UNDISTURBED SOIL.
6. PRESSURE-TREATED WOOD DEADMEN, TWO PER TREE (MIN.). BURY OUTSIDE OF PLANTING PIT AND 18" MIN. INTO UNDISTURBED SOIL.
7. TRUNK FLARE.
8. WOOD MULCH TREE RING 3" DIA MIN. TYPE AND DEPTH PER PLANS. DO NOT PLACE MULCH WITHIN 3" OF TRUNK.
9. FINISH GRADE. SEE PLANTING PLAN FOR GROUND COVER TREATMENT
10. ROOT BALL-SEE NOTE 3, THIS DETAIL
11. BACKFILL. AMEND AND FERTILIZE ONLY AS RECOMMENDED IN SOIL FERTILITY ANALYSIS.
12. UNDISTURBED NATIVE SOIL
13. SOFT VELCRO, OR OTHER FABRIC WRAP
14. CENTRAL LEADER, SEE PLANTING NOTES

NOTES:
1. SCARIFY SIDES OF PLANTING PIT PRIOR TO SETTING TREE.
2. REMOVE EXCESS SOIL APPLIED ON TOP OF THE ROOTBALL THAT COVERS THE ROOT FLARE. THE PLANTING HOLE DEPTH SHALL BE SUCH THAT THE ROOTBALL RESTS ON UNDISTURBED SOIL, AND THE ROOT FLARE IS 3"-5" ABOVE FINISH GRADE.
3. CUT OFF BOTTOM 1/3 OF WIRE BASKET BEFORE PLACING TREE IN HOLE. CUT OFF AND REMOVE REMAINDER OF BASKET AFTER TREE IS SET IN HOLE. REMOVE ALL NYLON TIES, TWINE, ROPE, AND OTHER PACKING MATERIAL. REMOVE ALL BURLAP FROM AROUND ROOTBALL.
4. TREE WRAP IS NOT TO BE USED ON ANY NEW PLANTINGS, EXCEPT IN LATE FALL PLANTING SITUATIONS, AND ONLY THEN AFTER CONSULTATION WITH THE LANDSCAPE ARCHITECT. WHEN WRAPPING TREE, WRAP FROM TRUNK FLARE TO LOWEST MAJOR BRANCH.
5. REMOVE ALL NURSERY STAKES AFTER PLANTING.
6. FOR TREES OVER 3" CALIPER, USE THREE STAKES OR DEADMEN (AS APPROPRIATE), SPACED EVENLY AROUND TREE.
7. DO NOT ALLOW AIR POCKETS TO FORM WHEN BACKFILLING.

STAKING EXAMPLES (PLAN VIEW)



3 TREE PLANTING DETAIL
SCALE: NOT TO SCALE

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Galloway

PROJECT NO.	FGA
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QA/QC	JW

MILESTONE HOLDINGS

SITE DEVELOPMENT

LANDSCAPE DETAILS & NOTES
3450 NORTH MAIN STREET

SHEET NO:
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8/23/2022

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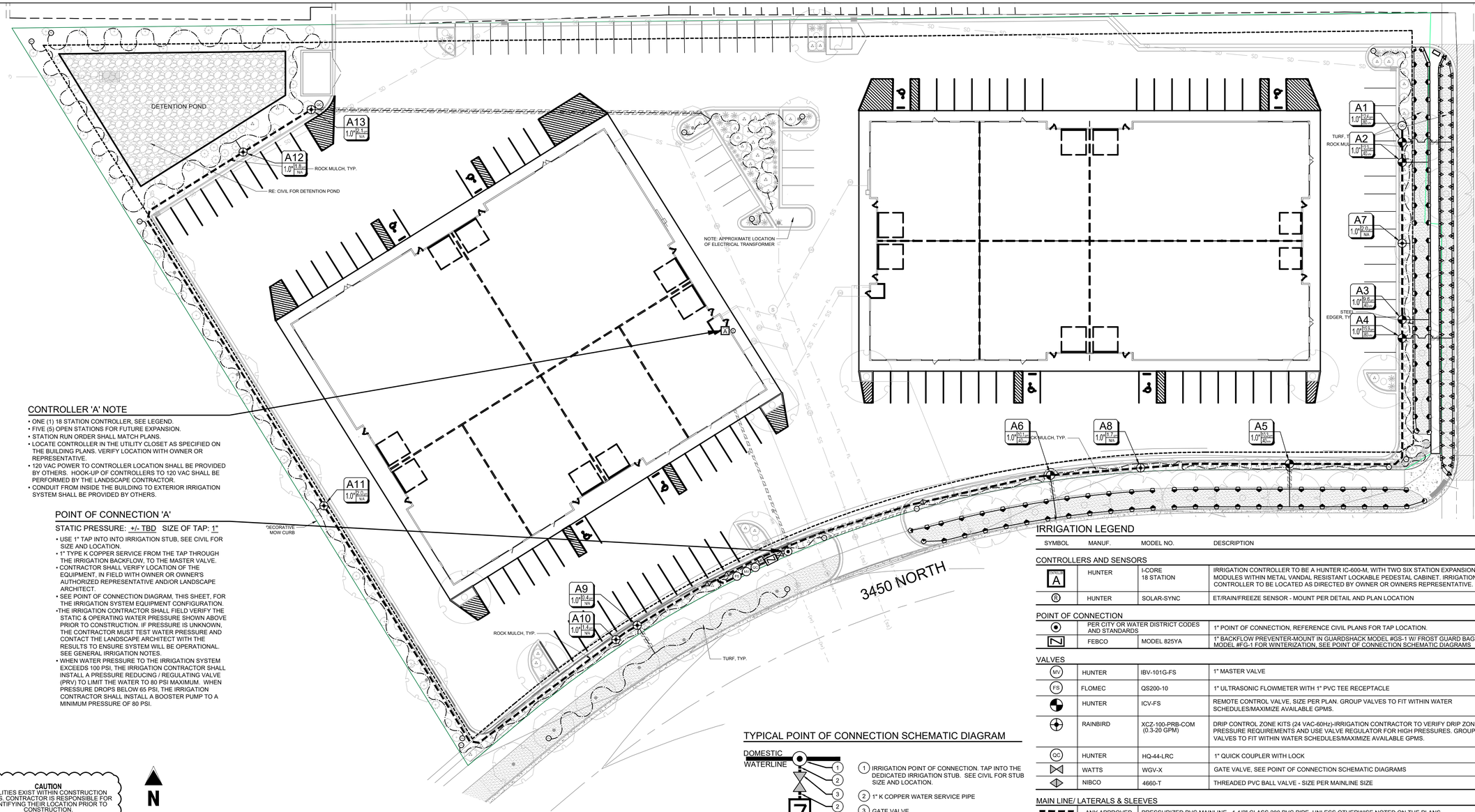


CONTROLLER 'A' NOTE

- ONE (1) 18 STATION CONTROLLER, SEE LEGEND.
- FIVE (5) OPEN STATIONS FOR FUTURE EXPANSION.
- STATION RUN ORDER SHALL MATCH PLANS.
- LOCATE CONTROLLER IN THE UTILITY CLOSET AS SPECIFIED ON THE BUILDING PLANS. VERIFY LOCATION WITH OWNER OR REPRESENTATIVE.
- 120 VAC POWER TO CONTROLLER LOCATION SHALL BE PROVIDED BY OTHERS. HOOK-UP OF CONTROLLERS TO 120 VAC SHALL BE PERFORMED BY THE LANDSCAPE CONTRACTOR.
- CONDUIT FROM INSIDE THE BUILDING TO EXTERIOR IRRIGATION SYSTEM SHALL BE PROVIDED BY OTHERS.

POINT OF CONNECTION 'A'

STATIC PRESSURE: +/- TBD SIZE OF TAP: 1"

- USE 1" TAP INTO INTO IRRIGATION STUB, SEE CIVIL FOR SIZE AND LOCATION.
- 1" TYPE K COPPER SERVICE FROM THE TAP THROUGH THE IRRIGATION BACKFLOW, TO THE MASTER VALVE.
- CONTRACTOR SHALL VERIFY LOCATION OF THE EQUIPMENT, IN FIELD WITH OWNER OR OWNER'S AUTHORIZED REPRESENTATIVE AND/OR LANDSCAPE ARCHITECT.
- SEE POINT OF CONNECTION DIAGRAM, THIS SHEET, FOR THE IRRIGATION SYSTEM EQUIPMENT CONFIGURATION.
- THE IRRIGATION CONTRACTOR SHALL FIELD VERIFY THE STATIC & OPERATING WATER PRESSURE SHOWN ABOVE PRIOR TO CONSTRUCTION. IF PRESSURE IS UNKNOWN, THE CONTRACTOR MUST TEST WATER PRESSURE AND CONTACT THE LANDSCAPE ARCHITECT WITH THE RESULTS TO ENSURE SYSTEM WILL BE OPERATIONAL. SEE GENERAL IRRIGATION NOTES.
- WHEN WATER PRESSURE TO THE IRRIGATION SYSTEM EXCEEDS 100 PSI, THE IRRIGATION CONTRACTOR SHALL INSTALL A PRESSURE REDUCING / REGULATING VALVE (PRV) TO LIMIT THE WATER TO 80 PSI MAXIMUM. WHEN PRESSURE DROPS BELOW 65 PSI, THE IRRIGATION CONTRACTOR SHALL INSTALL A BOOSTER PUMP TO A MINIMUM PRESSURE OF 80 PSI.

CAUTION
UTILITIES EXIST WITHIN CONSTRUCTION LIMITS. CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING THEIR LOCATION PRIOR TO CONSTRUCTION.

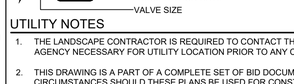
N

0 15 30
SCALE: 1"=30'

IRRIGATION CONTROLLER 'A'

VALVE NUMBER	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12	A13	A14-A18
VALVE SIZE	1.0"	1.0"	1.0"	1.0"	1.0"	1.0"	1.0"	1.0"	1.0"	1.0"	1.0"	1.0"	1.0"	OPEN
G.P.M.	12.4	12.3	9.6	15.9	10.3	10.1	2.0	1.7	0.4	1.4	2.0	1.8	2.1	OPEN
OPERATION PSI	40	40	40	40	40	40	40	40	40	40	40	40	40	OPEN
ZONE TYPE	ROTATOR	ROTATOR	ROTATOR	ROTATOR	ROTATOR	ROTATOR	DRIP	DRIP	DRIP	DRIP	DRIP	DRIP	DRIP	OPEN

VALVE KEY DIAGRAM



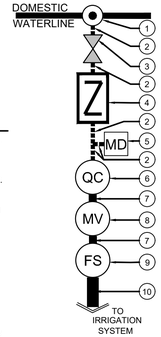
WIRING/SLEEVING NOTES

IN ADDITION TO PROVIDING SLEEVES FOR ALL PIPING UNDER ROADWAYS AND WALKWAYS, PROVIDE AND INSTALL SCH. 40 PVC SLEEVES FOR ALL CONTROLLER WIRES OCCURRING UNDER ALL ROADWAYS AND WALKWAYS. SLEEVES FOR CONTROLLER WIRES SHALL BE 2" DIA. AND CONTAIN NO MORE THAN 25 WIRES.

UTILITY NOTES

1. THE LANDSCAPE CONTRACTOR IS REQUIRED TO CONTACT THE COUNTY PUBLIC WORKS DEPARTMENT, AND ANY OTHER PUBLIC OR PRIVATE AGENCY NECESSARY FOR UTILITY LOCATION PRIOR TO ANY CONSTRUCTION.
2. THIS DRAWING IS A PART OF A COMPLETE SET OF BID DOCUMENTS, SPECIFICATIONS, ADDITIONAL DRAWINGS, AND EXHIBITS. UNDER NO CIRCUMSTANCES SHOULD THESE PLANS BE USED FOR CONSTRUCTION PURPOSES WITHOUT EXAMINING ACTUAL LOCATIONS OF UTILITIES ON SITE, AND REVIEWING ALL RELATED DOCUMENTS.
3. THE LOCATION OF THE ALL UNDERGROUND UTILITIES ARE LOCATED ON THE ENGINEERING DRAWINGS FOR THIS PROJECT. THE MOST CURRENT REVISION IS HERE IN MADE PART OF THIS DOCUMENT. UNDERGROUND UTILITIES EXIST THROUGHOUT THIS SITE AND MUST BE LOCATED PRIOR TO ANY CONSTRUCTION ACTIVITY. WHERE UNDERGROUND UTILITIES EXIST, FIELD ADJUSTMENT MAY BE NECESSARY AND MUST BE APPROVED BY A REPRESENTATIVE OF THE OWNER. NEITHER THE OWNER NOR THE LANDSCAPE ARCHITECT ASSUMES ANY RESPONSIBILITY WHATSOEVER, IN RESPECT TO THE CONTRACTORS ACCURACY IN LOCATING THE INDICATED PLANT MATERIAL, AND UNDER NO CIRCUMSTANCES SHOULD THESE PLANS BE USED WITHOUT REFERENCING THE ABOVE MENTIONED DOCUMENTS.

TYPICAL POINT OF CONNECTION SCHEMATIC DIAGRAM



1. IRRIGATION POINT OF CONNECTION. TAP INTO THE DEDICATED IRRIGATION STUB. SEE CIVIL FOR STUB SIZE AND LOCATION.
2. 1" K COPPER WATER SERVICE PIPE
3. GATE VALVE
4. 1" BACKFLOW DEVICE
5. MANUAL DRAIN VALVE, SEE SHEET IR1.2 DETAIL 15
6. 1" QUICK COUPLER
7. 1" PVC LINE, CLASS 200 PIPE
8. 1" MASTER VALVE
9. 1" FLOW SENSOR
10. 1-1/2" MAINLINE, CLASS 200 PIPE

WINTERIZATION PROCEDURES:
TURN OFF SYSTEM AT THE GATE VALVE DOWNSTREAM OF THE IRRIGATION METER. OPEN ONE CONTROL VALVE TO RELIEVE PRESSURE SLOWLY OPEN BLOW OUT VALVE. REPEAT PROCEDURE FOR ALL BLOW OUT VALVES ALONG IRRIGATION MAINLINE.

IRRIGATION DISCLAIMER

1. IRRIGATION DESIGN IS NOT AN EXACT SCIENCE. IT IS BASED ON THEORIES, ASSUMPTIONS, AND/OR INFORMATION PROVIDED BY CIVIL MODELS/UTILITIES/MUNICIPALITIES ENTITIES AND THUS DIAGRAMMATIC IN NATURE.
2. CONTRACTOR SHALL INSTALL MAINLINES ±12" FROM PAVEMENT EDGE IN PLANTING AREAS. ALL PIPING, VALVES, AND OTHER EQUIPMENT SHOWN WITHIN PAVED AREAS OR OUT OF PROPERTY BOUNDARIES ARE FOR DESIGN CLARIFICATION ONLY, AND SHALL BE INSTALLED IN PLANTING AREAS WITHIN THE PROPERTY LINES OR LIMITS AS INDICATED ON THESE PLANS.
3. THE IRRIGATION CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL ABOVE-GRADE AND VISIBLE IRRIGATION EQUIPMENT (CONTROLLERS, BACKFLOW PREVENTERS, METER PITS, ETC.) WITH THE OWNER'S AUTHORIZED REPRESENTATIVE AND / OR LANDSCAPE ARCHITECT PRIOR TO INSTALLATION. THE INSTALLATION OF THESE ITEMS SHALL BE INTEGRATED WITHIN DESIGNATED LANDSCAPE AREAS. FAILURE TO LOCATE THIS EQUIPMENT IN AN APPROVED LOCATION MAY RESULT IN THE IRRIGATION CONTRACTOR BEING REQUIRED TO MOVE SUCH ITEMS AT HIS OWN COST.
4. THE IRRIGATION SYSTEM DESIGN IS BASED ON THE MINIMUM OPERATING PRESSURE AND THE MAXIMUM FLOW DEMAND SHOWN ON THE DRAWINGS. THE IRRIGATION CONTRACTOR SHALL FIELD VERIFY THE STATIC & OPERATING WATER PRESSURE PRIOR TO CONSTRUCTION OF ANY COMPONENT OF THE IRRIGATION SYSTEM. AFTER FIELD VERIFICATION, THE IRRIGATION CONTRACTOR SHALL NOTIFY THE OWNER, OWNER'S REPRESENTATIVE, LANDSCAPE ARCHITECT, & IRRIGATION DESIGNER OF THE PRESSURE READING FOR THE TAP.
5. ALL PRESSURIZED MAINLINES, VALVES, DRIP, AND ROTOR AND SPRAY HEADS SHALL BE INSTALLED A MINIMUM OF 5' AWAY FROM ANY BUILDING FOUNDATION. ADDITIONAL REQUIREMENTS MAY BE LISTED IN THE GEOTECHNICAL REPORT REGARDING IRRIGATION NEAR BUILDING FOUNDATIONS. CONTRACTOR IS RESPONSIBLE TO ABIDE BY THE 5' MINIMUM DISTANCE AND/OR THE GEOTECHNICAL REPORT REQUIREMENTS. IF THIS EQUIPMENT IS SHOWN WITHIN THE 5' OFFSET ON THESE PLANS, IT IS FOR THE PURPOSE OF GRAPHIC CLARITY ONLY.
6. REFER TO SHEET IR1.2 FOR IRRIGATION NOTES AND IRRIGATION DETAILS.

IRRIGATION LEGEND

SYMBOL	MANUF.	MODEL NO.	DESCRIPTION	REMARKS/DETAIL
CONTROLLERS AND SENSORS				
A (CONTROL)	HUNTER	I-CORE 18 STATION	IRRIGATION CONTROLLER TO BE A HUNTER IC-600-M, WITH TWO SIX STATION EXPANSION MODULES WITHIN METAL VANDAL RESISTANT LOCKABLE PEDESTAL CABINET. IRRIGATION CONTROLLER TO BE LOCATED AS DIRECTED BY OWNER OR OWNERS REPRESENTATIVE.	DETAIL 1 / IR1.2
R	HUNTER	SOLAR-SYNC	ET/RAIN/FREEZE SENSOR - MOUNT PER DETAIL AND PLAN LOCATION	DETAIL 2 / IR1.2
POINT OF CONNECTION				
	PER CITY OR WATER DISTRICT CODES AND STANDARDS		1" POINT OF CONNECTION, REFERENCE CIVIL PLANS FOR TAP LOCATION.	SEE P.O.C. DIAGRAM THIS SHEET
	FEBCO	MODEL 825YA	1" BACKFLOW PREVENTER-MOUNT IN GUARDSHACK MODEL #GS-1 W/ FROST GUARD BAG MODEL #FG-1 FOR WINTERIZATION, SEE POINT OF CONNECTION SCHEMATIC DIAGRAMS	DETAIL 3 / IR1.2
VALVES				
MV	HUNTER	IBV-101G-FS	1" MASTER VALVE	DETAIL 4 / IR1.2
FS	FLOMEC	QS200-10	1" ULTRASONIC FLOWMETER WITH 1" PVC TEE RECEPTACLE	DETAIL 5 / IR1.2
	HUNTER	ICV-FS	REMOTE CONTROL VALVE, SIZE PER PLAN. GROUP VALVES TO FIT WITHIN WATER SCHEDULES/MAXIMIZE AVAILABLE GPMS.	DETAIL 6 / IR1.2
	RAINBIRD	XCZ-100-PRB-COM (0.3-20 GPM)	DRIP CONTROL ZONE KITS (24 VAC-60Hz)-IRRIGATION CONTRACTOR TO VERIFY DRIP ZONES PRESSURE REQUIREMENTS AND USE VALVE REGULATOR FOR HIGH PRESSURES. GROUP VALVES TO FIT WITHIN WATER SCHEDULES/MAXIMIZE AVAILABLE GPMS.	DETAIL 7 / IR1.2
QC	HUNTER	HQ-44-LRC	1" QUICK COUPLER WITH LOCK	DETAIL 8 / IR1.2
	WATTS	WGV-X	GATE VALVE, SEE POINT OF CONNECTION SCHEMATIC DIAGRAMS	DETAIL 9 / IR1.2
	NIBCO	4660-T	THREADED PVC BALL VALVE - SIZE PER MAINLINE SIZE	DETAIL 10 / IR1.2
MAIN LINE/ LATERALS & SLEEVES				
	ANY APPROVED		PRESSURIZED PVC MAINLINE - 1-1/2" CLASS 200 PVC PIPE UNLESS OTHERWISE NOTED ON THE PLANS	DETAIL 11 / IR1.2
	ANY APPROVED		LATERAL LINE - USE CLASS 200 PVC, SIZE 1"-INCH SIZE UNLESS OTHERWISE NOTED ON THE PLANTS. INSTALL ANTI-FREEZE DRAINS AT LOW POINTS	DETAIL 11 / IR1.2
	ANY APPROVED		IRRIGATION SLEEVE - SCHEDULE 40 PVC TWICE THE SIZE OF THE PIPE TO BE INSERTED, ONE SLEEVE PER PIPE	DETAIL 11 / IR1.2
	ANY APPROVED		CONTROL WIRING SLEEVE - 2" SCHEDULE 40 PVC PIPE (SEE WIRING/SPLICING/SLEEVE NOTE, THIS SHEET)	DETAIL 11 / IR1.2
DRIP SYSTEM				
POINT SOURCE EMITTERS	RAINBIRD	FOR LANDSCAPE BED AREAS - XBS-XXX	XERI BLACK STRIPE POLY TUBING (OR APPROVED EQUAL), CONNECTION TO PVC LATERAL PER CONTRACTOR. ATTACH TREE & SHRUB DRIP EMITTERS PER THE EMITTER SCHEDULE BELOW. USE 3/4-INCH POLY TUBING SIZE UNLESS OTHERWISE NOTED. FLOWS IN GPM FOR LINE CHANGES SHALL BE: (3/4"-1 TO 7 GPM), (1-1/2"-15 TO 35 GPM). INSTALL SEVERAL INLINE CHECK VALVES IN ZONES W/ LARGE ELEVATION DIFFERENCES. GROUP DRIP CONTROLLER VALVES TOGETHER TO MAXIMIZE WATER WINDOWS.	DETAIL 12 / IR1.2
FV	NIBCO	4660-S	MANUAL DRIPLINE FLUSH VALVE	DETAIL 13 / IR1.2
	PROVIDE THE FOLLOWING DRIP EMITTERS FOR EACH PLANT:		PLANTS, 1 GALLON AND SMALLER: 1, XB-10PC - (1 GPH) EMITTER PER PLANT PLANTS, 5 GALLON: 2, XB-10PC - (2 GPH) EMITTERS PER PLANT UPRIGHT JUNIPERS, 10-15 GALLON: 3, XB-10PC - (3 GPH) EMITTERS PER TREE TREES, 1" TO 2-1/2" CALIPER: 4, XB-10PC - (4 GPH) EMITTERS PER TREE TREES, 3" TO 4" CALIPER: 7, XB-10PC - (7 GPH) EMITTERS PER TREE	– – –

ROTORS & SPRAY HEADS

				NOZZLE	RADIUS	G.P.M.	P.S.I.	
	HUNTER	PROS-06-PRS40-CV/MP800SR-90 (TURF) PROS-12-PRS40-CV/MP800SR-90 (SEED)	MP ROTATOR-QUARTER	ORANGE	6'-12'	0.23	40	DETAIL 14 / IR1.2
	HUNTER	PROS-06-PRS40-CV/MP800SR-90 (TURF) PROS-12-PRS40-CV/MP800SR-90 (SEED)	MP ROTATOR-HALF	ORANGE	6'-12'	0.42	40	DETAIL 14 / IR1.2
	HUNTER	PROS-06-PRS40-CV/MP800SR-360 (TURF) PROS-12-PRS40-CV/MP800SR-360 (SEED)	MP ROTATOR-FULL	LIME	6'-12'	0.78	40	DETAIL 14 / IR1.2
	HUNTER	PROS-06-PRS40-CV/MP1000-90 (TURF) PROS-12-PRS40-CV/MP1000-90 (SEED)	MP ROTATOR-QUARTER	MAROON	8'-13'	0.16	40	DETAIL 14 / IR1.2
	HUNTER	PROS-06-PRS40-CV/MP1000-90 (TURF) PROS-12-PRS40-CV/MP1000-90 (SEED)	MP ROTATOR-HALF	MAROON	8'-13'	0.32	40	DETAIL 14 / IR1.2
	HUNTER	PROS-06-PRS40-CV/MP1000-360 (TURF) PROS-12-PRS40-CV/MP1000-360 (SEED)	MP ROTATOR-FULL	OLIVE	8'-13'	0.65	40	DETAIL 14 / IR1.2

SPRAY NOTES:
1. CONTRACTOR SHALL USE RADIUS REDUCTION SCREWS ON MP ROTATORS AS NECESSARY TO ACHIEVE APPROPRIATE RADII COVERAGE.

NO.	REVISIONS	BY	DATE

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Galloway

PROJECT NO.	FGA
DRAWN	EDN
DESIGNED	EDN
APPROVED	
QA/QC	TDN

MILESTONE HOLDINGS

SITE DEVELOPMENT

IRRIGATION PLAN
3450 NORTH MAIN STREET

SHEET NO:
IR1.1

DATE:
8/23/2022

PAGE NO:

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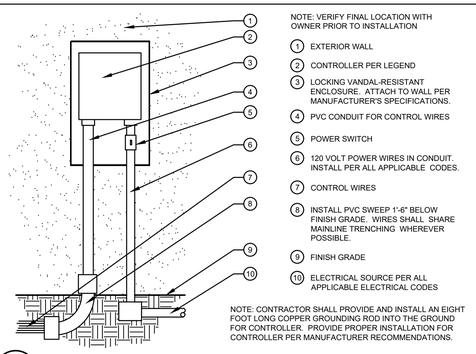
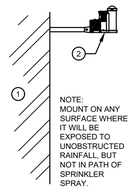


NOTE: VERIFY FINAL LOCATION WITH OWNER PRIOR TO INSTALLATION

1. EXTERIOR WALL
2. CONTROLLER PER LEGEND
3. LOCKING VANDAL-RESISTANT ENCLOSURE. ATTACH TO WALL PER MANUFACTURER'S SPECIFICATIONS.
4. PVC CONDUIT FOR CONTROL WIRES
5. POWER SWITCH
6. 120 VOLT POWER WIRES IN CONDUIT. INSTALL PER ALL APPLICABLE CODES.
7. CONTROL WIRES
8. INSTALL PVC SWEEP 1'-6" BELOW FINISH GRADE. WIRES SHALL SHARE MAINLINE TRENCHING WHEREVER POSSIBLE.
9. FINISH GRADE
10. ELECTRICAL SOURCE PER ALL APPLICABLE ELECTRICAL CODES

NOTE: CONTRACTOR SHALL PROVIDE AND INSTALL AN EIGHT FOOT LONG COPPER GROUNDING ROD INTO THE GROUND FOR CONTROLLER. PROVIDE PROPER INSTALLATION FOR CONTROLLER PER MANUFACTURER RECOMMENDATIONS.

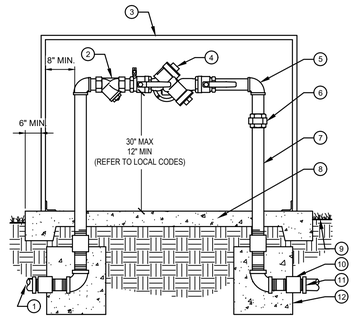
1 WALL MOUNT CONTROLLER
SCALE: NOT TO SCALE



NOTE:
MOUNT ON ANY SURFACE WHERE IT WILL BE EXPOSED TO UNOBSTRUCTED RAINFALL, BUT NOT IN PATH OF SPRINKLER SPRAY.

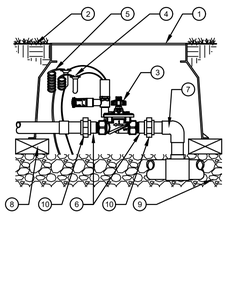
1. EXTERIOR WALL OR POLL
2. RAIN SENSOR

2 WEATHER SENSOR
SCALE: NOT TO SCALE



1. TO POINT OF CONNECTION- ADAPT AS NECESSARY ALL WORK SHALL CONFORM TO ALL APPLICABLE CODES
2. BRASS WYE STRAINER W/60 MESH SCREEN
3. ENCLOSURE PER IRRIGATION LEGEND
4. BACKFLOW PREVENTER UNIT
5. BRASS 90 DEGREE ELLS (TYP.)
6. BRASS UNION (TYPICAL)
7. BRASS NIPPLES (TYPICAL)
8. 4" CONCRETE PAD - SLOPE TO DRAIN AWAY FROM BACKFLOW PREVENTER
9. FINISH GRADE 2" BELOW PAD
10. BRASS COUPLING
11. PIPE ADAPTER AND MAINLINE PIPE
12. 12"X12"X12" THRUST BLOCKS

3 BACKFLOW PREVENTER, REDUCED PRESSURE
SCALE: NOT TO SCALE

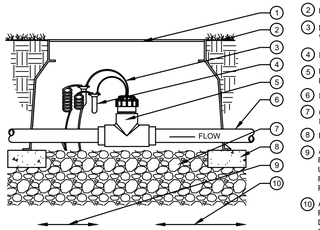


1. STANDARD VALVE BOX EQUIPMENT TYPE BRAND ONTO BOX LID
2. FINISH GRADE
3. REMOTE CONTROL VALVE WITH FILTER SENTRY (FS')
4. WATERPROOF CONNECTORS (2)
5. 18-24" COILED WIRE
6. SCH 80 T.O.E. NIPPLE
7. MAIN LINE PIPE & FITTINGS
8. BRICK SUPPORTS (4)
9. 3/4" MINUS WASHED GRAVEL
10. PVC SLIP UNIONS
11. KBI-LT PVC SCH 80 BALL VALVE SLIP X SLIP

4 MASTER VALVE
SCALE: NOT TO SCALE

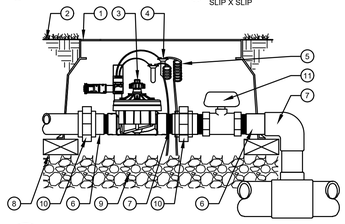
GENERAL IRRIGATION NOTES

1. IRRIGATION DESIGN IS NOT AN EXACT SCIENCE. IT IS BASED ON THEORIES, ASSUMPTIONS, AND/OR INFORMATION PROVIDED BY CIVIL MODELS/UTILITIES/MUNICIPAL ENTITIES AND THUS, IS DIAGRAMMATIC IN NATURE. ALL PIPING, VALVES, AND OTHER EQUIPMENT SHOWN WITHIN PAVED AREAS OR OUT OF PROPERTY BOUNDARIES ARE FOR GRAPHIC CLARIFICATION ONLY, AND SHALL BE INSTALLED IN PLANTING AREAS WITHIN THE PROPERTY LINES OR LIMITS INDICATED ON PLAN. THE IRRIGATION CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL ABOVE-GRADE IRRIGATION EQUIPMENT WITH THE OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO INSTALLATION, OR IRRIGATION CONTRACTOR MAY BE REQUIRED TO MOVE SUCH ITEMS AT HIS OWN COST.
2. REFER TO SPECIFICATIONS (AS APPROPRIATE) FOR SUBMITTALS, INSPECTIONS AND OTHER APPLICABLE INFORMATION. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING A COPY OF THE PROJECT SPECIFICATIONS PRIOR TO BIDDING. THE PROJECT SPECIFICATIONS ARE A PART OF THESE PLANS AND SHALL BE CONSULTED BY THE IRRIGATION CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR IMPLEMENTING WORK AS SPECIFIED IN THE PROJECT SPECIFICATIONS AND ON THE PLANS.
3. THE IRRIGATION CONTRACTOR SHALL MEET WITH THE OWNER'S REPRESENTATIVE PRIOR TO COMMENCEMENT OF WORK, AND SHALL OBTAIN ALL ENGINEERING, LANDSCAPE, AND OTHER APPLICABLE PLANS & DOCUMENTS. CONTRACTOR SHALL THOROUGHLY REVIEW PLANS & REPORT ANY CONFLICTS OR DISCREPANCIES TO OWNER'S REPRESENTATIVE IMMEDIATELY.
4. CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS, EQUIPMENT QUANTITIES, AND UTILITY LOCATIONS PRIOR TO BEGINNING WORK. DO NOT INSTALL THE IRRIGATION SYSTEM AS SHOWN ON THE DRAWINGS WHEN IT IS OBVIOUS IN THE FIELD THAT OBSTRUCTIONS, GRADE DIFFERENCES, OR DIFFERENCES IN THE AREA DIMENSIONS EXIST THAT MIGHT NOT HAVE EXISTED AT THE TIME OF THE IRRIGATION DESIGN PREPARATION. SUCH OBSTRUCTIONS OR DIFFERENCES SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER'S AUTHORIZED REPRESENTATIVE AND LANDSCAPE ARCHITECT. IN THE EVENT THIS NOTIFICATION IS NOT GIVEN, THE IRRIGATION CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY REVISIONS NECESSARY TO BRING THE SYSTEM TO A PROPER WORKING CONDITION, AND TO THE OWNER'S SATISFACTION.
5. IT IS THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR TO FAMILIARIZE HIMSELF WITH ALL GRADE DIFFERENCES, LOCATIONS OF WALLS, RETAINING WALLS, ETC. THE IRRIGATION CONTRACTOR SHALL COORDINATE HIS WORK WITH THE GENERAL CONTRACTOR AND OTHER SUBCONTRACTORS FOR THE LOCATION AND INSTALLATION OF PIPE SLEEVES THROUGH WALL, UNDER ROADWAY PAVING, ETC.
6. THE CONTRACTOR SHALL MAKE NO SUBSTITUTIONS, DELETIONS, OR ADDITIONS TO THIS PLAN WITHOUT APPROVAL OF THE LANDSCAPE ARCHITECT.
7. SEE CIVIL ENGINEER'S DRAWINGS FOR IRRIGATION POINT OF CONNECTION (TAP) AND DOMESTIC WATER SUPPLY.
8. ALL CONSTRUCTION SHALL CONFORM TO CITY, COUNTY, STATE, AND FEDERAL REQUIREMENTS. IT SHALL BE THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR TO ENSURE THAT ALL IRRIGATION EQUIPMENT MEETS GOVERNMENT REGULATIONS. CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR OBTAINING ANY NECESSARY PERMITS OR APPROVALS
9. THE IRRIGATION SYSTEM DESIGN IS BASED ON THE MINIMUM OPERATING PRESSURE AND THE MAXIMUM FLOW DEMAND SHOWN ON THE POINT OF CONNECTION NOTE TAG(S) ON THE DRAWINGS. THE IRRIGATION CONTRACTOR SHALL FIELD VERIFY THE STATIC & OPERATING WATER PRESSURE PRIOR TO CONSTRUCTION, AND SHALL REPORT ANY DIFFERENCES BETWEEN THE WATER PRESSURE INDICATED ON THE DRAWINGS AND THE ACTUAL PRESSURE READING AT THE IRRIGATION POINT OF CONNECTION TO THE OWNER'S AUTHORIZED REPRESENTATIVE AND LANDSCAPE ARCHITECT. IN THE EVENT PRESSURE DIFFERENCES ARE NOT REPORTED OR PRESSURES HAVE GREATLY CHANGED PRIOR TO THE START OF THE IRRIGATION SYSTEM CONSTRUCTION, THE IRRIGATION CONTRACTOR SHALL BE RESPONSIBLE FOR RECOMMENDING A SOLUTION AND PROVIDING AN ADD ALTERNATE BID FOR IRRIGATION COSTS.
10. CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT IF AVAILABLE WATER PRESSURE EXCEEDS 5 PSI HIGHER OR LOWER THAN AVAILABLE WATER PRESSURE.
11. NO MORE THAN 90% OF AVAILABLE MINIMUM STATIC WATER PRESSURE WAS USED IN PREPARATION OF THESE PLANS, FURTHERMORE, THE MAXIMUM FLOW THROUGH THE METER SHOULD NOT EXCEED 75% OF THE MAXIMUM SAFE FLOW.
12. SUPPLY LINE AND METER TO BE PROVIDED BY GENERAL CONTRACTOR. BACKFLOW PREVENTER TO BE PROVIDED BY IRRIGATION CONTRACTOR. IRRIGATION CONTRACTOR'S POINT OF CONNECTION TO BEGIN AFTER THE IRRIGATION WATER METER.
13. INSTALL ALL MATERIALS AND EQUIPMENT AS SHOWN ON THE PLANS AND DETAILS. NO SUBSTITUTIONS OF EQUIPMENT WILL BE ACCEPTABLE WITHOUT PRIOR WRITTEN APPROVAL BY THE LANDSCAPE ARCHITECT OR THE OWNERS REPRESENTATIVE. THE IRRIGATION CONTRACTOR MAY BE REQUIRED TO REMOVE AND REPLACE ALL UNAPPROVED SUBSTITUTED EQUIPMENT AT HIS OWN COST IF SO DIRECTED BY THE OWNER.
14. WHEN INSTALLING IRRIGATION PIPE AND EQUIPMENT NEXT TO HARDSCAPE (SUCH AS WALLS, CURBS, OR WALKS), PLACE PIPE AS CLOSE AS POSSIBLE TO HARDSCAPE TO AVOID CONFLICTS WITH PLANTING. REFER TO MAINLINE TRENCHING DETAILS FOR ADDITIONAL INFORMATION.
15. THE IRRIGATION CONTRACTOR SHALL COORDINATE 120 V.A.C. ELECTRICAL POWER TO CONTROLLERS AND DEDICATE ONE (1) 20-AMP BREAKER FOR EACH CONTROLLER. IT SHALL BE THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR TO MAKE THE FINAL HOOK-UP FROM THE ELECTRICAL SOURCE TO THE CONTROLLER UNIT ONLY.
16. THE RAIN SENSOR SHALL BE LOCATED NEAR THE IRRIGATION CONTROLLER, AND SHALL BE MOUNTED AS SHOWN ON THE DETAIL AND/OR LEGEND. LOCATE SENSOR AWAY FROM TALL TREES, SHRUBS, AND OTHER POTENTIAL OBSTRUCTIONS.
17. ALL VALVE CONTROL WIRE SHALL BE AWG 14 TYPE UF, 600 VOLT TEST, DIRECT BURIAL. NO SPLICES SHALL BE ALLOWED EXCEPT AT VALVES AND CONTROLLER. WHERE SPLICES MAY BE NECESSARY DUE TO EXCESSIVELY LONG WIRE RUNS, THE CONTRACTOR SHALL MAKE ALL SPLICES IN 6" ROUND VALVE BOXES WITH 3M'S "DBY-DIRECT BURIAL SPLICE KIT". THE CONTRACTOR SHALL LABEL ALL WIRES WITH WATERPROOF TAGS AND MARKERS AT ALL SPLICES AND VALVE MANIFOLDS, AND SHALL LEAVE A 24" COIL OF EXCESS WIRE AT EACH CONNECTION.
18. CONTRACTOR SHALL PROVIDE #10 COMMON WIRE, DIRECT BURIAL, TO ALL REMOTE CONTROL VALVES.
19. CONNECT ALL DIRECT BURIAL WIRES TO VALVES USING 3M'S "DBY-DIRECT BURIAL SPLICE KIT" (UNLESS OTHERWISE SPECIFIED).
20. PROVIDE ADDITIONAL IRRIGATION CONTROL WIRES TO THE AMOUNT OF OPEN ZONES ON THE CONTROLLER ALONG EACH BRANCH OF MAINLINE FOR FUTURE EXPANSION. STUB ADDITIONAL CONTROL WIRES INTO BACK OF IRRIGATION CONTROLLERS.
21. THE IRRIGATION CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING ALL CONTROL WIRE SLEEVES AND PIPE SLEEVES UNDER PAVED AREAS PRIOR TO PAVING. ELECTRICAL WIRES FOR IRRIGATION VALVES AND IRRIGATION LINES ARE TO BE PLACED IN SEPARATE SLEEVES. ALL SLEEVING SHALL BE PVC SCHEDULE 40 PIPE. SLEEVES FOR MAINLINE AND LATERAL LINES SHALL BE A MINIMUM TWICE THE DIAMETER OF THE ENCLOSED PIPE; SLEEVES FOR CONTROL WIRES SHALL BE AS PER THE SLEEVING / WIRING NOTE AND THE WIRING SLEEVE LEGEND ITEM AS SHOWN ON THESE DRAWINGS.
22. TRENCH BACKFILL MATERIAL SHALL BE FREE OF ROCKS, GLASS, AND OTHER EXTRANEOUS MATERIALS LARGER THAN 1" IN DIAMETER. BACKFILL SHALL BE COMPACTED TO 90% MAXIMUM DRY DENSITY.
23. WHERE VALVES ARE LOCATED IN CLOSE PROXIMITY TO EACH OTHER, CLUSTER VALVES INTO MANIFOLDS. INSTALL NO MORE THAN ONE VALVE PER VALVE BOX.
24. MANUAL DRAIN VALVE. FOR FREEZE PROTECTION, ARE TO BE LOCATED AT ALL LOW POINTS OF IRRIGATION LATERAL LINES. WHERE THE LOW POINT IS AT THE END OF THE LINE, LOCATE DRAIN VALVE A MINIMUM OF 12" DOWNSTREAM FROM THE LAST SPRINKLER HEAD. SEE DETAIL FOR VALVE ORIENTATION.
25. USE TEFLON TAPE ON ALL PVC MALE PIPE THREADS ON ALL SWING JOINT AND VALVE ASSEMBLIES.
26. ALL IRRIGATION HEADS, INCLUDING FIXED-SPRAY AND DRIP DEVICES, SHALL BE SET PERPENDICULAR TO THE FINISH GRADE OF THE AREA TO BE IRRIGATED.
27. ALL PRESSURIZED MAINLINES, VALVES, DRIP, AND ROTOR AND SPRAY HEADS SHALL BE INSTALLED A MINIMUM OF 3' AWAY FROM ANY BUILDING FOUNDATION. IF THIS EQUIPMENT IS SHOWN WITHIN THE 3' OFFSET ON THESE PLANS, IT IS FOR THE PURPOSE OF GRAPHIC CLARITY ONLY.
28. EXCEPT WHERE SPECIFICALLY NOTED OTHERWISE, IT IS THE INTENT OF THE IRRIGATION DESIGN TO INDICATE ALL SPRAY HEADS AS "POP-UPS". IN THE EVENT THAT POP-UP HEADS HAVE NOT BEEN SPECIFIED IN TURF AREAS, IT SHALL BE THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR TO BRING THIS TO THE ATTENTION OF THE LANDSCAPE ARCHITECT PRIOR TO BIDDING AND CONSTRUCTION.
29. ALL SPRAY AND ROTOR HEAD LOCATIONS SHALL BE STAKED, FLAGGED AND/OR OTHERWISE CLEARLY MARKED ON THE GROUND PRIOR TO INSTALLATION. SPRINKLER HEAD STAKING SHALL BE INSPECTED AND APPROVED BY THE OWNER'S REPRESENTATIVE OR THE LANDSCAPE ARCHITECT BEFORE INSTALLATION. STAKED LOCATIONS SHALL BE SPACED TO PROVIDE HEAD-TO-HEAD COVERAGE. RECOMMENDED SETBACK DISTANCE OF ALL PROPOSED IRRIGATION HEADS IS 12" FROM BACK OF CURB AND EDGE OF PAVEMENT.
30. FLUSH AND ADJUST ALL SPRINKLER HEADS FOR OPTIMUM PERFORMANCE AND TO PREVENT OVERSPRAY ONTO WALKS, ROADWAYS, AND/OR BUILDINGS AS MUCH AS POSSIBLE. THIS SHALL INCLUDE SELECTING THE BEST NOZZLE ARC AND RADIUS TO FIT THE EXISTING SITE CONDITIONS.
31. ALL POP-UP TYPE SPRINKLER HEADS INSTALLED IN TURF AREAS SHALL BE INSTALLED SO THE TOP OF THE SPRINKLER HEAD IS FLUSH WITH THE ADJACENT SIDEWALK, OR PAVING. ALL POP-UP HEADS AWAY FROM HARDSCAPE EDGES IN TURF SHALL BE 1" ABOVE THE FINISH GRADE TO PREVENT CONTACT WITH MOWERS.
32. EXISTING TREES TO REMAIN ARE TO BE PROTECTED FROM DAMAGE. DO NOT TRENCH OR EXCAVATE WITHIN THE CRITICAL ROOT ZONE OF ANY TREE.
33. ALL PLANT MATERIAL IN TREE HOLDING AREAS SHALL BE MANUALLY WATERED/IRRIGATED TO KEEP MOIST UNTIL PLANTED.
34. UPON COMPLETION OF INSTALLATION OF IRRIGATION SYSTEM, IRRIGATION CONTRACTOR SHALL PROVIDE THE FOLLOWING:
    A. ACCURATE AND COMPLETE "AS BUILT" PLANS OF IRRIGATION SYSTEM INCLUDING 8-1/2" X 11" ZONE MAP TO BE PLACED INSIDE EACH CONTROLLER BOX.
    B. LOG ON ALL WATER WINDOWS, RUN SCHEDULE TIMES, AND OTHER CHANGES AND/OR MODIFICATIONS TO THE IRRIGATION SYSTEM SINCE INSTALLATION.
    C. ONE HOUR OF TRAINING TO OWNER ON IRRIGATION SYSTEM AND CONTROLLER OPERATION.
    D. THREE OF EACH TYPE OF HEAD AND EMITTER INSTALLED.
    E. ONE OF EACH TYPE OF VALVE INSTALLED.
    F. REVIEW WINTERIZATION PROCEDURES FOR IRRIGATION SYSTEM WITH OWNERS REPRESENTATIVE.
35. PRIOR TO ACCEPTANCE OF IRRIGATION SYSTEM AT THE END OF THE MAINTENANCE PERIOD, THE IRRIGATION CONTRACTOR SHALL PROVIDE THE FOLLOWING: CURRENT SCHEDULE RUN TIME AND WATER WINDOW LOG, ALONG WITH NOTING ANY OTHER PERTINENT INFORMATION.
36. UNLESS OTHERWISE SPECIFIED, THE IRRIGATION CONTRACTOR SHALL REPAIR OR REPLACE ANYTHING DAMAGED BY HIS WORK AT NO ADDITIONAL COST TO THE OWNER.
37. CONTRACTOR SHALL INSTALL MAINLINES ±12" FROM PAVEMENT EDGE IN PLANTING AREAS. ALL PIPING, VALVES, AND OTHER EQUIPMENT SHOWN WITHIN PAVED AREAS OR OUT OF PROPERTY BOUNDARIES ARE FOR DESIGN CLARIFICATION ONLY, AND SHALL BE INSTALLED IN PLANTING AREAS WITHIN THE PROPERTY LINES OR LIMITS AS INDICATED ON THESE PLANS.
38. IN THE EVENT OF A DISCREPANCY BETWEEN THE PLAN AND SPECIFICATIONS, THE PLAN SHALL TAKE PRECEDENCE.
39. THE IRRIGATION SYSTEM SHALL BE INSTALLED BY A QUALIFIED IRRIGATION CONTRACTOR.



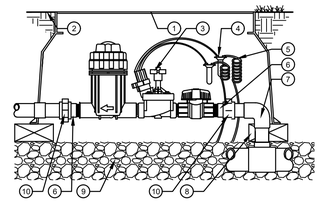
1. 10" DIA ROUND VALVE BOX, BRAND EQUIPMENT TYPE ONTO LID
2. FINISH GRADE
3. MIN. 18/2 WIRE TO CONTROLLER. MAX WIRE DISTANCE RUN OF 1,000'
4. DBRY-6 WIRE CONNECTORS (2)
5. FLOW SENSOR AS REFERENCED IN IRRIGATION LEGEND
6. PVC MAINLINE PIPE
7. 6" MINIMUM LAYER OF 3/4" MINUS WASHED GRAVEL
8. BRICK SUPPORTS (3)
9. ALLOW MINIMUM DISTANCE OF 10X FLOW SENSOR SIZE FROM NEAREST UPSTREAM VALVE, FITTING, OR REDUCING COUPLER FROM EDGE OF FLOW SENSOR
10. ALLOW MINIMUM DISTANCE OF 5X FLOW SENSOR SIZE FROM NEAREST DOWNSTREAM VALVE, FITTING OR REDUCING COUPLER FROM EDGE OF FLOW SENSOR

5 FLOW SENSOR
SCALE: NOT TO SCALE



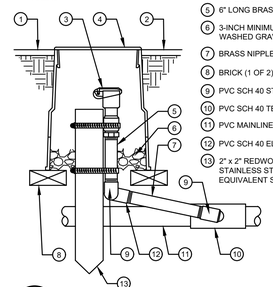
1. STANDARD VALVE BOX EQUIPMENT TYPE BRAND ONTO BOX LID
2. FINISH GRADE
3. REMOTE CONTROL VALVE WITH FILTER SENTRY (FS')
4. WATERPROOF CONNECTORS (2)
5. 18-24" COILED WIRE
6. SCH 80 T.O.E. NIPPLE
7. MAIN LINE PIPE & FITTINGS
8. BRICK SUPPORTS (4)
9. 3/4" MINUS WASHED GRAVEL
10. PVC SLIP UNIONS
11. KBI-LT PVC SCH 80 BALL VALVE SLIP X SLIP

6 REMOTE CONTROL VALVE
SCALE: NOT TO SCALE



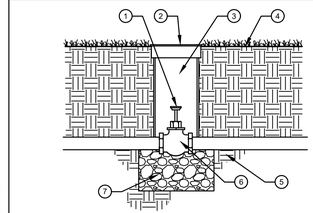
1. STANDARD VALVE BOX, BRAND EQUIPMENT TYPE AND ZONE NUMBER ONTO LID
2. FINISH GRADE
3. DRIP ZONE KIT PER PLAN
4. WATERPROOF CONNECTORS (2)
5. 18-24" COILED WIRE
6. SCH 80 T.O.E. NIPPLE
7. MAIN LINE PIPE & FITTINGS
8. BRICK SUPPORTS (4)
9. 6" MINIMUM LAYER OF 3/4" MINUS WASHED GRAVEL
10. PVC SLIP UNIONS

7 REMOTE DRIP CONTROL VALVE
SCALE: NOT TO SCALE



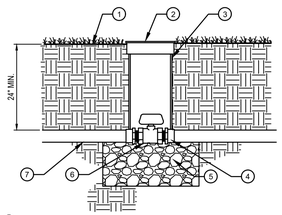
1. TOP OF MULCH
2. FINISHED GRADE-1" BELOW TOP OF BOX IN TURF AREAS, 2" IN SHRUB AREAS
3. QUICK-COUPLING VALVE
4. 10" ROUND PLASTIC VALVE BOX BY CARSON (OR EQUAL) EQUIPMENT TYPE BRAND ONTO BOX LID
5. 6" LONG BRASS NIPPLE
6. 3-INCH MINIMUM DEPTH OF 3/4-INCH WASHED GRAVEL
7. BRASS NIPPLE (LENGTH AS REQUIRED)
8. BRICK (1 OF 2)
9. PVC SCH 40 STREET ELL
10. PVC SCH 40 TEE OR ELL
11. PVC MAINLINE PIPE
12. PVC SCH 40 ELL
13. 2" x 2" REDWOOD STAKE WITH STAINLESS STEEL GEAR CLAMPS OR EQUIVALENT SUPPORT SYSTEM

8 QUICK COUPLER
SCALE: NOT TO SCALE



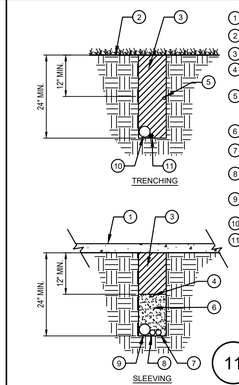
1. KEY HEAD PER HEAD
2. 9" ROUND VALVE BOX-EQUIPMENT TYPE BRAND ONTO BOX LID
3. 4" PVC SLEEVE
4. FINISH GRADE AT 1" BELOW TOP OF BOX IN TURF AREAS: 2" BELOW TOP OF BOX IN SHRUB/GROUNDCOVER AREAS
5. IRRIGATION MAINLINE
6. GATE VALVE (SIZED PER MAINLINE)
7. 1' DIA. x 12-INCH MINIMUM DEPTH OF ¾-INCH CRUSHED ROCK

9 GATE STOP VALVE
SCALE: NOT TO SCALE



1. FINISH GRADE AT 1" BELOW TOP OF BOX IN TURF AREAS: 2" BELOW TOP OF BOX IN SHRUB/GROUNDCOVER AREAS
2. 9" ROUND VALVE BOX WITH LOCKABLE LID-EQUIPMENT TYPE BRAND ONTO BOX LID
3. EXTENSION SECTION AS NECESSARY TO MEET GRADE
4. PVC MALE ADAPTER
5. ¾-INCH MINIMUM DEPTH OF ¾-INCH WASHED GRAVEL
6. PLASTIC BALL VALVE (SIZED PER MAINLINE)
7. IRRIGATION MAINLINE

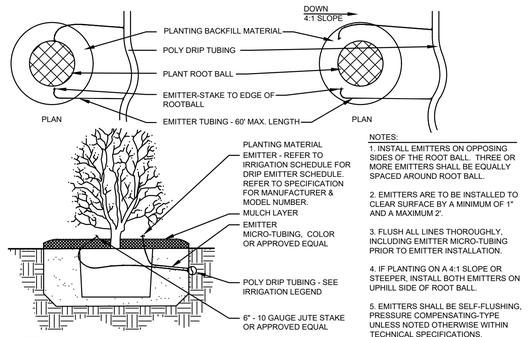
10 PLASTIC BALL VALVE
SCALE: NOT TO SCALE



1. PAVEMENT SURFACE
2. FINISH GRADE
3. TRENCH BACKFILL
4. LOCATOR WIRE W/BURIED CAUTION TAPE
5. PVC IRRIGATION LATERAL - BURIED MIN. 12" BELOW GRADE
6. SAND BACKFILL
7. PVC LATERAL SLEEVE SEE PLANS FOR SIZE
8. 2" MIN. PVC WIRE SLEEVE FOR CONTROL WIRES
9. PVC MAINLINE SLEEVE SEE PLANS FOR SIZE
10. PVC IRRIGATION MAINLINE
11. CONTROL WIRES - TAPE TO MAINLINE AT 10' INTERVALS

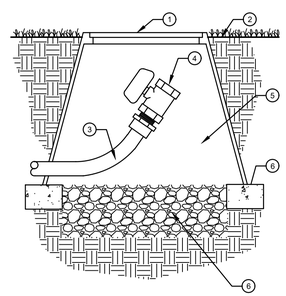
NOTE:
EXTEND SLEEVES INTO LANDSCAPE AREAS 12" BEYOND EDGE OF HARDSCAPE

11 PIPE AND SLEEVE INSTALLATION
SCALE: NOT TO SCALE



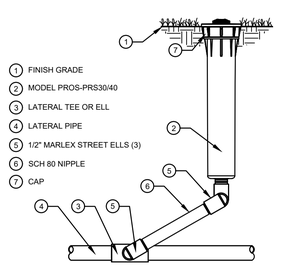
NOTES:
1. INSTALL EMITTERS ON OPPOSING SIDES OF THE ROOT BALL. THREE OR MORE EMITTERS SHALL BE EQUALLY SPACED AROUND ROOT BALL.
2. EMITTERS ARE TO BE INSTALLED TO CLEAR SURFACE BY A MINIMUM OF 1" AND A MAXIMUM 2'.
3. FLUSH ALL LINES THOROUGHLY, INCLUDING EMITTER MICRO-TUBING PRIOR TO EMITTER INSTALLATION.
4. IF PLANTING ON A 4:1 SLOPE OR STEEPER, INSTALL BOTH EMITTERS ON UPHILL SIDE OF ROOT BALL.
5. EMITTERS SHALL BE SELF-FLUSHING, PRESSURE COMPENSATING-TYPE UNLESS NOTED OTHERWISE WITHIN TECHNICAL SPECIFICATIONS.

