### SOUTH WEBER CITY PLANNING COMMISSION AGENDA

PUBLIC NOTICE is hereby given that the Planning Commission of SOUTH WEBER CITY, Utah, will meet in a REGULAR public meeting on Thursday, April 13, 2017, at the South Weber City Council Chambers, 1600 East South Weber Drive, commencing at 6:30 p.m. \*

A WORK MEETING WILL BE HELD PRIOR TO THE REGULAR PLANNING COMMISSION MEETING AT 6:00 P.M. TO DISCUSS AGENDA ITEMS, CORRESPONDENCE, AND/OR FUTURE AGENDA ITEMS

### THE AGENDA FOR THE REGULAR MEETING IS AS FOLLOWS:

6:30 P.M.	Pledge of Allegiance Approval of Meeting Minutes – Commissioner Johnson  March 9, 2017 Approval of Agenda Declaration of Conflict of Interest
6:35 P.M.	Public Hearing on Final Subdivision: Application for Brimley Subdivision (2 lots) located at approx. 600 E. South Weber Dr. (Parcel 13-020-0056), approx. 0.85 acres, by applicant Grady Brimley
6:50 P.M.	Public Hearing on Amending Code Ordinances: Subsections 11.02.020 Fees, 11.02.050 Application Expiration, and 11.06 Impact Fees
7:05 P.M.	Old Maple Farms Subdivision Revised Preliminary and Revised Final Phases 1 & 2 (adding land drain system)
7:30 P.M.	Open & Public Meetings Act Training; City Attorney
7:55 P.M.	Planning Commission Rules of Order and Procedure
8:05 P.M.	Public Comments – Please keep public comments to 3 minutes or less per person
8:10 P.M.	Planning Commissioner Comments (Johnson, Pitts, Walton, Grubb, Osborne)
8:15 P.M.	Adjourn
***** THE LINDERSIGN	**************************************

THE UNDERSIGNED RECORDER FOR THE MUNICIPALITY OF SOUTH WEBER CITY HEREBY CERTIFIES THAT A COPY OF THE FOREGOING NOTICE WAS MAILED OR POSTED TO:

CITY OFFICE BUILDING Utah Public Notice website www.utah.gov/pmn

www.southwebercity.com TO EACH MEMBER OF THE PLANNING COMMISSION THOSE LISTED ON THE AGENDA

DATE: April 6, 2017

ELYSE GREINER, RECORDER

IN COMPLIANCE WITH THE AMERICANS WITH DISABILITIES ACT, INDIVIDUALS NEEDING SPECIAL ACCOMMODATIONS DURING THIS MEETING SHOULD NOTIFY ELYSE GREINER, 1600 EAST SOUTH WEBER DRIVE, SOUTH WEBER, UTAH 84405 (801-479-3177) AT LEAST TWO DAYS PRIOR TO THE MEETING.

<sup>\*</sup>Agenda times are flexible and may be moved in order, sequence, and time to meet the needs of the Commission\*

### SOUTH WEBER CITY PLANNING COMMISSION MEETING

DATE OF MEETING: 9 March 2017 TIME COMMENCED: 6:30 p.m.

PRESENT: COMMISSIONERS: Tim Grubb

Debi Pitts Rob Osborne Wes Johnson

**Taylor Walton (excused)** 

**CITY PLANNER:** Barry Burton

**CITY ENGINEER:** Brandon Jones

CITY RECORDER: Elyse Greiner

**CITY MANAGER:** Tom Smith

Transcriber: Minutes transcribed by Michelle Clark

A PUBLIC WORK MEETING was held at 6:00 p.m. to REVIEW AGENDA ITEMS

**PLEDGE OF ALLEGIANCE:** Commissioner Osborne

**VISITORS:** Mark Staples, Rhett & Becca Reisbeck, Ivan Ray, Margene Bambrough, Kelly Bambrough, Judy & Roger Bambrough, Scott Logerquist, Bonnie Logerquist, Race Kenny, Delene Hyde, Arlean Blair, and Daren Gardner.

### APPROVAL OF MEETING MINUTES

• February 9, 2017

Commissioner Johnson moved to approve the meeting minutes of 9 February 2017 as amended. Commissioner Pitts seconded the motion. Commissioners Osborne, Pitts, and Johnson voted yes. The motion carried.

**APPROVAL OF THE AGENDA:** Commissioner Grubb moved to approve the agenda as written. Commissioner Johnson seconded the motion. Commissioners Pitts, Johnson, Osborne, and Grubb voted yes. The motion carried.

**DECLARATION OF CONFLICT OF INTEREST: None** 

**OATH OF OFFICE:** Commissioner Osborne welcomed Tim Grubb to the Planning Commission. Elyse then presented the oath of office to Commissioner Timothy Grubb.

Commissioner Johnson moved to open the public hearing for application for Broadview Point (1 lot) located at approx. 7400 S. 1550 E. (Parcel 13-030-0084), approx. 0.57 acres, by applicants Rhett and Becca Reisbeck. Commissioner Grubb seconded the motion. Commissioners Grubb, Pitts, Johnson, and Osborne voted yes. The motion carried.

\* \* \* \* \* \* \* \* \* \* PUBLIC HEARING \* \* \* \* \* \* \* \* \*

Public Hearing and Action on Preliminary/Final Subdivision: Application for Broadview Point (1 lot) located at approx. 7400 S. 1550 E. (Parcel 13-030-0084), approx. 0.57 acres, by applicants Rhett and Becca Reisbeck: Rhett & Becca Reisbeck said they purchased this property last summer and are aware of the easements that surround this property. They would like to construct a one lot residential home. They have met with residents of Sandalwood Wood Cove. Rhett said they have come to an agreement with the HOA concerning the utilities. Becca said they are in agreement with the City staff's recommendations concerning the plat.

**Ivan Ray, 7268 S. 1600 E.,** said he is not opposed to this subdivision, but he is currently involved with his engineer researching the old South Weber Drive. He said in 1942 to 1945 his family got involved with the purchase of property and the straightening out of South Weber Drive. He said his engineer is trying to verify property ownership. He is concerned about how the access to the home will work with the commercial property. He said there is a cell tower that needs access.

Commissioner Grubb moved to close the public hearing for application for Broadview Point (1 lot) located at approx. 7400 S. 1550 E. (Parcel 13-030-0084), approx. 0.57 acres, by applicants Rhett and Becca Reisbeck. Commissioner Johnson seconded the motion. Commissioners Grubb, Pitts, Johnson, and Osborne voted yes. The motion carried.

\*\*\*\*\*\*\* PUBLIC HEARING CLOSED \*\*\*\*\*\*\*

### Brandon Jones, City Engineer, reviewed his memo of 2 March 2017 which is as follows:

He said his office has completed a review of the Final Plat and Site Plan Improvements received on February 23, 2017, for the Broadview Point Subdivision. He recommended approval, subject to the following items being addressed prior to final approval from the City Council.

### **PLAT**

- 1. The turnaround should be labeled as a "Fire Access Turnaround Easement."
- 2. The following notes should be added to the plat (with the approval of the Fire Chief):
- a. The property owner is responsible for maintaining all areas of the turnaround with a drivable surface of road base, concrete or asphalt.
- b. No above-grade structures can be constructed within the turnaround access easement. Any below-grade structures must be approved by the City.

<sup>\*</sup>The Fire Chief may have other requirements not listed here.

### **IMPROVEMENTS**

3. The construction and proposed material of the turnaround should be shown and required with the construction of the other required improvements.

### FOLLOWING APPROVAL

4. Since the improvements required for this lot only serve that lot (and not the public as a whole), we feel it would be permissible to allow the construction and installation of the necessary improvements to be part of the Building Permit. This means that the plat can be recorded as soon as it is approved by the City Council and a Building Permit could be issued as soon as the lot owner is ready to submit plans. No escrow account would be required, because there are no public improvements whose installation needs to be guaranteed.

### Barry Burton reviewed his memo which is as follows:

GENERAL INFORMATION: This proposal is for a .57 acre lot located south of the old Ray's Grocery Store with access from either 1550 East or 7400 South. The lot frontage would have to be considered the north side on 7400 South. This is the remnant of South Weber Drive from when the road was realigned in the distant past and is not currently used as a public street. But, it is still a dedicated roadway and, in my opinion, we really don't have a choice but to consider it a public road. The other access to this lot off of 1550 East is only 32' wide and does not qualify as a frontage. This access would qualify as a "private right-of-way" if it were in the agriculture zone where that is a conditional use. But, it is in the RM zone which does not allow development on a private right-of-way. This lot also has frontage on Sandalwood Drive, but is not allowed access by the HOA that owns the road.

All utilities are available to the lot. There is an existing fire hydrant immediately adjacent to the lot on the north side. There are some city owned utilities crossing the lot, and the proposal provides public utility easements where those are located as well as the normal perimeter easement.

Barry said the reality of this proposal is that the day to day access will be from 1550 East on the 32' wide stem. It will function as a flag lot, even though it technically isn't one. We have made recommendations in the past to vacate this portion of 7400 South. Those recommendations have not been acted upon and that led to the current situation. Vacating 7400 would create a nonconforming lot of this subdivision, but would make it clear that the City has no obligation to maintain that portion of road right-of-way.

Barry said he recommends approval of the Preliminary/Final plat as presented. Commissioner Johnson said in the event that Mr. Ray finds out information on the property then access may not be available. He doesn't want to recommend vacating until then. Commissioner Grubb asked if an agreement needs to be submitted from the HOA. Brandon suggested the City receive a copy of that written agreement prior to final approval. Commissioner Grubb asked about fencing on the south side of the property. He sees a potential issue with the HOA concerning anyone visiting this property parking on Sandalwood Drive. Becca said the house will be facing northwest and she is

Aaron Stone, representing the HOA, asked if the City can take over that road. It was stated that the City is not interested in taking over the road.

Commissioner Grubb moved to recommend approval of application for Broadview Point (1 lot) located at approx. 7400 S. 1550 E. (Parcel 13-030-0084), approx. 0.57 acres, by applicants Rhett and Becca Reisbeck subject to the following:

- 1. Developer to complete conditions listed in Barry Burton's memo.
- 2. Developer to complete conditions listed in Brandon Jones memo of 2 March 2017.
- 3. The City is to receive a copy of the agreement with the Sandalwood Cove HOA that controls Sandalwood Drive before going to City Council.
- 4. The adjacent owner, Ivan Ray, may bring in additional information regarding the north line.

Commissioner Johnson seconded the motion. Commissioners Grubb, Pitts, Johnson, and Osborne voted yes. The motion carried

Action on Amended Preliminary Subdivision: Application for Hidden Valley Meadows (formerly Bambrough Property) (24 lots) located at approx. 475 E. 6650 S. (Parcel 13-023-0070), approx. 12.98 acres, by applicant Bruce Nilson: Mark Staples, of Nilson Homes, approached the Planning Commission. He reviewed the amendments made to the preliminary plat. He said an access road has been added to 475 East. Brandon Jones, City Engineer, discussed the fee calculations for retention and said they have changed to approximately \$47,000, which is different than what is listed in his memo. Mark Staples discussed the access by the Miller property being removed. He said they are working with the Miller's at this time. Brandon explained item #1 of his memo. Mr. Staples discussed the adjacent property owner is not the Halversons but the Poulters. They will be working out Parcel A with the Poulters. Brandon would recommend excluding this property from the plat.

### Brandon Jones memo of 6 March 2017 is as follows:

Our office has completed a review of the Revised Preliminary Plans for the Hidden Valley Meadows Subdivision (formerly called the Bambrough Subdivision) received, February 23, 2017. We recommend approval, subject to the following comments and items being addressed prior to final approval from the City Council of any phase.

### **GENERAL PLAN - TRANSPORTATION**

As a result of the recommendation of the Planning Commission at the meeting on February 9, 2017, the developer has negotiated with the Winchesters and secured the property to construct the road to 475 East that was previously shown only as a stub. This road will be built in Phase 2 of the development due to its location at the south end of the property. Phase 1 is located at the north end of the property, and needs to be constructed first due to the gravity utilities (sewer and storm drain) needing to connect at 6650 South. It is our opinion that the revised plan being shown complies with the recommendations in the General Plan.

### **GENERAL**

1. Water Source. The Water Capital Facilities Plan (CFP) was adopted on June 14, 2016. The Impact Fee Facilities Plan (IFFP) and Impact Fee Analysis (IFA) were adopted on February 28, 2017. This means that the new impact fees will go into effect on approximately May 29, 2017. Due to the need for the water source acquisition that will be a part of these impact fees, we would recommend that no building permits be issued until the new impact fees are in place.

- 2. <u>Geotechnical Report</u>. A geotechnical study was performed by GSH and a report dated August 18, 2016 was submitted.
  - a. <u>Basements</u>. The geotechnical report indicates groundwater elevations as shallow as 3.4 feet below the existing grade, and recommends that the lowest habitable floor needs to be a minimum of 3.0 feet above the existing groundwater elevation. The developer is proposing to construct homes <u>with basements</u>. Due to the presence of shallow groundwater, we would recommend one of the following:
    - i. Not allow basements at all, OR
    - ii. Have the geotech specifically address the construction of basements in more detail and measure the elevation of the lowest habitable floor off of a fixed improvement in the development (e.g. Curb & Gutter) so that implementation of the recommendation can be easily applied by the Building Official.
  - b. <u>Groundwater</u>. There is no land drain system being proposed for this development, due to the unavailability of a storm drain system that is deep enough to make a difference. This also has influence on the geotech's recommendation for basement elevations.
  - c. <u>Backfill</u>. Some of the native soils may meet the City Standard backfill requirements, but it is likely that it will be labor-intensive to use these soils during construction. We anticipate the majority of the backfill will need to be imported.
  - d. <u>Pavement</u>. A minimum of 3" asphalt and 12" roadbase over properly prepared subgrade will be required; unless a different design is desired and approved.
- 3. South Weber Irrigation Ditch and Off Site Drainage. The old South Weber ditch runs along the south property line of the proposed development. The Davis and Weber Counties Canal Company (DWCCC) has a drain line that currently empties into the ditch. The development is proposing to connect this drain line directly into the new storm drain being installed in the subdivision. Making this connection will allow the ditch to be filled in and abandoned. Individual private yard inlet boxes and private 6" drain lines are being provided at the low end of lots 205, 206, 208 and 209 to help ensure that any surface water generated from their own lot or draining onto their property from properties to the south will have a way to drain. As a note, the yard box on lot 205 could drain into the storm drain line going between lots 205 and 206. This would allow the drain line across lot 206 to be eliminated, needing only a yard inlet box. The drain line on lot 205 should be constructed all the way to the east property line.
- 4. Future Drainage of South property. The public storm drain line being installed between lots 205 and 206 can be connected to and used as an outfall line for future drainage of the property south of the development. However, this line is not being upsized. So, any future connection to this line will need to provide detention. This line will be the City's responsibility up to the south property line. The City will not be responsible for the DWCCC drain line. Also, it was previously mentioned that the City would need to pay for the extension of the storm drain between these two lots to allow for future drainage abilities. However, now that the location of the DWCCC drain line has been verified, it appears that this storm drain line was needed anyway. Therefore, we do not feel that the City is responsible to pay for this portion of the storm drain line.
- 5. <u>Detention Basin</u>. All developments must provide detention. However, due to the approval of the Old Maple Farms regional detention basin and Cost Share Agreement, the developer can choose whether to construct a permanent detention basin within the development or pay a fee "in

lieu" of actual detention. Our office has performed a fee analysis based on similar costs used in the recently approved Old Maple Farms Cost Share Agreement. The fee calculates to be \$74,173.65 (see attached analysis).

- 6. There is no existing storm drain system in 6650 South. The cost for the piping from 475 East to the development is the developer's responsibility.
- 7. The street numbers need to be revised, as follows:
- a. 350 East Street → 375 East Street
- b. 6550 South Street → 6725 South Street
- c. 6775 South Street → no change
- d. 6825 South Street → no change
- 8. The 20' drainage easement between Lots 205 and 206 needs to be shown on the preliminary plat, and needs to be located all on one lot (not splitting the property line).
- 9. We would recommend a 15' drainage easement (not 10') along the south property lines of Lots 205, 206, 208, 209 and along the east property lines of Lot 107.

### Barry Burton's memo is as follows:

PRELIMINARY PLAT: The preliminary plat has been revised by adding a connector road to 475 East as part of the development and by adding phase lines for two phases and by adding one lot. The addition of the property for the connector street to 475 E. added enough property to the subdivision to qualify for an additional lot. All lots meet the requirements of the R-LM zone. The connector road to 475 E., 6825 South, is in the location shown on the previously approved preliminary plat as the stub street. The developers have successfully negotiated with the Winchesters for the additional property needed. In my opinion, this will make a very good primary ingress/egress location for the subdivision. This connector does, however, reside in the 2nd phase of the subdivision. The reason developers are starting the subdivision on the north end of the project with Phase 1 is because the storm drain and sewer have to go out that way onto 6650 S. They pretty well have to start there. Phase one consists of 14 lots that will initially have their access only from 6650. Developers tell us that Phase 2 will be coming within a year.

The only other change is a very slight modification to one of the cul-de-sac streets. This modification is to accommodate the wishes of neighboring property owners, the Hyde's and Blair's. This cul-de-sac is labeled 6550 South, but this is not a correct and it should be renamed with an appropriate number.

Barry said he recommends approval of the Revised Preliminary Plat with the renaming of the cul-de-sac labeled 6550 South.

Commissioner Osborne recommended limiting heavy trucks on 6650 South. Mr. Staples said they will work on being good neighbors. Commissioner Johnson asked if property owners will be made aware of livestock in the area. Commissioner Grubb asked about fencing. Mr. Staples said the City ordinance requires fencing between agriculture property and residential property.

**Delene Hyde, 349 E. 6650 S.,** said this is a different plan that is presented than what was presented at the public hearing; therefore, she would appreciate the opportunity to speak.

**Delene Hyde, 349 E. 6650 S.,** said she understands that Bambroughs have the right to develop their property. She is concerned about making sure access for phase 2 to 475 East takes place. She would like to know how the Planning Commission will make sure the primary access is 475 East. She wants to know if the general plan is going to be followed and how the Planning Commission is going to protect it. She said Winchesters may never sell their property.

Barry said access to 475 East is part of Phase 2 and there is some risk, but the developer has an agreement with Winchesters. He said there will be no Phase 2 without that access.

Commissioner Johnson moved to approve the application for Hidden Valley Meadows (formerly Bambrough Property) (25 lots) located at approx. 475 E. 6650 S. (Parcel 13-023-0070), approx. 12.98 acres, by applicant Bruce Nilson subject to the following conditions:

- 1. Developer to complete conditions listed in Brandon and Barry's memos as well as the amendment to retention fees.
- 2. All applicable City fees be paid by the developer.
- 3. 6' fencing as per City code

Commissioner Pitts seconded the motion. Commissioners Grubb, Pitts, Johnson, Osborne, and Walton voted yes. The motion carried

Application for Hidden Valley Meadows (formerly Bambrough Property) (14 lots) located at approx. 475 E. 6650 S. (Parcel 13-023-0070), approx. 12.98 acres, by applicant Bruce Nilson: Commissioner Grubb asked how the water from the slew is being handled. Brandon said that will be handled in Phase 2 in that any water in the ditch will be collected from east property line of Lot #107. He said there will be individual yard boxes installed. He isn't aware of any drainage going through Phase 1. Brandon referenced his memo of 6 March 2017 item #6. Mr. Staples said they will work through the geotechnical reports and doesn't want to state "no basements". Barry referenced item #2 of his memo.

### Brandon Jones memo of 6 March 2017 is as follows:

Our office has completed a review of the Final Plat and Improvement Plans for the Hidden Valley Meadows, Phase 1 Subdivision received, February 24, 2017. We recommend approval, subject to the following comments and items being addressed prior to final approval from the City Council. **GENERAL** 

- 1. The final plans need to be submitted to the South Weber Irrigation Company for a Plan Review, and an approval letter submitted to the City.
- 2. Additional documentation from the geotechnical engineer is needed depending on whether or not basements are desired.

#### **PLAT**

- 3. The street numbers need to be revised according to our recommendation on the preliminary plat.
- 4. Addresses for the lots will be provided by our office.
- 5. The following note should be added:
- "All lots are subject to the requirements of the Geotechnical Report prepared by GSH, dated August 18, 2016."

- 6. All of the lots need to be listed at restricted "R" lots with the appropriate description; either they will be restricted to having no basements, or they will be restricted as to the elevation of the lowest habitable floor in relation to the final curb and gutter elevation.
- 7. If the developer decides to make the detention basin permanent, it needs to be labeled as a parcel and dedicated to the City in the Owner's Dedication. Otherwise, it should be shown as Lot 114, not "Temp. Basin."
- 8. If it is the developer's intent to transfer ownership of Parcel A to the adjacent owner (Halverson) as stated in the Owner's Dedication, we would recommend one of the following approaches:
- a. Include the Halverson property in the subdivision boundary. This would require Halversons to sign the plat as an owner. Additional street dedication and frontage improvements would be required along the additional frontage.
- b. Developer maintains ownership and responsibility for the property until after the plat is recorded; then they can transfer ownership of the parcel. If the developer chooses this approach then a note should be added to the plat stating that "Parcel A is not a building lot."
- 9. We recommend that the transfer of ownership of Parcels B and C be done with separate Deed documents, and that the subdivision boundary description be revised such that these are not included inside the subdivision boundary.
- 10. The Owner's Dedication needs to be revised. Our office can provide example language.
- 11. An additional survey monument is needed at the intersection of 6650 South and 375 East.
- 12. Any existing access easements (either inside or outside of the subdivision) should be shown and noted whether they are to remain or be terminated.
- 13. Parcel A and Lot 114 (Temp. Basin) need 10' PUE's along the street frontage.

### **IMPROVEMENT PLANS**

- 14. The curb, gutter and sidewalk along 6650 South should align with the cross section adopted by the Council.
- 15. A detailed design of the detention basin and outlet control structure has not been provided in these plans. If the developer chooses to construct the detention basin rather than pay the fee in lieu of constructing it, then a detailed design will be required.
- 16. The Grading and Drainage Plan (Sheet 7) only shows existing contours. Proposed contours and grading need to be added. If it is anticipated that any fill material is being placed on the lots, that should be shown.
- 17. Temporary blow-offs are not allowed. A fire hydrant needs to be installed at the end of the waterline on 375 East. This could be relocated in Phase 2 when the line is extended, if it is not needed at this location.
- 18. The drain line that runs along the east property lines of Lot 107 is a private line and should be labeled as such. It does not need to be 15" RCP. We would recommend 12" PVC.
- 19. We have prepared a set of redlined drawings of the improvement plans in order to communicate our comments graphically, rather than just verbally. We will provide these to the developer's engineer to be addressed prior to submitting for final approval with the City Council.

### Barry Burton's memo is as follows:

**REQUEST:** Approval of the 14 lot first phase of the subdivision.

**FINAL PLAT:** There are three issues I see with this final plat, all of which are easily addressed. 1. The street labeled 6550 on the Preliminary Plat is labeled 6650 South on the Final Plat, and this is obviously incorrect as well. This needs to be changed to the correct address.

2. Developers are proposing dedicating 25' of additional right-of-way on 6650 South for street widening. I believe this would be appropriate if we were trying to widen 6650 to a 70' width. We know that isn't feasible, but there has been no official street cross section approved. **I would recommend we plan a 50' right-of-way for 6650 S.** 

If we do any improvements to the street, this will be the least impactful of all the alternatives. The dedication of additional right-of-way should reflect this width.

3. Developers have extended the northernmost cul-de-sac so that it touches the Seth Blair property at a single point. There are sliver parcels on either side of this touch point labeled Parcel B and Parcel C. This will not be a problem if those parcels are conveyed to the adjoining property owners, the Blair's and Hyde's at a reasonable price. Conveyance of those parcels will allow the Blair's and the Hyde's access to the cul-de-sac. Otherwise, those parcels will amount to a holding strip which we no longer allow for obvious reasons.

Barry said he recommends approval of the final plat for Phase 1 if the three items listed above are adequately addressed.

Commissioner Grubb moved to recommend approval of application for Hidden Valley Meadows (formerly Bambrough Property) (14 lots) located at approx. 475 E. 6650 S. (Parcel 13-023-0070), approx. 12.98 acres, by applicant Bruce Nilson subject to the following conditions:

- 1. Developer is to complete conditions listed in Brandon Jones memo of 6 March 2017.
- 2. Developer is to complete conditions listed in Barry Burton's memo.
- 3. Recommend change boundary to remove Parcels B and C, but the ownership be consolidated with the adjacent property prior at time of recording.
- 4. Concerning Item #8 of Brandon's memo, correct the name Halverson to Poulter.
- 5. Concerning Item #15 of Brandon's memo, amend detention fee in lieu of retention basin.
- 6. 6' fencing to be installed along Agricultural property.
- 7. Developer to pay all City fees.

Commissioner Johnson seconded the motion. Commissioners Grubb, Pitts, Johnson, and Osborne voted yes. The motion carried

City Council seeking recommendation on future 6650 S. improvements: Brandon stated he is concerned if the street is 40' there are safety issues with no one having room to walk down the street. Barry said 50' allows for parking. Delene Hyde said if the road is widened to 50' some of the homes will be dramatically affected. Commissioner Grubb suggested staking the area so that you have a better visual. He suggested at some time down the road addressing the specifics in the master plan. Commissioner Osborne said at the time of the change of the master plan the collector will be through Old Maple Farms.

Commissioner Johnson moved that at this time future improvements on 6650 S. be left as is until the general plan is amended. Commissioner Grubb seconded the motion. Commissioners Grubb, Pitts, Johnson, and Osborne voted yes. The motion carried

**PUBLIC COMMENTS: None** 

### PLANNING COMMISSION COMMENTS:

**Commissioner Grubb:** He said he is excited to a part of this group.

Commissioner Johnson: He met with Mayor Long and one issue that needs to be resolved is development easements on the west end of town. He said those rights need to be platted. He said Mayor Long has a copy of those easements. Brandon asked if those easements have been recorded. Commissioner Johnson said we need maps of them. Barry said the easements don't necessarily coincide with noise zone. Commissioner Osborne asked why the Mayor is talking to Commissioner Johnson and not the City Manager who would work with the City Engineer. Brandon said if he is given the direction, then he would work with the City Attorney. Tom said the City isn't responsible to enforce the State's easements on the noise zone.

**CITY RECORDER ITEMS:** She reported there will be some code changes coming before the Planning Commission next month.

**ADJOURNED:** Commissioner Grubb moved to adjourn the Planning Commission meeting at 8:09 p.m. Commissioner Pitts seconded the motion. Commissioners Grubb, Johnson, Pitts, and Osborne voted yes. The motion carried.

APPROVI	ED:	Date
	Chairperson: Rob Osborne	
	Transcriber: Michelle Clark	<del></del>
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Attest:	City Recorder: Elyse Greiner	

# SOUTH WEBER CITY PLANNING COMMISSION MEETING WORK MEETING

DATE OF MEETING: 9 March 2017 TIME COMMENCED: 6:00 p.m.

PRESENT: COMMISSIONERS: Tim Grubb

Debi Pitts Rob Osborne Wes Johnson

**Taylor Walton (excused)** 

**CITY ENGINEER:** Brandon Jones

**CITY PLANNER:** Barry Burton

**CITY RECORDER:** Elyse Greiner

**CITY MANAGER:** Tom Smith (excused)

Transcriber: Minutes transcribed by Michelle Clark

**VISITORS:** Rhett & Becca Reisbeck, Mark Staples.

Approval of Minutes of 9 February 2017: no discussion on this item

Commissioner Osborne reminded the Planning Commission that they represent all of the City and not a portion.

Public Hearing and Action on Preliminary/Final Subdivision: Application for Broadview Point (1 lot) located at approx. 7400 S. 1550 E. (Parcel 13-030-0084), approx. 0.57 acres, by applicant Rhett and Becca Reisbeck: Commissioner Osborne discussed the road behind Rays. He is concerned that this should never be a road and questioned if some language can be added to the plat. Barry said twice the Planning Commission has recommended the City Council vacate it, and nothing has been done. Brandon suggested not asking that approval until after this item has been approved. Rhett and Becca Reisbeck, property owners, said they understand that there will be no road. Barry discussed the history of the road and Ivan Ray's claim. Becca stated Mr. Ray has filed a quit claim deed. Ivan Ray stated his engineer is looking into the road. He then gave a brief history of the road that went behind Rays Market. He said his engineer is researching any documents recorded. He said a lot of the records written or word of mouth stated they own to the fence, but because they used the road, there was an easement. Mr. Ray said he would like to get this cleared up because if their commercial property is sold, he wants it to be clear. Discussion took place regarding the old fence line along the south side of the proposed driveway. Brandon said if Mr. Ray feels the property line is incorrect then his engineer will need to conduct an investigation. Mr. Ray said his request is that he would like clarification on what is there. He said the property in question is 30' wide by 345' long. Brandon said there is time in between now and City Council for Mr. Ray to get any information.

Action on Amended Preliminary Subdivision: Application for Hidden Valley Meadows (formerly Bambrough Property) (24 lots) located at approx. 475 E. 6650 S. (Parcel 13-023-0070), approx. 12.98 acres, by applicant Bruce Nilson: No discussion on this item.

Application for Hidden Valley Meadows (formerly Bambrough Property) (24 lots) located at approx. 475 E. 6650 S. (Parcel 13-023-0070), approx. 12.98 acres, by applicant Bruce Nilson: No discussion on this item.

City Council seeking recommendation on future 6650 S. improvements: No discussion on this item.

ADJOURNED: 6:30 p.m.		
APPROVED:	Chairperson: Rob Osborne	Date
Attest•	Transcriber: Michelle Clark  City Recorder: Flyse Greiner	
Attest:	City Recorder: Elyse Greiner	

### PUBLIC HEARINGS NOTICE

Notice is hereby given that on Thursday, April 13, 2017, at approx. 6:30 p.m., in the South Weber City Council Chambers, 1600 E. South Weber Dr., South Weber, Davis County, Utah, the following public hearings will be held before the Planning Commission:

- (1) City Code Section Amendments in 11.02.020 Fees and 11.02.050 Application Expiration; changing the recording deadline for subdivision plats from 120 days to one year after Council approval, and 11.06 Impact Fees; changing the culinary water rates; and
- (2) A final subdivision application for Brimley Subdivision (2 lots) located at approx. 600 E. South Weber Dr. (Parcel 13-020-0056), approx. 0.85 acres; by applicant Grady Brimley.

A copy of the associated information for the hearings is on file for review at the South Weber City Office. The public is invited to attend and make comments. In compliance with the Americans with Disabilities Act, individuals needing special accommodation during the public hearings should notify the City Recorder at 801-479-3177 two days prior to the meeting date.



### **CONSULTING ENGINEERS**

### MEMORANDUM

TO: South Weber City Planning Commission

FROM: Brandon K. Jones, P.E.

South Weber City Engineer /

CC: Barry Burton – South Weber City Planner

Mark Larsen – South Weber City Public Works Director

Elyse Greiner – South Weber City Recorder

**RE:** BRIMLEY SUBDIVISION

**Preliminary and Final Review** 

Date: April 7, 2017

Our office has completed a review of the Final Plat and Site Plan Improvements received on March 30, 2017, for the Brimley Subdivision. We recommend approval, subject to the following items being addressed prior to final approval from the City Council.

### **IRRIGATION**

- 1. The current home on Lot 1 is served by a private irrigation line that runs across other private properties. Davis & Weber Counties Canal Company has a water delivery responsibility to serve this lot, but they are not responsible for the delivery line unless it meets their standards (which this private line does not). It is our understanding that there is no recorded easement for this private line. So, there is nothing in place to protect it or ensure that it remains in service. In addition, Lot 2 falls below the old canal and is technically in the South Weber Irrigation Company's service area. Given that as background, we having been working with DWCCC, SWIC and Mr. Brimley to come up with a long-term solution. Our recommendation is that a new irrigation service be installed from Old Post Office Road in the PUE along the east property line of Lot 1 (Bowman Old Farm Estates). This service would serve Lot 2 and be sized sufficiently to serve both lots in the future. Lot 1 would keep its current connection, but have the physical ability to be serviced from the SWIC if approved in the future. This would ensure that if/when the private line to Lot 1 is removed by other future development, they would have the ability to still acquire service. We also recommend that this service line be installed now before a home is built on Lot1 of Bowman Old Farm Estates. Mr. Brimley has submitted plans that represent our recommendation.
  - a. We have discussed this verbally with DWCCC and SWIC, but recommend that Mr. Brimley get letters from both irrigation companies indicating their approval of what is being proposed.

Brimley Subdivision Preliminary and Final Review April 7, 2017

### **GEOTECHNICAL REPORT**

2. We recommend that all recommendations in the geotechnical report done by Earthtec Engineering be complied with.

### **PLAT**

- 3. The following general note needs to be added:
  - "All lots are subject to the requirements of the Geotechnical Report prepared by Earthtee Engineering, dated January 31, 2017."
- 4. Addresses need to be added as follows:
  - a. Lot 1 600 E. South Weber Drive (remains the same)
  - b. Lot 2 606 E. South Weber Drive
- 5. The plat and the Boundary Description do not reference Lot 1 in the Bowman Old Farm Estates Subdivision. This needs to be labeled and described correctly.
- 6. Lot 2 needs to labeled as an "R" (restricted) lot, with the associated restrictions called out. The following is the restriction language we would recommend.
  - c. An individual geotechnical report will be required specifically addressing the proposed home to be built, identifying the lowest elevation allowed due to groundwater and any other mitigation measures recommended.
  - d. The water service has not been installed. It will need to connect to the water main in South Weber Drive. It will be required as a part of the Building Permit.
  - e. The sewer lateral and irrigation service have been installed and are located along the east property line of Lot 1 in the Bowman Old Farm Estates Subdivision. They can be connected to at the northeast corner of the lot.
  - f. The sewer lateral is very shallow. If found to be unusable due to the lowest floor elevation of the proposed home, the sewer will have to be pumped.
  - g. The irrigation service is sized sufficiently to serve both Lot 1 and Lot 2. If Lot 1 has a future need to use this service, it should be located in the PUE and Storm Drain Easement. The replacement or repair of any landscaping or other personal property disturbed on Lot 2 as a part of installing this service line will be the responsibility of the owner of Lot 1.
- 7. On Sheet 2, there is a note calling out the width of the storm drain easement, but it would help to have the width labeled on the drawing.
- 8. On Sheet 1, there are some dimension offsets shown along the east property line of Lot 2. These don't appear to be referencing anything (possibly the fence that was shown previously) and should be taken off the plat.

### **UTILITY EXHIBIT**

- 9. A profile of the sewer service should be provided in order to verify that it does not conflict with the land drain main, and to give some perspective on its depth and cover.
- 10. The lots in the Bowman Old Farm Estates Subdivision should be labeled for reference.

- 11. The asphalt patch, curb & gutter and sidewalk to be removed and replaced should be shown for the installation of these two service lines.
- 12. For spacing of the service lines, we recommend 3' on either side of the lines and 4' between them. This should be labeled on the drawing.



## Planning Department

Davis County Administration Building, 61 South Main Street, P.O. Box 618, Farmington Utah 84025

Telephone: (801) 451-3279 - Fax: (801) 451-3281

## PROJECT REVIEW BRIMLEY SUBDIVISION FINAL By Barry Burton

April 5, 2017

### Plat/Layout:

This is the two lot subdivision the Planning Commission was informed would be coming when the property was proposed for rezone a couple of months ago. That rezone was approved by the City Council and now the subdivision has been proposed. This is a lot split for a parcel that contains an existing home many of you know as the former residence of Warren Reynolds. The lot will be split in such a way that the existing home would be on a lot just under 1/3 acre and the other lot would be just over ½ acre. There is an easement running approximately along the lot line separating the two lots. This easement is for an existing storm drain pipeline and is the remnant of and old ditch. This easement is not labeled as such and the plat does not show the width of that easement. Addresses need to be added to the plat. There is a label for a 10' P.U.E. near the center of Lot 2 that refers to an easement that was previously removed at the request of the staff. That label should be removed. Curb, gutter and sidewalk already exist on the South Weber Drive frontage. No further street improvements are necessary.

Secondary water can be served to the property by two different irrigation companies, but there are some complexities as to how the water can be delivered that Brandon will cover in his review.

### **Title Report:**

The title report indicates the property is subject to an easement granted to Uinta Pipeline Company in 1929 and one granted to the Town of Roy in 1939 for a water pipeline. These utilities may have been located on a larger parcel, of which this is a remnant, but that is unknown to me. The location of these utilities needs to be verified and shown that they do not impact this development.

### **Geotechnical:**

The Geotechnical Study indicates groundwater depth varies across Lot 2 from 1.5' to 8' and gives specific recommendations for building on the lot.

### Recommendation:

I recommend approval of the final plat with the provisions that the recommended changes to the plat be made regarding addresses, easements and notations and that it can be show that the two utility easements flagged in the title report have no significant impact (hopefully before the PC meeting). I also recommend that any building constructed on Lot 2 be required to follow the recommendations of the geotechnical report.

