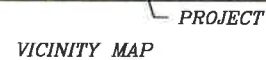


Phase 3 only

PART OF THE SOUTHEAST QUARTER OF SECTION 26,
TOWNSHIP 8 NORTH, RANGE 2 WEST,
SALT LAKE BASELINE AND MERIDIAN
WILLARD, UTAH

**Approval for
Phase 3 only at
this time.**



SHEET INDEX	
SHEET NO.	SHEET DESCRIPTION
1	INDEX SHEET
2	EXIST/ DEMO PLAN
3	SADDLEBACK ROAD PG1
4	SADDLEBACK ROAD PG2
5	NAMELESS ROAD PLAN
6	GRADING/DRAINAGE PLAN PG1
7	GRADING/DRAINAGE PLAN PG2
8	SWPPP
9	SWPPP SPECIFICATIONS

Need additional developer information; i.e.; Company, address, phone numbers.

Valves are to be clustered at tee or cross

GENERAL NOTES (APPLICABLE TO ALL CIVIL SHEETS):

1. ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, APWA STANDARDS AND SPECIFICATIONS, WILLARD CITY PUBLIC WORKS CONSTRUCTION STANDARDS, STATE OF UTAH AND ANY OTHER APPLICABLE STANDARDS ISSUED BY THE CONTROLLING AGENCY.
2. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS BEFORE CONSTRUCTION. ANY DISCREPANCIES BETWEEN CONSTRUCTION DOCUMENTS AND FIELD CONDITIONS SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE OWNER.
3. CONTRACTOR SHALL REPAIR AND/OR REPLACE ANY AREAS AND/OR MATERIALS DAMAGED DURING CONSTRUCTION.
4. CONTRACTOR SHALL MAINTAIN ALL ADJACENT PROPERTY (PUBLIC & PRIVATE) FROM ALL CONSTRUCTION DEBRIS.
5. CONTRACTOR SHALL PROVIDE SMOOTH TRANSITION FROM ALL NEW CONSTRUCTION TO EXISTING CONDITIONS.
6. CONTRACTOR SHALL PROVIDE ALL NECESSARY AUTOMOBILE AND PEDESTRIAN TRAFFIC CONTROL DEVICES REQUIRED BY LOCAL, STATE, AND FEDERAL CODES AND ORDINANCES.
7. CONTRACTOR SHALL REPLACE SURVEY MONUMENTS DAMAGED DURING CONSTRUCTION. SURVEY MONUMENTS TO BE REPLACED BY A REGISTERED, LICENSED LAND SURVEYOR.
8. CONTRACTOR TO LOCATE ALL EXISTING UTILITIES, INCLUDING FIBER OPTIC, ANY DAMAGES TO EXISTING UTILITIES WILL BE REPAIRED AT CONTRACTORS EXPENSE.
9. DIMENSIONS SHOWN ARE TO THE CENTER OF THE PIPELINE UNLESS OTHERWISE NOTED.
10. DISTANCES SHOWN ALONG PIPELINES ARE HORIZONTAL DISTANCES AND NOT ACTUAL PIPE LENGTHS. MORE PIPE MAY BE REQUIRED TO COMPLETE CONSTRUCTION THAN IS DIMENSIONED IN THE PLANS.
11. THRUST BLOCKS SHALL BE PLACED ON WATERLINES AT ALL DIRECTION CHANGES, FITTINGS, BENDS, ELBOWS, FIRE HYDRANTS AND GATES VALVES AS SHOWN IN THE PROJECT PLANS.
12. CONTRACTOR IS REQUIRED TO HAVE A SET OF PLANS ON THE SITE AT ALL TIMES. ANY WORK COMPLETED WITHOUT A SET PRESENT IS DONE SO AT THE CONTRACTORS RISK AND EXPENSE IF ERRORS OCCUR.
13. CONTRACTOR IS RESPONSIBLE FOR PROVIDING WATER NECESSARY FOR DUST ABATEMENT, COMPACTION, ETC.
14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING SOURCES FOR GRANULAR MATERIALS, WATER, WASTE SITES, AND ANY OTHER MATERIALS SOURCES AS REQUIRED FOR PROJECT COMPLETION.
15. ANY WORK DONE WITHIN A PUBLIC RIGHT-OF-WAY SHALL BE COORDINATED WITH THE APPROPRIATE TRANSPORTATION AGENCY AND SHALL MEET THE REQUIREMENTS OF THAT AGENCY AND THE REQUIREMENTS OF ANY RIGHT-OF-WAY OR SPECIAL USE PERMITS.
16. THE CONTRACTOR SHALL COORDINATE ALL LIVE TAPS AND ANY OTHER WORK OR MANIPULATION OF THE EXISTING WATER SYSTEM WITH THE CITY.
17. ON SLOPING AREAS THE CONTRACTOR SHALL TAKE PRECAUTIONS TO MITIGATE ANY POSSIBLE EROSION PROBLEMS IN THE TRENCHES DUE TO STORM WATER THAT MIGHT OCCUR DURING OR AFTER CONSTRUCTION AS DIRECTED OR APPROVED BY ENGINEER.
18. THE CONTRACTOR SHALL INSTALL AND MAINTAIN ALL EROSION CONTROL MEASURES AS DETAILED IN THE PROJECT PLANS UNTIL ALL PERMANENT AND POST CONSTRUCTION BMP'S AREA INSTALLED AND ACCEPTED.
19. THE CONTRACTOR IS REQUIRED TO TAKE ALL PRECAUTIONS NECESSARY TO INSURE THAT NO STORM WATER/SEDIMENT AND/OR CONSTRUCTION DEBRIS ARE RELEASED FROM THE SITE. ANY RELEASES SHALL BE CLEANED AND MITIGATED AT THE CONTRACTOR'S EXPENSE.
20. CONTRACTOR SHALL COORDINATE ALL CONSTRUCTION ACCESS AND RELATED TRAFFIC CONTROL WITH THE COUNTY, CITY, AND STATE ROADWAY DEPARTMENTS. THE ENGINEER SHALL REVIEW ALL TRAFFIC CONTROL PLANS.
21. ALL GATE VALVES SHALL BE LOCATED NEAR THE EXTENSION OF LOT PROPERTY LINES OUTSIDE THE INTERSECTION.
22. CONTRACTOR SHALL PROVIDE ALL NECESSARY FITTINGS, HARDWARE, LABOR, ETC. TO CONSTRUCT VERTICAL AND HORIZONTAL BENDS IN PIPE AS NEEDED TO MEET THE REQUIRED GRADES, ALIGNMENTS AND COVER REQUIREMENTS.
23. THE CONTRACTOR SHALL COORDINATE WITH WILLARD CITY FOR ALL UTILITY INSPECTIONS PRIOR TO BACKFILLING.
24. ALL WATER SYSTEM COMPONENTS SHALL BE INSTALLED, PRESSURE TESTED, AND CHLORINATED PRIOR TO COMPLETING ANY ROADWAY CONSTRUCTION.
25. ALL WATER LINE SERVICES ARE TO BE STUBBED INTO EACH LOT 15' BEYOND THE PROPERTY LINE AT WHICH POINT THE BARREL, SETTER AND OTHER APPURTENANCES ARE TO BE INSTALLED PER CITY STANDARDS.
26. WATER MAIN TO BE C-900 DR14. INSTALL PER WILLARD CITY STANDARDS AND SPECIFICATIONS.