12 DRIP EMITTERS LAYOUT
SCALE: NOT TO SCALE



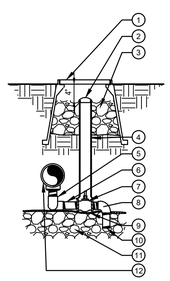
1. 10" DIA ROUND VALVE BOX, BRAND EQUIPMENT TYPE ONTO LID
2. FINISH GRADE
3. POLYPIPE DRIP LINE
4. MANUAL FLUSH BALL VALVE
5. BRICK SUPPORTS (3)
6. 6" MINIMUM LAYER OF 3/4" MINUS WASHED GRAVEL

13 MANUAL FLUSH DRAIN VALVE
SCALE: NOT TO SCALE



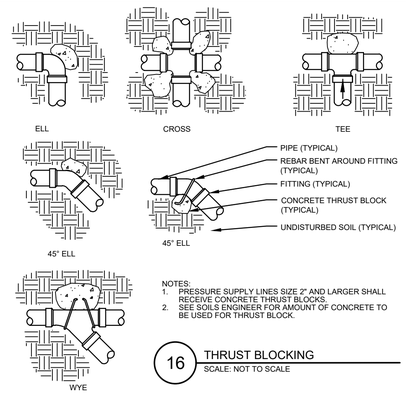
1. FINISH GRADE
2. MODEL PROS-PRS30/40
3. LATERAL TEE OR ELL
4. LATERAL PIPE
5. 1/2" MARLEX STREET ELLS (3)
6. SCH 80 NIPPLE
7. CAP

14 MP ROTATOR SPRINKLER
SCALE: NOT TO SCALE



1. CARSON-BROOKS VALVE BOX EQUIPMENT TYPE BRAND ONTO BOX LID- REFER TO TECHNICAL SPECIFICATIONS
2. 2" VALVE MARKER
3. 3/4" CRUSHED GRAVEL SUMP 1 CU. FT.
4. 2" CL160 PVC ACCESS SLEEVE - LENGTH AS REQUIRED
5. 3/4" FxF SCH.80 PVC 90 ELL (2) 3/4"xCL PVC NIPPLE SCH. 80 (2)
6. 3/4"x6" SCH. 80 GALVANIZED STEEL NIPPLE
7. 3/4" McDONALD #6101 SERIES VALVE
8. 3/4" MxF SCH.40 PVC 90 ELL
9. SOIL BLANKET COVERING SUMP
10. 3/4"x4" PVC NIPPLE SCH. 80
11. 3/4" CRUSHED GRAVEL SUMP SEE TECHNICAL SPECIFICATIONS FOR SUMP SIZE
12. PRESSURE MAINLINE

15 MANUAL DRAIN VALVE
SCALE: NOT TO SCALE



NOTES:
1. PRESSURE SUPPLY LINES SIZE 2" AND LARGER SHALL RECEIVE CONCRETE THRUST BLOCKS.
2. SEE SOILS ENGINEER FOR AMOUNT OF CONCRETE TO BE USED FOR THRUST BLOCK.

16 THRUST BLOCKING
SCALE: NOT TO SCALE

NO.	REVISIONS	BY	DATE

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Galloway

PROJECT NO.	FGA
DRAWN	EDN
DESIGNED	EDN
APPROVED	
QA/QC	TDN

MILESTONE HOLDINGS

SITE DEVELOPMENT

IRRIGATION DETAILS & NOTES

3450 NORTH MAIN STREET

SHEET NO:
IR1.2

DATE:
8/23/2022

PAGE NO:

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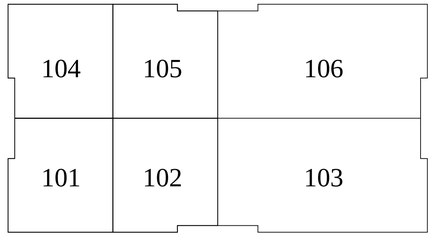
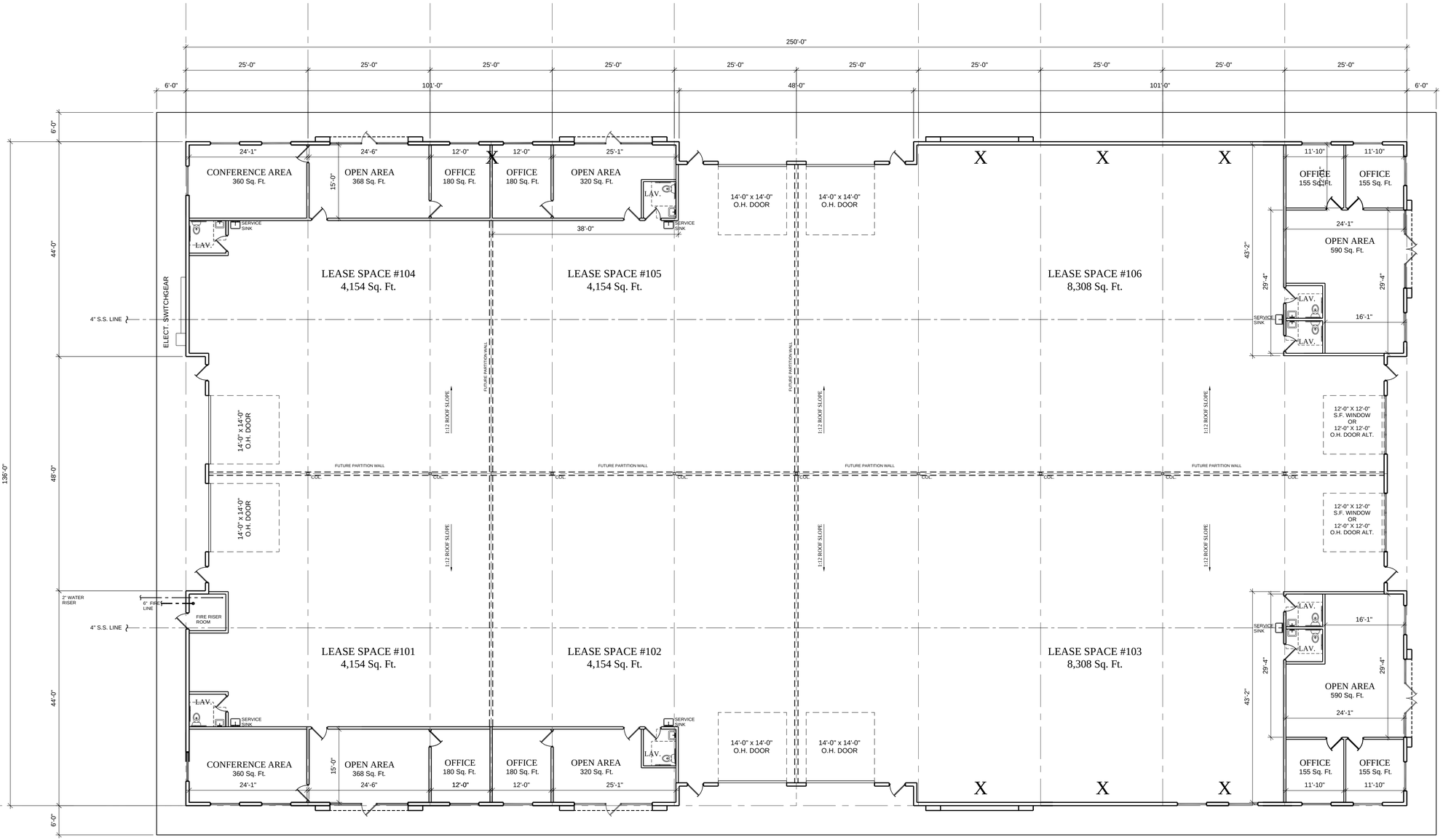


BLDG. KEY PLAN



BLDG #2 MAIN FLOOR PLAN

SCALE: 3/32" = 1'-0 33,232 Sq. Ft.

Diversified
DESIGN SERVICES AND ENGINEERING, L.C.
6236 SOUTH TURPIN ST.
MURRAY, UTAH 84107
TELEPHONE (801) 347-2369
Email: brandon@dds-slc.com

PROJECT NAME:

A NEW OFFICE / WAREHOUSE DEVELOPMENT FOR:

Tenedor Holdings

3475 North Main St. Spanish Fork, Utah 84660

PROJECT INFO.	
PROJECT NO.:	2022-010
CAD FILE NAME:	Bld 2 A101 Floor Plan V6.DWG
DRAWN BY:	BL
CHECKED BY:	
SCALE:	3/32" = 1'-0"
DATE:	04-11-2022

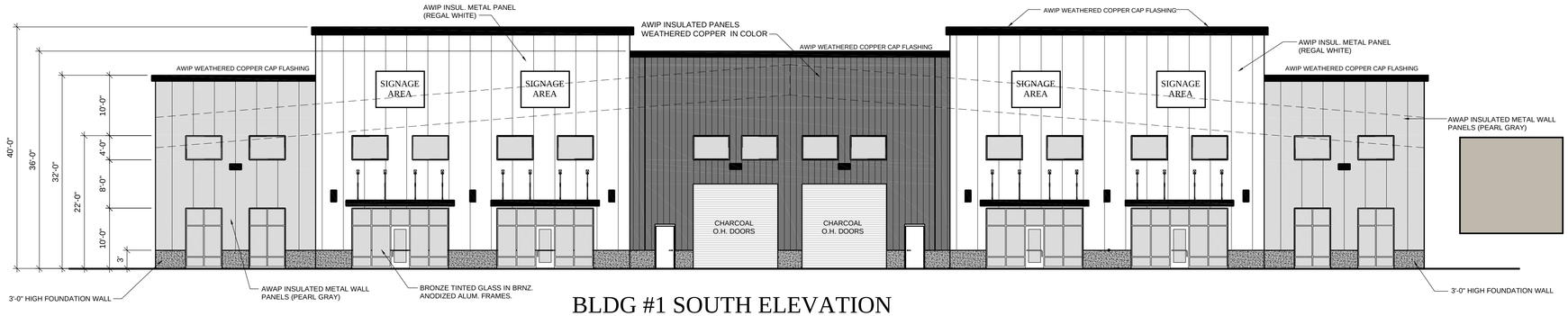
REVISIONS		
REV.	DATE	DESCRIPTION
1	DATE	DESCRIPTION

SHEET TITLE:

BUILDING #2
MAIN FLOOR PLAN

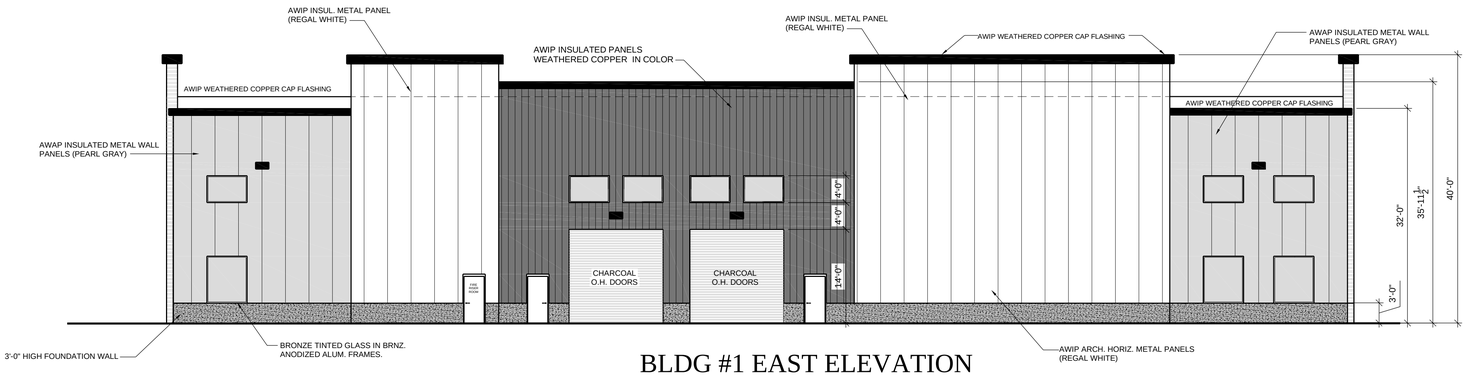
A 101

SHEET 1 OF 2



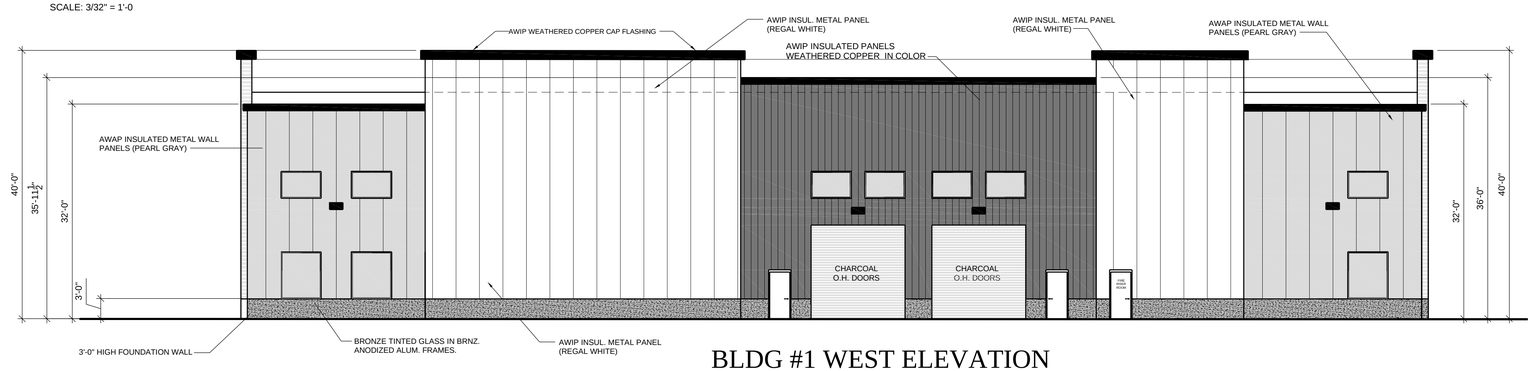
BLDG #1 SOUTH ELEVATION

SCALE: 3/32" = 1'-0



BLDG #1 EAST ELEVATION

SCALE: 3/32" = 1'-0



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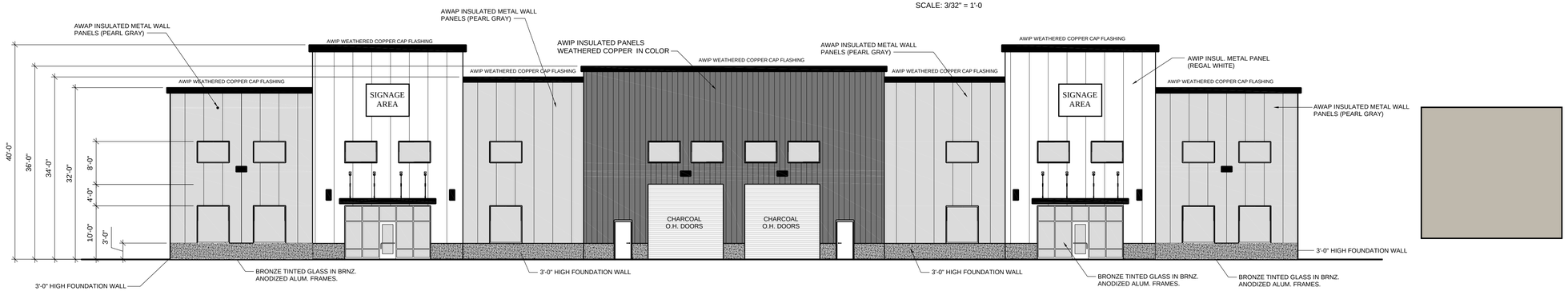

BLDG #1 NORTH ELEVATION

SCALE: 3/32" = 1'-0

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6236 SOUTH TURPIN ST.
MURRAY, UTAH 84107
TELEPHONE (801) 347-2369
Email: brandon@dds-slc.com

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Tenedor Holdings

3475 North Main St. Spanish Fork, Utah 84660

PROJECT INFO.	
PROJECT NO.:	2022-010
CAD FILE NAME:	Bld 1 A201 Elevations V6.DWG
DRAWN BY:	BL
CHECKED BY:	
SCALE:	3/32" = 1'-0"
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REVISIONS		
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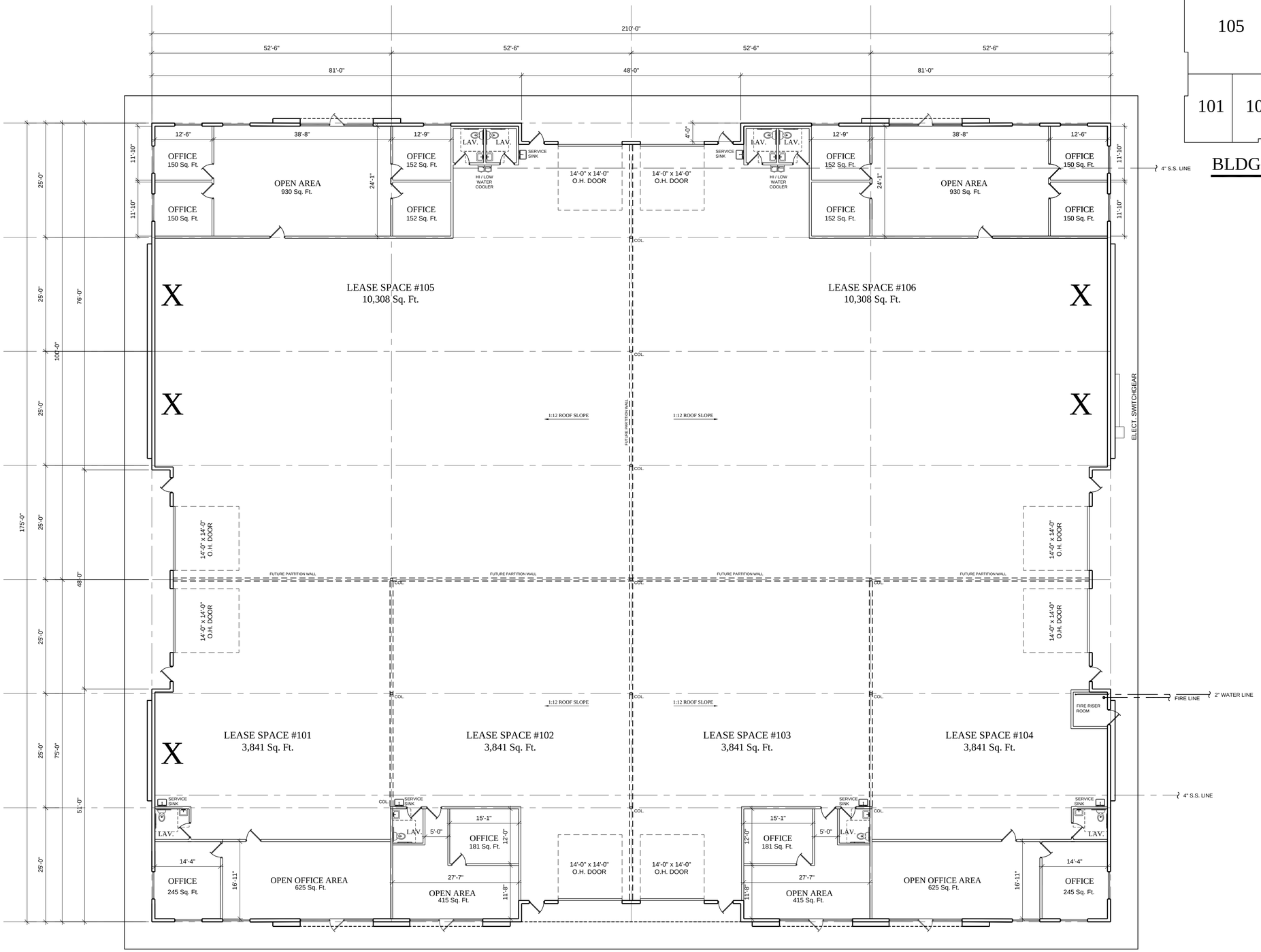
1	DATE	DESCRIPTION

SHEET TITLE:

BUILDING #1
EXT. ELEVATIONS

A 201

SHEET 2 OF 2



BLDG #1 MAIN FLOOR PLAN

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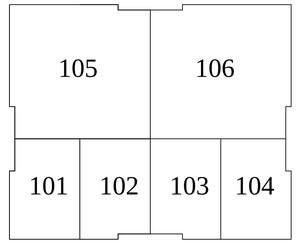

BLDG. KEY PLAN

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DESIGN SERVICES AND ENGINEERING, L.C.
6236 SOUTH TURPIN ST.
MURRAY, UTAH 84107
TELEPHONE (801) 347-2369
Email: brandon@dds-slc.com

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3475 North Main St. Spanish Fork, Utah 84660

PROJECT INFO.	
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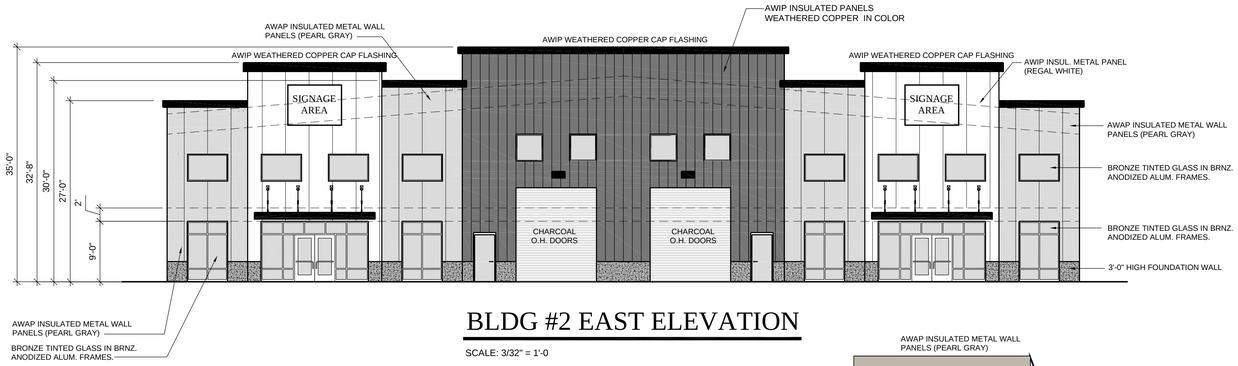
1	DATE	DESCRIPTION

SHEET TITLE:

BUILDING #1
MAIN FLOOR PLAN

A 101

SHEET 1 OF 2



BLDG #2 EAST ELEVATION

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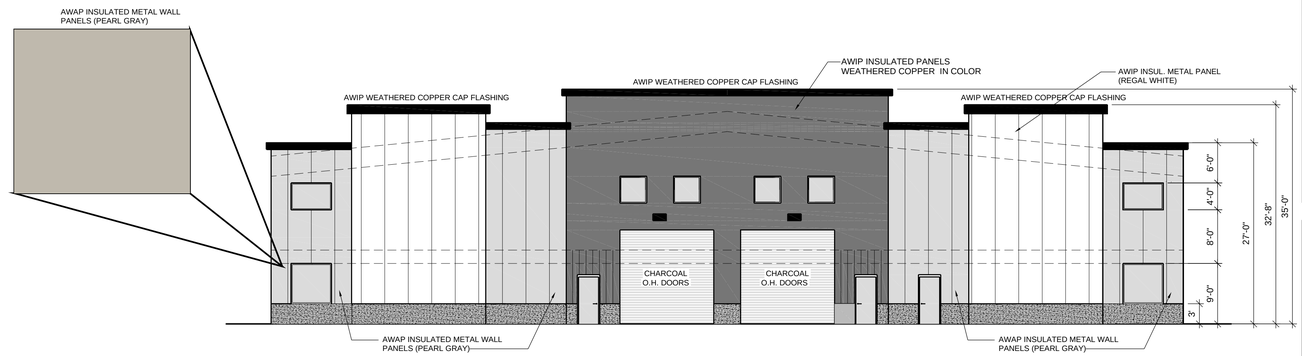

BLDG #2 WEST ELEVATION

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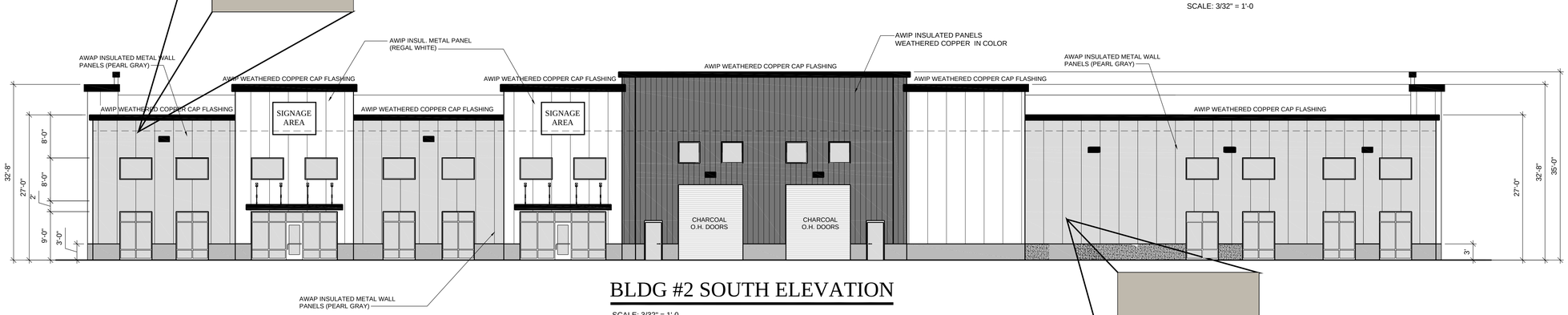

BLDG #2 SOUTH ELEVATION

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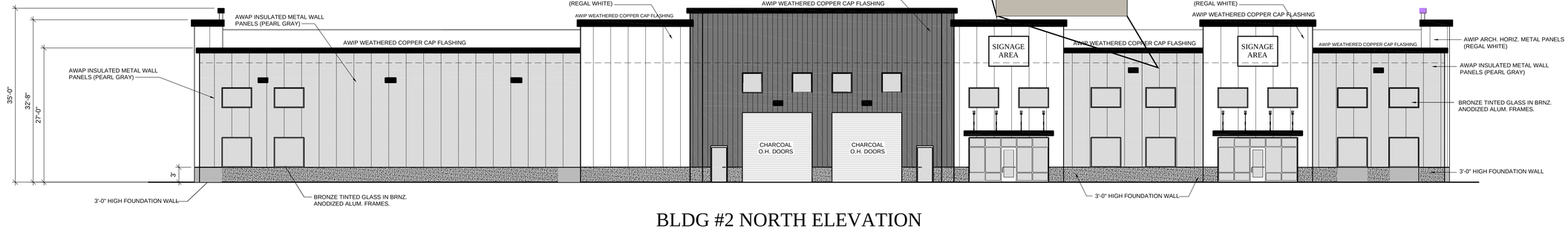

BLDG #2 NORTH ELEVATION

SCALE: 3/32" = 1'-0

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CAD FILE NAME:	Bld 2 A201 Elevations V1.DWG
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CHECKED BY:	
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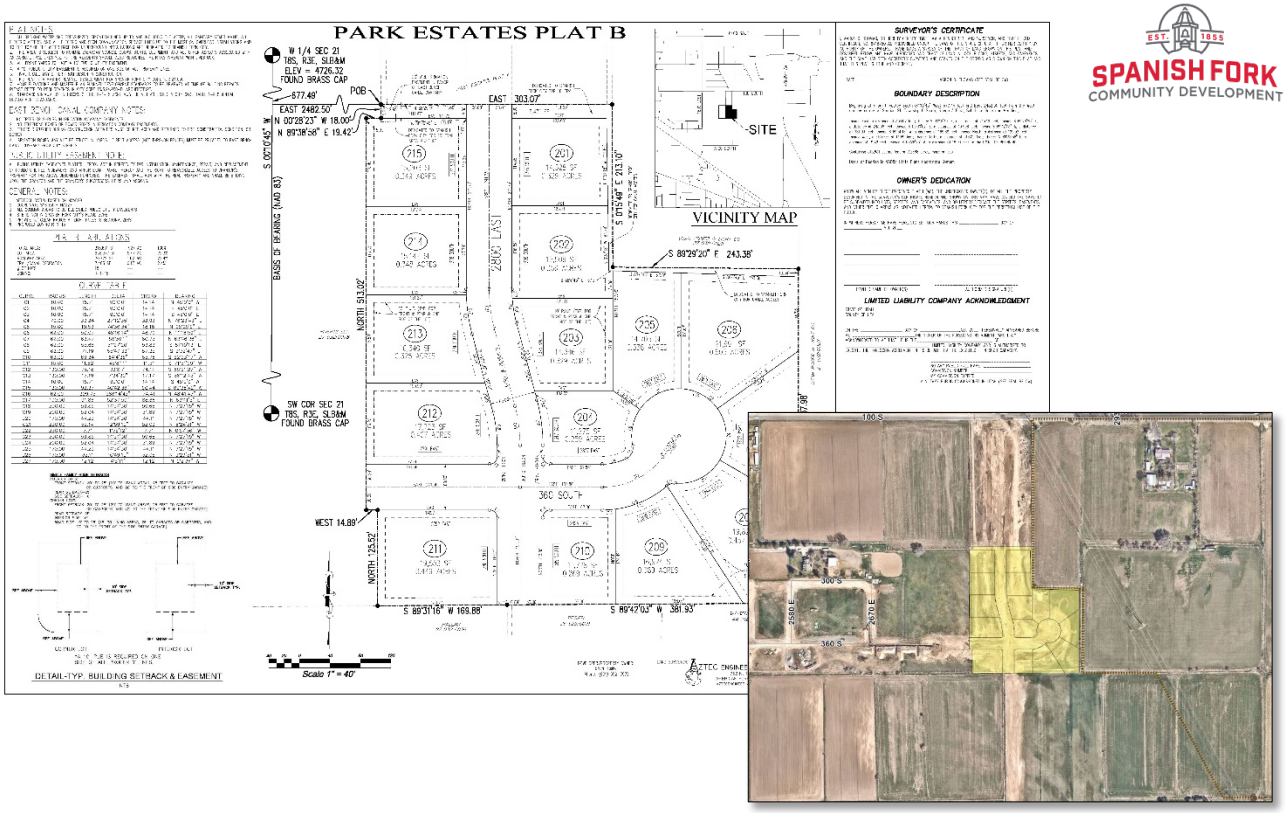
DATE:	04-13-2022

REVISIONS		
REV.	DATE	DESCRIPTION
1	DATE	DESCRIPTION

SHEET TITLE:

BUILDING #2
EXT. ELEVATIONS

A 201
SHEET 2 OF 2



SPANISH FORK COMMUNITY DEVELOPMENT

Park Estates Plat B Final Plat Approval Request

September 21, 2022, Development Review Committee Meeting.

Located at 300 South 2800 East, including 7.27 acres.

The subject property is zoned R-1-15.

The applicant has requested that a Final Plat of fifteen (15) residential lots be reapproved.

The Final Plat was last approved by the DRC on June 30, 2021, and the approval has since expired.

Key Issues

1. Consistency with the Preliminary Plat.

Recommendation

That the proposed Final Plat be approved based on the following findings and subject to the following conditions:

Findings

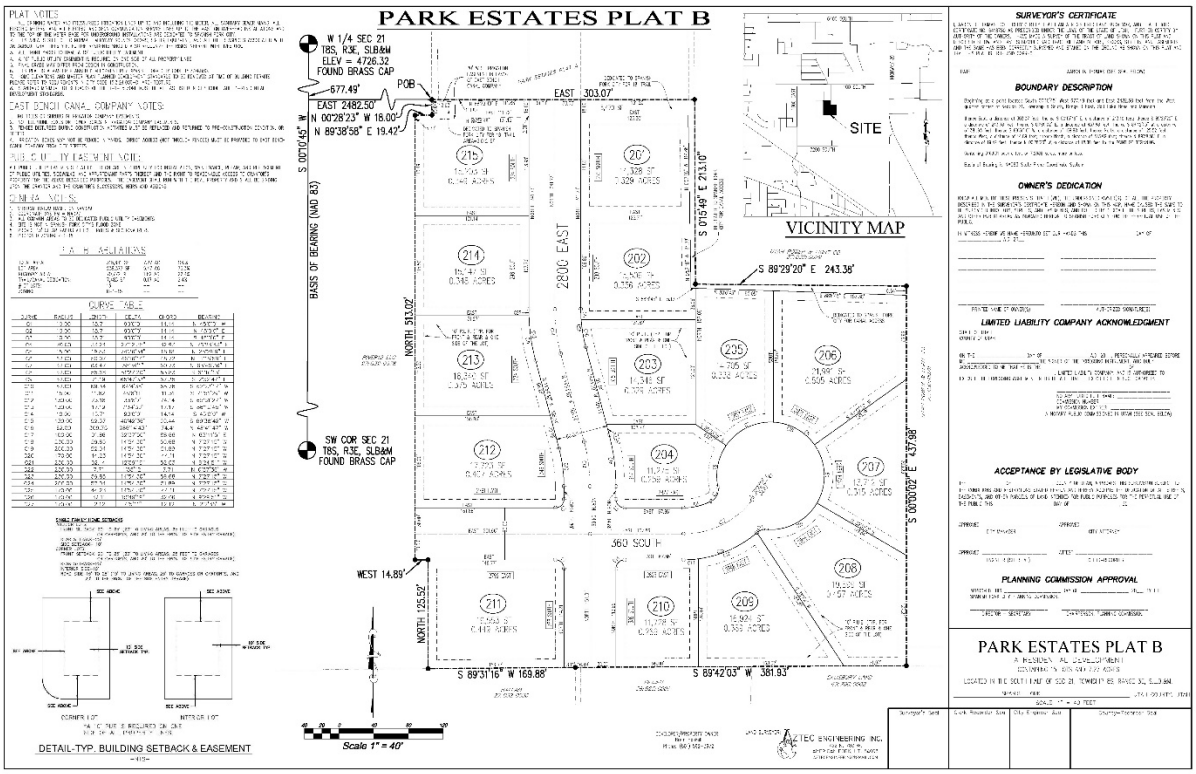
1. That the application conforms to the City's General Plan Designation and Zoning Map.
2. That the application is consistent with the approved Preliminary Plat.

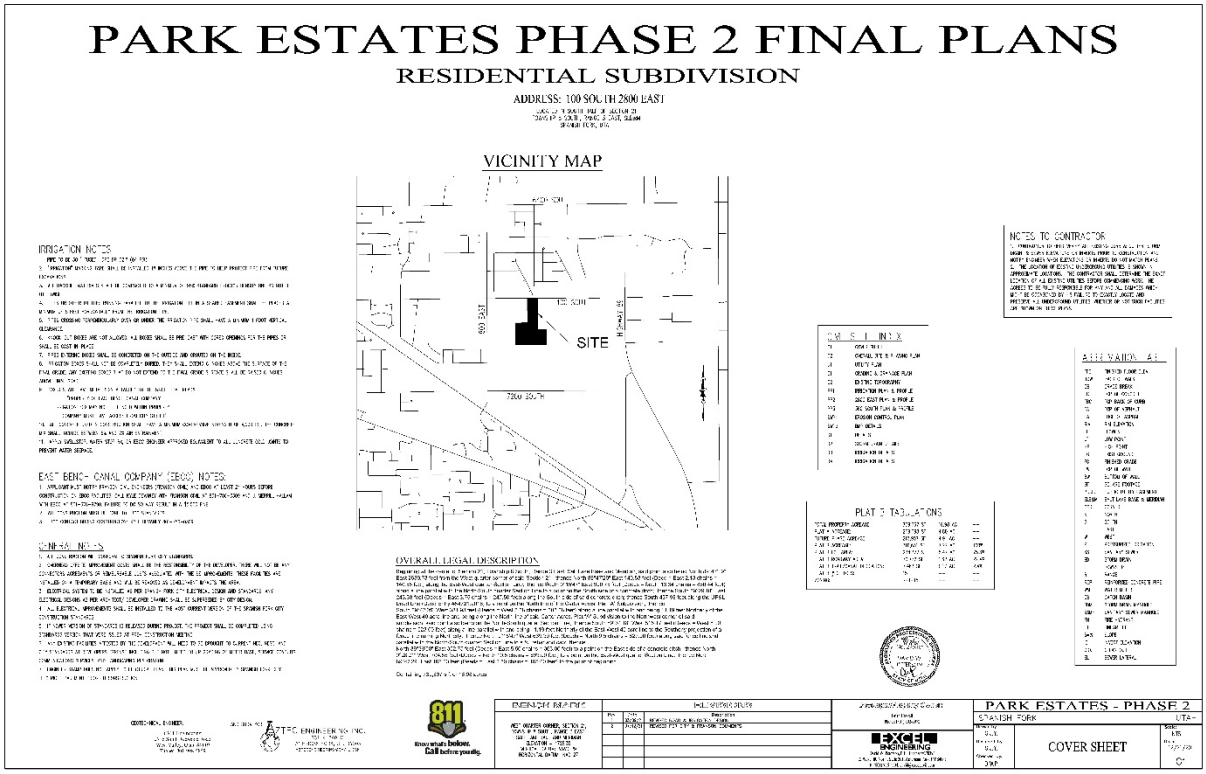
Conditions

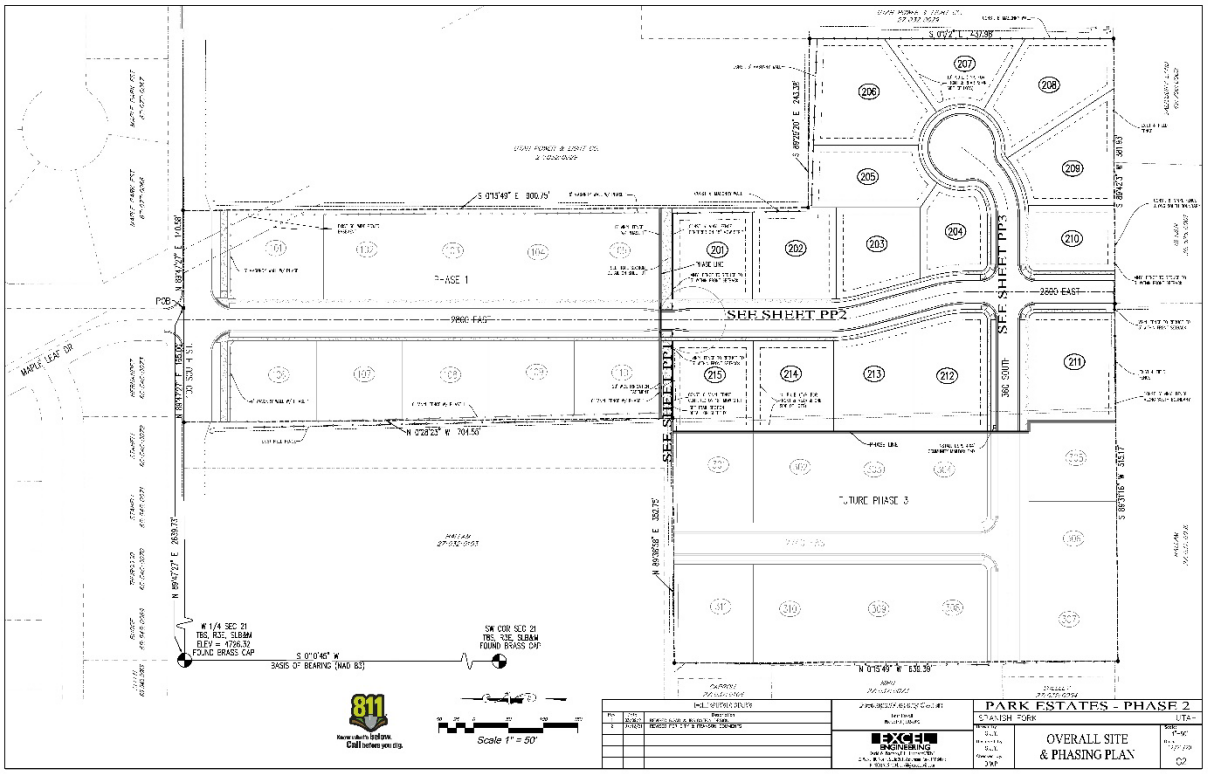
1. That the applicant meets the City's Zoning requirements and Construction Standards.
2. That the applicant addresses any red-lines.

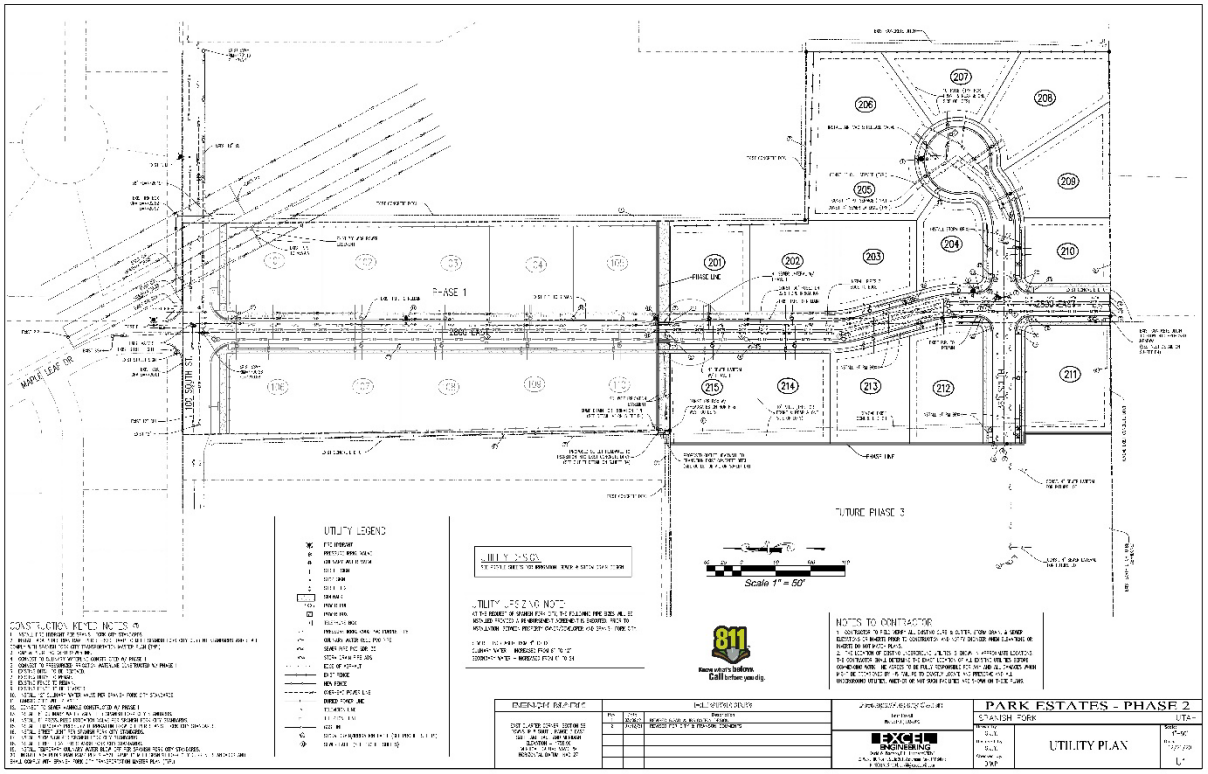
Exhibits

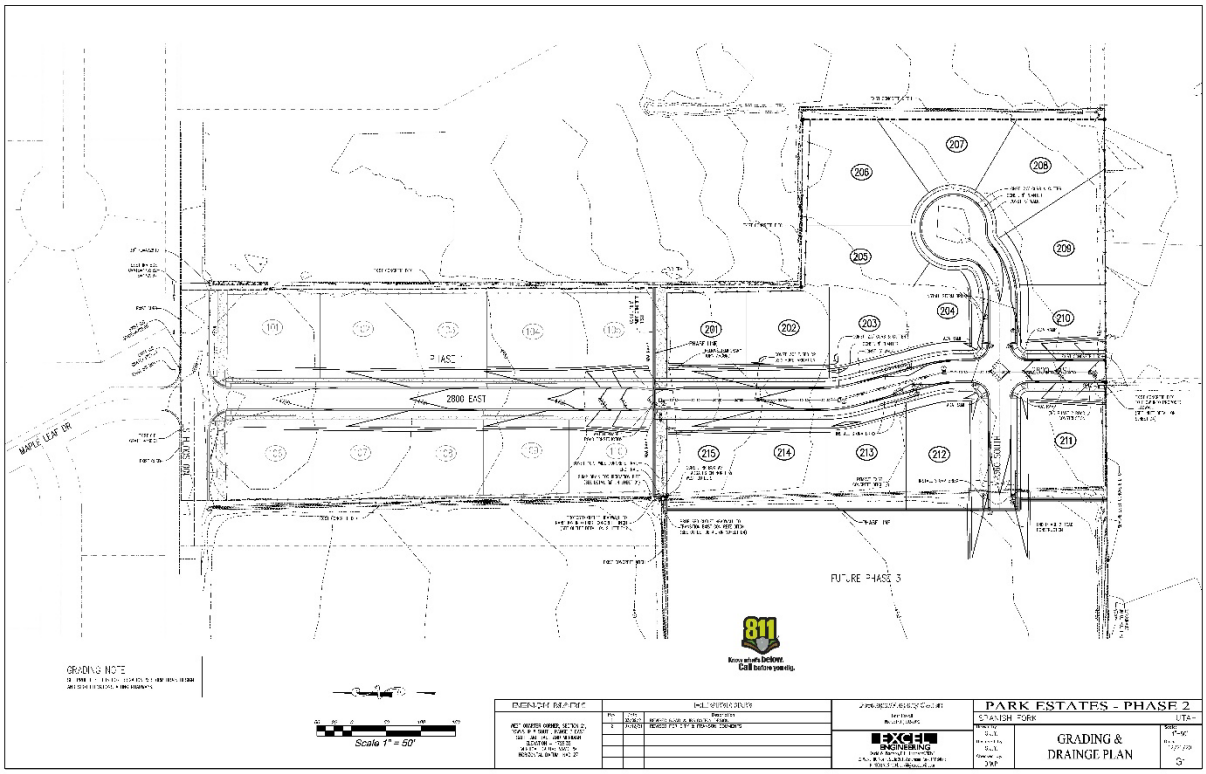
1. Final Plat.

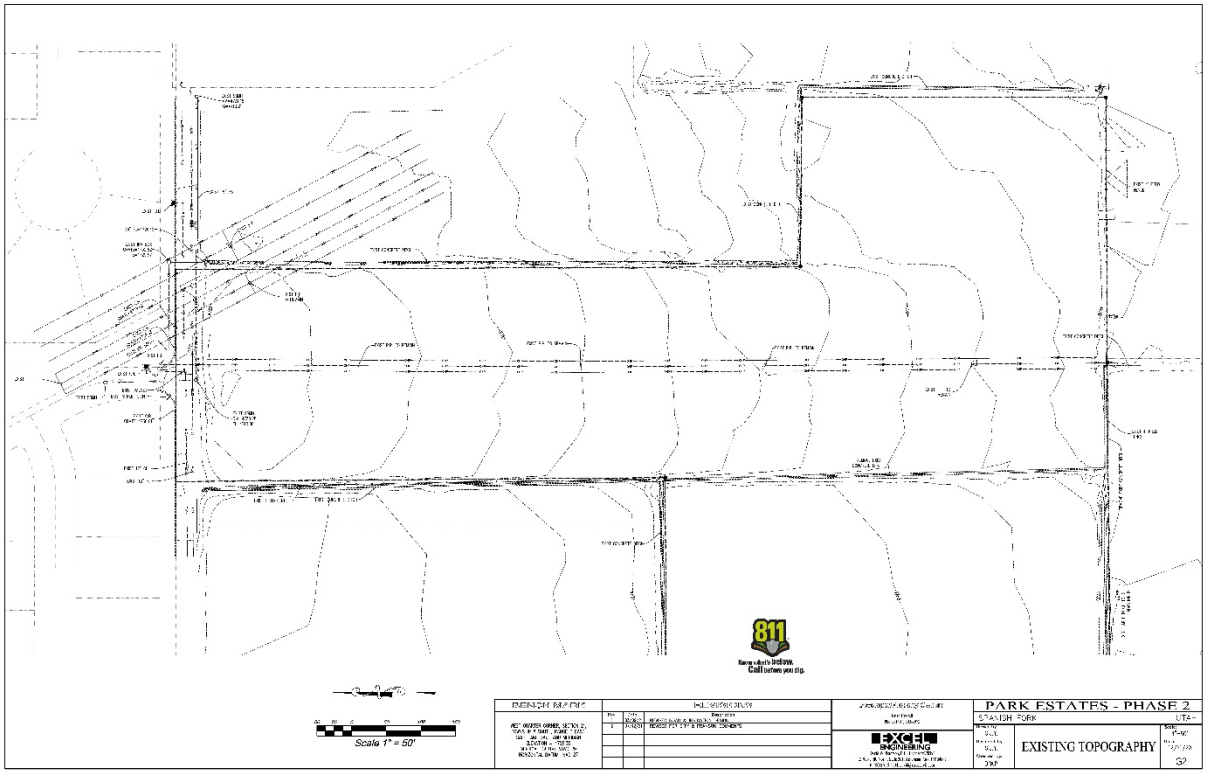

PARK ESTATES PLAT B
W 1/4 SEC 21
T8S, R3E, SLB&M
ELEV = 4726.32
FOUND BRASS CAP
677.49'
POB
EAST 2482.50'
N 00°28'23" W 18.00'
N 89°38'58" E 19.42'
EAST 303.07'
S 00°10'45" W
BASIS OF BEARING (NAD 83)
NORTH 513.02'
2800 EAST
S 01°54'49" E 213.10'
S 89°29'20" E 243.38'
SW COR SEC 21
T8S, R3E, SLB&M
FOUND BRASS CAP
WEST 14.89'
NORTH 125.52'
360 SOUTH
S 89°31'16" W 169.88'
S 89°42'03" W 381.93'
S 00°00'02" E 437.98'
SITE
VICINITY MAP
SURVEYOR'S CERTIFICATE
BOUNDARY DESCRIPTION
OWNER'S DEDICATION
LIMITED LIABILITY COMPANY ACKNOWLEDGMENT
ACCEPTANCE BY LEGISLATIVE BODY
PLANNING COMMISSION APPROVAL
PARK ESTATES PLAT B
DETAIL-TYP. BUILDING SETBACK & EASEMENT
Scale 1" = 40'
ZTEC ENGINEERING INC.

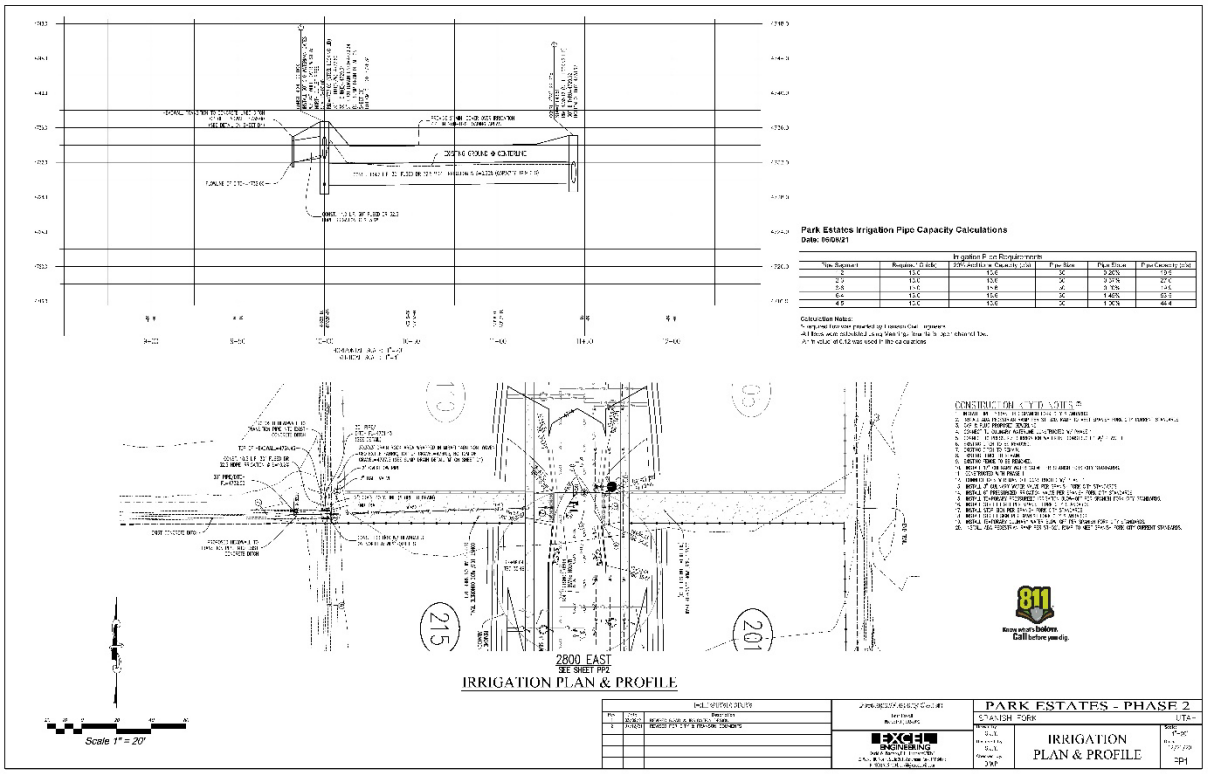

PARK ESTATES PHASE 2 FINAL PLANS
RESIDENTIAL SUBDIVISION
ADDRESS: 100 SOUTH 2800 EAST
VICINITY MAP
SITE
IRRIGATION NOTES
EAST BENCH CANAL COMPANY (EBCC) NOTES:
GENERAL NOTES
OVERALL LEGAL DESCRIPTION
NOTES TO CONTRACTOR
PLAT 3 TABULATIONS
ATTENUATION AT
BENCH MARK
PARK ESTATES - PHASE 2
SPANISH FORK
COVER SHEET
ZTEC ENGINEERING INC.