### For Office Use Only Fees received by: Amount Paid: 100 Part of submittal: 3/2/1/7 Receipt #: 13.085637 SOUTH WEBER Initial Review, all of the required supporting materials have been provided: PC/CC Meeting Date: April 13, 2017 **Final Plan Application** Project/Subdivision Name: Brimby Subdivision Approx. Location: 600 S. S. Weber Dr. Parcel Number(s): 1302000 56 Total Acres: 186 Current Zone: RM Surrounding Land Uses: Residential Number of Lots: 7 # Lots Per Acre: 2.32 Phase: 1 of PUD: Yes/N **Contact Information Developer or Agent Developer's Engineer** Name: trever Hatch Name: Granton Brimley Company Name: Address: 956 E. 800 S. Company: Reeves and Asgoc License #: City/State/Zip: Bountiful UT 84010 Address: 5160 S. 500 W. Phone: 401 309 6052 Fax: City/State/Zip: Riverdale, UT 84405 Email: (grady brin@ gmail com Phone: 401 621-3100 Fax: 801 621 2666 Email: thatch@reeve-assoc.com **Best Way/Preferred Method of Contact: Best Way/Preferred Method of Contact:** \_\_\_\_Email \_\_\_\_Phone \_\_\_\_ Fax \_\_\_\_Mail Email V Phone Fax Mail Surveyor Property Owner(s) ☑ Check here if same as Engineer Check here if same as Developer Name: Name: Company: Address: City/State/Zip: \_\_\_\_\_\_\_\_Fax: \_\_\_\_\_\_ License #: Address: City/State/Zip: \_\_\_\_\_Fax: \_\_\_\_\_ Email:

Email:

### **Final Plan Requirements**

☐ Complete all conditions/requirements set by the Planning Commission at Preliminary Approval			
☐ Finalized Draft of Covenants, Conditions, and Restrictions (if applicable)			
<ul> <li>☐ Finalized Storm Drain Calculations</li> <li>☐ Any applicable agreements finalized, signed, and proof of recording with county provided (agreements with South Weber City must be finalized and remain unsigned)</li> <li>☐ Finalized set of certified, stamped construction drawings and specifications as prepared by a licensed civil engineer**</li> </ul>			
**One full sized (24" x 36"), one reduced (11" x 17"), and one electronic PDF form shall be submitted of the following (the north area to point up or to the left):			
☐ Format of Final Plat for Recording Required by the County			
*All plans must be prepared and stamped by a licensed and/or certified professionals including, but not limited to, architects, landscape architects, land planners, engineers, surveyors, transportation engineers or other professionals as deemed necessary by the City Planner.			
Applicant Certification			
I certify under penalty of perjury that this application and all information submitted as a part of this application are true, complete, and accurate to the best of my knowledge. I also certify that I am the owner of the subject property and that the authorized agent noted in this application has my consent to represent me with respect to this application. Should any of the information or representations submitted in connection with this application be incorrect or untrue, I understand that The City of South Weber may rescind any approval, or take any other legal or appropriate action. I also acknowledge that I have reviewed the applicable sections of the South Weber City Land Development Code and that items and checklists contained in this application are basic and minimum requirements only and that other requirements may be imposed that are unique to individual projects or uses. Additionally, I agree to pay all fees associated with this project, as set by the current adopted Consolidated Fee Schedule as well as any fees associated with any City Consultant (i.e. engineer, attorney). The applicant shall also be responsible for all collection fees incurred including a collection fee of up to 40% (pursuant to the provisions of the Utah Code Ann. §12-1-11). I also agree to allow the Staff, Planning Commission, or City Council or appointed agent(s) of the City to enter the subject property to make any necessary inspections thereof.			
Applicant's Signature:			
Property Owner's Signature:			

### Sketch Plan Meeting Brimley Subdivision February 8, 2017 @ 3:30 p.m.

**Attendees:** Barry Burton, City Planner; Mayor Tammy Long; Commissioner Wes Johnson; Brandon Jones, City Engineer; Bryan Wageman, Public Works; Chris Tremea, Fire Department; Elyse Greiner, City Recorder; and Grady Brimley, Developer.

### **Staff Comments:**

Grady said the property was recently rezoned to Residential Moderate (RM) and they are splitting the property down the middle to create two lots.

Barry said there is existing curb, gutter and sidewalk on the street. Bryan said there is a fire hydrant just down the street that will meet the requirements.

Brandon wondered about restricting a basement based on the geotechnical report. Brandon wants to know if the current recommendations in the report are sufficient to build a home. Brandon thinks the main floor should sit above the road so there isn't a reverse grade driveway. Barry said an addendum to the geotechnical report or an individual geotechnical report should be required with the building permit. Brandon said an addendum wouldn't be as in-depth as the first one, it can reference the original report. The follow-up report would specifically reference what type of home is intended to be built. Brandon thinks the higher the home is built up from the ground, the better off it will be.

Barry wondered about a sewer issue. Grady thinks the depth is around 9 feet. Brandon said there could be restrictions on lot 2, that the sewer may require a pump. The more north the house is built, the worse off it would be. The optimal placement of the house would be as close to the road as setbacks will allow. Commissioner Johnson wondered about backflow from Bowman Old Farm Estates since they brought in so much fill. Brandon says they must keep everything from their property on their property, but anything that was naturally flowing on this property to the north will no longer be able to go that way. Lot 2 would be responsible for all water on their property. Bryan said he has seen standing water on the northern portion of the property. Brandon said the lot should have two restrictions; an individual geotech, would be required with the building permit and that a sewer pump may be required. Discussion took place about warnings of a reverse grade driveway but it was decided that a note wasn't required to be on the plat.

Brandon says the storm drain line runs under South Weber Drive and along the north to south fence. The City hasn't maintained it previously but Bowman Old Farm Estates connected to it. The City needs to maintain it but it isn't up to city standard. Brandon isn't sure how to handle it because it's not up to city standards; it's corrugated. The City would also need a bigger easement to be able to maintain it. Barry said the City can't expect anyone to take ownership because it takes in street water. Commissioner Johnson asked where the pipe came from. Barry said there was a ditch there that was piped and historically there was water coming off South Weber Dr. going into that ditch. The ditch is no longer used for irrigation but it was originally used for that. Commissioner Johnson thinks there is a spring on the south side of South Weber Dr. that also

feeds into it. Bowman Old Farm piped the ditch through their property and the ditch connects to 475 E. but storm water gets in it. Brandon asked if a title report has been done because it would show all the easements on the property. The easements need to be shown on the plat. The City needs a 15' storm drain easement; 7 ½' on either side of the line. Brandon would prefer the easement to all be on one lot or as far over as possible to one side so a fence doesn't become an issue.

Brandon asked if the garage on lot 2 garage should be removed. Barry said no, the garage could still be used. Barry said the fences should not be on the plat. Brandon wondering about the existing fence by the garage if it needs to be relocated or removed. Barry said to leave the fence but make sure the property line matches the Canyon Meadows Subdivision property line. Either the fence was installed wrong by the other subdivision or the survey is wrong.

Grady asked questions about the application checklist, specifically the title report and secondary water letter. The title report can be obtained from any title company. Grady said he has a share of formerly Bambrough water that is serviced by the Davis and Weber Counties Canal Company. The City needs a letter from the secondary water company stating they are ok with the plans and the property has sufficient water.

Commissioner Johnson asked about UDOT access. There is an existing driveway to the garage, so it won't be necessary. The developer will need to contact UDOT for a permit to connect to the sewer and water line across South Weber Dr. There should be a note on the plat that water and sewer services are not currently there and will be constructed by the owner when the home is built if Grady doesn't want to do it up front.

Adjourned at 4:15 p.m. Minutes by Elyse Greiner.

### Items for developer to address:

- Make lot 2 a restricted lot; needs another geotechnical report with building permit and sewer pump may be required
- Give City 15' storm drain easement
- Remove fences from plat
- Get a will-serve letter from DWCCC
- Add note to the plat about there not being sewer and water connections at the property
- Follow checklist for preliminary/final applications because the subdivision will go to the Planning Commission as a combined item

### South Weber City Sketch Plan Meeting

### Brimley Subdivision

February 8, 2017

Name (please print)	Phone	Email Address
Barry Barton	801-457-3279	
Tanny Long	801-476-8602	Honge southwelverchy com
Grandon Brinley	8N 309-6092	
WES JOHNSON	801.479. 8846	j'wes 3@msw. com
Brandon Jones	801-476-9767	brandonje jonescivil com
Bayon Wageman	801-791-5765	Blaganne South Weber cityica
Chris I nemen	801-540-7094	1 Tremea @ Southblebercity
Elyse Greiner	801-479-3177	egreiner@southwebercity.com

### TITLE INSURANCE COMMITMENT

**ISSUED BY** 

TITLE INSURANCE AGENCY

2225 Washington Boulevard, Suite 110

Ogden, Utah 84401

PHONE: (801) 479-4699 FAX: (801) 479-7417

**RE:** Grandon Bart Brimley April 13, 2016 File No: 026900

**Attention:** 

Bank of Utah 2605 Washington Boulevard Ogden, UT 84401 Angela Vause

Phone: 801-409-5053 Fax: 801-409-5298

We agree to issue a policy to you according to the terms of this Commitment. When we show the policy amount and your name as the proposed insured in Schedule A, this Commitment becomes effective as of the Commitment Date shown in Schedule A.

If the Requirements shown in the Commitment have not been met within six months after the Commitment Date, our obligation under this Commitment will end. Also, our obligation under this Commitment will end when the policy is issued and that our obligation to you will be under the Policy.

Our obligation under this Commitment is limited by the following: (1) The Provisions in Schedule A. (2) The Requirements in Schedule B-1. (3) The Exceptions in Schedule B-2. (4) The Conditions on the inside cover page.

The Commitment is not valid without SCHEDULE A and Sections 1 and 2 of SCHEDULE B.

Underwritten by:

First American Title Insurance Company

Cout S. Johnson PRESIDENT

ST Printly May SECRETARY

### **CONDITIONS**

#### 1. DEFINITIONS

(a) "Mortgage" means mortgage, deed of trust or other security instrument. (b) "Public Records" means title records that give constructive notice of matters affecting the title according to the state law where the land is located.

### 2. LATER DEFECTS

The Exceptions in Schedule B - Section 2 may be amended to show any defects, liens or encumbrances that appear for the first time in the public records or are created or attached between the Commitment Date and the date on which all of the Requirements (a) and (c) of Schedule B - Section 1 are met. We shall have no liability to you because of this amendment.

### 3. EXISTING DEFECTS

If any defects, liens or encumbrances existing at Commitment Date are not shown in Schedule B, we may amend Schedule B to show them. If we do amend Schedule B to show these defects, liens or encumbrances, we shall be liable to you according to Paragraph 4 below unless you knew of this information and did not tell us about it in writing.

### 4. LIMITATION OF OUR LIABILITY

Our only obligation is to issue to you the Policy referred to in this Commitment, when you have met its Requirements. If we have any liability to you for any loss you incur because of an error in this Commitment, our liability will be limited to your actual loss caused by your relying on this Commitment when you acted in good faith to:

comply with the Requirements shown in Schedule B - Section 1

eliminate with our written consent any Exceptions shown in Schedule B - Section 2.

We shall not be liable for more than the Policy Amount shown in Schedule A of this Commitment and our liability is subject to the terms of the Policy form to be issued to you.

### 5. CLAIMS MUST BE BASED ON THIS COMMITMENT

Any claim, whether or not based on negligence, which you may have against us concerning the title to the land must be based on this Commitment and is subject to its terms.

### TITLE INSURANCE COMMITMENT SCHEDULE A

<u>Escrow/Closing inquiries</u> should be directed to your Escrow Officer: Carrie L. Brough via email cbrough@lincolntitle.net or at (801)479-4699.

1. Commitment Date: April 01, 2016 at 7:30 AM

2. Policy (or Policies) to be issued: POLICY AMOUNT PREMIUM

(a) ALTA STANDARD OWNER'S POLICY

\$0.00

Proposed Insured:

(b) ALTA 2006 LOAN POLICY

\$261,000.00

\$816.00

Proposed Insured: Bank of Utah, its successors and/or assigns

Proposed Borrower: Grandon Bart Brimley

(c) Endorsements: **100**, **116**, **8.1** 

\$55.00

3. The estate or interest in the land described or referred to in this commitment and covered herein is Fee Simple as to Parcel 1 and an Easement Estate as to Parcel 1A and title thereto is at the effective date hereof vested in:

### GRANDON BART BRIMLEY, INDIVIDUALLY

4. The land referred to in the Commitment is described as follows:

Parcel 1: Beginning at a point on the Southwest corner of the Canyon Meadows PUD, said point being 236.32 feet South and 892.97 feet East from the West Quarter corner of Section 28, Township 5 North, Range 1 West, Salt Lake Base and Meridian; (basis of bearing being North 00°36'36") East 2653.32 feet between said West Quarter corner and the Northwest corner of Section 28); and running thence North 84°21'17" West 207.86 feet; thence North 178.34 feet; thence North 23°16'35" West 43.54 feet; thence East 158.40 feet to a point on the Westerly boundary of said Canyon Meadows PUD; thence South along said boundary 84.98 feet; thence South 23°06'57" East along said boundary 167.23 feet to the point of beginning.

#### Parcel 1A:

Together with a right-of-way for ingress and egress as recorded in that certain Quit-Claim Deed recorded as Entry No. 2071120, in Book 3782, at Page 203 in the Official Records of the Davis County Recorder.

Property Address: 600 E South Weber Dr, South Weber, UT 84405

### TITLE INSURANCE COMMITMENT

### SCHEDULE B - SECTION I REQUIREMENTS

The following requirements must be met:

- (a) Pay the agreed amounts for the interest in the land and/or the mortgage or deed of trust to be insured.
- (b) Pay us the premium, fees and charges for the policy. In the event the transaction for which this commitment is furnished cancels, the minimum cancellation fee will be \$100.00.
- (c) Provide us with releases, reconveyances or other instruments, acceptable to us, including payment of any amounts due, removing the encumbrances shown in Schedule B-2 that are objectionable to the proposed insured.
- (d) Provide us with copies of appropriate agreements, trusts, resolutions, certificates, or other evidence needed to identify the parties authorized to execute the documents creating the interest to be insured.
- (e) The documents creating the interest to be insured must be signed, delivered and recorded.
- (f) You must tell us, in writing, the name of anyone not referred to in this Commitment who will receive an interest in, or who will make a loan secured by a deed of trust or mortgage secured by, the land describe in this Commitment.
- (g) After we have received the information requested in these requirements, together with any other information about the transaction, we will have the right to add requirements to this Schedule B-1 or special exceptions to Schedule B-2.
- (h) Approval by the Company's Underwriter of the contents hereof and satisfaction of any conditions or requirements imposed thereby.
- (i) Other:

NOTE: THE OWNERS POLICY OF TITLE INSURANCE COMMITTED TO BE ISSUED WILL CONTAIN DEDUCTIBLE AMOUNTS AND LIABILITY LIMITS RELATIVE TO CERTAIN COVERED RISKS AS FOLLOWS:

**COVERED RISK 16** (Subdivision Law Violations) has a deductible of 1% of the Policy Amount or \$2,500, whichever is lesser, and a Maximum Dollar Limit of Liability of \$10,000.

**COVERED RISK 18** (Building Permits) has a deductible of 1% of the Policy Amount or \$5,000, whichever is lesser, and a Maximum Dollar Limit of Liability of \$25,000.

**COVERED RISK 19** (Zoning) has a deductible of 1% of the Policy Amount or \$5,000, whichever is lesser, and a Maximum Dollar Limit of Liability of \$25,000.

**COVERED RISK 21** (Encroachment of Boundary Walls or Fences) has a deductible of 1% of the Policy Amount or \$2,500, whichever is lesser, and a Maximum Dollar Limit of Liability of \$5,000.

### TITLE INSURANCE COMMITMENT

### SCHEDULE B - SECTION II EXCEPTIONS

Any policy we issue will have the following exceptions unless they are taken care of to our satisfaction.

- 1. The lien of real estate taxes or assessments imposed on the title by a governmental authority that are not shown as existing liens in the records of any taxing authority that levies taxes or assessments on real property or in the public records.
- 2. Any facts, rights, interests, or claims that are not shown in the public records but which could be ascertained by an inspection of the land or by making inquiry of persons in possession of the land.
- 3. Easements, claims of easement or encumbrances that are not shown in the public records.
- 4. Any encroachment, encumbrance, violation, variation or adverse circumstance affecting the title including discrepancies, conflicts in boundary lines, shortage in area, or any other facts that would be disclosed by an accurate and complete land survey of the land, and that are not shown in the public records.
- 5. Unpatented mining claims; reservations or exceptions in patents or in acts authorizing the issuance thereof; water rights, claims, or title to water.
- 6. Any lien, or right to a lien, for services, labor or material theretofore or hereafter furnished, imposed by law and not shown in the public records.
- 7. Defects, liens, encumbrances, adverse claims or other claims, if any created, first appearing in the public records or attaching subsequent to the effective date hereof but prior to the date of the proposed insured acquires of record for value the estate or interest or mortgage thereon covered by this commitment

Exceptions 1-7 will be omitted on extended coverage loan policy

- 8. General taxes for the year 2016 are accruing as a lien but not yet due and payable. 2015 taxes were paid in the amount of \$2,579.81. Serial No. 13-020-0056.
- 9. Said property is located within the boundaries of Weber Basin Water Conservancy District, Mosquito Abatement District, Central Weber Sewer District (546-1235), South Weber City, Davis County, Davis County Library, and Davis School District, and is subject to the charges and assessments levied thereunder.
- 10. Claim, right, title or interest to water or water rights whether or not shown by the Public Records.
- 11. Any and all outstanding oil and gas, mining and mineral rights, etc., together with the right of the proprietor of a vein or lode to extract his ore therefrom should the same be found to penetrate or intersect the premises and the right of ingress and egress for use of said rights.
- 12. Easements and rights of way of record or enforceable in law and equity for any existing roads, streets, alleys, ditches, reservoirs, utilities, canals, pipe lines, power, telephone, sewer, gas or water lines now existing over, under or across subject property.

- 13. An easement granted and conveyed to Uinta Pipe Line Company, its successors or assigns for an easement to lay maintain, operate, repair, inspect, protect, install, remove, and replace a pipeline and telephone or telegraph lines, recorded on April 8, 1929 as Entry No. 45408 & 45411, in Book "I" of Liens and Leases, at Page 23 & 27, records of Davis County, Utah. Location of Easement: (Exact location not disclosed).
- 14. An easement granted and conveyed to Town of Roy, for a right of way to construct, maintain, operate and remove a municipal culinary water supply pipeline with the rights of ingress and egress and for the construction and maintenance thereof, recorded September 21, 1939 as Entry No. 72057 in Book M, Page 186, records of Davis County, Utah.
- 15. Subject to a 25 foot right of way as disclosed in Warranty Deed recorded November 27, 1995 as Entry No. 1213047 in Book 1941, page 501, records of Davis County, Utah.
- 16. A Deed of Trust dated May 14, 2015, executed by GRANDON BART BRIMLEY, INDIVIDUALLY, as Trustor, in the amount of \$262,000.00, in favor of NORTHWEST TITLE CO, as Trustee and BANK OF UTAH as Lender and "MERS" Mortgage Electronic Registration Systems, Inc. as Beneficiary, recorded May 15, 2015 as Entry No. 2867221, in Book 6268, at Page 573, records of Davis County, Utah.

\*\*\*\*\*\*

NOTE: Judgments have been checked against the following names. If any judgments were found they are listed herein:

Grandon Bart Brimley

### Chain of Title

According to Official Records, there have been no documents conveying the land described herein within a period of 24 months prior to the date of commitment, except as follows:

Document Name: Recording Date: Entry No. Book: Page: WARRANTY DEED May 15, 2015 2867220 6268 571

Title inquiries should be directed to Lance Jensen at (801)479-4699.

NOTE: The policy to be issued may contain an arbitration clause. When the Amount of Insurance is less than the certain dollar amount set forth in any applicable arbitration clause, all arbitrable matters shall be arbitrated at the option of either the Company or the Insured as the exclusive remedy of the parties. If you desire to review the terms of the policy, including any arbitration clause that may be included, contact the office that issued this Commitment or Report to obtain a sample of the policy jacket for the policy that is to be issued in connection with your transaction.



### Davis and Weber Counties Canal Company

138 West 1300 North ▲ Sunset, Utah 84015-2918 ▲ Office: (801) 774-6373 ▲ Fax: (801) 774-5424 ▲ davisweber.org

DATE: February 15, 2017

TO: South Weber City

CC: Grady Brimley, Monte Byram

FROM: Rick Smith, P.E.

SUBJECT: Brimley Subdivision – Irrigation Water

We received a request for a letter explaining the irrigation water for the Brimley property located at 600 E. South Weber Drive. Grandon Brimley has the right to use 3 acre feet of water from the Davis and Weber Counties Canal based on water delivery contracts to deliver former Bambrough water (previously owned by Mr. Reynolds). D&W delivers the water to a private pipeline and has no responsibility for the operation and maintenance of said delivery system down to the property.

D&W has been made aware of the plans to divide the lot and proper documentation will need to occur for the water delivery claim to be split between the two lots/owners. As stated above, the pressure irrigation system is private once it leaves our canal facility.

We trust this meets your needs at this time.

### WILL-SERVE LETTER

March 8, 2017

South Weber City 1600 East South Weber Drive South Weber, UT 84405

Re: Brimley Subdivision

The South Weber Irrigation System states that Lot 2 of the subdivision is within the area of the South Weber Irrigation Company and the irrigation company can provide the irrigation water needed.

This letter certifies that the developer does not own any water shares for the land but they have agreed to rent the water needed from the irrigation company. The developer has not yet paid the hook up fee for the irrigation water and will need to pay it before any building permit can be issued. The water is not yet piped to the land and the developer will need to get permission to do so. The preferable route would be from the lateral in front of the property purchased by Lane Reynolds and then to the east boundary and down to the developer's property. The company would like Calvin Kap and Sons to do the work on the lateral and water line because they put the line in the Bowman Old Farm Estates and have the knowledge needed to quickly and safely put in the line. All costs will be the responsibility of the developer.

The South Weber Irrigation Company reserves the right to approve all plans and decisions made to install the water line and lateral.

Sincerely,

Glen Poll President

Louise Cooper, Sec.



1497 West 40 South **Lindon, Utah - 84042** Phone (801) 225-5711 3662 West 2100 South **Salt Lake City, Utah - 84120** Phone (801) 787-9138 1596 W. 2650 S. #108 **Ogden, Utah - 84401** Phone (801) 399-9516

# Geotechnical Study Brimley Subdivision 600 East South Weber Drive South Weber, Utah

Project No. 177001

January 31, 2017

Prepared For:

Mr. Grady Brimley 956 East 800 South Bountiful, UT 84010

Prepared By:

**EARTHTEC ENGINEERING**Ogden Office



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Nos. 3 –4 TEST PIT LOGS

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Nos. 6 CONSOLIDATION-SWELL TEST



Geotechnical Study Brimley Subdivision 600 East South Weber Drive South Weber, Utah

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### 1.0 EXECUTIVE SUMMARY

This entire report presents the results of Earthtec Engineering's completed geotechnical study for the Brimley Subdivision in South Weber, Utah. This executive summary provides a general synopsis of our recommendations and findings. Details of our findings, conclusions, and recommendations are provided within the body of this report.

- The subject property is approximately 1 acre and is proposed to be subdivided and developed with single family residences. The proposed structures will consist of conventionally framed, one to two-story residences with the possibility of basements. We anticipate foundation loads for the proposed structures will not exceed 4,000 pounds per linear foot for bearing wall, 30,000 pounds for column loads, and 100 pounds per square foot for floor slabs. (see Section 3)
- Our field exploration included the excavation of two (2) test pits to depth of 9 to 12 feet below the existing ground surface. Groundwater was encountered at depths of approximately 1½ to 8 feet below the existing ground surface. (see Section 5)
- The native silt soils have a slight potential for collapse (settlement) and a moderate potential for compressibility under increased moisture contents and anticipated load conditions. (see Section 6)
- The subsurface soils encountered generally consisted of fill and topsoil overlying nearsurface soft silt, and dense gravel. All fill encountered appears to be undocumented. Fill and topsoil should be removed beneath the entire building footprints, exterior flatwork, and pavements prior to construction. (see Section 7)
- Conventional strip and spread footings may be used to support the structure, with foundations placed entirely on a minimum 18 inches of properly placed, compacted, and tested structural fill extending to undisturbed native soils. (see Section 10)
- Minimum roadway section consists of 3 inches of asphalt over 8 inches of road-base. Areas
  that are soft or deflect under construction traffic should be removed and replaced with
  granular material or structural fill. (see Section 13)

Based on the results of our field exploration, laboratory testing, and engineering analyses, it is our opinion that the subject site may be suitable for the proposed development, provided the recommendations presented in this report are followed and implemented during design and construction.

Failure to consult with Earthtec Engineering (Earthtec) regarding any changes made during design and/or construction of the project from those discussed herein relieves Earthtec from any liability arising from changed conditions at the site. We also strongly recommend that Earthtec observes the building excavations to verify the adequacy of our recommendations presented



herein, and that Earthtec performs materials testing and special inspections for this project to provide continuity during construction.

### 2.0 INTRODUCTION

The project is located at approximately 600 East South Weber Drive in South Weber, Utah. The general location of the site is shown on Figure No. 1, Vicinity Map and Figure No. 2, Site Plan Showing Location of Test Pits, at the end of this report. The purposes of this study are to:

- Evaluate the subsurface soil conditions at the site.
- Assess the engineering characteristics of the subsurface soils, and
- Provide geotechnical recommendations for general site grading and the design and construction of foundations, concrete floor slabs, miscellaneous concrete flatwork, and asphalt paved residential streets.

The scope of work completed for this study included field reconnaissance, subsurface exploration, field and laboratory soil testing, geotechnical engineering analysis, and the preparation of this report.

### 3.0 PROPOSED CONSTRUCTION

We understand that the proposed project, as described to us by Mr. Grady Brimley, consists of developing the approximately 1-acre existing parcel into two residential lots. The proposed structures will consist of conventionally framed, one to two-story residences with the possibility of basements. We have based our recommendations in this report on the assumption that or anticipated foundation loads for the proposed structures will not exceed 4,000 pounds per linear foot for bearing wall, 30,000 pounds for column loads, and 100 pounds per square foot for floor slabs. If structural loads will be greater Earthtee should be notified so that we may review our recommendations and make modifications, if necessary.

In addition to the construction described above, we anticipate that

- Utilities will be installed to service the proposed buildings,
- Exterior concrete flatwork will be placed in the form of curb, gutter, and sidewalks, and
- Asphalt paved residential streets will be constructed.

### 4.0 GENERAL SITE DESCRIPTION

### 4.1 Site Description

At the time of our subsurface exploration the site was mostly covered with snow and was



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partially a developed lot vegetated with weeds on the proposed north lot, near a pond. Brimley Subdivision is currently developed with a residence on the west portion. The subject site consists of two lots that are located to the east of the developed lot. The south portion of the subject lots currently contains several trees and a garage building, is relatively flat, and is built on approximately 4 to 5 feet of fill. The north portion of the subject lots is currently undeveloped and is approximately 4 to 5 feet lower in elevation than the south lot. There are fences around the subject site with a cattle gate and a fence separating the south lot from the north lot. The ground surface appears to slope less than 15 percent grade, we anticipate up to 4 of cut and fill may be required for site grading. The lot was bounded on the north and east by undeveloped land, on the west by a residence, and on the south by South Weber Drive and vacant land beyond.

### 4.2 Geologic Setting

The subject property is located near the eastern shore of the Great Salt Lake in a valley between the Great Salt Lake Basin and the Wasatch Mountain Range. The valley and Great Salt Lake Basin were formed by extensional tectonics during the Tertiary and Quaternary geologic periods. The valley and Great Salt Lake Basin, and much of western Utah, were previously covered by Lake Bonneville, a large, Pleistocene age, fresh water lake that reached a high-stand surface elevation of approximately 5,170 feet above sea level. The Great Salt Lake is a remnant of Lake Bonneville. The valleys and lake basin to the west of the Wasatch Range have been partially filled with several thousand feet of lake (lacustrine) sediment during Lake Bonneville time, and post-Bonneville (Holocene) deltaic, lacustrine, alluvial, and colluvial deposits. The Wasatch Mountains to the east of the subject property are comprised of the early Proterozoic Farmington Canyon Complex consisting primarily of schist and gneiss. The surficial geology at the location of the subject site has been mapped as "Older stream alluvium, Holocene- Clast-supported, moderately to well-sorted, pebble and cobble gravel, gravelly sand, and silty sand; deposited along inactive flood plains and terraces 3 to 9 meters (10-30 ft) above modern stream level; mapped where fluvial processes are generally no longer active; exposed thickness less than 6 meters (20 ft)." by James Coogan and Jon King (2016)1.

### 5.0 SUBSURFACE EXPLORATION

### 5.1 Soil Exploration

Under the direction of a qualified member of our geotechnical staff, subsurface explorations were conducted at the site on January 12, 2017 by the excavation of two (2) test pits to depth of 9 to 12 feet below the existing ground surface using a a rubber-tire backhoe. The approximate locations of the test pits are shown on Figure No. 2, Site Plan Showing Location of Test Pits.

<sup>&</sup>lt;sup>1</sup> Utah Geological Survey OFR 653: Interim geologic map of the Ogden 30' x 60' quadrangle, Weber, Box Elder, Cache, Davis, Morgan, Rich, and Summit Counties, Utah, and Uinta County, Wyoming by James C. Coogan and Jon K. King 2016.



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Graphical representations and detailed descriptions of the soils encountered are shown on Figure Nos. 3 through 4, *Test Pit Log* at the end of this report. The stratification lines shown on the logs represent the approximate boundary between soil units; the actual transition may be gradual. Due to potential natural variations, inherent in soil deposits, care should be taken in interpolating between and extrapolating beyond exploration points. A key to the symbols and terms on the logs is presented on Figure No. 5, *Legend*.

Disturbed bag samples and relatively undisturbed block samples were collected at various depths in each test pit. The soil samples collected were classified by visual examination in the field following the guidelines of the Unified Soil Classification System (USCS). The samples were transported to our Ogden, Utah laboratory where they will be retained for 30 days following the date of this report and then discarded, unless a written request for additional holding time is received prior to the 30-day limit.

### 6.0 LABORATORY TESTING

Representative soil samples collected during our field exploration were tested in the laboratory to assess pertinent engineering properties and to aid in refining field classifications, if needed. Tests performed included natural moisture content, liquid and plastic limits determinations, mechanical (partial) gradation analyses, and a one-dimensional consolidation test. The table below summarizes the laboratory test results, which are also included on the attached Test Pit Logs at the respective sample depths, on Figure Nos. 3 and 4, and Consolidation-Swell Test on Figure No. 6.

**Table 1: Laboratory Test Results** 

Tubio 11 Education 1 Tool (Courts										
			Natural	Atterb	erg Limits	Grain S	ize Distrib	ution (%)		
Test Pit No.	Depth (ft.)	Natural Moisture (%)	Dry Density (pcf)	Liquid Limit	Plasticity Index	Gravel (+ #4)	Sand	Silt/Clay (- #200)	Soil Type	
1	6	12	-	-	-	-	-		GP-GM	
1	8	8	-	-	•	74	18	8	GP-GM	
2	4	58	-	-	-	5	21	74	ML	
2	6	17	80	47	8	76	6	18	GM	

NP\* = Non-Plastic

As part of the consolidation test procedure, water was added to a sample to assess moisture sensitivity when the sample was loaded to an equivalent pressure of approximately 1,000 psf. The native soils have a negligible to slight potential for collapse (settlement) and a moderate potential for compressibility under increased moisture contents and anticipated load conditions.



### 7.0 SUBSURFACE CONDITIONS

### 7.1 Soil Types

On the surface of the site, we encountered fill and topsoil which is estimated to extend about 3 to 4 feet in depth at the test pit locations. Below the fill and topsoil we encountered layers of Silt (ML), Silty Gravel (GM), and Poorly Graded Gravel with silt and sand (GP-GM) extending to depth of 9 to 12 feet below the existing ground surface. Graphical representations and detailed descriptions of the soils encountered are shown on Figure Nos. 3 and 4, *Test Pit Log* at the end of this report. Based on our experience and observations during field exploration, the silt soils visually were soft in consistency and the gravel soils visually had a relative density of dense.

Fill material composition and contacts are difficult to determine from boring sampling. Variation in fill depths may occur at the site.

### 7.2 **Groundwater Conditions**

Groundwater was encountered at depths of approximately 1½ to 8 feet below the existing ground surface. Note that groundwater levels will fluctuate in response to the season, precipitation, snow melt, irrigation, and other on and off-site influences. Quantifying these fluctuations would require long term monitoring, which is beyond the scope of this study. The contractor should be prepared to dewater excavations as needed.

### 8.0 SITE GRADING

### 8.1 General Site Grading

All surface vegetation and unsuitable soils (such as topsoil, organic soils, undocumented fill, soft, loose, or disturbed native soils, and any other inapt materials) should be removed from below foundations, floor slabs, exterior concrete flatwork, and pavement areas. We encountered fill and topsoil on the surface of the site. The fill encountered on the site is considered undocumented (untested). The fill and topsoil (including soil with roots larger than about ¼ inch in diameter) should be completely removed, even if found to extend deeper, along with any other unsuitable soils that may be encountered. Over-excavations below footings and slabs also may be needed, as discussed in Section 10.0.

Fill placed over large areas, even if only a few feet in depth, can cause consolidation in the underlying native soils resulting in settlement of the fill. Because there is more than 4 feet of relief from north to south, we anticipate that more than 3 feet of fill may be placed in some areas of the site during grading. If more than 3 feet of grading fill will be placed above the existing surface (to raise site grades), Earthtee should be notified so that we may provide additional recommendations, if required. Such recommendations will likely include placing the fill several weeks (or possibly more) prior to construction to allow settlement to occur.



### 8.2 <u>Temporary Excavations</u>

Temporary excavations that are less than 4 feet in depth and above groundwater should have side slopes no steeper than ½H:1V (Horizontal:Vertical). Temporary excavations where water is encountered in the upper 4 feet or that extend deeper than 4 feet below site grades should be sloped or braced in accordance with OSHA² requirements for Type C soils.

### 8.3 Fill Material Composition

The existing fill native soils within the upper 4 feet appear to be suitable for use as placed and compacted structural fill provided the material meets the requirements for structural fill and any existing debris and particles larger than 6 inches in diameter are removed prior to use. Excavated soils, including silt, may be stockpiled for use as fill in landscape areas.

Structural fill is defined as fill material that will ultimately be subjected to any kind of structural loading, such as those imposed by footings, floor slabs, pavements, etc. We recommend that a professional engineer or geologist verify that the structural fill to be used on this project meets the requirements, stated below. We recommend that structural fill consist of imported sandy/gravelly soils meeting the following requirements in the table below:

<u>Table 2: Structural Fill Recommendations</u>

Sieve Size/Other	Percent Passing (by weight)
4 inches	100
3/4 inches	70 – 100
No. 4	40 – 80
No. 40	15 – 50
No. 200	0-20
Liquid Limit	35 maximum
Plasticity Index	15 maximum

In some situations, particles larger than 4 inches and/or more than 30 percent coarse gravel may be acceptable, but would likely make compaction more difficult and/or significantly reduce the possibility of successful compaction testing. Consequently, stricter quality control measures than normally used may be required, such as using thinner lifts and increased or full time observation of fill placement.

We recommend that utility trenches below any structural load be backfilled using structural fill. Note that most local governments and utility companies require Type A-1-a or A-1-b (AASHTO classification) soils (which overall is stricter than our recommendations for structural fill) be used as backfill above utilities in certain areas. In other areas or situations, utility trenches may be backfilled with the native soil, but the contractor should be aware that native silt soils (as observed in the explorations) may be time consuming to compact due to potential difficulties in

<sup>&</sup>lt;sup>2</sup> OSHA Health And Safety Standards, Final Rule, CFR 29, part 1926.



controlling the moisture content needed to obtain optimum compaction. All backfill soil should have a maximum particle size of 4 inches, a maximum Liquid Limit of 35 and a maximum Plasticity Index of 15.

If required (i.e. fill in submerged areas), we recommend that free draining granular material (clean sand and/or gravel) meet the following requirements in the table below:

**Table 3: Free-Draining Fill Recommendations** 

Sieve Size/Other	Percent Passing (by weight)
3 inches	100
No. 10	0 – 25
No. 40	0 – 15
No. 200	0 – 5
Plasticity Index	Non-plastic

Three inch minus washed rock (sometimes called river rock or drain rock) and pea gravel materials usually meet these requirements and may be used as free draining fill. If free draining fill will be placed adjacent to soil containing a significant amount of sand or silt/clay, precautions should be taken to prevent the migration of fine soil into the free draining fill. Such precautions should include either placing a filter fabric between the free draining fill and the adjacent soil material, or using a well-graded, clean filtering material approved by the geotechnical engineer.

### 8.4 <u>Fill Placement and Compaction</u>

Fill should be placed on level, horizontal surfaces. Where fill will be placed on existing slopes steeper than 5H:1V, the existing ground should be benched prior to placing fill. We recommend bench heights of 1 to 4 feet, with the lowest bench being a minimum 3 feet below adjacent grade and at least 10 feet wide.

The thickness of each lift should be appropriate for the compaction equipment that is used. We recommend a maximum lift thickness prior to compaction of 4 inches for hand operated equipment, 6 inches for most "trench compactors" and 8 inches for larger rollers, unless it can be demonstrated by in-place density tests that the required compaction can be obtained throughout a thicker lift. The full thickness of each lift of structural fill placed should be compacted to at least the following percentages of the maximum dry density, as determined by ASTM D-1557:

In landscape and other areas not below structurally loaded areas:

Less than 5 feet of fill below structurally loaded areas:

Greater than 5 feet of fill below structurally loaded areas:

Generally, placing and compacting fill at moisture contents within  $\pm 2$  percent of the optimum moisture content, as determined by ASTM D-1557, will facilitate compaction. Typically, the further the moisture content deviates from optimum the more difficult it will be to achieve the required compaction.



Fill should be tested frequently during placement and we recommend early testing to demonstrate that placement and compaction methods are achieving the required compaction. The contractor is responsible to ensure that fill materials and compaction efforts are consistent so that tested areas are representative of the entire fill.

### 8.5 Stabilization Recommendations

Near surface layers of silt soils may rut and pump during grading and construction. The likelihood of rutting and/or pumping, and the depth of disturbance, is proportional to the moisture content in the soil, the load applied to the ground surface, and the frequency of the load. Consequently, rutting and pumping can be minimized by avoiding concentrated traffic, minimizing the load applied to the ground surface by using lighter equipment, partially loaded equipment, tracked equipment, by working in dry times of the year, and/or by providing a working surface for equipment. However, because of the relatively shallow depth of groundwater, it is likely that rutting and pumping may not be avoidable.

During grading the soil in any obvious soft spots should be removed and replaced with granular material. If rutting or pumping occurs traffic should be stopped in the area of concern. The soil in rutted areas should be removed and replaced with granular material. In areas where pumping occurs the soil should either be allowed to sit until pore pressures dissipate (several hours to several days) and the soil firms up, or be removed and replaced with granular material. Typically, we recommend removal to a minimum depth of 24 inches.

For granular material, we recommend using angular well-graded gravel, such as pit run, or crushed rock with a maximum particle size of four inches. We suggest that the initial lift be approximately 12 inches thick and be compacted with a static roller-type compactor. A finer granular material such as sand, gravelly sand, sandy gravel or road base may also be used. Materials which are more angular and coarse may require thinner lifts in order to achieve compaction. We recommend that the fines content (percent passing the No. 200 sieve) be less than 15%, the liquid limit be less than 35, and the plasticity index be less than 15.