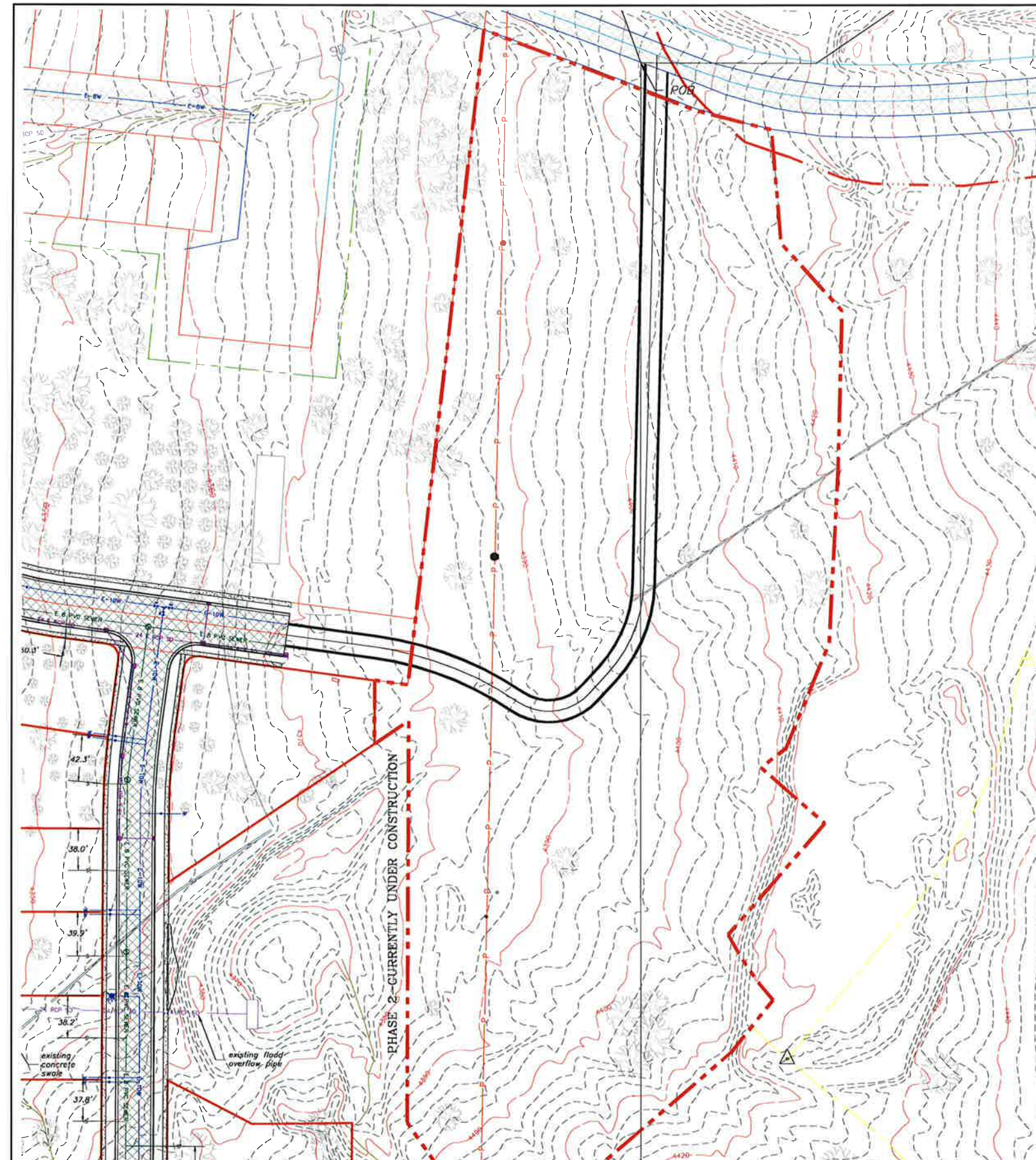


**ALLIANCE CONSULTING
ENGINEERS**
150 EAST 200 NORTH SUITE P
LOGAN, UTAH 84321
(435)755-5121

[illegible]

GRANITE RIDGE SUBDIVISION
PHASE 3/4
PART OF THE SOUTHEAST QUARTER OF SECTION 26,
TOWNSHIP 8 NORTH, RANGE 2 WEST,
SALT LAKE COUNTY, UTAH
MILLARD, UTAH
INDEX SHEET

DATE: JUNE, 2019
DRAWING No.



GRANITE RIDGE SUBDIVISION
PHASE 3/4

PART OF THE SOUTHEAST QUARTER OF SECTION 26,
TOWNSHIP 8 NORTH, RANGE 2 WEST,
SALT LAKE BASELINE AND MERIDIAN
WILLARD, UTAH

EXIST/ DEMO PLAN



0 50 100
SCALE: 1"=50' (22x34 PLAN SET)
SCALE: 1"=100' (11x17 PLAN SET)

Legend:

-  BOUNDARY LINE
-  LOT LINE
-  EXISTING FENCE
-  EXISTING SANITARY SEWER
-  EXISTING WATERLINE
-  EXISTING STORM
-  EXISTING ASPHALT
-  MAJOR CONTOUR EXISTING (10')
-  MINOR CONTOUR EXISTING (2')



**ALLIANCE CONSULTING
ENGINEERS**
150 EAST 200 NORTH SUITE P
LOGAN, UTAH 84321
(435)755-5121

[illegible]

GRANITE RIDGE SUBDIVISION
 PHASE 3/4
 PART OF THE SOUTHEAST QUARTER OF
 SECTION 26,
 TOWNSHIP 12N, RANGE 12E,
 SALT LAKE BASIN AND MERIDIAN
 WILLARD, UTAH

EXIST / DEMO PLAN

DATE: JUNE, 2019
DRAWING 2

Approval for Phase 3 only at this time.

All comments in regards to SD system are subject to drainage district review.

No junction boxes allowed on building lots. Extend pipe directly to detention basin parcel. Keep pipe in alignment with the lot line.