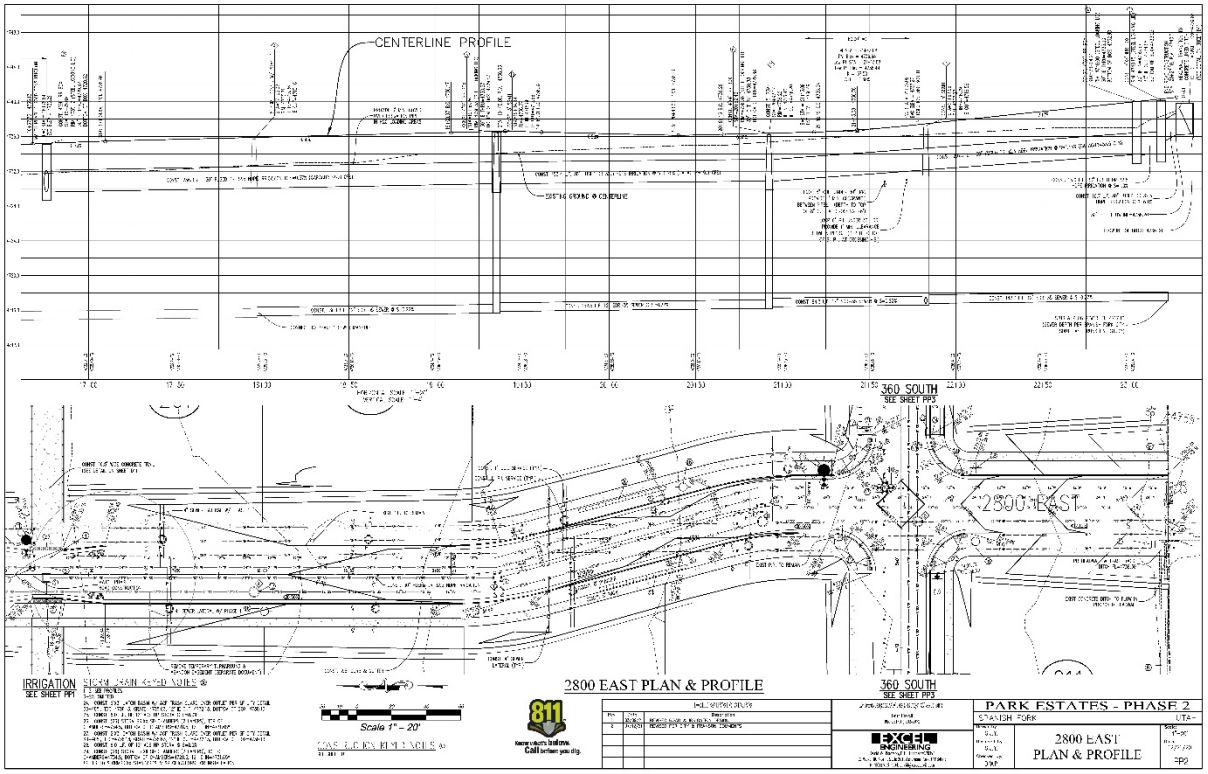

PARK ESTATES - PHASE 2
SPANISH FORK UTA-
OVERALL SITE & PHASING PLAN
EXCEL ENGINEERING
SEE SHEET PP2
SEE SHEET PP1
SEE SHEET PP3
FUTURE PHASE 3
PHASE 1
MAPLE LEAF DR
2800 EAST
Scale 1" = 50'

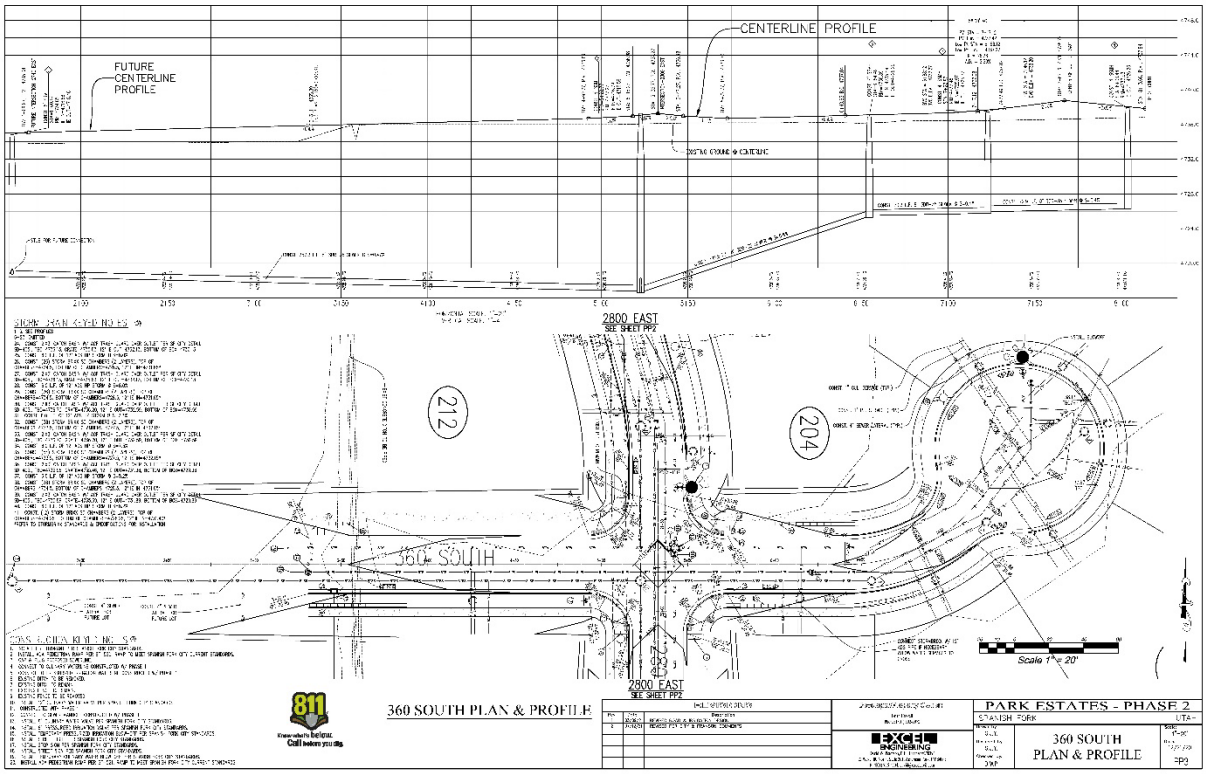

PARK ESTATES - PHASE 2
SPANISH FORK UTA-
UTILITY PLAN
EXCEL ENGINEERING
UTILITY LEGEND
NOTES TO CONTRACTOR
CONSTRUCTION KEYED NOTES
FUTURE PHASE 3
PHASE 1
MAPLE LEAF DR
2800 EAST
Scale 1" = 50'

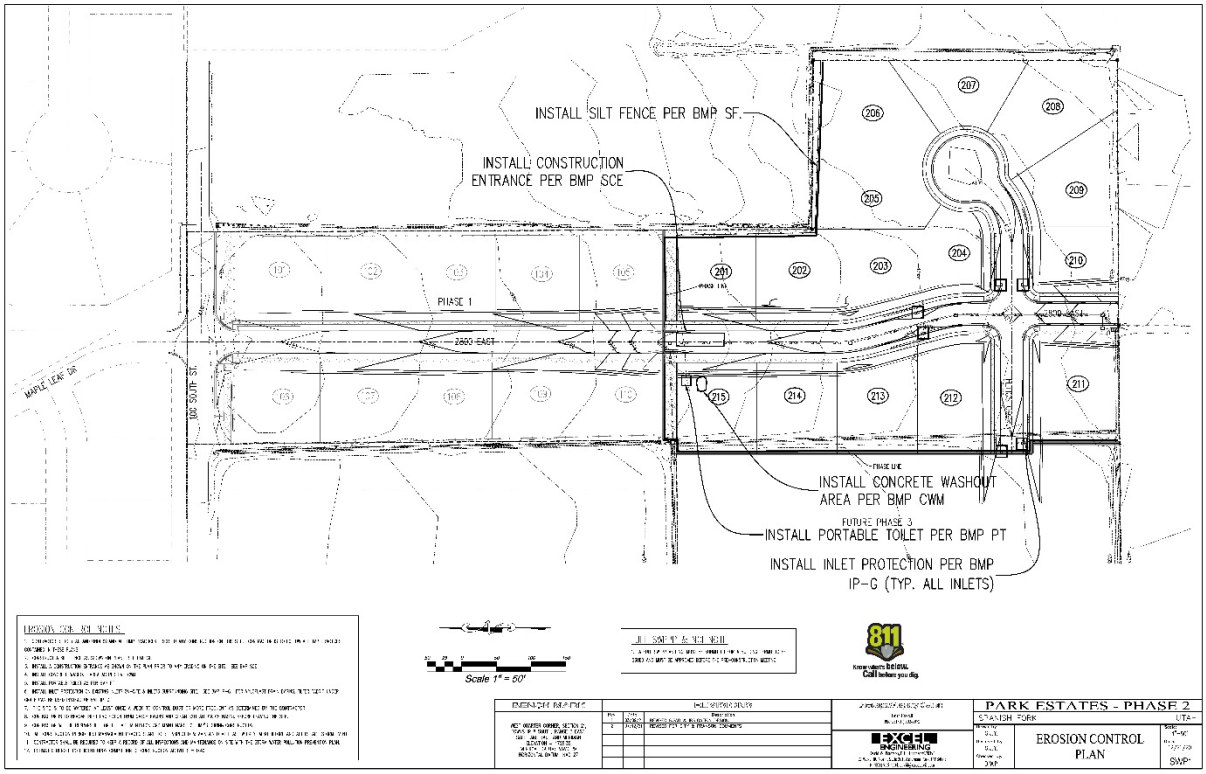

2800 EAST
MAPLE LEAF DR
FUTURE PHASE 3
GRADING NOTE
Scale 1" = 50'
PARK ESTATES - PHASE 2
SPANISH FORK
UTA-
GRADING & DRAINGE PLAN
G1

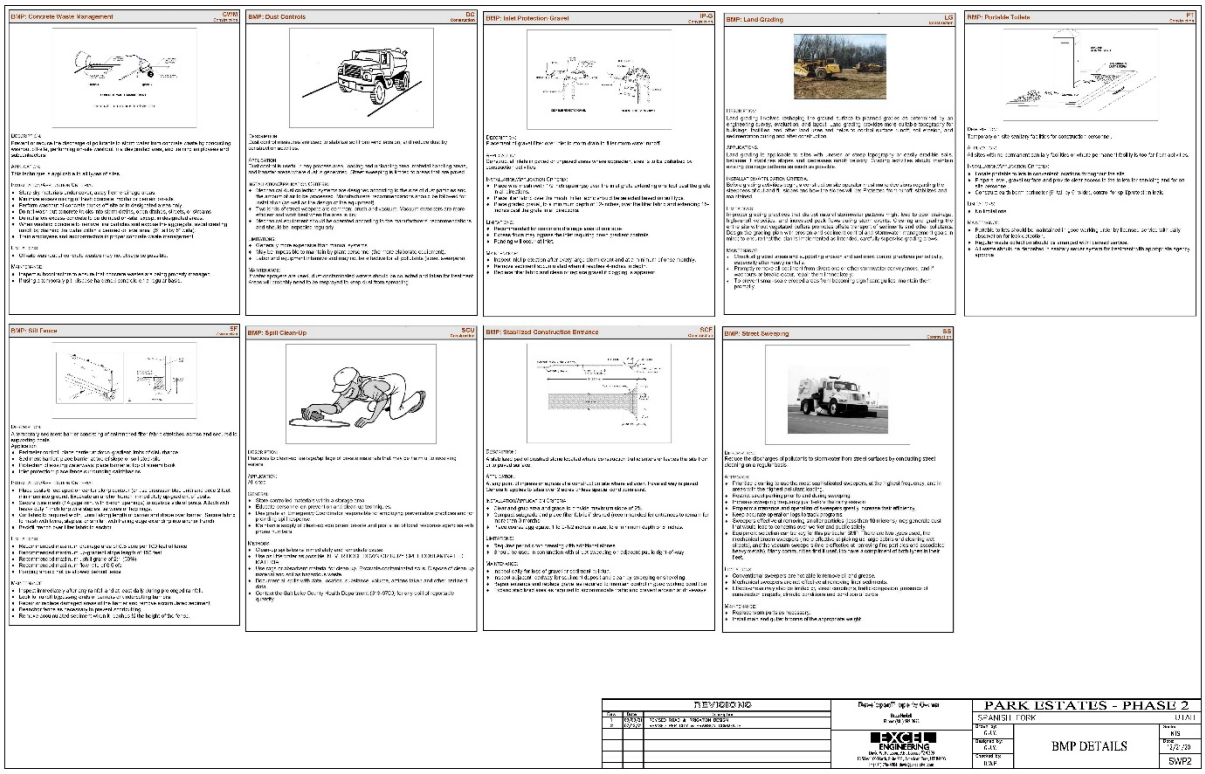

Scale 1" = 50'
PARK ESTATES - PHASE 2
SPANISH FORK
UTA-
EXISTING TOPOGRAPHY
G2

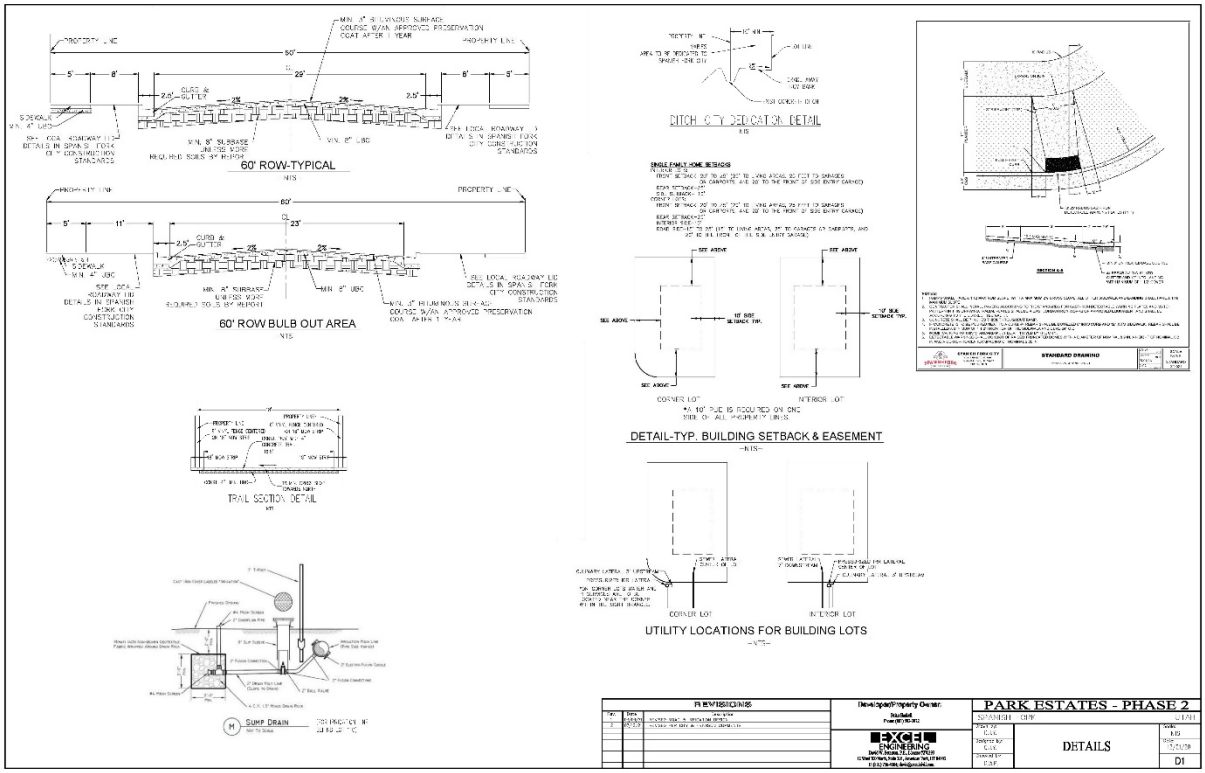

Park Estates Irrigation Pipe Capacity Calculations
Date: 06/08/21
Irrigation Pipe Requirements
Calculation Notes:
2800 EAST
SEE SHEET PP2
IRRIGATION PLAN & PROFILE
Scale 1" = 20'
PARK ESTATES - PHASE 2
SPANISH FORK
UTA-
IRRIGATION
PLAN & PROFILE
EXCEL ENGINEERING
PP1

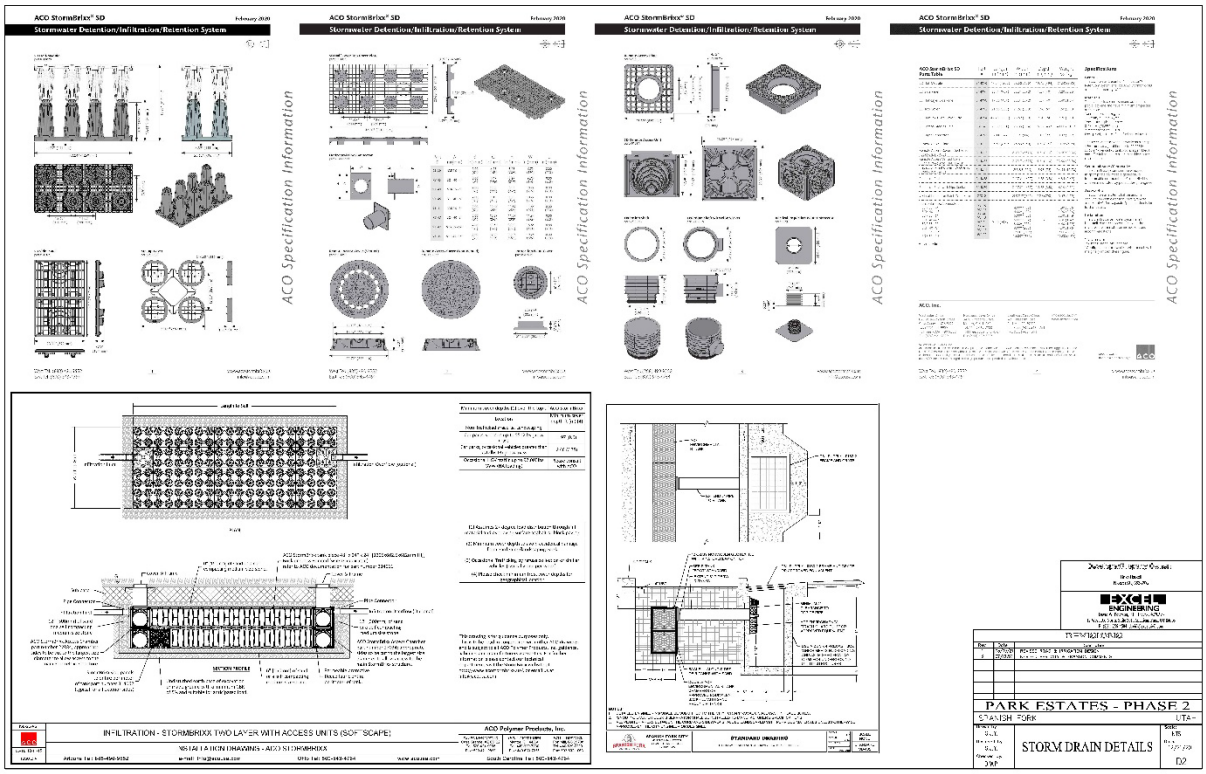

CENTERLINE PROFILE
360 SOUTH
SEE SHEET PP3
2800 EAST
IRRIGATION
SEE SHEET PP1
2800 EAST PLAN & PROFILE
360 SOUTH
SEE SHEET PP3
Scale 1" = 20'
PARK ESTATES - PHASE 2
SPANISH FORK
UTA-
2800 EAST
PLAN & PROFILE
EXCEL ENGINEERING
PP2

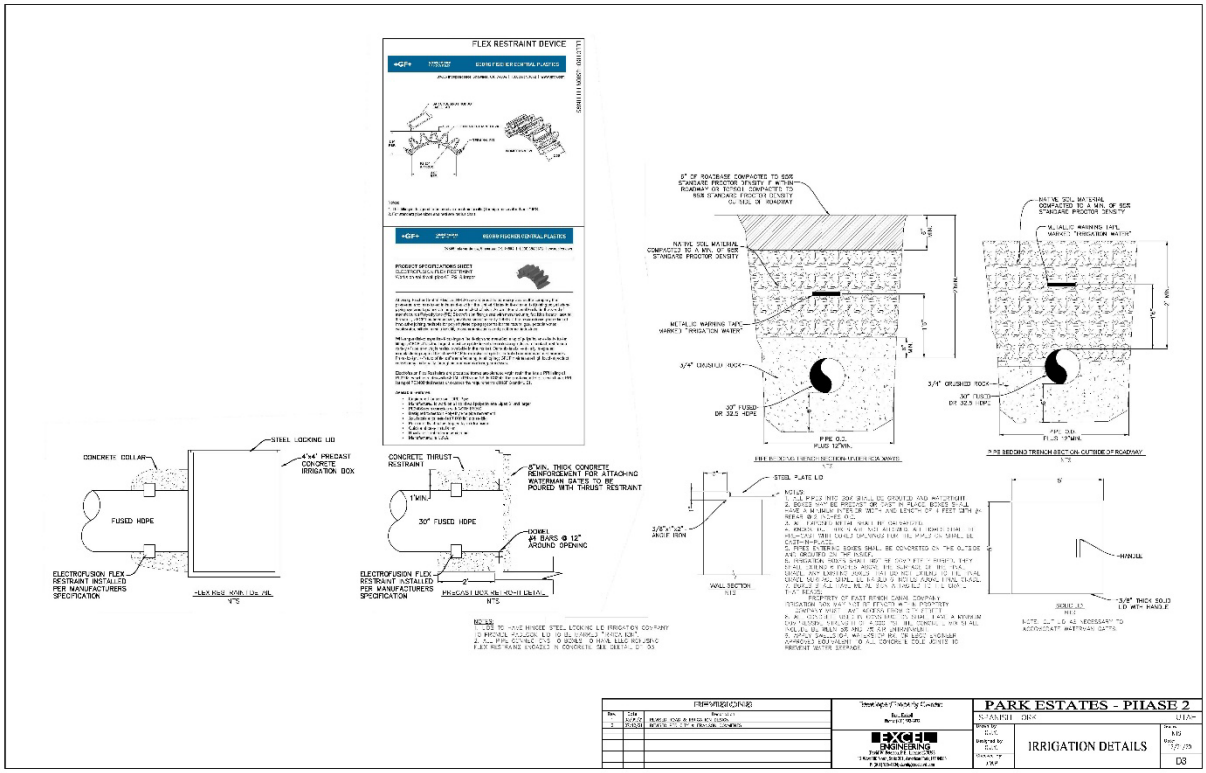

FUTURE CENTERLINE PROFILE
CENTERLINE PROFILE
2800 EAST
SEE SHEET PP2
212
204
360 SOUTH
Scale 1" = 20'
360 SOUTH PLAN & PROFILE
PARK ESTATES - PHASE 2
SPANISH FORK UTA-
360 SOUTH PLAN & PROFILE
PP2

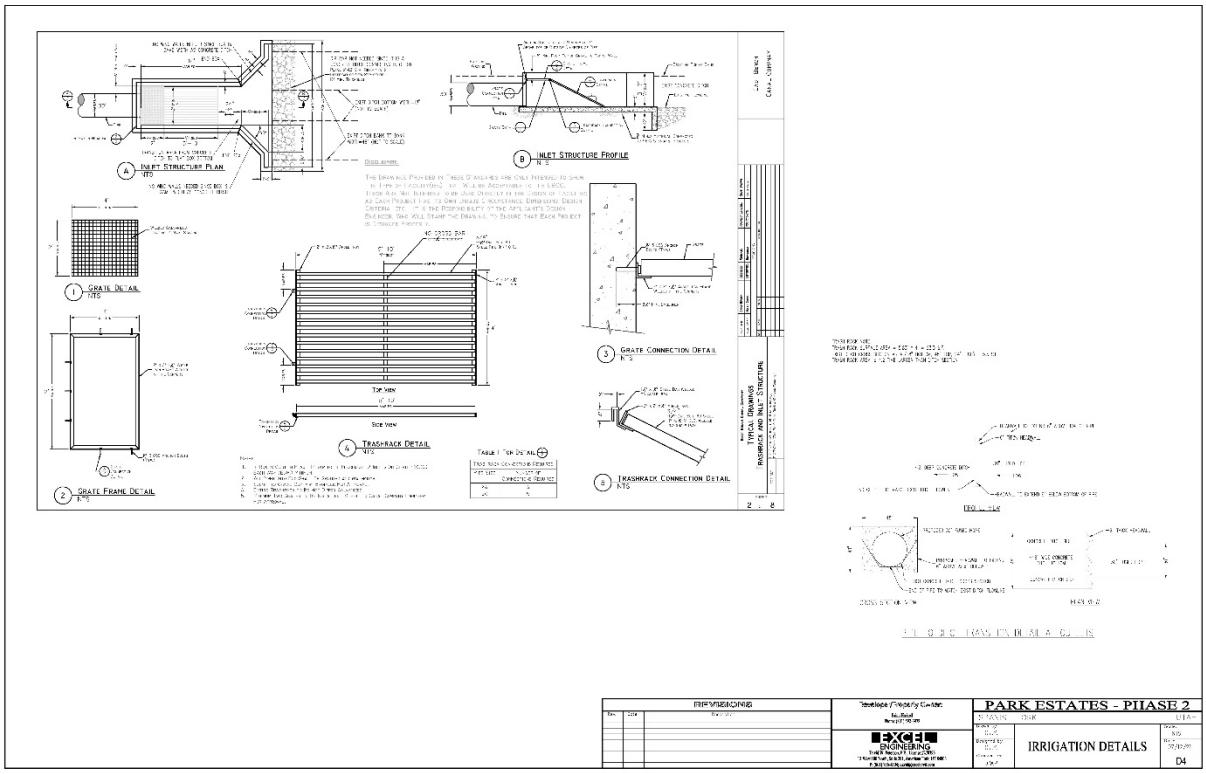

INSTALL SILT FENCE PER BMP SF
INSTALL CONSTRUCTION ENTRANCE PER BMP SCE
PHASE 1
2800 EAST
MAPLE LEAF DR
165 SOUTH ST
INSTALL CONCRETE WASHOUT AREA PER BMP CWM
FUTURE PHASE 3
INSTALL PORTABLE TOILET PER BMP PT
INSTALL INLET PROTECTION PER BMP IP-G (TYP. ALL INLETS)
Scale 1" = 50'
PARK ESTATES - PHASE 2
SPANISH FORK UTA-
EROSION CONTROL PLAN
SWP-

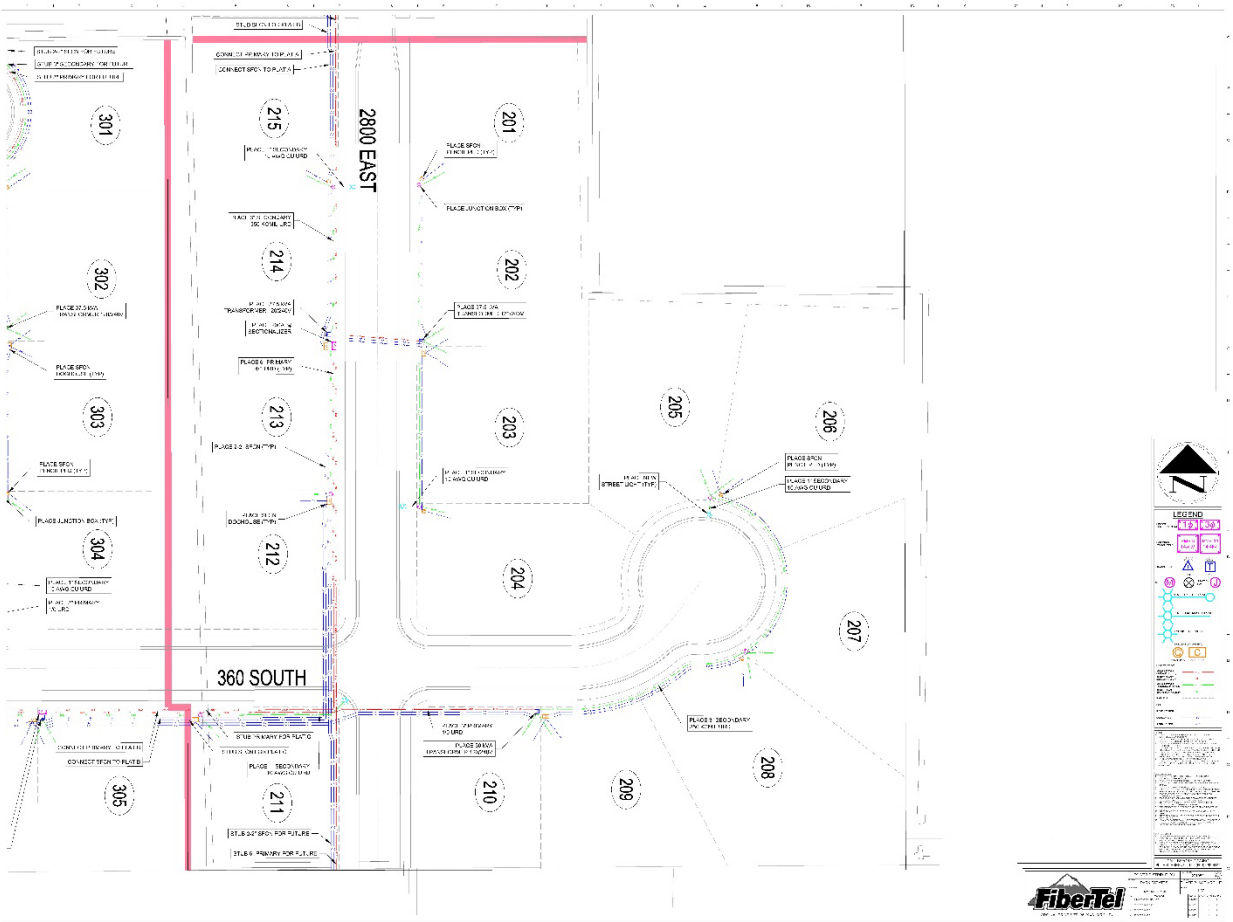

BMP: Concrete Waste Management
BMP: Dust Controls
BMP: Inlet Protection Gravel
BMP: Land Grading
BMP: Portable Toilets
BMP: Silt Fence
BMP: Spill Clean-Up
BMP: Stabilized Construction Entrance
BMP: Street Sweeping
REVISIONS
PARK ESTATES - PHASE 2
SPANISH FORK
BMP DETAILS
SWP2


60' ROW-TYPICAL
60' ROW BULB OUT AREA
DITCH CITY DEDICATION DETAIL
DETAIL-TYP. BUILDING SETBACK & EASEMENT
TRAIL SECTION DETAIL
UTILITY LOCATIONS FOR BUILDING LOTS
SUMP DRAIN
REVISIONS
PARK ESTATES - PHASE 2
SPANISH FORK
DETAILS
D1


ACO StormBrixx® SD
Stormwater Detention/Infiltration/Retention System
ACO Specification Information
INFILTRATION - STORMBRIXX TWO LAYER WITH ACCESS UNITS (SOFT SCAPE)
INSTALLATION DRAWING - ACO STORMBRIXX
ACO Polymer Products, Inc.
PARK ESTATES - PHASE 2
STORM DRAIN DETAILS
D2


FLEX RESTRAINT DEVICE
CONCRETE COLLAR
STEEL LOCKING LID
4'x4' PRECAST CONCRETE IRRIGATION BOX
FUSED HDPE
ELECTROFUSION FLEX RESTRAINT INSTALLED PER MANUFACTURERS SPECIFICATION
CONCRETE THRUST RESTRAINT
8"MIN. THICK CONCRETE REINFORCEMENT FOR ATTACHING WATERMAN GATES TO BE POURED WITH THRUST RESTRAINT
30" FUSED HDPE
#4 BARS @ 12" AROUND OPENING
PARK ESTATES - PHASE 2
IRRIGATION DETAILS
D3


A INLET STRUCTURE PLAN
B INLET STRUCTURE PROFILE
1 GRATE DETAIL
2 GRATE FRAME DETAIL
3 GRATE CONNECTION DETAIL
4 TRASHRACK DETAIL
5 TRASHRACK CONNECTION DETAIL
Top View
Side View
TYPICAL DRAWINGS
TRASHRACK AND INLET STRUCTURE
PARK ESTATES - PHASE 2
IRRIGATION DETAILS
EXCEL ENGINEERING
D4


2800 EAST
360 SOUTH
201
202
203
204
205
206
207
208
209
210
211
212
213
214
215
301
302
303
304
305
LEGEND
FiberTel

PARK ESTATES PLAT B

PLAT NOTES

1. ALL DRINKING WATER AND PRESSURIZED IRRIGATION LINES UP TO AND INCLUDING THE METER, ALL SANITARY SEWER MAINS, ALL ELECTRIC METERS, AND ALL ELECTRIC AND SFCN COMMUNICATION SERVICE LINES UP TO THE MAST ON OVERHEAD INSTALLATIONS AND TO THE TOP OF THE METER BASE FOR UNDERGROUND INSTALLATIONS ARE DEDICATED TO SPANISH FORK CITY.
2. THIS AREA IS SUBJECT TO NORMAL EVERYDAY SOUNDS, ODORS, SIGHTS, EQUIPMENT, AND ALL OTHER ASPECTS ASSOCIATED WITH AN AGRICULTURAL LIFESTYLE. FUTURE RESIDENTS SHOULD ALSO RECOGNIZE THE RISKS INHERENT WITH LIVESTOCK.
3. ALL FRONT YARDS TO HAVE A 10' PUBLIC UTILITY EASEMENT.
4. A 10' PUBLIC UTILITY EASEMENT IS REQUIRED ON ONE SIDE OF ALL PROPERTY LINES.
5. FINAL GRADE MAY DIFFER FROM DESIGN IN CONSTRUCTION.
6. THIS PLAT IS A MASTER PLANNED DEVELOPMENT PER SPANISH FORK CITY CODE 15.3.24.030.
7. HOME ELEVATIONS AND MASTER PLAN PLANNED DEVELOPMENT STANDARDS TO BE REVIEWED AT TIME OF BUILDING PERMITS. PLEASE REFER TO REQUIREMENTS IN CITY CODE 15.3.24.030-D. ARCHITECTURE.
8. STANDARD MINIMUM LOT SETBACKS OF THE R-1-15 ZONE MUST BE MET AS LISTED IN CITY CODE TABLE 1-RESIDENTIAL DEVELOPMENT STANDARDS.

EAST BENCH CANAL COMPANY NOTES:

1. NO TREES OR SHRUBS IN IRRIGATION COMPANY EASEMENTS.
2. NO TELEPHONE BOXES OR POWER BOXES IN IRRIGATION COMPANY EASEMENTS.
3. FENCES DISTURBED DURING CONSTRUCTION ACTIVITIES MUST BE REPLACED AND RETURNED TO PRE-CONSTRUCTION CONDITION, OR BETTER.
4. IRRIGATION BOXES MAY NOT BE FENCED IN YARDS. DIRECT ACCESS (NOT THROUGH FENCES) MUST BE PROVIDED TO EAST BENCH CANAL COMPANY FROM CITY STREETS.

PUBLIC UTILITY EASEMENT NOTE:

ALL PUBLIC UTILITY EASEMENTS PLATTED HEREON ARE IN PERPETUITY FOR INSTALLATION, MAINTENANCE, REPAIR, AND REPLACEMENT OF PUBLIC UTILITIES, SIDEWALKS, AND APPURTENANT PARTS THEREOF AND THE RIGHT TO REASONABLE ACCESS TO GRANTOR'S PROPERTY FOR THE ABOVE DESCRIBED PURPOSES. THE EASEMENT SHALL RUN WITH THE REAL PROPERTY AND SHALL BE BINDING UPON THE GRANTOR AND THE GRANTOR'S SUCCESSORS, HEIRS AND ASSIGNS.

GENERAL NOTES:

1. VERTICAL DATUM BASED ON NAVD29
2. COORDINATE SYSTEM = NAD27
3. ALL COMMON AREAS TO BE DEDICATED PUBLIC UTILITY EASEMENTS
4. SITE IS NOT IN SPANISH FORK CITY'S FLOOD ZONE
5. PROVIDE 15' CLEAR RADIUS AT LIGHT POLES & SECTIONALIZERS
6. PROPOSED ZONING R-1-15

PLAT B TABULATIONS

TOTAL AREA:	316,631 SF	7.27 AC	100%
LOT AREA	238,377 SF	5.47 AC	75.3%
ROADWAY AREA:	70,772 SF	1.62 AC	22.4%
TRAIL/CANAL DEDICATION:	7,483 SF	0.17 AC	2.4%
# OF LOTS:	15	--	--
ZONING:	R-1-15	--	--

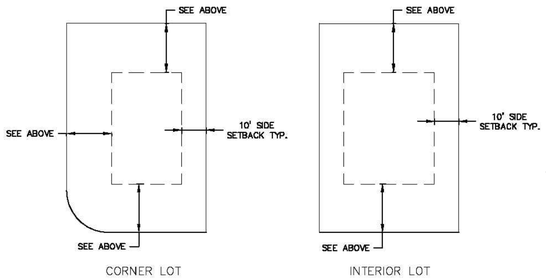
CURVE TABLE

CURVE	RADIUS	LENGTH	DELTA	CHORD	BEARING
C1	10.00	15.71	90°0'0"	14.14	N 45°0'0" W
C2	10.00	15.71	90°0'0"	14.14	N 45°0'0" E
C3	10.00	15.71	90°0'0"	14.14	S 45°0'0" E
C4	70.00	33.24	27°12'35"	32.93	N 76°23'43" E
C5	15.00	19.53	74°36'34"	18.18	N 25°29'9" E
C6	62.00	50.07	46°16'14"	48.72	N 11°18'59" E
C7	62.00	63.47	58°39'1"	60.73	N 63°46'36" E
C8	62.00	55.68	51°27'20"	53.83	S 61°10'13" E
C9	62.00	71.19	65°47'33"	67.35	S 2°32'47" E
C10	62.00	69.34	64°4'35"	65.78	S 62°23'17" W
C11	15.00	11.82	45°8'11"	11.51	S 71°51'29" W
C12	130.00	75.18	33°8'7"	74.14	S 65°51'27" W
C13	130.00	17.19	7°34'30"	17.17	S 86°12'45" W
C14	10.00	15.71	90°0'0"	14.14	S 45°0'0" W
C15	130.00	92.37	40°42'36"	90.44	S 69°38'42" W
C16	62.00	309.75	286°14'43"	74.41	N 48°41'47" W
C17	100.00	91.86	52°37'50"	88.66	N 63°41'5" E
C18	230.00	59.85	14°54'30"	59.68	N 7°27'15" W
C19	200.00	52.04	14°54'30"	51.89	N 7°27'15" W
C20	170.00	44.23	14°54'30"	44.11	N 7°27'15" W
C21	230.00	52.14	12°59'19"	52.03	N 8°24'51" W
C22	230.00	7.71	1°55'12"	7.71	N 0°57'36" W
C23	230.00	59.85	14°54'30"	59.68	N 7°27'15" W
C24	200.00	52.04	14°54'30"	51.89	N 7°27'15" W
C25	170.00	44.23	14°54'30"	44.11	N 7°27'15" W
C26	170.00	32.11	10°49'19"	32.06	N 9°29'51" W
C27	170.00	12.12	4°5'11"	12.12	N 2°2'36" W

SINGLE FAMILY HOME SETBACKS

INTERIOR LOTS:
FRONT SETBACK-20' TO 25' (20' TO LIVING AREAS, 25 FEET TO GARAGES OR CARPORTS, AND 20' TO THE FRONT OF SIDE ENTRY GARAGE)
REAR SETBACK-25'
SIDE SETBACK- 10'

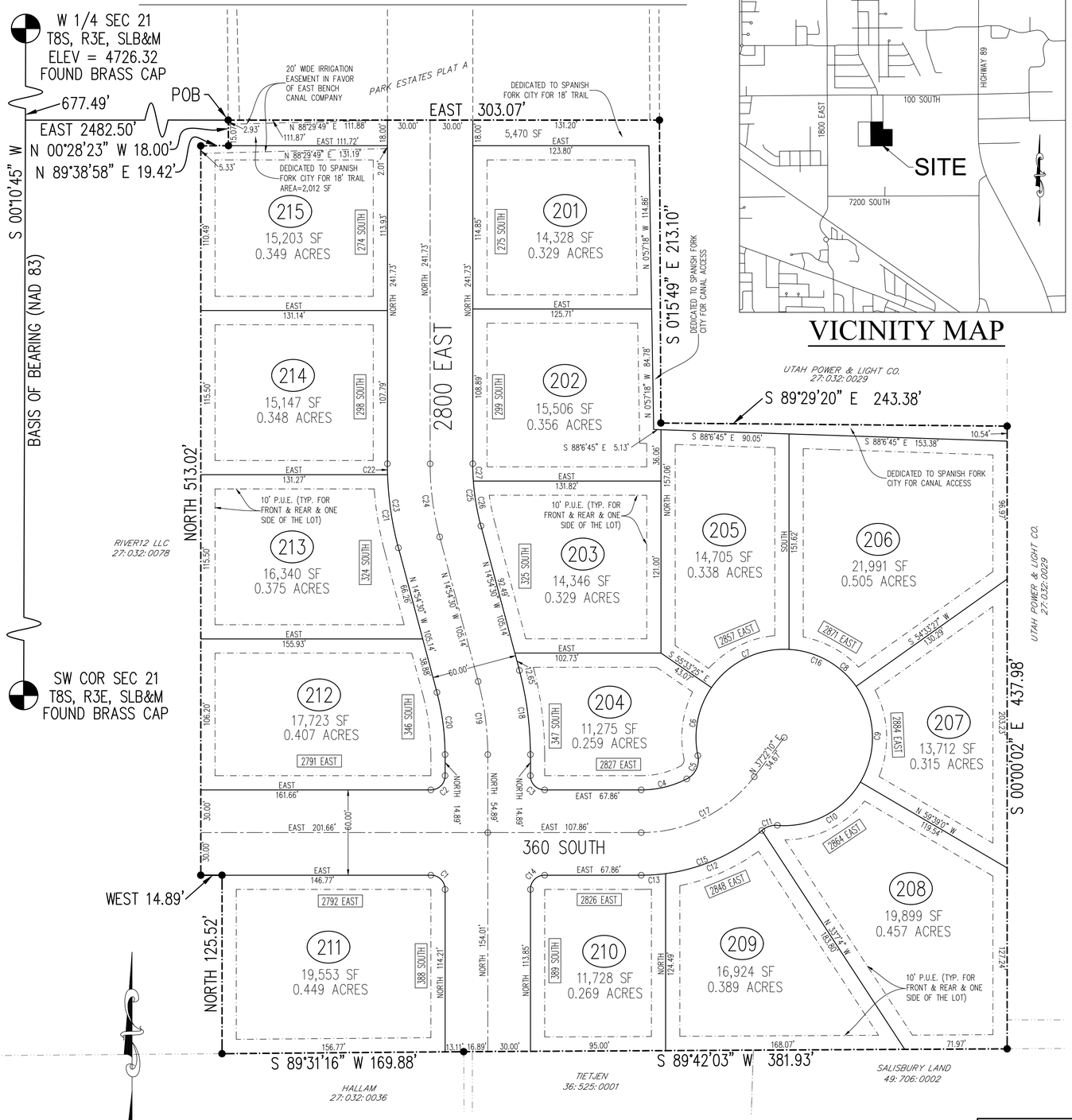
CORNER LOTS:
FRONT SETBACK-20' TO 25' (20' TO LIVING AREAS, 25 FEET TO GARAGES OR CARPORTS, AND 20' TO THE FRONT OF SIDE ENTRY GARAGE)
REAR SETBACK-25'
INTERIOR SIDE-10'
ROAD SIDE-15' TO 25' (15' TO LIVING AREAS, 25' TO GARAGES OR CARPORTS, AND 20' TO THE FRONT OF THE SIDE ENTRY GARAGE)



CORNER LOT INTERIOR LOT

*A 10' PUE IS REQUIRED ON ONE SIDE OF ALL PROPERTY LINES.

DETAIL-TYP. BUILDING SETBACK & EASEMENT
-NTS-



VICINITY MAP

DEVELOPER/PROPERTY OWNER:
Brian Haskell
Phone: (801) 592-3972

LAND SURVEYOR:
AZTEC ENGINEERING INC.
732 N. 780 W.
AMERICAN FORK, UT. 84003
AZTECENGINEERING@GMAIL.COM

SURVEYOR'S CERTIFICATE

I, AARON D. THOMAS, DO HEREBY CERTIFY THAT I AM A REGISTERED LAND SURVEYOR, AND THAT I HOLD CERTIFICATE NO. 6418780 AS PRESCRIBED UNDER THE LAWS OF THE STATE OF UTAH, I FURTHER CERTIFY BY AUTHORITY OF THE OWNERS, I HAVE MADE A SURVEY OF THE TRACT OF LAND SHOWN ON THIS PLAT AND DESCRIBED BELOW, AND HAVE SUBDIVIDED SAID TRACT OF LAND IN 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.

DATE — AARON D. THOMAS (SEE SEAL BELOW)

BOUNDARY DESCRIPTION

Beginning at a point located South 00°10'45" West 677.49 feet and East 2482.50 feet from the West quarter corner of Section 21, Township 8 South, Range 3 East, Salt Lake Base and Meridian;

thence East, a distance of 303.07 feet; thence S 00°15'49" E, a distance of 213.10 feet; thence S 89°29'20" E, a distance of 243.38 feet; thence S 00°00'02" E, a distance of 437.98 feet; thence S 89°42'03" W, a distance of 381.93 feet; thence S 89°31'16" W, a distance of 169.88 feet; thence North, a distance of 125.52 feet; thence West, a distance of 14.89 feet; thence North, a distance of 513.02 feet; thence N 89°38'58" E, a distance of 19.42 feet; thence N 00°28'23" W, a distance of 18.00 feet to the POINT OF BEGINNING.

Containing 316,631 square feet or 7.2688 acres, more or less.

Basis of Bearing is NAD83 State Plane Coordinate System

OWNER'S DEDICATION

KNOW ALL MEN BY THESE PRESENTS THAT I (WE), THE UNDERSIGNED OWNER(S), OF ALL THE PROPERTY DESCRIBED IN THE SURVEYOR'S CERTIFICATE HEREON AND SHOWN ON THIS MAP, HAVE CAUSED THE SAME TO BE SUBDIVIDED INTO LOTS, STREETS, AND EASEMENTS, AND DO HEREBY DEDICATE THE STREETS, EASEMENTS AND OTHER PUBLIC AREAS AS INDICATED HEREON TO SPANISH FORK CITY FOR THE PERPETUAL USE OF THE PUBLIC.

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

PRINTED NAME OF OWNER(S) — AUTHORIZED SIGNATURE(S)

LIMITED LIABILITY COMPANY ACKNOWLEDGMENT

STATE OF UTAH
COUNTY OF UTAH

ON THE _____ DAY OF _____,A.D. 20__, PERSONALLY APPEARED BEFORE ME_____THE SIGNER OF THE FOREGOING INSTRUMENT, WHO DULY ACKNOWLEDGED TO ME THAT HE IS THE_____OF _____, LIMITED LIABILITY COMPANY, AND IS AUTHORIZED TO EXECUTE THE FOREGOING AGREEMENT IN ITS BEHALF THAT HE EXECUTED IT IN SUCH CAPACITY.

NOTARY PUBLIC FULL NAME: _____
COMMISSION NUMBER: _____
MY COMMISSION EXPIRES: _____
A NOTARY PUBLIC COMMISSIONED IN UTAH (SEE SEAL BELOW)

ACCEPTANCE BY LEGISLATIVE BODY

THE _____ OF _____ COUNTY OF UTAH, APPROVES THIS SUBDIVISION SUBJECT TO THE CONDITIONS AND RESTRICTIONS STATED HEREON AND HEREBY ACCEPTS THE DEDICATION OF ALL STREETS, EASEMENTS, AND OTHER PARCELS OF LAND INTENDED FOR PUBLIC PURPOSES FOR THE PERPETUAL USE OF THE PUBLIC THIS _____ DAY OF _____, 20__.

APPROVED _____ CITY MANAGER — APPROVED _____ CITY ATTORNEY

APPROVED _____ ENGINEER (SEE SEAL) — ATTEST _____ CLERK-RECORDER

PLANNING COMMISSION APPROVAL

APPROVED THIS _____ DAY OF _____, 20__, BY THE SPANISH FORK CITY PLANNING COMMISSION.

DIRECTOR - SECRETARY — CHAIRPERSON, PLANNING COMMISSION.

PARK ESTATES PLAT B

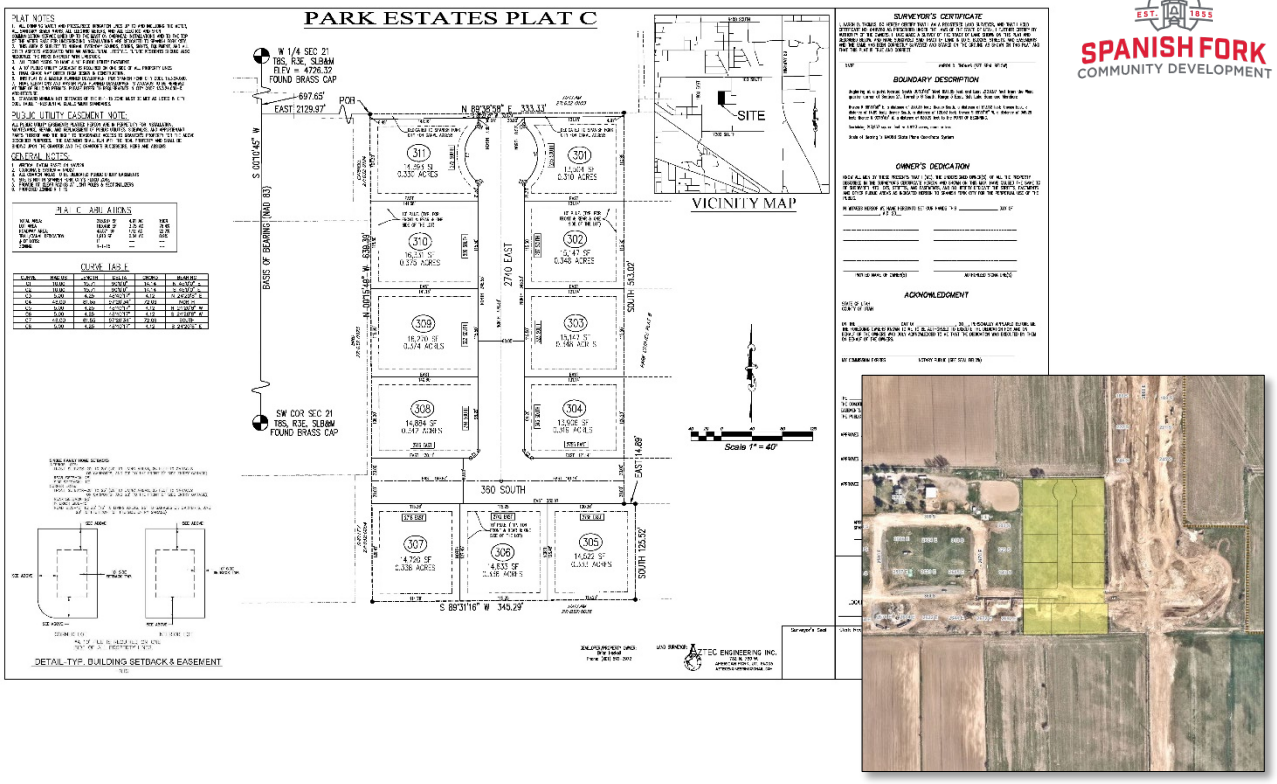
A RESIDENTIAL DEVELOPMENT
CONTAINING 15 LOTS AND 7.27 ACRES

LOCATED IN THE SOUTH HALF OF SEC 21, TOWNSHIP 8S, RANGE 3E, S.L.B.&M.

SPANISH FORK UTAH COUNTY, UTAH

SCALE: 1" = 40 FEET

Surveyor's Seal	Clerk Recorder Seal	City Engineer Seal	County-Recorder Seal



Park Estates Plat C Final Plat Approval Request

September 21, 2022, Development Review Committee Meeting.

Located at 2740 East 360 South, including 4.91 acres.

The subject property is zoned R-1-15.

The applicant has requested that a Final Plat of eleven (11) residential lots be reapproved.

The Final Plat was last approved by the DRC on August 4, 2021, and the approval has since expired.

Key Issues

1. Consistency with the Preliminary Plat.
2. Turn-around.

Recommendation

That the proposed Final Plat be approved based on the following findings and subject to the following conditions:

Findings

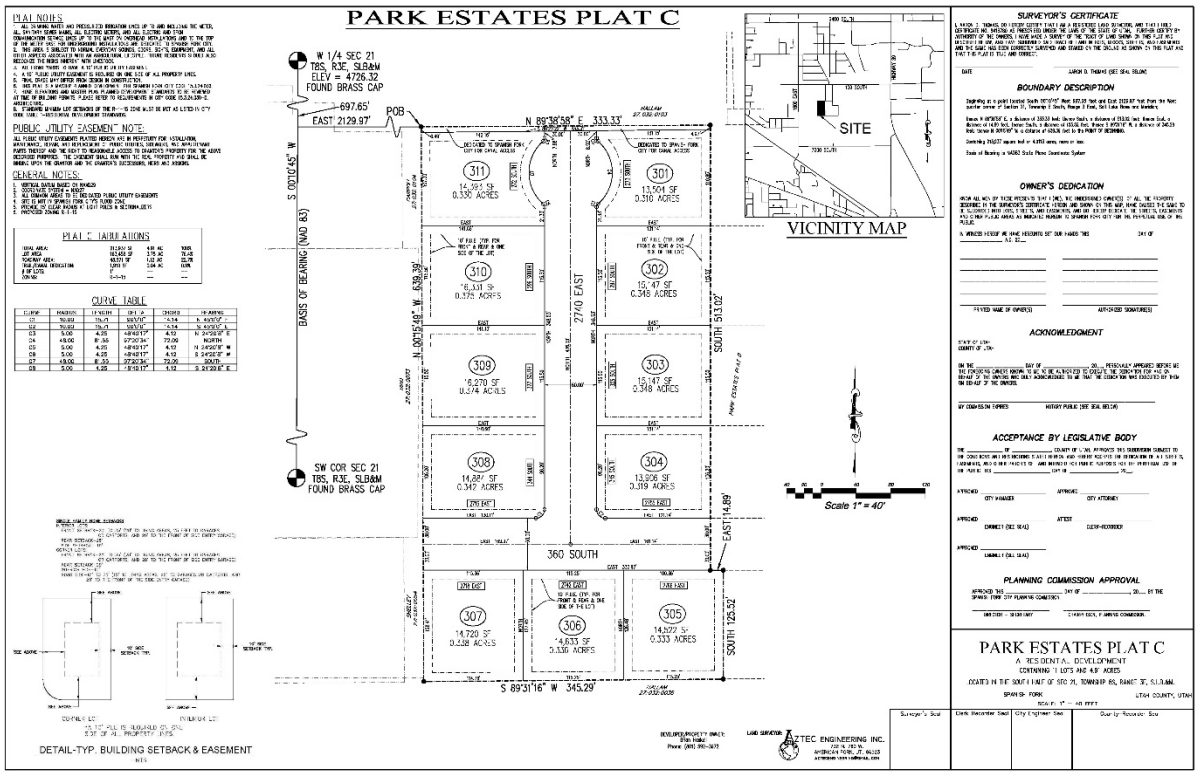
1. That the application conforms to the City's General Plan Designation and Zoning Map.
2. That the application is consistent with the approved Preliminary Plat.

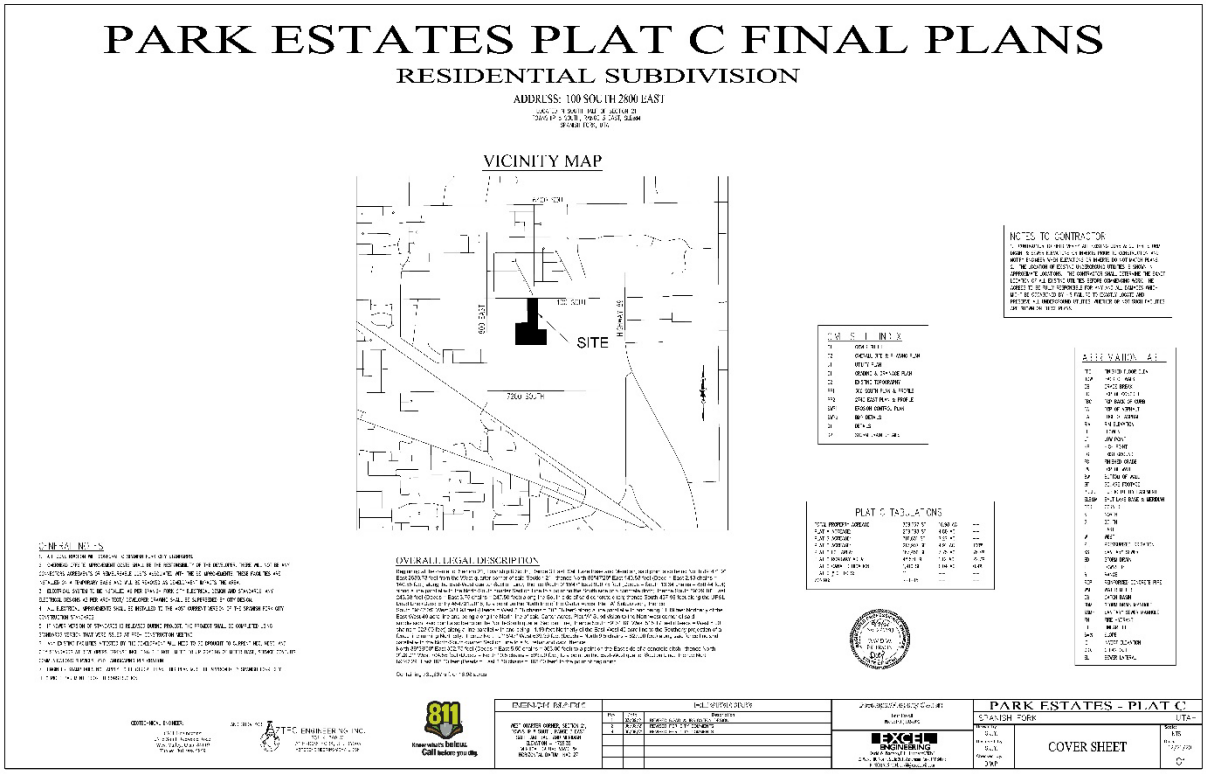
Conditions

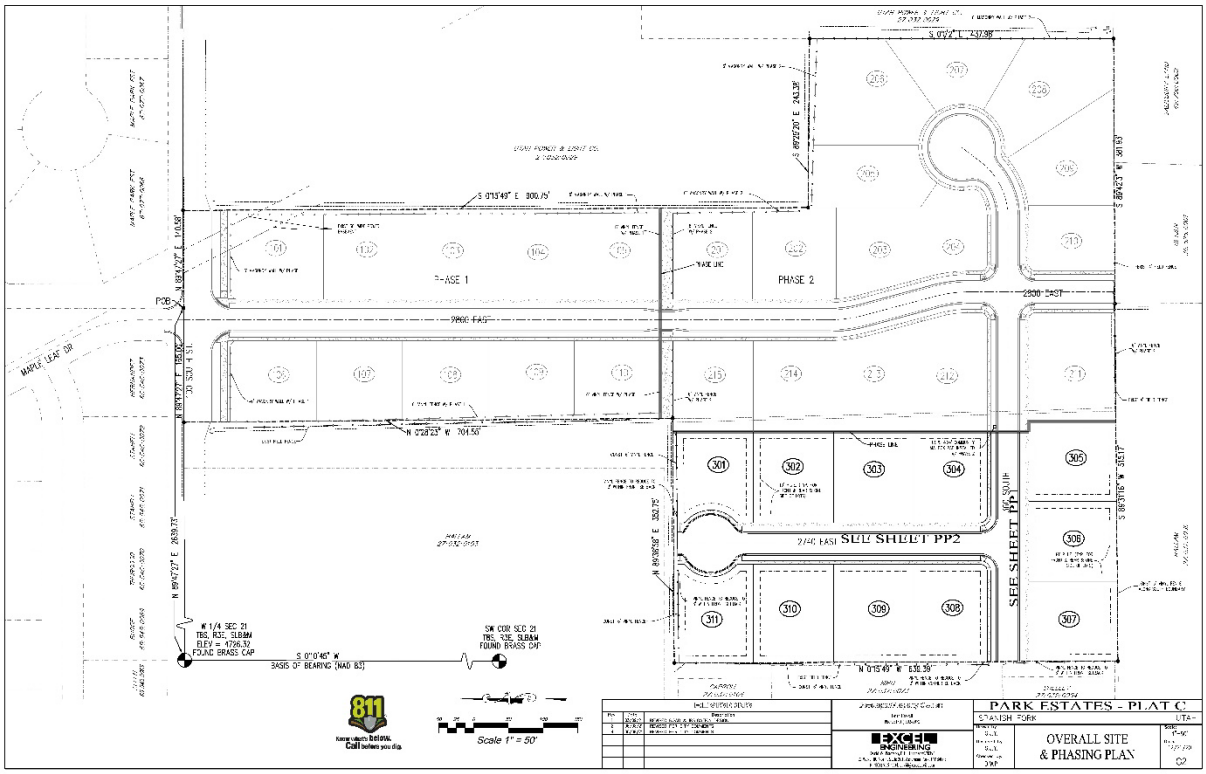
1. That the applicant meets the City's Zoning requirements and Construction Standards.
2. That the applicant addresses any red-lines.