Using a geosynthetic fabric, such as Mirafi 600X or equivalent, may also reduce the amount of material required and avoid mixing of the granular material and the subgrade. If a fabric is used, following removal of disturbed soils and water, the fabric should be placed over the bottom and up the sides of the excavation a minimum of 24 inches. The fabric should be placed in accordance with the manufacturer's recommendations, including proper overlaps. The granular material should then be placed over the fabric in compacted lifts. Again, we suggest that the initial lift be approximately 12 inches thick and be compacted with a static roller-type compactor.



### 9.0 SEISMIC AND GEOLOGIC CONSIDERATIONS

### 9.1 <u>Seismic Design</u>

The residential structures should be designed in accordance with the 2015 International Residential Code (IRC). The IRC designates this area as a seismic design class  $D_2$ .

The site is located at approximately 41.140 degrees latitude and -111.966 degrees longitude from the approximate center of the site. The IRC site value for this property is 0.929g. The design spectral response acceleration parameters are given below.

Table 4: Design Acceleration for Short Period

Ss	Fa	Site Value (S <sub>DS</sub> )
		2/3 Ss*Fa
1.39g	1.00	0.929g

Ss = Mapped spectral acceleration for short periods
Fa = Site coefficient from Table 1613.3.3(1)

S<sub>DS</sub> = 3/3 S<sub>MS</sub>= 3/3 (F<sub>a</sub>·S<sub>s</sub>) = 5% damped design spectral response acceleration for short periods

### 9.2 Faulting

The subject property is located within the Intermountain Seismic Belt where the potential for active faulting and related earthquakes is present. Based upon published geologic maps<sup>3</sup>, no active faults traverse through or immediately adjacent to the site and the site is not located within local fault study zones. The nearest mapped fault trace is the Wasatch Fault located about ½ miles southwest of the site.

### 9.3 <u>Liquefaction Potential</u>

According to current liquefaction maps<sup>4</sup> for Davis County, the site is located within an area designated as "Low" in liquefaction potential. Liquefaction can occur when saturated subsurface soils below groundwater lose their inter-granular strength due to an increase in soil pore water pressures during a dynamic event such as an earthquake

Loose, saturated sands are most susceptible to liquefaction, but some loose, saturated gravels and relatively sensitive silt to low-plasticity silty clay soils can also liquefy during a seismic event. Subsurface soils were composed of silt and gravel soils. The soils encountered at this project do not appear liquefiable, but the liquefaction susceptibility of underlying soils (deeper than our explorations) is not known and would require deeper explorations to quantify.

<sup>&</sup>lt;sup>4</sup> Utah Geological Survey, Liquefaction-Potential Map for a Part of Davis County, Utah, Public Information Series 28, August 1994



<sup>&</sup>lt;sup>3</sup> Utah Geological Survey OFR 653: Interim geologic map of the Ogden 30' x 60' quadrangle, Weber, Box Elder, Cache, Davis, Morgan, Rich, and Summit Counties, Utah, and Uinta County, Wyoming by James C. Coogan and Jon K. King 2016.

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#### **FOUNDATIONS** 10.0

#### 10.1 General

The foundation recommendations presented in this report are based on the soil conditions encountered during our field exploration, the results of laboratory testing of samples of the native soils, the site grading recommendations presented in this report, and the foundation loading conditions presented in Section 3.0, Proposed Construction, of this report. If loading conditions and assumptions related to foundations are significantly different. Earthtee should be notified so that we can re-evaluate our design parameters and estimates (higher loads may cause more settlement), and to provide additional recommendations if necessary.

Conventional strip and spread footings may be used to support the proposed structures after appropriate removals as outlined in Section 8.1. Foundations should not be installed on topsoil, undocumented fill, debris, combination soils, organic soils, frozen soil, or in ponded water. If foundation soils become disturbed during construction, they should be removed or compacted.

#### 10.2 Strip/Spread Footings

We recommend that conventional strip and spread foundations be constructed entirely on a minimum 18 inches of properly placed, compacted, and tested structural fill extending to undisturbed native soils For foundation design we recommend the following:

- Footings founded on native soils may be designed using a maximum allowable bearing capacity of 1,500 pounds per square foot. Footings founded on a minimum 24 inches of structural fill may be designed using a maximum allowable bearing capacity of 2,000 pounds per square foot. The values for vertical foundation pressure can be increased by one-third for wind and seismic conditions per Section 1806.1 when used with the Alternative Basic Load Combinations found in Section 1605.3.2 of the 2015 International Building Code.
- Continuous and spot footings should be uniformly loaded and should have a minimum width of 20 and 30 inches, respectively.
- Exterior footings should be placed below frost depth which is determined by local building codes. In general, 30 inches of cover is adequate for most sites; however local code should be verified by the end design professional. Interior footings, not subject to frost (heated structures), should extend at least 18 inches below the lowest adjacent grade.
- Foundation walls and footings should be properly reinforced to resist all vertical and lateral loads and differential settlement.
- The bottom of footing excavations should be compacted with at least 4 passes of an approved non-vibratory roller prior to erection of forms or placement of structural fill to densify soils that may have been loosened during excavation and to identify soft spots. If soft areas are encountered, they should be stabilized as recommended in Section 8.5.
- Footing excavations should be observed by the geotechnical engineer prior to beginning



footing construction to evaluate whether suitable bearing soils have been exposed and whether excavation bottoms are free of loose or disturbed soils.

- Because of shallow groundwater conditions encountered at the site, we anticipate that 18 inches of structural fill will be required below the proposed structure to provide a firm surface upon which to construct the proposed structure. In lieu of traditional structural fill, clean 1- to 2-inch clean gravel may be used in conjunction with a stabilization fabric, such as Mirafi 600X or equivalent, which should be placed between the native soils and the clean gravel (additional recommendations for placing clean gravel and stabilization fabric are given in Section 8.5 of this report).
- Due to shallow groundwater encountered at the site, lowest floor slab depths should be limited to existing site grades on the north lot. This is intended to provide a minimum of 3 feet of separation between the observed groundwater condition and the bottom of the floor slab.
- Structural fill used below foundations should extend laterally a minimum of 6 inches for every 12 vertical inches of structural fill placed. For example, if 18 inches of structural fill is required to bring the excavation to footing grade, the structural fill should extend laterally a minimum of 9 inches beyond the edge of the footings on both sides.

### 10.3 Estimated Settlements

If the proposed foundations are properly designed and constructed using the parameters provided above, we estimate that total settlements should not exceed one inch and differential settlements should be one-half of the total settlement over a 25-foot length of continuous foundation, for non-earthquake conditions. Additional settlement could occur during a seismic event due to ground shaking, if more than 3 feet of grading fill is placed above the existing ground surface, if loading conditions are greater than anticipated in Section 3, and/or if foundation soils are allowed to become wetted.

### 10.4 Lateral Earth Pressures

Below grade walls act as soil retaining structures and should be designed to resist pressures induced by the backfill soils. The lateral pressures imposed on a retaining structure are dependent on the rigidity of the structure and its ability to resist rotation. Most retaining walls that can rotate or move slightly will develop an active lateral earth pressure condition. Structures that are not allowed to rotate or move laterally, such as subgrade basement walls, will develop an at-rest lateral earth pressure condition. Lateral pressures applied to structures may be computed by multiplying the vertical depth of backfill material by the appropriate equivalent fluid density. Any surcharge loads in excess of the soil weight applied to the backfill should be multiplied by the appropriate lateral pressure coefficient and added to the soil pressure. For static conditions the resultant forces are applied at about one-third the wall height (measured from bottom of wall). For seismic conditions, the resultant forces are applied at about two-third times the height of the wall both measured from the bottom of the wall. The lateral



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pressures presented in the table below are based on drained, horizontally placed native soils as backfill material using a 32° friction angle and a dry unit weight of 120 pcf.

Table 5: Lateral Earth Pressures (Static and Dynamic)

Condition	Case	Lateral Pressure Coefficient	Equivalent Fluid Pressure (pcf)		
Active	Static	0.31	37		
Votive	Seismic	0.54	65		
At-Rest	Static	0.47	56		
Al-Nesi	Seismic	0.74	89		
Passive	Static	3.25	391		
r dassive	Seismic	4.26	511		

<sup>\*</sup>Seismic values combine the static and dynamic values

These pressure values do not include any surcharge, and are based on a relatively level ground surface at the top of the wall and drained conditions behind the wall. It is important that water is not allowed to build up (hydrostatic pressures) behind retaining structures. Retaining walls should incorporate drainage behind the walls as appropriate, and surface water should be directed away from the top and bottom of the walls.

Lateral loads are typically resisted by friction between the underlying soil and footing bottoms. Resistance to sliding may incorporate the friction acting along the base of foundations, which may be computed using a coefficient of friction of soils against concrete of 0.55 for clean, angular gravel or structural fill meeting the recommendations presented herein. Concrete or masonry walls shall be selected and constructed in accordance to the provision of Section R404 of the 2015 International Residential Code or sections referenced therein. Retaining wall lateral resistance design should further reference Section R404.4 for reference of Safety Factors.

The pressure and coefficient values presented above are ultimate; therefore, an appropriate factor of safety may need to be applied to these values for design purposes. The appropriate factor of safety will depend on the design condition and should be determined by the project structural engineer.

### 11.0 FLOOR SLABS AND FLATWORK

Due to shallow groundwater encountered at the site, lowest floor slab depths should be limited to existing site grades in the north lot and 5 feet below the existing site grades for the south lot. This is intended to provide a minimum of 3 feet of separation between the observed groundwater condition and the bottom of the floor slab.

Concrete floor slabs and exterior flatwork may be supported on native soils after appropriate removals and grading as outlined in Section 8.1 are completed. We recommend placing a minimum 4 inches of free-draining fill material (see Section 8.3) beneath floor slabs to facilitate construction, act as a capillary break, and aid in distributing floor loads. For exterior flatwork,



we recommend placing a minimum 4 inches of road-base material. Prior to placing the free-draining fill or road-base materials, the native sub-grade should be proof-rolled to identify soft spots, which should be stabilized as discussed above in Section 8.5.

For slab design, we recommend using a modulus of sub-grade reaction of 120 pounds per cubic inch. The thickness of slabs supported directly on the ground shall not be less than 3½ inches. A 6-mil polyethylene vapor retarder with joints lapped not less than 6 inches shall be placed between the ground surface and the concrete, as per Section R506 of the 2015 International Residential Code.

To help control normal shrinkage and stress cracking, we recommend that floor slabs have adequate reinforcement for the anticipated floor loads with the reinforcement continuous through interior floor joints, frequent crack control joints, and non-rigid attachment of the slabs to foundation and bearing walls. Special precautions should be taken during placement and curing of all concrete slabs and flatwork. Excessive slump (high water-cement ratios) of the concrete and/or improper finishing and curing procedures used during hot or cold weather conditions may lead to excessive shrinkage, cracking, spalling, or curling of slabs. We recommend all concrete placement and curing operations be performed in accordance with American Concrete Institute (ACI) codes and practices.

### 12.0 DRAINAGE

### 12.1 <u>Surface Drainage</u>

As part of good construction practice, precautions should be taken during and after construction to reduce the potential for water to collect near foundation walls. Accordingly, we recommend the following:

- The contractor should take precautions to prevent significant wetting of the soil at the base of the excavation. Such precautions may include: grading to prevent runoff from entering the excavation, excavating during normally dry times of the year, covering the base of the excavation if significant rain or snow is forecast, backfill at the earliest possible date, frame floors and/or the roof at the earliest possible date, other precautions that might become evident during construction.
- Adequate compaction of foundation backfill should be provided i.e. a minimum of 90% of ASTM D-1557. Water consolidation methods should not be used.
- The ground surface should be graded to drain away from the building in all directions. We recommend a minimum fall of 6 inches in the first 10 feet.
- Roof runoff should be collected in rain gutters with down spouts designed to discharge well
  outside of the backfill limits, or at least 10 feet from foundations, whichever is greater.
- Sprinkler nozzles should be aimed away, and all sprinkler components kept at least 2 feet,



Project No.: 177001

from foundation walls. Also, sprinklers should not be placed at the top or on the face of slopes. Sprinkler systems should be designed with proper drainage and well maintained. Over-watering should be avoided.

Any additional precautions which may become evident during construction.

#### 12.2 Subsurface Drainage

Groundwater or indicators of past groundwater levels were encountered/observed at depths of 11/2 to 8 feet below the existing ground surface. Due to the presence of shallow groundwater throughout property, basements for residences may be difficult to construct. The depth of basements will depend greatly on site grading and drainage. Based on current site conditions, basements may be constructed no deeper than 5 feet below existing site grades for the south lot and existing site grades for the north lot. Basement depths can be increased if a land drain system is constructed for the subdivision. The depth of the land drain will then control the allowable depth of the basements. Additionally, we recommend that a perimeter foundation drain be utilized for each structure. The information below should be used during the design and installation of the perimeter foundation drain:

Section R405.1 of the 2015 International Residential Code states, "Drains shall be provided around all concrete and masonry foundations that retain earth and enclose habitable or usable spaces located below grade." Section R310.2.3.2 of the 2015 International Residential Code states, "Window wells shall be designed for proper drainage by connecting to the building's foundation drainage system." An exception is allowed when the foundation is installed on well drained ground consisting of Group 1 soils, which include those defined by the Unified Soil Classification System as GW, GP, SW, SP, GM, and SM, The soils observed in the explorations at the depth of foundation consisted primarily of silt (ML) which is not a Group 1 soil. The recommendations presented below should be followed during design and construction of the foundation drains:

- A perforated 4-inch minimum diameter pipe should be enveloped in at least 12 inches of free-draining gravel and placed adjacent to the perimeter footings. The perforations should be oriented such that they are not located on the bottom side of the pipe, as much as possible. The free-draining gravel should consist of primarily \(^3\)4- to 2-inch size gravel having less than 5 percent passing the No. 4 sieve, and should be wrapped with a separation fabric such as Mirafi 140N or equivalent.
- The highest point of the perforated pipe bottom should be equal to the bottom elevation of the footings. The pipe should be uniformly graded to drain to an appropriate outlet (storm drain, land drain, other gravity outlet, etc.) or to one or more sumps where water can be removed by pumping.
- A perforated 4-inch minimum diameter pipe should be installed in all window wells and connected to the foundation drain.



- To facilitate drainage beneath basement floor slabs we recommend that the minimum thickness of free-draining fill beneath the slabs be increased to at least 10 inches (approximately equal to the bottom of footing elevations). A separation fabric such as Mirafi 140N or equivalent should be placed beneath the free-draining gravel. Connections should be made to allow any water beneath the slabs to reach the perimeter foundation drain.
- The drain system should be periodically inspected and clean-outs should be installed for the foundation drain to allow occasional cleaning/purging, as needed. Proper drain operation depends on proper construction and maintenance.

### 13.0 PAVEMENT RECOMMENDATIONS

We understand that asphalt paved residential streets will be constructed as part of the development. The native soils encountered beneath the fill and topsoil during our field exploration were predominantly composed of silts. We estimate that a California Bearing Ratio (CBR) value of 3 is appropriate for these soils. Also, the near-surface native clay/silt soils are potentially collapsible, and over-excavation may be needed to minimize the potential settlement of pavements. If the fill material and topsoil is left beneath concrete flatwork and pavement areas, increased maintenance costs over time should be anticipated.

We anticipate that the traffic volume will be less than 100 vehicles a day or less for the residential streets, consisting of mostly cars and pickup trucks, with a daily delivery truck and a weekly garbage truck. Based on these traffic parameters, the estimated CBR given above, and the procedures and typical design inputs outlined in the UDOT Pavement Design Manual (1998), we recommend the minimum asphalt pavement section presented below.

Table 6: Pavement Section Recommendations

Compacted	Compacted
Roadbase	Subbase
Thickness (in)	Thickness (in)
6	6*
8*	0
	Roadbase Thickness (in) 6

<sup>\*</sup> Stabilization may be required

If the pavement will be required to support construction traffic, more than an occasional semi-tractor or fire truck, or more traffic than listed above, our office should be notified so that we can re-evaluate the pavement section recommendations. The following also apply:

- The subgrade should be prepared by proof rolling to a firm, non-yielding surface, with any identified soft areas stabilized as discussed above in Section 8.5.
- Site grading fills below the pavements should meet structural fill composition and placement recommendations per Sections 8.3 and 8.4 herein.
- Asphaltic concrete, aggregate base and sub-base material composition should meet local, APWA or UDOT requirements.



Project No.: 177001

- Aggregate base and sub-base is compacted to local, APWA, or UDOT requirements, or to at least 95 percent of maximum dry density (ASTM D 1557).
- Asphaltic concrete is compacted to local or UDOT requirements, or to at least 96 percent of the laboratory Marshall density (ASTM D 6927).

#### 14.0 **GENERAL CONDITIONS**

The exploratory data presented in this report was collected to provide geotechnical design recommendations for this project. The explorations may not be indicative of subsurface conditions outside the study area or between points explored and thus have a limited value in depicting subsurface conditions for contractor bidding. Variations from the conditions portraved in the explorations may occur and which may be sufficient to require modifications in the design. If during construction, conditions are different than presented in this report, Earthtee should be advised immediately so that the appropriate modifications can be made.

The findings and recommendations presented in this geotechnical report were prepared in accordance with generally accepted geotechnical engineering principles and practice in this area of Utah at this time. No warranty or representation is intended in our proposals, contracts, letters, or reports.

This geotechnical report is based on relatively limited subsurface explorations and laboratory testing. Subsurface conditions may differ in some locations of the site from those described herein, which may require additional analyses and possibly modified recommendations. Thus we strongly recommend consulting with Earthtec regarding any changes made during design and construction of the project from those discussed herein. Failure to consult with Earthtec regarding any such changes relieves Earthtec from any liability arising from changed conditions at the site.

To maintain continuity, Earthtec should also perform materials testing and special inspections for this project. The recommendations presented herein are based on the assumption that an adequate program of tests and observations will be followed during construction to verify compliance with our recommendations. We also assume that we will review the project plans and specifications to verify that our conclusions and recommendations are incorporated and remain appropriate (based on the actual design). Earthtec should be retained to review the final design plans and specifications so comments can be made regarding interpretation and implementation of our geotechnical recommendations in the design and specifications. Earthtec also should be retained to provide observation and testing services during grading, excavation, foundation construction, and other earth-related construction phases of the project.



Page 17

We appreciate the opportunity of providing our services on this project. If we can answer questions or be of further service, please contact Earthtec at your convenience.

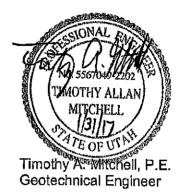
Respectfully;

**EARTHTEC ENGINEERING** 

Frank Namdar, P.G., E.I.T.

Frank F.

Project Engineer

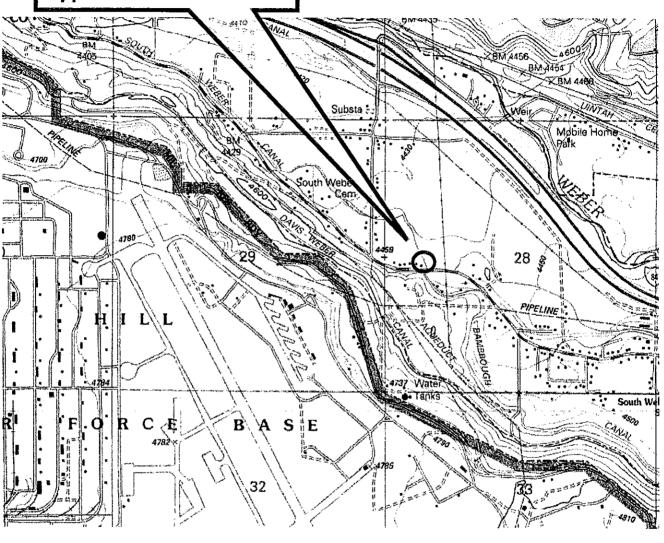




### **VICINITY MAP**

### BRIMLEY SUBDIVISION 600 EAST SOUTH WEBER DRIVE SOUTH WEBER, UTAH

**Approximate Site Location** 



(cida.usgs.gov)

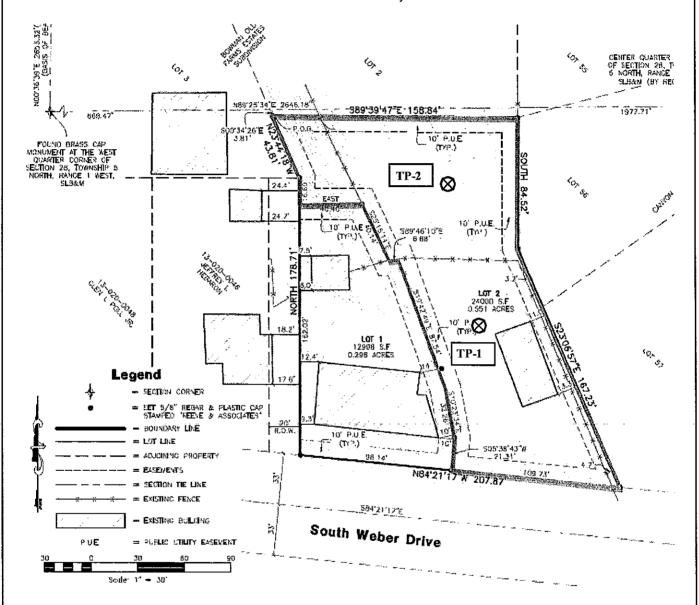


**PROJECT NO.: 177001** 



# AERIAL PHOTOGRAPHS SHOWING LOCATION OF TEST PITS

BRIMLEY SUBDIVISION 600 EAST SOUTH WEBER DRIVE SOUTH WEBER, UTAH



Approximate Boundary of Site

Approximate Location of Test Pits

(Site Plan provided by Client)



Not to Scale

**PROJECT NO.: 177001** 



# **TEST PIT LOG**

**NO.: TP-1** 

PROJECT:

**Brimley Subdivision** 

**PROJECT NO.: 177001** 

CLIENT:

**Grady Brimley** 

DATE:

01/12/17

LOCATION:

See Figure 2

**ELEVATION:** Not Determined

OPERATOR:

C.E. Butters Construction

LOGGED BY: F. Namdar

**EQUIPMENT:** Rubber-tire Backhoe

	-		WATER; INITIAL ♥: 8 ft.	AT C	OMP	LETIC						
D	ے اد	S		es			TES		SULT			
Depth (Ft.) 0	Graphic Log	nscs	Description	Samples	Water Cont. (%)	Dry Dens. (pcf)	LL	PI	Gravel (%)	Sand (%)	Fines (%)	Other Tests
	<u> </u>	4	TOPSOIL, lean clay with gravel, wet, brown, organics			\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \						
1		<b></b>	FILL, Poorly Graded Gravel with silt and sand, wet, brown, some cobbles									
2									<u> </u>			
3												
4	41 4	7	TOPSOIL, silt with gravel, wet, brown, organics	1					1			
5	0 0		Poorly Graded GRAVEL with silt and sand, dense (estimated), wet, brown, cobbles and some boulders	X								!
6	0 0 Q											
7	000		•	X	12			-				
. 8	ີ ໃ	GP-GM	<u>Z</u>		8				74	18	8	
9	0 0 0 0 0 0											
. 10		, ,		X								
11	0.0.0	6										
. 12	الم	<u> </u>	MAXIMUM DEPTH EXPLORED APPROXIMATELY 12 FEI	ET								
13												
. 14												
15												
Not	tes: C	I Froundw Fround st	ater encountered at approximately 8 feet below existing irface.	Te	C =	y Californi Consolid Resistivi	lation	aring	Ratio	<u> </u>	<u> </u>	

DS = Direct Shear

SS = Soluble Sulfates

UC = Unconfined Compressive Strength

**PROJECT NO.: 177001** 

LOG OF TESTPIT 177001.GPJ EARTHTEC.GDT 1/31/17



# **TEST PIT LOG**

**NO.: TP-2** 

PROJECT:

**Brimley Subdivision** 

CLIENT:

**Grady Brimley** 

LOCATION:

See Figure 2

OPERATOR:

**EQUIPMENT:** Rubber-tire Backhoe

C.E. Butters Construction

**DEPTH TO WATER; INITIAL**  $\Sigma$ : 1.5 ft.

**PROJECT NO.: 177001** 

DATE:

01/12/17

**ELEVATION:** Not Determined

LOGGED BY: F. Namdar

AT COMPLETION ▼:

	1		1							SULT	e e		•••
Depth (Ft.) 0	Graphic Log	nscs		Description	Samples	Water Cont, (%)	Dry Dens, (pcf)	LL		Gravel (%)		Fines (%)	Other Tests
. 1	77 77 77 77 77 77 77 77 77 77 77 77		TOPSOIL, silt with sand  V  SILT with sand, soft (es	d, wet, brown, organics									
4		ML				58				5	21	74	
5		W.E											
7			Silty GRAVEL, dense (e	estimated), wet, brown, some cobbles		17	80	47	8	76	6	18	С
8		GM			X								
9			MAXIMUM DEPTH EXI	PLORED APPROXIMATELY 9 FEET	_								
10				LONED AND ROCKINATED STEET									
11			; 										
12													
13													
14 15													
	tes: (	Groundw ground s	ater encountered at apprurface.	oximately 1½ feet below existing	Te		Californi Consolic Resistivi Direct SI Soluble	lation ty 1ear Sulfat	es		Streng	th	
PRO	ОЈЕС	CT NO.	: 177001	ec Engine				FIG	URI	E NO.	: 4		



## **LEGEND**

PROJECT:

**Brimley Subdivision** 

**CLIENT:** 

**Grady Brimley** 

DATE:

01/12/17

LOGGED BY: F. Namdar

### **UNIFIED SOIL CLASSIFICATION SYSTEM**

MAJOR SOIL DIVISIONS
----------------------

### USCS

SYMBOL TYPICAL SOIL DESCRIPTIONS

MAZAGY	OK SOIL DIVIS	DE TITICAL SOIL DESCRIPTIONS			
	GRAVELS	CLEAN GRAVELS		GW	Well Graded Gravel, May Contain Sand, Very Little Fines
	(More than 50% of coarse fraction	(Less than 5% fines)	) 0 V	GP	Poorly Graded Gravel, May Contain Sand, Very Little Fines
COARSE GRAINED	retained on No. 4 Sieve)	GRAVELS WITH FINES		GM	Silty Gravel, May Contain Sand
SOILS		(More than 12% fines)		GC	Clayey Gravel, May Contain Sand
(More than 50% retaining on No.	SANDS	CLEAN SANDS (Less than 5%		sw	Well Graded Sand, May Contain Gravel, Very Little Fines
200 Sieve)	(50% or more of	fines)		SP	Poorly Graded Sand, May Contain Gravel, Very Little Fines
	coarse fraction passes No. 4	SANDS WITH FINES		SM	Silty Sand, May Contain Gravel
	Sieve)	(More than 12% fines)		SC	Clayey Sand, May Contain Gravel
	SILTS AN	ID CLAYS		CL	Lean Clay, Inorganic, May Contain Gravel and/or Sand
FINE GRAINED	(Liquid Limi	(Liquid Limit less than 50)			Silt, Inorganic, May Contain Gravel and/or Sand
SOILS			OL	Organic Silt or Clay, May Contain Gravel and/or Sand	
(More than 50% passing No. 200	SILTS AN	ID CLAYS		СН	Fat Clay, Inorganic, May Contain Gravel and/or Sand
Sieve)	(Liquid Limit (	(Liquid Limit Greater than 50)			Elastic Silt, Inorganic, May Contain Gravel and/or Sand
			ОН	Organic Clay or Silt, May Contain Gravel and/or Sand	
HIGI	HIGHLY ORGANIC SOILS				Peat, Primarily Organic Matter

### **SAMPLER DESCRIPTIONS**



SPLIT SPOON SAMPLER (1 3/8 inch inside diameter)



MODIFIED CALIFORNIA SAMPLER



(2 inch outside diameter)



SHELBY TUBE (3 inch outside diameter)

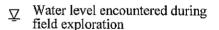


BLOCK SAMPLE



**BAG/BULK SAMPLE** 

### **WATER SYMBOLS**



Water level encountered at completion of field exploration

**NOTES:** 1. The logs are subject to the limitations, conclusions, and recommendations in this report.

2. Results of tests conducted on samples recovered are reported on the logs and any applicable graphs.

3. Strata lines on the logs represent approximate boundaries only. Actual transitions may be gradual.

4. In general, USCS symbols shown on the logs are based on visual methods only: actual designations (based on laboratory tests) may vary.

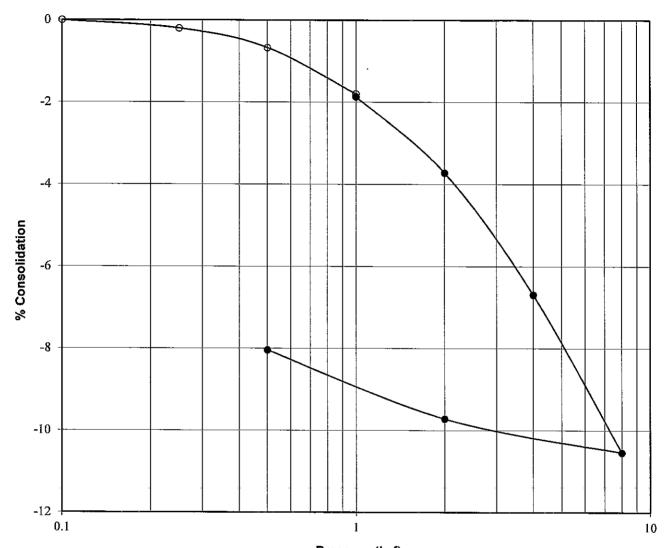
**PROJECT NO.: 177001** 



FIGURE NO.: 5

EGEND 177001.GPJ EARTHTEC.GDT 1/25/17





### Pressure (ksf)

Project: **Brimley Subdivision** Location: TP-2

Sample Depth, ft: 6 Description: Block

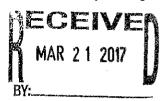
Soil Type: Silty GRAVEL (GM) Natural Moisture, %: 17

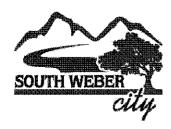
Dry Density, pcf: 80 Liquid Limit: 47

Plasticity Index: 8 Water Added at: 1 ksf Percent Collapse: 0.1



### All Plans Must Reflect The Following Date & South Weber City Stamp:





\*If a utility can not be reached to sign this form, a letter stating service will be provided from that utility is acceptable, provided that the same plans have been shown to all utilities. Plans will not be approved by the city until this document is completed and returned.

# **Utility Notification Form**

Project/Su	ubdivision	Developer or Agent
Name: Pocinty But Residential Con Approx. Location: 66 Parcel Number(s): Number of Lots: 2 Phase: 1 of 1	00 E. S. wher Dr.	Name: Grandon Brimley Company Name: Address: 986 & 800 S City/State/Zip: Bountiful UT 84010 Phone: 881 309 6052 Fax: Email: Grandphim & gmail com
	QUEST	ARGAS See Attached
Name:	Title:	Phone:
(please print) Signature:		Date
		CABLE TV See Attached
Name:	Title:	Phone:
(please print) Signature:		Date:
		RYLINK
Name: Bawn In. A	6332600 Title: 121	Phone: 700 788 3600
(please print) Signature: Phone		Date: 3/14/17
	ROCKY MOU	NTAIN POWER See Attached.
Name:	Title:	
(please print) Signature:		Date:

Dear Developer:

Re: Natural Gas Service Availability Letter

Natural gas can be made available to serve the 600 e south weber dr development when the following requirements are met:

- 1. Developer provides plat maps, drawings, construction schedules, average size of homes, units, and/or buildings that will be served by natural gas, and any and all other relevant information regarding commercial and residential uses, including but no limited to, proposed natural gas appliances (number and type of appliances per unit, homes, building).
- 2. Review and analysis by Questar Gas' Engineering and/or Pre-Construction Department to determine load requirements. System reinforcement requirements and estimated costs to bring natural gas to the development.

Upon completion of Questar Gas' review of the development's natural gas requirements, agreements will be prepared, as necessary, for high pressure, intermediate high pressure and/or service line extensions required to serve the development. These service extensions must be paid in advance.

To accommodate your construction schedule and provide cost estimates to you, please contact me at your earliest convenience.

Sincerely,
Mike Davis

Mike Davis

Pre-Construction Representative

**Grady Brimley** 

To whom it may Concern,

This letter is to verify that Comcast service is available to Brimley Subdivision located at 600 E South Weber Dr. Weber S, Utah. Comcast will generally provide all materials and labor to provide broadband services from the property line to the point of service, in a trench provided by the property owner.

The cost of installation, construction and provision of cable service will be part of the contract negotiations with the Owner of the Property or a designated representative. **This letter is not to be considered a contract or guarantee of service.** Furthermore, all permits, licenses and rights of access must be provided by the Owner prior to any provision of services.

Please be advised that we require a minimum of 90 days for project approvals and construction <u>after</u> <u>we receive a signed contract</u>. If this is a private development.

Please contact Elysia Valdez at 801-401-3017 before opening utility trenches. We look forward to working with you on this Project; please feel free to contact me with any questions or concerns.

Sincerely,

Elysia Valdez

**Comcast Cable** 

801 401-3017 office

801 255-2711 fax

1350 E Miller Avenue

Salt Lake City, Utah 84106



March 8, 2017

Brady Mark Brimley gradybrim@gmail.com

RE: Request 6324496

Dear Mr. Brimley:

Rocky Mountain Power will supply power to property located at or near 600 E South Weber Dr, South Weber, UT, with the following provisions:

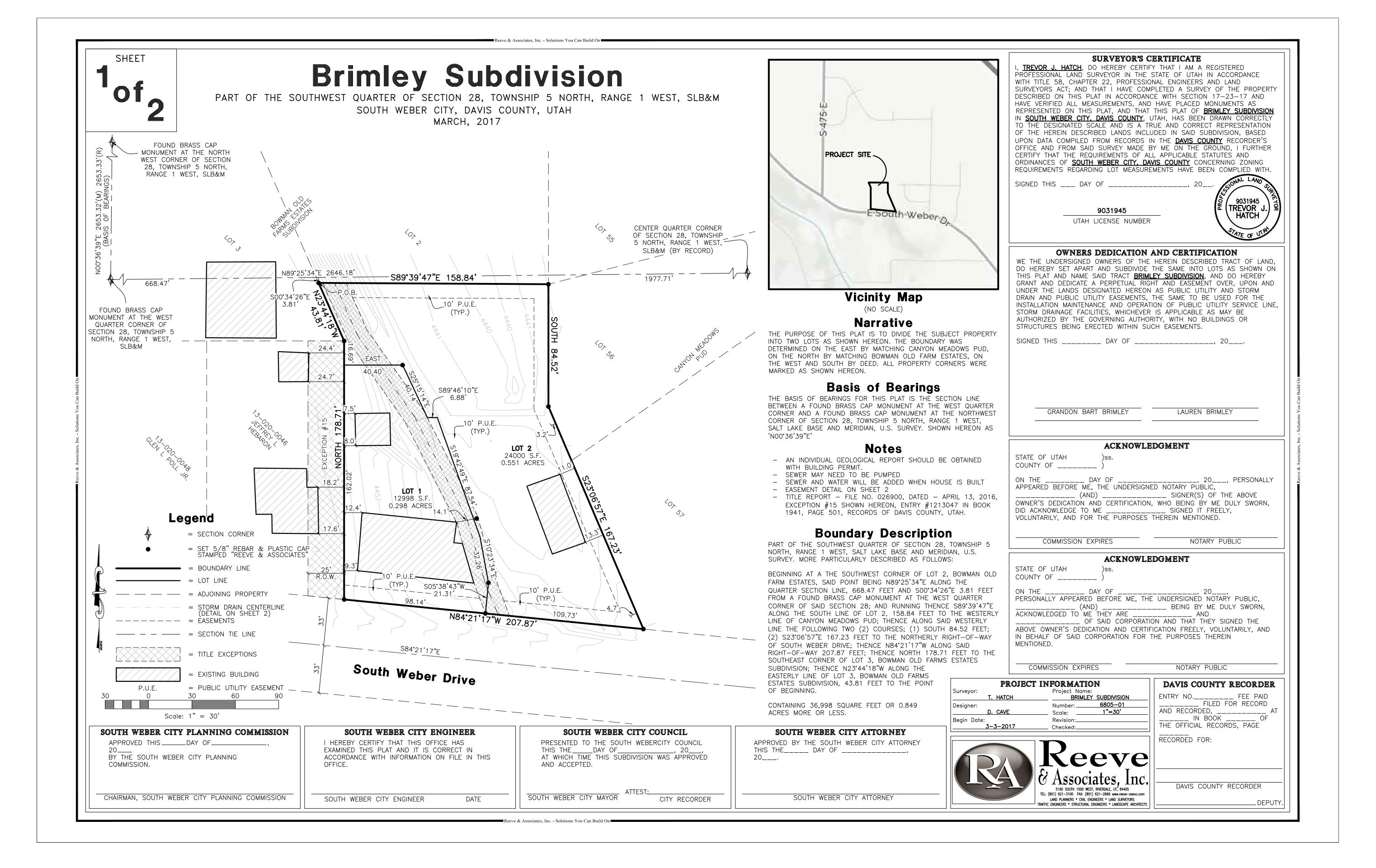
- Applicant will apply for power by calling 1-888-221-7070
- Applicant or Developer will supply a signed, approved recorded property plat map with lot numbers, addresses, and section corners identified if applicable.
- Residential and Commercial Developer will supply an electronic copy of the subdivision by e-mail, (Auto-cad version 2011), to the estimator assigned to the project.
- Residential Subdivision Developer will pay all costs which are non-refundable above the \$750.00 per lot allowance according to line extension tariff, regulation 12.
- All single lot applicants will be subject to the line extension rules and regulation 12.
- Applicant is responsible to sign a contract after job is approved by Rocky Mountain Power management, and pay any associated costs before work can be scheduled or materials ordered.
- Rocky Mountain Power engineering review may be required and may be subject to additional charges according to our filed line extension tariff, regulation 12.