Construct drive approach to ponds

change in s.w. width

How will landscaping of parkstrip across frontage of ponds and common area be handled? Could install decorative concrete.

Show new contour elevations

Detention pond to be approved by drainage district

Need to discuss landscaping or surface improvements of ponds

This line will be on the higher pressure zone. Need to discuss how connection to upper pressure zone will be made. Size of line yet to be determined.

Permanent dead end here for water line. Construct combination air valve station.

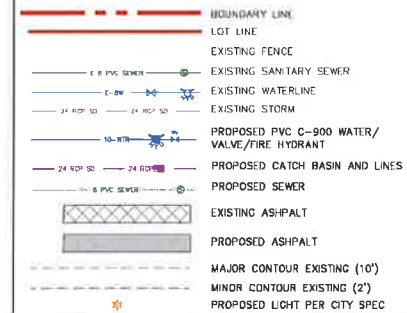
Show end of construction for utilities and roadway for Phase 3. Construction Plans for each phase must be separate. Anything shown for Phase 4 must be shown clearly different than Phase 3

Need to show temporary turn around.

12% slope not allowed on street. 10% max.

The sidewalk width has changed from the previous phase from 4' to 5'. What is the reason for this?

Legend:



Notes:
1. Trees/ landscaping will be installed per the development agreement. In particular final landscaping shall include two trees per lot, (4) per corner lot (1-1/2" caliber honey locust).

Approval for Phase 3 only at this time.



ALLIANCE CONSULTING ENGINEERS
150 EAST 200 NORTH SUITE P
LOGAN, UTAH 84321
(435) 755-5121



DATE	REVISION	BY	CHKD	PROJECT NO.