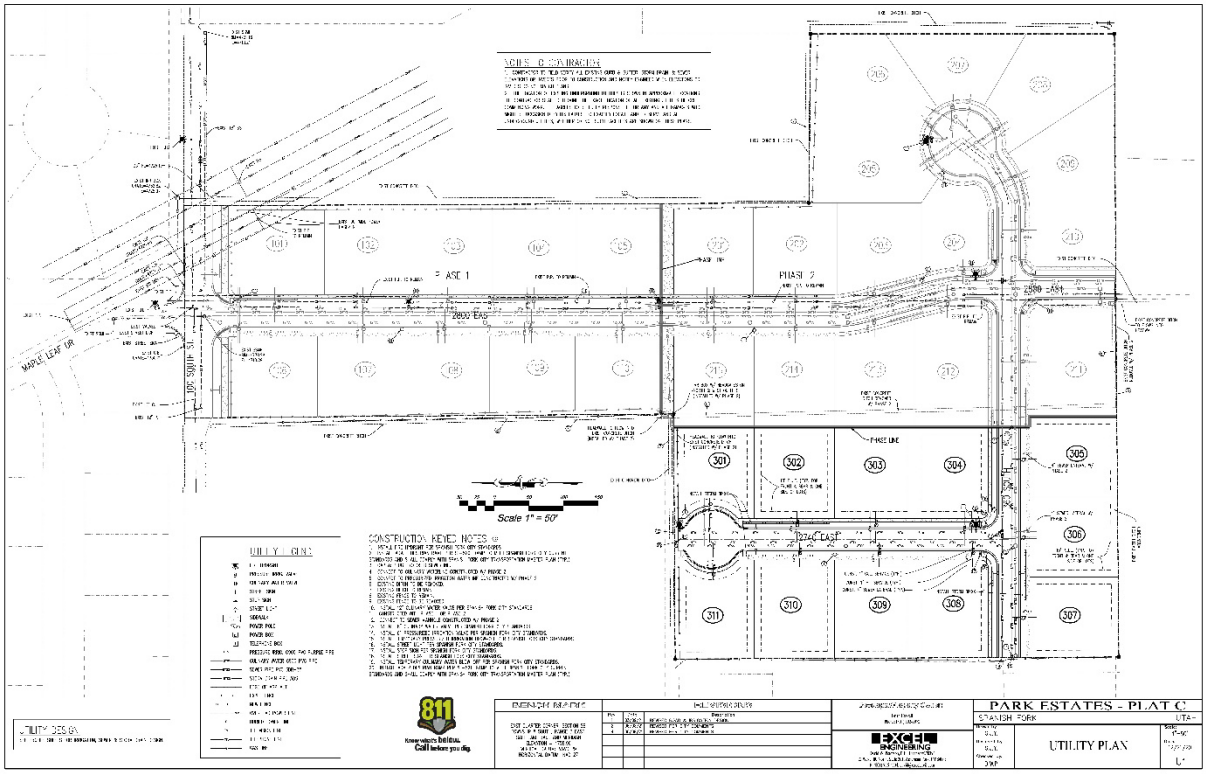
Exhibits

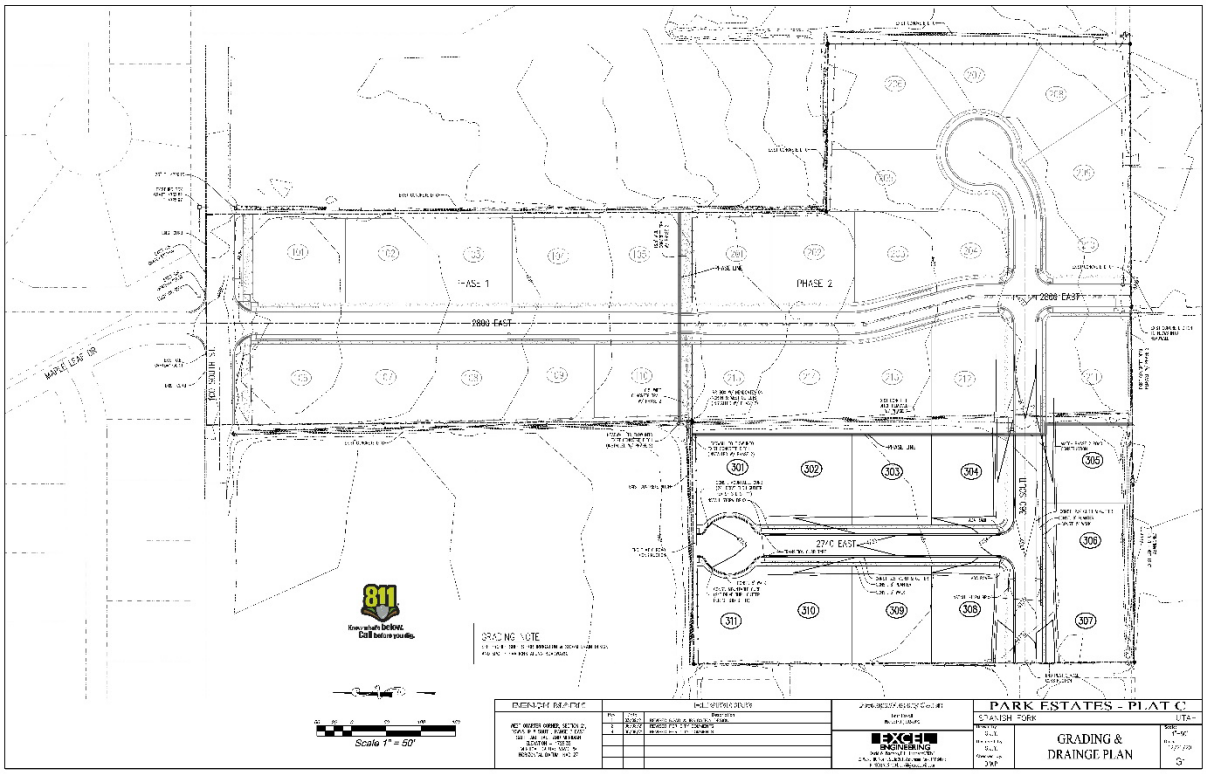
1. Final Plat.

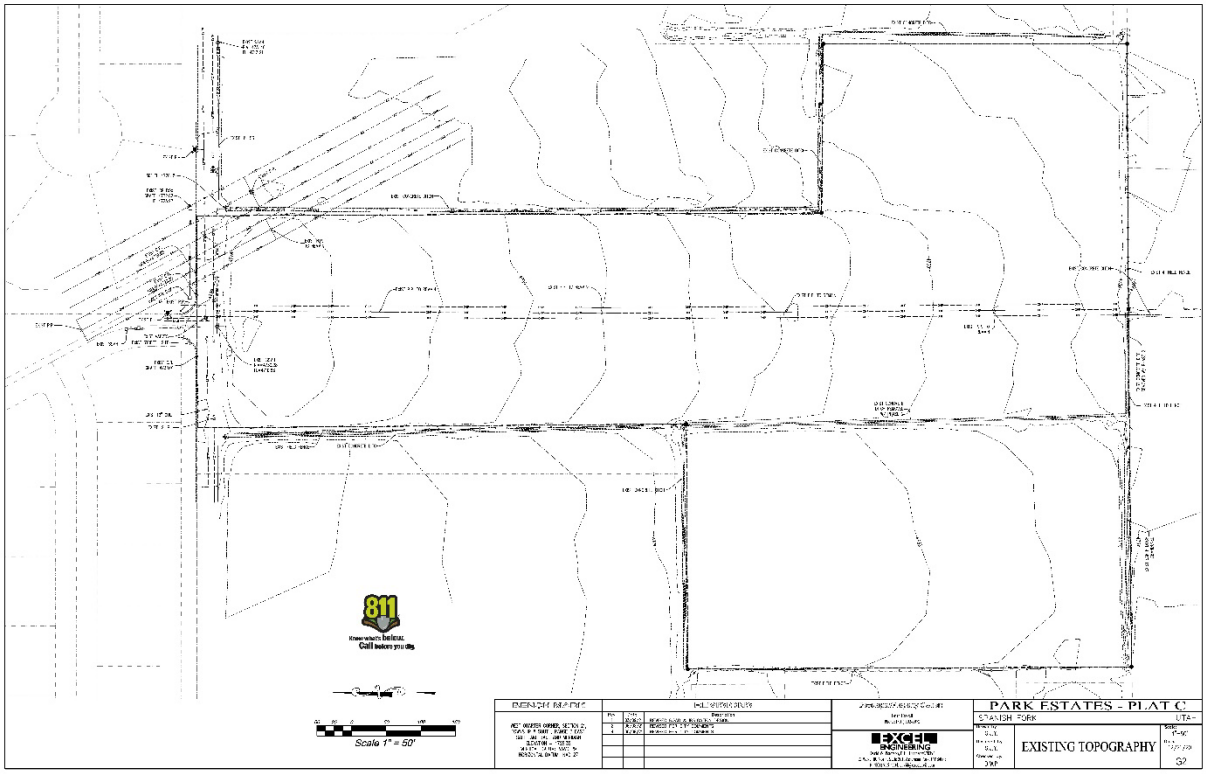

PARK ESTATES PLAT C
PLAT NOTES
PUBLIC UTILITY EASEMENT NOTE:
GENERAL NOTES:
PLAT C TABULATIONS
CURVE TABLE
W 1/4 SEC 21
TBS, R3E, SLB&M
ELEV = 4726.32
FOUND BRASS CAP
SW COR SEC 21
TBS, R3E, SLB&M
FOUND BRASS CAP
BASIS OF BEARING (NAD 83)
2740 EAST
360 SOUTH
SOUTH 513.02'
SOUTH 125.52'
EAST 14.89'
S 89°31'16" W 345.29'
N 89°38'58" E 333.33'
S 00°10'45" W
N 00°15'49" W 639.39'
SITE
VICINITY MAP
Scale 1" = 40'
SURVEYOR'S CERTIFICATE
BOUNDARY DESCRIPTION
OWNER'S DEDICATION
ACKNOWLEDGMENT
ACCEPTANCE BY LEGISLATIVE BODY
PLANNING COMMISSION APPROVAL
PARK ESTATES PLAT C
A RESIDENTIAL DEVELOPMENT
DETAIL-TYP. BUILDING SETBACK & EASEMENT
ZTEC ENGINEERING INC.

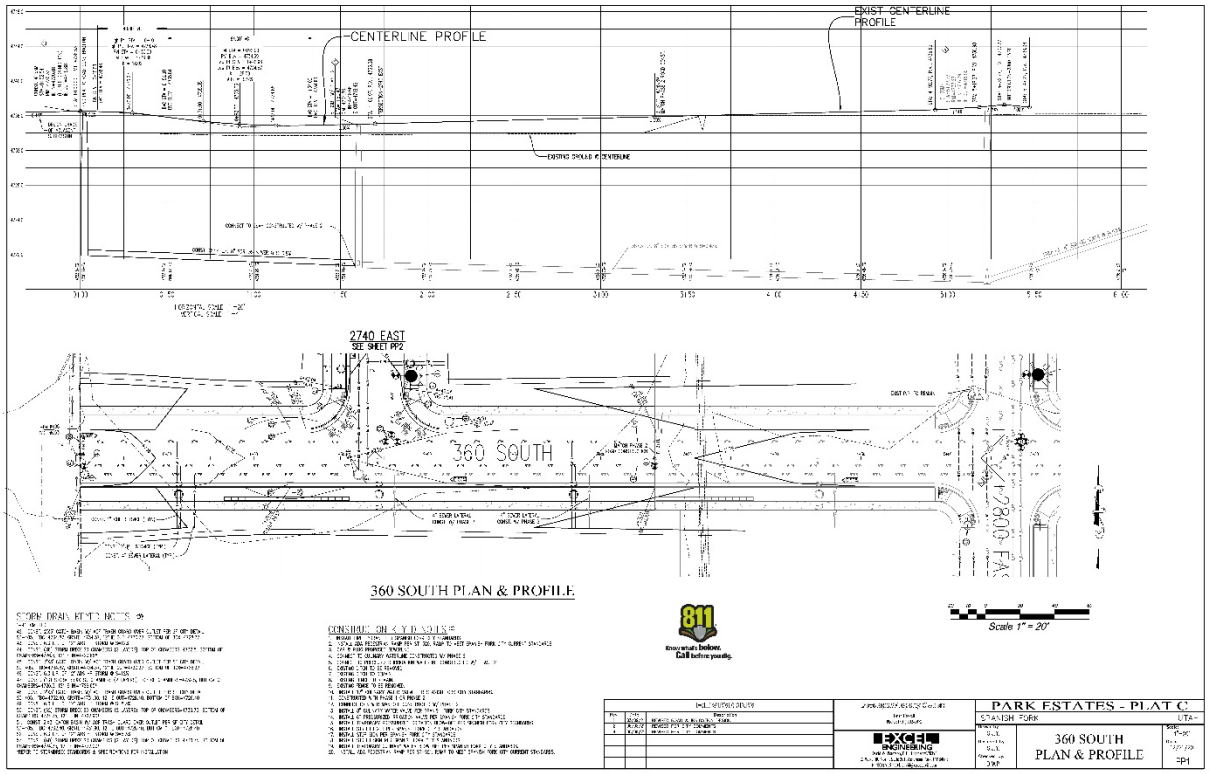

PARK ESTATES PLAT C FINAL PLANS
RESIDENTIAL SUBDIVISION
ADDRESS: 100 SOUTH 2800 EAST
VICINITY MAP
SITE
NOTES TO CONTRACTOR
PLAT C TABULATIONS
GENERAL NOTES
OVERALL LEGAL DESCRIPTION
PARK ESTATES - PLAT C
COVER SHEET
ZTEC ENGINEERING INC.

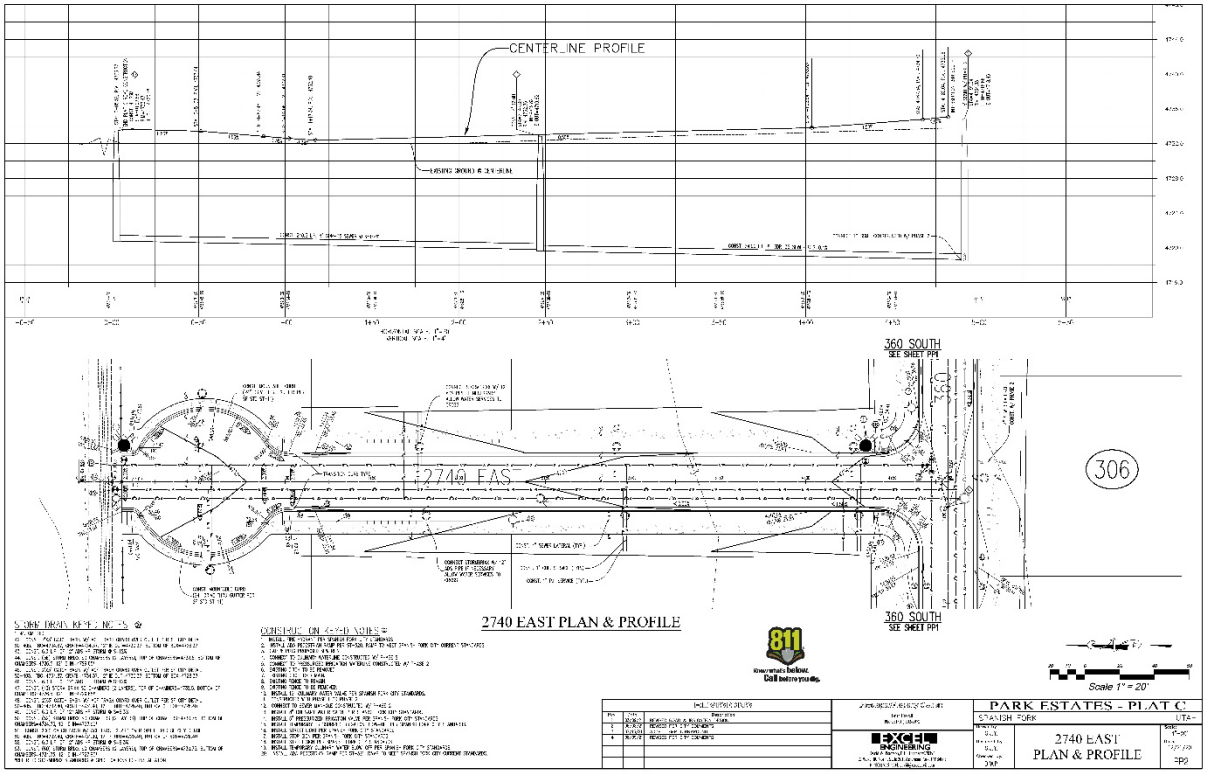

PHASE 1
PHASE 2
2800 EAST
MAPLE LEAF DR
P.O.B.
W 1/4 SEC 21
T8S, R3E, SLBAM
ELEV = 4796.30
FOUND BRASS CAP
SW COR SEC 21
T8S, R3E, SLBAM
FOUND BRASS CAP
BASIS OF BEARING (NAD 83)
SEE SHEET PP2
Scale 1" = 50'
PARK ESTATES - PLAT C
SPANISH FORK
UTA-
OVERALL SITE
& PHASING PLAN

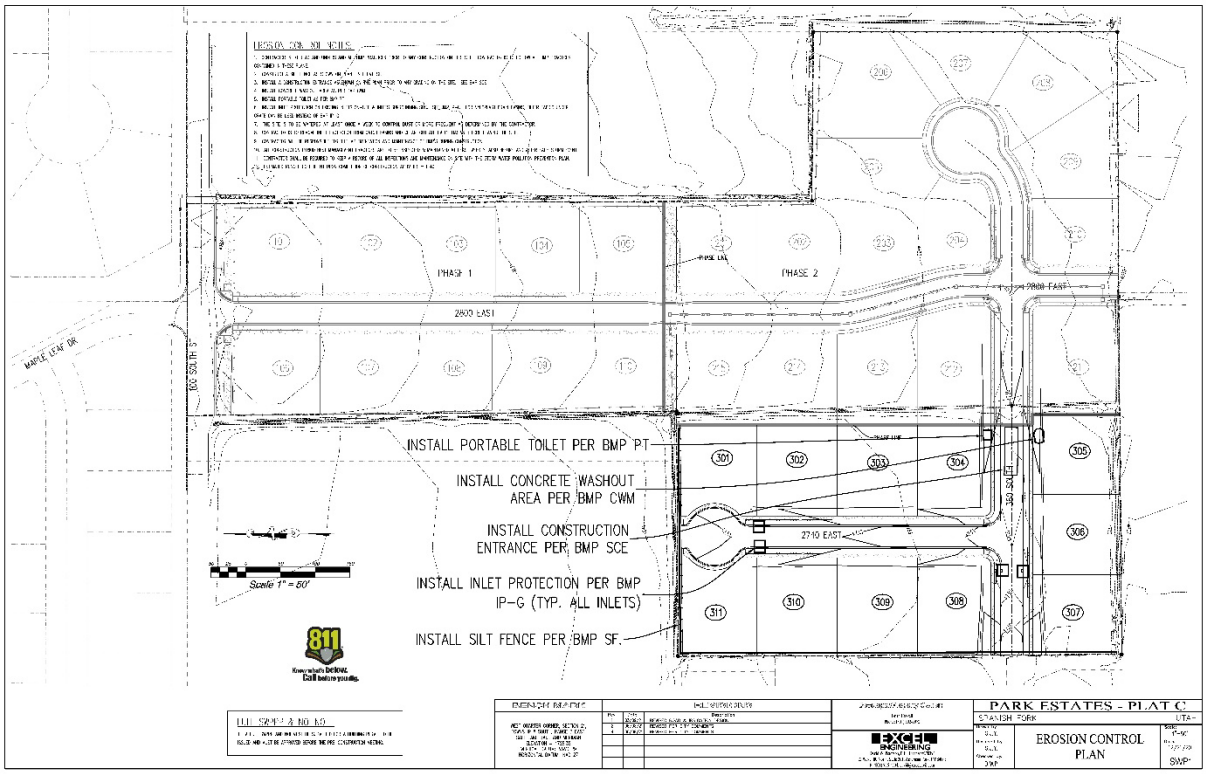

PHASE 1
PHASE 2
2800 EAST
MAPLE LEAF DR
Scale 1" = 50'
UTILITY LINE
CONSTRUCTION KEYED NOTES
PARK ESTATES - PLAT C
SPANISH FORK
UTA-
UTILITY PLAN

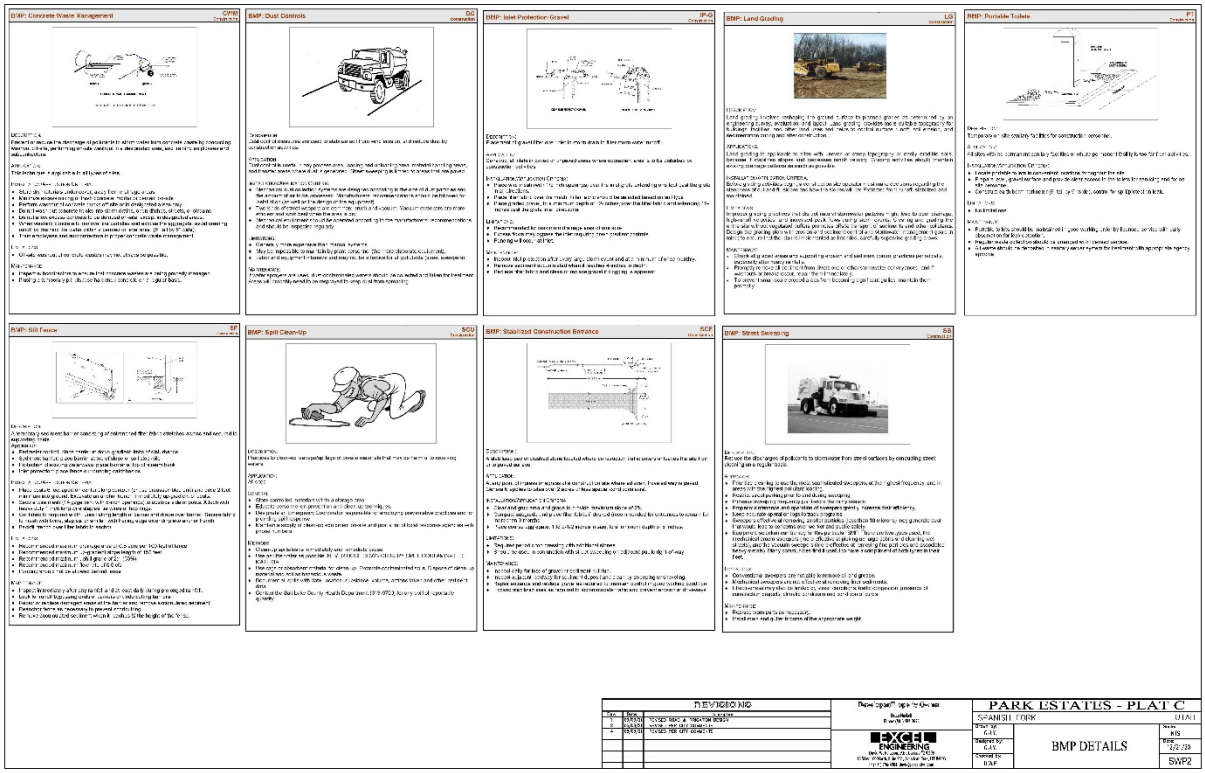

PHASE 1
PHASE 2
2800 EAST
MAPLE LEAF DR
165 SOUTH ST
365 SOUTH
270 EAST
GRADING NOTE
Scale 1" = 50'
PARK ESTATES - PLAT C
SPANISH FORK
UTA-
GRADING & DRAINGE PLAN
EXCEL ENGINEERING

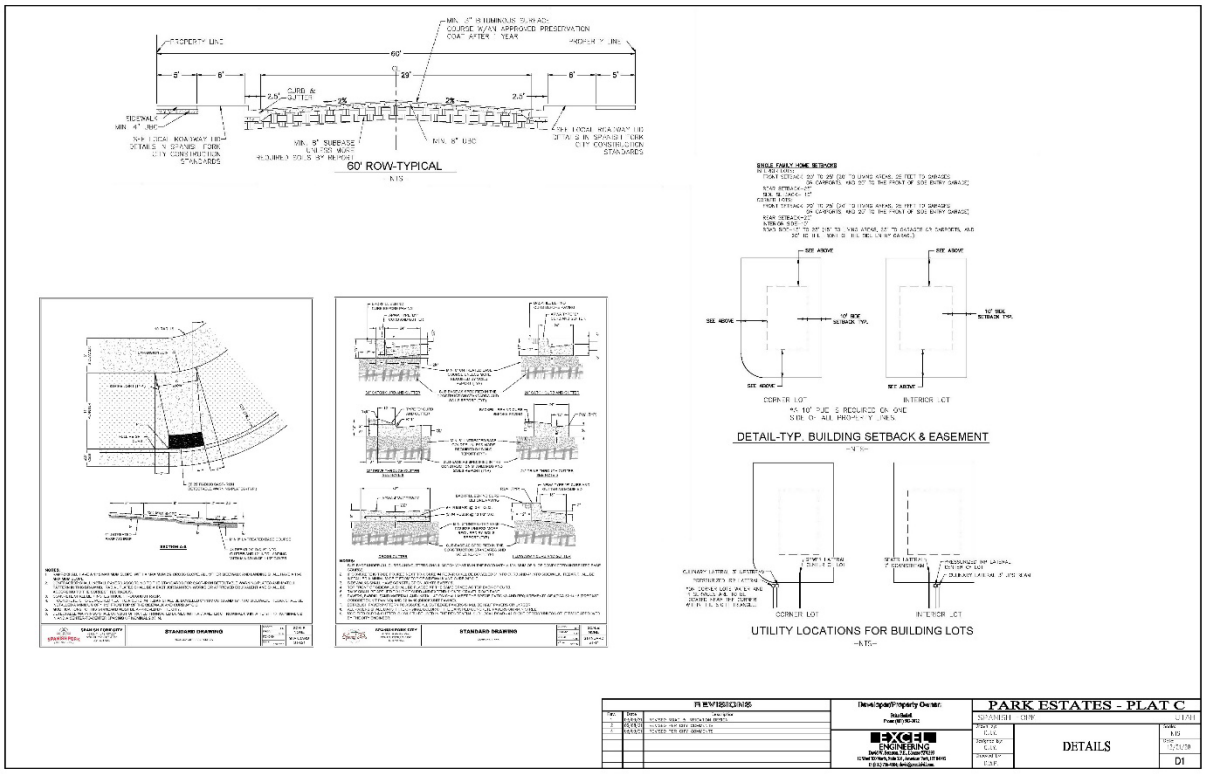

Scale 1" = 50'
PARK ESTATES - PLAT C
SPANISH FORK
UTA-
EXISTING TOPOGRAPHY
EXCEL ENGINEERING

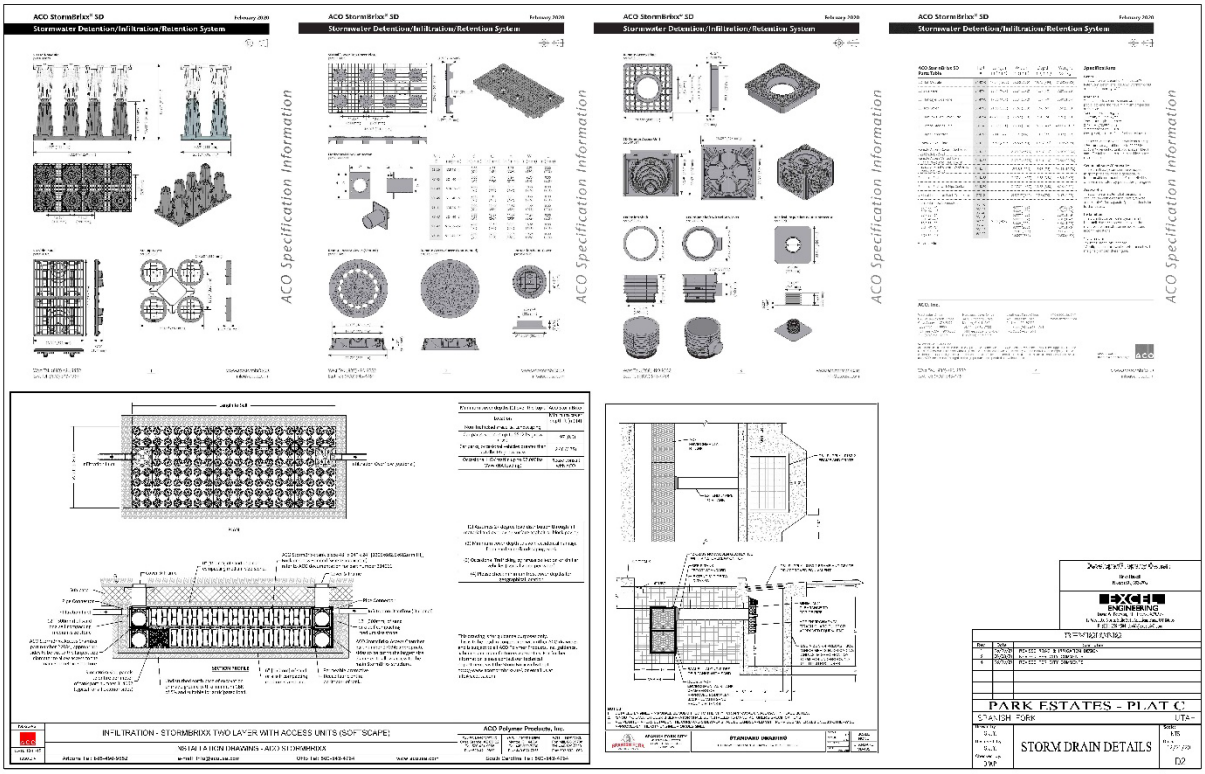

CENTERLINE PROFILE
EXIST. CENTERLINE PROFILE
2740 EAST
SEE SHEET PP2
360 SOUTH
360 SOUTH PLAN & PROFILE
Scale 1" = 20'
PARK ESTATES - PLAT C
SPANISH FORK UTAH
360 SOUTH
PLAN & PROFILE
PP1

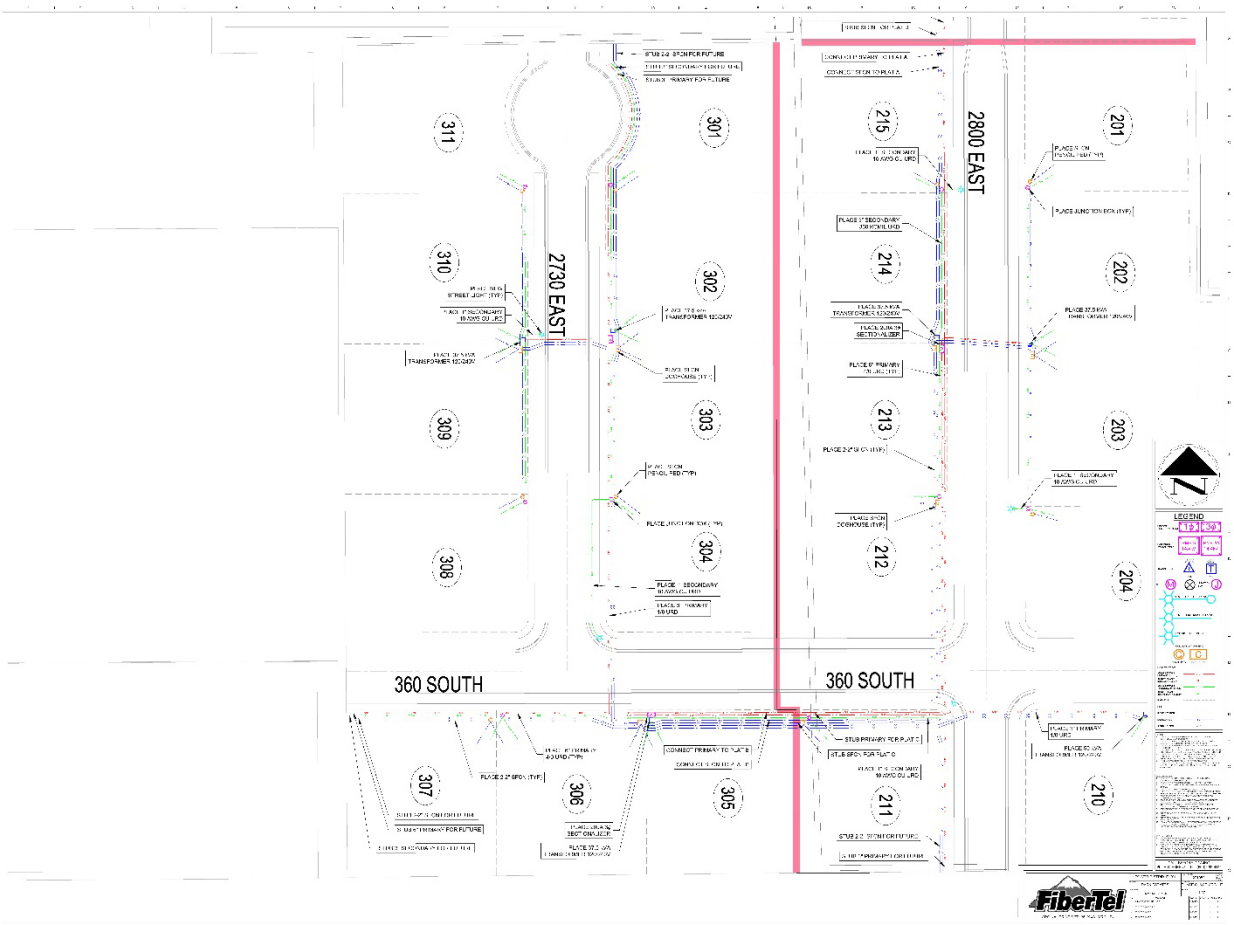

CENTER_INE PROFILE
360 SOUTH
SEE SHEET PP1
2740 EAS
306
2740 EAST PLAN & PROFILE
360 SOUTH
SEE SHEET PP1
Scale 1" = 20'
PARK ESTATES - PLAT C
SPANISH FORK UTAH
2740 EAST
PLAN & PROFILE
PP2


PHASE 1
PHASE 2
2600 EAST
2710 EAST
MAPLE LEAF DR
660 SOUTH
INSTALL PORTABLE TOILET PER BMP PT
INSTALL CONCRETE WASHOUT AREA PER BMP CWM
INSTALL CONSTRUCTION ENTRANCE PER BMP SCE
INSTALL INLET PROTECTION PER BMP IP-G (TYP. ALL INLETS)
INSTALL SILT FENCE PER BMP SF.
Scale 1" = 50'
811
Know what's BELOW. Call before you dig.
EXCEL ENGINEERING
PARK ESTATES - PLAT C
SPANISH FORK UTAH
EROSION CONTROL PLAN
SWP


BMP: Concrete Waste Management
BMP: Dust Controls
BMP: Inlet Protection Gravel
BMP: Land Grading
BMP: Portable Toilets
BMP: Silt Fence
BMP: Spill Clean-Up
BMP: Stabilized Construction Entrance
BMP: Street Sweeping
EXCEL ENGINEERING
PARK ESTATES - PLAT C
SPANISH FORK UTAH
BMP DETAILS
SWP2


60' ROW-TYPICAL
DETAIL-TYP. BUILDING SETBACK & EASEMENT
UTILITY LOCATIONS FOR BUILDING LOTS
PARK ESTATES - PLAT C
DETAILS
D1


ACO Specification Information
INFILTRATION - STORMBRIXX TWO LAYER WITH ACCESS UNITS (SOF SCAPE)
INSTALLATION DRAWINGS - ACO STORMBRIXX
PARK ESTATES - PLAT C
STORM DRAIN DETAILS
D2


2730 EAST
2800 EAST
360 SOUTH
360 SOUTH
311
310
309
308
307
306
305
304
303
302
301
215
214
213
212
211
210
204
203
202
201
LEGEND
FiberTel

PARK ESTATES PLAT C

PLAT NOTES

1. ALL DRINKING WATER AND PRESSURIZED IRRIGATION LINES UP TO AND INCLUDING THE METER, ALL SANITARY SEWER MAINS, ALL ELECTRIC METERS, AND ALL ELECTRIC AND SFCN COMMUNICATION SERVICE LINES UP TO THE MAST ON OVERHEAD INSTALLATIONS AND TO THE TOP OF THE METER BASE FOR UNDERGROUND INSTALLATIONS ARE DEDICATED TO SPANISH FORK CITY.
2. THIS AREA IS SUBJECT TO NORMAL EVERYDAY SOUNDS, ODORS, SIGHTS, EQUIPMENT, AND ALL OTHER ASPECTS ASSOCIATED WITH AN AGRICULTURAL LIFESTYLE. FUTURE RESIDENTS SHOULD ALSO RECOGNIZE THE RISKS INHERENT WITH LIVESTOCK.
3. ALL FRONT YARDS TO HAVE A 10' PUBLIC UTILITY EASEMENT.
4. A 10' PUBLIC UTILITY EASEMENT IS REQUIRED ON ONE SIDE OF ALL PROPERTY LINES.
5. FINAL GRADE MAY DIFFER FROM DESIGN IN CONSTRUCTION.
6. THIS PLAT IS A MASTER PLANNED DEVELOPMENT PER SPANISH FORK CITY CODE 15.3.24.030.
7. HOME ELEVATIONS AND MASTER PLAN PLANNED DEVELOPMENT STANDARDS TO BE REVIEWED AT TIME OF BUILDING PERMITS. PLEASE REFER TO REQUIREMENTS IN CITY CODE 15.3.24.030-D. ARCHITECTURE.
8. STANDARD MINIMUM LOT SETBACKS OF THE R-1-15 ZONE MUST BE MET AS LISTED IN CITY CODE TABLE 1-RESIDENTIAL DEVELOPMENT STANDARDS.

PUBLIC UTILITY EASEMENT NOTE:

ALL PUBLIC UTILITY EASEMENTS PLATTED HEREON ARE IN PERPETUITY FOR INSTALLATION, MAINTENANCE, REPAIR, AND REPLACEMENT OF PUBLIC UTILITIES, SIDEWALKS, AND APPURTENANT PARTS THEREOF AND THE RIGHT TO REASONABLE ACCESS TO GRANTOR'S PROPERTY FOR THE ABOVE DESCRIBED PURPOSES. THE EASEMENT SHALL RUN WITH THE REAL PROPERTY AND SHALL BE BINDING UPON THE GRANTOR AND THE GRANTOR'S SUCCESSORS, HEIRS AND ASSIGNS.

GENERAL NOTES:

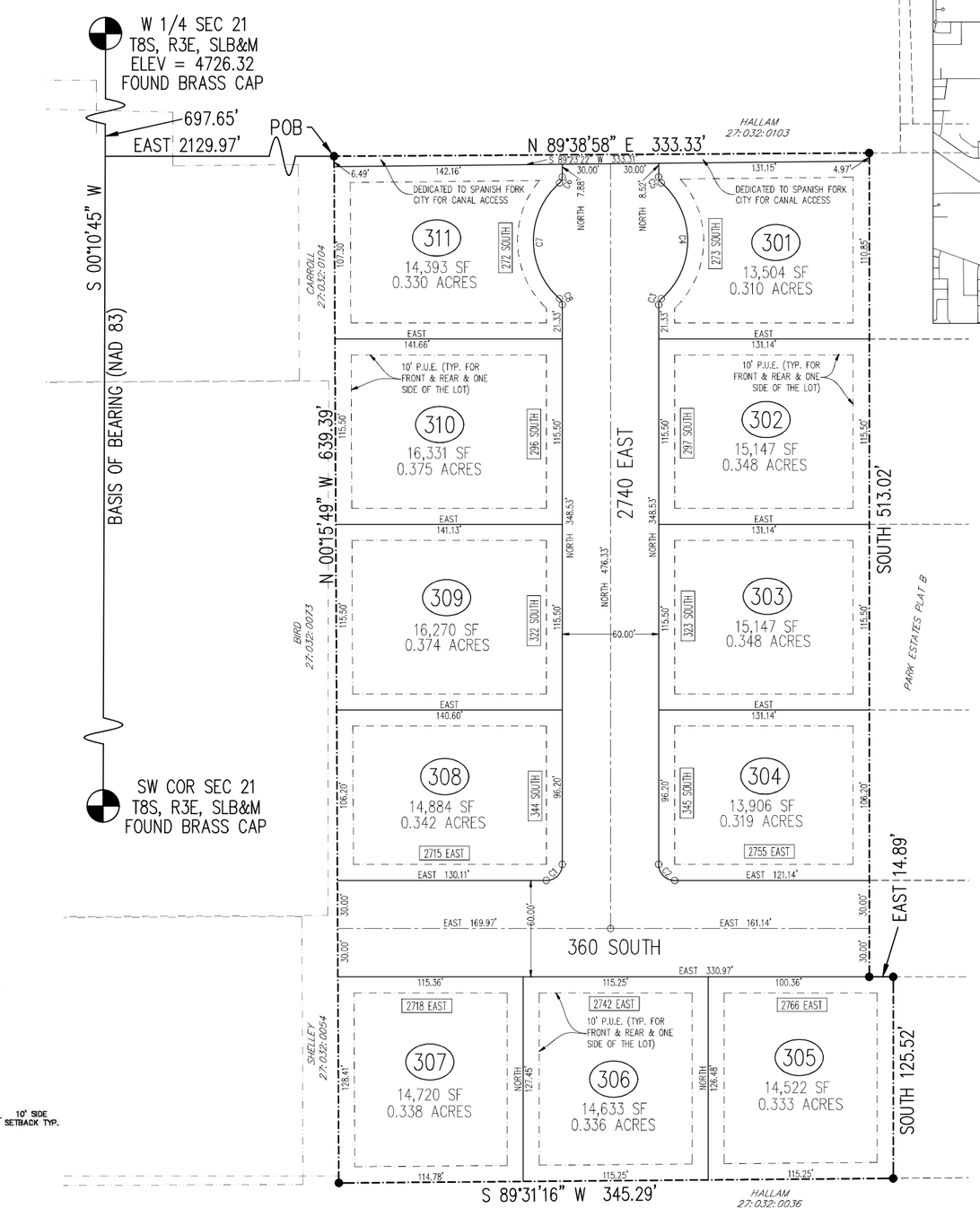
1. VERTICAL DATUM BASED ON NAVD29
2. COORDINATE SYSTEM = NAD27
3. ALL COMMON AREAS TO BE DEDICATED PUBLIC UTILITY EASEMENTS
4. SITE IS NOT IN SPANISH FORK CITY'S FLOOD ZONE
5. PROVIDE 15' CLEAR RADIUS AT LIGHT POLES & SECTIONALIZERS
6. PROPOSED ZONING R-1-15

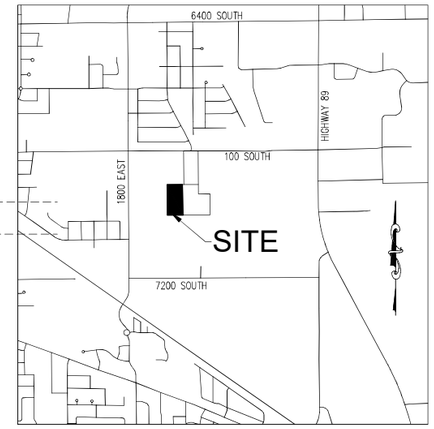
PLAT C TABULATIONS

TOTAL AREA:	213,937 SF	4.91 AC	100%
LOT AREA	163,456 SF	3.75 AC	76.4%
ROADWAY AREA:	48,571 SF	1.12 AC	22.7%
TRAIL/CANAL DEDICATION:	1,910 SF	0.04 AC	0.9%
# OF LOTS:	11	--	--
ZONING:	R-1-15	--	--

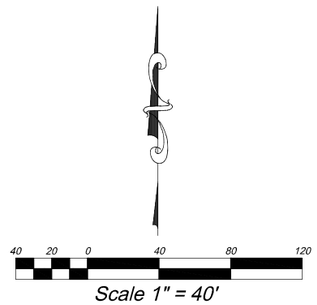
CURVE TABLE

CURVE	RADIUS	LENGTH	DELTA	CHORD	BEARING
C1	10.00	15.71	90°0'0"	14.14	N 45°0'0" E
C2	10.00	15.71	90°0'0"	14.14	S 45°0'0" E
C3	5.00	4.25	48°40'17"	4.12	N 24°20'8" E
C4	48.00	81.55	97°20'34"	72.09	NORTH
C5	5.00	4.25	48°40'17"	4.12	N 24°20'8" W
C6	5.00	4.25	48°40'17"	4.12	S 24°20'8" W
C7	48.00	81.55	97°20'34"	72.09	SOUTH
C8	5.00	4.25	48°40'17"	4.12	S 24°20'8" E



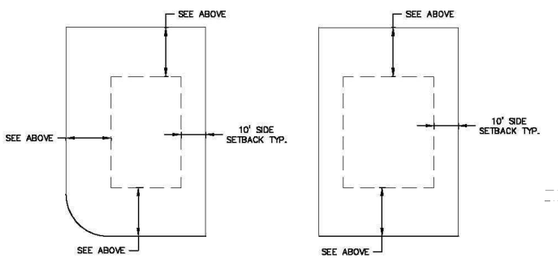


VICINITY MAP



Scale 1" = 40'

SINGLE FAMILY HOME SETBACKS
INTERIOR LOTS:
FRONT SETBACK-20' TO 25' (20' TO LIVING AREAS, 25 FEET TO GARAGES OR CARPORTS, AND 20' TO THE FRONT OF SIDE ENTRY GARAGE)
REAR SETBACK-25'
SIDE SETBACK- 10'
CORNER LOTS:
FRONT SETBACK-20' TO 25' (20' TO LIVING AREAS, 25 FEET TO GARAGES OR CARPORTS, AND 20' TO THE FRONT OF SIDE ENTRY GARAGE)
REAR SETBACK-25'
INTERIOR SIDE-10'
ROAD SIDE-15' TO 25' (15' TO LIVING AREAS, 25' TO GARAGES OR CARPORTS, AND 20' TO THE FRONT OF THE SIDE ENTRY GARAGE)



*A 10' PUE IS REQUIRED ON ONE SIDE OF ALL PROPERTY LINES.

DETAIL-TYP. BUILDING SETBACK & EASEMENT
-NTS-

SURVEYOR'S CERTIFICATE

I, AARON D. THOMAS, DO HEREBY CERTIFY THAT I AM A REGISTERED LAND SURVEYOR, AND THAT I HOLD CERTIFICATE NO. 6418780 AS PRESCRIBED UNDER THE LAWS OF THE STATE OF UTAH, I FURTHER CERTIFY BY AUTHORITY OF THE OWNERS, I HAVE MADE A SURVEY OF THE TRACT OF LAND SHOWN ON THIS PLAT AND DESCRIBED BELOW, AND HAVE SUBDIVIDED SAID TRACT OF LAND IN 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.

DATE _____ AARON D. THOMAS (SEE SEAL BELOW)

BOUNDARY DESCRIPTION

Beginning at a point located South 00°10'45" West 697.65 feet and East 2129.97 feet from the West quarter corner of Section 21, Township 8 South, Range 3 East, Salt Lake Base and Meridian;

thence N 89°38'58" E, a distance of 333.33 feet; thence South, a distance of 513.02 feet; thence East, a distance of 14.89 feet; thence South, a distance of 125.52 feet; thence S 89°31'16" W, a distance of 345.29 feet; thence N 00°15'49" W, a distance of 639.39 feet to the POINT OF BEGINNING.

Containing 213,937 square feet or 4.9113 acres, more or less.

Basis of Bearing is NAD83 State Plane Coordinate System

OWNER'S DEDICATION

KNOW ALL MEN BY THESE PRESENTS THAT I (WE), THE UNDERSIGNED OWNER(S), OF ALL THE PROPERTY DESCRIBED IN THE SURVEYOR'S CERTIFICATE HEREON AND SHOWN ON THIS MAP, HAVE CAUSED THE SAME TO BE SUBDIVIDED INTO LOTS, STREETS, AND EASEMENTS, AND DO HEREBY DEDICATE THE STREETS, EASEMENTS AND OTHER PUBLIC AREAS AS INDICATED HEREON TO SPANISH FORK CITY FOR THE PERPETUAL USE OF THE PUBLIC.

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

PRINTED NAME OF OWNER(S) AUTHORIZED SIGNATURE(S)

ACKNOWLEDGMENT

STATE OF UTAH
COUNTY OF UTAH

ON THE _____ DAY OF _____, 20__, PERSONALLY APPEARED BEFORE ME THE FOREGOING OWNERS KNOWN TO ME TO BE AUTHORIZED TO EXECUTE THE DEDICATION FOR AND ON BEHALF OF THE OWNERS WHO DULY ACKNOWLEDGED TO ME THAT THE DEDICATION WAS EXECUTED BY THEM ON BEHALF OF THE OWNERS.

MY COMMISSION EXPIRES NOTARY PUBLIC (SEE SEAL BELOW)

ACCEPTANCE BY LEGISLATIVE BODY

THE _____ OF _____, COUNTY OF UTAH, APPROVES THIS SUBDIVISION SUBJECT TO THE CONDITIONS AND RESTRICTIONS STATED HEREON AND HEREBY ACCEPTS THE DEDICATION OF ALL STREETS, EASEMENTS, AND OTHER PARCELS OF LAND INTENDED FOR PUBLIC PURPOSES FOR THE PERPETUAL USE OF THE PUBLIC THIS _____ DAY OF _____, 20__.

APPROVED _____ CITY MANAGER
APPROVED _____ CITY ATTORNEY
APPROVED _____ ENGINEER (SEE SEAL)
ATTEST _____ CLERK-RECORDER
APPROVED _____ ENGINEER (SEE SEAL)

PLANNING COMMISSION APPROVAL

APPROVED THIS _____ DAY OF _____, 20__, BY THE SPANISH FORK CITY PLANNING COMMISSION.

DIRECTOR - SECRETARY CHAIRPERSON, PLANNING COMMISSION.

PARK ESTATES PLAT C

A RESIDENTIAL DEVELOPMENT
CONTAINING 11 LOTS AND 4.91 ACRES

LOCATED IN THE SOUTH HALF OF SEC 21, TOWNSHIP 8S, RANGE 3E, S.L.B.&M.

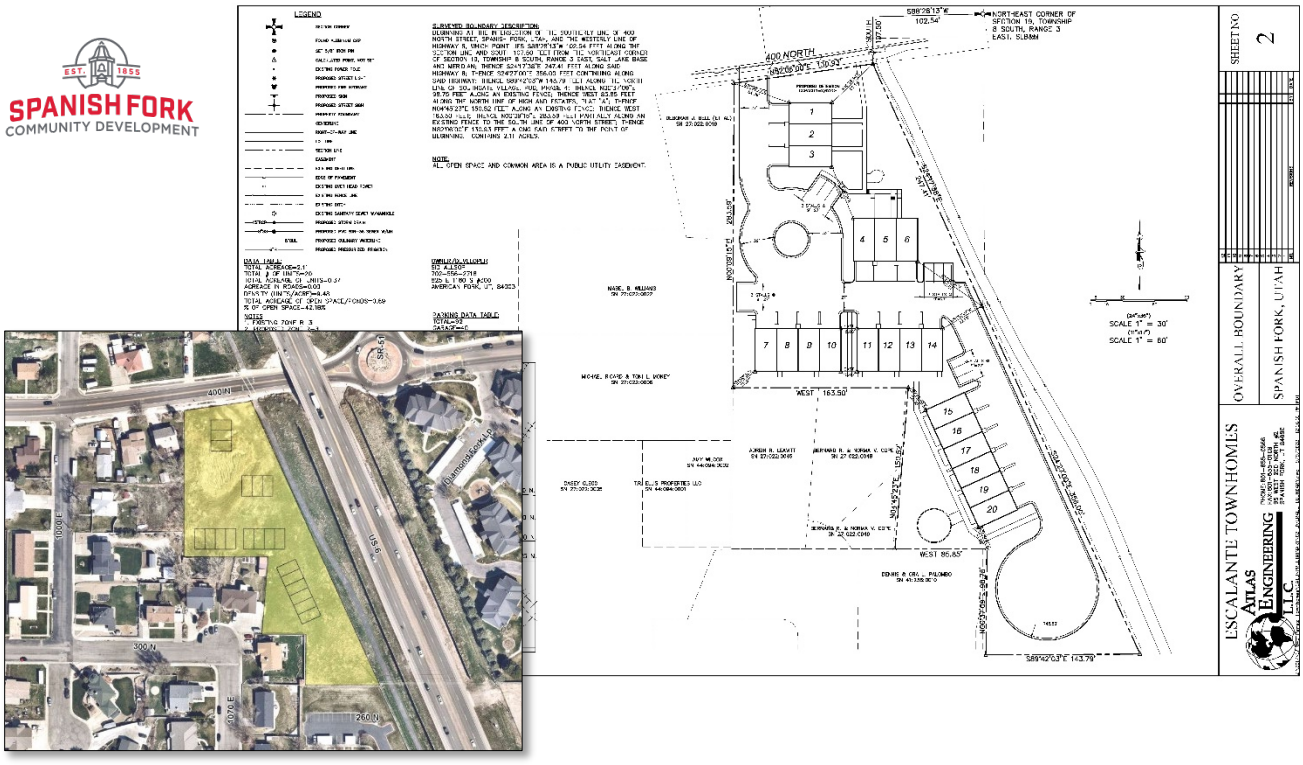
SPANISH FORK UTAH COUNTY, UTAH

SCALE: 1" = 40 FEET

DEVELOPER/PROPERTY OWNER:
Brian Haskell
Phone: (801) 592-3972

LAND SURVEYOR:
AZTEC ENGINEERING INC.
732 N. 780 W.
AMERICAN FORK, UT. 84003
AZTECENGINEERING@GMAIL.COM

Surveyor's Seal	Clerk Recorder Seal	City Engineer Seal	County-Recorder Seal



Escalante Townhomes Preliminary Plat Approval Request

September 21, 2022, Development Review Committee Meeting.

Located at 1060 East 400 North, including 2.11 acres.

The applicant has requested Preliminary Plat approval for a Master Planned Development that includes 20 residential townhome units.

The subject property is zoned R-3 Residential. A portion of the current proposal was previously approved for an Infill Overlay project. That approval has since expired.

Key Issues

1. General Plan Designation.
2. Building Elevations.
3. Landscaping.
4. Amenities.
5. Setbacks.
6. Parking.
7. Utilities.
8. Walls.
9. CC&Rs.

Recommendation

That the proposed Preliminary Plat be recommended for approval based on the following finding and subject to the following conditions:

Finding

1. That the application conforms to the City's Zoning Map.

Conditions

1. That the applicant meets the City's Zoning requirements and Construction Standards.
2. That the applicant addresses any red-lines.