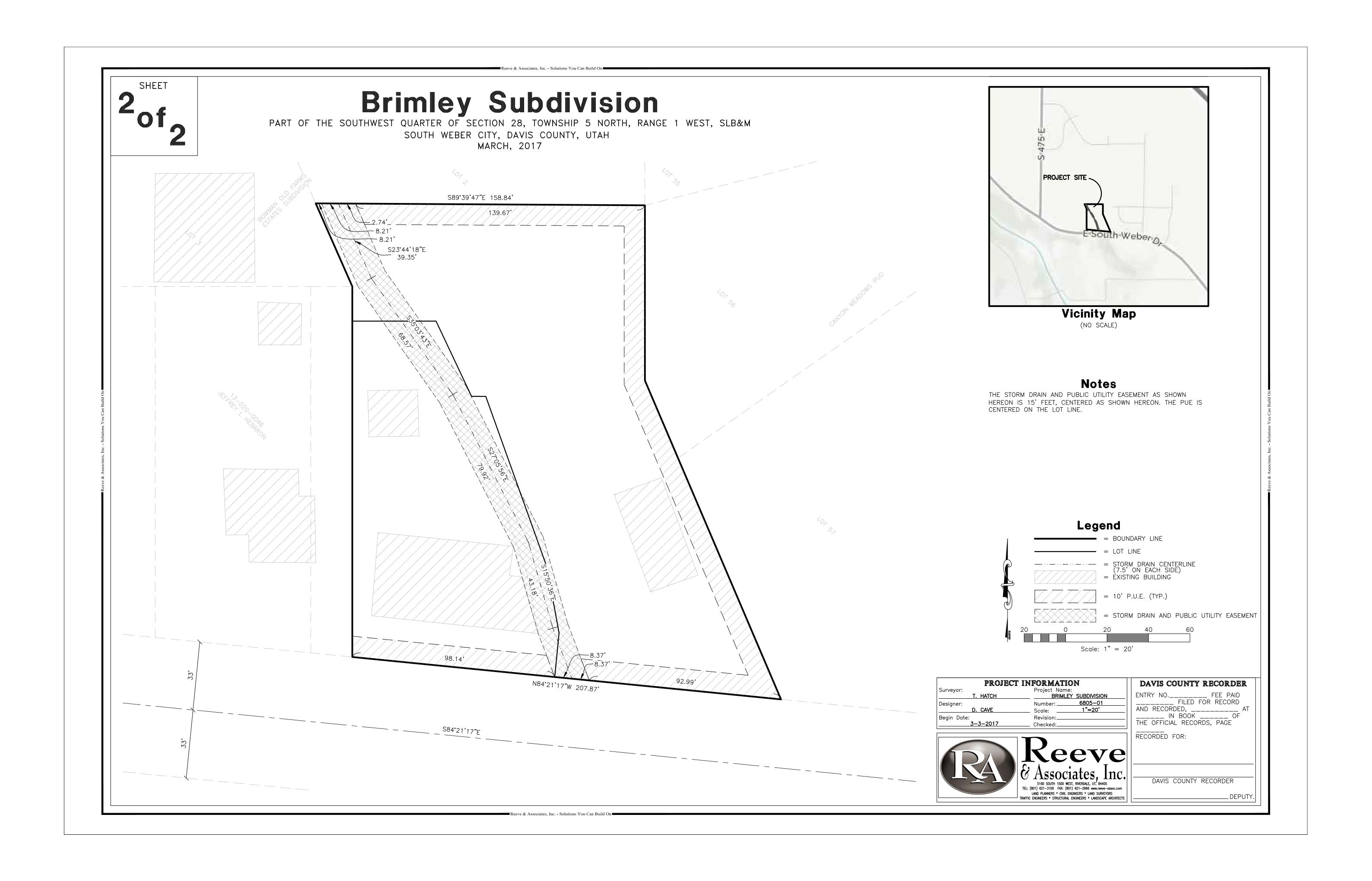
If you have any questions regarding these provisions, please feel free to call me at 801-629-4318.

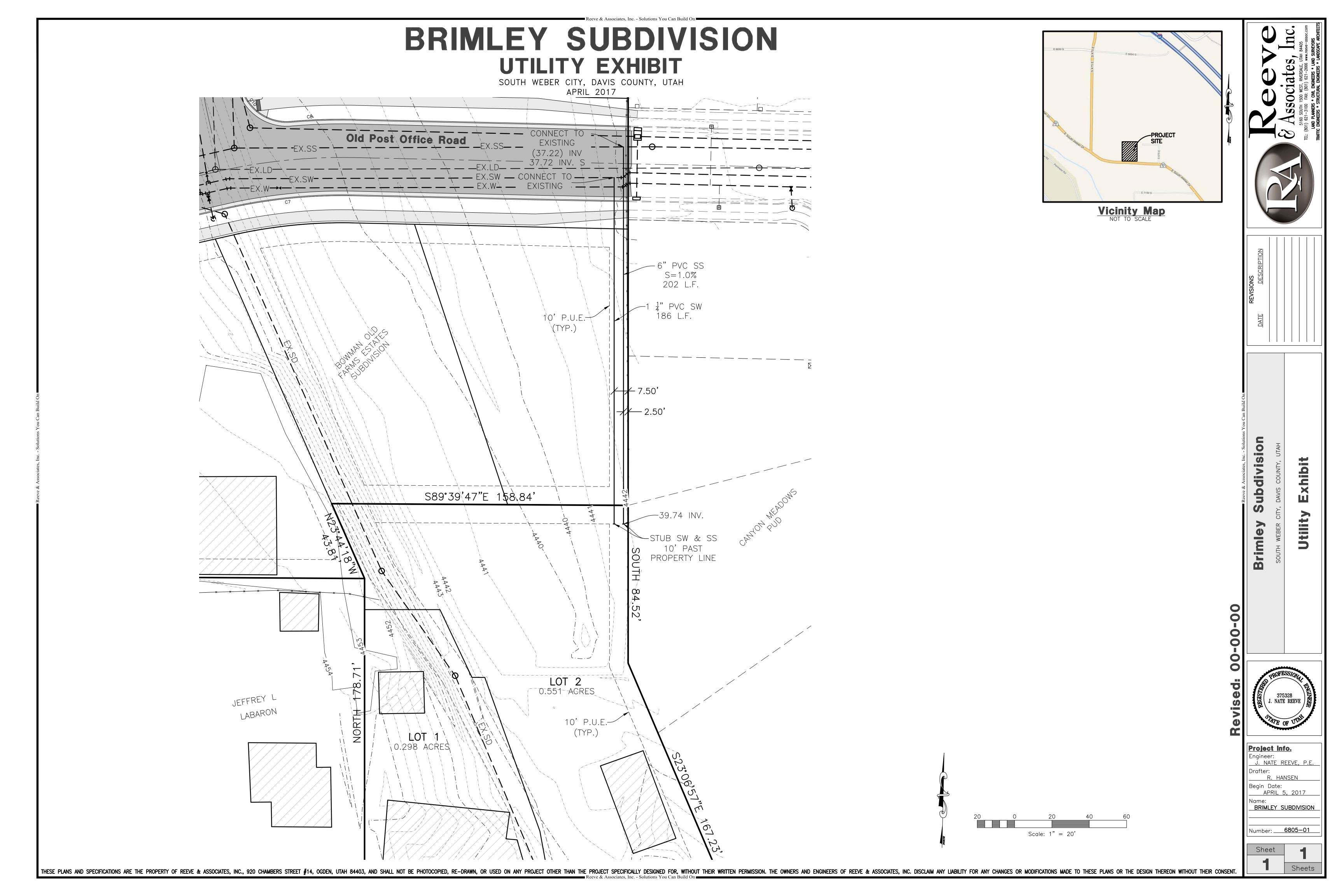
Respectfully,

Curtis Galvez Estimator

Rocky Mountain Power







### 11.02.020 Fees

- A. Subdivision Plan Application Fees: All persons desiring to develop a subdivision within the city shall file an application with the city recorder and pay fees for the permit to file an application with the planning commission. The city council shall from time to time pass by resolution the fees to be charged. Separate fees will be charged for plans which may include sketch plan, preliminary plan, final plan or other fees which may be deemed necessary by the city. No subdivision plans may be considered by the planning commission until such fees have been paid.
- B. Development And Inspection Fees: Prior to recording of the final plat, the subdivider shall pay all applicable development fees and inspection fees as established by the city. The city council shall from time to time pass by resolution the fees to be charged.
- C. Subdivision Plat Recording Fee: Within one <u>yearhundred twenty (120) days</u> of the final approval of the subdivision final plat by the city council, the subdivider shall submit to the city payment of sufficient amount to cover the recording fees of the final plat and developer's agreements. The city recorder shall deliver said plat to the office of the Davis County recorder for recording. Plats not recorded within one <u>yearhundred twenty (120) days</u> of the final approval by the city council shall be null and void and the developer shall be required to reapply and begin the development process over and pay all associated fees.

### 11.02.050 Application Expiration

The preliminary plan and final plan applications shall expire one year from the date of initial application. Upon expiration, the developer shall be required to reapply and pay all associated fees. The final plat must be recorded within one <u>yearhundred twenty (120) days</u> from the date of city council approval. Developments not recorded within the one <u>yearhundred twenty (120) days</u> shall be deemed null and void, and the developer shall be required to reapply and begin the development process over and pay all associated fees.

The subdivider may request a six (6) month extension on any application or final plat approval due to extenuating circumstances out of the control of the subdivider. Requests for extension must be made prior to the expiration of the approval. Such extensions shall be approved at the discretion of the planning commission for preliminary plan application or at the discretion of the city council for final plan application or final plat approval.

# <u>Section 1. Subsections Amended: 11.06.010, 11.06.020, 11.06.030, 11.06.040. 11.06.050, 11.06.060, 11.06.070, and 11.06.080</u>

### 11.06.010 Adoption.

The South Weber City Council hereby approves and adopts the Impact Fee Analyses attached and the analyses reflected therein. The Impact Fee Facilities Plans and the Impact Fee Analyses, including the Weber Basin Water Conservancy Districts Treated Water Impact Fee, are incorporated herein by reference and adopted as though fully set forth herein.

### **11.06.020 Definitions.**

Except as provided below, words and phrases that are defined in the Impact Fees Act shall have the same meaning in this Ordinance.

"Service Area" shall mean that geographic area designated within the City's boundaries as exhibited in the appendix of the Impact Fee Analyses.

"Project Improvement" does not mean system improvement and includes, but is not limited to, those projects identified in the plans for the benefit of growth.

"Impact Fees Act" shall mean Title 11, Chapter 36a, Utah Code Annotated or its successor state statute if that title and chapter is re-numbered, re-codified, or amended.

### 11.06.030 Findings and Purpose.

- A. There is a need for public facilities for new development which have not been constructed and are required to be consistent with the city's general plan and to protect the public's health, safety and welfare. All required notices have been given and made and public hearings conducted as required by the Impact Fees Act with respect to the Impact Fee Facilities Plans, the Impact Fee Analyses, and this Impact Fee Ordinance (this "Ordinance").
- B. Growth and development activities in South Weber City will create additional demands on its infrastructure. The facility improvement requirements which are analyzed in the Impact Fee Facilities Plans and the Impact Fee Analyses, which includes the Weber Basin Water Conservancy Districts Treated Water Impact Fee, are the direct result of the additional facility needs caused by anticipated future development activities. The persons responsible for growth and development activities should pay a proportionate share of the costs of the facilities needed to serve the growth and development activity. Impact fees are necessary to achieve an equitable allocation to the costs borne in the past and to be borne in the future, in comparison with the benefits already received and yet to be received.
- D. In enacting and approving the Impact Fee Analyses and this Ordinance, the Council has taken into consideration, and in certain situations will consider on a case-by-case basis in the future, the future capital facilities and needs of South Weber City, the capital financial needs of South Weber City which are the result of South Weber City's future facilities' needs, the distribution of the burden of costs to different properties within South Weber City based on the use of

culinary water facilities of South Weber City by such properties, the financial contribution of those properties and other properties similarly situated in South Weber City at the time of computation of the required fee and prior to the enactment of this Ordinance, all revenue sources available to South Weber City, and the impact on future facilities that will be required by growth and new development activities in South Weber City. The provisions of this Ordinance shall be liberally construed in order to carry out the purpose and intent of the Council in establishing the impact fee program.

### 11.03.040 Impact Fees Levied.

<u>Impact Fees.</u> The impact fees imposed by this Ordinance shall have two components: a future facilities impact fee as well as a buy-in fee for excess capacity in existing facilities. The Impact Fees shall be calculated at:

Impact Fee Analysis Table 2: Summary of Culinary Water Gross Impact Fee – Without Credits					
Category	Calculation per ERC				
Excess Capacity – Water Storage	\$1,154.33				
Excess Capacity – Water Distribution	\$169.55				
Other New Construction	\$529.87				
Consultant Fees	\$11.30				
Subtotal Gross Fee -City Portion	\$1,865.05				
WBWCD Source Amount per Agreement with WBWCD (ZFPI IFA for Culinary Water pg. 3)	\$4,363.00				
Total Maximum Amount to be Collected (before credits or outstanding bond)	\$6,228.05				

<u>Developer Credits/Developer Reimbursements.</u> A developer, including a school district or charter school, may be allowed a credit against or proportionate reimbursement of impact fees if the developer dedicates land for a system improvement, builds and dedicates some or all of a system improvement, or dedicates a public facility that South Weber City and the developer agree will reduce the need for a system improvement. A credit against impact fees shall be granted for any dedication of land for, improvement to, or new construction of, any system improvements provided by the developer if the facilities are system improvements to the respective utilities, or are dedicated to the public and offset the need for an identified future improvement.

<u>Adjustment of Fees.</u> The Council may adjust either up (but not above the maximum allowable fee) or down the standard impact fees at the time the fee is charged in order to respond to an unusual circumstance in specific cases and to ensure that the fees are imposed fairly. The Council may adjust the amount of the fees to be imposed if the fee payer submits studies and data clearly showing that the payment of an adjusted impact fee is more consistent with the true impact being placed on the system.

<u>Impact Fee Accounting</u>. South Weber City shall establish a separate interest-bearing ledger account for the cash impact fees collected pursuant to this Ordinance. Interest earned on such account shall be allocated to that account.

- (a) <u>Reporting.</u> At the end of each fiscal year, South Weber City shall prepare a report generally showing the source and amount of all monies collected, earned and received by the fund or account and of each expenditure from the fund or account. The report shall also identify impact fee funds by the year in which they were received, the project from which the funds were collected, the capital projects from which the funds were budgeted, and the projected schedule for expenditure and be provided to the State Auditor on the appropriate form found on the State Auditor's Website.
- (b) <u>Impact Fee Expenditures.</u> Funds collected pursuant to the impact fees shall be deposited in such account and only be used by the City to construct and upgrade the respective facilities to adequately service development activity or used as otherwise approved by law.

*Refunds*. The City shall refund any impact fee paid when:

- (a) the fee payer has not proceeded with the development activity and has filed a written request with the Council for a refund within one year after the impact fee was paid;
  - (b) the fees have not been spent or encumbered within six years of the payment
  - (c) no impact has resulted.

### 11.06.050 Time Of Collection

Unless otherwise provided by the city council, impact fees shall be payable prior to the issuance of a building permit by the city.

### 11.06.060 Use Of Fees

date: or

The fees shall be used solely to:

- A. Pay for the described public facilities to be constructed by the city;
- B. Reimburse the city for the development's share of those capital improvements already constructed by the city; or
- C. Reimburse developers who have constructed public facilities where those facilities were beyond what was needed to mitigate the impacts of the developer's project(s).

### **11.06.070 Adjustments**

The city may, upon a proper showing, adjust the standard impact fee at the time the fee is charged to:

- A. Respond to unusual circumstances in specific cases; and
- B. Ensure that the impact fees are imposed fairly; and
- C. Adjust the amount of the fee based upon studies and data submitted by the developer which are approved by the city after review of the same; and
- D. Allow credits as approved by the city for dedication of land for improvement to, or new construction of, public facilities providing services to the community at large, provided such facilities are identified in the capital facilities plan and are required by the city as a condition

of approving the development activity. No credit shall be given for project improvements as defined in the act.

### 11.06.080 Accounting, Expenditure, And Refund

The city shall account for, expend and refund impact fees in accordance with the provisions of UCA Section 11-36a.

### 11.06.080 Appeal

- A. Any person required to pay an impact fee who believes the fee does not meet the requirements of the law may file a written request for information with the City Council.
- B. Within two weeks of the receipt of the request for information the City shall provide the person or entity with a copy of the reports and with any other relevant information relating to the impact fee.
- C. Any person or entity required to pay an impact fee imposed under this article, who believes the fee does not meet the requirements of law may request and be granted a full administrative appeal of that grievance. An appeal shall be made to the Council within thirty (30) calendar days of the date of the action complained of, or the date when the complaining person reasonably should have become aware of the action.
- D. The notice of the administrative appeal to the Council shall be filed and shall contain the following information:
  - 1. the person's name, mailing address, and daytime telephone number;
- 2. a copy of the written request for information and a brief summary of the grounds for appeal; and
  - 3. the relief sought.
- E. The City shall schedule the appeal before the Council no sooner than five (5) days and no later than fifteen (15) days from the date of the filing of the appeal. The written decision of the Council shall be made no later than thirty (30) days after the date the challenge to the fee is filed with the City and shall, when necessary, be forwarded to the appropriate officials for action.



### **CONSULTING ENGINEERS**

### MEMORANDUM

TO: South Weber City Planning Commission

FROM: Brandon K. Jones, P.E.

South Weber City Engineer /

CC: Barry Burton – South Weber City Planner

Mark B. Larsen – South Weber City Public Works Director

Elyse Greiner – South Weber City Recorder

RE: OLD MAPLE FARMS SUBDIVISION – LAND DRAIN ADDITION

**Review Memo** 

Date: April 7, 2017

### **BACKGROUND**

The construction for Old Maple Farms Phases 1 and 2 is current underway. Nilson Homes, the developer of the Hidden Valley Meadows (Bambrough property), has been working on trying to redesign their sewer and storm drain lines to increase the depth in an effort to decrease the amount of imported fill required for their subdivision. They would also like to add in a land drain system to better enable them to have homes with basements and address the geotechnical concerns identified with shallow groundwater in the development.

They have been working with Mike Ford (Old Maple Farms) and Kent Bambrough to run the sewer and storm drain through Kent's property on the west and Lots 104-R and 105-R in Old Maple Farms. This doesn't change anything on the design for these two utilities in Old Maple Farms. This just helps Nilson Homes gain a couple of feet in depth, thus decreasing the amount of fill required for their subdivision.

They have also been working with Kent Bambrough and Old Maple Farms to add a land drain system. Old Maple Farms does not currently have a land drain system, but would greatly benefit by having one. We initially recommended that a land drain system be installed, but didn't feel we could require it when the developer for Old Maple Farms agreed to eliminate basements. Putting in a land drain system would potentially allow for basements to be installed.

### **REOUEST**

Old Maple Farms is requesting approval to add a land drain system for the whole subdivision and allow for basements. This would revise their preliminary approval of the whole development, and final approval of the plats and improvement plans for Phases 1 and 2. If approved, this would allow Nilson Homes to revised their design and then submit for approval.

Our office has completed a review of the revised Final Plats for Phases 1 and 2, the Improvement Plans and the letter from the Geotechnical Engineer addressing the request (all dated April 5, 2017). We recommend approval subject to the following items being addressed prior to approval from the City Council.

### **GEOTECHNICAL LETTER**

1. Andrew M. Harris, P.E. from CMT Engineering Laboratories provided a letter referencing the original geotechnical report (which he had provided when working for GSH) and the recommendations given relative to groundwater and the construction of new homes. In the letter, he gave additional recommendations relating to allowing homes with basements due to the addition of the land drain system. He provided tables for all of the homes in all three phases (not including the apartments) specifying the maximum allowable depth of the lowest floor elevation relative to the curb and gutter elevation. We agree with the recommendations of the letter and feel this is a very good way to ensure that basements don't get built too deep.

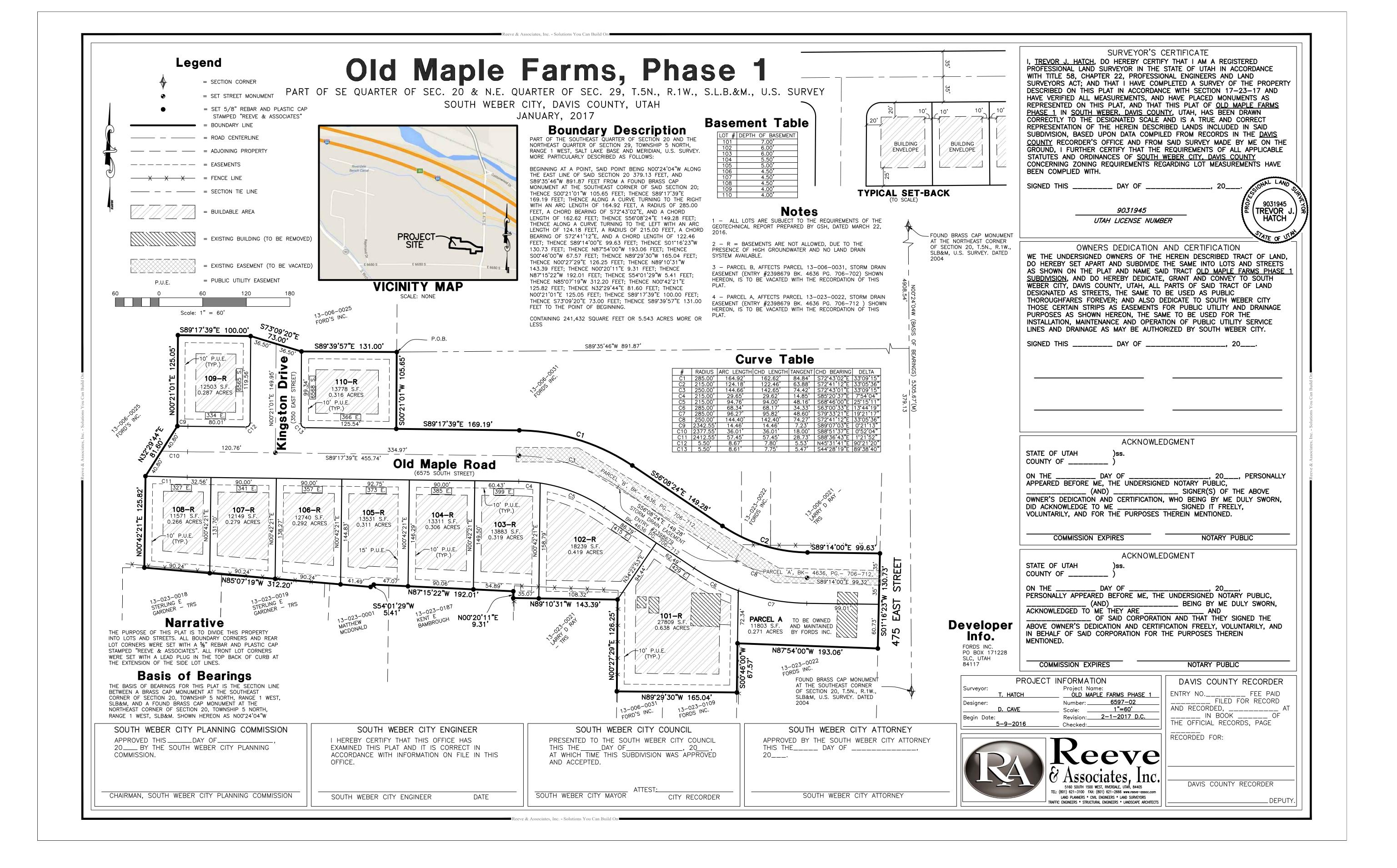
However, clarification needs to be provided on one concern; the original report states that "The tops of all floor slabs in habitable areas must be established at least 3 feet above the measured static water level or a minimum 18 inches above levels controlled by subdrains." The April 5<sup>th</sup> letter states "We understand that the value provided in these tables reflects a depth referenced below Top Back of Curb (TBC) equivalent to 1 foot above the land drain invert for each lot." We recommend that this elevation difference should be 18 inches, as recommended in the original report.

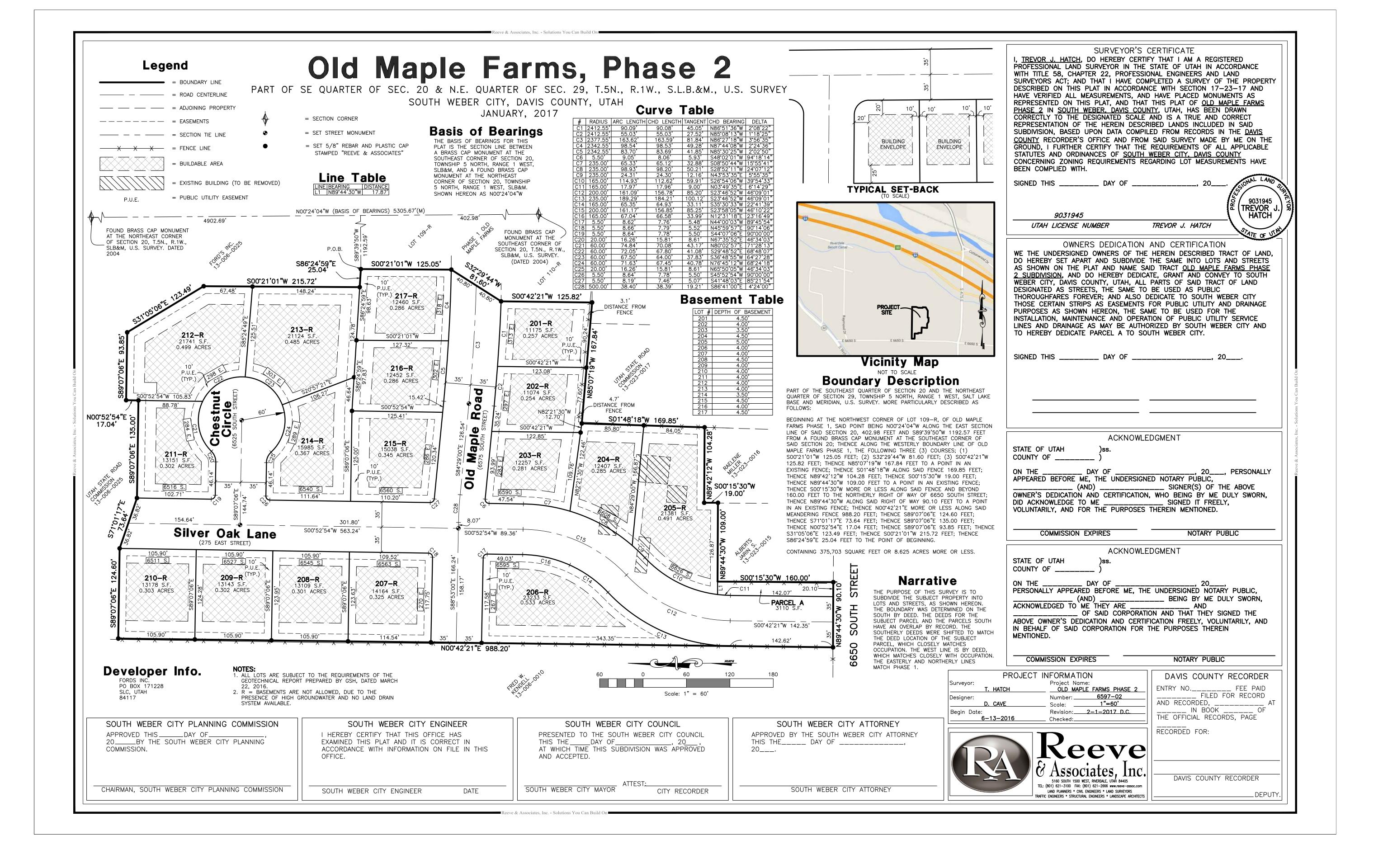
### **PLATS**

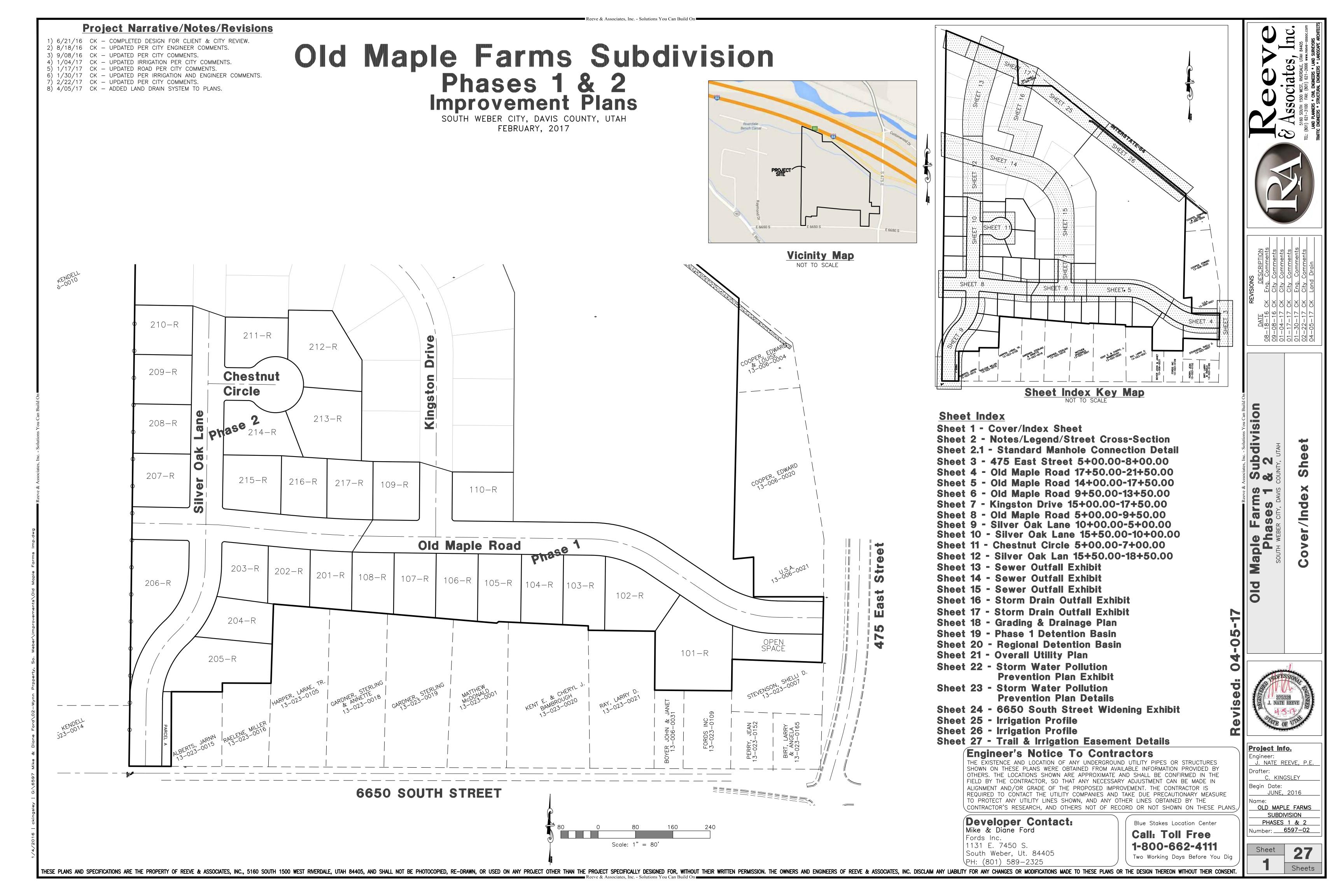
- 2. Note #2 on both plats needs to be changed to the following language:
  - "R = Basements are allowed, but only to the maximum depth as shown in the "Basement Table." This depth represents the top of floor slab depth below top back of curb in feet, and also represents 18 inches from the top of floor slab to the land drain lateral invert. All homes must install a footing and foundation drain and connect to the land drain system provided in accordance with the recommendations of the geotechnical report."
- 3. The "Basement Table" needs to reference the lots as 101-R, 102-R, 201-R, etc.

### IMPROVEMENT PLANS

- 4. The land drain system connects to the storm drain system on the downstream side of the outlet control structure for the detention basin. We agree with this design. It will allow for the collection and discharge of groundwater and minimize the influence of storm water on the system during storm events.
- 5. We have some minor comments and questions relating to the location of laterals, main line alignment and depth. We will coordinate with the developer's engineer to address these items.







2. CONTRACTOR TO STRICTLY FOLLOW GEOTECHNICAL RECOMMENDATIONS FOR THIS PROJECT. ALL GRADING INCLUDING BUT NOT LIMITED TO CUT, FILL, COMPACTION, ASPHALT SECTION, SUBBASE, TRENCH EXCAVATLON/BACKFILL, SITE GRUBBING, RETAINING WALLS AND FOOTINGS MUST BE COORDINATED

DIRECTLY WITH THE PROJECT GEOTECHNICAL ENGINEER.

3. TRAFFIC CONTROL, STRIPING & SIGNAGE TO CONFORM TO CURRENT GOVERNING AGENCIES

TRANSPORTATION ENGINEER'S MANUAL AND MANUAL OF LINESPORTATION FOR THE PROPERTY OF THE PROPE

TRANSPORTATION ENGINEER'S MANUAL AND MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.

4. ANY AREA OUTSIDE THE LIMIT OF WORK THAT IS DISTURBED SHALL BE RESTORED TO ITS ORIGINAL CONDITION AT NO COST TO OWNER.

5. CONSULT ALL OF THE DRAWINGS AND SPECIFICATIONS FOR COORDINATION REQUIREMENTS BEFORE COMMENCING CONSTRUCTION.6. AT ALL LOCATIONS WHERE EXISTING PAVEMENT ABUTS NEW CONSTRUCTION, THE EDGE OF THE EXISTING

PAVEMENT SHALL BE SAWCUT TO A CLEAN, SMOOTH EDGE.

7. ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE MOST RECENT, ADOPTED

EDITION OF ADA ACCESSIBILITY GUIDELINES.

8. PRIOR TO STARTING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING SURE THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED THOROUGHLY REVIEWED PLANS AND OTHER

DOCUMENTS APPROVED BY ALL OF THE PERMITTING AUTHORITIES.

9. CONTRACTOR IS RESPONSIBLE FOR SCHEDULING AND NOTIFYING ENGINEER OR INSPECTING AUTHORITY 48 HOURS IN ADVANCE OF COVERING UP ANY PHASE OF CONSTRUCTION REQUIRING OBSERVATION.

10. ANY WORK IN THE PUBLIC RIGHT-OF-WAY WILL REQUIRE PERMITS FROM THE APPROPRIATE CITY, COUNTY OR STATE AGENCY CONTROLLING THE ROAD, INCLUDING OBTAINING REQUIRED INSPECTIONS.
 11. ALL DIMENSIONS, GRADES & UTILITY DESIGNS SHOWN ON THE PLANS SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY DISCREPANCIES

PRIOR TO PROCEEDING WITH CONSTRUCTION FOR NECESSARY PLAN OR GRADE CHANGES.

12. CONTRACTOR MUST VERIFY ALL EXISTING CONDITIONS BEFORE BIDDING AND BRING UP ANY QUESTIONS

REFOREHAND

BEFOREHAND.

13. SITE GRADING SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE

RECOMMENDATIONS SET FORTH BY THE GEOTECHNICAL ENGINEER.

14. CATCH SLOPES SHALL BE GRADED AS SPECIFIED ON GRADING PLANS.

15. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FLAGGING, CAUTION SIGNS, LIGHTS, BARRICADES, FLAGMEN, AND ALL OTHER DEVICES NECESSARY FOR PUBLIC SAFETY.

16. CONTRACTOR SHALL, AT THE TIME OF BIDDING AND THROUGHOUT THE PERIOD OF THE CONTRACT, BE LICENSED IN THE STATE WHERE THE PROJECT IS LOCATED AND SHALL BE BONDABLE FOR AN AMOUNT EQUAL TO OR GREATER THAN THE AMOUNT BID AND TO DO THE TYPE OF WORK CONTEMPLATED IN THE PLANS AND SPECIFICATIONS. CONTRACTOR SHALL BE SKILLED AND REGULARLY ENGAGED IN THE GENERAL CLASS AND TYPE OF WORK CALLED FOR IN THE PLANS AND SPECIFICATIONS.

17. CONTRACTOR SHALL INSPECT THE SITE OF THE WORK PRIOR TO BIDDING TO SATISFY HIMSELF BY PERSONAL EXAMINATION OR BY SUCH OTHER MEANS AS HE MAY PREFER OF THE LOCATIONS OF THE PROPOSED WORK AND OF THE ACTUAL CONDITIONS OF AND AT THE SITE OF WORK. IF, DURING THE COURSE OF HIS EXAMINATION, A BIDDER FINDS FACTS OR CONDITIONS WHICH APPEAR TO HIM TO BE IN CONFLICT WITH THE LETTER OR SPIRIT OF THE PROJECT PLANS AND SPECIFICATIONS, HE SHALL CONTACT THE ENGINEER FOR ADDITIONAL INFORMATION AND EXPLANATION BEFORE SUBMITTING HIS BID. SUBMISSION OF A BID BY THE CONTRACTOR SHALL CONSTITUTE ACKNOWLEDGMENT THAT, IF AWARDED THE CONTRACT, HE HAS RELIED AND IS RELYING ON HIS OWN EXAMINATION OF (1) THE SITE OF THE WORK, (2) ACCESS TO THE SITE, AND (3) ALL OTHER DATA AND MATTERS REQUISITE TO THE FULFILLMENT OF THE WORK AND ON HIS OWN KNOWLEDGE OF EXISTING FACILITIES ON AND IN THE VICINITY OF THE SITE OF THE WORK TO BE CONSTRUCTED UNDER THIS CONTRACT. THE INFORMATION PROVIDED BY THE ENGINEER IS NOT INTENDED TO BE A SUBSTITUTE FOR, OR A SUPPLEMENT TO, THE INDEPENDENT VERIFICATION BY THE CONTRACTOR TO THE EXTENT SUCH INDEPENDENT INVESTIGATION OF SITE CONDITIONS IS DEEMED NECESSARY OR DESIRABLE BY THE CONTRACTOR. CONTRACTOR SHALL ACKNOWLEDGE THAT HE HAS NOT RELIED SOLELY UPON OWNER- OR ENGINEER-FURNISHED INFORMATION REGARDING SITE CONDITIONS IN PREPARING AND SUBMITTING HIS BID.

18. CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE ALL WATER, POWER, SANITARY FACILITIES AND TELEPHONE SERVICES AS REQUIRED FOR THE CONTRACTOR'S USE DURING CONSTRUCTION.

19. CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY FIELD CHANGES MADE WITHOUT PRIOR WRITTEN AUTHORIZATION FROM THE OWNER, ENGINEER, AND/OR GOVERNING AGENCIES.