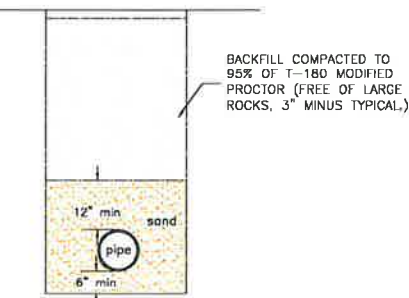
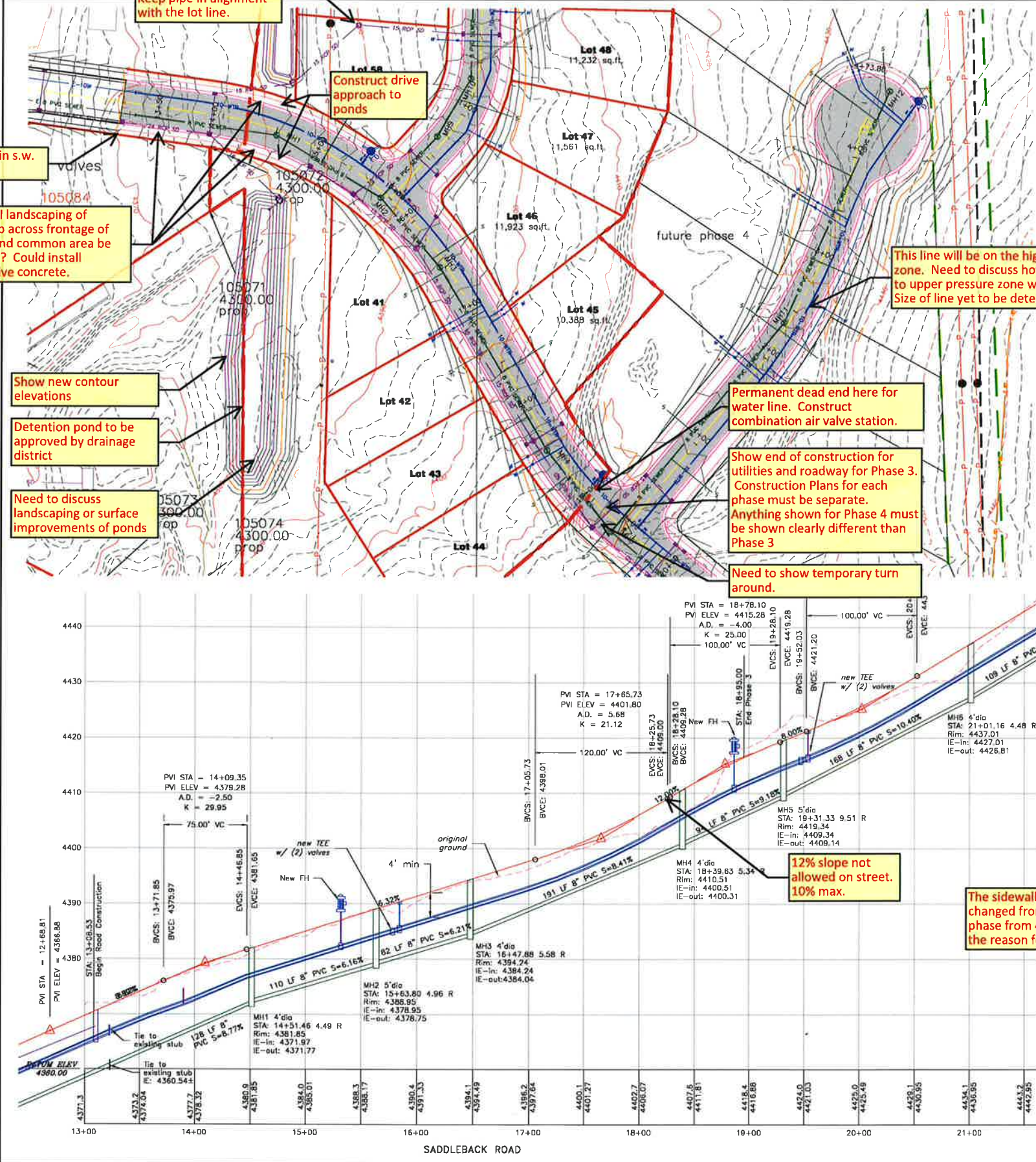
GRANITE RIDGE SUBDIVISION
PHASE 3/4
PART OF THE SOUTHEAST QUARTER OF SECTION 26,
TOWNSHIP 8 NORTH, RANGE 2 WEST,
SALT LAKE BASELINE AND MERIDIAN
WILLARD, UTAH
SADDLEBACK ROAD PG1

DATE: JUNE, 2019
DRAWING 63

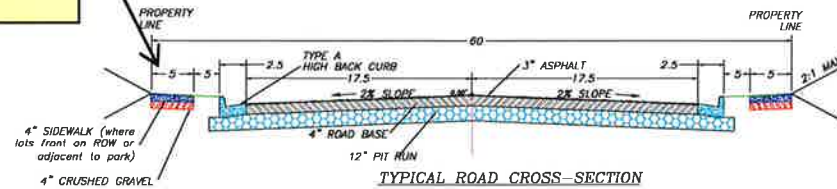
GRANITE RIDGE SUBDIVISION PHASE 3/4 PART OF THE SOUTHEAST QUARTER OF SECTION 26, TOWNSHIP 8 NORTH, RANGE 2 WEST, SALT LAKE BASELINE AND MERIDIAN WILLARD, UTAH SADDLEBACK ROAD PG1