Exhibits

1. Preliminary Plat.
2. Landscaping.
3. Building Elevations.

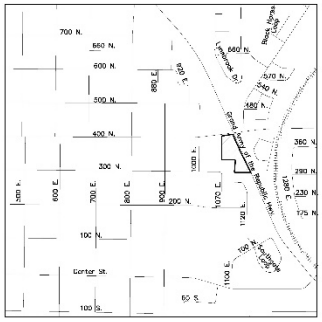
ESCALANTE TOWNHOMES

A RESIDENTIAL SUBDIVISION
SPANISH FORK, UTAH
PRELIMINARY PLAN SET

-SHEET INDEX-

SHEET	SHEET NAME
1	COVER
2	OVERALL BOUNDARY
3	OVERALL SITE PLAN
4	EXISTING TOPOGRAPHY
5	UDOT ACCESS PLAN
6	ELECTRICAL PLAN
7	FIRE ACCESS EXHIBIT
DT-01	DETAIL SHEET
8	RECORD OF SURVEY – BY OTHERS

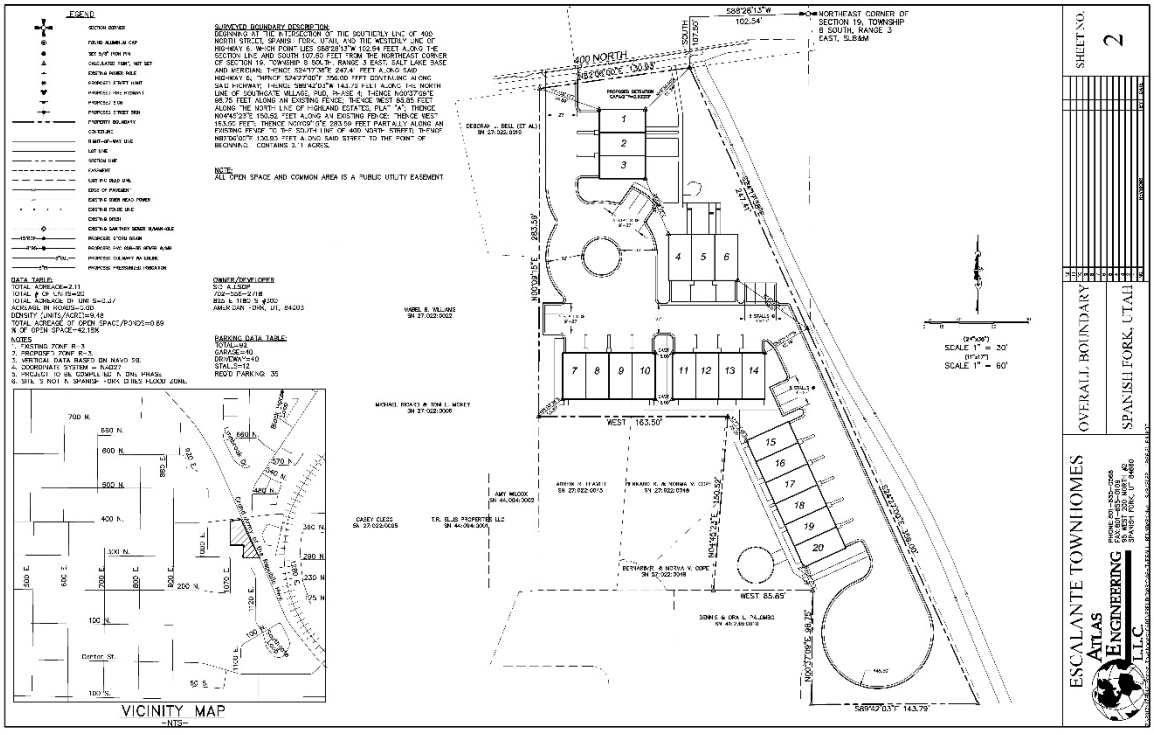
GENERAL NOTES:
1. ALL CONSTRUCTION WILL CONFORM TO SPANISH FORK CITY STANDARDS.
2. OVERHEAD OFFSITE IMPROVEMENT COSTS SHALL BE THE RESPONSIBILITY OF THE DEVELOPER. THERE WILL NOTE BE ANY CONNECTORS AGREEMENTS OR REIMBURSABLE COSTS ASSOCIATED WITH THESE IMPROVEMENTS. THESE FACILITIES ARE INSTALLED ON A TEMPORARY BASIS AND WILL BE REMOVED AS DEVELOPMENT IMPACTS THE AREA.
3. ELECTRICAL SYSTEM TO BE INSTALLED AS PER SPANISH FORK CITY ELECTRICAL DESIGN AND STANDARDS. ANY ELECTRICAL DESIGNS AS PER ARCHITECT/DEVELOPER DRAWING SHALL BE SUPERSEDED BY CITY DESIGN.
4. ALL ELECTRICAL IMPROVEMENTS SHALL BE INSTALLED TO THE MOST CURRENT VERSION OF THE SPANISH FORK CITY CONSTRUCTION STANDARDS.
5. IF NEWER VERSION OF STANDARDS IS RELEASED DURING PROJECT THE PROJECT SHALL BE COMPLETED USING STANDARDS VERSION THAT WERE ISSUED AT PRE-CONSTRUCTION MEETING.
6. ANY EXISTING FACILITIES AFFECTED BY THE DEVELOPMENT WILL NEED TO BE BROUGHT TO CURRENT NESC, NESC AND CITY STANDARDS AT DEVELOPERS EXPENSE INCLUDING BUT NOT LIMITED TO UPGRADING OF METER BASE, SERVICE CONDUITS, COMMUNICATIONS SERVICES, AND LANDSCAPING RESTORATION.
7. SESD BUY OUT WILL HAVE TO BE COMPLETED WITH ZONING BEFORE SUBDIVISION CAN PROCEED.
8. OVERHEAD OFFSITE IMPROVEMENTS COSTS SHALL BE THE RESPONSIBILITY OF THE DEVELOPER. THERE WILL NOT BE ANY CONNECTORS AGREEMENTS OR REIMBURSABLE COSTS ASSOCIATED WITH THESE IMPROVEMENTS. THESE FACILITIES ARE INSTALLED ON A TEMPORARY BASIS AND WILL BE REMOVED AS DEVELOPMENT IMPACTS THESE AREAS.
9. ALL CONSTRUCTION TO FOLLOW RECOMMENDATIONS OF GEOTECHNICAL STUDY 1410120 AND GROUNDWATER CONSULTATION 178146, BOTH BY EARTHTEC ENGINEERING.

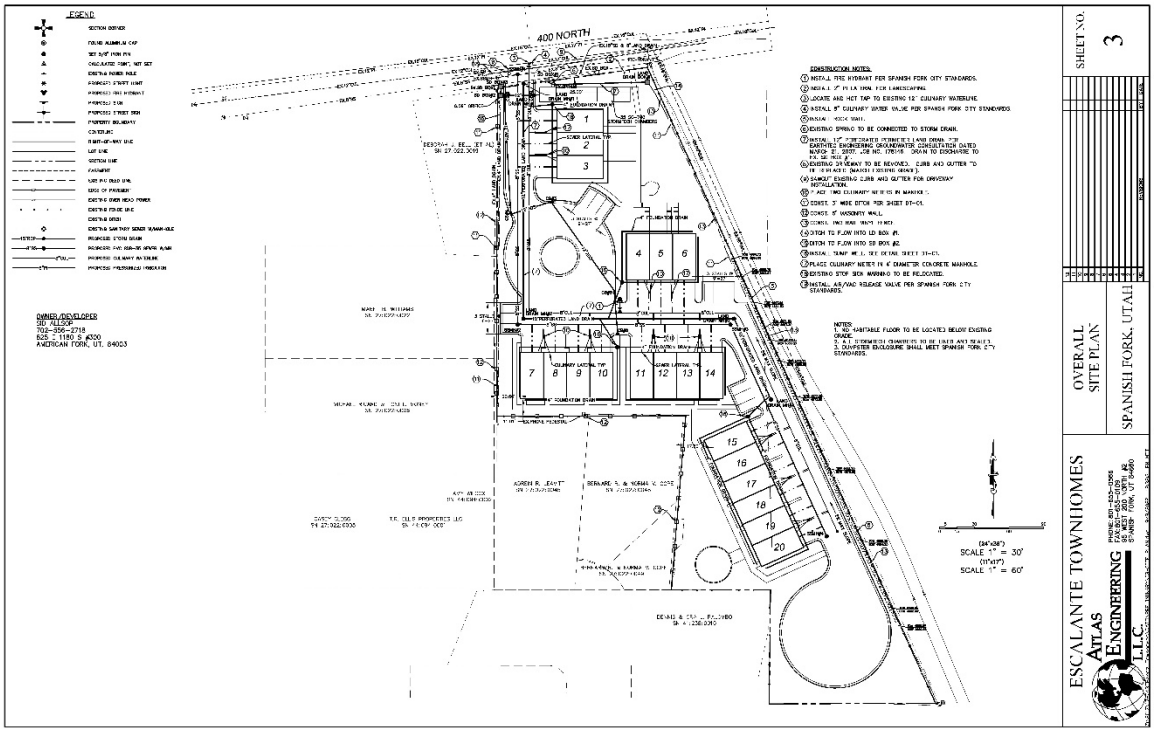


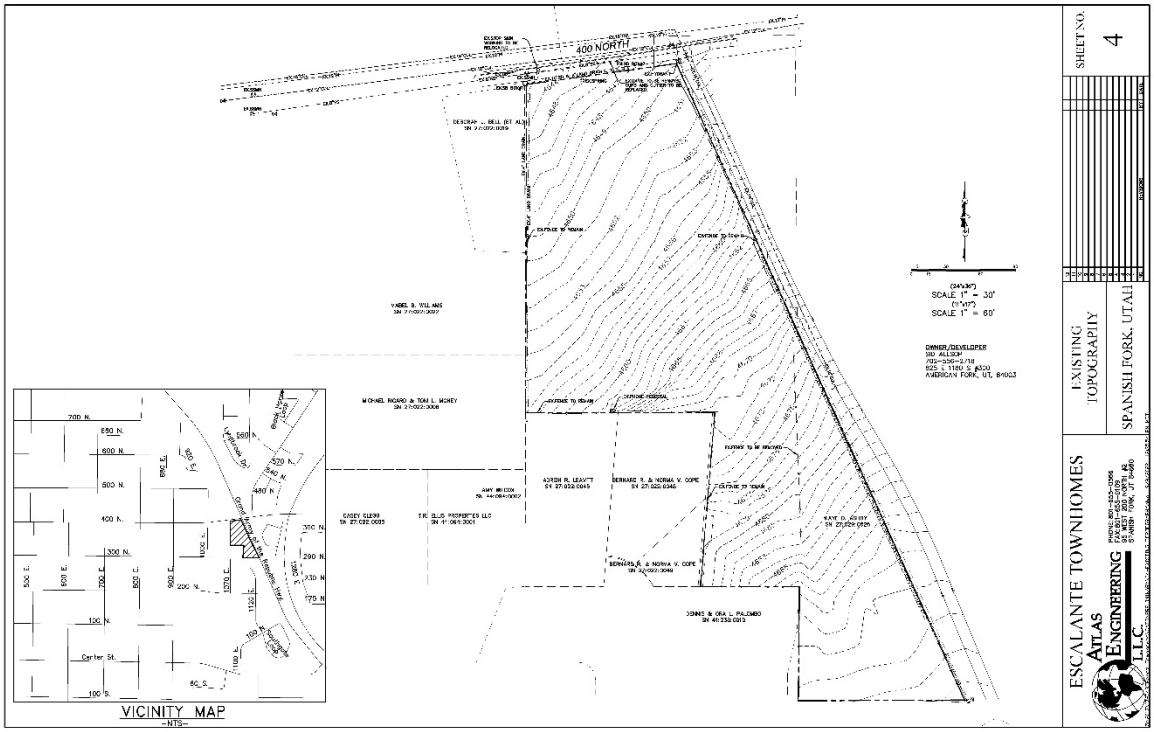
VICINITY MAP
-NTS-

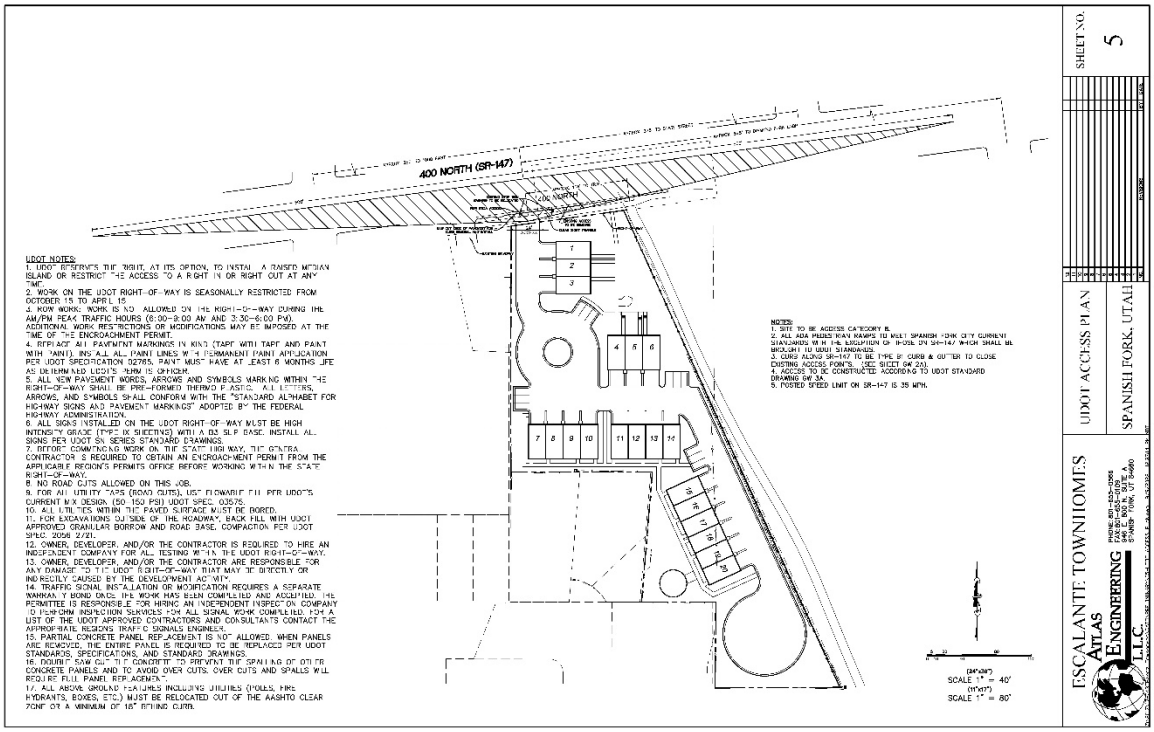
OWNER/DEVELOPER
SID ALLSOP
702-556-2718
625 E 1180 S #300
AMERICAN FORK, UT, 84003

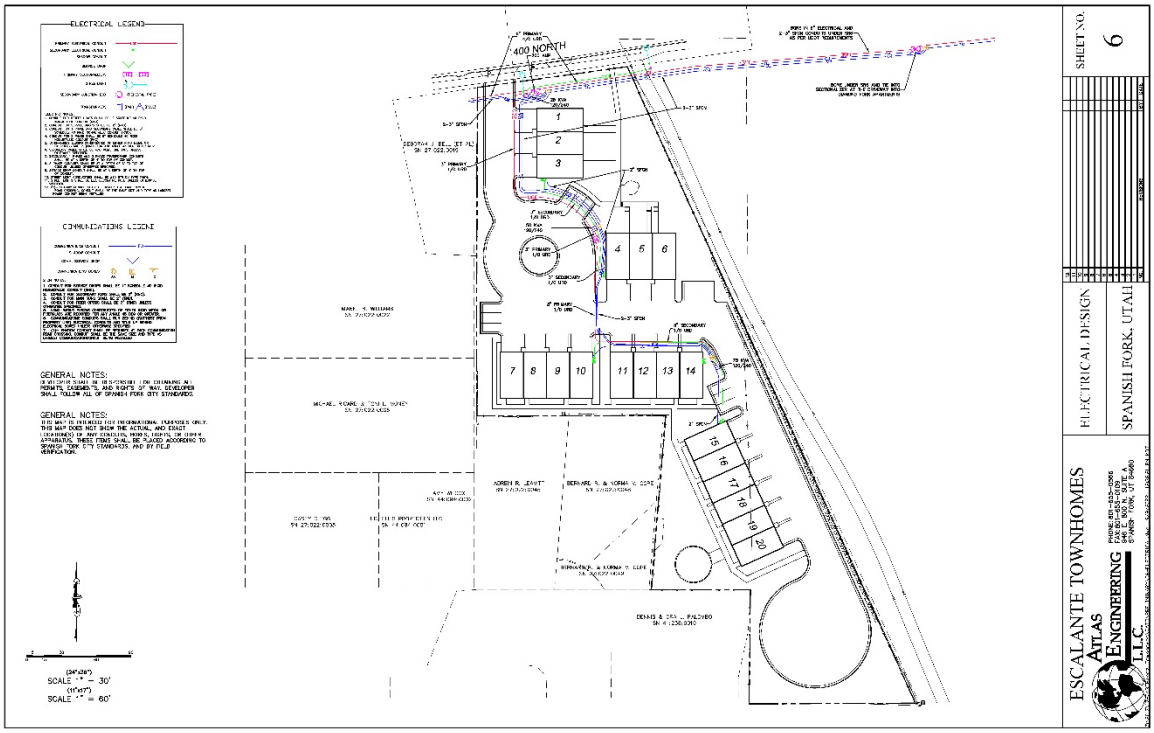
ESCALANTE TOWNHOMES
ATLAS ENGINEERING L.L.C.
PHONE:801-655-0566
FAX:801-655-0109
95 WEST 200 NORTH #2
SPANISH FORK, UT 84660

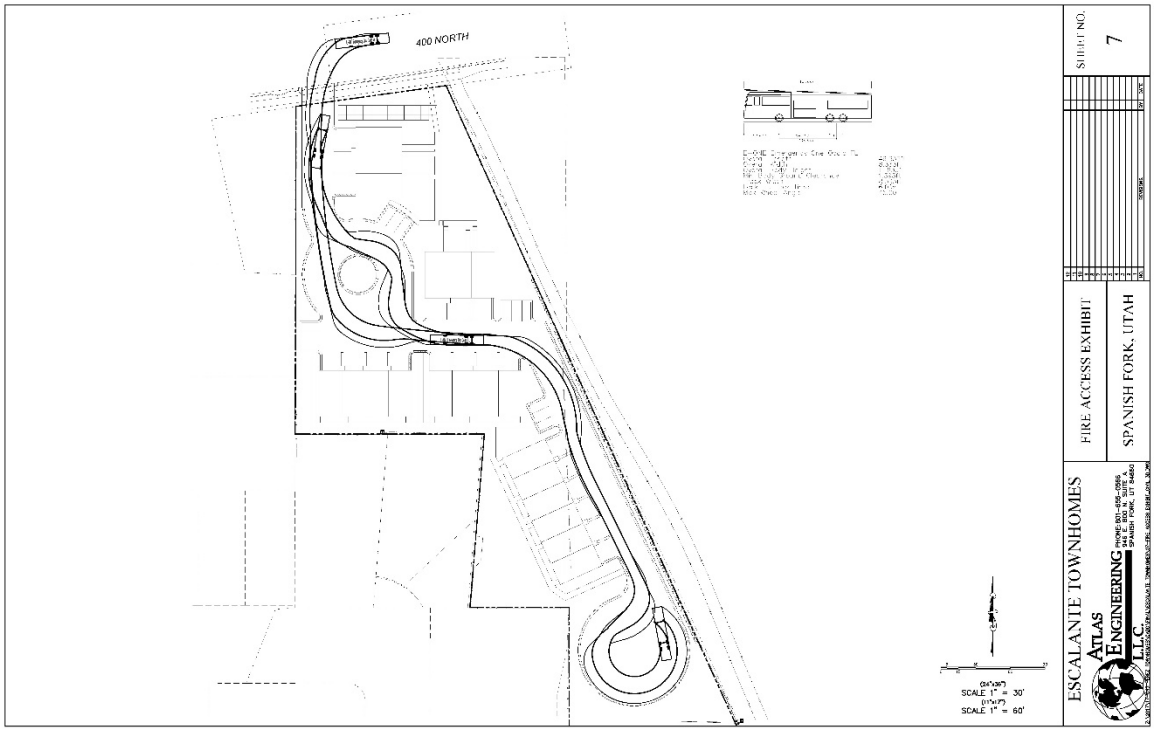



400 NORTH
OVERALL SITE PLAN
SHEET NO. 3
ESCALANTE TOWNHOMES
SPANISH FORK, UTAH
ATLAS ENGINEERING L.L.C.
SCALE 1" = 30'
SCALE 1" = 60'


400 NORTH
EXISTING TOPOGRAPHY
SHEET NO. 4
ESCALANTE TOWNHOMES
SPANISH FORK, UTAH
ATLAS ENGINEERING L.L.C.
SCALE 1" = 30'
SCALE 1" = 60'
VICINITY MAP
-NTS-


400 NORTH (SR-147)
UDOT NOTES:
NOTES:
SCALE 1" = 40'
SCALE 1" = 80'
SHEET NO. 5
UDOT ACCESS PLAN
SPANISH FORK, UTAH
ESCALANTE TOWNHOMES
ATLAS ENGINEERING L.L.C.


ELECTRICAL LEGEND
COMMUNICATIONS LEGEND
GENERAL NOTES:
GENERAL NOTES:
400 NORTH
SCALE 1" = 30'
SCALE 1" = 60'
SHEET NO. 6
ELECTRICAL DESIGN
SPANISH FORK, UTAH
ESCALANTE TOWNHOMES
ATLAS ENGINEERING L.L.C.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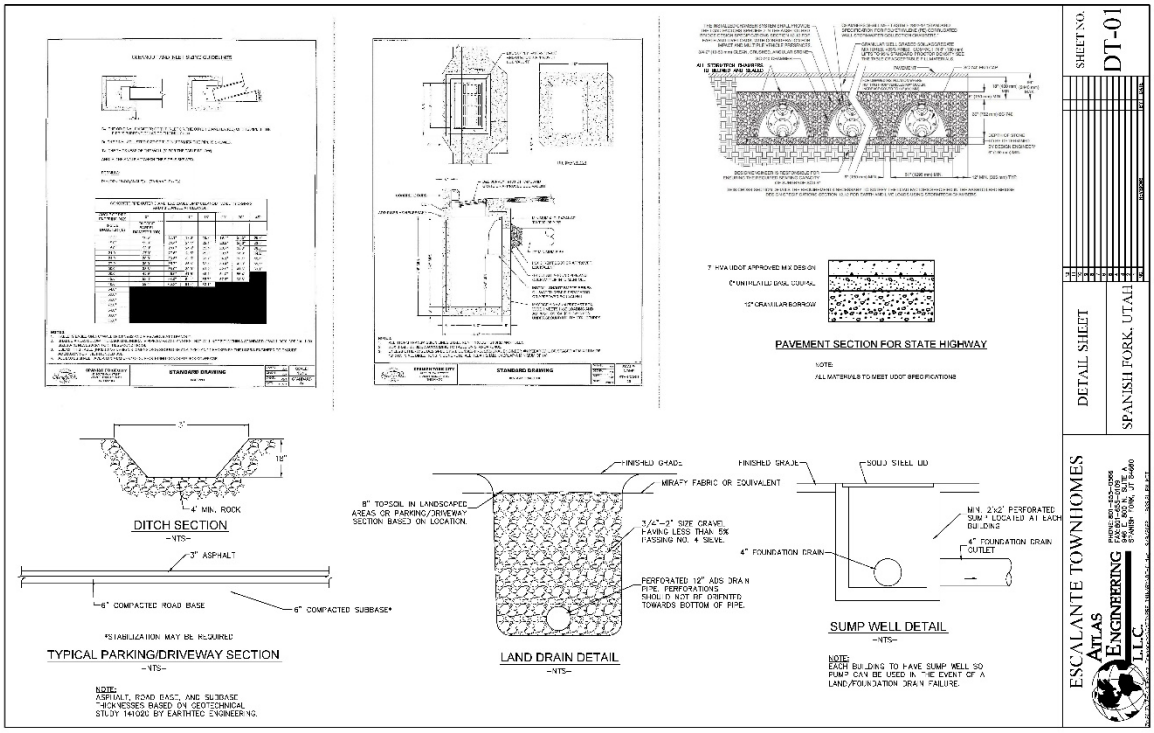
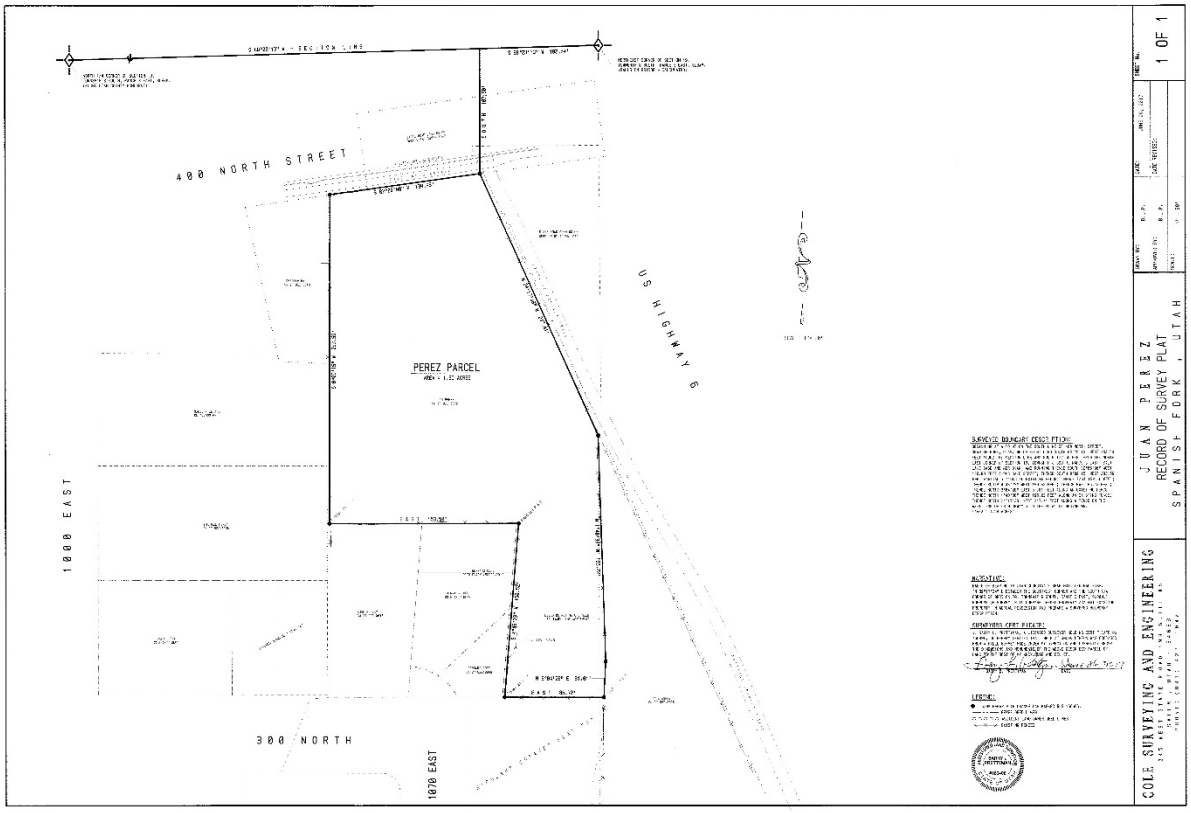
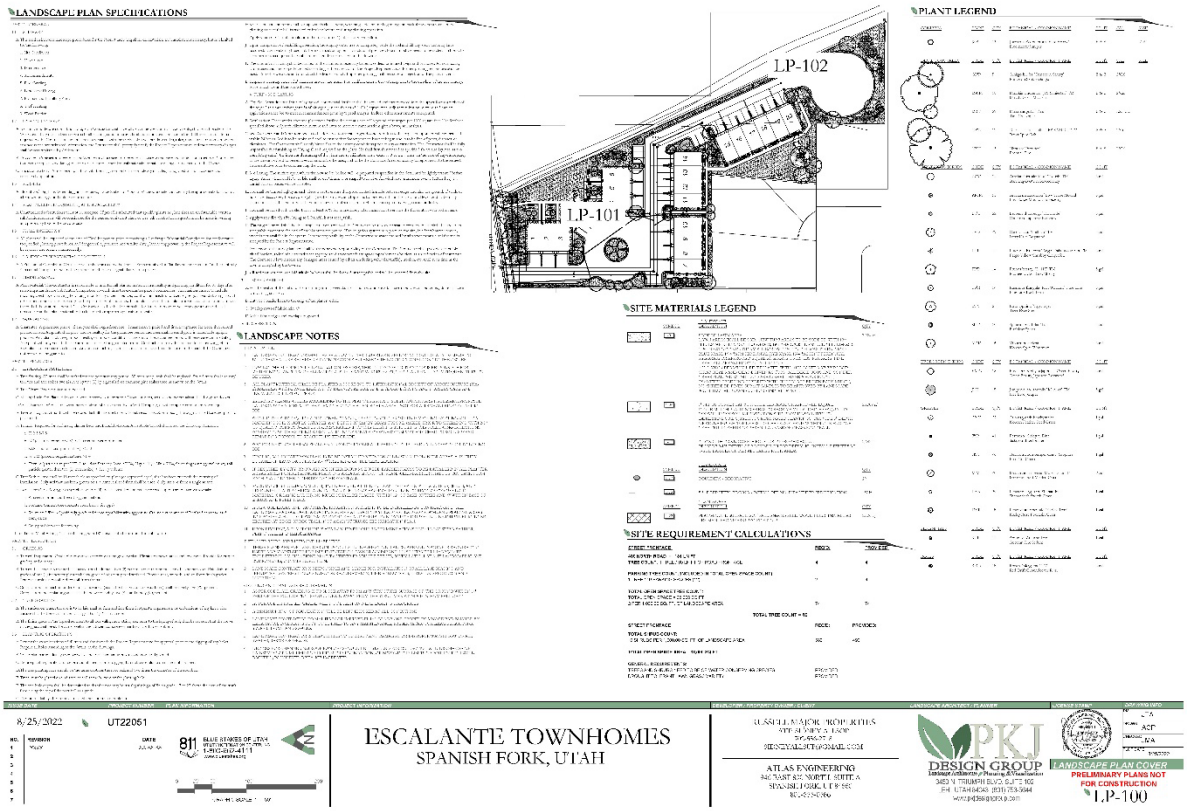
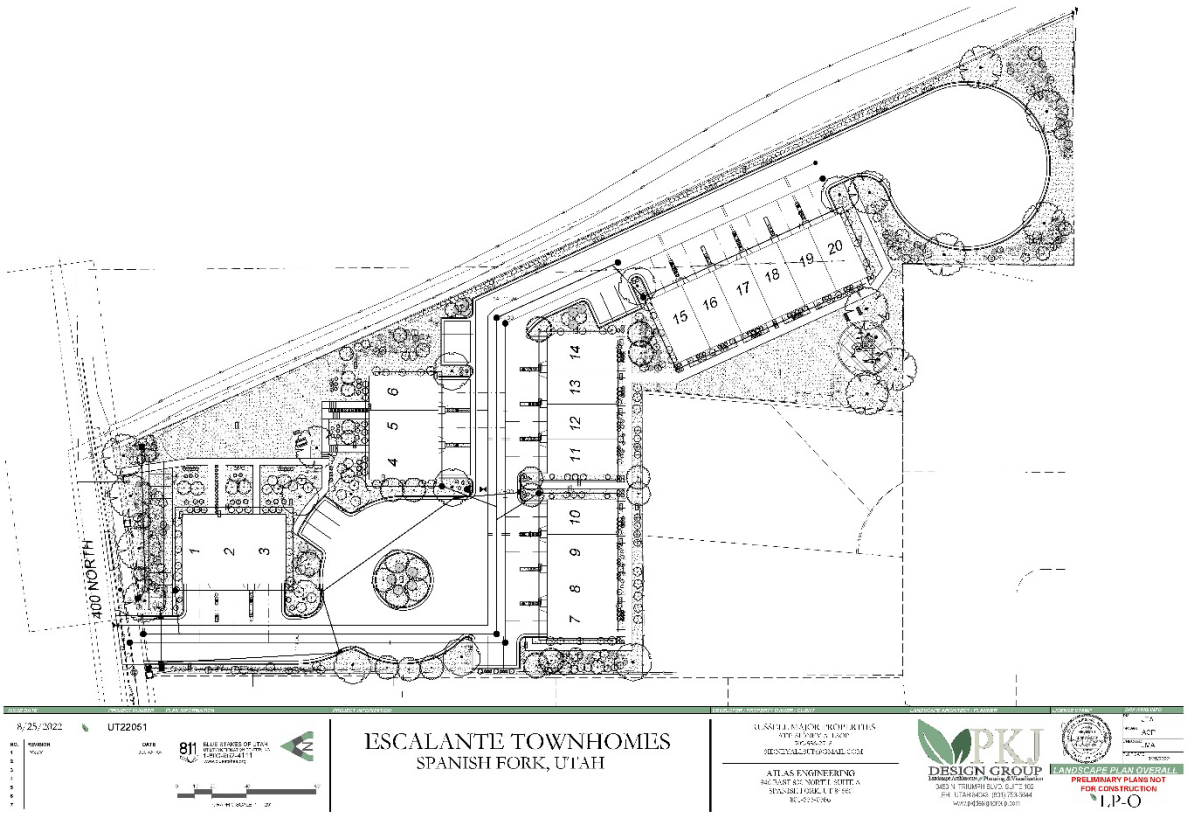
SCALE 1" = 30'
(11x17)
SCALE 1" = 60'
SHEET NO.
7
FIRE ACCESS EXHIBIT
SPANISH FORK, UTAH
ESCALANTE TOWNHOMES
ATLAS ENGINEERING LLC


SHEET NO.
DT-01
DETAIL SHEET
SPANISH FORK, UTAH
ESCALANTE TOWNHOMES
ATLAS ENGINEERING LLC
PAVEMENT SECTION FOR STATE HIGHWAY
NOTE:
ALL MATERIALS TO MEET UDOT SPECIFICATIONS
DITCH SECTION
-NTS-
4" MIN. ROCK
3" ASPHALT
6" COMPACTED ROAD BASE
6" COMPACTED SUBBASE*
*STABILIZATION MAY BE REQUIRED
TYPICAL PARKING/DRIVEWAY SECTION
-NTS-
NOTE:
ASPHALT, ROAD BASE, AND SUBBASE THICKNESSES BASED ON GEOTECHNICAL STUDY 141020 BY EARTHTEC ENGINEERING.
FINISHED GRADE
MIRAFY FABRIC OR EQUIVALENT
8" TOPSOIL IN LANDSCAPED AREAS OR PARKING/DRIVEWAY SECTION BASED ON LOCATION.
3/4"-3" SIZE GRAVEL HAVING LESS THAN 5% PASSING NO. 4 SIEVE.
PERFORATED 12" ADS DRAIN PIPE. PERFORATIONS SHOULD NOT BE ORIENTED TOWARDS BOTTOM OF PIPE.
LAND DRAIN DETAIL
-NTS-
FINISHED GRADE
SOLID STEEL LID
MIN. 2'x2' PERFORATED SUMP LOCATED AT EACH BUILDING
4" FOUNDATION DRAIN
4" FOUNDATION DRAIN OUTLET
SUMP WELL DETAIL
-NTS-
NOTE:
EACH BUILDING TO HAVE SUMP WELL SO PUMP CAN BE USED IN THE EVENT OF A LAND/FOUNDATION DRAIN FAILURE.


400 NORTH STREET
US HIGHWAY 6
PEREZ PARCEL
1000 EAST
300 NORTH
1070 EAST
JUAN PEREZ
RECORD OF SURVEY PLAT
SPANISH FORK, UTAH
1 OF 1
COLE SURVEYING AND ENGINEERING


LANDSCAPE PLAN SPECIFICATIONS
LANDSCAPE NOTES
LP-102
LP-101
PLANT LEGEND
SITE MATERIALS LEGEND
SITE REQUIREMENT CALCULATIONS
8/25/2022
UT22051
ESCALANTE TOWNHOMES
SPANISH FORK, UTAH
ATLAS ENGINEERING
PKJ DESIGN GROUP
LANDSCAPE PLAN COVER
PRELIMINARY PLANS NOT FOR CONSTRUCTION
LP-100


400 NORTH
1
2
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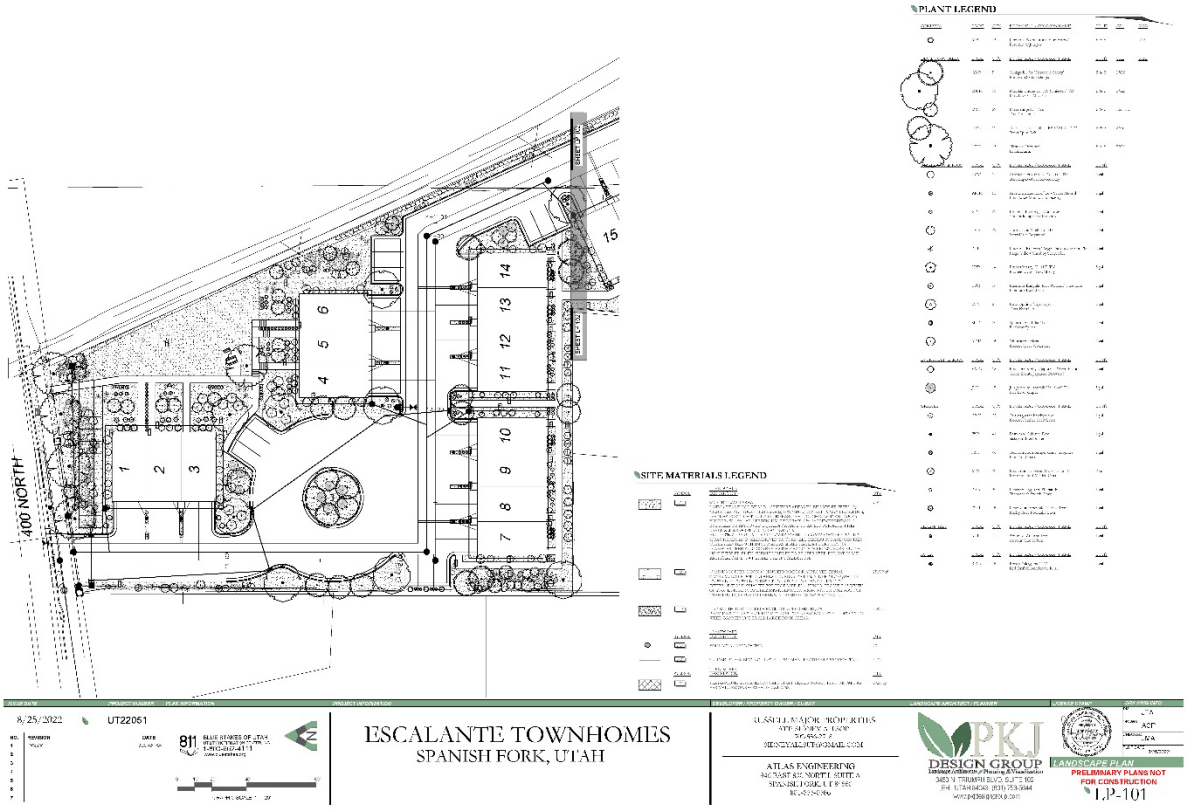
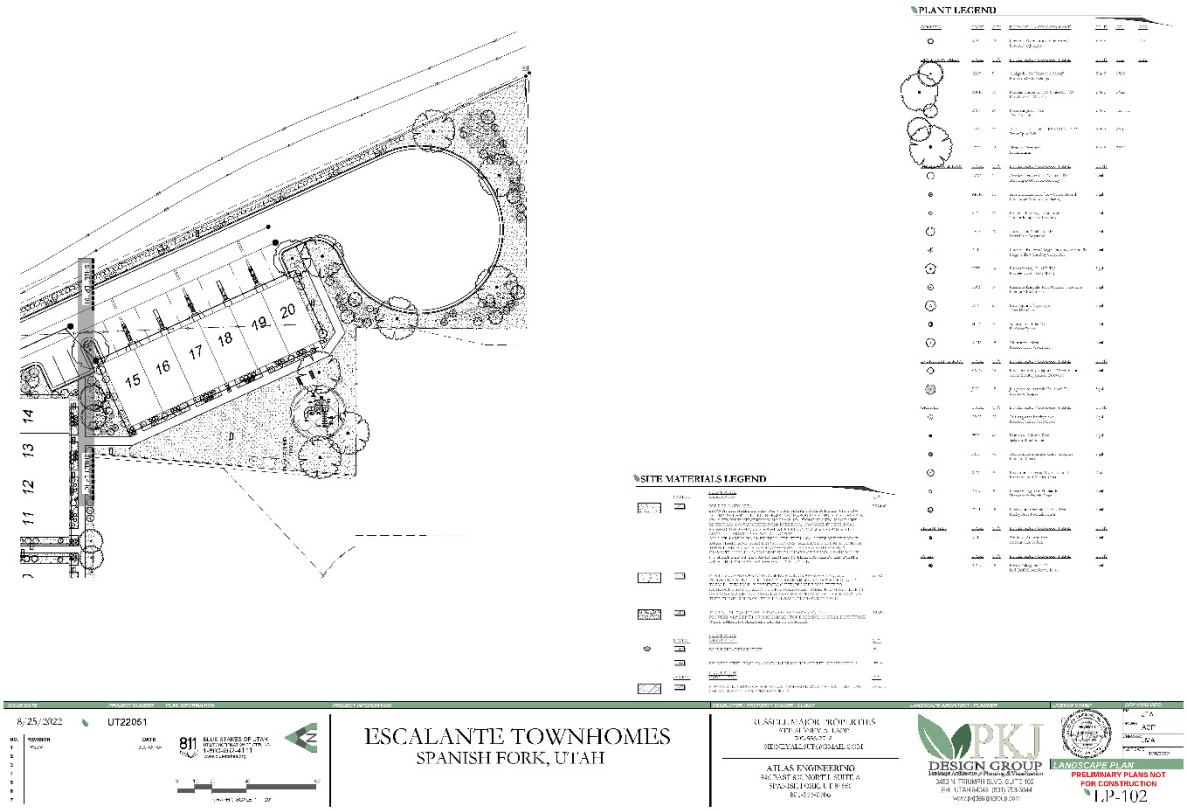
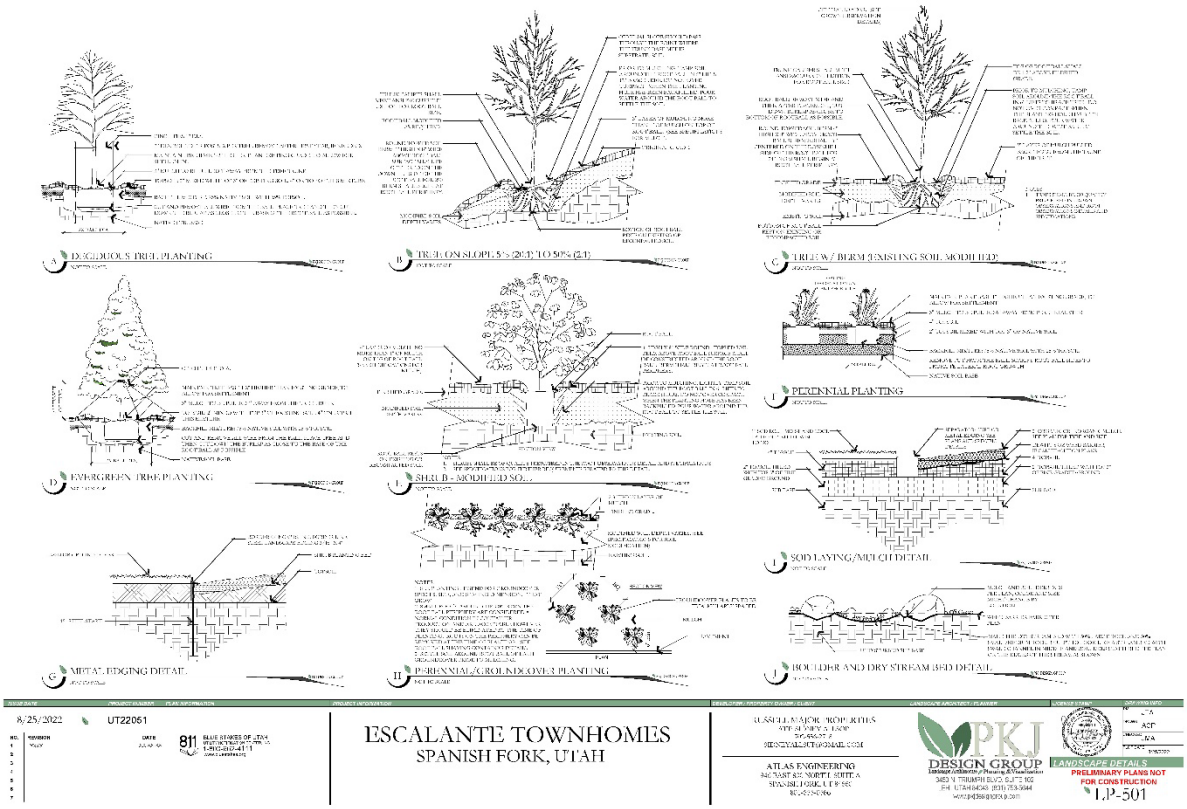
20
8/25/2022
UT22051
ESCALANTE TOWNHOMES
SPANISH FORK, UTAH
ATLAS ENGINEERING
PKJ DESIGN GROUP
LANDSCAPE PLAN OVERALL
PRELIMINARY PLANS NOT FOR CONSTRUCTION
LP-O


PLANT LEGEND
SITE MATERIALS LEGEND
400 NORTH
8/25/2022
UT22051
ESCALANTE TOWNHOMES
SPANISH FORK, UTAH
PKJ DESIGN GROUP
LANDSCAPE PLAN
PRELIMINARY PLANS NOT FOR CONSTRUCTION
LP-101


PLANT LEGEND
SITE MATERIALS LEGEND
8/25/2022
UT22051
ESCALANTE TOWNHOMES
SPANISH FORK, UTAH
PKJ DESIGN GROUP
LANDSCAPE PLAN
PRELIMINARY PLANS NOT FOR CONSTRUCTION
LP-102