20. CONTRACTOR SHALL EXERCISE DUE CAUTION AND SHALL CAREFULLY PRESERVE BENCH MARKS, CONTROL POINTS, REFERENCE POINTS AND ALL SURVEY STAKES, AND SHALL BEAR ALL EXPENSES FOR REPLACEMENT AND/OR ERRORS CAUSED BY THEIR UNNECESSARY LOSS OR DISTURBANCE.

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

22. CONTRACTOR SHALL BE RESPONSIBLE FOR ADEQUATELY SCHEDULING INSPECTION AND TESTING OF ALL FACILITIES CONSTRUCTED UNDER THIS CONTRACT. ALL TESTING SHALL CONFORM TO THE REGULATORY AGENCY'S STANDARD SPECIFICATIONS. ALL TESTING AND INSPECTION SHALL BE PAID FOR BY THE OWNER; ALL RE—TESTING AND/OR RE—INSPECTION SHALL BE PAID FOR BY THE CONTRACTOR.

23. IF EXISTING IMPROVEMENTS NEED TO BE DISTURBED AND/OR REMOVED FOR THE PROPER PLACEMENT OF IMPROVEMENTS TO BE CONSTRUCTED BY THESE PLANS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING EXISTING IMPROVEMENTS FROM DAMAGE. COST OF REPLACING OR REPAIRING EXISTING IMPROVEMENTS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEMS REQUIRING REMOVAL AND/OR REPLACEMENT. THERE WILL BE NO EXTRA COST DUE TO THE CONTRACTOR FOR REPLACING OR REPAIRING EXISTING IMPROVEMENTS.

24. WHENEVER EXISTING FACILITIES ARE REMOVED, DAMAGED, BROKEN, OR CUT IN THE INSTALLATION OF THE WORK COVERED BY THESE PLANS OR SPECIFICATIONS, SAID FACILITIES SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE WITH MATERIALS EQUAL TO OR BETTER THAN THE MATERIALS USED IN THE ORIGINAL EXISTING FACILITIES. THE FINISHED PRODUCT SHALL BE SUBJECT TO THE APPROVAL OF THE OWNER, THE ENGINEER, AND THE RESPECTIVE REGULATORY AGENCY.

25. CONTRACTOR SHALL MAINTAIN A NEATLY MARKED SET OF FULL—SIZE AS—BUILT RECORD DRAWINGS SHOWING THE FINAL LOCATION AND LAYOUT OF ALL STRUCTURES AND OTHER FACILITIES. AS—BUILT RECORD DRAWINGS SHALL REFLECT CHANGE ORDERS, ACCOMMODATIONS, AND ADJUSTMENTS TO ALL IMPROVEMENTS CONSTRUCTED. WHERE NECESSARY, SUPPLEMENTAL DRAWINGS SHALL BE PREPARED AND SUBMITTED BY THE CONTRACTOR. PRIOR TO ACCEPTANCE OF THE PROJECT, THE CONTRACTOR SHALL DELIVER TO THE ENGINEER ONE SET OF NEATLY MARKED AS—BUILT RECORD DRAWINGS SHOWING THE INFORMATION REQUIRED ABOVE. AS—BUILT RECORD DRAWINGS SHALL BE REVIEWED AND THE COMPLETE AS—BUILT RECORD DRAWING SET SHALL BE CURRENT WITH ALL CHANGES AND DEVIATIONS REDLINED AS A PRECONDITION TO THE FINAL PROGRESS PAYMENT APPROVAL AND/OR FINAL ACCEPTANCE.

26. WHERE THE PLANS OR SPECIFICATIONS DESCRIBE PORTIONS OF THE WORK IN GENERAL TERMS BUT NOT IN COMPLETE DETAIL, IT IS UNDERSTOOD THAT ONLY THE BEST GENERAL PRACTICE IS TO PREVAIL AND THAT ONLY MATERIALS AND WORKMANSHIP OF THE HIGHEST QUALITY ARE TO BE USED.

27. CONTRACTOR SHALL BE SKILLED AND REGULARLY ENGAGED IN THE GENERAL CLASS AND TYPE OF WORK CALLED FOR IN THE PROJECT PLANS AND SPECIFICATIONS. THEREFORE, THE OWNER IS RELYING UPON THE EXPERIENCE AND EXPERTISE OF THE CONTRACTOR. PRICES PROVIDED WITHIN THE CONTRACT DOCUMENTS SHALL INCLUDE ALL LABOR AND MATERIALS NECESSARY AND PROPER FOR THE WORK CONTEMPLATED AND THAT THE WORK BE COMPLETED IN ACCORDANCE WITH THE TRUE INTENT AND PURPOSE OF THESE PLANS AND SPECIFICATIONS. THE CONTRACTOR SHALL BE COMPETENT, KNOWLEDGEABLE AND HAVE SPECIAL SKILLS IN THE NATURE, EXTENT AND INHERENT CONDITIONS OF THE WORK TO BE PERFORMED. CONTRACTOR SHALL ALSO ACKNOWLEDGE THAT THERE ARE CERTAIN PECULIAR AND INHERENT CONDITIONS EXISTENT IN THE CONSTRUCTION OF THE PARTICULAR FACILITIES WHICH MAY CREATE, DURING THE CONSTRUCTION PROGRAM, UNUSUAL OR UNSAFE CONDITIONS HAZARDOUS TO PERSONS, PROPERTY AND THE ENVIRONMENT. CONTRACTOR SHALL BE AWARE OF SUCH PECULIAR RISKS AND HAVE THE SKILL AND EXPERIENCE TO FORESEE AND TO ADOPT PROTECTIVE MEASURES TO ADEQUATELY AND SAFELY PERFORM THE CONSTRUCTION WORK WITH RESPECT TO SUCH HAZARDS.

28. CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL STRIPING AND/OR PAVEMENT MARKINGS NECESSARY TO TIE EXISTING STRIPING INTO FUTURE STRIPING. METHOD OF REMOVAL SHALL BE BY GRINDING OR SANDBLASTING.

29. CONTRACTOR SHALL PROVIDE ALL SHORING, BRACING, SLOPING OR OTHER PROVISIONS NECESSARY TO PROTECT WORKMEN FOR ALL AREAS TO BE EXCAVATED TO A DEPTH OF 4 FEET OR MORE. FOR EXCAVATIONS 4 FEET OR MORE IN DEPTH, THE CONTRACTOR SHALL COMPLY WITH LOCAL, STATE AND NATIONAL SAFETY CODES, ORDINANCES. OR REQUIREMENTS FOR EXCAVATION AND TRENCHES.

30. ALL EXISTING GATES AND FENCES TO REMAIN UNLESS OTHERWISE NOTED ON PLANS. PROTECT ALL GATES AND FENCES FROM DAMAGE

**Utility Notes:** 

 CONTRACTOR SHALL COORDINATE LOCATION OF NEW "DRY UTILITIES" WITH THE APPROPRIATE UTILITY COMPANY, INCLUDING BUT NOT LIMITED TO: TELEPHONE SERVICE, GAS SERVICE, CABLE, POWER, INTERNET.

2. EXISTING UTILITIES HAVE BEEN SHOWN ON THE PLANS USING A COMBINATION OF ON—SITE SURVEYS (BY OTHERS). PRIOR TO COMMENCING ANY WORK, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO HAVE EACH UTILITY COMPANY LOCATE IN THE FIELD, THEIR MAIN AND SERVICE LINES 48 HOURS IN ADVANCE OF PERFORMING ANY EXCAVATION WORK. THE CONTRACTOR SHALL RECORD THE BLUE STAKES ORDER NUMBER AND FURNISH ORDER NUMBER TO OWNER AND ENGINEER PRIOR TO ANY EXCAVATION. IT WILL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO DIRECTLY CONTACT ANY OTHER UTILITY COMPANIES THAT ARE NOT MEMBERS OF BLUE STAKES. IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO PROTECT ALL EXISTING UTILITIES SO THAT NO DAMAGE RESULTS TO THEM DURING THE PERFORMANCE OF THIS CONTRACT. ANY REPAIRS NECESSARY TO DAMAGED UTILITIES SHALL BE PAID FOR BY THE CONTRACTOR. THE CONTRACTOR SHALL BE REQUIRED TO COOPERATE WITH OTHER CONTRACTORS AND

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UTILITY COMPANIES INSTALLING NEW STRUCTURES, UTILITIES AND SERVICE TO THE PROJECT.

3. CONTRACTOR SHALL POT HOLE ALL UTILITIES TO DETERMINE IF CONFLICTS EXIST PRIOR TO BEGINNING ANY EXCAVATION. NOTIFY ENGINEER OF ANY CONFLICTS. CONTRACTOR SHALL VERIFY LOCATION AND INVERTS OF EXISTING UTILITIES TO WHICH NEW UTILITIES WILL BE CONNECTED. PRIOR TO COMMENCING ANY EXCAVATION WORK THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES IN ACCORDANCE WITH THE REQUIRED PROCEDURES.

4. CARE SHOULD BE TAKEN IN ALL EXCAVATIONS DUE TO POSSIBLE EXISTENCE OF UNRECORDED UTILITY LINES. EXCAVATION REQUIRED WITHIN PROXIMITY OF EXISTING UTILITY LINES SHALL BE DONE BY HAND. CONTRACTOR SHALL REPAIR ANY DAMAGE TO EXISTING UTILITY LINES OR STRUCTURES INCURRED DURING CONSTRUCTION OPERATIONS AT HIS EXPENSE.

5. ALL VALVES AND MANHOLE COVERS SHALL BE RAISED OR LOWERED TO MEET FINISHED GRADE.
6. CONTRACTOR SHALL CUT PIPES OFF FLUSH WITH THE INSIDE WALL OF THE BOX OR MANHOLE.

7. CONTRACTOR SHALL GROUT AT CONNECTION OF PIPE TO BOX WITH NON-SHRINKING GROUT, INCLUDING PIPE VOIDS LEFT BY CUTTING PROCESS, TO A SMOOTH FINISH.

8. CONTRACTOR SHALL GROUT WITH NON-SHRINK GROUT BETWEEN GRADE RINGS AND BETWEEN BOTTOM OF INLET LID FRAME AND TOP OF CONCRETE BOX

9. SILT AND DEBRIS IS TO BE CLEANED OUT OF ALL STORM DRAIN BOXES. CATCH BASINS ARE TO BE MAINTAINED IN A CLEANED CONDITION AS NEEDED UNTIL AFTER THE FINAL BOND RELEASE INSPECTION.

10. CONTRACTOR SHALL CLEAN ASPHALT, TAR OR OTHER ADHESIVES OFF OF ALL MANHOLE LIDS AND INLET

GRATES TO ALLOW ACCESS.

11. EACH TRENCH SHALL BE EXCAVATED SO THAT THE PIPE CAN BE LAID TO THE ALIGNMENT AND GRADE
AS REQUIRED. THE TRENCH WALL SHALL BE SO BRACED THAT THE WORKMEN MAY WORK SAFELY AND

AS REQUIRED. THE TRENCH WALL SHALL BE SO BRACED THAT THE WORKMEN MAY WORK SAFELY AND EFFICIENTLY. ALL TRENCHES SHALL BE DRAINED SO THE PIPE LAYING MAY TAKE PLACE IN DE—WATERED CONDITIONS.

12. CONTRACTOR SHALL PROVIDE AND MAINTAIN AT ALL TIMES AMPLE MEANS AND DEVICES WITH WHICH TO

REMOVE PROMPTLY AND TO PROPERLY DISPOSE OF ALL WATER ENTERING THE TRENCH EXCAVATION.

13. MAINTAIN A MINIMUM 18" VERTICAL SEPARATION DISTANCE BETWEEN ALL UTILITY CROSSINGS.
14. CONTRACTOR SHALL START INSTALLATION AT LOW POINT OF ALL NEW GRAVITY UTILITY LINES.

15. ALL BOLTED FITTINGS MUST BE GREASED AND WRAPPED.

16. UNLESS SPECIFICALLY NOTED OTHERWISE, MAINTAIN AT LEAST 2 FEET OF COVER OVER ALL STORM DRAIN LINES AT ALL TIMES (INCLUDING DURING CONSTRUCTION).

17. ALL WATER LINES SHALL BE INSTALLED A MINIMUM OF 60" BELOW FINISHED GRADE.

18. ALL SEWER LINES AND SEWER SERVICES SHALL HAVE A MINIMUM SEPARATION OF 10 FEET, PIPE EDGE TO PIPE EDGE, FROM THE WATER LINES. IF A 10 FOOT SEPARATION CAN NOT BE MAINTAINED, THE SEWER LINE AND WATER LINE SHALL BE LAID IN SEPARATE TRENCHES AND THE BOTTOM OF THE WATER LINE SHALL BE AT LEAST 18" ABOVE THE TOP OF THE SEWER LINE.

19. CONTRACTOR SHALL INSTALL THRUST BLOCKING AT ALL WATERLINE ANGLE POINTS AND TEES.
20. ALL UNDERGROUND UTILITIES SHALL BE IN PLACE PRIOR TO INSTALLATION OF CURB, GUTTER, SIDEWALK AND STREET PAVING.

21. CONTRACTOR SHALL INSTALL MAGNETIC LOCATING TAPE CONTINUOUSLY OVER ALL NONMETALLIC PIPE.

22. ALL STREET LIGHTS SHALL BE COBRA STYLE STREET LIGHTS (400 WATT EQUIVALENT LED) AT THE INTERSECTIONS AND POST STYLE STREET LIGHTS (WASHINGTON ACORN 250 WATT EQUIVALENT LED) AT A MAXIMUM SPACING OF 300'.

23. CONSTRUCTION OF THE PRESSURE IRRIGATION SYSTEM SHALL BE PER THE SOUTH WEBER IRRIGATION COMPANY STANDARDS AND SPECIFICATIONS.

### **Erosion Control General Notes:**

THE CONTRACTOR TO USE BEST MANAGEMENT PRACTICES FOR PROVIDING EROSION CONTROL FOR CONSTRUCTION OF THIS PROJECT. ALL MATERIAL AND WORKMANSHIP SHALL CONFORM TO GOVERNING AGENCIES ORDINANCES AND ALL WORK SHALL BE SUBJECT TO INSPECTION BY THE COUNTIES. ALSO, INSPECTORS WILL HAVE THE RIGHT TO CHANGE THE FACILITIES AS NEEDED.

CONTRACTOR SHALL KEEP THE SITE WATERED TO CONTROL DUST. CONTRACTOR TO LOCATE A NEARBY HYDRANT FOR USE AND TO INSTALL TEMPORARY METER. CONSTRUCTION WATER COST TO BE INCLUDED IN BID.

WHEN GRADING OPERATIONS ARE COMPLETED AND THE DISTURBED GROUND IS LEFT GOPENG FOR 14 DAYS OR MORE, THE AREA SHALL BE FURROWED PARALLEL TO THE CONTOURS.

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

ALL ACCESS TO PROPERTY WILL BE FROM PUBLIC RIGHT-OF-WAYS.
THE CONTRACTOR IS REQUIRED BY STATE AND FEDERAL REGULATIONS TO
PREPARE A STORM WATER POLLUTION PREVENTION PLAN AND FILE A "NOTICE OF
INTENT" WITH THE GOVERNING AGENCIES.

### Maintenance:

ALL BEST MANAGEMENT PRACTICES (BMP'S) SHOWN ON THIS PLAN MUST BE MAINTAINED AT ALL TIMES UNTIL PROJECT CLOSE—OUT.

THE CONTRACTOR'S RESPONSIBILITY SHALL INCLUDE MAKING BI-WEEKLY CHECKS ON ALL EROSION CONTROL MEASURES TO DETERMINE IF REPAIR OR SEDIMENT REMOVAL IS NECESSARY. CHECKS SHALL BE DOCUMENTED AND COPIES OF THE INSPECTIONS KEPT ON SITE.

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

SEDIMENT TRACKED ONTO PAVED ROADS MUST BE CLEANED UP AS SOON AS PRACTICAL, BUT IN NO CASE LATER THAN THE END OF THE NORMAL WORK DAY. THE CLEAN UP WILL INCLUDE SWEEPING OF THE TRACKED MATERIAL, PICKING IT UP, AND DEPOSITING IT TO A CONTAINED AREA.

### EXPOSED SLOPES:

ANY EXPOSED SLOPE THAT WILL REMAIN UNTOUCHED FOR LONGER THAN 14 DAYS MUST BE STABILIZED BY ONE OR MORE OF THE FOLLOWING METHODS:

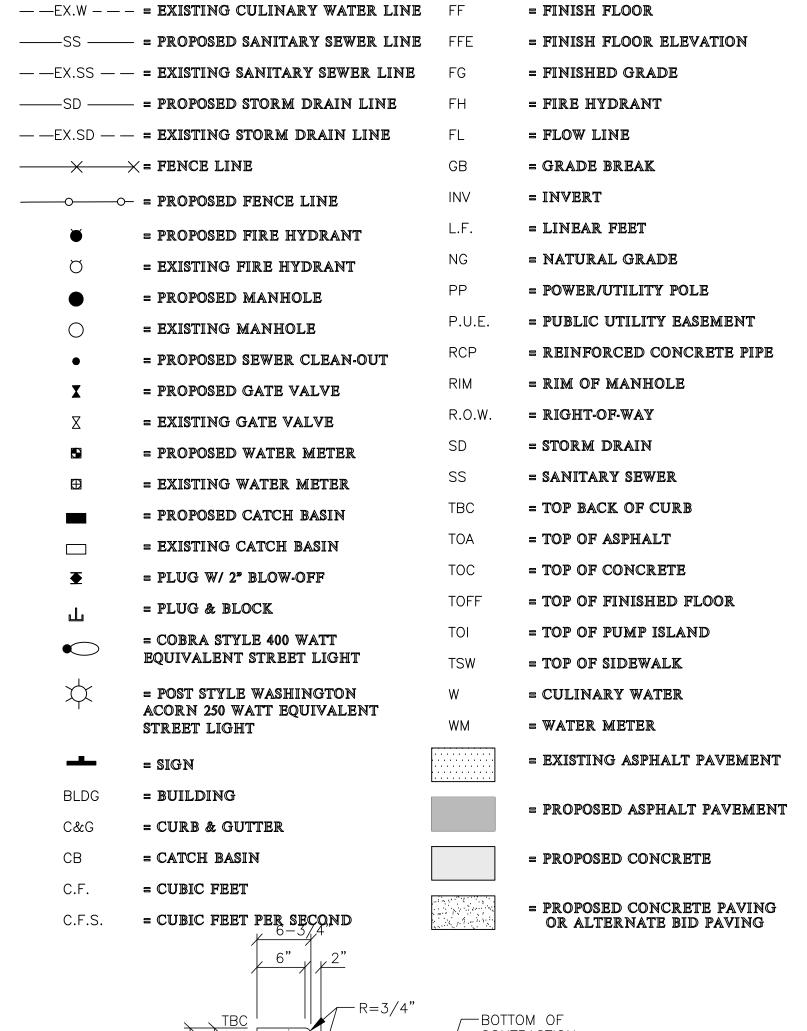
A) Spraying DISTURBED AREAS WITH A TACKIFIER VIA HYDROSEED

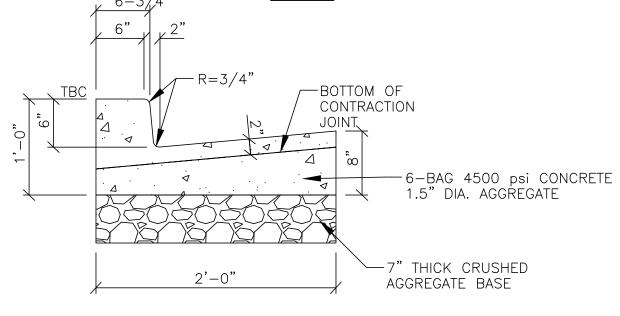
B) TRACKING STRAW PERPENDICULAR TO SLOPES

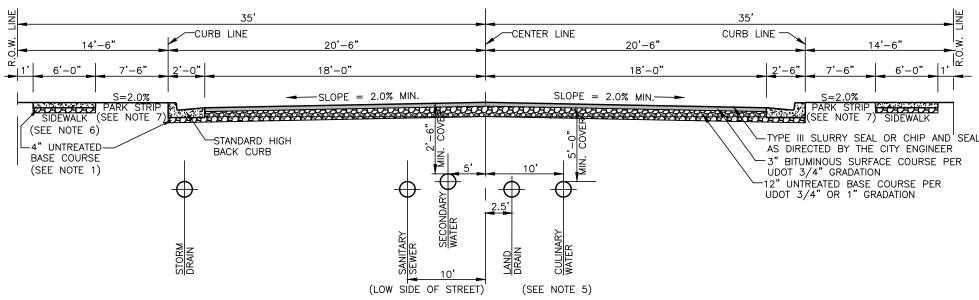
C) INSTALLING A LIGHT-WEIGHT, TEMPORARY EROSION CONTROL BLANKET

Legend

= FENCE CORNER

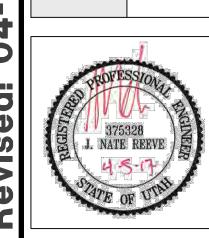






Street Section (70' R.O.W.)

Revised: 04-05-1



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Project Info.

Engineer:

J. NATE REEVE, P.E.

Drafter:

C. KINGSLEY

Begin Date:

JUNE, 2016

Name:

OLD MAPLE FARMS

SUBDIVISION

PHASES 1 & 2

Number: 6597-02

Sheet 27
Sheets

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1. PROVIDE 4" THICKNESS OF ₹" OR 1" UNTREATED BASE COURSE UNDER

GREATER DEPTH IS NECESSARY TO PROVIDE SUFFICIENT STABILITY.

STANDARDS AND MAY BE INCREASED BY THE CITY ENGINEER WHEN A

DESIGNER AND/OR DEVELOPER MAY SUBMIT AN ALTERNATIVE PAVEMENT

DESIGN BASED ON A DETAILED SOILS ANALYSIS FOR APPROVAL BY THE

CITY ENGINEER WHICH MAY MODIFY PAVEMENT THICKNESS, BUT IN NO

CASE SHALL THE BITUMINOUS SURFACE COURSE BE LESS THAN 3"

CONSTRUCTED IN COMPLIANCE WITH SOUTH WEBER CITY TECHNICAL

EPARATION IN ACCORDANCE WITH THE STATE OF UTAH DIVISION OF

SIDEWALK IS LOCATED AGAINST THE TBC, IT MUST BE A MINIMUM OF 6

5. ALL CULINARY WATER MAINS AND SERVICES MUST MAINTAIN A MINIMUM

7. THE PLANTING OF TREES IN THE PARKSTRIP MAY BE A REQUIREMENT

SIDEWALK, DRIVEWAY APPROACHES, AND CURB & GUTTER.

THESE PAVEMENT THICKNESS SHALL BE CONSIDERED AS CIT

AND THE UNTREATED BASE COURSE LESS THAN 8" THICK.

4. SIDEWALKS, CURB & GUTTER, AND CROSS DRAINS SHALL BE

6. THE SIDEWALK SHOWN ABOVE IS TO BE CONSIDERED THE "CITY

STANDARD." OTHER LOCATIONS AND TYPES OF SIDEWALK AS REQUESTED BY THE DEVELOPER MUST BE APPROVED BY THE CITY.

OF THE DEVELOPMENT IF DEEMED NECESSARY BY THE CITY.

DRINKING WATER RULES SECTION R309-550-7.

THE EXISTING PAVEMENT SECTION CUT

SPECIFICATIONS.

3. ALL ROAD CUTS SHALL BE PATCHED TO MATCH THE THICKNESS OF

**Central Weber Sewer District** Standard Manhole Connection Detail

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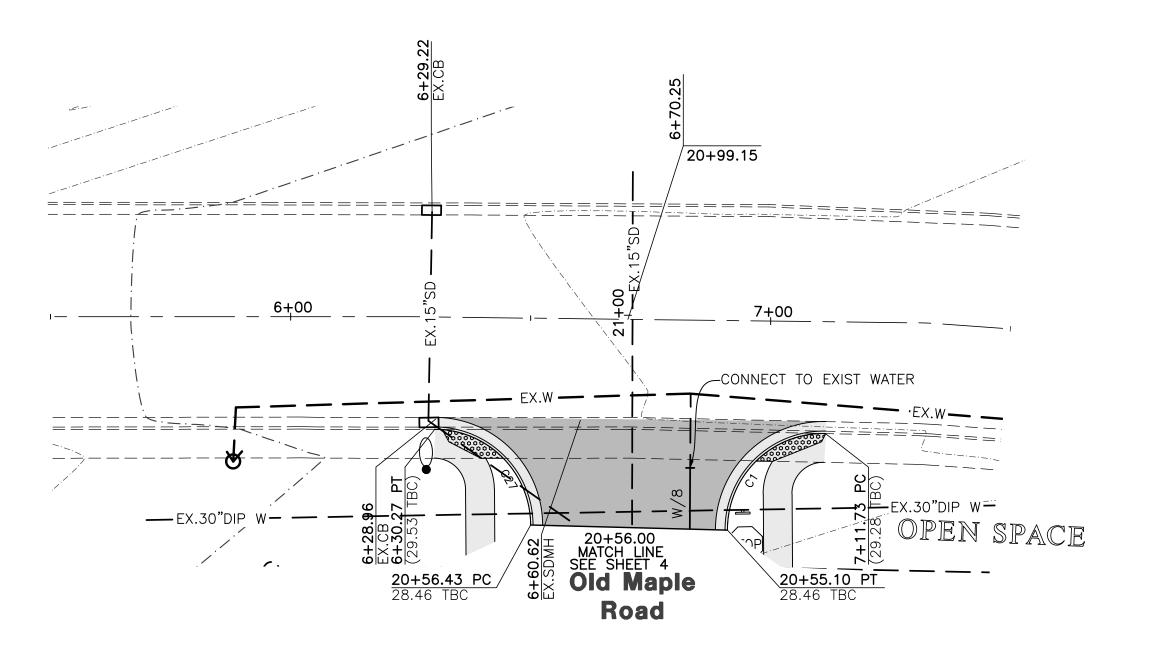
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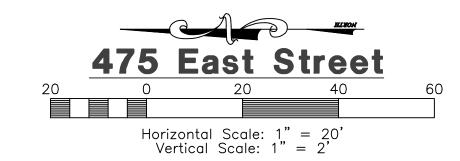
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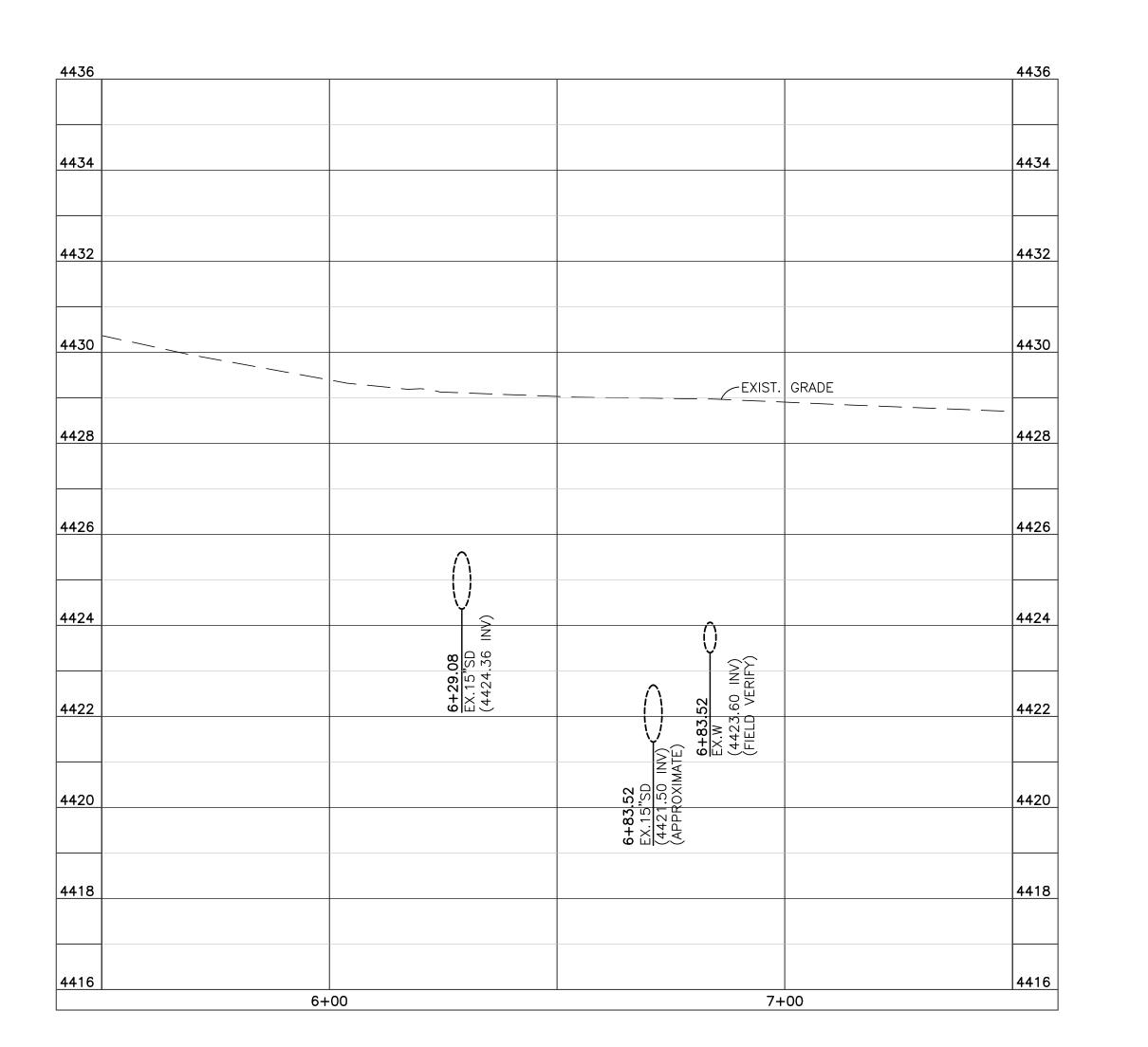
Project Info. J. NATE REEVE, P.E. Drafter: C. KINGSLEY Begin Date: JUNE, 2016 OLD MAPLE FARMS SUBDIVISION PHASES 1 & 2 Number: <u>6597-02</u>

Sheets

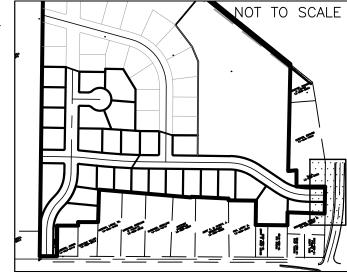


TBC Curve Data							
#	Delta	Radius	Length	Tangent	Chord	CH Length	
C1	91°35'04"	20.00'	31.97'	20.56'	N43°26'28"W	28.67'	
C27	89°42'12"	20.00'	31.31'	19.90'	N45°54'54"E	28.21'	





Key Map



### **Construction Notes:**

ALL CONSTRUCTION IS TO CONFORM TO THE STANDARD DRAWINGS AND SPECIFICATIONS OF SOUTH WEBER CITY.

(2) CONSTRUCT HANDICAP RAMP PER ADA AND CITY REQUIREMENTS.

CULINARY WATER 1"W - 1"ø TYPE K COPPER W/1" METER

SEE CITY STANDARD DRAWING CS-06 W/8 - 8" DI AWWA C151-02 CLASS 51 W/POLY WRAP

## IRRIGATION WATER IRR/8 - 8" PVC IRR C-900 DR-14

### SANITARY SEWER 4"SS - 4" PVC 3034 SEWER PIPE SS/8 - 8" PVC ASTM 3034 SEWER LINE

STORM DRAIN
SD/15 - 15" RCP STORM DRAIN

SD/18 - 18" RCP STORM DRAIN SD/36 - 36" RCP STORM DRAIN SD/42 - 42" RCP STORM DRAIN

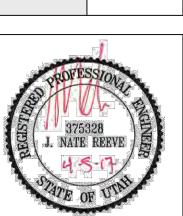
### LAND DRAIN

4"LD - 4" PVC 3034 LAND DRAIN PIPE LD/8 - 8" PVC ASTM 3034 LAND DRAIN LINE NOTE: ANY CULINARY OR IRRIGATION WATERLINE LOOPS TO BE PER SOUTH WEBER CITY STANDARDS



DESCRIPTION	Eng. Comments	City Comments	City Comments	City Comments	Eng. Comments	City Comments	_and Drain	
	Eng.	City	City	City	Eng.	City	Lanc	
	CK	CK	CK	CK	CK	CK	CK	
DATE	08-18-16 CK	09-08-16 CK	01-04-17 CK	01-17-17 CK	01-30-17 CK	02-22-17 CK	04-05-17 CK	

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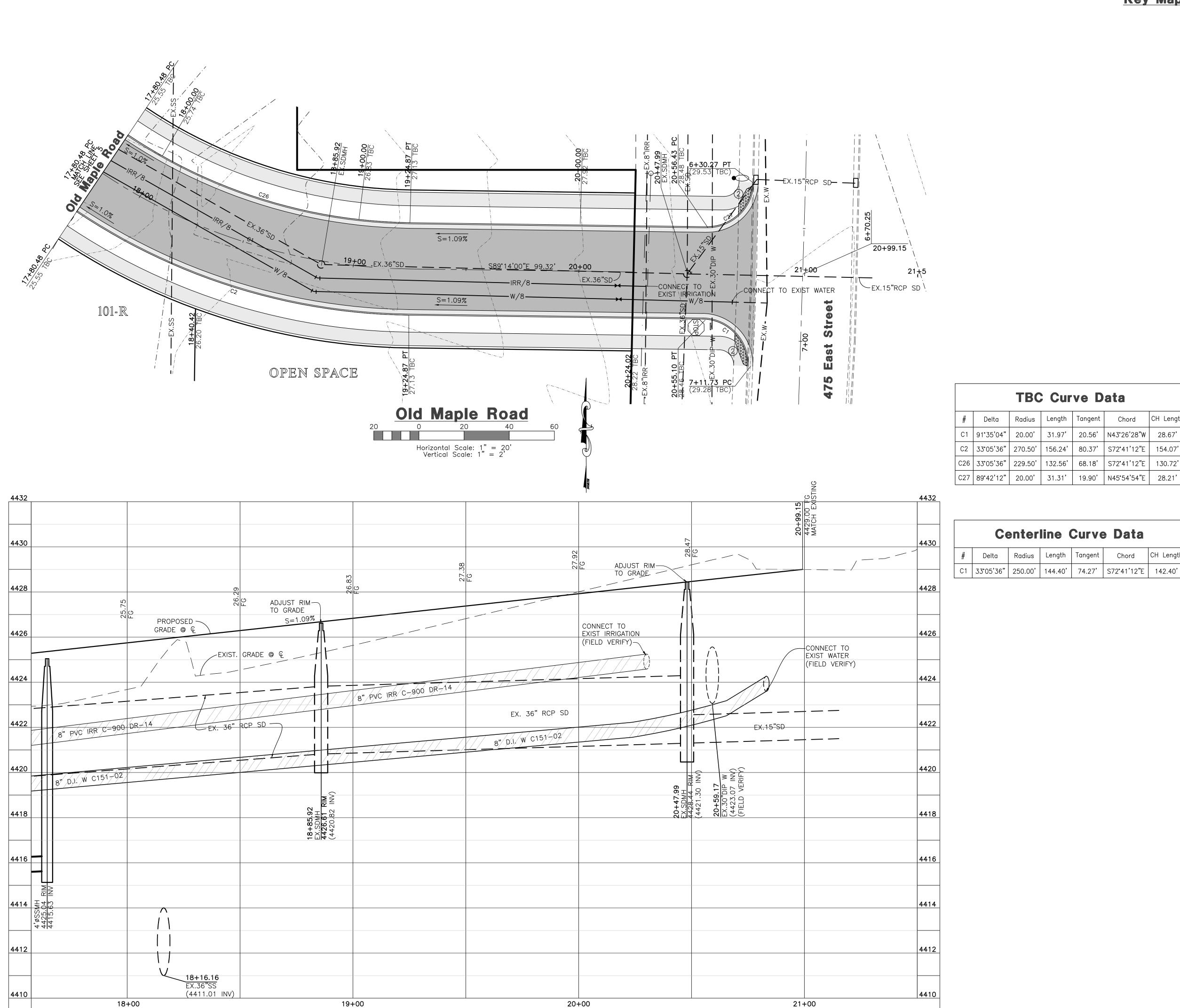


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Revised:	375328 J. NATE REEVE
	Project Info.