SCALE: 1"=50' (22x34 PLAN SET)
SCALE: 1"=10' VERTICAL
SCALE: 1"=100' (11x17 PLAN SET)

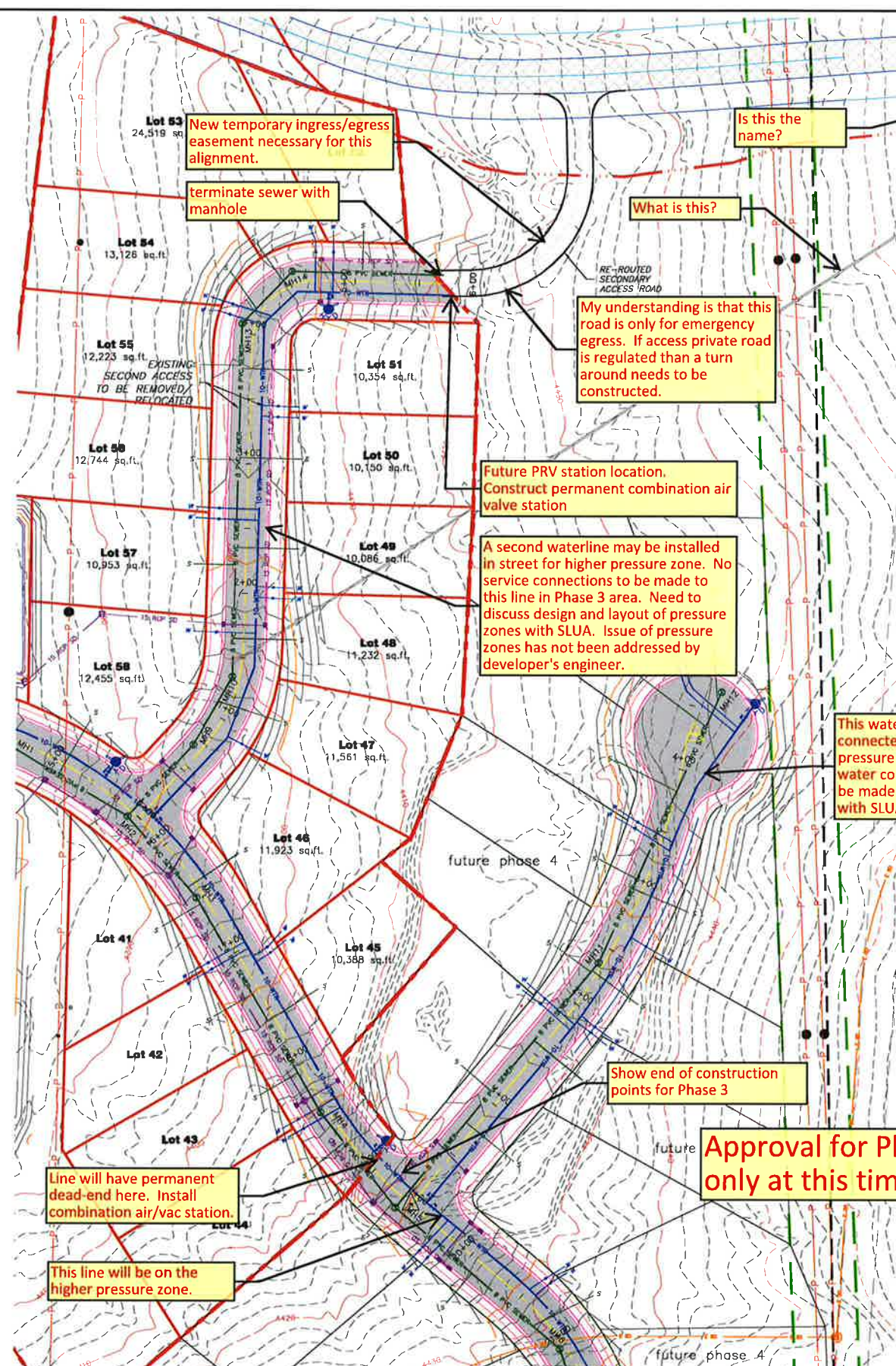


UTILITY TRENCH DETAIL
NOT TO SCALE

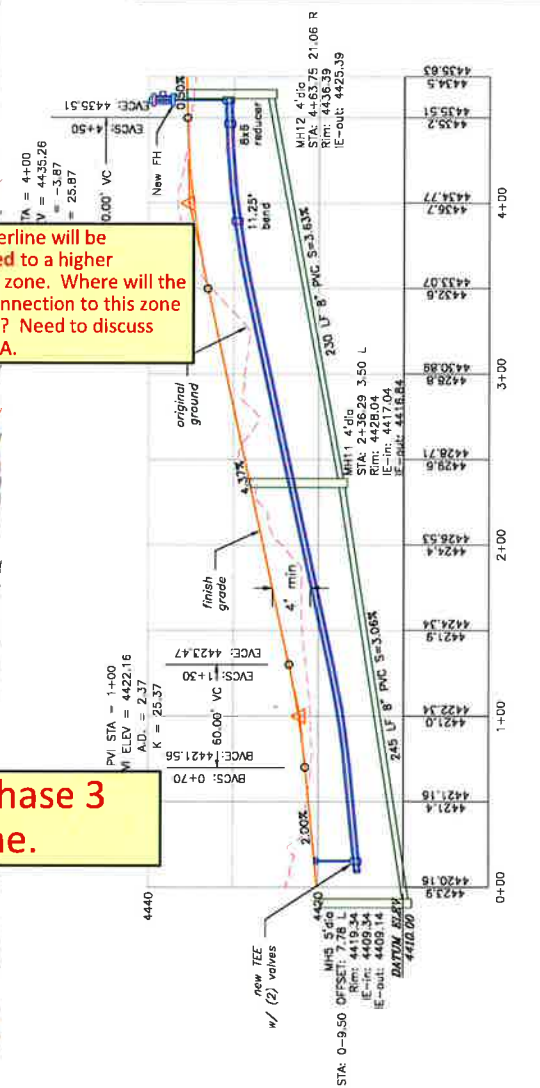


TYPICAL ROAD CROSS-SECTION
SADDLEBACK ROAD

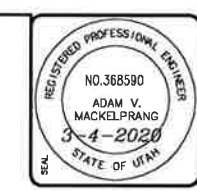