8/25/2022 UT22051

811 BLUE STAKES OF UTAH

ESCALANTE TOWNHOMES
SPANISH FORK, UTAH

RUSSELL MAJOR PROPERTIES

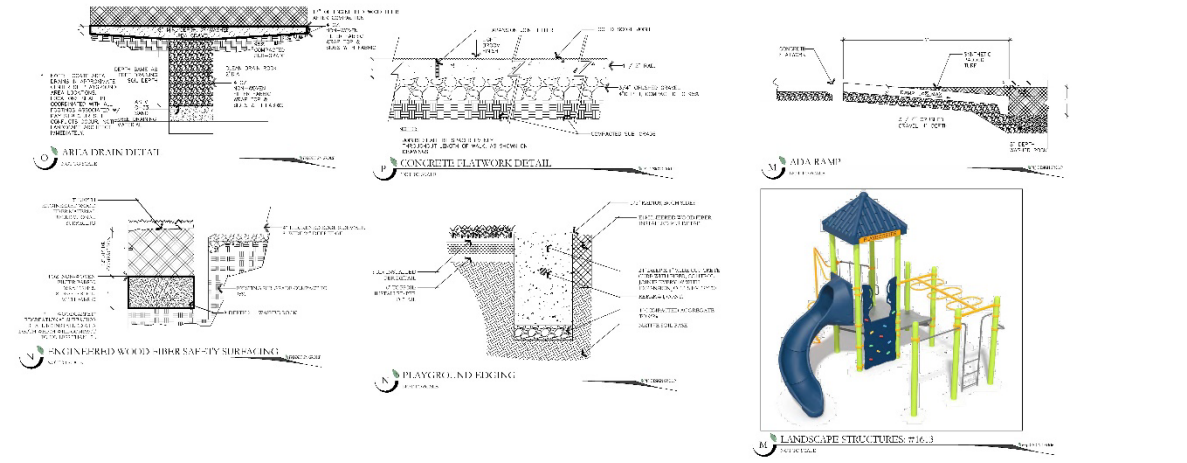
ATLAS ENGINEERING

PKJ DESIGN GROUP

LANDSCAPE DETAILS

PRELIMINARY PLANS NOT FOR CONSTRUCTION

LP-501



8/25/2022 UT22051

811 BLUE STAKES OF UTAH

ESCALANTE TOWNHOMES
SPANISH FORK, UTAH

RUSSELL MAJOR PROPERTIES

ATLAS ENGINEERING

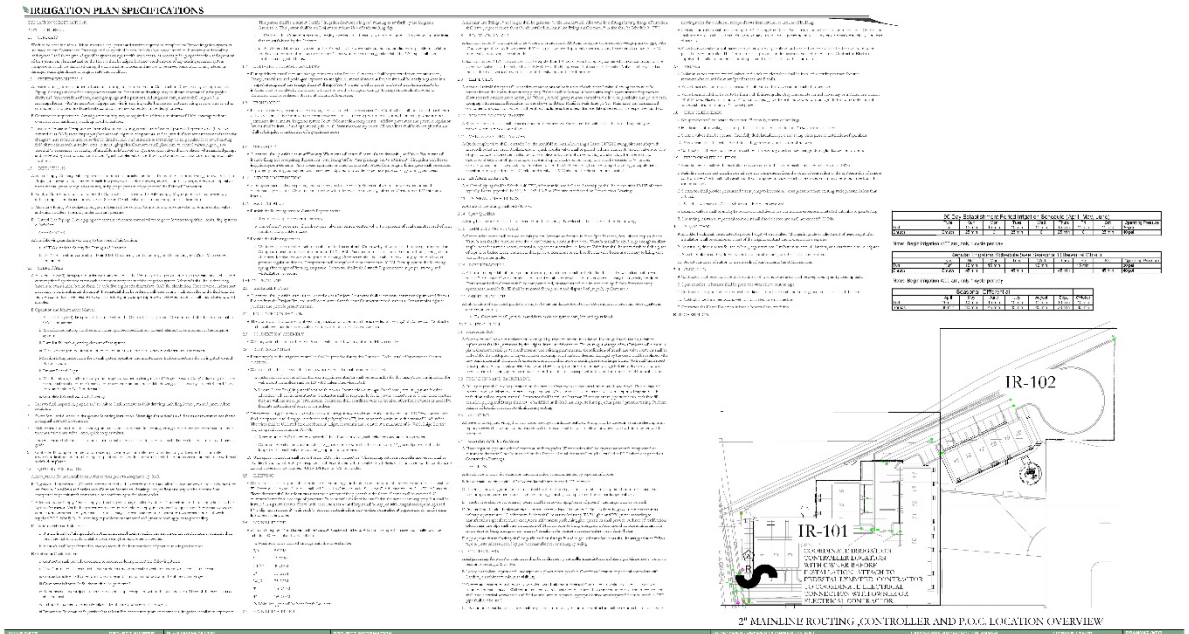
PKJ DESIGN GROUP

LANDSCAPE DETAILS

PRELIMINARY PLANS NOT FOR CONSTRUCTION

LP-502

ESCALANTE TOWNHOMES
SPANISH FORK, UTAH



8/25/2022 U 17"2051

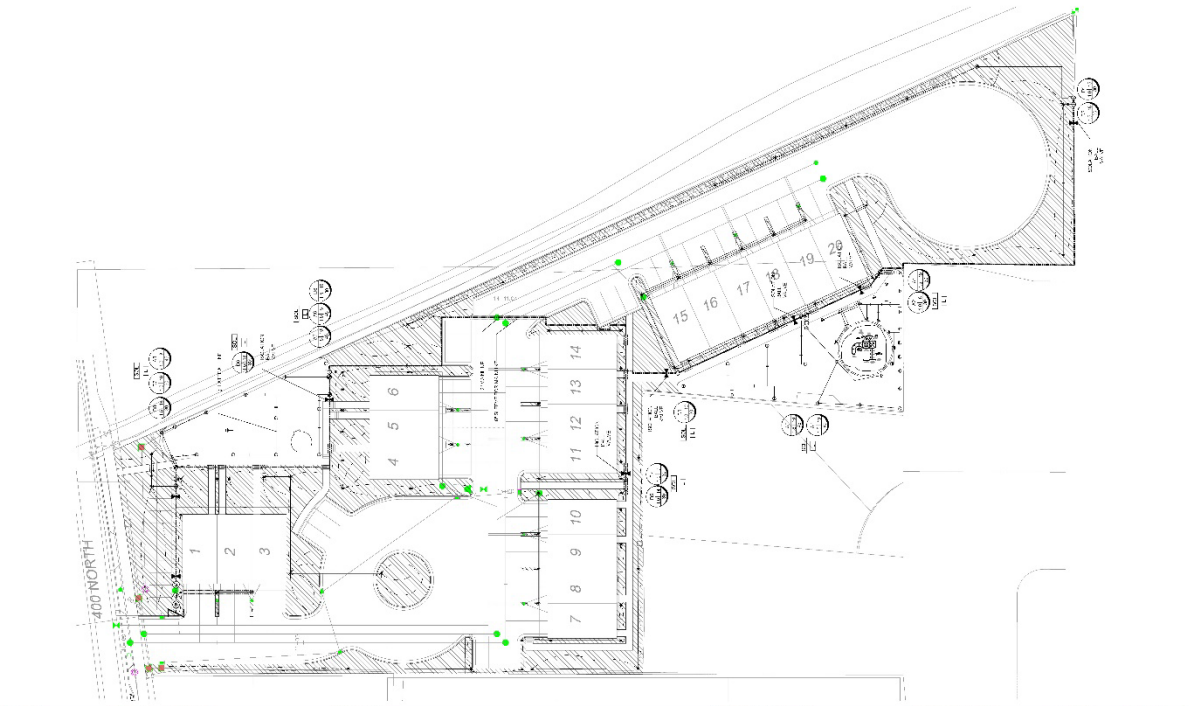
ESCALANTE TOWNHOMES
SPANISH FORK, UTAH

RUSSELL MAJOR PROPERTIES

ATLAS ENGINEERING

PKJ DESIGN GROUP

IRRIGATION PLAN COVER
PRELIMINARY PLANS NOT FOR CONSTRUCTION
IR-100



8/25/2022 U 17"2051

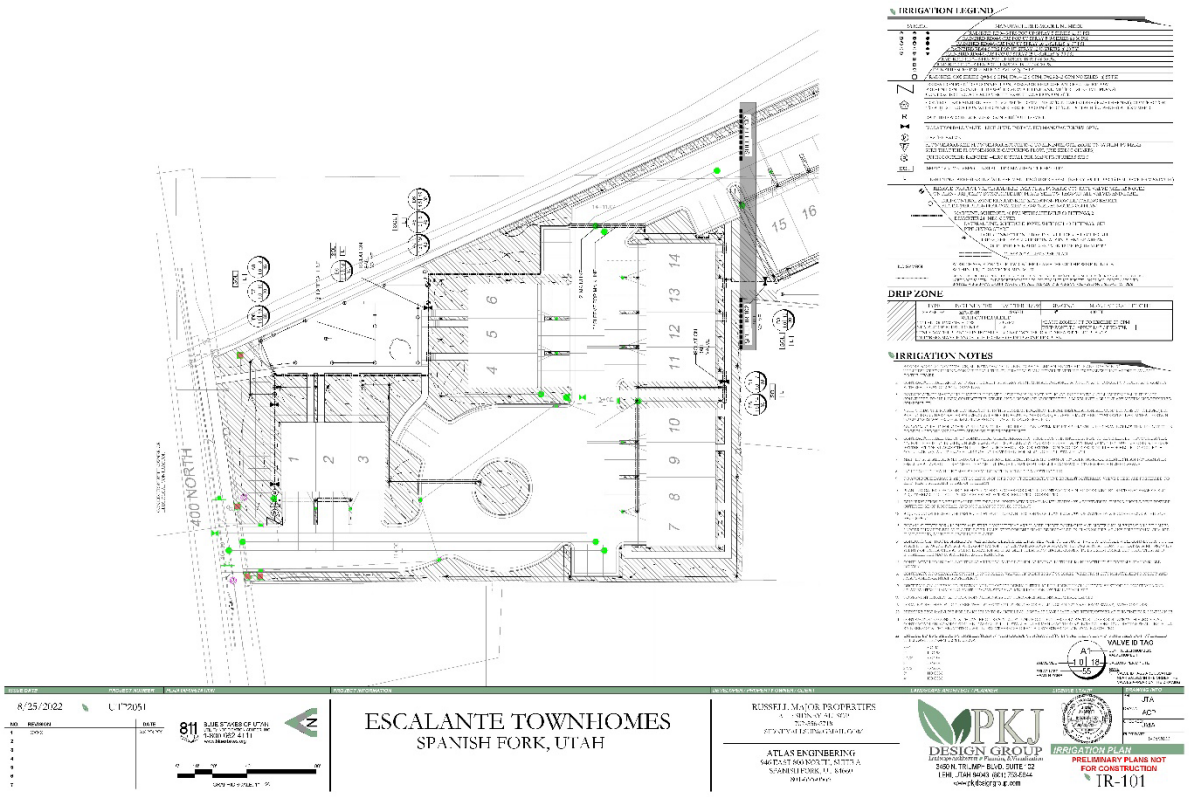
ESCALANTE TOWNHOMES
SPANISH FORK, UTAH

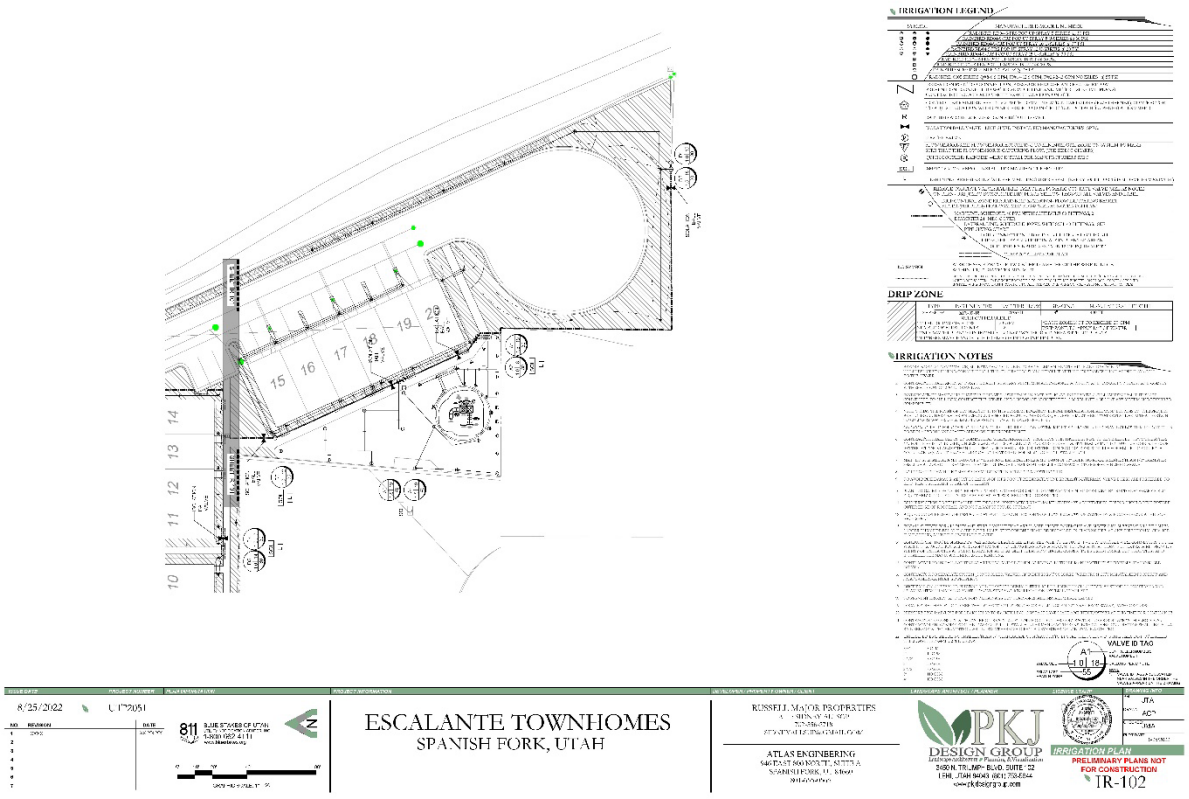
RUSSELL MAJOR PROPERTIES

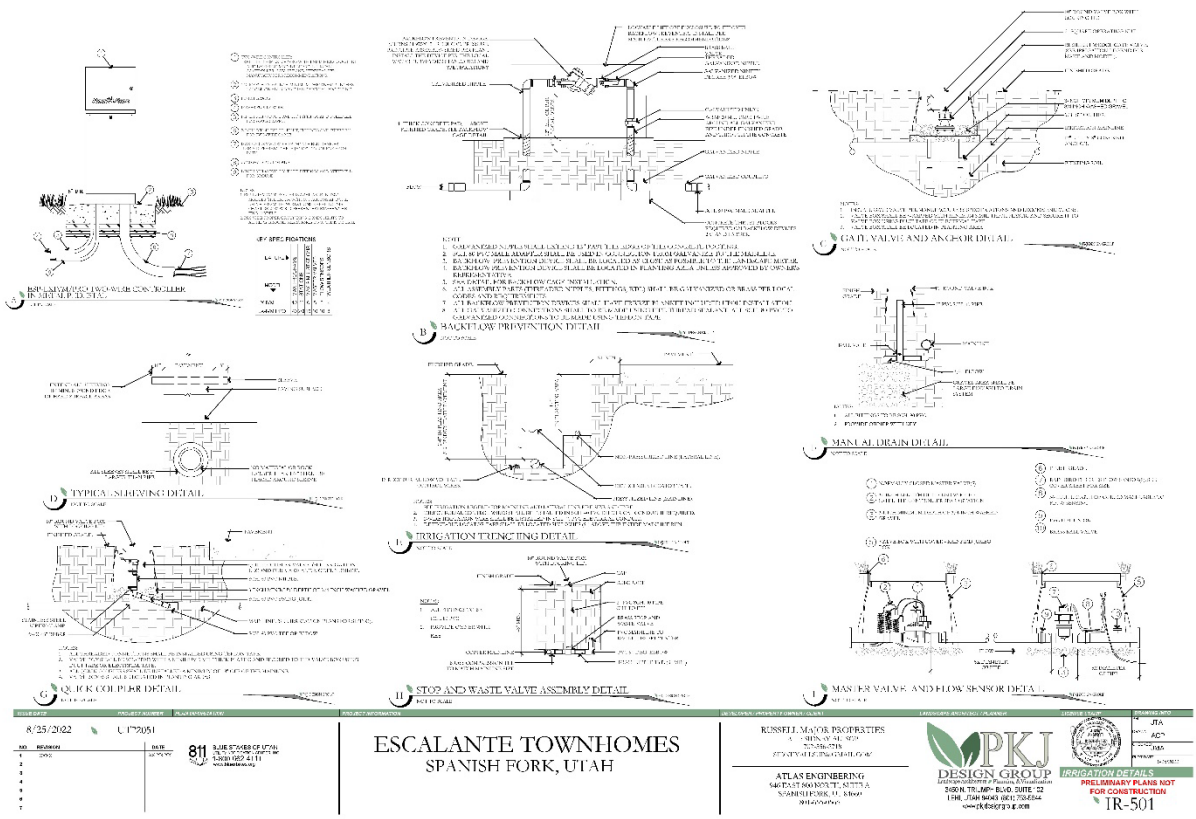
ATLAS ENGINEERING

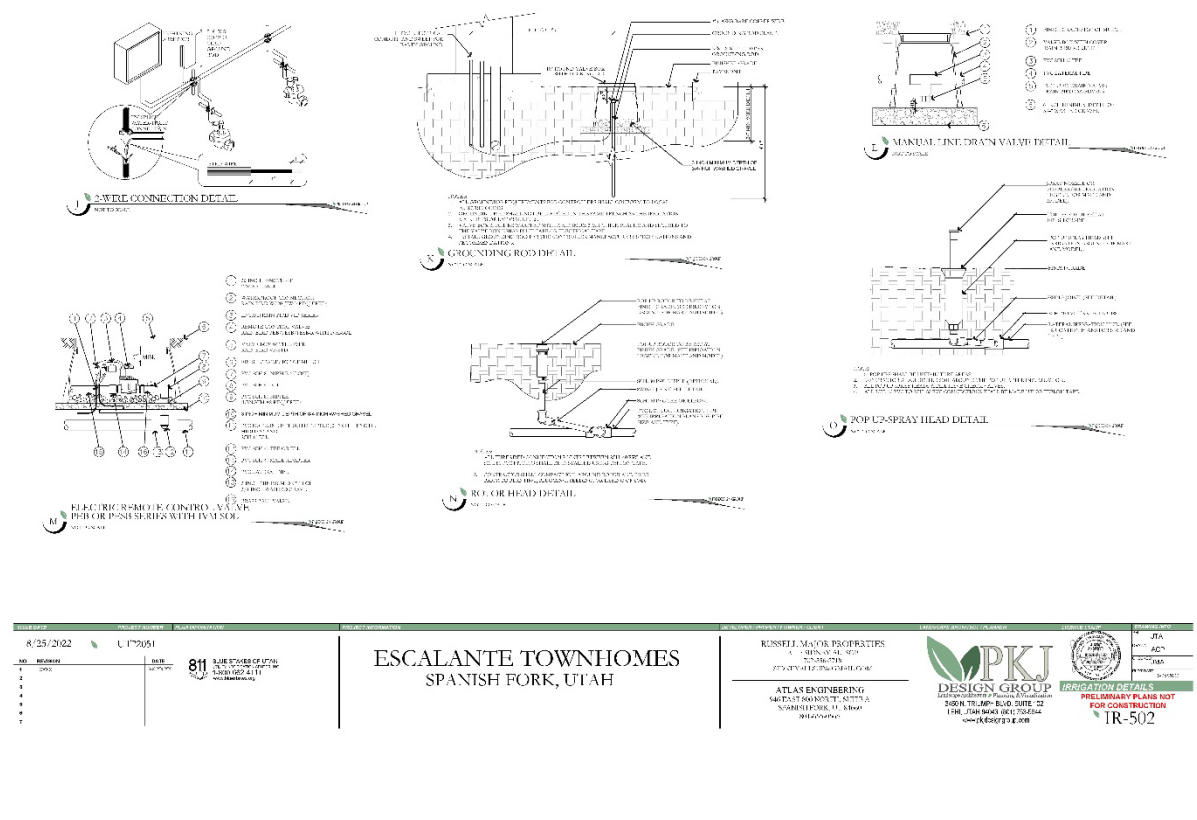
PKJ DESIGN GROUP

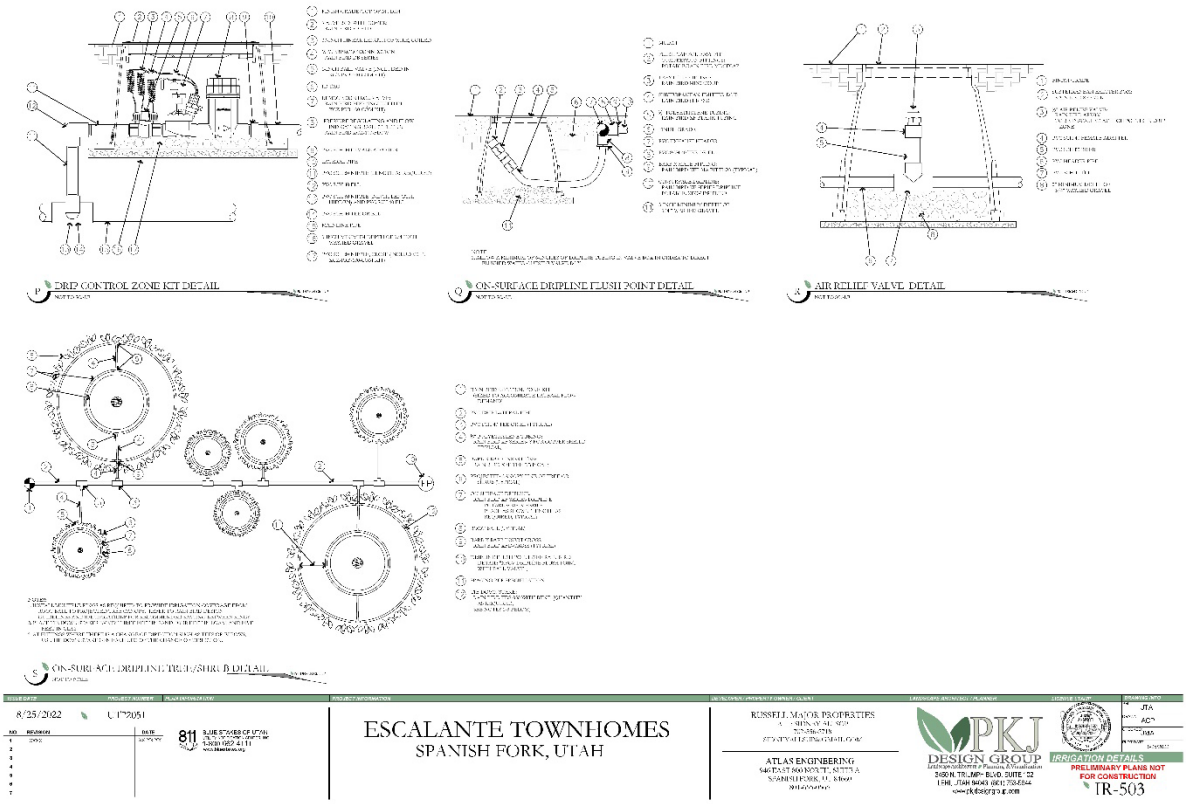
IRRIGATION PLAN OVERALL
PRELIMINARY PLANS NOT FOR CONSTRUCTION
IR-O


IRRIGATION LEGEND
DRIP ZONE
IRRIGATION NOTES
400 NORTH
8/25/2022
ESCALANTE TOWNHOMES
SPANISH FORK, UTAH
PKJ DESIGN GROUP
IRRIGATION PLAN
PRELIMINARY PLANS NOT FOR CONSTRUCTION
IR-101

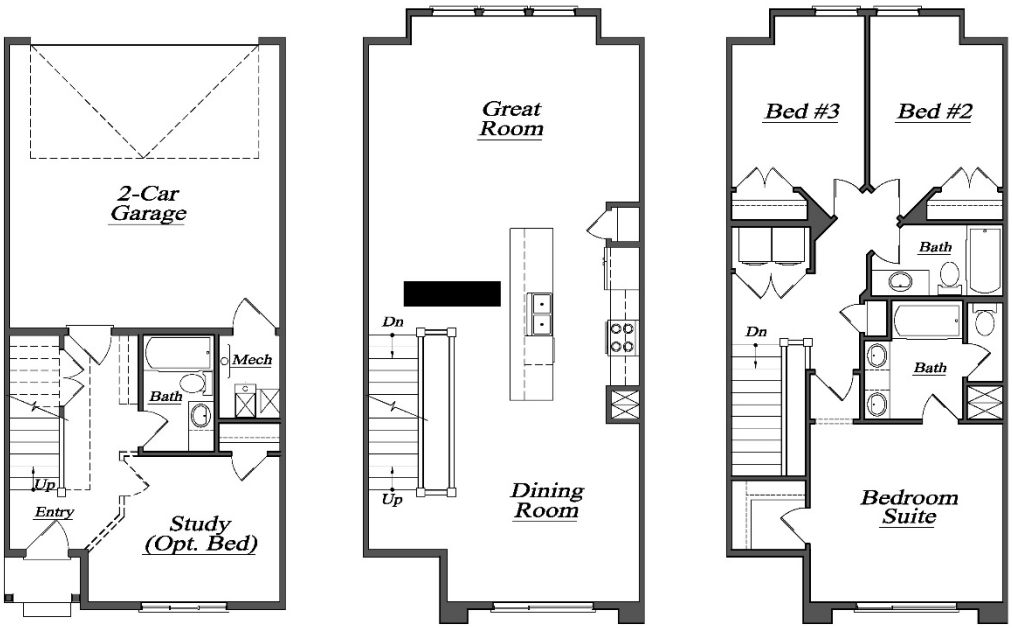

IRRIGATION LEGEND
DRIP ZONE
IRRIGATION NOTES
8/25/2022
ESCALANTE TOWNHOMES
SPANISH FORK, UTAH
PKJ DESIGN GROUP
IRRIGATION PLAN
PRELIMINARY PLANS NOT FOR CONSTRUCTION
IR-102


BACKFLOW PREVENTION DETAIL
GATE VALVE AND ANCHOR DETAIL
TYPICAL SLEEVING DETAIL
IRRIGATION TRENCHING DETAIL
MANUAL DRAIN DETAIL
QUICK COUPLER DETAIL
STOP AND WASTE VALVE ASSEMBLY DETAIL
MASTER VALVE AND FLOW SENSOR DETAIL
8/25/2022
ESCALANTE TOWNHOMES
SPANISH FORK, UTAH
RUSSELL MAJOR PROPERTIES
ATLAS ENGINEERING
PKJ DESIGN GROUP
IRRIGATION DETAILS
PRELIMINARY PLANS NOT FOR CONSTRUCTION
IR-501


2-WIRE CONNECTION DETAIL
GROUNDING ROD DETAIL
MANUAL LINE DRAIN VALVE DETAIL
ELECTRIC REMOTE CONTROL VALVE
PEB OR PSB SERIES WITH IVM SOL
ROTOR HEAD DETAIL
POP UP-SPRAY HEAD DETAIL
8/25/2022
ESCALANTE TOWNHOMES
SPANISH FORK, UTAH
RUSSELL MAJOR PROPERTIES
ATLAS ENGINEERING
PKJ DESIGN GROUP
IRRIGATION DETAILS
PRELIMINARY PLANS NOT FOR CONSTRUCTION
IR-502


DRIP CONTROL ZONE KIT DETAIL
ON-SURFACE DRIPLINE FLUSH POINT DETAIL
AIR RELIEF VALVE DETAIL
ON-SURFACE DRIPLINE TREE/SHRUB DETAIL
8/25/2022
ESCALANTE TOWNHOMES
SPANISH FORK, UTAH
RUSSELL MAJOR PROPERTIES
ATLAS ENGINEERING
PKJ
DESIGN GROUP
IRRIGATION DETAILS
PRELIMINARY PLANS NOT FOR CONSTRUCTION
TR-503

Escalante Townhomes



Main Floor 374 sq.ft.

Second Floor 788 sq.ft.

Third Floor 756 sq.ft.

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 Cerrificate 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 fully 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"

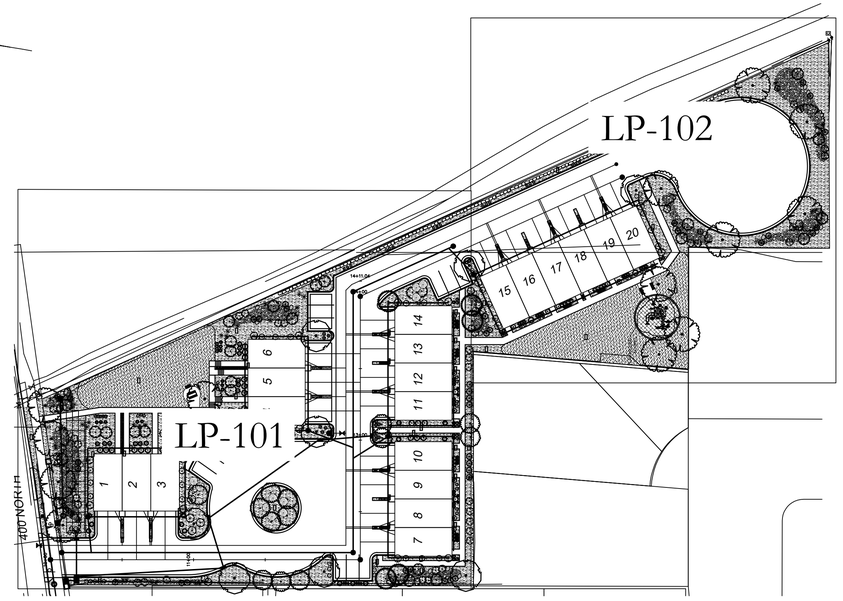
2. AS PER CODE, FINISHED GRADE WILL NOT DRAIN ON NEIGHBORING PROPERTIES

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 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.	7,924 sf
1-09	1" MINUS COPPER CANYON CRUSHED 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.KEEP ROCK FROM WITHIN ONE FOOT OF TREE TRUNK, SHRUB OR PERENNIAL BASE OR GRASS ROOT BALL.	25,309 sf
1-13	4"-6" SOUTH TOWN COBBLE ROCK OR APPROVED EQUAL PROVIDE 9-12" DEPTH OF ROCK MULCH TOP DRESSING. INSTALL DEWITT 5OZ WEED BARRIER UNDER ALL LARGE ROCK AREAS.	3,632 sf

SYMBOL	1 LANDSCAPE DESCRIPTION	QTY
1-17	BOULDERS - DECORATIVE	29
1-19	5.5" DEEP STEEL EDGING - INSTALL PER MANUFACTURER SPECIFICATION.	157 lf

SYMBOL	1 LANDSCAPE DESCRIPTION	QTY
1-23	PLAYGROUND SURFACE. SOF'FALL ENGINEERED WOOD FIBER. INSTALL AS PER MANUFACTURERS SPECIFICATIONS.	27.36 cy

SITE REQUIREMENT CALCULATIONS

STREET FRONTAGE	REQ'D:	PROVIDED:
400 NORTH ROAD = 131 LN FT		
TREE COUNT: 1 TREE / 30 LN FT OF ROAD FRONTAGE	4	4
PARKING TREE COUNT:(INCLUDED IN TOTAL OPEN SPACE COUNT)		
1 TREE / 10 PARKING SPACES (12)	2	4
TOTAL OPEN SPACE TREE COUNT:		
TOTAL OPEN SPACE = 38,000 SQ FT		
2 PER 1,000.00 SQ. FT. OF LANDSCAPE AREA	74	74
TOTAL TREE COUNT = 82		

STREET FRONTAGE	REQ'D:	PROVIDED:
TOTAL SHRUB COUNT:		
10 SHRUBS PER 1,000.00 SQ. FT. OF LANDSCAPE AREA	380	490
TOTAL OPEN SPACE AREA: 38,000 SQ FT		
GENERAL REQUIREMENTS:		
TREES AND SHRUBS NEED TO BE OF WATER CONSERVING SPECIES	PROVIDED	
DROUGHT TOLERANT LAWN GRASS VARIETY	PROVIDED	

PLANT LEGEND

CONIFERS	CODE	QTY	BOTANICAL / COMMON NAME	CONT	CAL	SIZE
	JS'B	13	Juniperus Scopulorum `Blue Arrow` Blue Arrow Juniper	B & B		5`-6`
DECIDUOUS TREES	**CODE**	**QTY**	**BOTANICAL / COMMON NAME**	**CONT**	**CAL**	**SIZE**
	GB'P	5	Ginkgo biloba `Princeton Sentry` Princeton Sentry Gingko	B & B	2"Cal	
	MA'M	10	Maackia amurensis `JFS-Schiectell` TM MaacNificent Maackia	B & B	2"Cal	
	MS'T	29	Malus sargentii `Tina` Tina Crabapple	B & B	1.25"Cal	
	QR'A	15	Quercus robur x alba `JFS-KW1QX` TM Street Spire Oak	B & B	2"Cal	
	UX'F	13	Ulmus x `Frontier` Frontier Elm	B & B	2"Cal	
DECIDUOUS SHRUBS	**CODE**	**QTY**	**BOTANICAL / COMMON NAME**	**CONT**		
	AA'O	24	Amelanchier alnifolia `Obelisk` TM Standing Ovation Serviceberry	5 gal		
	AM'M	55	Aronia melanocarpa `Low Scape Mound' Low Scape Mound Chokeberry	5 gal		
	BT'C	22	Berberis thunbergii `Concorde` Concorde Japanese Barberry	5 gal		
	CA'B	49	Cornus alba `Bailhalo` TM Ivory Halo Dogwood	5 gal		
	PF'F	45	Potentilla fruticosa 'Fargo' Dakota Sunspot TM Fargo Yellow Shrubby Cinquefoil	5 gal		
	PB'P	14	Prunus besseyi `P011S` TM Pawnee Buttes Sand Cherry	5 gal		
	RF'R	14	Rhamnus frangula `Ron Williams` Fine Line Fine Line Buckthorn	5 gal		
	RT'T	2	Rhus typhina `Tiger Eyes` Tiger Eyes Sumac	5 gal		
	SB'T	20	Spiraea betulifolia `Tor` Birchleaf Spirea	5 gal		
	VC'K	16	Viburnum carlesii Korean Spice Viburnum	5 gal		
EVERGREEN SHRUBS	**CODE**	**QTY**	**BOTANICAL / COMMON NAME**	**CONT**		
	BM'G	28	Buxus microphylla japonica 'Green Beauty' Green Beauty Japanese Boxwood	5 gal		
	JH'I	15	Juniperus horizontalis `Monber` TM Icee Blue Juniper	5 gal		
GRASSES	**CODE**	**QTY**	**BOTANICAL / COMMON NAME**	**CONT**		
	CB'K	22	Calamagrostis brachytricha Korean Feather Reed Grass	1 gal		
	FS'B	41	Festuca x `Siskiyou Blue` Siskiyou Blue Fescue	1 gal		
	HS'S	46	Helictotrichon sempervirens `Sapphire` Blue Oat Grass	1 gal		
	MM'L	40	Miscanthus sinensis `Morning Light` Morning Light Maiden Grass	2 gal		
	PV'S	39	Panicum virgatum `Shenandoah` Shenandoah Switch Grass	1 gal		
	PK'R	18	Pennisetum orientale `Karley Rose` Karley Rose Fountain Grass	1 gal		
PERENNIALS	**CODE**	**QTY**	**BOTANICAL / COMMON NAME**	**CONT**		
	SA'F	14	Sedum x `Autumn Fire` Autumn Fire Sedum	1 gal		
ROSES	**CODE**	**QTY**	**BOTANICAL / COMMON NAME**	**CONT**		
	RR'D	18	Rosa x `Meigalpio` TM Red Drift Groundcover Rose	5 gal		

ISSUE DATE	PROJECT NUMBER
8/25/2022	UT22051

NO.	REVISION	DATE
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0' 25' 50' 100' 200'
GRAPHIC SCALE: 1" = 50'

PLAN INFORMATION

PROJECT INFORMATION

ESCALANTE TOWNHOMES
SPANISH FORK, UTAH

DEVELOPER / PROPERTY OWNER / CLIENT

RUSSELL MAJOR PROPERTIES
ATT: SIDNEY ALLSOP
702-556-2718
SIDNEYALLSUP@GMAIL.COM

ATLAS ENGINEERING
946 EAST 800 NORTH, SUITE A
SPANISH FORK, UT 84660
801-655-0566

LANDSCAPE ARCHITECT / PLANNER

PKJ DESIGN GROUP
Landscape Architecture / Planning & Visualization
3450 N. TRIUMPH BLVD. SUITE 102
LEHI, UTAH 84043 (801) 753-5644
www.pkjdesigngroup.com

LICENSE STAMP

LICENSED LANDSCAPE ARCHITECT
JEREMY AINSWORTH
STATE OF UTAH
8128121-5301
08/25/2022

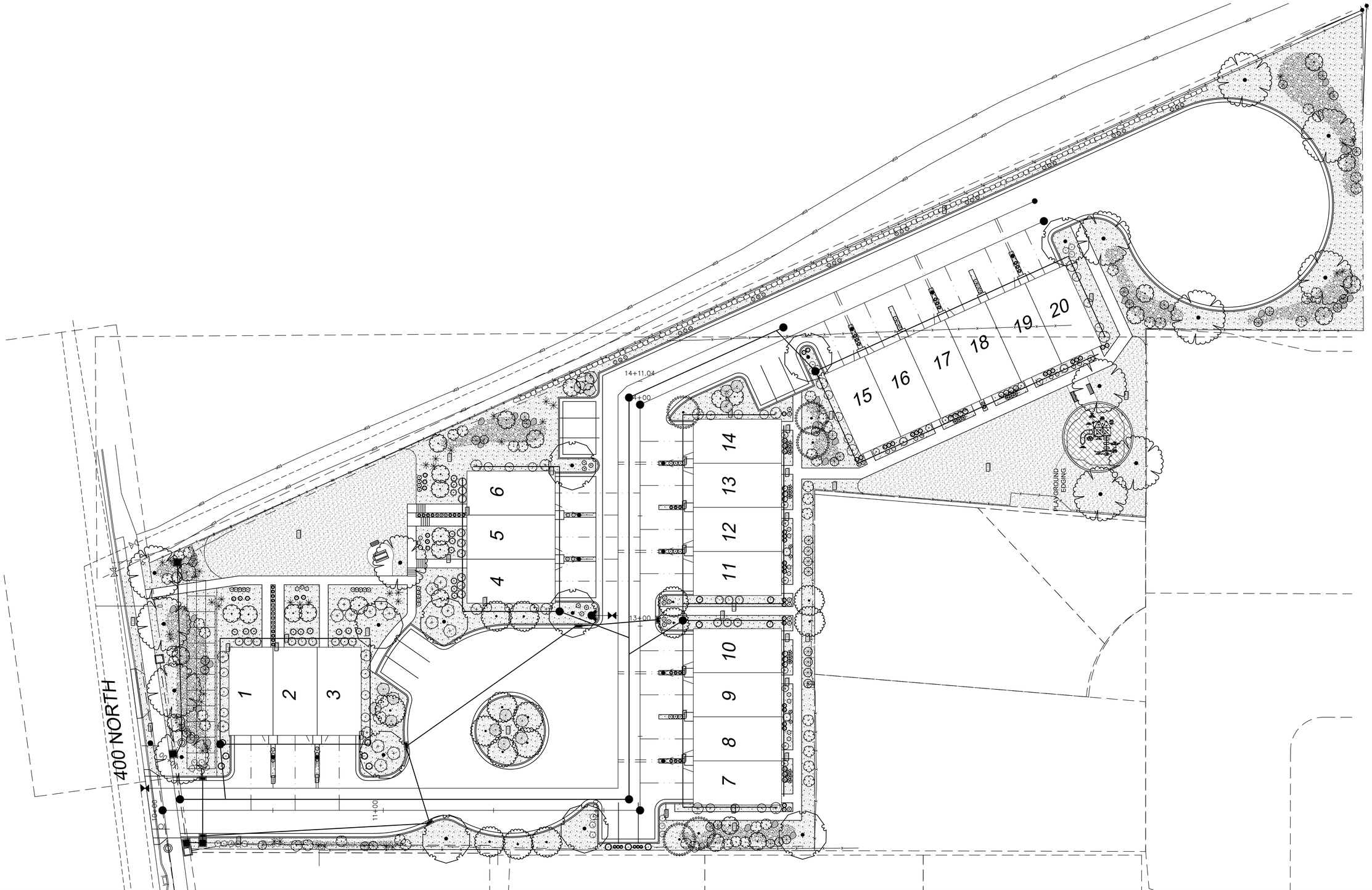
DRAWING INFO

PM:	JTA
DRAWN:	ACP
CHECKED:	JMA
PLOT DATE:	8/25/2022

LANDSCAPE PLAN COVER

PRELIMINARY PLANS NOT FOR CONSTRUCTION

LP-100



ISSUE DATE	PROJECT NUMBER	PLAN INFORMATION
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LICENSED LANDSCAPE ARCHITECT
JEREMY ANDWORTH
812121-5301
08/25/2022
ELECTRONIC SEAL
STATE OF UTAH

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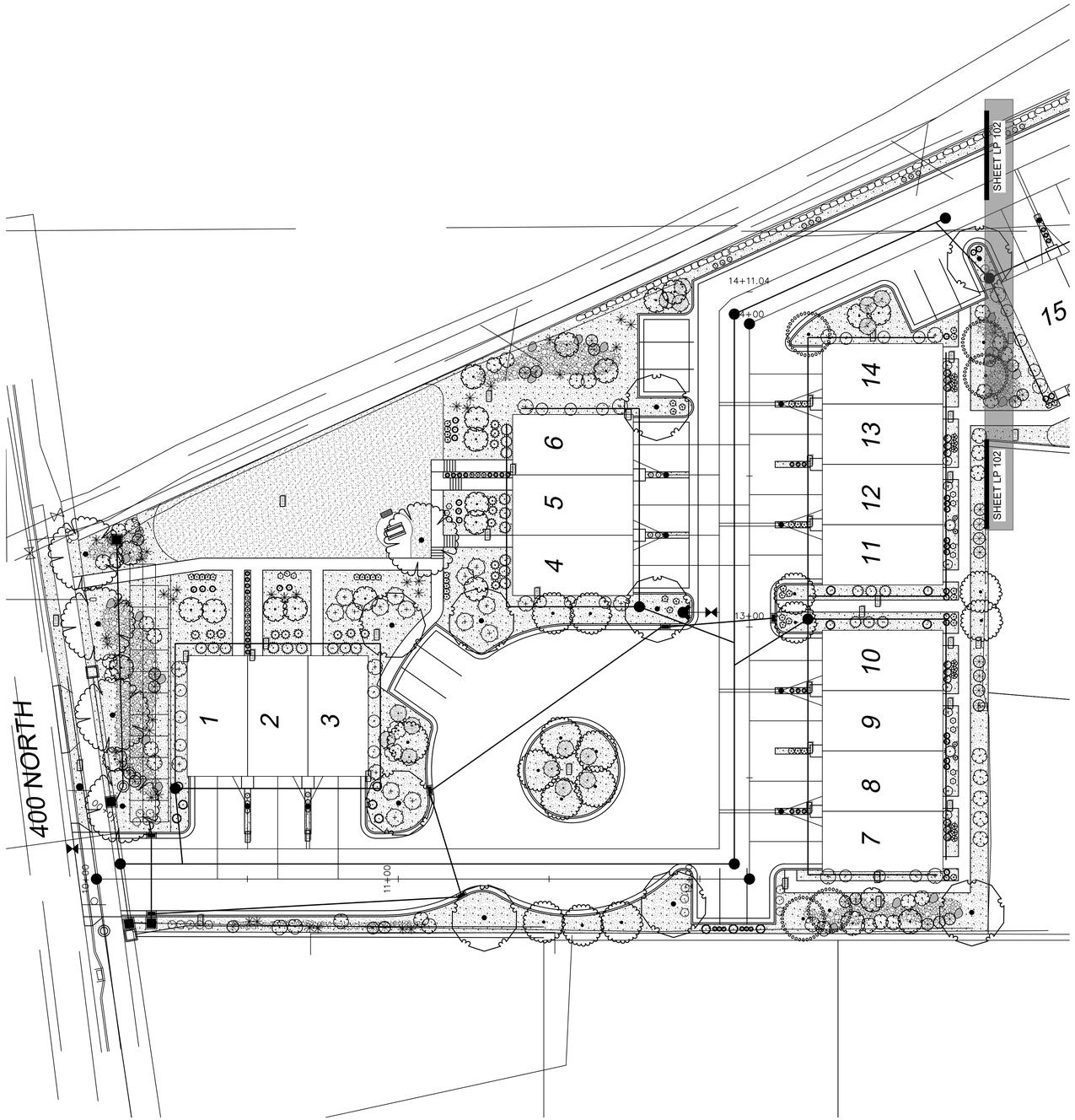
LANDSCAPE PLAN OVERALL

PRELIMINARY PLANS NOT FOR CONSTRUCTION

LP-O



PLANT LEGEND

CONIFERS	CODE	QTY	BOTANICAL / COMMON NAME	CONT	CAL	SIZE
	JS'B	13	Juniperus Scopulorum `Blue Arrow` Blue Arrow Juniper	B & B		5`-6`
DECIDUOUS TREES	**CODE**	**QTY**	**BOTANICAL / COMMON NAME**	**CONT**	**CAL**	**SIZE**
	GB'P	5	Ginkgo biloba `Princeton Sentry` Princeton Sentry Gingko	B & B	2"Cal	
	MA'M	10	Maackia amurensis `JFS-Schiectell` TM MaacNificent Maackia	B & B	2"Cal	
	MS'T	29	Malus sargentii `Tina` Tina Crabapple	B & B	1.25"Cal	
	QR'A	15	Quercus robur x alba `JFS-KW1QX` TM Street Spire Oak	B & B	2"Cal	
	UX'F	13	Ulmus x `Frontier` Frontier Elm	B & B	2"Cal	
DECIDUOUS SHRUBS	**CODE**	**QTY**	**BOTANICAL / COMMON NAME**	**CONT**		
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	AM'M	55	Aronia melanocarpa `Low Scape Mound' Low Scape Mound Chokeberry	5 gal		
	BT'C	22	Berberis thunbergii `Concorde` Concorde Japanese Barberry	5 gal		
	CA'B	49	Cornus alba `Bailhalo` TM Ivory Halo Dogwood	5 gal		
	PF'F	45	Potentilla fruticosa 'Fargo' Dakota Sunspot TM Fargo Yellow Shrubby Cinquefoil	5 gal		
	PB'P	14	Prunus besseyi `P011S` TM Pawnee Buttes Sand Cherry	5 gal		
	RF'R	14	Rhamnus frangula `Ron Williams` Fine Line Fine Line Buckthorn	5 gal		
	RT'T	2	Rhus typhina `Tiger Eyes` Tiger Eyes Sumac	5 gal		
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	P'KR	18	Pennisetum orientale `Karley Rose` Karley Rose Fountain Grass	1 gal		
PERENNIALS	**CODE**	**QTY**	**BOTANICAL / COMMON NAME**	**CONT**		
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ROSES	**CODE**	**QTY**	**BOTANICAL / COMMON NAME**	**CONT**		
	R'RD	18	Rosa x `Meigalpio` TM Red Drift Groundcover Rose	5 gal		

SITE MATERIALS LEGEND

SYMBOL	1 LANDSCAPE DESCRIPTION	QTY
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SYMBOL	**1 LANDSCAPE DESCRIPTION**	**QTY**
1-22	PLAYGROUND SURFACE. SOF'FALL ENGINEERED WOOD FIBER. INSTALL AS PER MANUFACTURERS SPECIFICATIONS.	27.36 cy

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LICENSE STAMP: LICENSED LANDSCAPE ARCHITECT — JEREMY ANDREW THORNOCK — 8128121-5301 — 08/25/2022 — ELECTRONIC SEAL — STATE OF UTAH

DRAWING INFO
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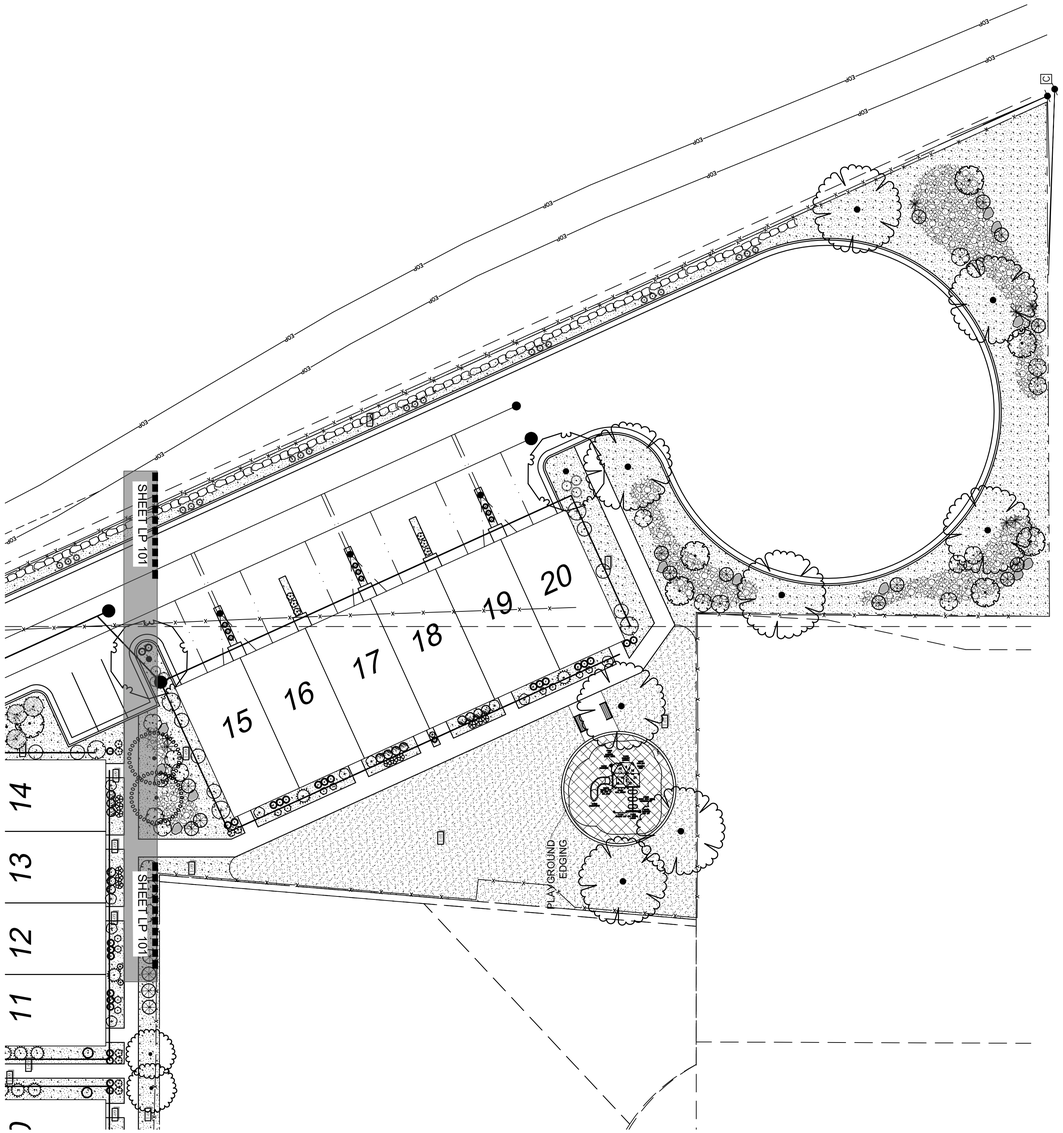
DRAWN: ACP
CHECKED: JMA
PLOT DATE: 8/25/2022

LANDSCAPE PLAN
PRELIMINARY PLANS NOT FOR CONSTRUCTION
LP-101



PLANT LEGEND

CONIFERS	CODE	QTY	BOTANICAL / COMMON NAME	CONT	CAL	SIZE
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	QR'A	15	Quercus robur x alba `JFS-KW1QX` TM Street Spire Oak	B & B	2"Cal	
	UX'F	13	Ulmus x `Frontier` Frontier Elm	B & B	2"Cal	
DECIDUOUS SHRUBS	**CODE**	**QTY**	**BOTANICAL / COMMON NAME**	**CONT**		
	AA'O	24	Amelanchier alnifolia `Obelisk` TM Standing Ovation Serviceberry	5 gal		
	AM'M	55	Aronia melanocarpa `Low Scape Mound' Low Scape Mound Chokeberry	5 gal		
	BT'C	22	Berberis thunbergii `Concorde` Concorde Japanese Barberry	5 gal		
	CA'B	49	Cornus alba `Bailhalo` TM Ivory Halo Dogwood	5 gal		
	PF'F	45	Potentilla fruticosa 'Fargo' Dakota Sunspot TM Fargo Yellow Shrubby Cinquefoil	5 gal		
	PB'P	14	Prunus besseyi `P011S` TM Pawnee Buttes Sand Cherry	5 gal		
	RF'R	14	Rhamnus frangula `Ron Williams` Fine Line Fine Line Buckthorn	5 gal		
	RT'T	2	Rhus typhina `Tiger Eyes` Tiger Eyes Sumac	5 gal		
	SB'T	20	Spiraea betulifolia `Tor` Birchleaf Spirea	5 gal		
	VC'K	16	Viburnum carlesii Korean Spice Viburnum	5 gal		
EVERGREEN SHRUBS	**CODE**	**QTY**	**BOTANICAL / COMMON NAME**	**CONT**		
	BM'G	28	Buxus microphylla japonica 'Green Beauty' Green Beauty Japanese Boxwood	5 gal		
	JH'I	15	Juniperus horizontalis `Monber` TM Icee Blue Juniper	5 gal		
GRASSES	**CODE**	**QTY**	**BOTANICAL / COMMON NAME**	**CONT**		
	CB'K	22	Calamagrostis brachytricha Korean Feather Reed Grass	1 gal		
	FS'B	41	Festuca x `Siskiyou Blue` Siskiyou Blue Fescue	1 gal		
	HS'S	46	Helictotrichon sempervirens `Sapphire` Blue Oat Grass	1 gal		
	M'ML	40	Miscanthus sinensis `Morning Light` Morning Light Maiden Grass	2 gal		
	PV'S	39	Panicum virgatum `Shenandoah` Shenandoah Switch Grass	1 gal		
	P'KR	18	Pennisetum orientale `Karley Rose` Karley Rose Fountain Grass	1 gal		
PERENNIALS	**CODE**	**QTY**	**BOTANICAL / COMMON NAME**	**CONT**		
	S'AF	14	Sedum x `Autumn Fire` Autumn Fire Sedum	1 gal		
ROSES	**CODE**	**QTY**	**BOTANICAL / COMMON NAME**	**CONT**		
	R'RD	18	Rosa x `Meigalpio` TM Red Drift Groundcover Rose	5 gal		

SITE MATERIALS LEGEND

SYMBOL	1 LANDSCAPE DESCRIPTION	QTY
L-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.	7,924 sf
L-09	1" MINUS COPPER CANYON CRUSHED 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 KEEP ROCK FROM WITHIN ONE FOOT OF TREE TRUNK, SHRUB OR PERENNIAL BASE OR GRASS ROOT BALL.	25,309 sf
L-13	4"-6" SOUTH TOWN COBBLE ROCK OR APPROVED EQUAL PROVIDE 9-12" DEPTH OF ROCK MULCH TOP DRESSING. INSTALL DEWITT 5OZ WEED BARRIER UNDER ALL LARGE ROCK AREAS.	3,632 sf

SYMBOL	1 LANDSCAPE DESCRIPTION	QTY
L-17	BOULDERS - DECORATIVE	29
L-19	5.5" DEEP STEEL EDGING - INSTALL PER MANUFACTURER SPECIFICATION.	157 lf

SYMBOL	1 LANDSCAPE DESCRIPTION	QTY
L-22	PLAYGROUND SURFACE. SOF'FALL ENGINEERED WOOD FIBER. INSTALL AS PER MANUFACTURERS SPECIFICATIONS.	27.36 cy

ISSUE DATE 8/25/2022

PROJECT NUMBER UT22051

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

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

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

PROJECT INFORMATION

ESCALANTE TOWNHOMES
SPANISH FORK, UTAH

DEVELOPER / PROPERTY OWNER / CLIENT

RUSSELL MAJOR PROPERTIES
ATT: SIDNEY ALLSOP
702-556-2718
SIDNEYALLSUP@GMAIL.COM

ATLAS ENGINEERING
946 EAST 800 NORTH, SUITE A
SPANISH FORK, UT 84660
801-655-0566

LANDSCAPE ARCHITECT / PLANNER

PKJ DESIGN GROUP
Landscape Architecture / Planning & Visualization
3450 N. TRIUMPH BLVD. SUITE 102
LEHI, UTAH 84043 (801) 753-5644
www.pkjdesigngroup.com

LICENSE STAMP

LICENSED LANDSCAPE ARCHITECT
JEREMY AINSWORTH
8128125-5301
08/25/2022
ELECTRONIC SEAL
STATE OF UTAH

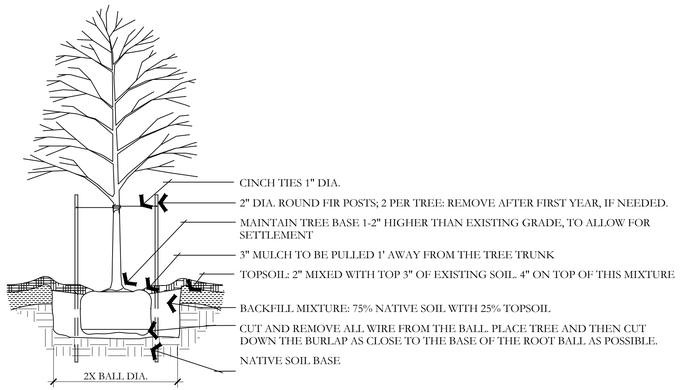
DRAWING INFO

PM: JTA
DRAWN: ACP
CHECKED: JMA
PLOT DATE: 8/25/2022

LANDSCAPE PLAN

PRELIMINARY PLANS NOT FOR CONSTRUCTION

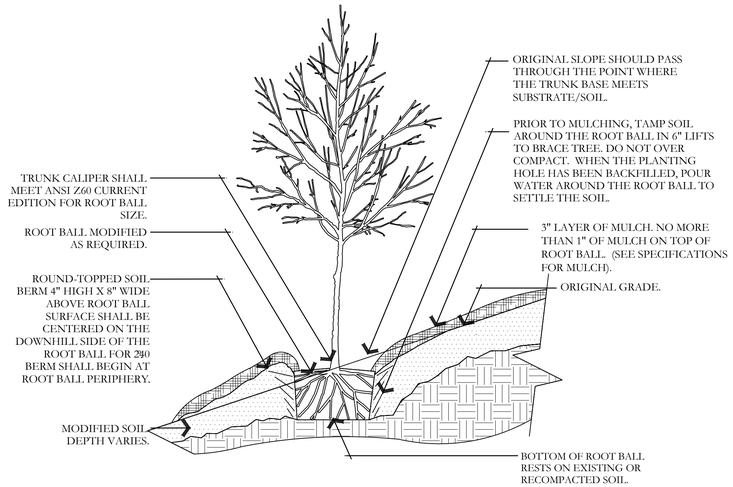
LP-102



A DECIDUOUS TREE PLANTING

NOT TO SCALE

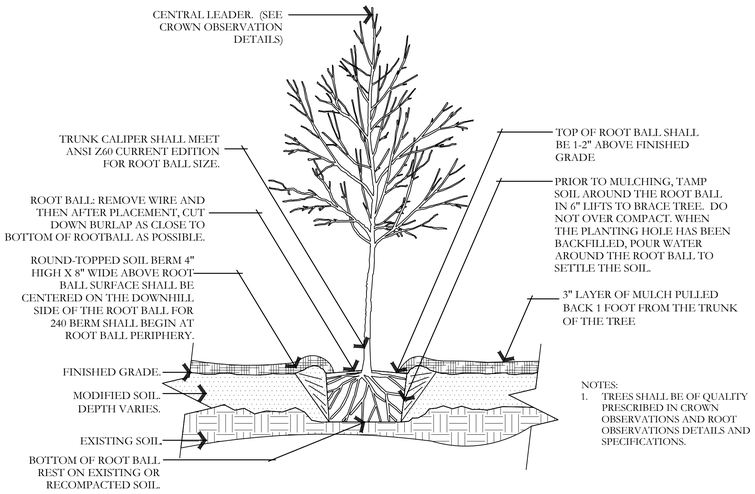
PKJ DESIGN GROUP



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

NOT TO SCALE

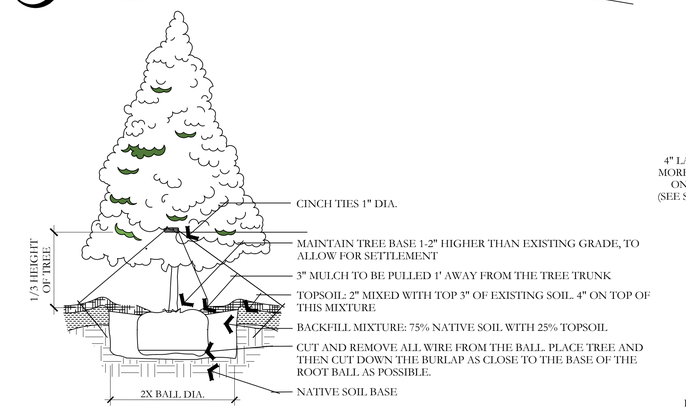
PKJ DESIGN GROUP



C TREE W/ BERM (EXISTING SOIL MODIFIED)

NOT TO SCALE

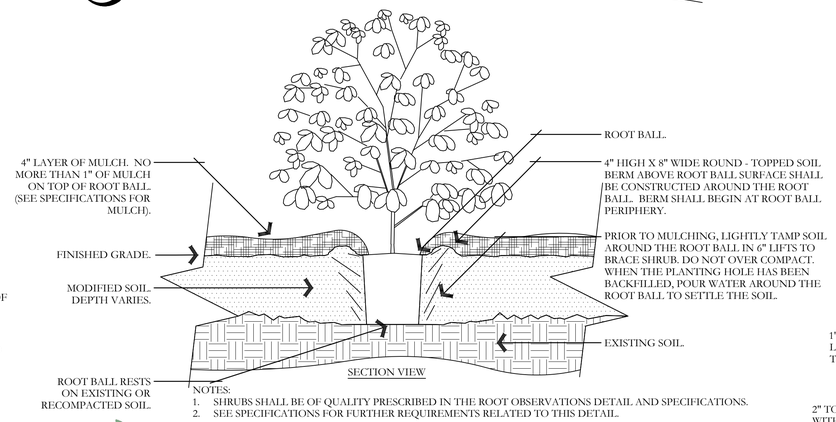
PKJ DESIGN GROUP



D EVERGREEN TREE PLANTING

NOT TO SCALE

PKJ DESIGN GROUP



E SHRUB - MODIFIED SOIL

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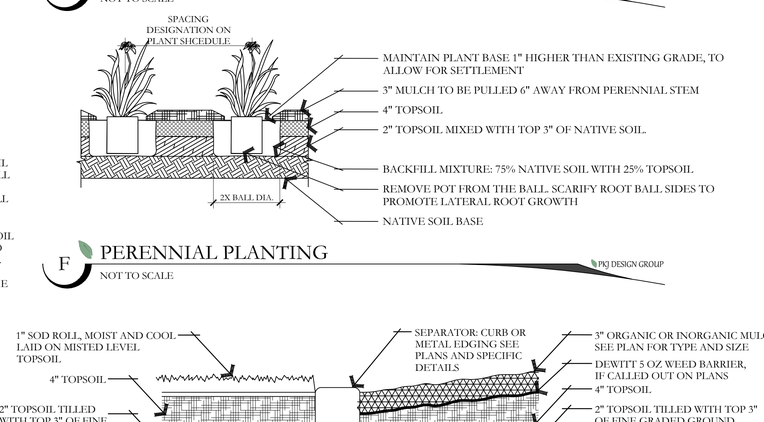
PKJ DESIGN GROUP



F PERENNIAL PLANTING

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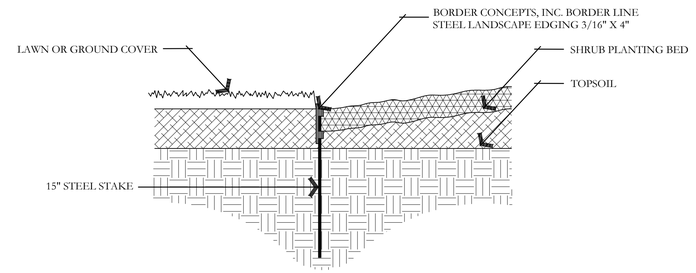
PKJ DESIGN GROUP



G METAL EDGING DETAIL

NOT TO SCALE

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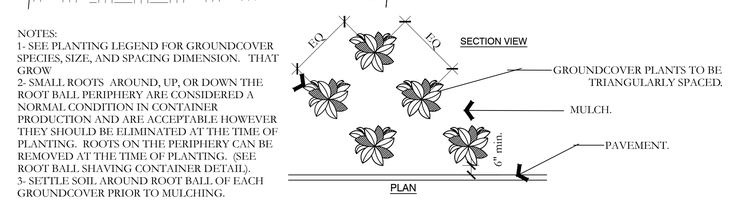
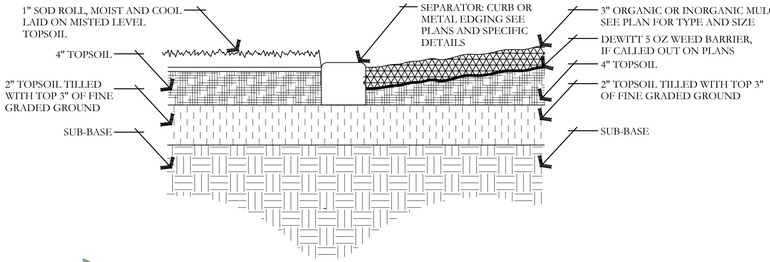


H PERENNIAL/GROUNDCOVER PLANTING

NOT TO SCALE

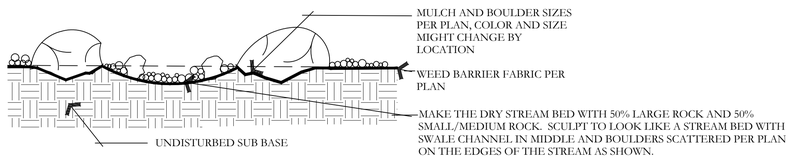
PKJ DESIGN GROUP



I SOD LAYING/MULCH DETAIL

NOT TO SCALE

PKJ DESIGN GROUP



J BOULDER AND DRY STREAM BED DETAIL

NOT TO SCALE

PKJ DESIGN GROUP

ISSUE DATE	PROJECT NUMBER
8/25/2022	UT22051

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PLAN INFORMATION

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PROJECT INFORMATION

ESCALANTE TOWNHOMES
SPANISH FORK, UTAH

DEVELOPER / PROPERTY OWNER / CLIENT

RUSSELL MAJOR PROPERTIES
ATT: SIDNEY ALLSOP
702-556-2718
SIDNEYALLSUP@GMAIL.COM

ATLAS ENGINEERING
946 EAST 800 NORTH, SUITE A
SPANISH FORK, UT 84660
801-655-0566

LANDSCAPE ARCHITECT / PLANNER

PKJ DESIGN GROUP
Landscape Architecture / Planning & Visualization
3450 N. TRIUMPH BLVD. SUITE 102
LEHI, UTAH 84043 (801) 753-5644
www.pkjdesigngroup.com

LICENSE STAMP

LICENSED LANDSCAPE ARCHITECT
JEREMY AINSWORTH
8128121-5301
08/28/2022
RENEWAL DATE
STATE OF UTAH

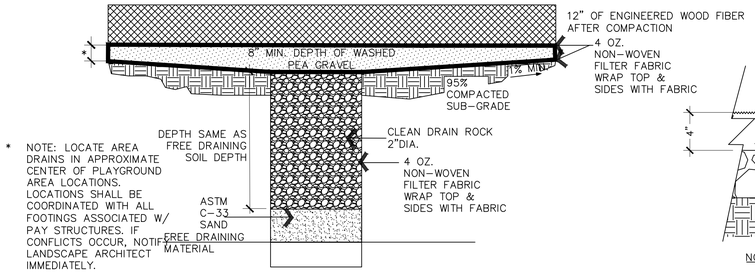
DRAWING INFO

PM:	JTA
DRAWN:	ACP
CHECKED:	JMA
PLOT DATE:	8/25/2022

LANDSCAPE DETAILS

PRELIMINARY PLANS NOT FOR CONSTRUCTION

LP-501



O AREA DRAIN DETAIL
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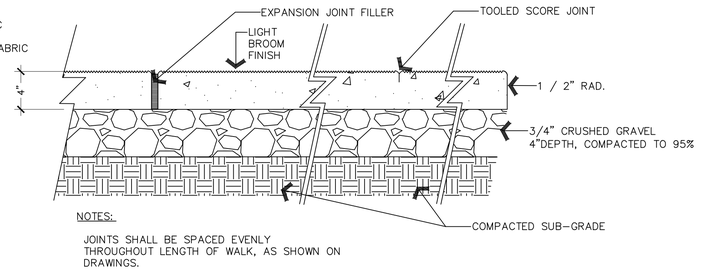

P CONCRETE FLATWORK DETAIL
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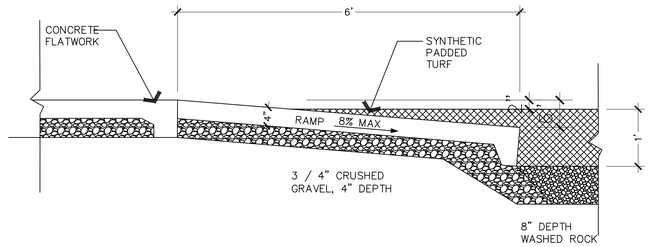

M ADA RAMP
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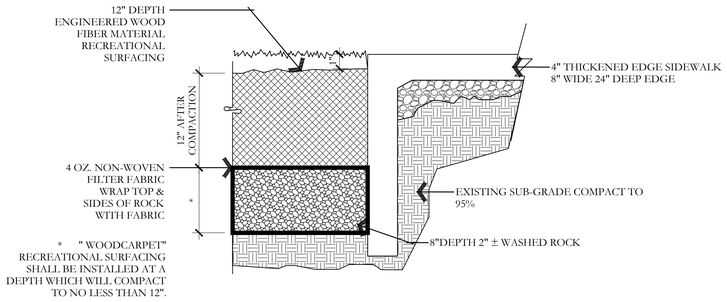

N ENGINEERED WOOD FIBER SAFETY SURFACING
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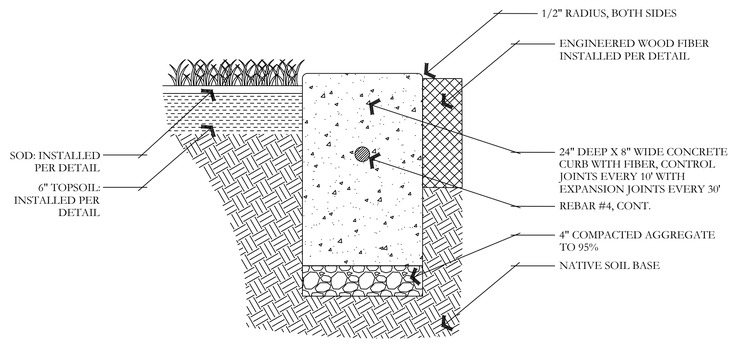

N PLAYGROUND EDGING
NOT TO SCALE

M LANDSCAPE STRUCTURES: #1613
NOT TO SCALE

ISSUE DATE	PROJECT NUMBER	PLAN INFORMATION	PROJECT INFORMATION	DEVELOPER / PROPERTY OWNER / CLIENT	LANDSCAPE ARCHITECT / PLANNER	LICENSE STAMP	DRAWING INFO
8/25/2022	UT22051						PM: JTA
							DRAWN: ACP
							CHECKED: JMA
							PLOT DATE: 8/25/2022

NO.	REVISION	DATE
1	XXXX	XX-XX-XX
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SPANISH FORK, UTAH

RUSSELL MAJOR PROPERTIES
ATT: SIDNEY ALLSOP
702-556-2718
SIDNEYALLSUP@GMAIL.COM

ATLAS ENGINEERING
946 EAST 800 NORTH, SUITE A
SPANISH FORK, UT 84660
801-655-0566

PKJ DESIGN GROUP
Landscape Architecture Planning & Visualization
3450 N. TRIUMPH BLVD. SUITE 102
LEHI, UTAH 84043 (801) 753-5644
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LICENSED LANDSCAPE ARCHITECT JEREMY AINSWORTH 8128121-5301 08/25/2022 ELECTRONIC SEAL STATE OF UTAH

LANDSCAPE DETAILS
PRELIMINARY PLANS NOT FOR CONSTRUCTION
LP-502

ESCALANTE TOWNHOMES

SPANISH FORK, UTAH

IRRIGATION PLAN SPECIFICATIONS

IRRIGATION SPECIFICATIONS

PART 1 - GENERAL

1.1 SUMMARY

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

1.2 SYSTEM DESCRIPTION

A. Design of irrigation components: Locations of irrigation components on Construction Drawings may be approximate. Piping, sleeving and/or other components shown on Construction drawings may be shown schematically for graphic clarity and demonstration of component groupings and separations. All irrigation components shall be placed in landscaped areas, with the exception of 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 including 2 wire path and junction box locations.
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 at supplied POC. Notify OAR in writing of problems encountered and pressure reading 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. Connection must meet state guidelines

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. To be installed by owner or electrical contractor.