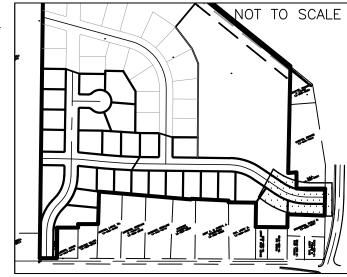
	Project Info.
	Engineer:
	Drafter: C. KINGSLEY
	Begin Date: JUNE, 2016
	Name: OLD MAPLE FARMS
$\overline{}$	SUBDIVISION
) [	PHASES 1 & 2
	Number: <u>6597-02</u>

Sheet Sheets

Blue Stakes Location Center Call: Toll Free 1-800-662-4111



Key Map



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NOTE: ANY CULINARY OR IRRIGATION WATERLINE LOOPS TO BE PER SOUTH WEBER CITY STANDARDS

### **TBC Curve Data** Radius | Length | Tangent | CH Length Delta Chord C1 | 91°35'04" | 20.00' | 31.97' | 20.56' | N43°26'28"W | 28.67' C2 | 33°05′36" | 270.50' | 156.24' | 80.37' | S72°41'12"E | 154.07'

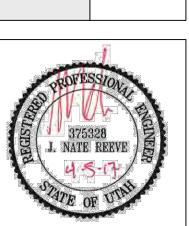
	Ce	enter	line (	Curve	Data	
#	Delta	Radius	Length	Tangent	Chord	CH Length
21	33°05'36"	250.00'	144.40'	74.27'	S72°41'12"E	142.40'

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Project Info. J. NATE REEVE, P.E. C. KINGSLEY Begin Date: JUNE, 2016 OLD MAPLE FARMS SUBDIVISION PHASES 1 & 2 Number: <u>6597-02</u>

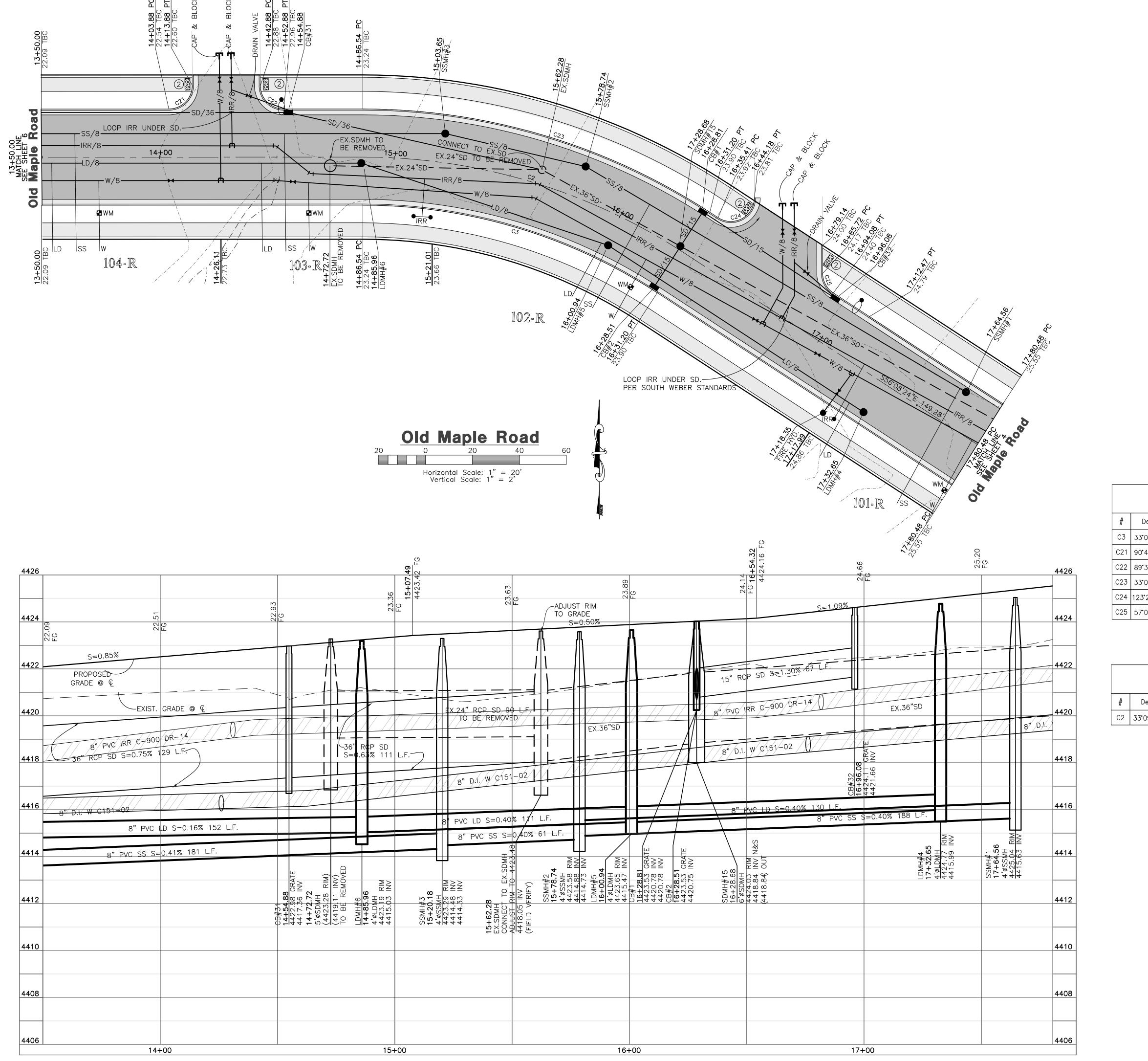
> Sheet 27 Sheets

Blue Stakes Location Center Call: Toll Free 1-800-662-4111

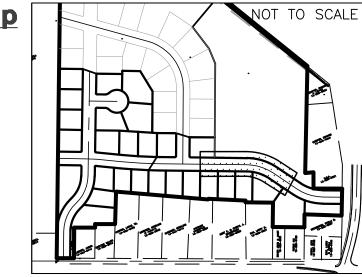
Two Working Days Before You Dig

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Reeve & Associates, Inc. - Solutions You Can Build On



Key Map



### **Construction Notes:**

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#### CULINARY WATER

1"W - 1"Ø TYPE K COPPER W/1" METER
SEE CITY STANDARD DRAWING CS-06
W/8 - 8" DI AWWA C151-02 CLASS 51
W/POLY WRAP

#### IRRIGATION WATER

IRR/8 - 8" PVC IRR C-900 DR-14

#### SANITARY SEWER

4"SS - 4" PVC 3034 SEWER PIPE SS/8 - 8" PVC ASTM 3034 SEWER LINE

## SD/15 - 15" RCP STORM DRAIN

SD/18 - 18" RCP STORM DRAIN SD/36 - 36" RCP STORM DRAIN SD/42 - 42" RCP STORM DRAIN

### LAND DRAIN

4"LD - 4" PVC 3034 LAND DRAIN PIPE LD/8 - 8" PVC ASTM 3034 LAND DRAIN LINE

NOTE: ANY CULINARY OR IRRIGATION WATERLINE LOOPS TO BE PER SOUTH WEBER CITY STANDARDS

		TBC	Cur	ve D	ata	
#	Delta	Radius	Length	Tangent	Chord	CH Length
С3	33°09'15"	229.50'	132.80'	68.32'	N72°43'01"W	130.96
C21	90°45'50"	9.96'	15.79'	10.10'	N45°31'41"E	14.19'
C22	89°38'40"	10.00'	15.65'	9.94'	S44°28'19"E	14.10'
C23	33°09'15"	270.50'	156.52	80.52	N72°43'01"W	154.35'
C24	123°21'24"	10.00'	21.53'	18.56	N62°10'54"E	4427.63
C25	57°09'07"	10.00'	9.97'	5.45'	S28°04'12"E	9.57

	Ce	enter	line (	Curve	e Data	
#	Delta	Radius	Length	Tangent	Chord	CH Length
C2	33°09'15"	250.00'	144.66	74.42'	S72°43'01"E	142.65

evised: 04-05-17

375328
J. NATE REEVE

Project Info.

Begin Date:

J. NATE REEVE, P.E.

JUNE, 2016

OLD MAPLE FARMS

SUBDIVISION
PHASES 1 & 2

Number: <u>6597-02</u>

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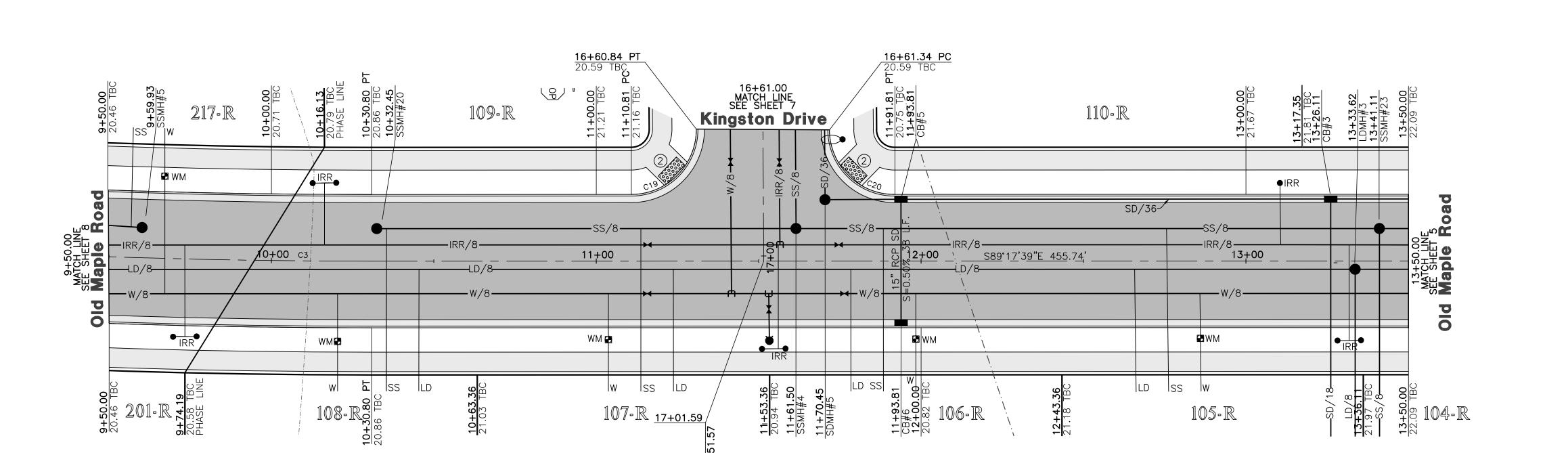
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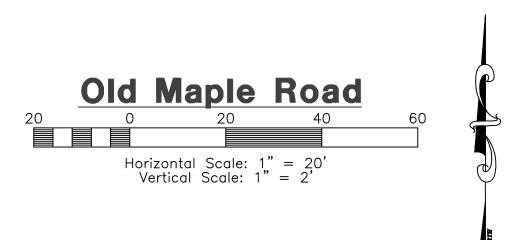
Blue Stakes Location Center

Call: Toll Free
1-800-662-4111
Two Working Days Before You Dig

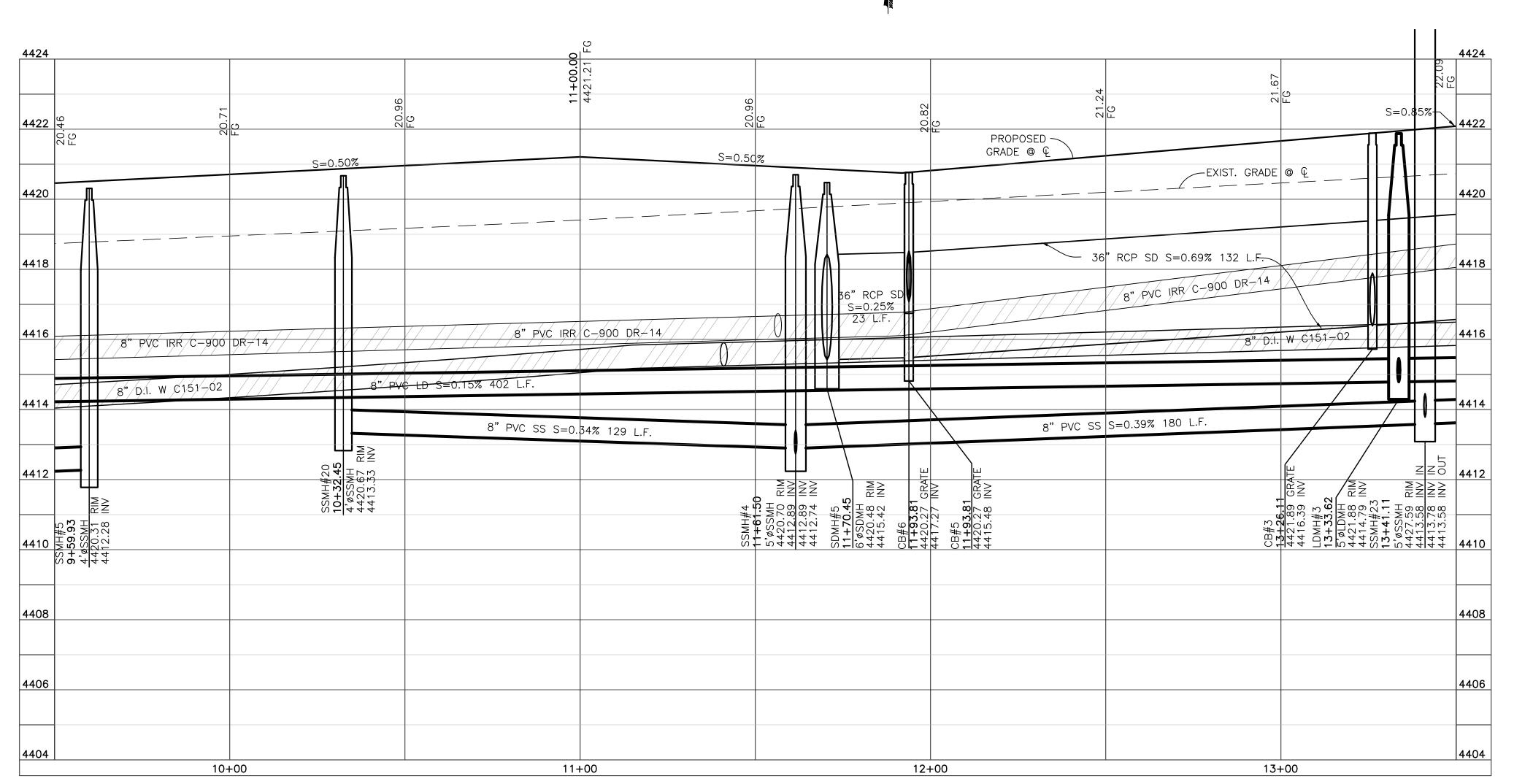
Sheet 27
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	TBC Curve Data								
#	Delta	Radius	Length	Tangent	Chord	CH Length			
C19	90°21'20"	20.00'	31.54'	20.12'	N45°31'41"E	28.37'			
C20	89°38'40"	20.00'	31.29'	19.88'	S44°28'19"E	28.20'			



Key Map



### **Construction Notes:**

ALL CONSTRUCTION IS TO CONFORM TO THE STANDARD DRAWINGS AND SPECIFICATIONS OF SOUTH WEBER CITY

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### CULINARY WATER

1"W - 1"Ø TYPE K COPPER W/1" METER SEE CITY STANDARD DRAWING CS-06 W/8 - 8" DI AWWA C151-02 CLASS 51 W/POLY WRAP

### IRRIGATION WATER

IRR/8 - 8" PVC IRR C-900 DR-14

#### SANITARY SEWER

4"SS - 4" PVC 3034 SEWER PIPE SS/8 - 8" PVC ASTM 3034 SEWER LINE

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### SD/42 - 42" RCP STORM DRAIN

LAND DRAIN 4"LD - 4" PVC 3034 LAND DRAIN PIPE LD/8 - 8" PVC ASTM 3034 LAND DRAIN LINE

NOTE: ANY CULINARY OR IRRIGATION WATERLINE LOOPS TO BE PER SOUTH WEBER CITY STANDARDS

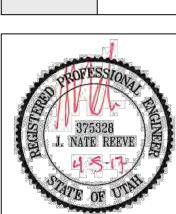


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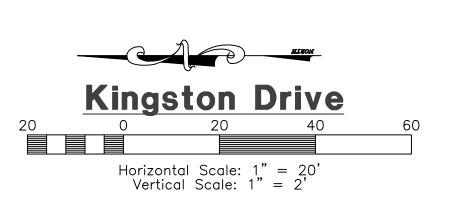


Project Info. J. NATE REEVE, P.E. C. KINGSLEY Begin Date: OLD MAPLE FARMS SUBDIVISION PHASES 1 & 2 Number: <u>6597-02</u>

> Sheet 27 6 Sheets

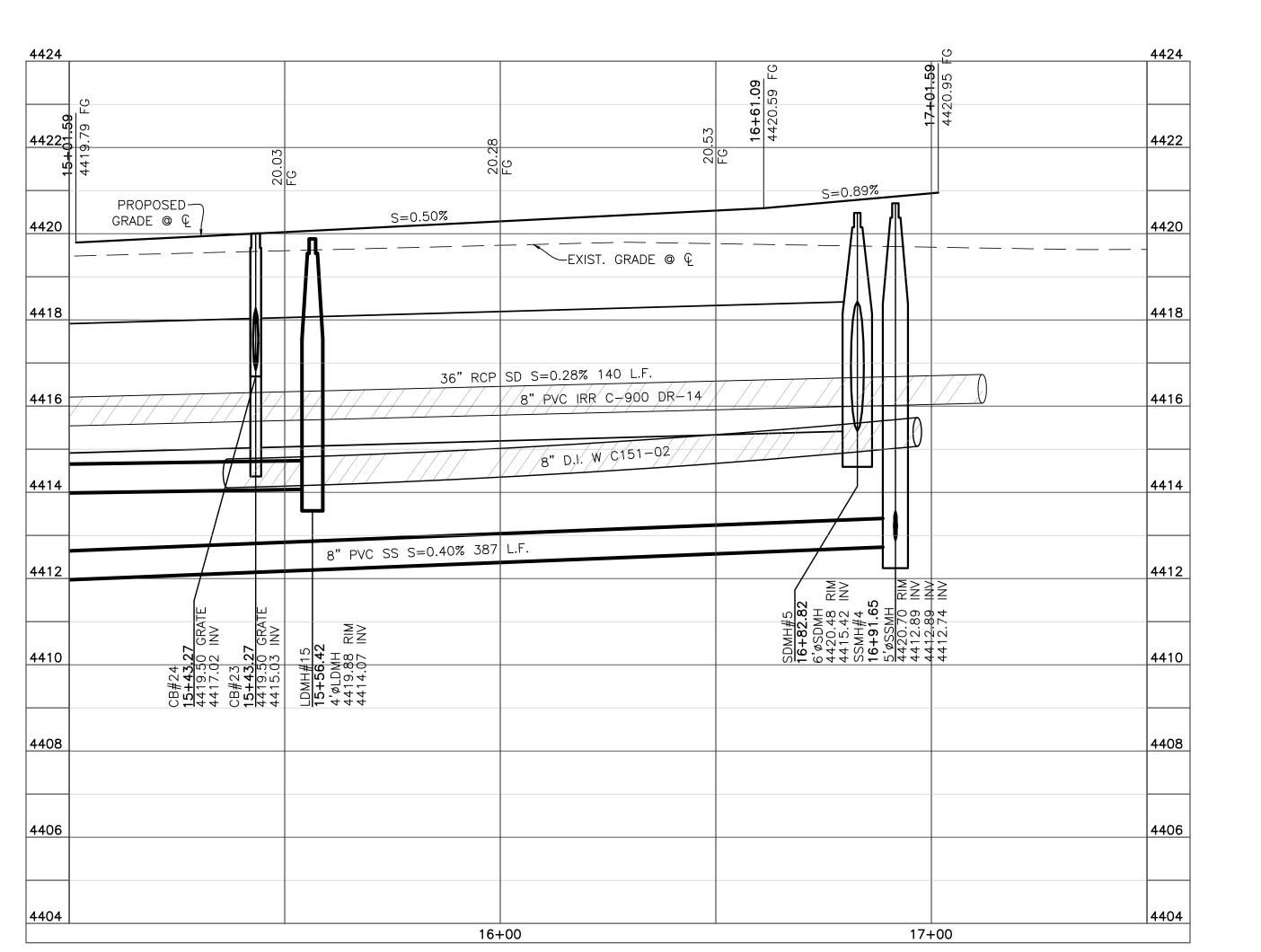
Blue Stakes Location Center Call: Toll Free 1-800-662-4111

Two Working Days Before You Dig

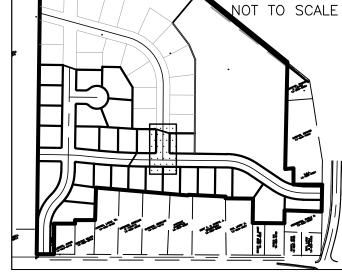


TBC Curve Data								
# Delta Radius Length Tangent Chord	CH Length							
C19 90°21'20" 20.00' 31.54' 20.12' N45°31'41"E	28.37'							
C20         89°38'40"         20.00'         31.29'         19.88'         S44°28'19"E	28.20'							

Road



Key Map



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NOTE: ANY CULINARY OR IRRIGATION WATERLINE LOOPS TO BE PER SOUTH WEBER CITY STANDARDS



I LAISIONS	DESCRIPTION	Eng. Comments	City Comments	City Comments	City Comments	Eng. Comments	City Comments	Land Drain	
	DATE	08-18-16 CK	09-08-16 CK	01-04-17 CK	01-17-17 CK	01-30-17 CK	02-22-17 CK	04-05-17 CK	

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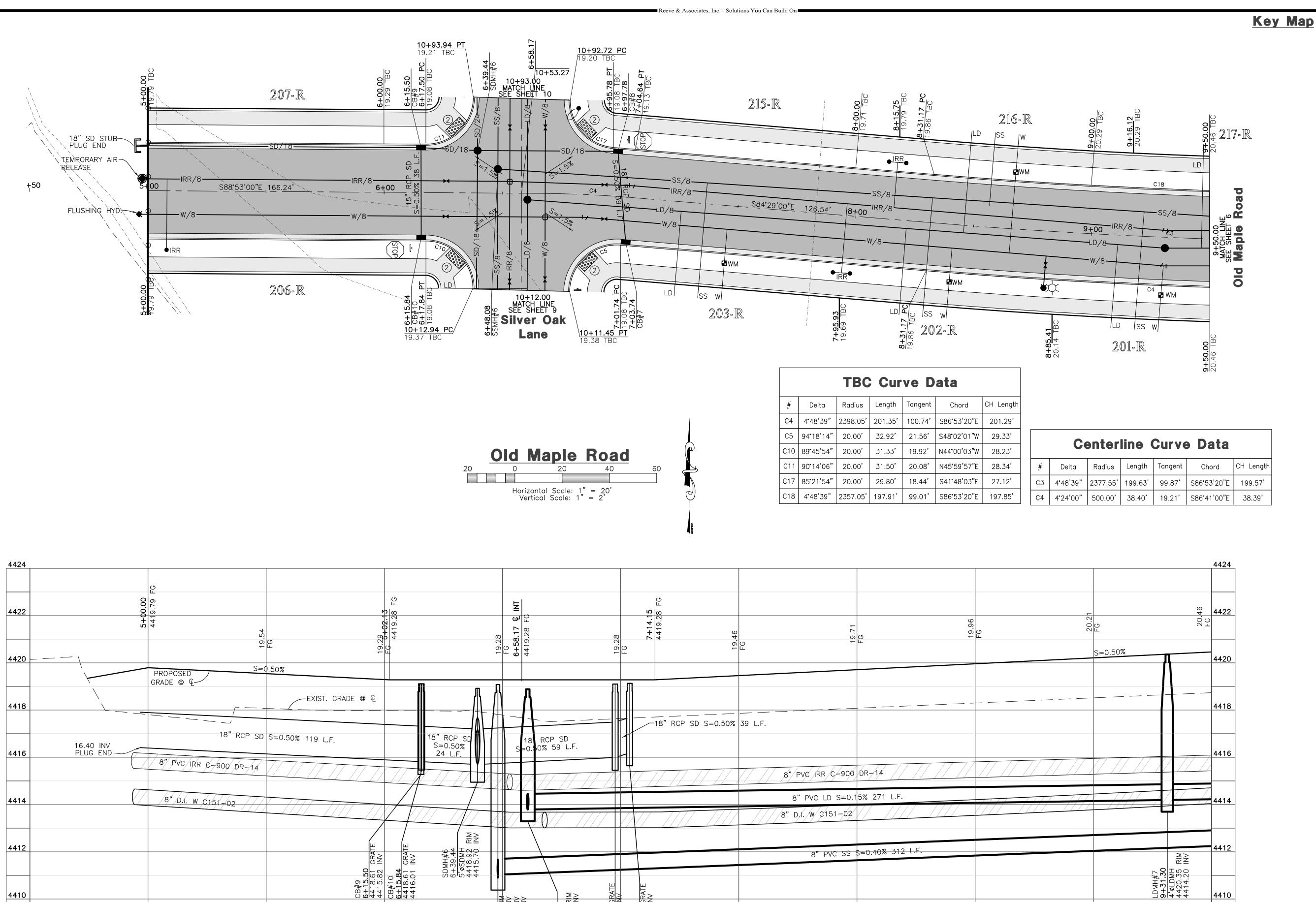
Maple Farms Phases 1 PIO

Project Info. J. NATE REEVE, P.E. Begin Date: JUNE, 2016 OLD MAPLE FARMS SUBDIVISION PHASES 1 & 2 Number: <u>6597-02</u>

> Sheet 27 Sheets

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DESCRIPTION	Eng. Comment	City Comments	City Comments	City Comments	Eng. Comment	City Comments	Land Drain	
	CK	X	S	CK	X	CK	CK	
DATE	08-18-16 CK	09-08-16 CK	01-04-17 CK	01-17-17 CK	01-30-17 CK	02-22-17 CK	04-05-17 CK	

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Project Info.

J. NATE REEVE, P.E. Begin Date: JUNE, 2016 OLD MAPLE FARMS SUBDIVISION PHASES 1 & 2

Sheet 8 Sheets

Number: <u>6597-02</u>

Blue Stakes Location Center Call: Toll Free 1-800-662-4111

Two Working Days Before You Dig

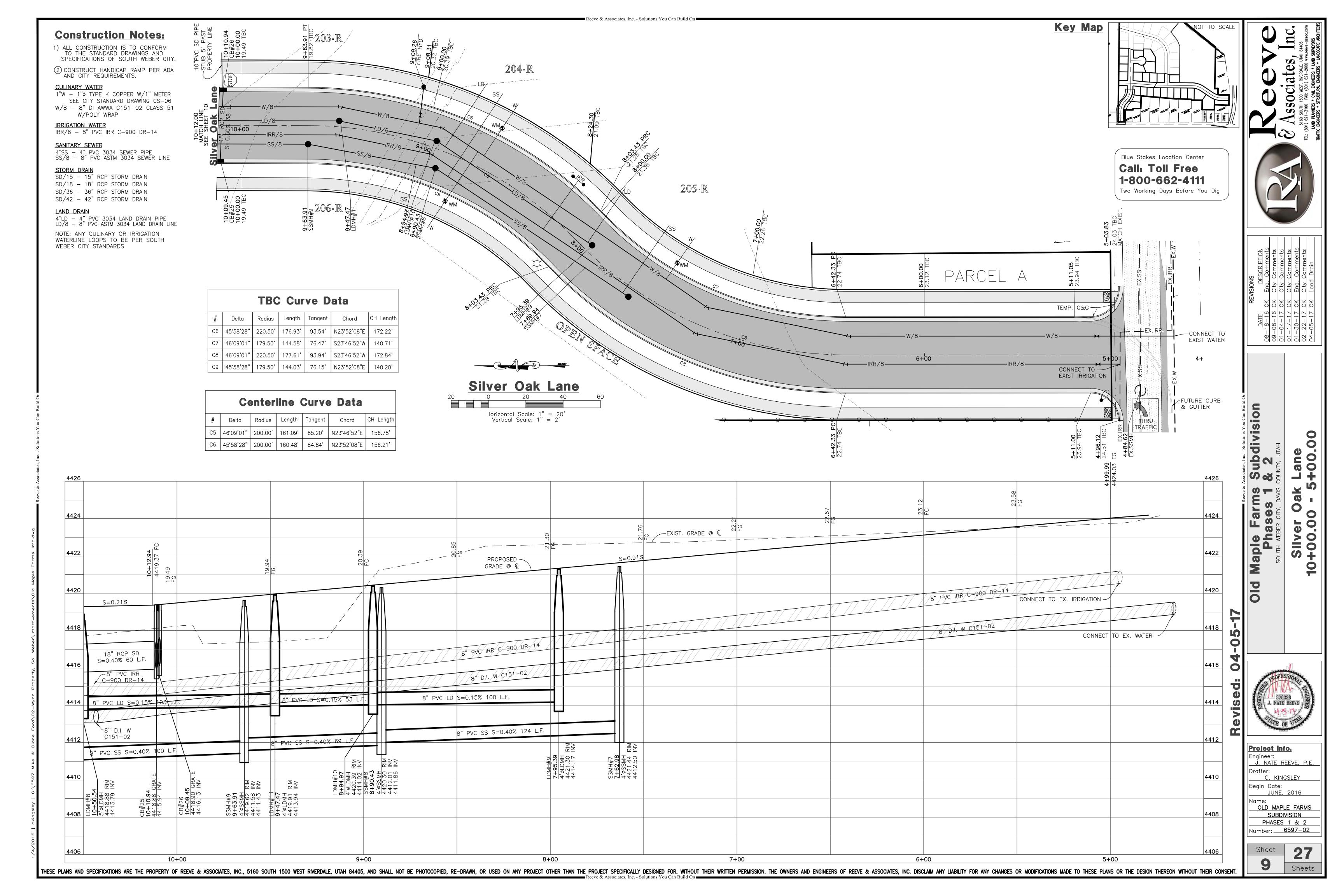
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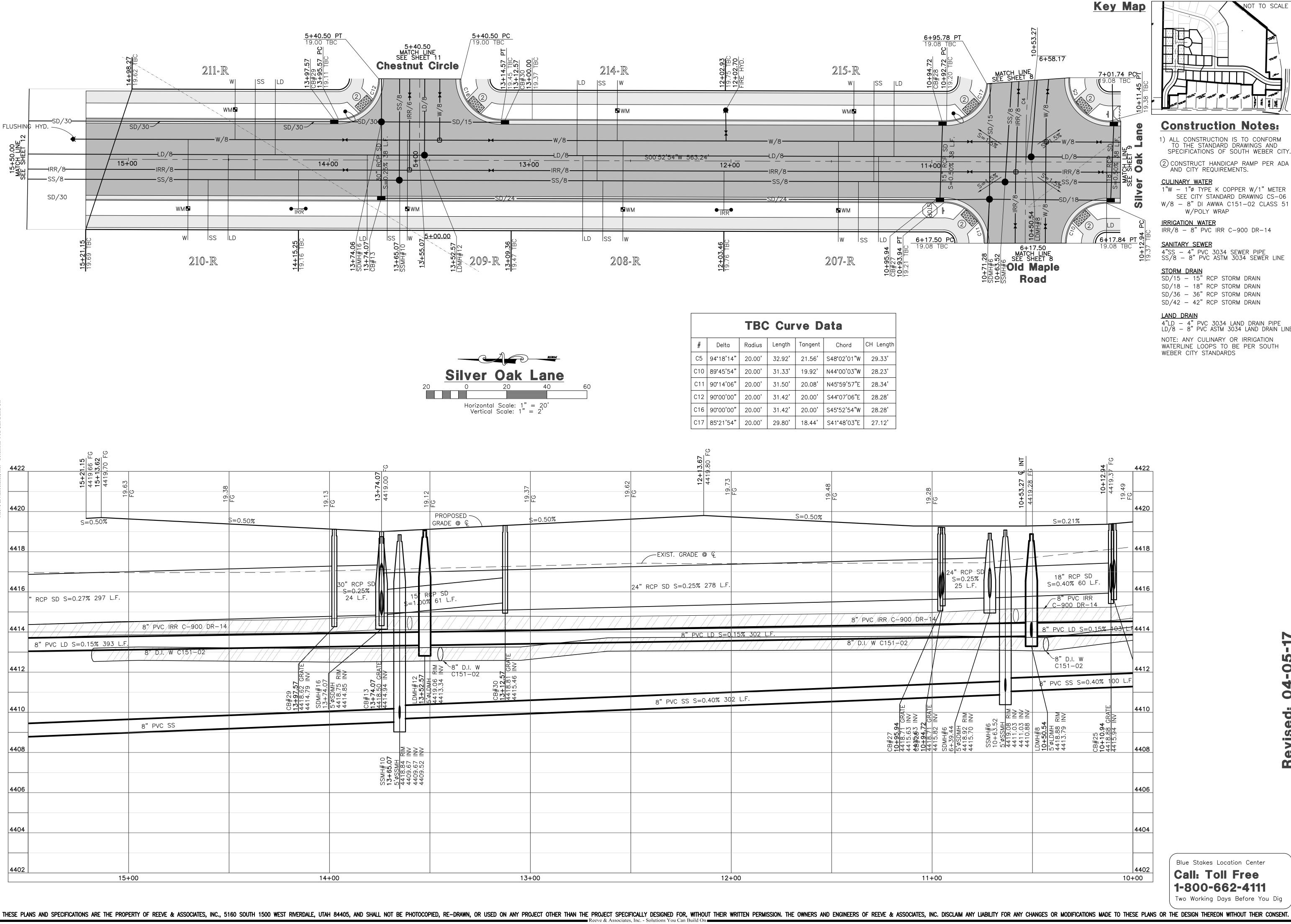
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IRR/8 - 8" PVC IRR C-900 DR-14

SD/15 - 15" RCP STORM DRAIN SD/18 - 18" RCP STORM DRAIN

SD/36 - 36" RCP STORM DRAIN SD/42 - 42" RCP STORM DRAIN

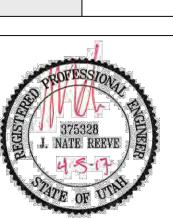
4"LD - 4" PVC 3034 LAND DRAIN PIPE LD/8 - 8" PVC ASTM 3034 LAND DRAIN LINE NOTE: ANY CULINARY OR IRRIGATION WATERLINE LOOPS TO BE PER SOUTH

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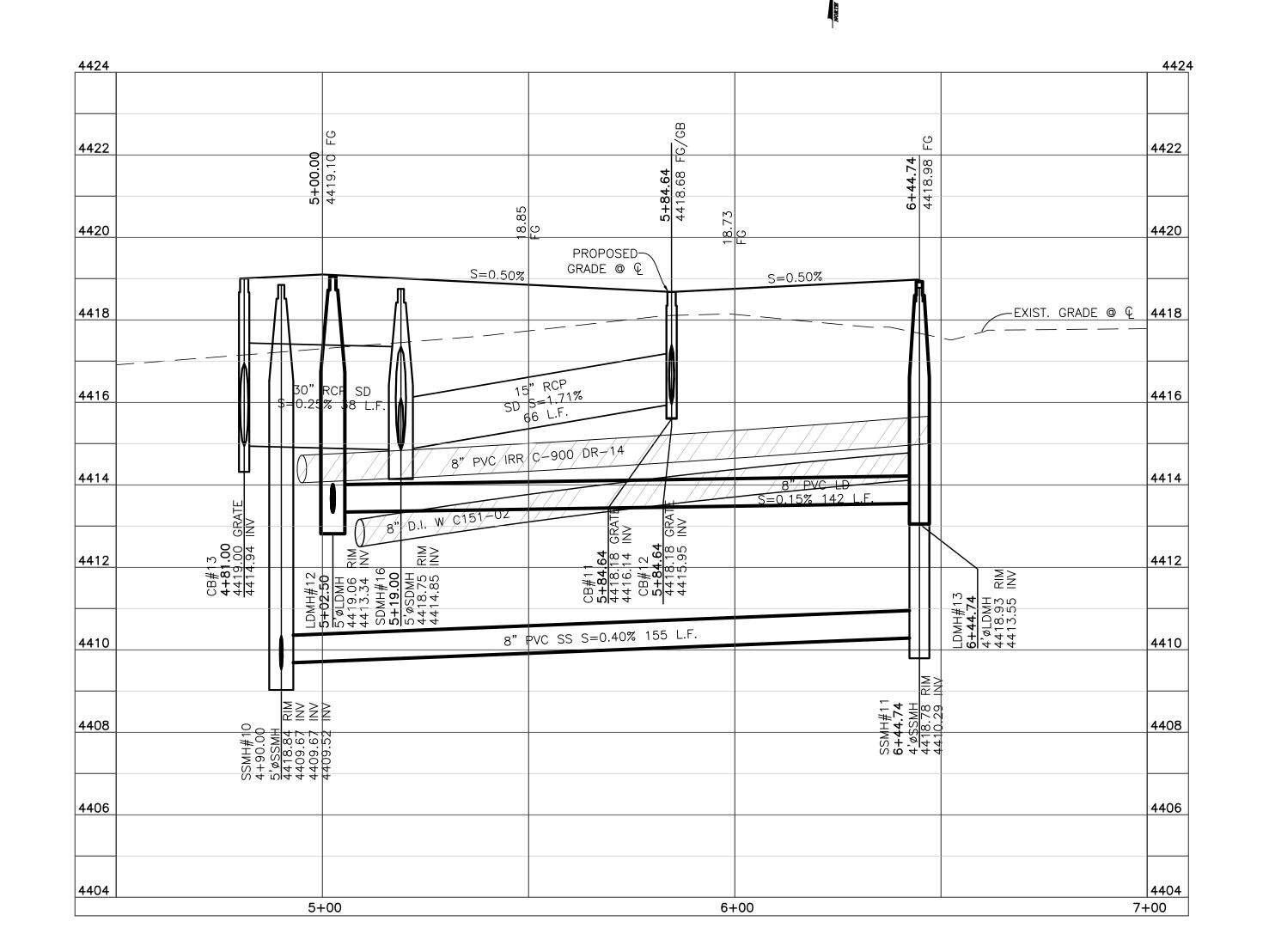
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Project Info. J. NATE REEVE, P.E C. KINGSLEY Begin Date: JUNE, 2016

OLD MAPLE FARMS SUBDIVISION PHASES 1 & 2 Number: <u>6597-02</u>

Sheet 27 Sheets



Key Map



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#	Delta	Radius	Length	Tangent	Chord	CH Length			
C12	90°00'00"	20.00'	31.42'	20.00'	S44°07'06"E	28.28'			
C13	46°34'03"	34.50'	28.04	14.85'	N67°35'52"E	27.27'			
C14	273°08'06"	45.50'	216.90'	43.08'	N0°52'54"E	62.56'			
C15	46°34'03"	34.50'	28.04	14.85'	N65°50'05"W	27.27'			
C16	90°00'00"	20.00'	31.42'	20.00'	S45°52'54"W	28.28'			

PIO

Blue Stakes Location Center Call: Toll Free

1-800-662-4111 Two Working Days Before You Dig Sheet 27 11 Sheets

Project Info.

Begin Date:

J. NATE REEVE, P.E.

JUNE, 2016

OLD MAPLE FARMS SUBDIVISION

PHASES 1 & 2

Number: <u>6597-02</u>



08-18-09-08-01-04-1 01-17-1 01-30-1 02-22-1 04-05-1

Subdivision

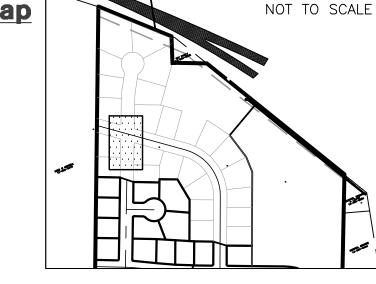
Subdivision

& 2

COUNTY, UTAH Circle 7+00.00

0 Che. Maple Ph

Key Map



### **Construction Notes:**

ALL CONSTRUCTION IS TO CONFORM TO THE STANDARD DRAWINGS AND SPECIFICATIONS OF SOUTH WEBER CITY.

② CONSTRUCT HANDICAP RAMP PER ADA AND CITY REQUIREMENTS.