Contractor to apply chip and seal with fog coat after one year



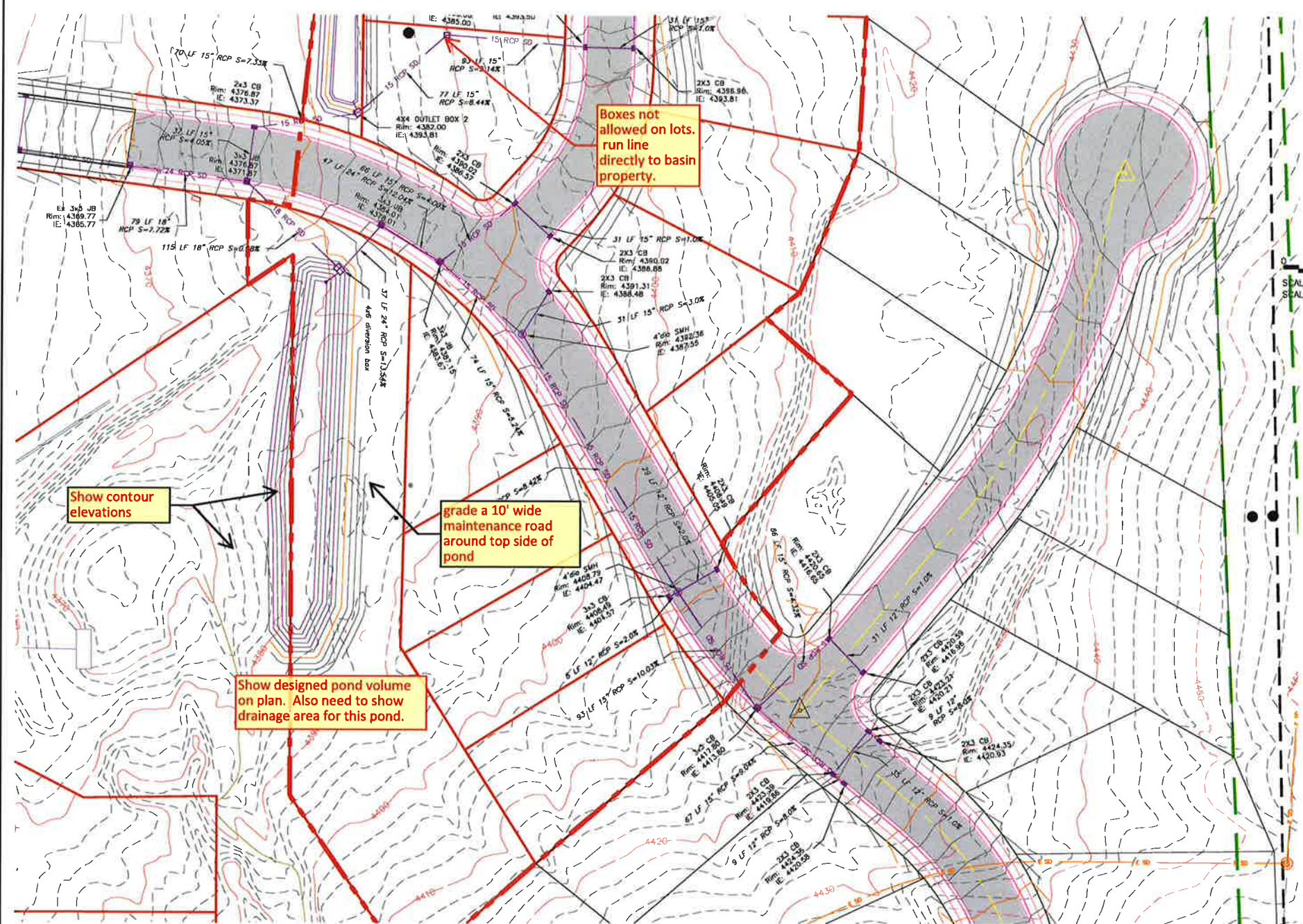
DATE : JUNE, 2019



GRANITE RIDGE SUBDIVISION
PHASE 3/4
PART OF THE SOUTHEAST QUARTER OF SECTION 26,
TOWNSHIP 8 NORTH, RANGE 2 WEST,
SALT LAKE BASELINE AND MERIDIAN
WILLARD, UTAH
GRADING/DRAINAGE PLAN PG1