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 36" 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. Wire splice connectors shall use 3M brand DBY wire connectors. 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 SCH40 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 SCH80 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 RAIN BIRD 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 Landscape Architect or 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.

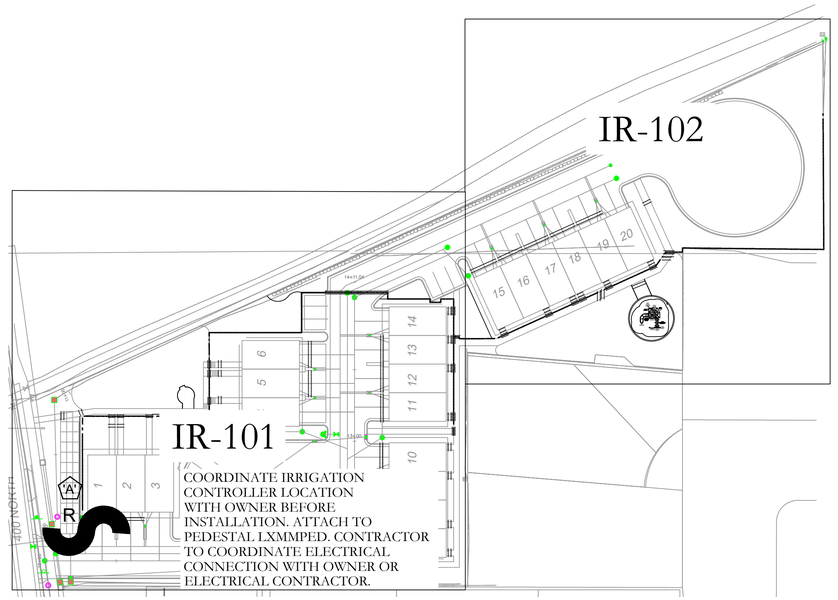
Regular Irrigation Schedule (see Seasonal Differential Chart)

	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



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

ISSUE DATE	PROJECT NUMBER	PLAN INFORMATION
8/25/2022	UT22051	

NO.	REVISION	DATE
1	XXXX	XX-XX-XX
2		
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1-800-662-4111
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0' 25' 50' 100' 200'
GRAPHIC SCALE: 1" = 50'

PROJECT INFORMATION

ESCALANTE TOWNHOMES

SPANISH FORK, UTAH

DEVELOPER / PROPERTY OWNER / CLIENT

RUSSELL MAJOR PROPERTIES
ATT: SIDNEY ALLSOP
702-556-2718
SIDNEYALLSUP@GMAIL.COM

ATLAS ENGINEERING
946 EAST 800 NORTH, SUITE A
SPANISH FORK, UT 84660
801-655-0566

LANDSCAPE ARCHITECT / PLANNER

PKJ DESIGN GROUP
Landscape Architecture / Planning &Visualization
3450 N. TRIUMPH BLVD. SUITE 102
LEHI, UTAH 84043 (801) 753-5644
www.pkjdesigngroup.com

LICENSE STAMP

LICENSED LANDSCAPE ARCHITECT
JEREMY ANDWORTH
812121-5301
08/28/2022
ELECTRONIC SEAL
STATE OF UTAH

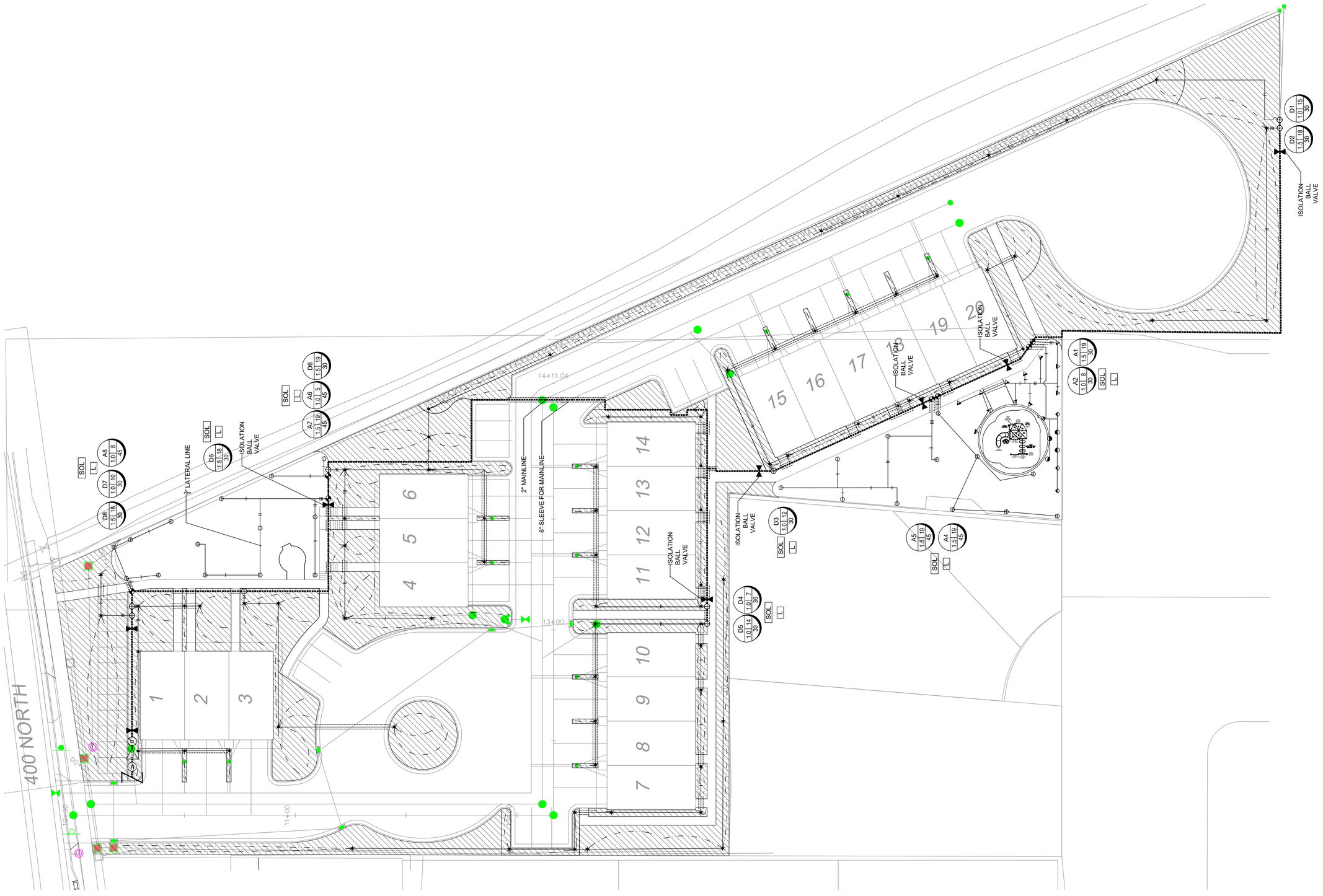
DRAWING INFO

PM:	JTA
DRAWN:	ACP
CHECKED:	JMA
PLOT DATE:	8/25/2022

IRRIGATION PLAN COVER

PRELIMINARY PLANS NOT FOR CONSTRUCTION

IR-100



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0' 10' 20' 40' 80'
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RUSSELL MAJOR PROPERTIES
ATT: SIDNEY ALLSOP
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ELECTRONIC
STATE OF UTAH

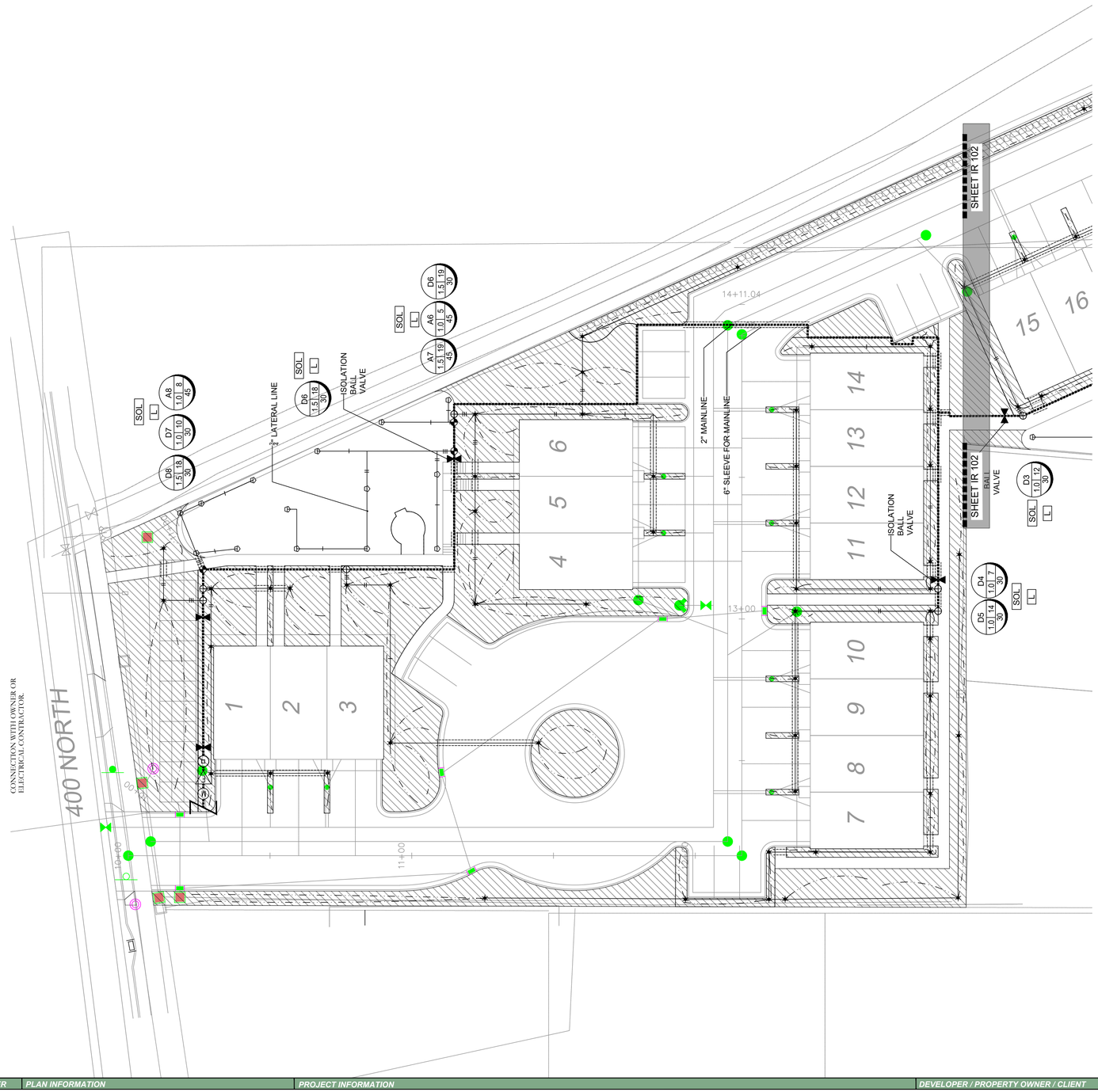
DRAWING INFO

PM:	JTA
DRAWN:	ACP
CHECKED:	JMA
PLOT DATE:	8/25/2022

IRRIGATION PLAN OVERALL

PRELIMINARY PLANS NOT FOR CONSTRUCTION

IR-O



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 @ 45 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-LXIVM, WITH COMMUNICATION CARTRIDGE (4G/ETHERNET), CONTRACTOR TO ADJUST LOCATION WITH OWNER PRIOR TO CONSTRUCTION. ATTACH TO PEDESTAL LXMMPED
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-SIZE FLOW SENSOR ACCORDING TO MINIMUM GPM ZONE ON SYSTEM TO MAKE SURE THAT THE FLOW SENSOR IS CAPTURING FLOW. (USE SIZING CHARTS)
Q	QUICK COUPLER: RAINBIRD 44LRC INSTALL PER MANUFACTURER'S SPEC.
SOL	SMART VALVE IVMSOL INSTALL PER MANUFACTURER'S SPEC.
L	LIGHTNING ARRESTER INSTALL PER MANUFACTURER'S SPEC. (EVERY 500 FT., OR 15 IVM DEVICES MAXIMUM.)
	REMOTE CONTROL VALVE: RAINBIRD IVMSOL AUTOMATIC CONTROL VALVE (SIZE AS NOTED ON PLAN- USE JUMBO BOX-PURPLE LID) PLACE YELLOW TAGS ON ALL VALVES AND LABEL.
	DRIP CONTROL ZONE KIT: RAINBIRD XCZ100IVM- FLOW INDICATING BASKET FILTER-(PER PLAN)-PRBR-COM MED FLOW (SIZE AS NOTED ON PLAN)
	MAINLINE: SCHEDULE 40 PVC WITH SCHEDULE 80 FITTINGS, 2" 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 XFS-CV-09-18 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
	14 GAUGE SOLID COPPER SINGLE STRAND CONTROL WIRE. INSTALL PER MANUFACTURER'S SPEC. PROVIDE 2 WIRE LOOP SYSTEM. ONLY WIRE FROM POC TO CONTROLLER IS DEPICTED ON PLANS. CONTRACTOR TO INSTALL WIRE IN CONDUIT FROM POC TO ALL VALVES. THE WIRE TO VALVES IS NOT SHOWN ON PLAN

DRIP ZONE

TYPE	PART NUMBER	EMITTER FLOW	SPACING	MAX. LATERAL LENGTH
XF SERIES	XFS-09-18	.9 GPH	18"	400 FT
WITH COPPER SHIELD				
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	
*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, UNLESS BLACK POLY IS CALLED OUT FOR WIRE SLEEVING. 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.

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SPANISH FORK, UTAH

DEVELOPER / PROPERTY OWNER / CLIENT

RUSSELL MAJOR PROPERTIES
ATT: SIDNEY ALLSOP
702-556-2718
SIDNEYALLSUP@GMAIL.COM

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ATLAS ENGINEERING
946 EAST 800 NORTH, SUITE A
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LICENSE STAMP

LICENSED LANDSCAPE ARCHITECT
JEREMY AINSWORTH
8128127-5301
06/28/2022
REGISTERED
STATE OF UTAH

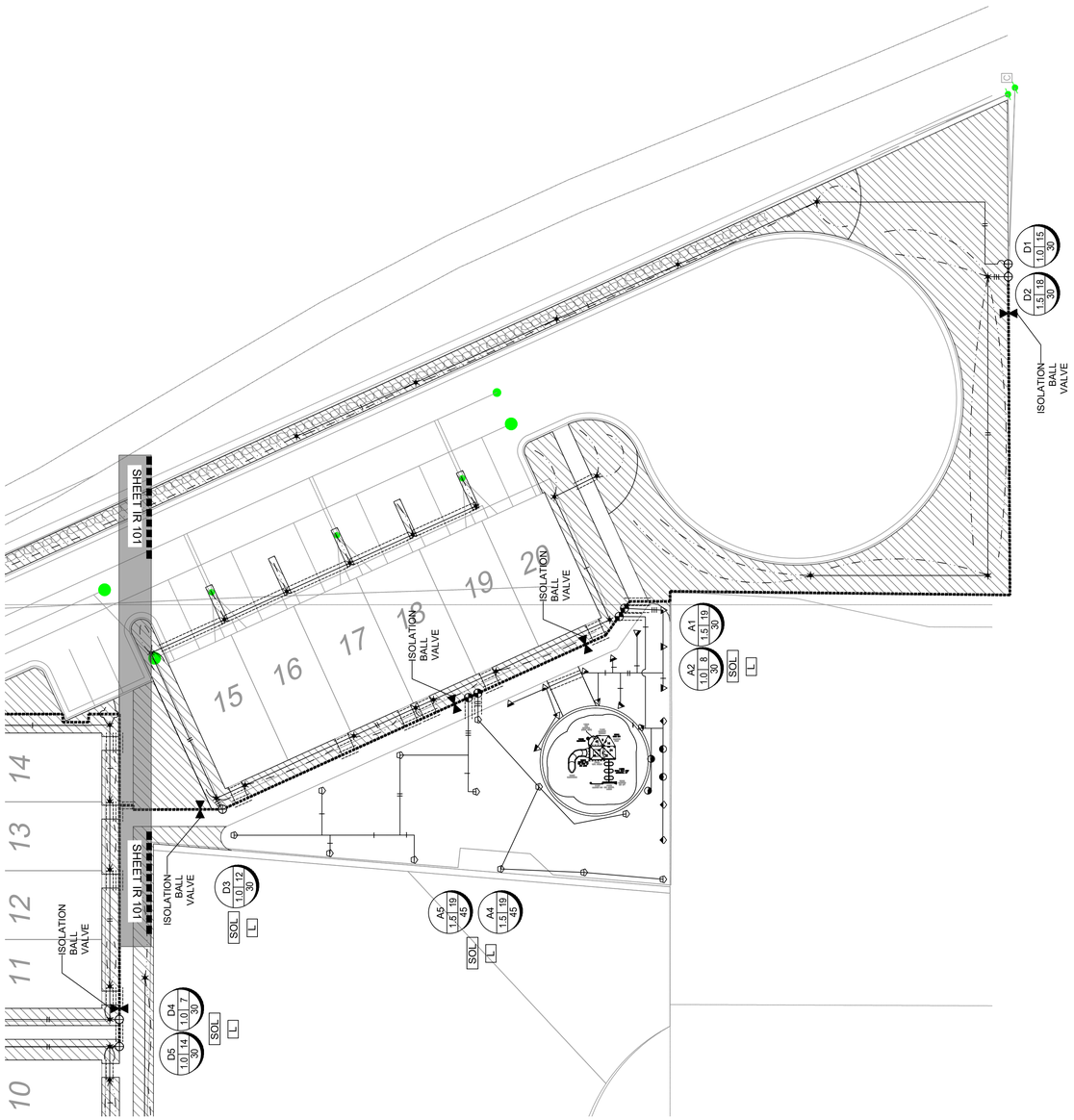
DRAWING INFO

PM:	JTA
DRAWN:	ACP
CHECKED:	JMA
PLOT DATE:	8/25/2022

IRRIGATION PLAN

PRELIMINARY PLANS NOT FOR CONSTRUCTION

IR-101



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 @ 45 PSI
	RAINBIRD 8005 SERIES Q#8-6.6 GPM, H#14-12.6 GPM, F#26-24.3 GPM NOZZLES @ 55 PSI
N	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-LXIVM, WITH COMMUNICATION CARTRIDGE (4G/ETHERNET), CONTRACTOR TO ADJUST LOCATION WITH OWNER PRIOR TO CONSTRUCTION. ATTACH TO PEDESTAL LXMMPED
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-SIZE FLOW SENSOR ACCORDING TO MINIMUM GPM ZONE ON SYSTEM TO MAKE SURE THAT THE FLOW SENSOR IS CAPTURING FLOW. (USE SIZING CHARTS)
Q	QUICK COUPLER: RAINBIRD 44LRC INSTALL PER MANUFACTURER'S SPEC.
SOL	SMART VALVE IVMSOL INSTALL PER MANUFACTURER'S SPEC.
L	LIGHTNING ARRESTER INSTALL PER MANUFACTURER'S SPEC. (EVERY 500 FT., OR 15 IVM DEVICES MAXIMUM.)
	REMOTE CONTROL VALVE: RAINBIRD IVMSOL AUTOMATIC CONTROL VALVE (SIZE AS NOTED ON PLAN- USE JUMBO BOX-PURPLE LID) PLACE YELLOW TAGS ON ALL VALVES AND LABEL.
	DRIP CONTROL ZONE KIT: RAINBIRD XCZ100IVM- FLOW INDICATING BASKET FILTER-(PER PLAN)-PRBR-COM MED FLOW (SIZE AS NOTED ON PLAN)
	MAINLINE: SCHEDULE 40 PVC WITH SCHEDULE 80 FITTINGS, 2" 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 XFS-CV-09-18 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 14 GAUGE SOLID COPPER SINGLE STRAND CONTROL WIRE. INSTALL PER MANUFACTURER'S SPEC. PROVIDE 2 WIRE LOOP SYSTEM. ONLY WIRE FROM POC TO CONTROLLER IS DEPICTED ON PLANS. CONTRACTOR TO INSTALL WIRE IN CONDUIT FROM POC TO ALL VALVES. THE WIRE TO VALVES IS NOT SHOWN ON PLAN

DRIP ZONE

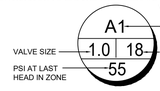
TYPE	PART NUMBER	EMITTER FLOW	SPACING	MAX. LATERAL LENGTH
XF SERIES	XFS-09-18	0.9 GPH	18"	400 FT
WITH COPPER SHIELD				
TOTAL DRIP ZONE FLOW		20 GPM	*EACH ZONE NOT TO EXCEED 20 GPM	
NUMBER OF FLUSH POINTS		2	DRIP ZONE TO APPLY 1/4" OF WATER	
*ONLY WATER PLANT SPECIFICALLY. DO NOT WATER ROCK AREA WITH 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, UNLESS BLACK POLY IS CALLED OUT FOR WIRE SLEEVING. 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



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

ISSUE DATE	PROJECT NUMBER
8/25/2022	UT22051

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

PLAN INFORMATION

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

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

PROJECT INFORMATION

ESCALANTE TOWNHOMES
SPANISH FORK, UTAH

DEVELOPER / PROPERTY OWNER / CLIENT

RUSSELL MAJOR PROPERTIES
ATT: SIDNEY ALLSOP
702-556-2718
SIDNEYALLSUP@GMAIL.COM

ATLAS ENGINEERING
946 EAST 800 NORTH, SUITE A
SPANISH FORK, UT 84660
801-655-0566

LANDSCAPE ARCHITECT / PLANNER

PKJ DESIGN GROUP
Landscape Architecture / Planning &Visualization
3450 N. TRIUMPH BLVD. SUITE 102
LEHI, UTAH 84043 (801) 753-5644
www.pkjdesigngroup.com

LICENSE STAMP

LICENSED LANDSCAPE ARCHITECT
JEREMY AINSWORTH
812812-5301
REGISTERED
08/25/2022
ELECTRONIC SEAL
STATE OF UTAH

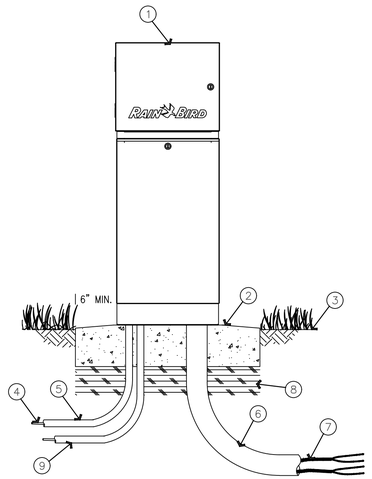
DRAWING INFO

PM:	JTA
DRAWN:	ACP
CHECKED:	JMA
PLOT DATE:	8/25/2022

IRRIGATION PLAN

PRELIMINARY PLANS NOT FOR CONSTRUCTION

IR-102



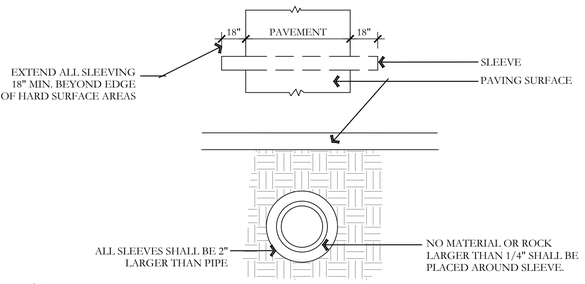
1. TWO-WIRE CONTROLLER: RAIN BIRD ESP-LXIVM/PRO WITH LXMM METAL CABINET AND LXMMPED METAL PEDESTAL. INSTALL CONTROLLER, CABINET AND PEDESTAL PER MANUFACTURER'S RECOMMENDATIONS.
2. CONCRETE PAD- 6-INCH MINIMUM THICKNESS, 6-INCHES LARGER ON ALL SIDES THAN PEDESTAL FOOTPRINT
3. FINISH GRADE
4. POWER SUPPLY WIRE
5. 1-INCH SCH 40 PVC CONDUIT, FITTINGS AND SWEEP ELL FOR POWER SUPPLY
6. 2-INCH SCH 40 PVC CONDUIT, FITTINGS AND SWEEP ELL FOR TWO-WIRE CABLE
7. MAXICABLE TWO-WIRE PATH TO FIELD DEVICES USE A DIFFERENT CABLE JACKET COLOR FOR EACH PATH.
8. COMPACTED SUBGRADE
9. 1-INCH SCH 40 PVC CONDUIT, FITTINGS AND SWEEP ELL FOR GROUND

NOTES:
1. ESP-LXIVM CONTROLLER IS AVAILABLE IN TWO MODELS. THE LXIVM WITH 60 STATIONS AND THE LMIVM-PRO WITH 240 STATIONS. REFER TO THE CHART BELOW FOR DIFFERENCES BETWEEN THE TWO MODELS.
2. PROVIDE PROPER GROUNDING COMPONENTS TO ACHIEVE GROUND RESISTANCE OF 10 OHMS OR LESS.

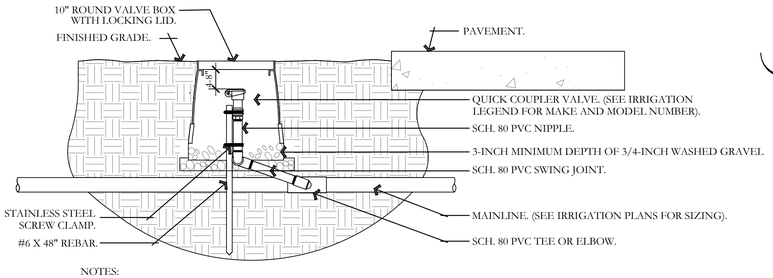
KEY SPECIFICATIONS

FEATURE ▶ / MODEL ▼	MAX PROGRAMS	STATIONS	MAX SIMULSTATIONS	MASTER VALVES	FLOW SENSORS	WEATHER SENSORS
LX-IVM	10	60	8	5	5	4
LX-IVM PRO	40	240	16	10	10	8

A ESP-LXIVM/PRO TWO-WIRE CONTROLLER IN METAL PEDESTAL
NOT TO SCALE — PKJ DESIGN GROUP

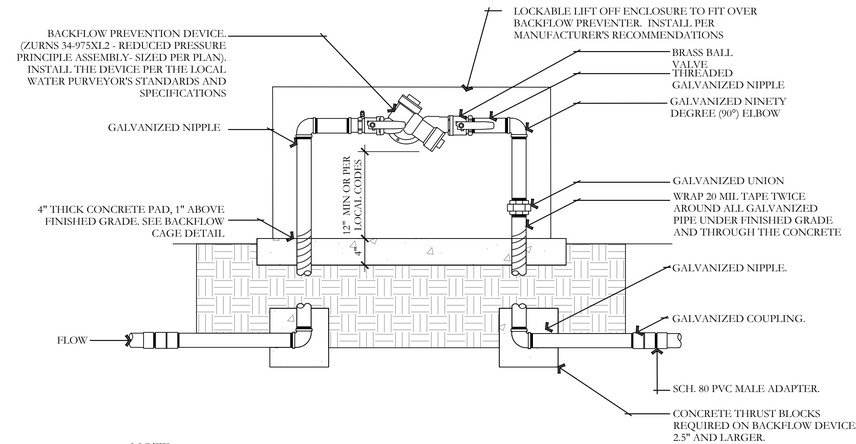


D TYPICAL SLEEVING DETAIL
NOT TO SCALE — PKJ DESIGN GROUP



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

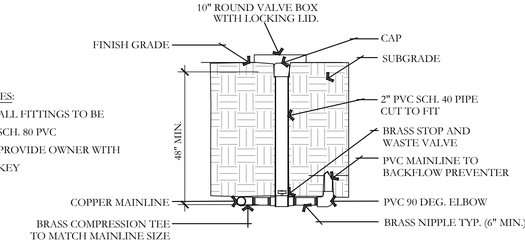


NOTE:
1. GALVANIZED NIPPLE SHALL EXTEND 12" PAST THE EDGE OF THE CONCRETE FOOTING.
2. SCH. 80 PVC MALE ADAPTER SHALL BE USED IN CONNECTION FROM GALVANIZE TO THE MAINLINE.
3. BACKFLOW PREVENTION DEVICE SHALL BE LOCATED AS CLOSE AS POSSIBLE TO THE LANDSCAPE METER.
4. BACKFLOW PREVENTION DEVICE SHALL BE 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

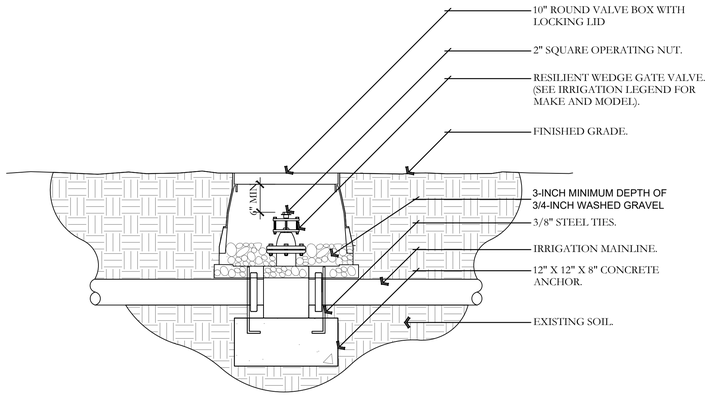
NOTES:
1. SEE IRRIGATION LEGEND FOR MAINLINE AND LATERAL LINE PIPE SIZE AND TYPE.
2. DIRECT BURIAL CONTROL WIRES SHALL BE INSTALLED IN SCH. 40 PVC ELECTRICAL CONDUIT IF REQUIRED.
3. 2-WIRE IRRIGATION WIRE SHALL BE INSTALLED IN SCH. 40 PVC ELECTRICAL CONDUIT.
4. DETECTABLE LOCATOR TAPE SHALL BE LOCATED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

E IRRIGATION TRENCHING DETAIL
NOT TO SCALE — PKJ DESIGN GROUP



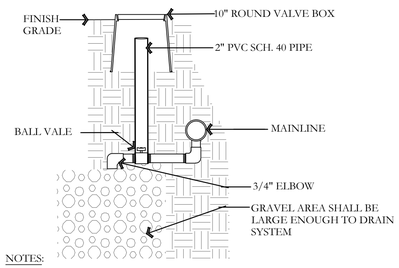
NOTES:
1. ALL FITTINGS TO BE SCH. 80 PVC
2. PROVIDE OWNER WITH KEY

H STOP AND WASTE VALVE ASSEMBLY DETAIL
NOT TO SCALE — PKJ DESIGN GROUP



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

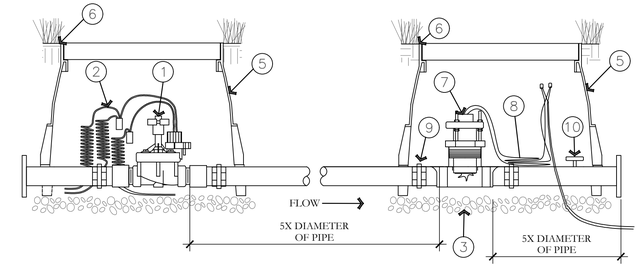
C GATE VALVE AND ANCHOR DETAIL
NOT TO SCALE — PKJ DESIGN GROUP



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

F MANUAL DRAIN DETAIL
NOT TO SCALE — PKJ DESIGN GROUP

1. NORMALLY CLOSED 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
5. VALVE BOX WITH COVER - RAINBIRD JUMBO BOX
6. FINISH GRADE
7. RAIN BIRD FS SERIES FLOW SENSOR(S). SEE COVER SHEET FOR SIZE
8. 36-INCH LENGTH OF COILED MAXI-CABLE TO FLOW SENSING
9. PVC PIPE UNION
10. BRASS BALL VALVE



I MASTER VALVE AND FLOW SENSOR DETAIL
NOT TO SCALE — PKJ DESIGN GROUP

ISSUE DATE: 8/25/2022 — PROJECT NUMBER: UT22051

NO.	REVISION	DATE
1	XXXX	XX-XX-XX
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SPANISH FORK, UTAH

DEVELOPER / PROPERTY OWNER / CLIENT:
RUSSELL MAJOR PROPERTIES
ATT: SIDNEY ALLSOP
702-556-2718
SIDNEYALLSUP@GMAIL.COM

ATLAS ENGINEERING
946 EAST 800 NORTH, SUITE A
SPANISH FORK, UT 84660
801-655-0566

LANDSCAPE ARCHITECT / PLANNER:
PKJ DESIGN GROUP
Landscape Architecture / Planning & Visualization
3450 N. TRIUMPH BLVD. SUITE 102
LEHI, UTAH 84043 (801) 753-5644
www.pkjdesigngroup.com

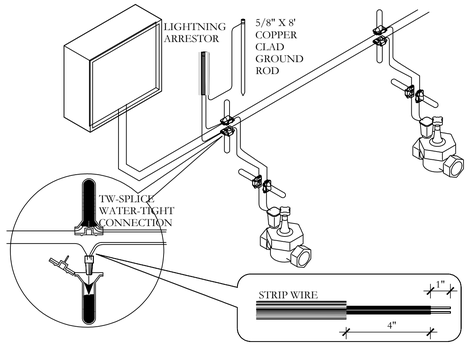
LICENSE STAMP: LICENSED LANDSCAPE ARCHITECT — JEREMY AINSWORTH — 312812-5301 — 08/08/2022 — STATE OF UTAH

DRAWING INFO
PM: JTA
DRAWN: ACP
CHECKED: JMA
PLOT DATE: 8/25/2022

IRRIGATION DETAILS

PRELIMINARY PLANS NOT FOR CONSTRUCTION

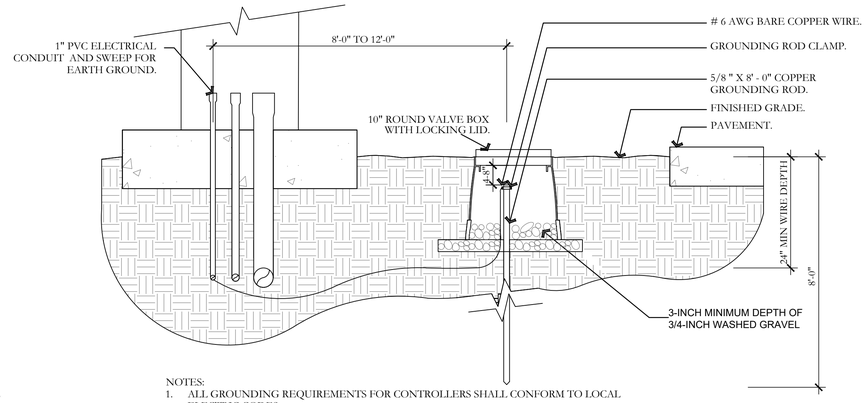
IR-501



J 2-WIRE CONNECTION DETAIL

NOT TO SCALE

PKJ DESIGN GROUP

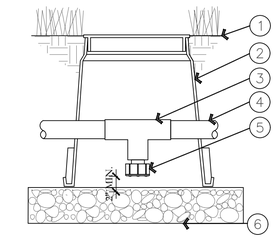


NOTES:
1. ALL GROUNDING REQUIREMENTS FOR CONTROLLERS SHALL CONFORM TO LOCAL ELECTRIC CODES.
2. GROUNDING ROD SHALL NOT BE LOCATED IN THE SAME TRENCH AS THE IRRIGATION MAINLINES OR LATERAL LINES.
3. VALVE BOX SHALL BE WRAPPED WITH A MINIMUM 3 MIL THICK PLASTIC AND SECURED TO THE VALVE BOX USING DUCT TAPE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

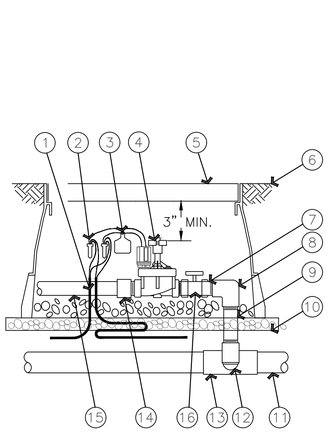


1. FINISH GRADE/TOP OF MULCH
2. VALVE BOX WITH COVER: RAIN BIRD VB-6RND
3. PVC SCH 40 TEE
4. PVC LATERAL PIPE
5. FILTERED DRAIN VALVE: RAIN BIRD 16A-FDV-075
6. 6-INCH MINIMUM DEPTH OF 3/4" WASHED GRAVEL

L MANUAL LINE DRAIN VALVE DETAIL

NOT TO SCALE

PKJ DESIGN GROUP

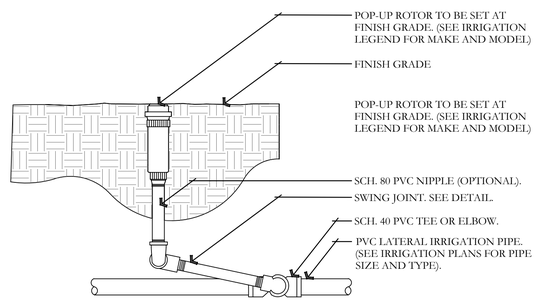


1. 36-INCH LENGTH OF 2-WIRE CABLE
2. WATERPROOF CONNECTION RAIN BIRD WC20 (TWO REQUIRED)
3. ID TAG: RAIN BIRD VID SERIES
4. REMOTE CONTROL VALVE: RAIN BIRD PEB/PESB/PESB-R WITH IVM-SOL
5. VALVE BOX WITH COVER: RAIN BIRD VB-STD
6. FINISH GRADE/TOP OF MULCH
7. PVC SCH 80 NIPPLE (CLOSE)
8. PVC SCH 40 ELL `
9. PVC SCH 80 NIPPLE (LENGTH AS REQUIRED)
10. 3-INCH MINIMUM DEPTH OF 3/4-INCH WASHED GRAVEL
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
16. BRASS BALL VALVE

M ELECTRIC REMOTE-CONTROL VALVE PEB OR PESB SERIES WITH IVM-SOL

NOT TO SCALE

PKJ DESIGN GROUP

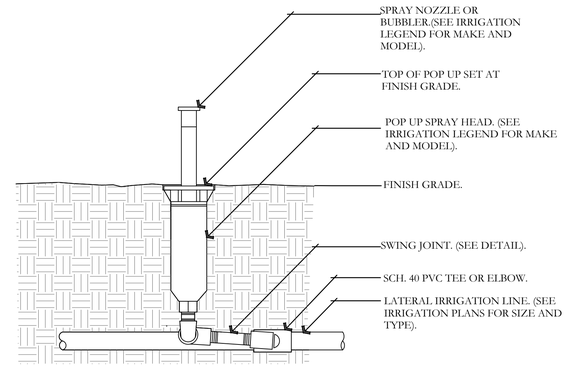


NOTES:
1. ALL THREADED CONNECTION POINTS BETWEEN SCH. 40 PVC AND SCH. 80 PVC FITTING SHALL BE INSTALLED USING TEFLON TAPE.
2. CONTRACTOR SHALL COMPACT SOIL AROUND ROTOR AND RISER PRIOR TO PLANTING, PLUGGING, SEEDING, OR LAYING OF SOD.

N ROTOR HEAD 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

ISSUE DATE	PROJECT NUMBER
8/25/2022	UT22051

NO.	REVISION	DATE
1	XXXX	XX-XX-XX
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UTILITY NOTIFICATION CENTER, INC
1-800-662-4111
www.bluestakes.org

ESCALANTE TOWNHOMES
SPANISH FORK, UTAH

DEVELOPER / PROPERTY OWNER / CLIENT

RUSSELL MAJOR PROPERTIES
ATT: SIDNEY ALLSOP
702-556-2718
SIDNEYALLSUP@GMAIL.COM

ATLAS ENGINEERING
946 EAST 800 NORTH, SUITE A
SPANISH FORK, UT 84660
801-655-0566

LANDSCAPE ARCHITECT / PLANNER

PKJ DESIGN GROUP
Landscape Architecture / Planning & Visualization
3450 N. TRIUMPH BLVD. SUITE 102
LEHI, UTAH 84043 (801) 753-5644
www.pkjdesigngroup.com

LICENSE STAMP

LICENSED LANDSCAPE ARCHITECT
JEREMY AINSWORTH
STATE OF UTAH
8128121-5301
08/25/2022
ELECTRONIC SEAL

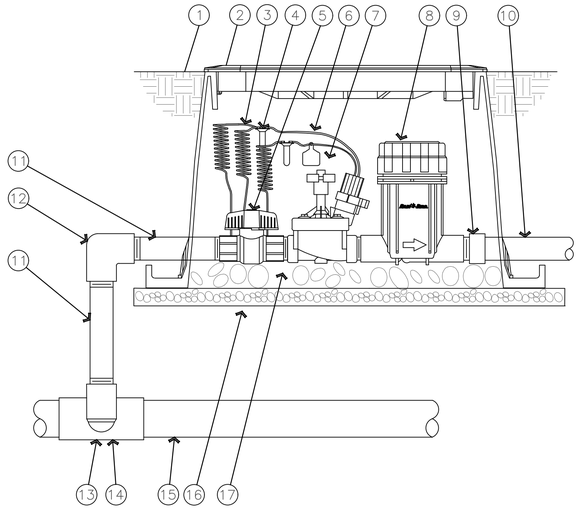
DRAWING INFO

PM:	JTA
DRAWN:	ACP
CHECKED:	JMA
PLOT DATE:	8/25/2022

IRRIGATION DETAILS

PRELIMINARY PLANS NOT FOR CONSTRUCTION

IR-502

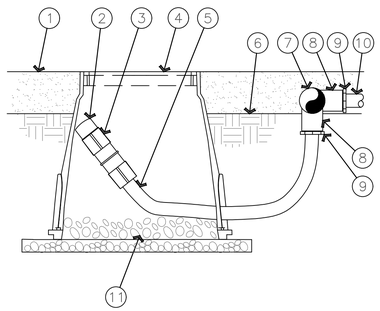


1. FINISH GRADE/TOP OF MULCH
2. VALVE BOX WITH COVER: RAIN BIRD VB-STD
3. 30-INCH LINEAR LENGTH OF WIRE, COILED
4. WATERPROOF CONNECTION: RAIN BIRD DB SERIES
5. 1-INCH BALL VALVE (INCLUDED IN XCZ-PRB-100-COM KIT)
6. ID TAG
7. REMOTE CONTROL VALVE: RAIN BIRD PESB (INCLUCED IN XCZ-PRB-100-COM KIT)
8. PRESSURE REGULATING AND FLOW INDICATING BASKET FILTER: RAIN BIRD XCZ-100-FLOW
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



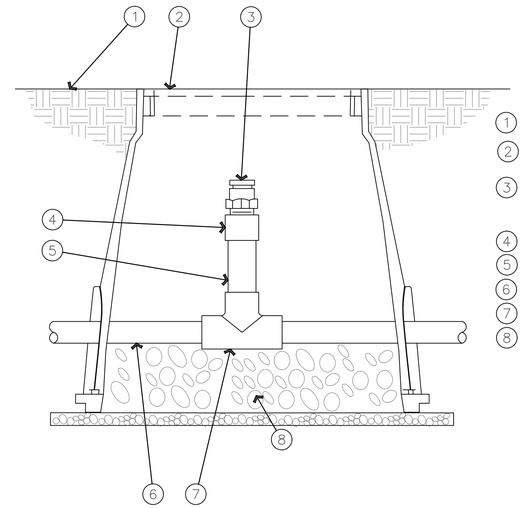
1. MULCH
2. FLUSH CAP FOR EASY FIT COMPRESSION FITTINGS: POTABLE:RAIN BIRD MDCFCAP
3. EASY FIT COUPLING: RAIN BIRD MDCFCOUP
4. SUBTERRANEAN EMITTER BOX: RAIN BIRD SEB 7XB
5. ½" POLYETHYLENE TUBING: RAIN BIRD XF BLANK TUBING
6. FINISH GRADE
7. PVC EXHAUST HEADER
8. PVC SCH 40 TEE OR EL
9. BARB X MALE 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

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

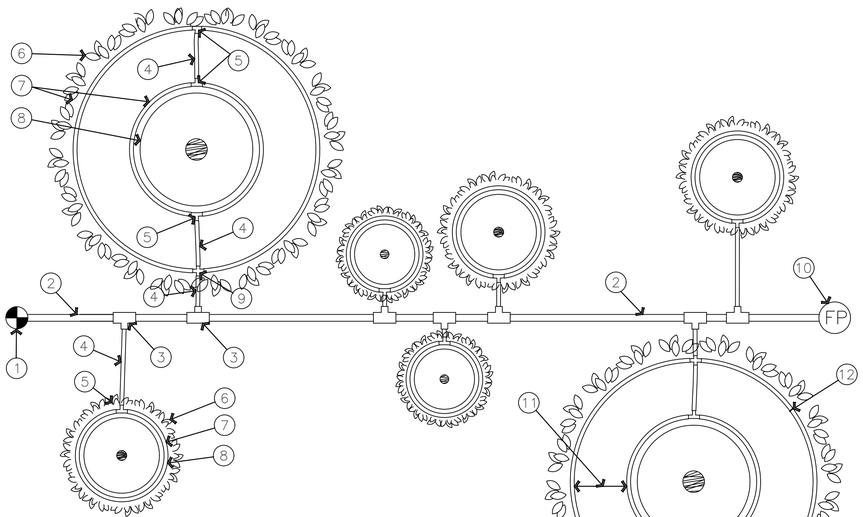


1. FINISH GRADE
2. SUBTERRANEAN EMITTER BOX: RAIN BIRD SEB 7XB
3. ½" AIR RELIEF VALVE: RAIN BIRD ARV050 TO BE INSTALLED AT HIGH POINTS IN DRIP ZONE
4. PVC SCH 40 FEMALE ADAPTER
5. PVC SCH 80 RISER
6. PVC HEADER PIPE
7. PVC SCH 40 TEE
8. 3" MINIMUM DEPTH OF 3/4" WASHED GRAVEL

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 LATERAL PIPE
3. PVC SCH 40 TEE OR EL (TYPICAL)
4. ½" POLYETHYLENE TUBING: RAIN BIRD XF SERIES- S FOR COPPER SHEILD (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, F0UR 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 8/25/2022 **PROJECT NUMBER** UT22051

NO.	REVISION	DATE
1	XXXX	XX-XX-XX
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946 EAST 800 NORTH, SUITE A
SPANISH FORK, UT 84660
801-655-0566

LANDSCAPE ARCHITECT / PLANNER

PKJ DESIGN GROUP
Landscape Architecture / Planning &Visualization
3450 N. TRIUMPH BLVD. SUITE 102
LEHI, UTAH 84043 (801) 753-5644
www.pkjdesigngroup.com

LICENSE STAMP

LICENSED LANDSCAPE ARCHITECT
JEREMY AINSWORTH
812812 - 5301
08/25/2022
ELECTRONIC SEAL
STATE OF UTAH

DRAWING INFO

PM: JTA
DRAWN: ACP
CHECKED: JMA
PLOT DATE: 8/25/2022

IRRIGATION DETAILS

PRELIMINARY PLANS NOT FOR CONSTRUCTION

IR-503

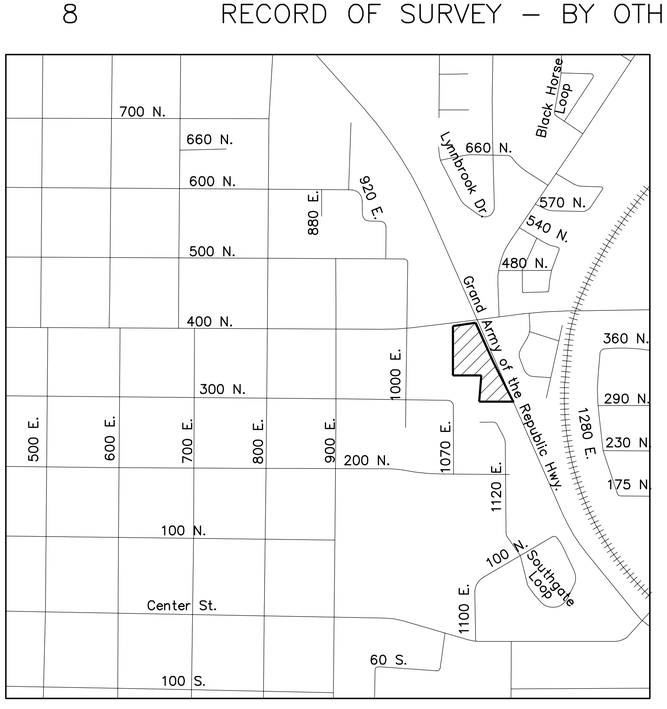
ESCALANTE TOWNHOMES

A RESIDENTIAL SUBDIVISION
SPANISH FORK, UTAH
PRELIMINARY PLAN SET

-SHEET INDEX-

SHEET	SHEET NAME
1	COVER
2	OVERALL BOUNDARY
3	OVERALL SITE PLAN
4	EXISTING TOPOGRAPHY
5	UDOT ACCESS PLAN
6	ELECTRICAL PLAN
7	FIRE ACCESS EXHIBIT
DT-01	DETAIL SHEET
8	RECORD OF SURVEY - BY OTHERS

GENERAL NOTES:
1. ALL CONSTRUCTION WILL CONFORM TO SPANISH FORK CITY STANDARDS.
2. OVERHEAD OFFSITE IMPROVEMENT COSTS SHALL BE THE RESPONSIBILITY OF THE DEVELOPER. THERE WILL NOTE BE ANY CONNECTORS AGREEMENTS OR REIMBURSABLE COSTS ASSOCIATED WITH THESE IMPROVEMENTS. THESE FACILITIES ARE INSTALLED ON A TEMPORARY BASIS AND WILL BE REMOVED AS DEVELOPMENT IMPACTS THE AREA.
3. ELECTRICAL SYSTEM TO BE INSTALLED AS PER SPANISH FORK CITY ELECTRICAL DESIGN AND STANDARDS. ANY ELECTRICAL DESIGNS AS PER ARCHITECT/DEVELOPER DRAWING SHALL BE SUPERSEDED BY CITY DESIGN.
4. ALL ELECTRICAL IMPROVEMENTS SHALL BE INSTALLED TO THE MOST CURRENT VERSION OF THE SPANISH FORK CITY CONSTRUCTION STANDARDS.
5. IF NEWER VERSION OF STANDARDS IS RELEASED DURING PROJECT THE PROJECT SHALL BE COMPLETED USING STANDARDS VERSION THAT WERE ISSUED AT PRE-CONSTRUCTION MEETING.
6. ANY EXISTING FACILITIES AFFECTED BY THE DEVELOPMENT WILL NEED TO BE BROUGHT TO CURRENT NEC, NESC, AND CITY STANDARDS AT DEVELOPERS EXPENSE INCLUDING BUT NOT LIMITED TO UPGRADING OF METER BASE, SERVICE CONDUITS, COMMUNICATIONS SERVICES, AND LANDSCAPING RESTORATION.
7. SESD BUY OUT WILL HAVE TO BE COMPLETED WITH ZONING BEFORE SUBDIVISION CAN PROCEED.
8. OVERHEAD OFFSITE IMPROVEMENTS COSTS SHALL BE THE RESPONSIBILITY OF THE DEVELOPER. THERE WILL NOT BE ANY CONNECTORS AGREEMENTS OR REIMBURSABLE COSTS ASSOCIATED WITH THESE IMPROVEMENTS. THESE FACILITIES ARE INSTALLED ON A TEMPORARY BASIS AND WILL BE REMOVED AS DEVELOPMENT IMPACTS THESE AREAS.
9. ALL CONSTRUCTION TO FOLLOW RECOMMENDATIONS OF GEOTECHNICAL STUDY 141020 AND GROUNDWATER CONSULTATION 178146, BOTH BY EARTHTEC ENGINEERING.