### CULINARY WATER

1"W - 1"Ø TYPE K COPPER W/1" METER SEE CITY STANDARD DRAWING CS-06 W/8 - 8" DI AWWA C151-02 CLASS 51 W/POLY WRAP

### IRRIGATION WATER

IRR/8 - 8" PVC IRR C-900 DR-14

#### SANITARY SEWER

4"SS - 4" PVC 3034 SEWER PIPE SS/8 - 8" PVC ASTM 3034 SEWER LINE

## STORM DRAIN SD/15 - 15" RCP STORM DRAIN

SD/18 - 18" RCP STORM DRAIN SD/36 - 36" RCP STORM DRAIN

### SD/42 - 42" RCP STORM DRAIN

LAND DRAIN 4"LD - 4" PVC 3034 LAND DRAIN PIPE LD/8 - 8" PVC ASTM 3034 LAND DRAIN LINE

NOTE: ANY CULINARY OR IRRIGATION WATERLINE LOOPS TO BE PER SOUTH WEBER CITY STANDARDS



REVISIONS	DESCRIPTION	Eng. Comments	City Comments	City Comments	City Comments	Eng. Comments	City Comments	Land Drain	
אַבּ	DATE	08-18-16 CK	09-08-16 CK	01-04-17 CK	01-17-17 CK	01-30-17 CK	02-22-17 CK	04-05-17 CK	
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ues, inc. - Solutions You Can Build ubdivision
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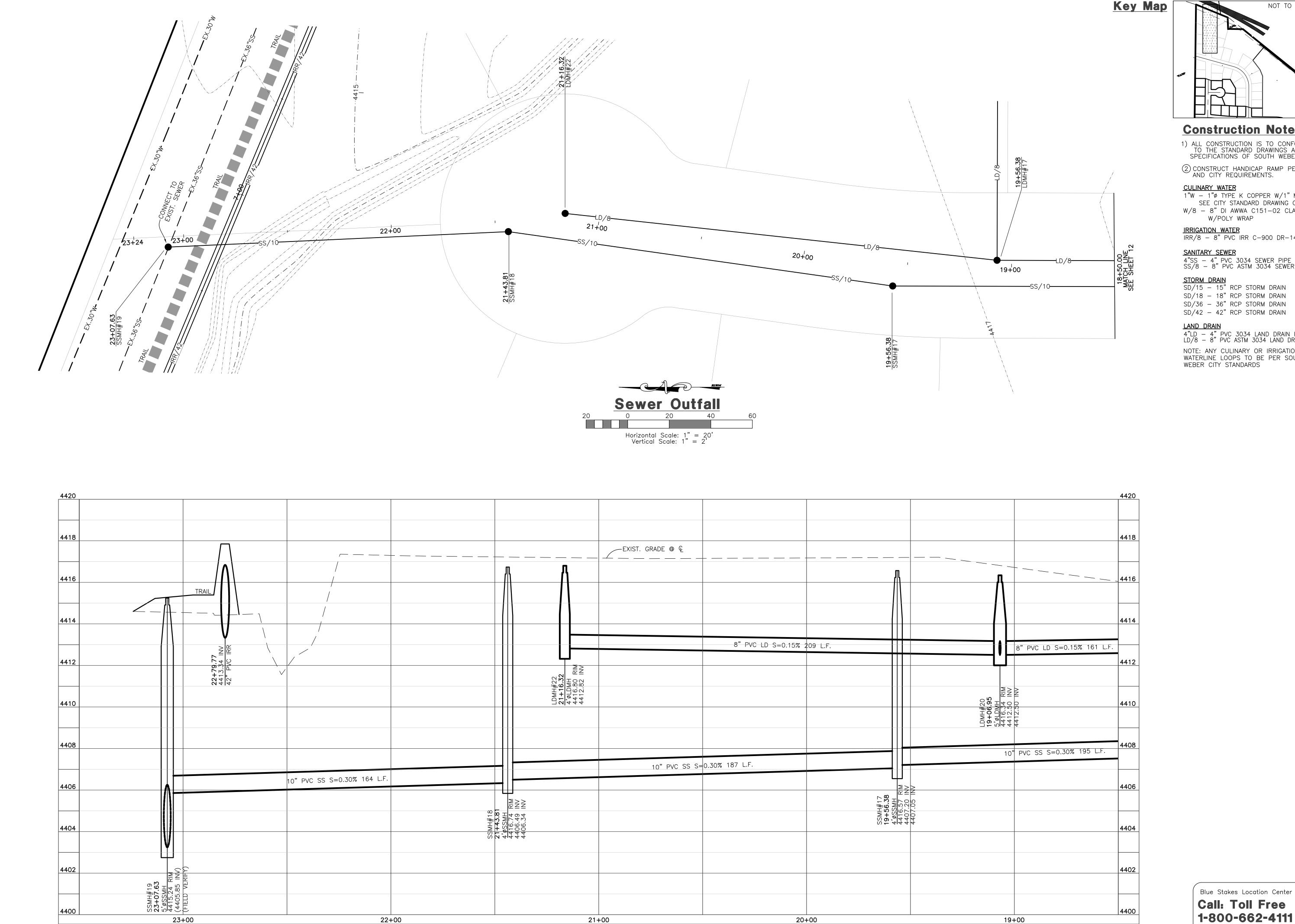
Project Info. J. NATE REEVE, P.E. C. KINGSLEY Begin Date: JUNE, 2016 OLD MAPLE FARMS SUBDIVISION PHASES 1 & 2 Number: <u>6597-02</u>

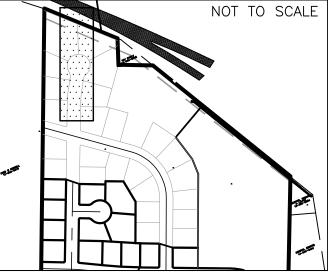
> Sheet 27 12 Sheets

Blue Stakes Location Center Call: Toll Free

1-800-662-4111 Two Working Days Before You Dig

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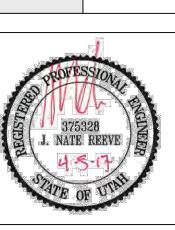
4"LD - 4" PVC 3034 LAND DRAIN PIPE LD/8 - 8" PVC ASTM 3034 LAND DRAIN LINE NOTE: ANY CULINARY OR IRRIGATION WATERLINE LOOPS TO BE PER SOUTH WEBER CITY STANDARDS

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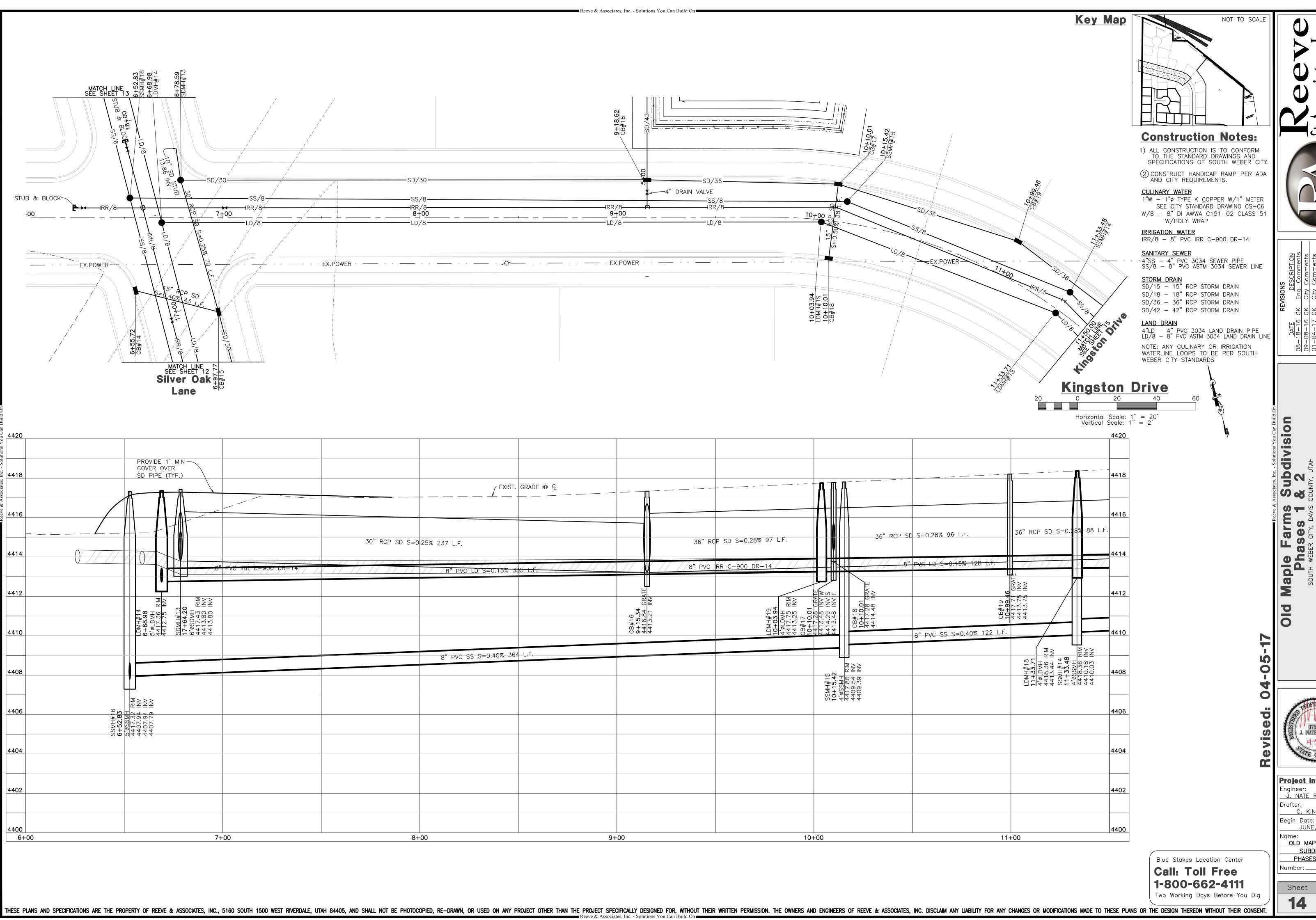
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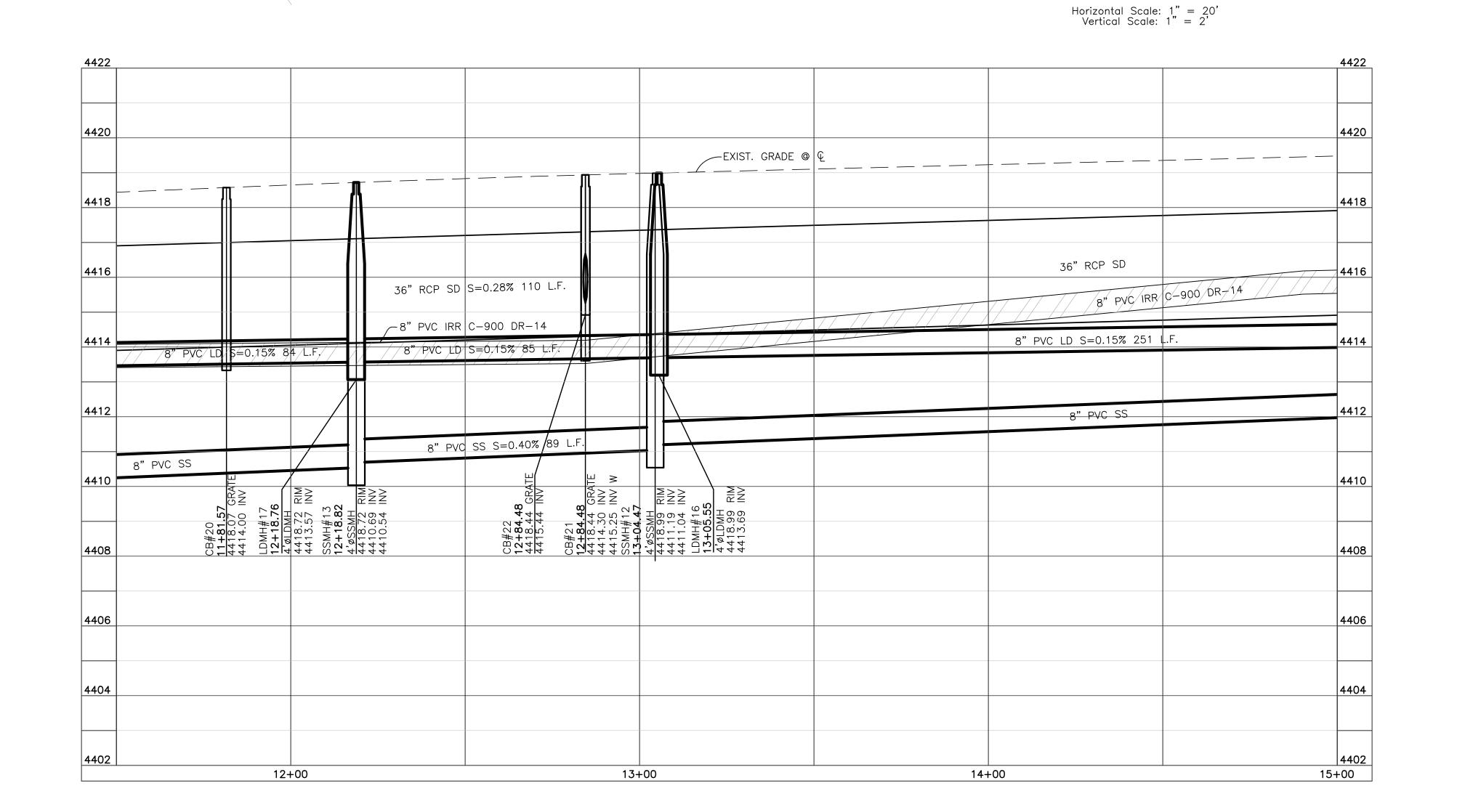
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Project Info. <u>J. NATE REEVE, P.E.</u> Drafter: C. KINGSLEY Begin Date: JUNE, 2016

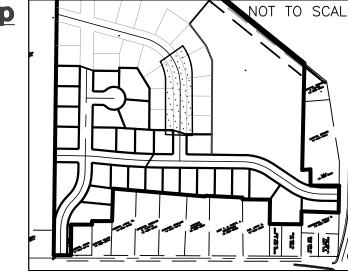
OLD MAPLE FARMS SUBDIVISION

PHASES 1 & 2 Number: <u>6597–02</u>

Sheet 27 14 Sheets



Key Map



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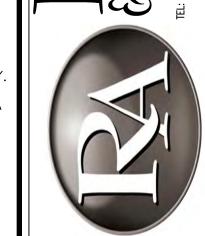
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Project Info. J. NATE REEVE, P.E. C. KINGSLEY Begin Date:

JUNE, 2016 OLD MAPLE FARMS SUBDIVISION

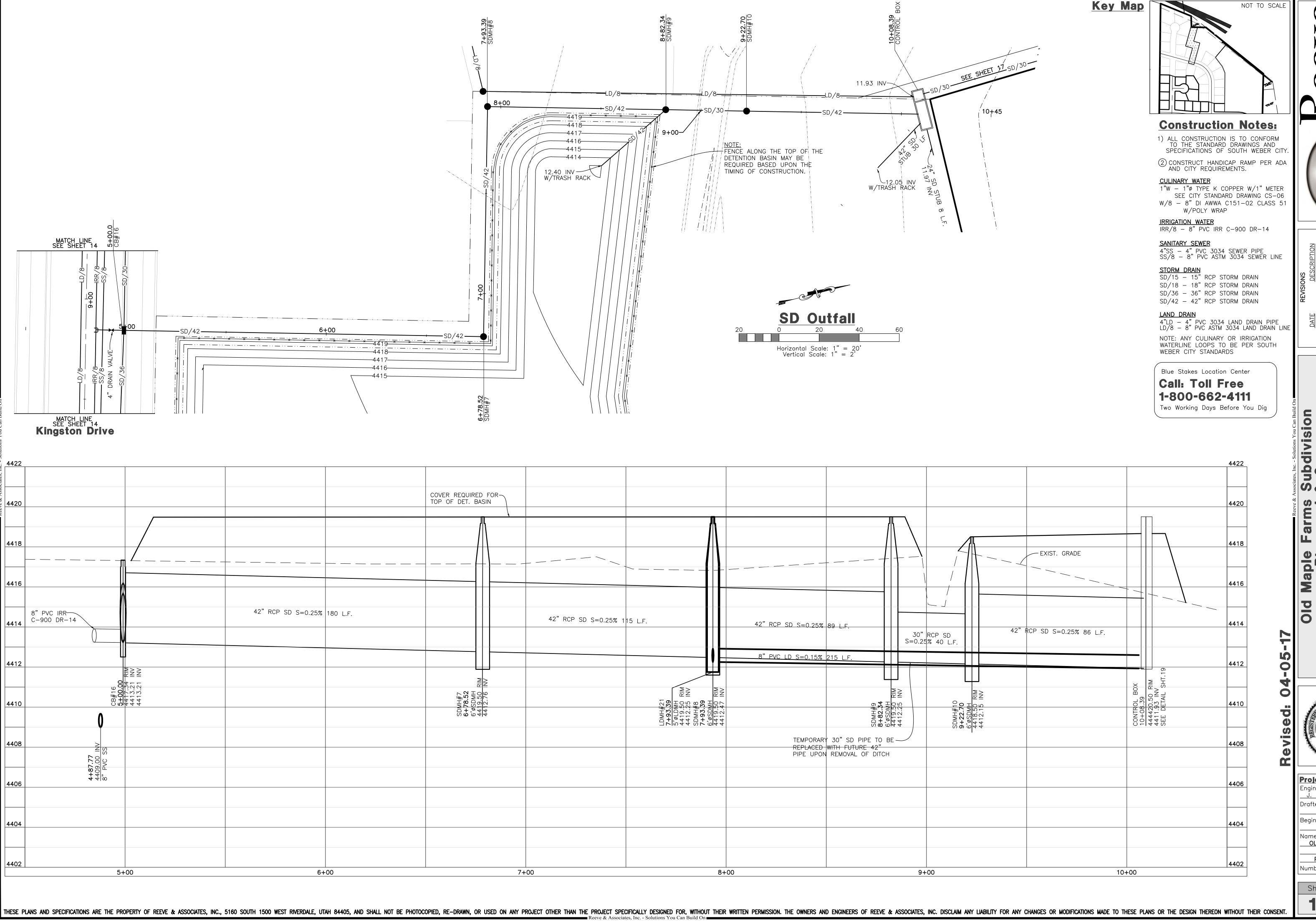
PHASES 1 & 2 Number: <u>6597-02</u>

Sheet 27 **15** Sheets

Blue Stakes Location Center Call: Toll Free

1-800-662-4111

Two Working Days Before You Dig



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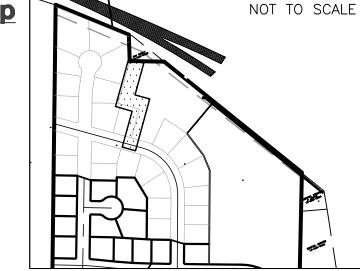
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J. NATE REEVE, P.E. C. KINGSLEY

Project Info. Drafter: Begin Date: JUNE, 2016 OLD MAPLE FARMS SUBDIVISION PHASES 1 & 2

Number: <u>6597–02</u> Sheet 27 Sheets

Key Map



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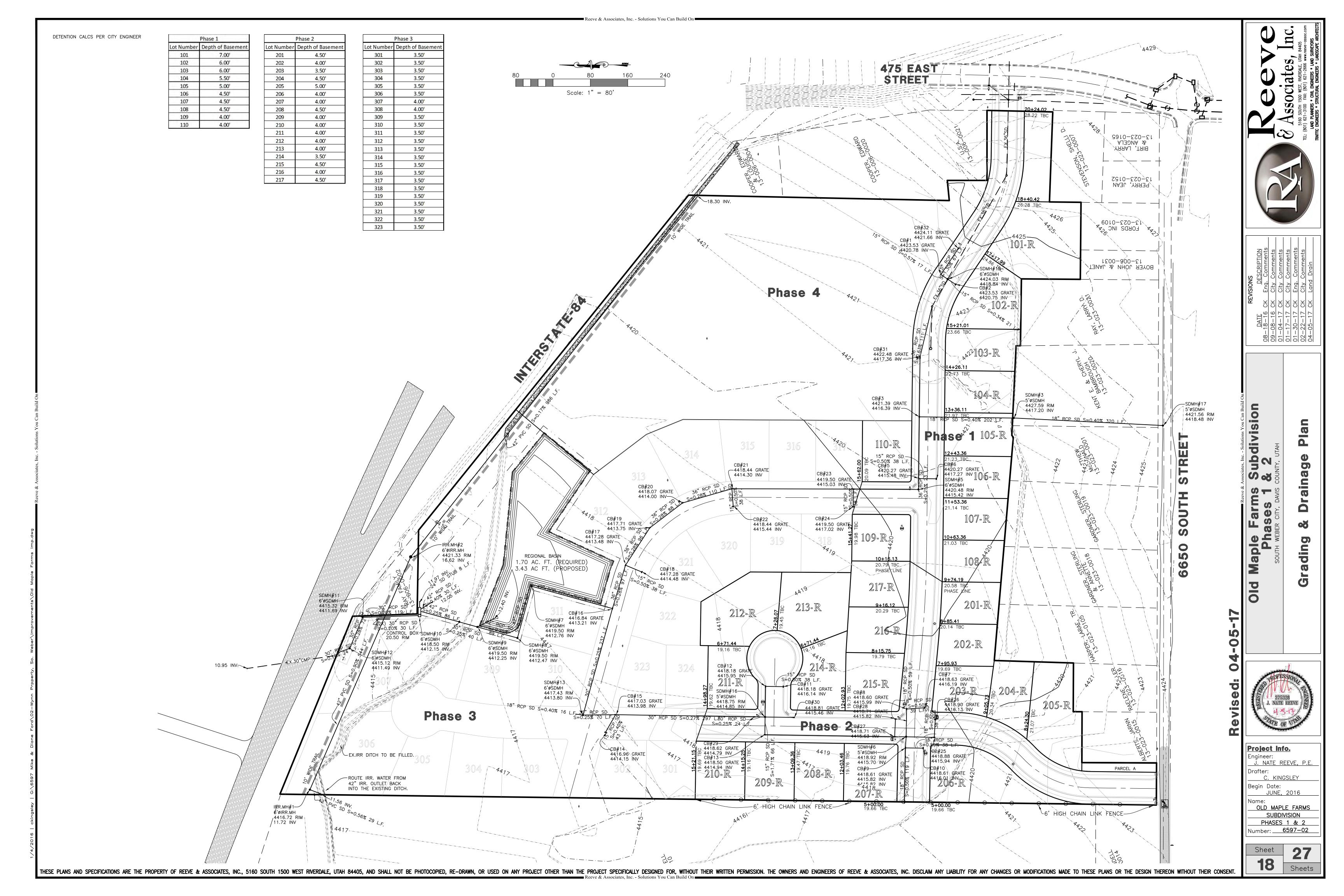
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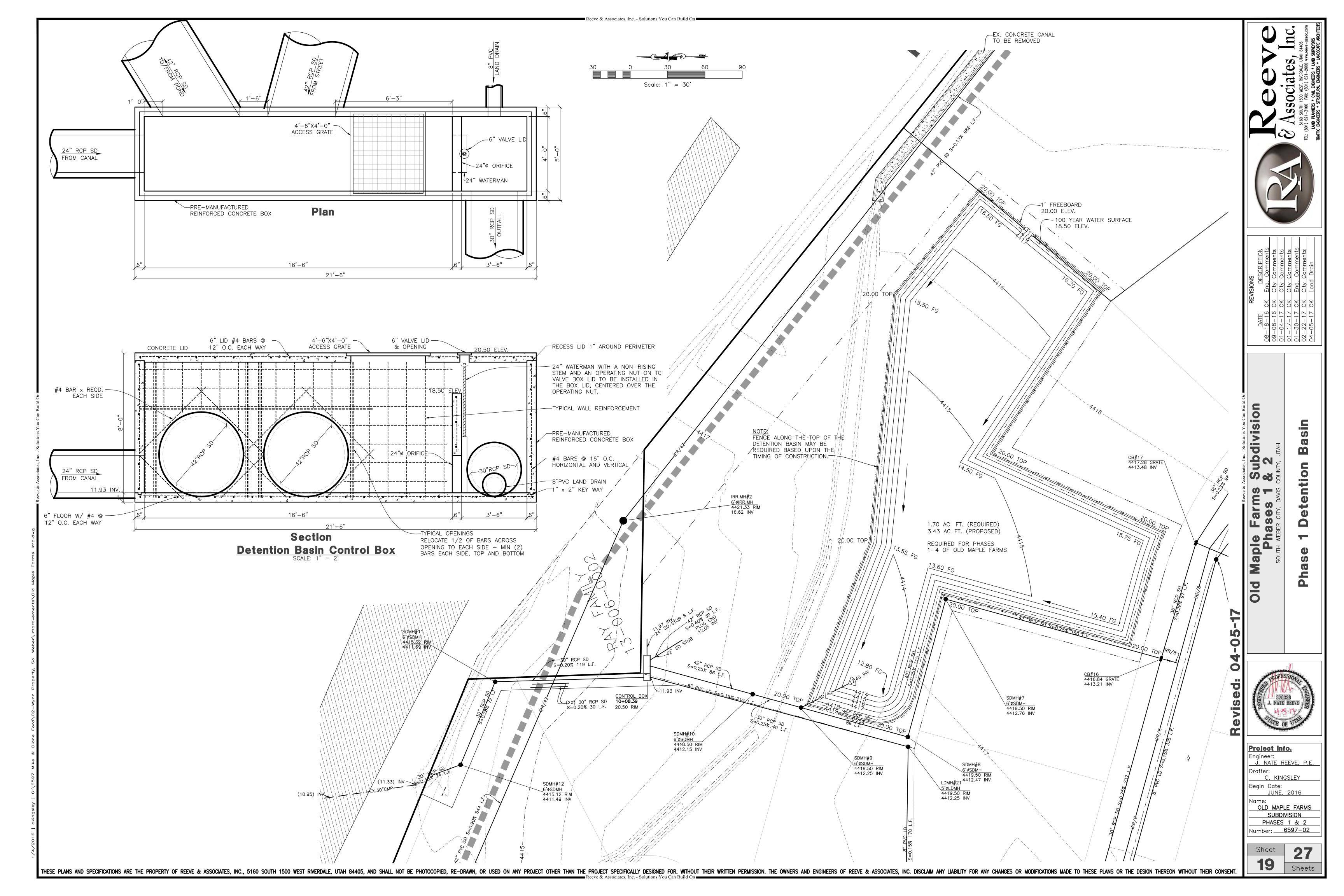
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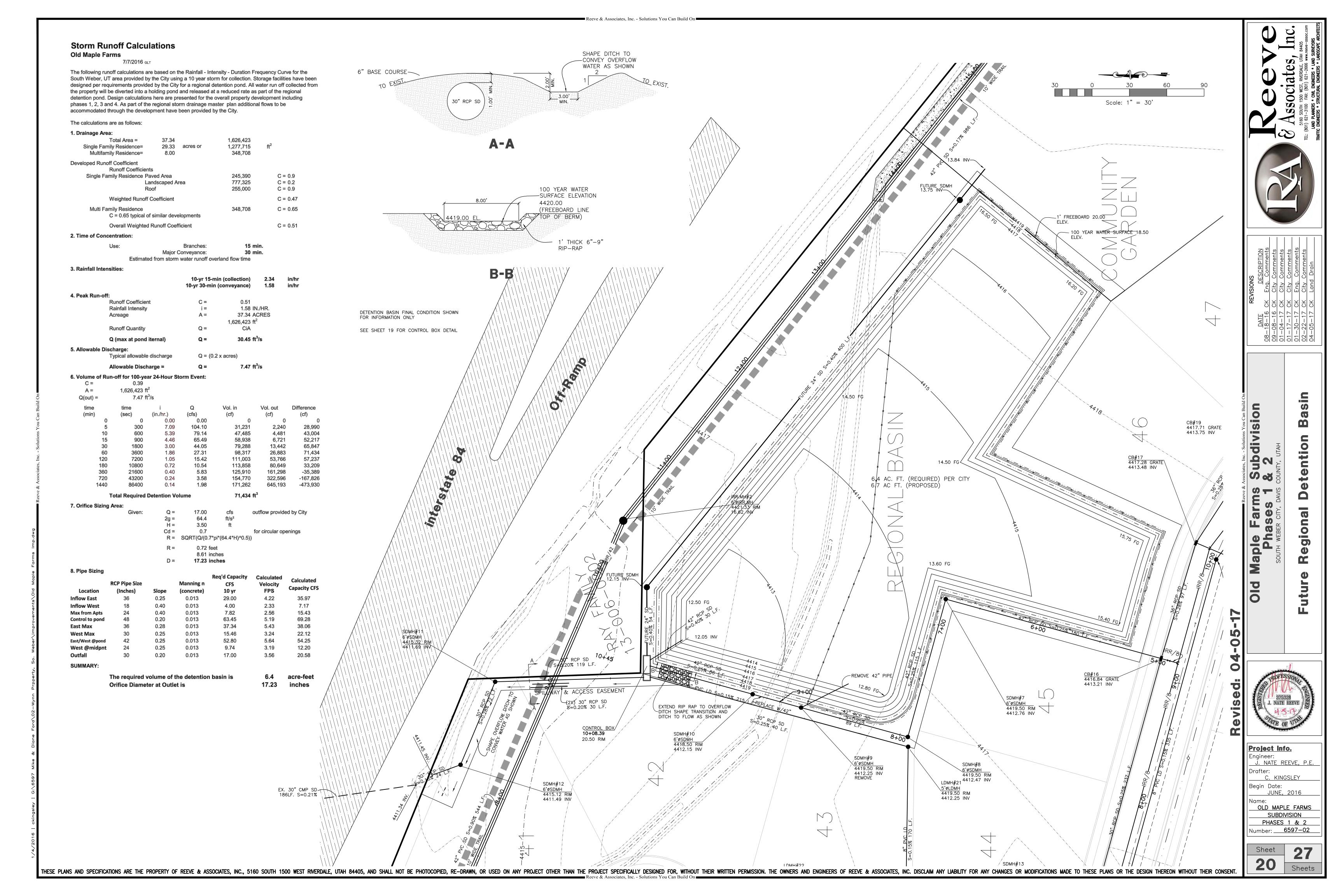
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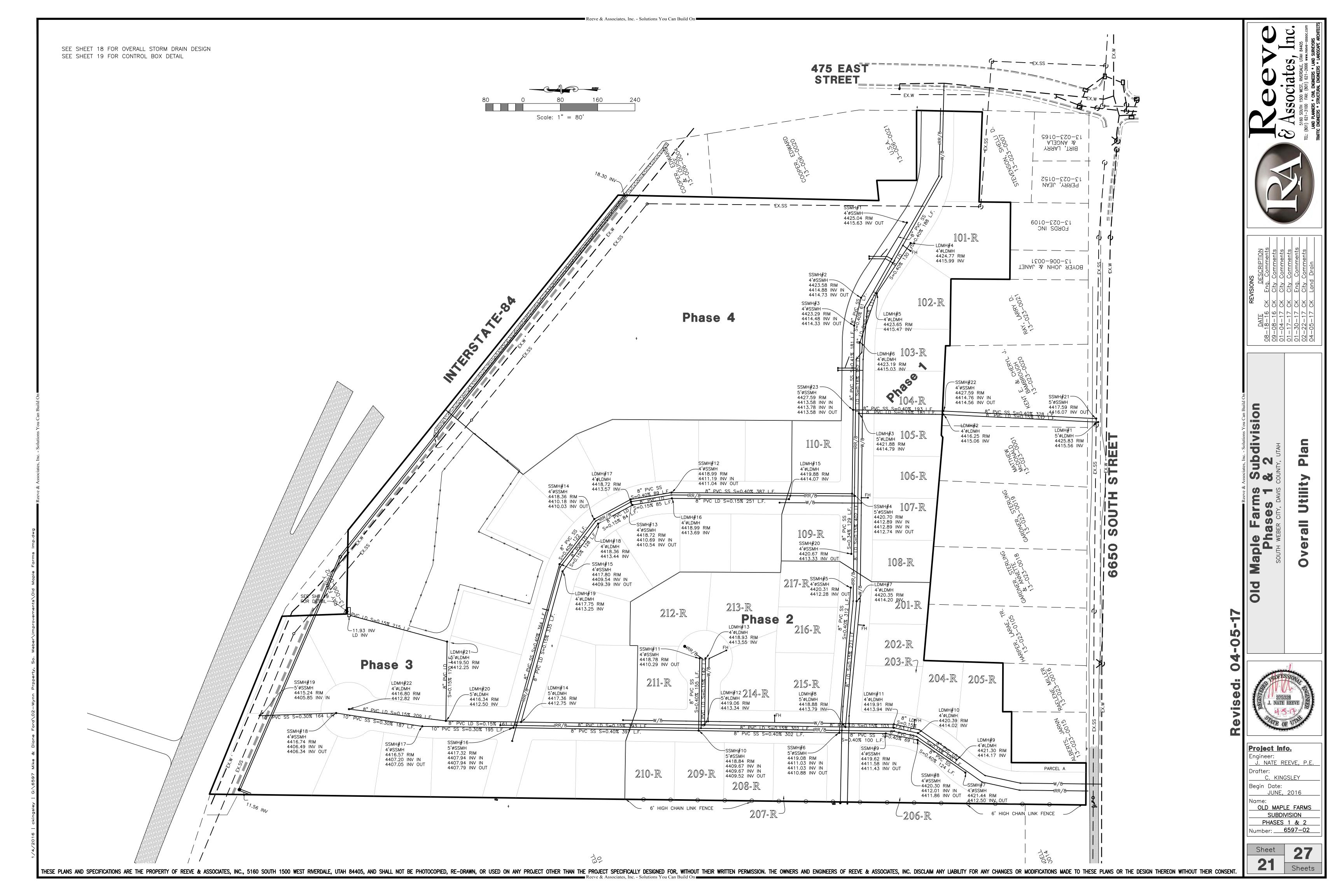
Call: Toll Free 1-800-662-4111 Two Working Days Before You Dig

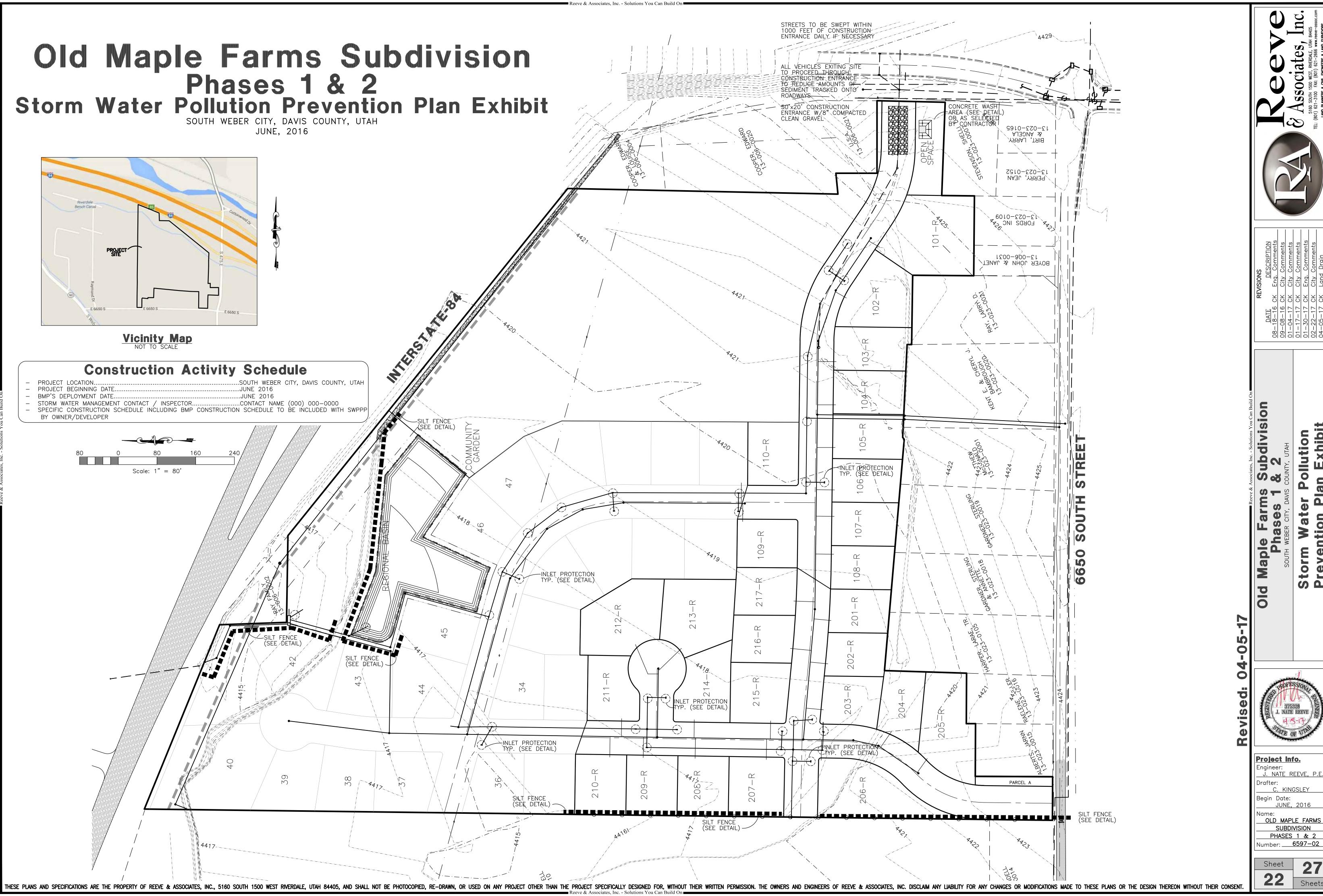
Blue Stakes Location Center













J. NATE REEVE, P.E OLD MAPLE FARMS

All storm water inlets to be protected by straw wattle barriers, or gravel bags (see detail).

Describe BMP's to eliminate/reduce contamination of storm water from:

Equipment / building / concrete wash areas:

To be performed in designated areas only and surrounded with silt fence barriers. Soil contaminated by soil amendments:

If any contaminates are found or generated, contact environmental engineer and contacts listed.

If any contaminates are found or generated, contact environmental engineer and contacts listed.

Fueling area: To be performed in designated areas only and surrounded with silt fence.

Vehicle maintenance areas: To be performed in designated areas only and surrounded with silt fence.

Vehicle parking areas: To be performed in designated areas only and surrounded with silt fence.