ALLIANCE CONSULTING
ENGINEERS
150 EAST 200 NORTH SUITE P
LOGAN, UTAH 84321
(435) 755-5121



- Legend:**
- BOUNDARY LINE
 - LOT LINE
 - EXISTING FENCE
 - EXISTING SANITARY SEWER
 - EXISTING WATERLINE
 - EXISTING STORM
 - PROPOSED PVC C-800 WATER/VALVE/FIRE HYDRANT
 - PROPOSED CATCH BASIN AND LINES
 - PROPOSED SEWER
 - EXISTING ASPHALT
 - PROPOSED ASPHALT
 - MAJOR CONTOUR EXISTING (10')
 - MINOR CONTOUR EXISTING (2')
 - MAJOR CONTOUR PROPOSED (10')
 - MINOR CONTOUR PROPOSED (2')
 - PROPOSED LIGHT PER CITY SPEC

Notes
1. Trees/landscaping will be installed per the development agreement. In particular final landscaping shall include two trees per lot, (4) per corner lot (1-2" caliber honey locust).

GRANITE RIDGE SUBDIVISION PHASE 3
Determination of Detention Pond Storage Requirements

Drainage Area to Pond: 11.48 acres
Weighted 'C' value for Pond Drainage Area: 0.45
Allowable Discharge Rate: 0.2 cfs/acre

10-Year Return Period

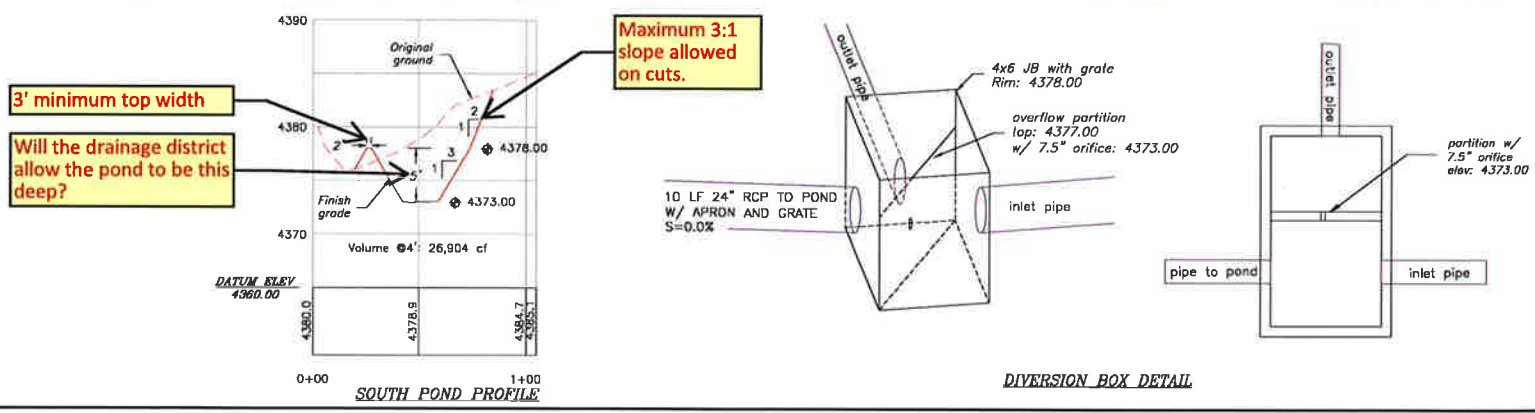
Interval (min)	Precip. Intensity (in/hr)	Precip. Depth (in)	Area (ac)	C Value	CxArea3630 (#/3min)	Accum. Inflow (#/3min)	Allowable Discharge (#/3min)	Accum. Discharge (#/3min)	Required Storage (ac-ft)
15	2.37	0.59	11.48	0.45	18753	11102	138	2066	9035
30	1.59	0.80	11.48	0.45	18753	14927	138	4133	10794
60	0.99	0.99	11.48	0.45	18753	18490	138	8266	10224
360	0.26	1.67	11.48	0.45	18753	31279	138	49594	0
720	0.19	2.16	11.48	0.45	18753	45068	138	99187	0
1440	0.13	3.02	11.48	0.45	18753	55708	138	198374	0