VICINITY MAP
-NTS-

OWNER/DEVELOPER
SID ALLSOP
702-556-2718
825 E 1180 S #300
AMERICAN FORK, UT, 84003

REGISTERED PROFESSIONAL ENGINEER
ANDREW J. DELPIVO
No. 8845722
9/9/22
STATE OF UTAH

ESCALANTE TOWNHOMES

ATLAS ENGINEERING L.L.C.
PHONE: 801-655-0566
FAX: 801-655-0109
95 WEST 200 NORTH #2
SPANISH FORK, UT 84660

LEGEND

- SECTION CORNER
- FOUND ALUMINUM CAP
- SET 5/8" IRON PIN
- CALCULATED POINT, NOT SET
- EXISTING POWER POLE
- PROPOSED STREET LIGHT
- PROPOSED FIRE HYDRANT
- PROPOSED SIGN
- PROPOSED STREET SIGN
- PROPERTY BOUNDARY
- CENTERLINE
- RIGHT-OF-WAY LINE
- LOT LINE
- SECTION LINE
- EASEMENT
- EXISTING DEED LINE
- EDGE OF PAVEMENT
- EXISTING OVER HEAD POWER
- EXISTING FENCE LINE
- EXISTING DITCH
- EXISTING SANITARY SEWER W/MANHOLE
- 15"RCP — PROPOSED STORM DRAIN
- 8"SS — PROPOSED PVC SDR-35 SEWER W/MH
- 8"CUL — PROPOSED CULINARY WATERLINE
- 6"PI — PROPOSED PRESSURIZED IRRIGATION

DATA TABLE:
TOTAL ACREAGE=2.11
TOTAL # OF UNITS=20
TOTAL ACREAGE OF UNITS=0.37
ACREAGE IN ROADS=0.00
DENSITY (UNITS/ACRE)=9.48
TOTAL ACREAGE OF OPEN SPACE/PONDS=0.89
% OF OPEN SPACE=42.18%

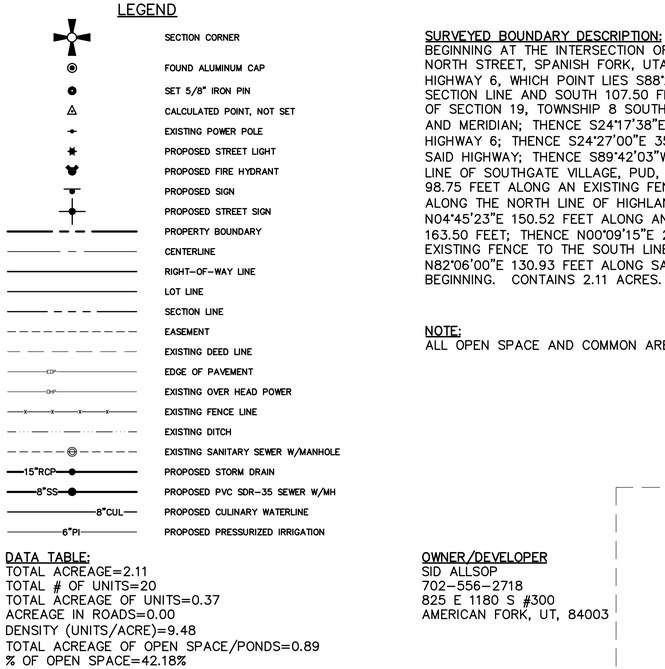
NOTES
1. EXISTING ZONE R-3
2. PROPOSED ZONE R-3.
3. VERTICAL DATA BASED ON NAVD 29.
4. COORDINATE SYSTEM = NAD27
5. PROJECT TO BE COMPLETED IN ONE PHASE
6. SITE IS NOT IN SPANISH FORK CITIES FLOOD ZONE.

SURVEYED BOUNDARY DESCRIPTION:
BEGINNING AT THE INTERSECTION OF THE SOUTHERLY LINE OF 400 NORTH STREET, SPANISH FORK, UTAH, AND THE WESTERLY LINE OF HIGHWAY 6, WHICH POINT LIES S88°28'13"W 102.54 FEET ALONG THE SECTION LINE AND SOUTH 107.50 FEET FROM THE NORTHEAST CORNER OF SECTION 19, TOWNSHIP 8 SOUTH, RANGE 3 EAST, SALT LAKE BASE AND MERIDIAN; THENCE S24°17'38"E 247.41 FEET ALONG SAID HIGHWAY 6; THENCE S24°27'00"E 356.00 FEET CONTINUING ALONG SAID HIGHWAY; THENCE S89°42'03"W 143.79 FEET ALONG THE NORTH LINE OF SOUTHGATE VILLAGE, PUD, PHASE 4; THENCE N00°37'09"E 98.75 FEET ALONG AN EXISTING FENCE; THENCE WEST 85.85 FEET ALONG THE NORTH LINE OF HIGHLAND ESTATES, PLAT "A"; THENCE N04°45'23"E 150.52 FEET ALONG AN EXISTING FENCE; THENCE WEST 163.50 FEET; THENCE N00°09'15"E 283.59 FEET PARTIALLY ALONG AN EXISTING FENCE TO THE SOUTH LINE OF 400 NORTH STREET; THENCE N82°06'00"E 130.93 FEET ALONG SAID STREET TO THE POINT OF BEGINNING. CONTAINS 2.11 ACRES.

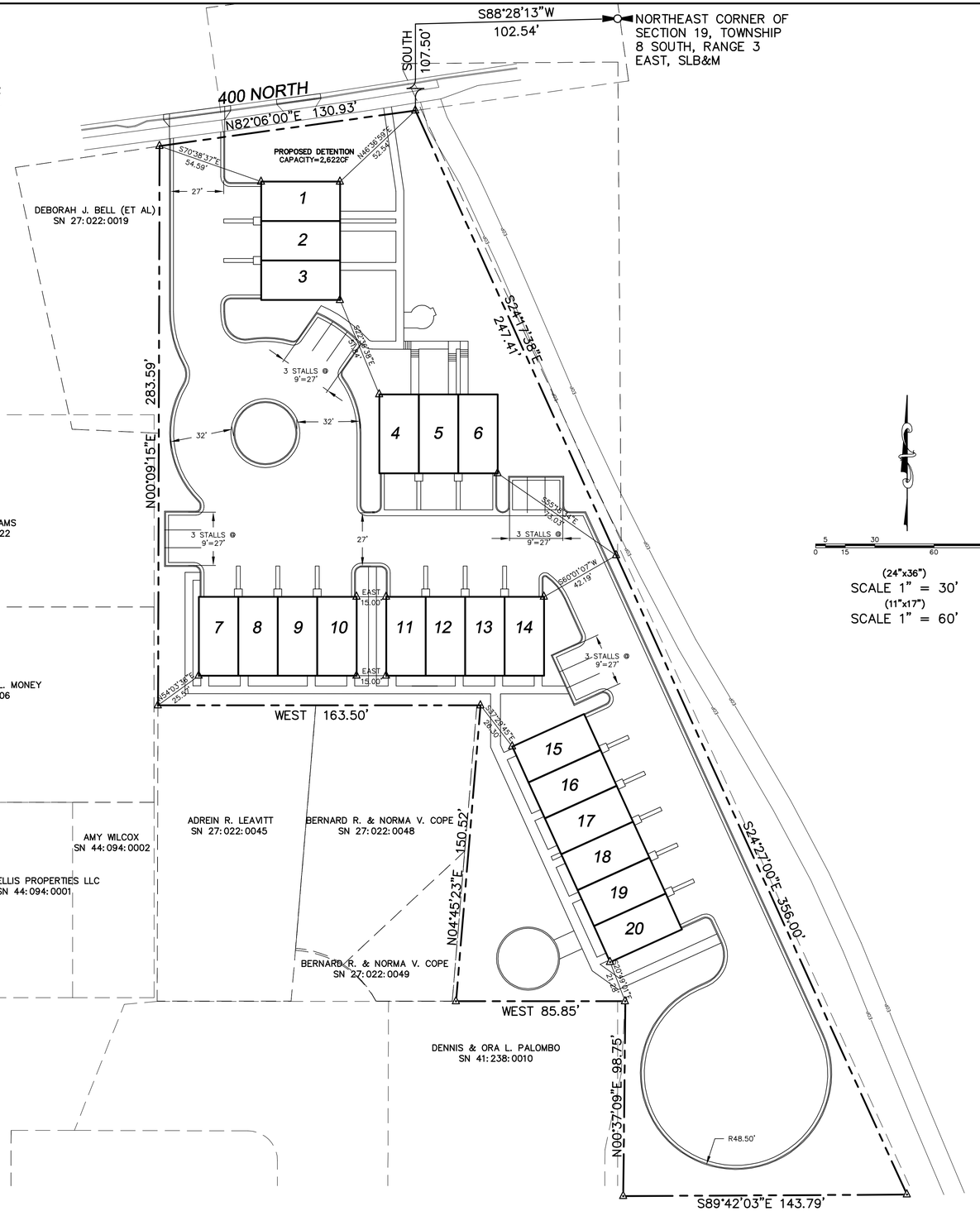
NOTE:
ALL OPEN SPACE AND COMMON AREA IS A PUBLIC UTILITY EASEMENT.

OWNER/DEVELOPER
SID ALLSOP
702-556-2718
825 E 1180 S #300
AMERICAN FORK, UT, 84003

PARKING DATA TABLE:
TOTAL=92
GARAGE=40
DRIVEWAY=40
STALLS=12
REQ'D PARKING: 35



VICINITY MAP
-NTS-



SHEET NO. 2

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OVERALL BOUNDARY

SPANISH FORK, UTAH

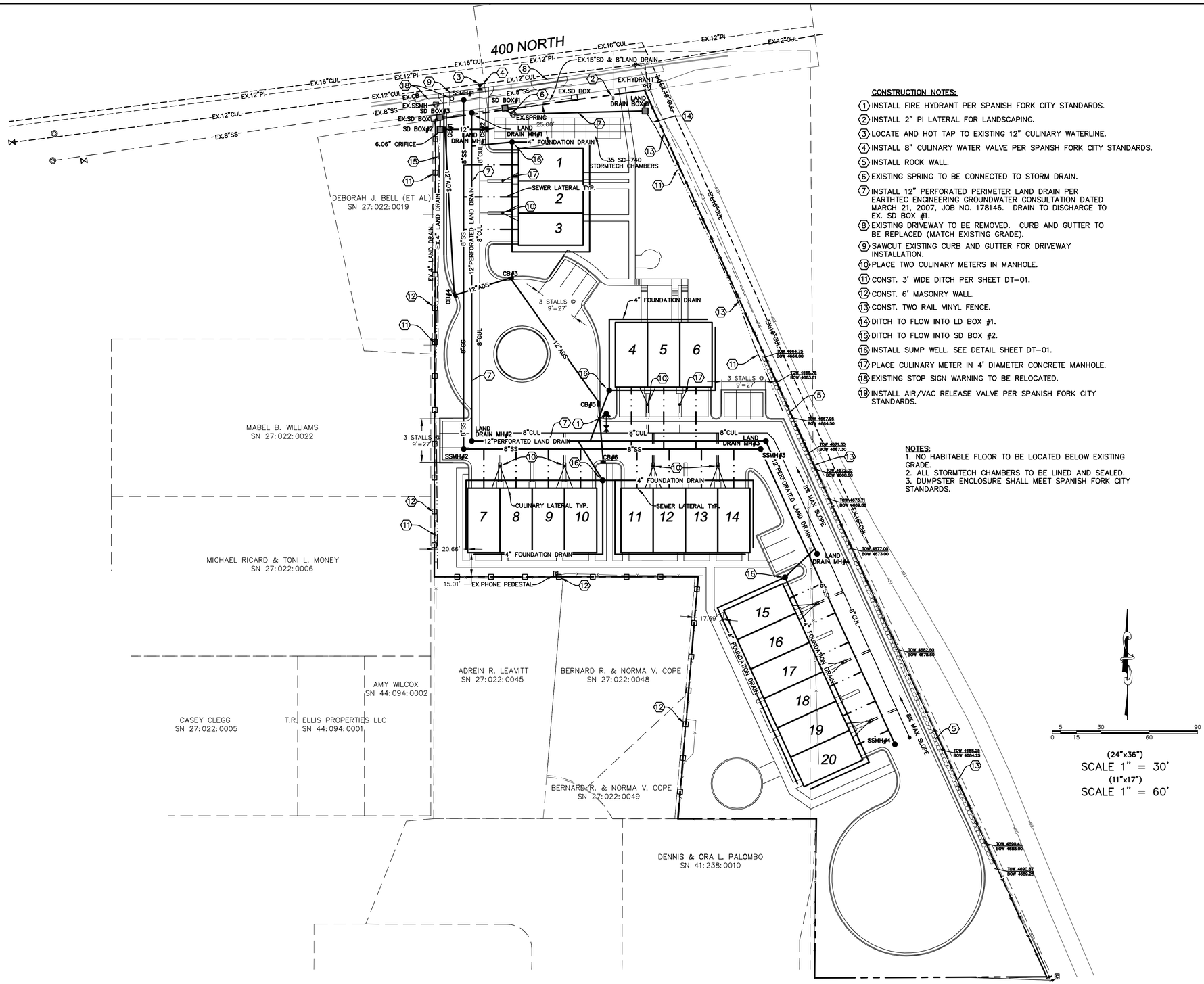
ESCALANTE TOWNHOMES

ATLAS ENGINEERING L.L.C.
PHONE:801-655-0566
FAX:801-655-0109
95 WEST 200 NORTH #2
SPANISH FORK, UT 84660

Z:\2017\17-053 Perez Townhomes\CAD\PRELIMINARY\02-OVERALL BOUNDARY.dwg 9/9/2022 12:26:31 PM MDT

LEGEND

- SECTION CORNER
- FOUND ALUMINUM CAP
- SET 5/8" IRON PIN
- CALCULATED POINT, NOT SET
- EXISTING POWER POLE
- PROPOSED STREET LIGHT
- PROPOSED FIRE HYDRANT
- PROPOSED SIGN
- PROPOSED STREET SIGN
- PROPERTY BOUNDARY
- CENTERLINE
- RIGHT-OF-WAY LINE
- LOT LINE
- SECTION LINE
- EASEMENT
- EXISTING DEED LINE
- EDGE OF PAVEMENT
- EXISTING OVER HEAD POWER
- EXISTING FENCE LINE
- EXISTING DITCH
- EXISTING SANITARY SEWER W/MANHOLE
- 15"RCP — PROPOSED STORM DRAIN
- 8"SS — PROPOSED PVC SDR-35 SEWER W/MH
- 8"CUL — PROPOSED CULINARY WATERLINE
- 6"PI — PROPOSED PRESSURIZED IRRIGATION



CONSTRUCTION NOTES:

1. INSTALL FIRE HYDRANT PER SPANISH FORK CITY STANDARDS.
2. INSTALL 2" PI LATERAL FOR LANDSCAPING.
3. LOCATE AND HOT TAP TO EXISTING 12" CULINARY WATERLINE.
4. INSTALL 8" CULINARY WATER VALVE PER SPANSH FORK CITY STANDARDS.
5. INSTALL ROCK WALL.
6. EXISTING SPRING TO BE CONNECTED TO STORM DRAIN.
7. INSTALL 12" PERFORATED PERIMETER LAND DRAIN PER EARTHTEC ENGINEERING GROUNDWATER CONSULTATION DATED MARCH 21, 2007, JOB NO. 178146. DRAIN TO DISCHARGE TO EX. SD BOX #1.
8. EXISTING DRIVEWAY TO BE REMOVED. CURB AND GUTTER TO BE REPLACED (MATCH EXISTING GRADE).
9. SAWCUT EXISTING CURB AND GUTTER FOR DRIVEWAY INSTALLATION.
10. PLACE TWO CULINARY METERS IN MANHOLE.
11. CONST. 3' WIDE DITCH PER SHEET DT-01.
12. CONST. 6' MASONRY WALL.
13. CONST. TWO RAIL VINYL FENCE.
14. DITCH TO FLOW INTO LD BOX #1.
15. DITCH TO FLOW INTO SD BOX #2.
16. INSTALL SUMP WELL. SEE DETAIL SHEET DT-01.
17. PLACE CULINARY METER IN 4' DIAMETER CONCRETE MANHOLE.
18. EXISTING STOP SIGN WARNING TO BE RELOCATED.
19. INSTALL AIR/VAC RELEASE VALVE PER SPANISH FORK CITY STANDARDS.

NOTES:

1. NO HABITABLE FLOOR TO BE LOCATED BELOW EXISTING GRADE.
2. ALL STORMTECH CHAMBERS TO BE LINED AND SEALED.
3. DUMPSTER ENCLOSURE SHALL MEET SPANISH FORK CITY STANDARDS.

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

OWNER/DEVELOPER
SID ALLSOP
702-556-2718
825 E 1180 S #300
AMERICAN FORK, UT, 84003

SHEET NO. 3

NO.	REVISIONS	BY	DATE
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OVERALL SITE PLAN

ESCALANTE TOWNHOMES

SPANISH FORK, UTAH

ATLAS ENGINEERING L.L.C.
PHONE:801-655-0566
FAX:801-655-0109
95 WEST 200 NORTH #2
SPANISH FORK, UT 84660

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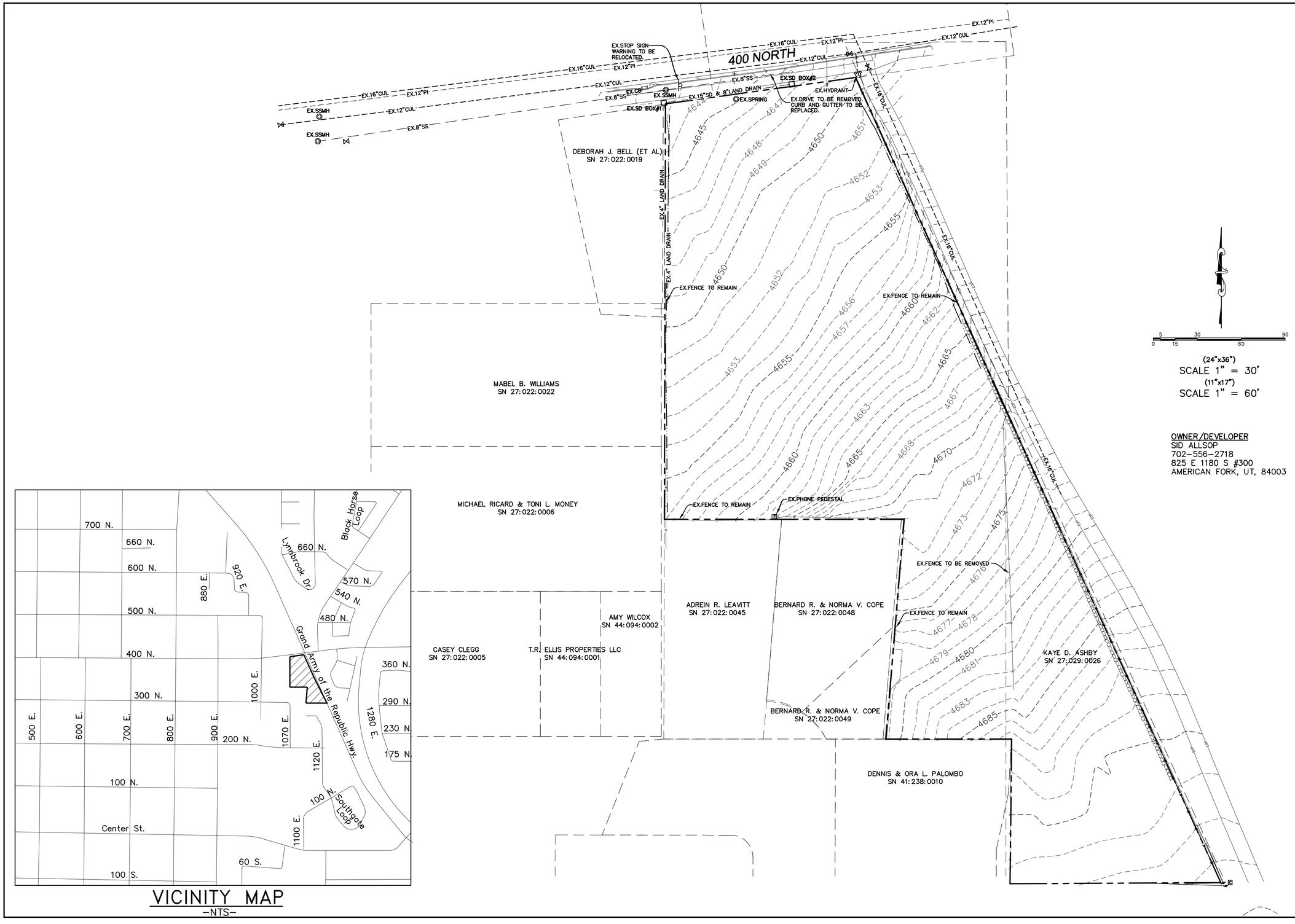

VICINITY MAP
–NTS–

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

OWNER/DEVELOPER
SID ALLSOP
702-556-2718
825 E 1180 S #300
AMERICAN FORK, UT, 84003

SHEET NO. 4

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EXISTING TOPOGRAPHY

SPANISH FORK, UTAH

ESCALANTE TOWNHOMES

ATLAS ENGINEERING L.L.C.
PHONE:801-655-0566
FAX:801-655-0109
95 WEST 200 NORTH #2
SPANISH FORK, UT 84660

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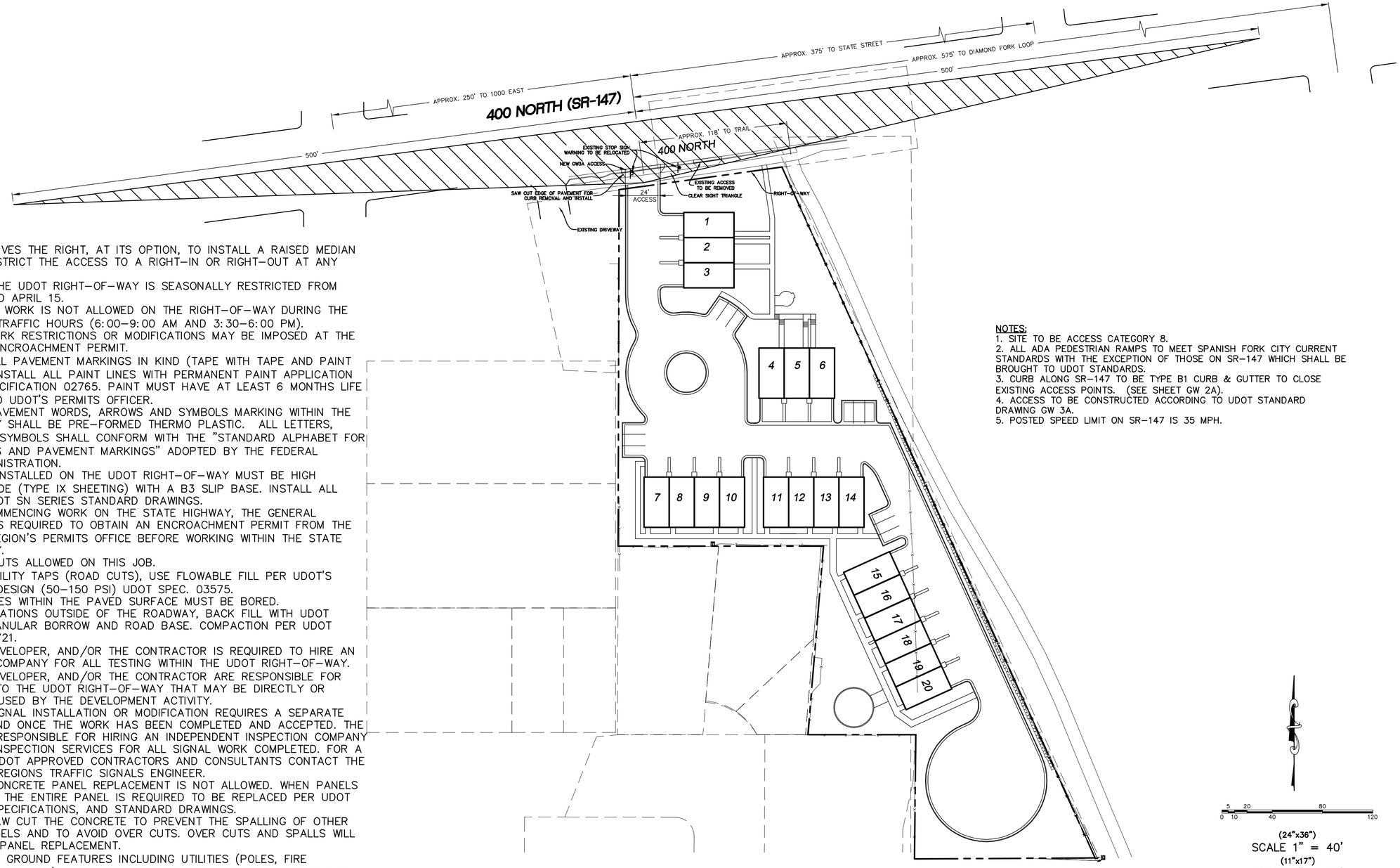

UDOT NOTES:

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

NOTES:

1. SITE TO BE ACCESS CATEGORY 8.
2. ALL ADA PEDESTRIAN RAMPS TO MEET SPANISH FORK CITY CURRENT STANDARDS WITH THE EXCEPTION OF THOSE ON SR-147 WHICH SHALL BE BROUGHT TO UDOT STANDARDS.
3. CURB ALONG SR-147 TO BE TYPE B1 CURB & GUTTER TO CLOSE EXISTING ACCESS POINTS. (SEE SHEET GW 2A).
4. ACCESS TO BE CONSTRUCTED ACCORDING TO UDOT STANDARD DRAWING GW 3A.
5. POSTED SPEED LIMIT ON SR-147 IS 35 MPH.

(24"x36")
SCALE 1" = 40'
(11"x17")
SCALE 1" = 80'

SHEET NO. 5

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UDOT ACCESS PLAN

SPANISH FORK, UTAH

ESCALANTE TOWNHOMES

ATLAS ENGINEERING L.L.C.
PHONE: 801-655-0566
FAX: 801-655-0109
946 E. 800 N. SUITE A
SPANISH FORK, UT 84660

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ELECTRICAL LEGEND

PRIMARY ELECTRICAL CONDUIT — UGE
SECONDARY ELECTRICAL CONDUIT — UGE
SHADOW CONDUIT
SERVICE DROP
PRIMARY SECTIONALIZERS — 18 — 38
STREETLIGHT
SECONDARY JUNCTION BOX — J (PEDESTAL TYPE)
TRANSFORMERS — T (PAD) — (POLE)

ELECTRIC NOTES:
1. CONDUIT FOR STREET LIGHTS SHALL BE 1" SCHEDULE 40 RIGID NONMETALLIC CONDUIT (RNC).
2. CONDUIT FOR SERVICE DROPS SHALL BE 2" (RNC).
3. CONDUIT FOR 1 PHASE AND SECONDARY CABLE SHALL BE 3" SCHEDULE 40 RIGID NONMETALLIC CONDUIT (RNC).
4. CONDUIT FOR 3 PHASE SHALL BE 6" SCHEDULE 40 RIGID NONMETALLIC CONDUIT (RNC).
5. LONG-RADIUS ELBOWS CONSTRUCTED OF EITHER RIGID METAL OR FIBERGLASS ARE REQUIRED FOR ANY ANGLE 45 DEG OR GREATER.
6. SECONDARY CABLE SHALL BE 4/0 KCMIL URD TYPE UNLESS OTHERWISE SPECIFIED.
7. SECONDARY, 1 PHASE AND 3 PHASE TRANSFORMER CONDUITS SHALL BE AT A DEPTH OF 4' TO TOP OF CONDUIT.
8. 3 PHASE CONDUITS SHALL BE AT A DEPTH OF 6' TO TOP OF CONDUIT, UNLESS OTHERWISE SPECIFIED.
9. SERVICE DROP CONDUIT SHALL BE AT A DEPTH OF 4' TO TOP OF CONDUIT.
10. STREET LIGHT CONDUCTORS SHALL BE #10 STR CU TYPE THWN.
11. STREET LIGHTS SHALL BE LED, DECORATIVE POLE UNLESS OTHERWISE SPECIFIED.
12. (1)– SHADOW CONDUIT SHALL BE REQUIRED AT EACH POWER ROAD CROSSING. CONDUIT SHALL BE THE SAME SIZE AND TYPE AS LARGEST POWER CONDUIT BEING INSTALLED

COMMUNICATIONS LEGEND

COMMUNICATIONS CONDUIT — FO
SHADOW CONDUIT
COMM. SERVICE DROP
COMMUNICATIONS BOXES — SM, M, LG

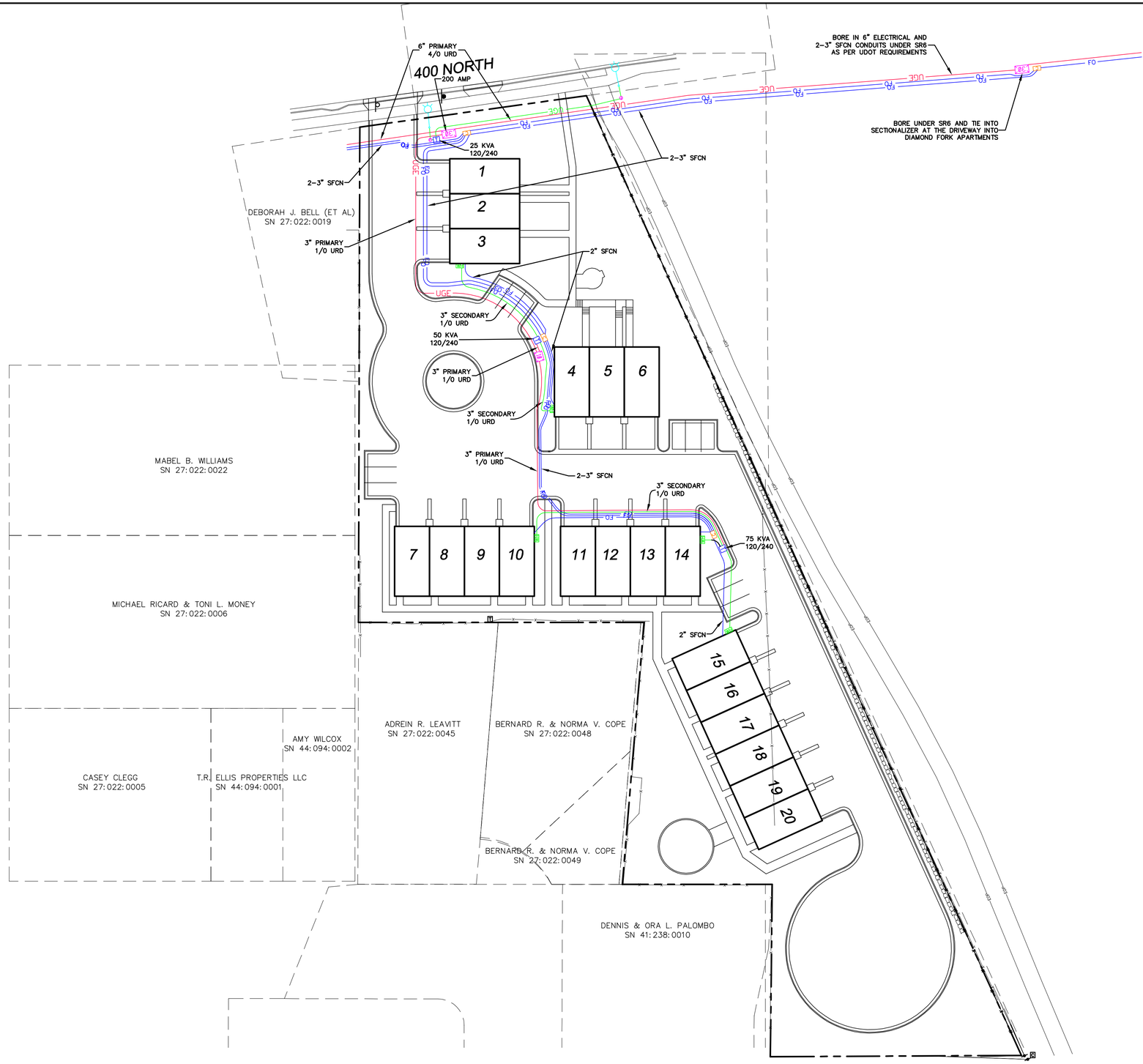
SFCN NOTES:
1. CONDUIT FOR SERVICE DROPS SHALL BE 1" SCHEDULE 40 RIGID NONMETALLIC CONDUIT (RNC).
2. CONDUIT FOR SECONDARY RUNS SHALL BE 2" (RNC).
3. CONDUIT FOR MAIN RUNS SHALL BE 2" (RNC).
4. CONDUIT FOR FIBER OPTICS SHALL BE 3" (RNC) UNLESS OTHERWISE SPECIFIED.
5. LONG-RADIUS ELBOWS CONSTRUCTED OF EITHER RIGID METAL OR FIBERGLASS ARE REQUIRED FOR ANY ANGLE 45 DEG OR GREATER.
6. COMMUNICATIONS CONDUITS SHALL RUN BEHIND (FARTHEST FROM PROPERTY LINE) ELECTRICAL CONDUITS AND STUB UP BEHIND ELECTRICAL BOXES UNLESS OTHERWISE SPECIFIED.
7. (1)– SHADOW CONDUIT SHALL BE REQUIRED AT EACH COMMUNICATION ROAD CROSSING. CONDUIT SHALL BE THE SAME SIZE AND TYPE AS LARGEST COMMUNICATIONCONDUIT BEING INSTALLED

GENERAL NOTES:

DEVELOPER SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS, EASEMENTS, AND RIGHTS-OF-WAY. DEVELOPER SHALL FOLLOW ALL OF SPANISH FORK CITY STANDARDS.

GENERAL NOTES:

THIS MAP IS INTENDED FOR INFORMATIONAL PURPOSES ONLY. THIS MAP DOES NOT SHOW THE ACTUAL, AND EXACT LOCATION(S) OF ANY CONDUITS, BOXES, LIGHTS, OR OTHER APPARATUS. THESE ITEMS SHALL BE PLACED ACCORDING TO SPANISH FORK CITY STANDARDS, AND BY FIELD VERIFICATION.



5 30 90
0 15 60

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

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REVISIONS

ELECTRICAL DESIGN

SPANISH FORK, UTAH

ESCALANTE TOWNHOMES

ATLAS ENGINEERING L.L.C.
PHONE: 801-655-0566
FAX: 801-655-0109
946 E. 800 N. SUITE A
SPANISH FORK, UT 84660

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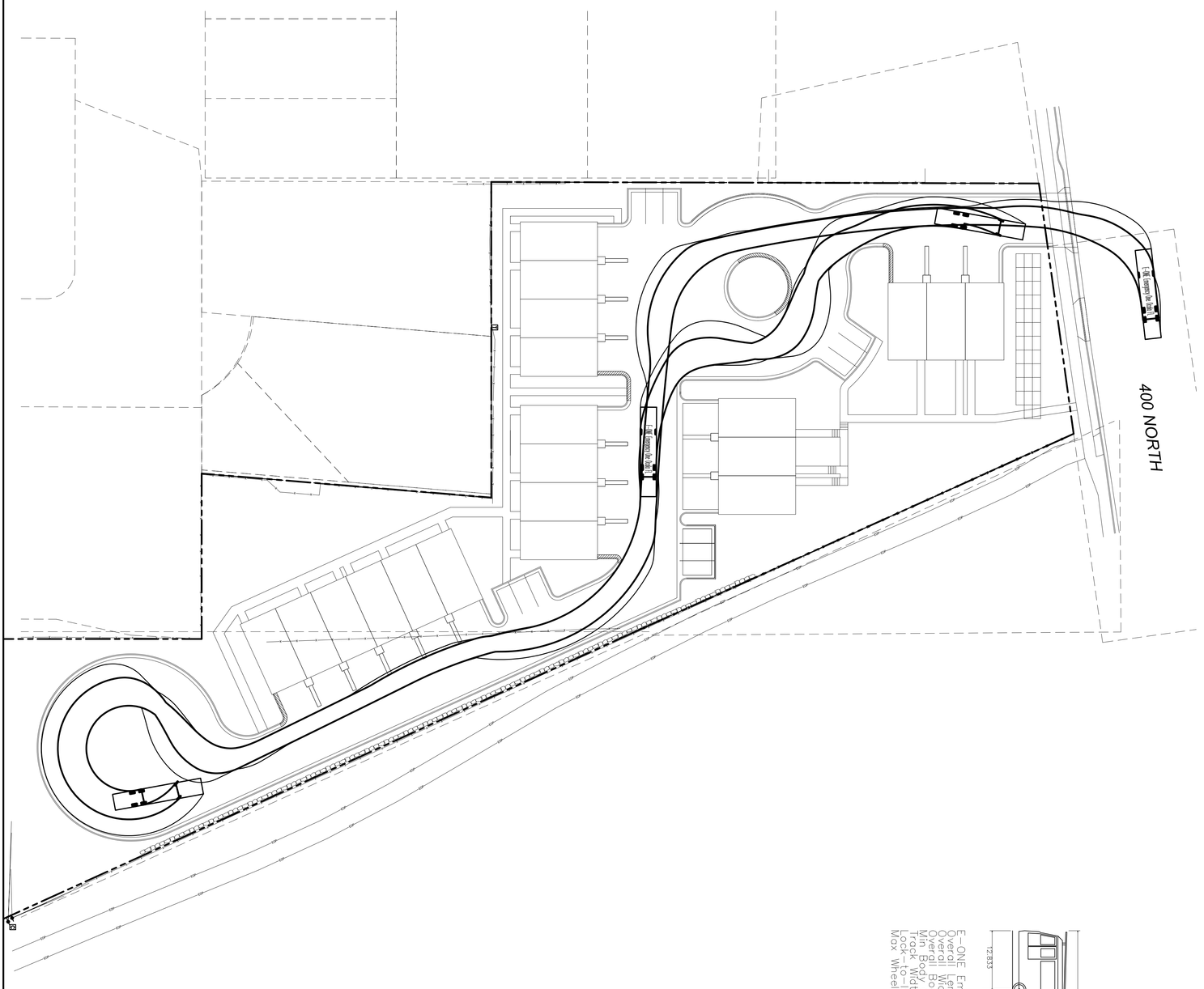
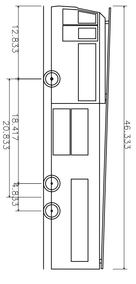


E-ONE Emergency One Ocala FL
Overall Length 46.333ft
Overall Width 8.3333ft
Overall Body Height 11.8333ft
Min Ground Clearance 1.3333ft
Track Width 8.3333ft
Lock-to-lock time 6.00s
Max Wheel Angle 45.00°



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

0 5 15 30 60 90

ESCALANTE TOWNHOMES

ATLAS ENGINEERING L.L.C.
PHONE: 801-655-0566
946 E. 800 N. SUITE A
SPANISH FORK, UT 84660

FIRE ACCESS EXHIBIT

SPANISH FORK, UTAH

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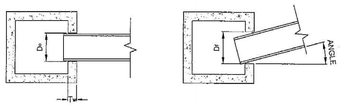
CLEANOUT AND INLET SIZING GUIDELINES



D_{IN}: THE ORIGINAL DIAMETER OF THE INLET OR THE OUTER DIAMETER (OD) OF THE PIPE IF THE PIPE IS PURPENDICULAR TO THE INLET BOX.

D_F: THE FINAL ADJUSTED SIZE OF THE INLET WHEN THE PIPE IS SKEWED.

T_W: THE THICKNESS OF THE WALL (6" FOR THE TABLE BELOW).

ANGLE: THE ANGLE AT WHICH THE PIPE IS SKEWED.

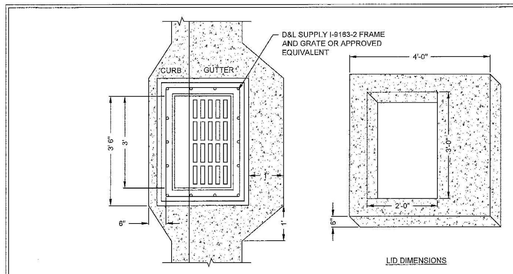
FORMULA:

$D_F = (OD \times 1/COS(ANGLE)) + (TAN(ANGLE) \times T_W)$

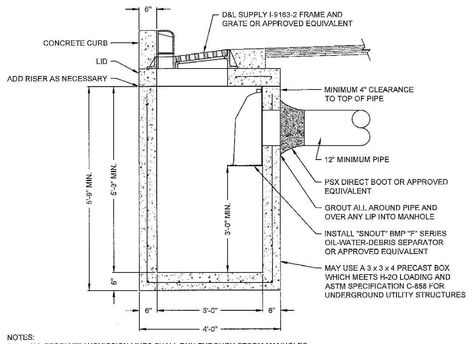
CONCRETE PIPE OUTER DIAMETERS BASED ON 6" CLEANOUT WALL THICKNESS AND PIPE ANGLE AT CLEANOUT							
ANGLE OF PIPE ENTERING BOX	0°	5°	10°	15°	20°	30°	45°
INSIDE DIAMETER (ID)	OUTSIDE BARREL DIAMETER (OD)						
12.0"	16.5"	17.1"	17.8"	18.7"	19.7"	22.5"	29.3"
15.0"	19.8"	20.4"	21.1"	22.1"	23.2"	26.3"	33.9"
18.0"	23.0"	23.6"	24.4"	25.4"	26.7"	30.0"	38.5"
21.0"	27.0"	27.6"	28.5"	29.6"	30.9"	34.6"	44.2"
24.0"	30.0"	30.8"	31.5"	32.7"	34.1"	38.1"	48.4"
27.0"	35.0"	35.7"	36.6"	37.8"	39.4"	43.9"	55.5"
30.0"	38.3"	38.9"	39.9"	41.2"	42.9"	47.6"	60.1"
36.0"	45.9"	46.6"	47.8"	49.1"	51.0"	56.4"	
42.0"	52.2"	53.0"	54.1"	55.7"	57.8"	63.8"	
48.0"	59.4"	60.2"	61.4"	63.1"			
54.0"							
60.0"							
66.0"							
72.0"							
84.0"							
90.0"							
96.0"							

NOTES:
1. TABLE IS BASED ON A 6" WALL THICKNESS AND PIPE ANGLE AT CLEANOUT.
2. SHADED AREAS BELOW THE DARK LINE INDICATE PIPE SIZES AND ANGLES THAT WILL NOT FIT WITHIN A STANDARD 6' WALL BOX. SPECIAL BOX SIZES ARE NECESSARY FOR THESE CONDITIONS.
3. USE OF THIS TABLE (INCLUDING DESIGN & DIMENSIONS) SHOULD BE ANALYZED AND CHECKED BY THE USER'S ENGINEER TO ENSURE ADEQUACY FOR THE INTENDED USE.
4. ALL BOXES SHALL HAVE A MINIMUM OF 6" OF SURROUNDING CONCRETE BOX COVERAGE.

SPANISH FORK CITY	STANDARD DRAWING	DRAWN: JLH	SCALE: NONE
40 SOUTH MAIN STREET SPANISH FORK, UT 84660 (801) 804-4800	BOX SIZING	DESIGN: CJP	
		CHECK: CMT	STANDARD 34
		DATE: 5/13/15	

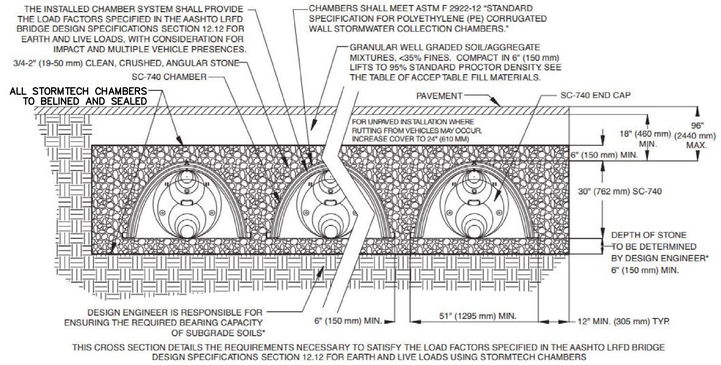


I/D DIMENSIONS



NOTES:
1. ALL STORM TRANSMISSION LINES SHALL RUN THROUGH STORM MANHOLES.
2. BOX SHALL BE SIZED ACCORDING TO TABLE ON STANDARD #32.
3. UNLESS OTHERWISE DESIGNED BY A LICENSED PROFESSIONAL ENGINEER, #4 REBAR WILL BE SPACED AT MINIMUM OF 12" O.C. IN ALL DIRECTIONS IN CONCRETE, ALL REBAR SHALL OVERLAP A MINIMUM OF 14".

SPANISH FORK CITY	STANDARD DRAWING	DRAWN: JLH	SCALE: NONE
40 SOUTH MAIN STREET SPANISH FORK, UT 84660 (801) 804-4800	STORM WATER INLET BOX	DESIGN: CJP	
		CHECK: CMT	STANDARD 26
		DATE: 3/19/15	

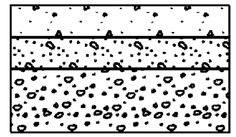


THIS CROSS SECTION DETAILS THE REQUIREMENTS NECESSARY TO SATISFY THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS SECTION 12.12 FOR EARTH AND LIVE LOADS USING STORMTECH CHAMBERS

7" HMA UDOT APPROVED MIX DESIGN

6" UNTREATED BASE COURSE

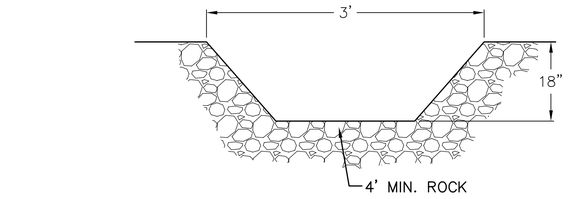
12" GRANULAR BORROW



PAVEMENT SECTION FOR STATE HIGHWAY

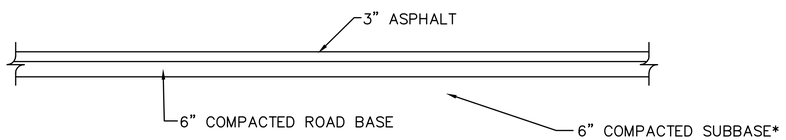
NOTE:

ALL MATERIALS TO MEET UDOT SPECIFICATIONS



DITCH SECTION

–NTS–

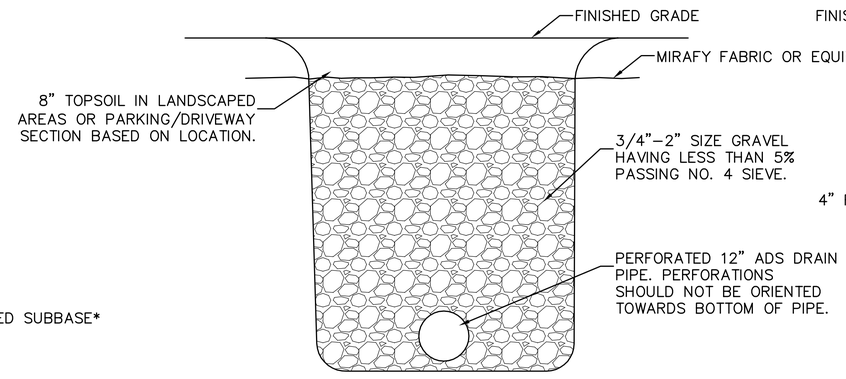


*STABILIZATION MAY BE REQUIRED

TYPICAL PARKING/DRIVEWAY SECTION

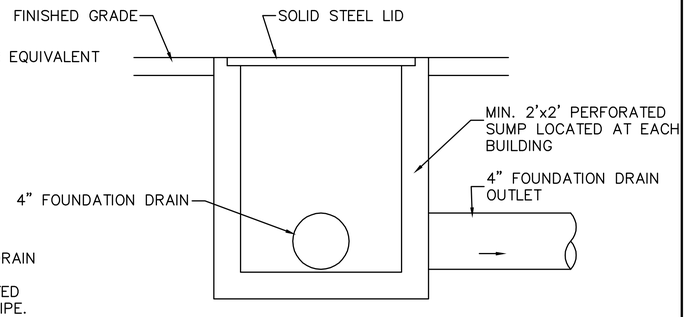
–NTS–

NOTE:
ASPHALT, ROAD BASE, AND SUBBASE THICKNESSES BASED ON GEOTECHNICAL STUDY 141020 BY EARTHTEC ENGINEERING.



LAND DRAIN DETAIL

–NTS–



SUMP WELL DETAIL

–NTS–

NOTE:
EACH BUILDING TO HAVE SUMP WELL SO PUMP CAN BE USED IN THE EVENT OF A LAND/FOUNDATION DRAIN FAILURE.

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SHEET NO. DT-01

DETAIL SHEET

SPANISH FORK, UTAH

ESCALANTE TOWNHOMES

ATLAS ENGINEERING L.L.C.
PHONE: 801-655-0566
FAX: 801-655-0109
946 E. 800 N. SUITE A
SPANISH FORK, UT 84660

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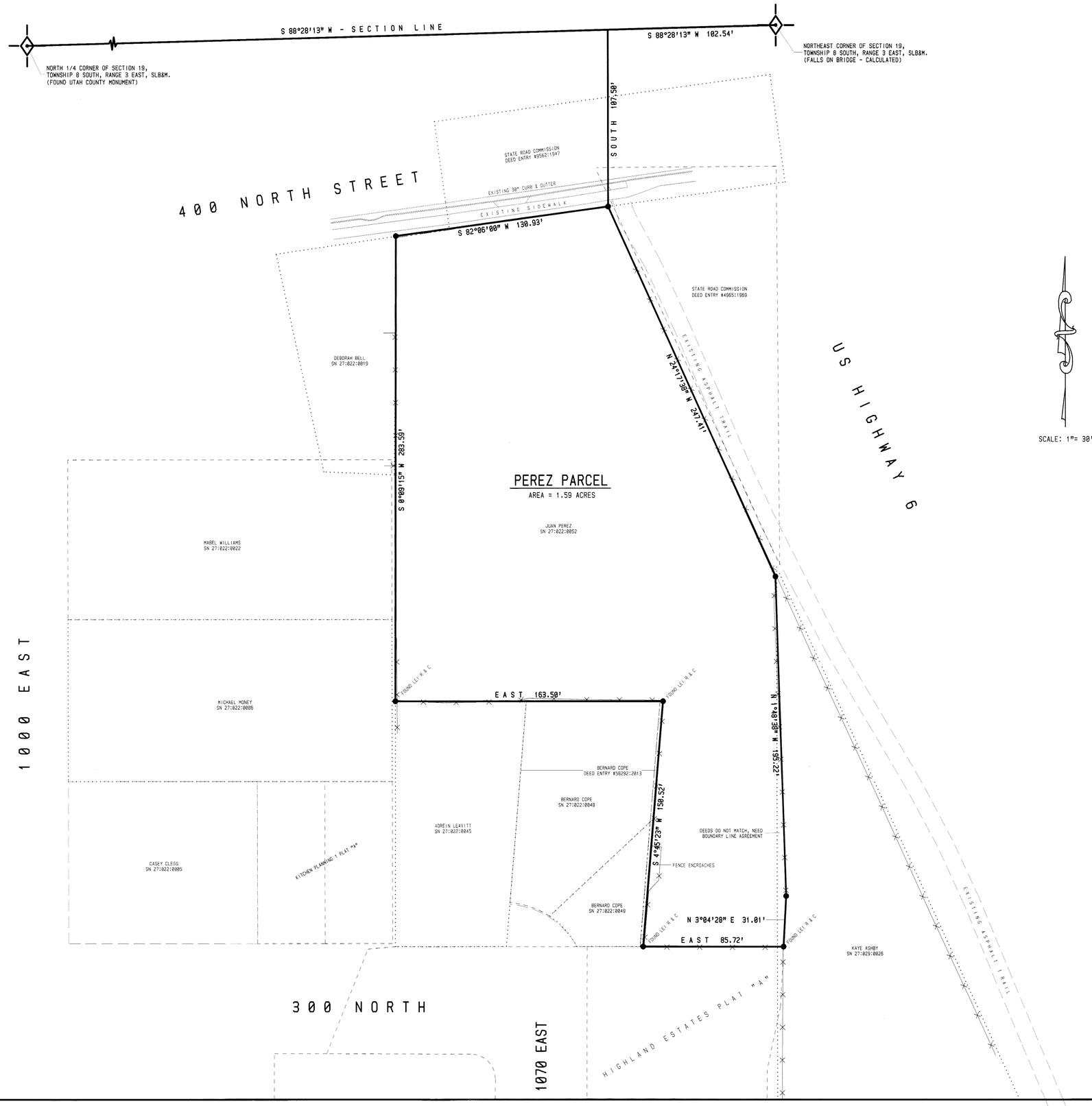

SCALE: 1"= 30'

SURVEYED BOUNDARY DESCRIPTION:

BEGINNING AT A POINT ON THE SOUTH LINE OF 400 NORTH STREET, SPANISH FORK, UTAH, WHICH POINT LIES SOUTH 88°28'13" WEST 102.54 FEET ALONG THE SECTION LINE AND SOUTH 107.50 FEET FROM THE NORTH EAST CORNER OF SECTION 19, TOWNSHIP 8 SOUTH, RANGE 3 EAST, SALT LAKE BASE AND MERIDIAN; AND RUNNING THENCE SOUTH 82°06'00" WEST 130.93 FEET ALONG SAID STREET; THENCE SOUTH 0°09'15" WEST 283.59 FEET PARTIALLY ALONG AN EXISTING FENCE; THENCE EAST 163.50 FEET; THENCE SOUTH 4°45'23" WEST 150.52 FEET; THENCE EAST 85.72 FEET; THENCE NORTH 3°04'28" EAST 31.01 FEET ALONG AN EXISTING FENCE; THENCE NORTH 1°48'38" WEST 195.22 FEET ALONG AN EXISTING FENCE; THENCE NORTH 24°17'38" WEST 247.41 FEET ALONG A FENCE ON THE WEST LINE OF US HIGHWAY 6 TO THE POINT OF BEGINNING.
(AREA = 1.59 ACRES)

NARRATIVE:

BASIS OF BEARING IS UTAH COORDINATE BEARINGS, CENTRAL ZONE. (N 89°17'34" E BETWEEN THE SOUTHWEST CORNER AND THE SOUTH 1/4 CORNER OF SECTION 20, TOWNSHIP 8 SOUTH, RANGE 3 EAST, SLB&M.) PURPOSE OF SURVEY IS TO COMPARE DEEDED PROPERTY AGAINST EXISTING PROPERTY IN ACTUAL POSSESSION AND PREPARE A SURVEYED BOUNDARY DESCRIPTION.

SURVEYORS CERTIFICATE:

I, BARRY L. PRETTYMAN, A LICENSED SURVEYOR HOLDING CERTIFICATE No 166406, DO HEREBY CERTIFY THAT THE PLAT SHOWN HEREON WAS PREPARED FROM A FIELD SURVEY MADE UNDER MY DIRECTION AND CORRECTLY SHOWS THE DIMENSIONS AND MONUMENTS OF THE ABOVE DESCRIBED PARCEL OF LAND TO THE BEST OF MY KNOWLEDGE AND BELIEF.

BARRY L. PRETTYMAN — DATE June 26, 2017

LEGEND:

- ● = 5/8" REBAR WITH ORANGE CAP MARKED RLS 166406.
- PEREZ DEED LINES
- ADJACENT LAND OWNER DEED LINES
- EXISTING FENCES

REGISTERED LAND SURVEYOR
BARRY L. PRETTYMAN
#166406
STATE OF UTAH

JUAN PEREZ
RECORD OF SURVEY PLAT
SPANISH FORK, UTAH

COLE SURVEYING AND ENGINEERING
245 WEST STATE ROAD 198-SUITE #5
SALEM, UTAH - 84653
PHONE: (801) 423-1040

DRAWN BY:	B.L.P.	DATE:	JUNE 26, 2017
APPROVED BY:	B.L.P.	DATE REVISED:	
SCALE:	1" = 30'		

SHEET No. 1 OF 1