Equipment storage areas:

To be performed in designated areas only and surrounded with silt fence. Materials storage areas:

To be performed in designated areas only and surrounded with silt fence. Waste containment areas:

To be performed in designated areas only and surrounded with silt fence.

To be performed in designated areas only and surrounded with silt fence. BMP's for wind erosion:

Stockpiles and site as needed to be watered regularly to eliminate / control wind erosion

#### Construction Vehicles and Equipment: a. Maintenance

Maintain all construction equipment to prevent oil or other fluid leaks.

Keep vehicles and equipment clean, prevent excessive build—up of oil and grease. Regularly inspect on—site vehicles and equipment for leaks, and repair immediately.

— Check incoming vehicles and equipment (including delivery trucks, and employee and subcontractor vehicles)

for leaking oil and fluids. Do not allow leaking vehicles or equipment on-site. - Segregate and recycle wastes, such as greases, used oil or oil filters, antifreeze, cleaning solutions,

automotive batteries, hydraulic, and transmission fluids.

- If fueling must occur on—site, use designated areas away from drainage.

- Locate on-site fuel storage tanks within a bermed area designed to hold the tank volume. - Cover retention area with an impervious material and install in in a manner to ensure that any spills will be

contained in the retention area. To catch spills or leaks when removing or changing fluids. Use drip pans for any oil or fluid changes.

— Use as little water as possible to avoid installing erosion and sediment controls for the wash area. — If washing must occur on—site, use designated, bermed wash areas to prevent waste water discharge into

storm water, creaks, rivers, and other water bodies. Use phosphate-free, biodegradable soaps.

Do not permit steam cleaning on—site.

#### Spill Prevention and Control

a. Minor Spills:

Minor spills are those which are likely to be controlled by on—site personnel. After contacting local emergency response agencies, the following actions should occur upon discovery of a minor spill: Contain the spread of the spill.

- If the spill occurs on paved or impermeable surfaces, clean up using "dry" methods (i.e. absorbent

materials, cat litter, and / or rags). — If the spill occurs in dirt areas, immediately contain the spill by constructing an earth dike. Dig up property dispose of contaminated soil.

- If the spill occurs during rain, cover the impacted area to avoid runoff.

- Record all steps taken to report and contain spill.

On—site personnel should not attempt to control major spills until the appropriate and qualified emergency response staff have arrived at the site. For spills of federal reportable quantities, also notify the National Response Center at (800) 424-8802. A written report should be sent to all notified authorities. Failure to report major spills can result in significant fines and penalties.

### Post Roadway / Utility Construction

Maintain good housekeeping practices. Enclose or cover building material storage areas.

Properly store materials such as paints and solvents.

Store dry and wet materials under cover, away from drainage areas. Avoid mixing excess amounts of fresh concrete or cement on-site.

approval by the engineer of record and the governing agency.

Perform washout of concrete trucks offsite or in designated areas only.

Do not wash out concrete trucks into storm drains, open ditches, streets or streams. Do not place material or debris into streams, gutters or catch basins that stop or reduce the flow of runoff

All public streets and storm drain facilities shall be maintained free of building materials, mud and debris

caused by grading or construction operations. Roads will be swept within 1000' of construction entrance daily,

Install straw wattle around all inlets contained within the development and all others that receive runoff from the development.

Erosion Control Plan Notes

The contractor will designate an emergency contact that can be reached 24 hours a day 7 days a week. A stand-by crew for emergency work shall be available at all times during potential rain or snow runoff events. Necessary materials shall be available on site and stockpiled at convenient locations to facilitate rapid construction of

emergency devices when rain or runoff is eminent. Erosion control devices shown on the plans and approved for the project may not be removed without approval of the engineer of record. If devices are removed, no work may continue that have the potential of erosion without consulting

the engineer of record. If deemed necessary erosion control should be reestablished before this work begins. d. Graded areas adjacent to fill slopes located at the site perimeter must drain away from the top of the slope at the conclusion of each working day. this should be confirmed by survey or other means acceptable to the engineer of

All silt and debris shall be removed from all devices within 24 hours after each rain or runoff event. Except as otherwise approved by the inspector, all removable protective devices shown shall be in place at the end of

each working day and through weekends until removal of the system is approved. All loose soil and debris, which may create a potential hazard to offsite property, shall be removed from the site as

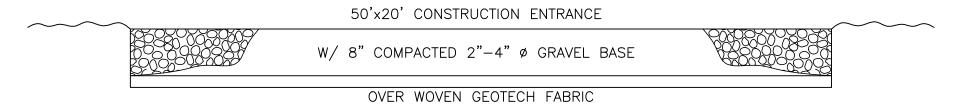
directed by the Engineer of record of the governing agency. The placement of additional devices to reduce erosion damage within the site is left to the discretion of the Engineer of

Desilting basins may not be removed or made inoperable without the approval of the engineer of record and the Erosion control devices will be modified as need as the project progresses, and plans of these changes submitted for

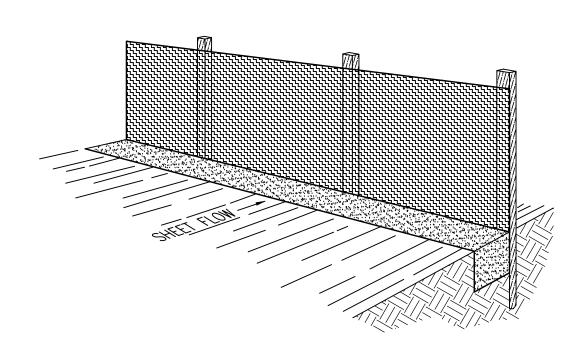
Conduct a minimum of one inspection of the erosion and sediment controls every two weeks. Maintain documentation on site.

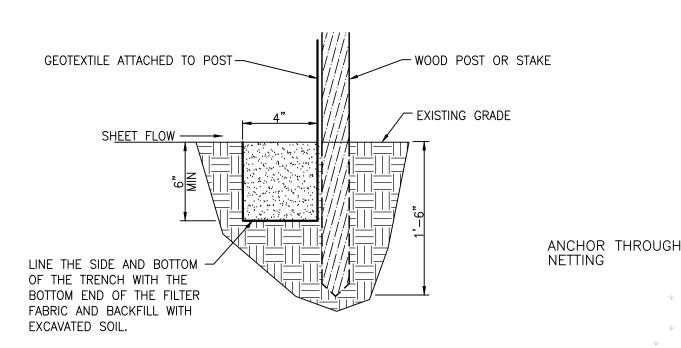
Part III.D.4 of general permit UTR300000 identifies the minimum inspection requirements.

Part II.D.4.C identifies the minimum inspection report requirements. failure to complete and/or document storm water inspections is a violation of part III.D.4 of Utah General Permit UTR



Cross Section 50' x 20' Construction Entrance





### **Section**

-2 TO 1 SLOPE

### **Perspective View**

The silt fence should be installed prior to major soil disturbances in the drainage area. The fence should be placed across the slope along a line of force the geotextile, it shall have a minimum uniform elevation wherever flow of sediment is anticipated. Table 1 shows generally—recommended maximum slope lengths (slope spacing between fences) at various site grades for most silt fence applications.

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TABLE 1: Recommended Maximum Slope Lengths for Silt Fence (Richardson & Middlebrooks, 1991)					
Slope Steepness (%)	Max. Slope Length m (ft)				
<2%	30.5m (100ft)				
2-5%	22.9m (75ft)				
5-10%	15.2m (50ft)				
10-20%	7.6m (25ft)				
>20%	4.5m (15ft)				

PREFABRICATED SILT FENCE ROLLS \*Excavate a minimum 15.2cm x 15.2cm (6"x6") trench at the desired location. \*Unroll the silt fence, positioning the post against the downstream wall of the trench. Adjacent rolls of silt fence should be joined be nesting the end post of one fence into the other. Before nesting the end posts, rotate each post until the geotextile is wrapped completely around the post, then abut the end posts to create a tight seal as shown in Figure 1. \*Drive posts into the ground until the required fence height and/or anchorage depth is

\*Bury the loose geotextile at the bottom of the fence in the upstream trench and backfill with natural soil, tamping the backfill to provide good compaction and anchorage. Figure 2 illustrates a typical silt fence installation and anchor trench placement.

\*Excavate a minimum 15.2cm x 15.2cm (6"x6") trench at the desired location. \*Drive wooden posts, or steel posts with fastening projections, against the downstream wall

be 2.4-3.0m (8-10ft). Post spacing

of the trench. Maximum post spacing should

should generally be less than three (3) times \*If a steel or plastic mesh is required to rein mesh opening of 15.2cm (6"). \*Fasten the mesh to the upslope side of the posts using heavy duty wire staples, tie wires or hog strings. Extend the mesh into the bottom of the trench.

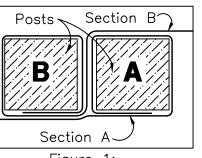
\*The geotextile shall then be stapled or wired to the posts. An extra 20-50cm (8-20") of geotextile shall extend into the trench.

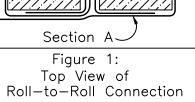
\*Inspect the silt fence daily during periods of rainfall, immediately after significant rainfall event and weekly during periods of no rainfall. Make any repairs immediately. \*When sediment deposits behind the silt fence are one—third of the fence height, remove and properly dispose of the silt accumulations. Avoid damage to the fabric during cleanout.

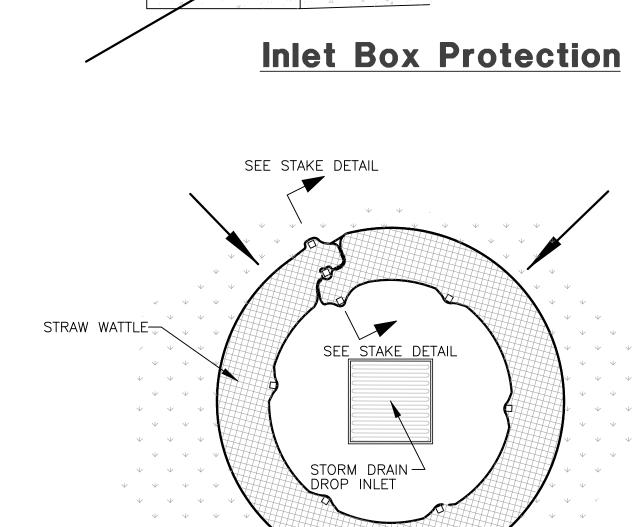
Silt Fence Detail

10 MIL PLASTIC LINER —

\*Silt fence should not be removed until construction ceases and the upslope area has been properly stablized and/or revegetated.



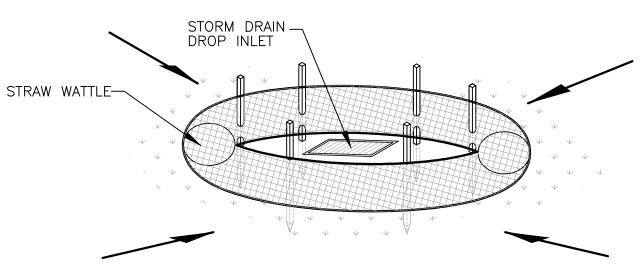




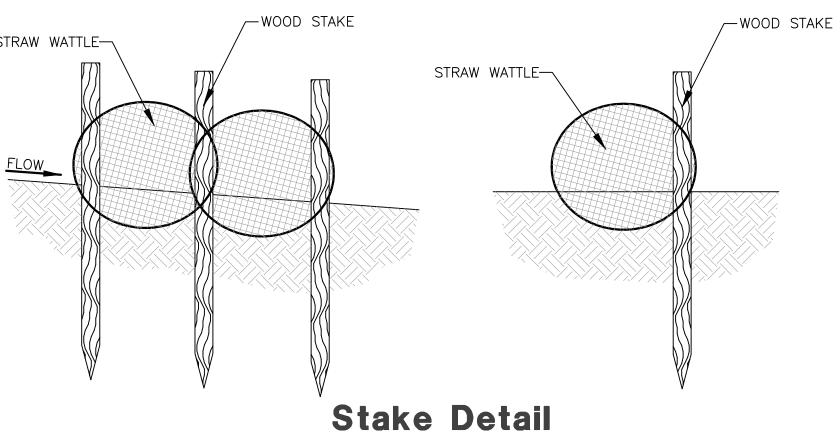
### **Plan View**

ANCHOR THROUGH

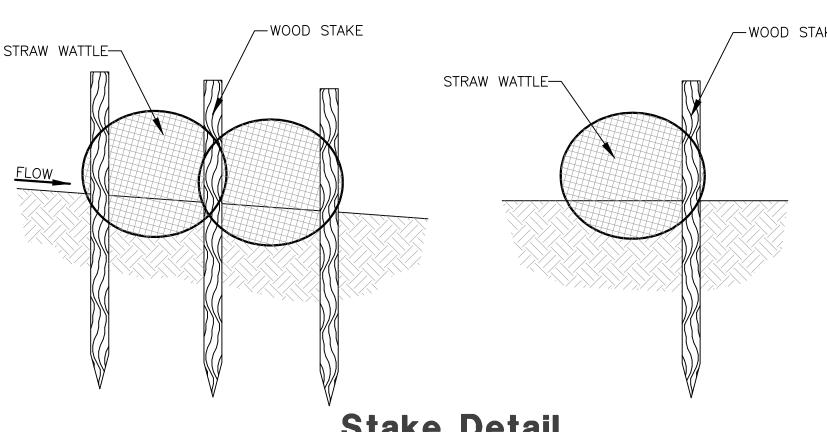
STORM DRAIN INLET-



# **Drop Inlet Protection**



**Concrete Washout Area** w/ 10 mil Plastic Liner





-GRAVEL BAGS

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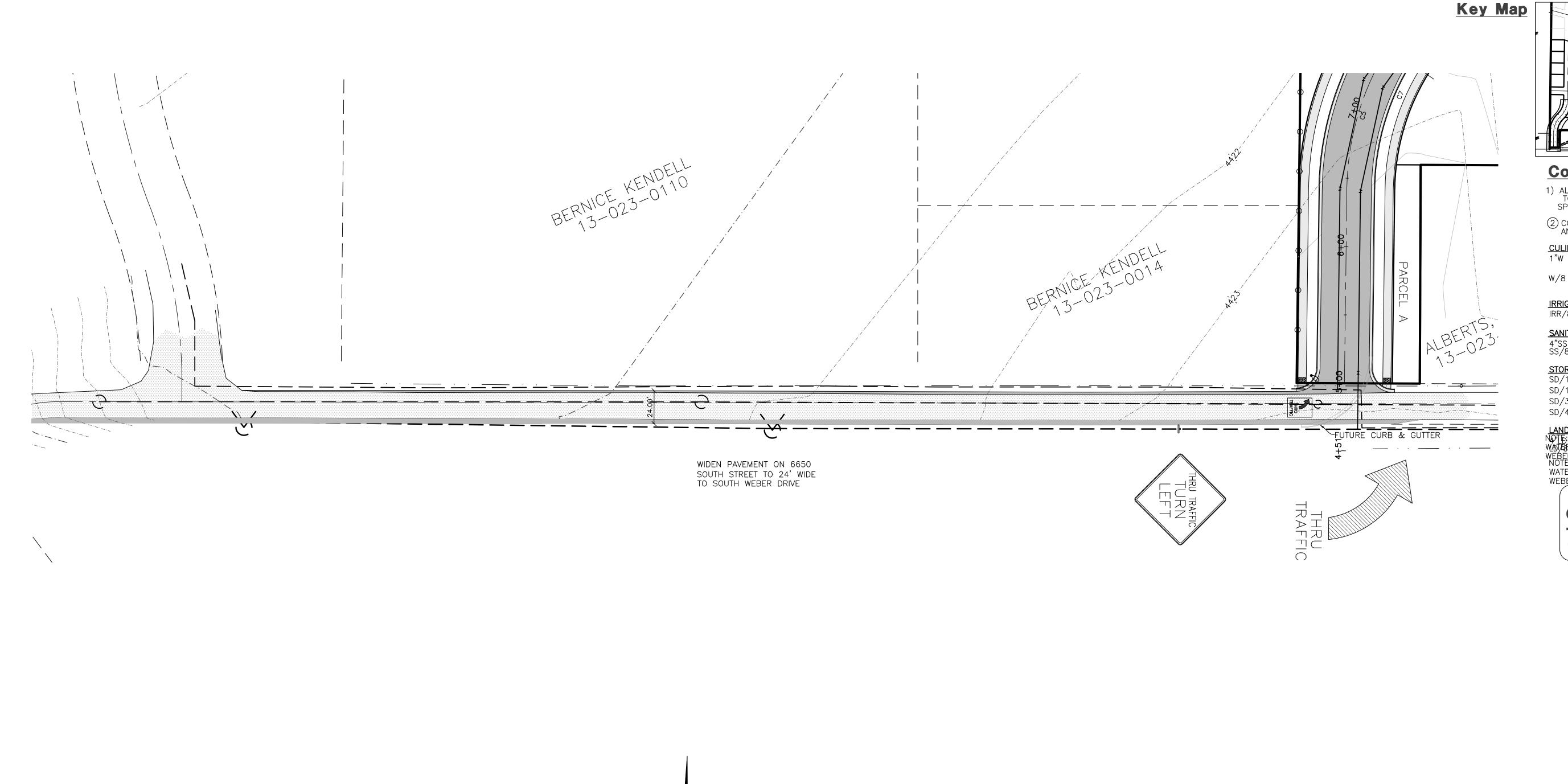
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Project Info. J. NATE REEVE, P.E. Drafter: C. KINGSLEY Begin Date: JUNE, 2016 OLD MAPLE FARMS SUBDIVISION PHASES 1 & 2

27 Sheet Sheets

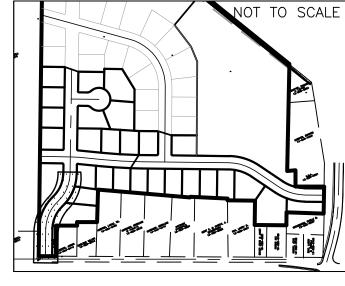
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6650 South Street

Horizontal Scale: 1" = 20' Vertical Scale: 1" = 2'

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LAND DRAIN

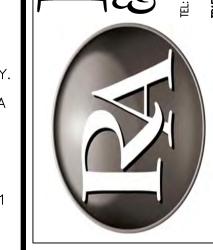
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### Blue Stakes Location Center Call: Toll Free 1-800-662-4111

Two Working Days Before You Dig



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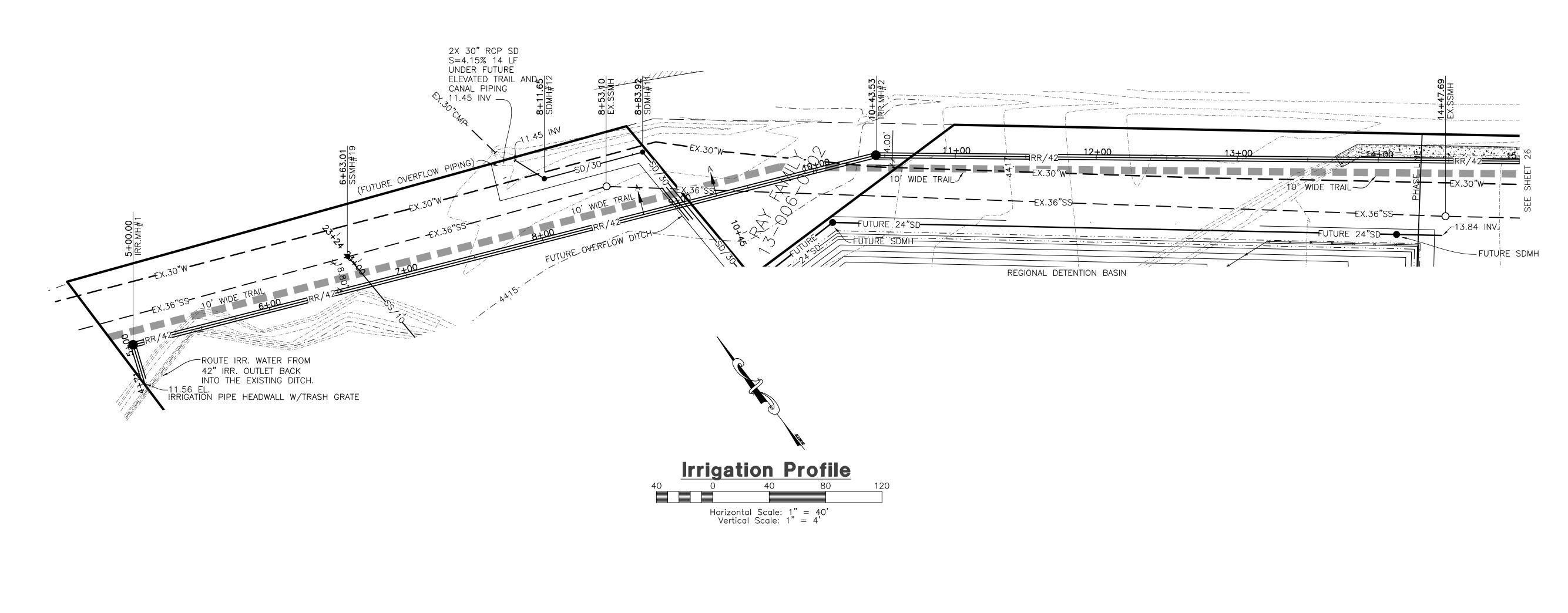
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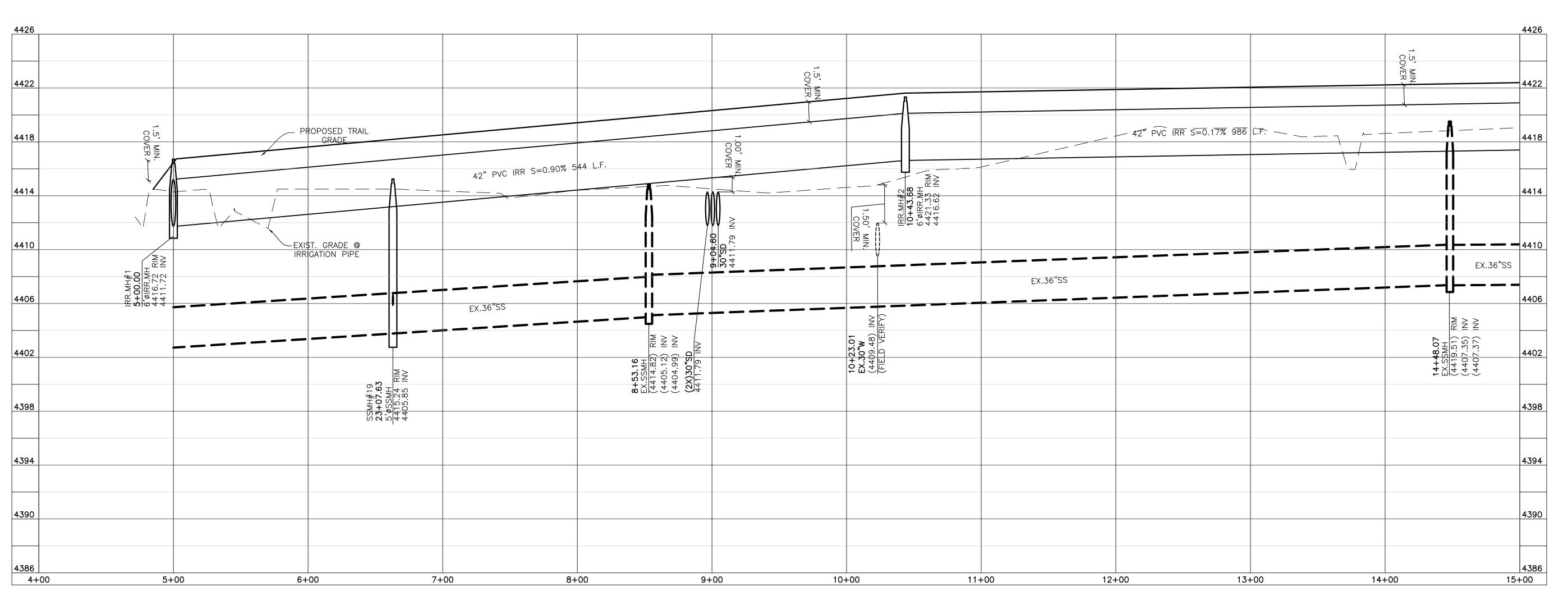
JUNE, 2016 OLD MAPLE FARMS

SUBDIVISION PHASES 1 & 2 Number: 6597-02

Sheet 27 Sheets

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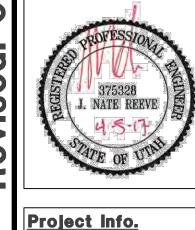
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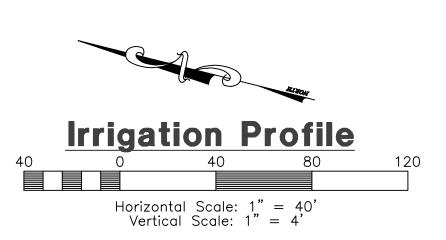


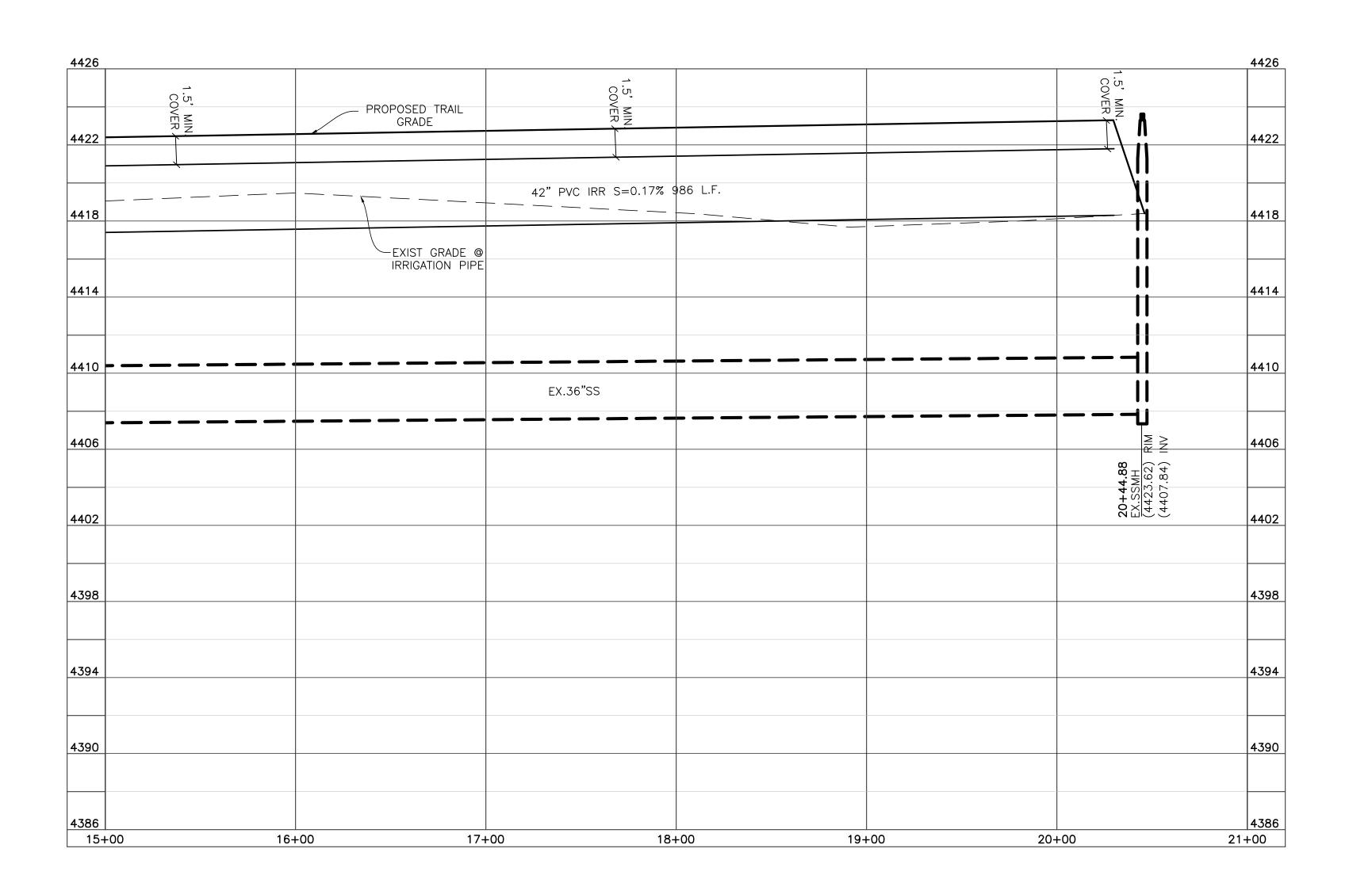
Project Info. J. NATE REEVE, P.E. Begin Date: OLD MAPLE FARMS SUBDIVISION PHASES 1 & 2

> 27 Sheet Sheets

Number: <u>6597-02</u>

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vised: 04-05-17

Old Maple Farms Subdivision
Phases 1 & 2
SOUTH WEBER CITY, DAVIS COUNTY, LITAH

DAT 08-18-09-08-1 01-04-1 01-17-1 01-30-1 02-22-1 04-05-1

375328
J. NATE REEVE

Project Info.

Engineer:

J. NATE REEVE, P.E.

Drafter:

C. KINGSLEY

Begin Date:

JUNE, 2016

Name:

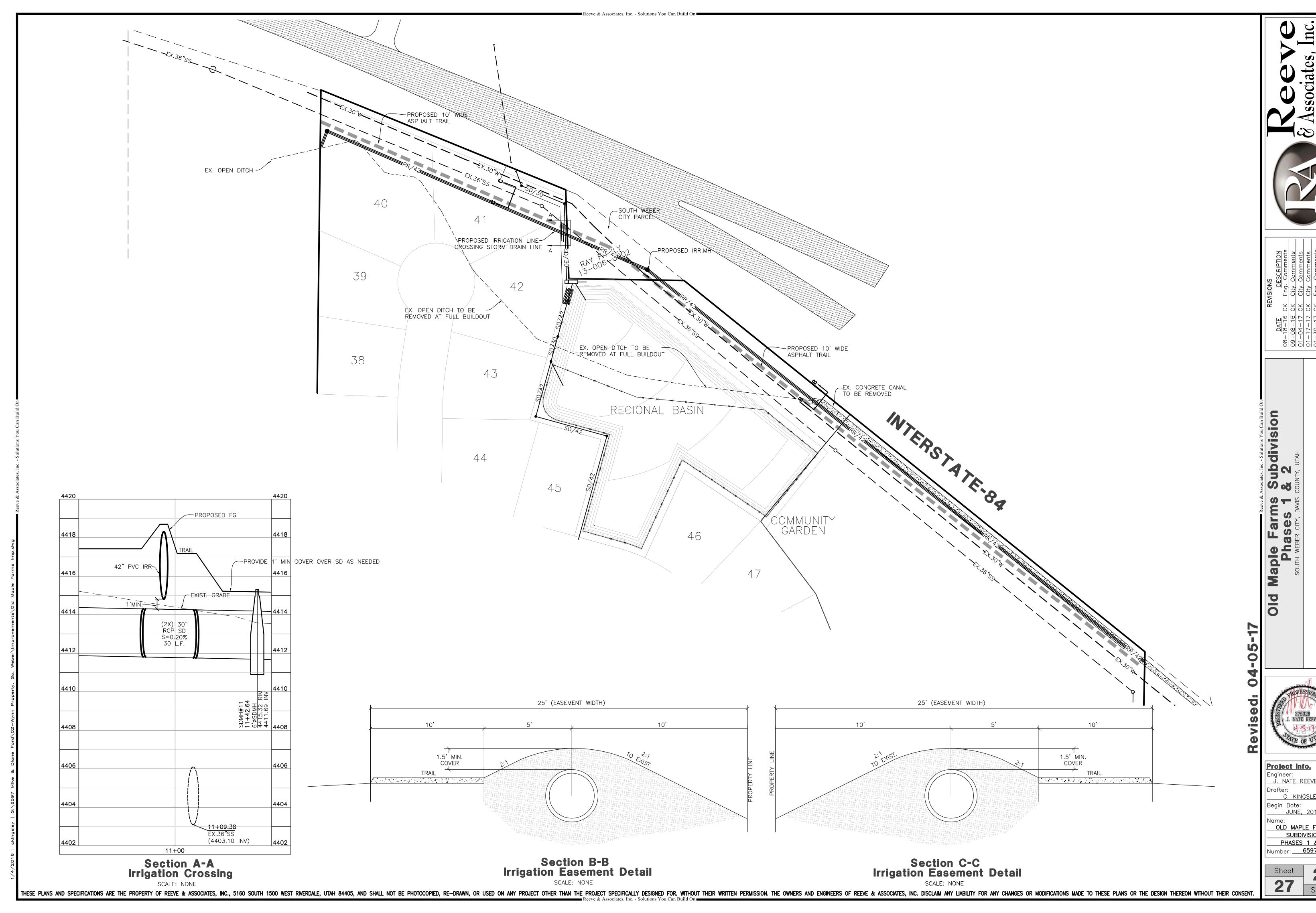
OLD MAPLE FARMS

SUBDIVISION

PHASES 1 & 2

Number: 6597-02

Sheet 27
26 Sheets





Engineer:
J. NATE REEVE, P.E. C. KINGSLEY JUNE, 2016 OLD MAPLE FARMS

SUBDIVISION PHASES 1 & 2 Number: <u>6597-02</u>

27 Sheets



April 5, 2017

Mr. Michael Ford 620 East 1700 South Clearfield, UT 84015

RE: Geotechnical Consultation Old Maple Farms Subdivision Phases 1, 2, and 3 About 310 East 6650 South South Weber, Utah

Mr. Hunt:

The purpose of this letter is to provide information related to suitable basement floor slab elevations for homes within the proposed Old Maple Farms Subdivision Phases 1, 2, and 3 in South Weber, Utah. As requested by Mr. Thomas Hunt of Reeve and Associates, Inc. (project engineer), CMT Engineering Laboratories (CMT) has reviewed the Grading and Drainage Plan<sup>1</sup> for the development and project geotechnical study<sup>2</sup> previously prepared for the subdivision as a whole by others, for which the undersigned engineer was the geotechnical engineer of record.

#### **Previous Studies**

Relatively shallow groundwater is present at the subject property. Section 5.1, Summary of Finding, of the referenced geotechnical report indicates, "Groundwater, where encountered, was measured across the site between 2.5 feet and 8.7 feet below the existing surface." The referenced report further states in section 5.2, Design Groundwater, "Shallow groundwater was encountered during excavation of the majority of the test pits explored for this project. As a result, further measures are required to control groundwater levels within the development, such as the construction of a land drain system throughout the development, will be required in order to construct full basements for the residences." Section 5.7, Floor Slabs, of the referenced report states, "The tops of all floor slabs in habitable areas must be established at least 3 feet above the measured static water level or a minimum 18 inches above levels controlled by subdrains." We understand that a land drain system will be installed within the development and therefore basement floor slab elevations will be controlled by the depth of the land drain system. The referenced Grading and Drainage Plan for the development provides tables for basement depths based on the land drain inverter elevation for each lot. We understand that the value provided in these tables reflects a depth referenced below Top Back of Curb (TBC) equivalent to 1 foot above the land drain invert for each lot.

<sup>&</sup>lt;sup>1</sup> "Old Maple Farms Subdivision – Phases 1 and 2, South Weber City, Davis County, Utah, Grading and Drainage Plan, Sheet 18 of 27," Reeve and Associates, Inc., Revised April 5, 2017.

<sup>&</sup>lt;sup>2</sup> "Report, Geotechnical Study, Proposed South Weber Development, About 310 East 6650 South, South Weber, Utah," GSH Geotechnical, Inc., GSH Job No. 1980-01N-15, November 18, 2015.



#### **Conclusions and Recommendations**

Based on our review of the referenced geotechnical study and the referenced grading and drainage plan, basement floor slabs elevations will be controlled by the land drain depth at the site. Basement floor slab depths vary based on site grading, as indicated in the table below. All other recommendations provided in the referenced geotechnical report and on the referenced construction plans should be followed.

Lot	Top of Floor Slab Depth Below Top Back of Curb (feet)
101	7.0
102	6.0
103	6.0
104	5.5
105	5.0
106	4.5
107	4.5
108	4.5
109	4.0
110	4.0



2007 F000	TE CIEL CILI
	Top of Floor Slab
Lat	Depth Below Top
Lot	Back of Curb (feet)
201	4.5
202	4.0
203	3.5
204	4.5
205	5.0
206	4.0
207	4.0
208	4.5
209	4.0
210	4.0
211	4.0
212	4.0
213	4.0
214	3.5
215	4.5
216	4.0
217	4.5



Lot	Top of Floor Slab Depth Below Top Back of Curb (feet)
301	3.5
302	3.5
303	3.5
304	3.5
305	3.5
306	3.5
307	4.0
308	4.0
309	3.5
310	3.5
311	3.5
312	3.5
313	3.5
314	3.5
315	3.5
316	3.5
317	3.5
318	3.5
319	3.5
320	3.5
321	3.5
322	3.5
323	3.5
324	3.5



#### **Limitations**

The recommendations contained herein are based solely on the soil characteristics determined during the referenced geotechnical study. It is possible that soil conditions other than those observed during the referenced study may exist, which could potentially be problematic. We cannot assume responsibility for conditions of which we are not aware or have not observed.

If you have any questions, please contact us at 801-870-6730.

Sincerely,

CMT Engineering Laboratories FESSION

Andrew M. Harris, P.E.

Senior Geotechnical Engineer



4-5-17

#### 25' UTILITY EASEMENT OLD MAPLE FARMS PHASE 1

PART OF THE SOUTHEAST QUARTER OF SECTION 20 AND THE NORTHEAST QUARTER OF SECTION 29, TOWNSHIP 5 NORTH, RANGE 1 WEST, SALT LAKE BASE AND MERIDIAN, U.S. SURVEY. MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT, SAID POINT BEING N00°25'01"W 58.52 FEET AND S89°34'59"W 905.07 FEET FROM THE SOUTHEAST CORNER OF SAID SECTION 20; THENCE S87°15'22"E 25.02 FEET; THENCE S00°44'00"W 311.28 FEET; THENCE N89°44'30"W 25.00 FEET; THENCE N00°44'00"E 312.37 FEET TO THE POINT OF BEGINNING.

CONTAINING 7,796 SQUARE FEET OR 0.179 ACRES MORE OR LESS