100-Year Return Period

Interval (min)	Precip. Intensity (in/hr)	Precip. Depth (in)	Area (ac)	C Value	CxArea3630 (#/3min)	Accum. Inflow (#/3min)	Allowable Discharge (#/3min)	Accum. Discharge (#/3min)	Required Storage (ac-ft)
15	4.55	1.14	11.48	0.45	18752.58	21331.06	138	2066.4	19255
30	3.06	1.53	11.48	0.45	18752.58	28691.447	138	4132.8	24559
60	1.90	1.90	11.48	0.45	18752.58	35629.902	138	8265.6	27364
360	0.44	2.64	11.48	0.45	18752.58	41253.676	138	16531.2	24724
720	0.28	3.36	11.48	0.45	18752.58	43008.662	138	49593.6	0
1440	0.12	2.85	11.48	0.45	18752.58	53444.853	138	99187.4	0

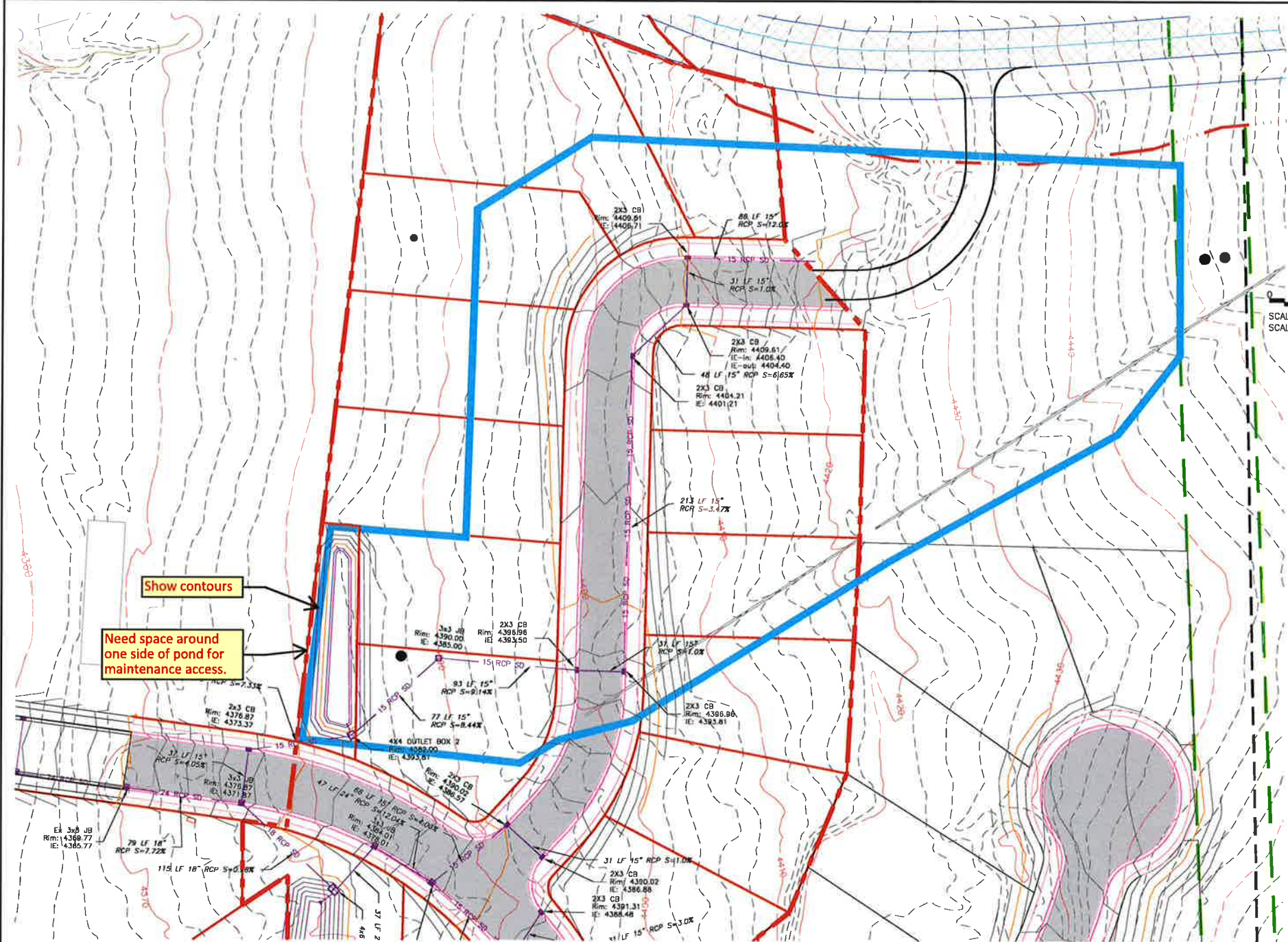
Size of the Orifice Openings for Discharge Pipe to Basin

Total Discharge	2.30 cfs
Number of Orifices	2.30 cfs
Estimated Discharge	2.30 cfs
Crust of Pond	4306.5 ft
Interior of Detention Line	4297.0 ft
Diameter of Detention Pipe	18 in
Head at center of Orifice	2.5 ft
Orifice Size	
Based on: minimum head and maximum discharge	
Orifice Shape	rectangular (b x h)
Orifice Coefficient (discharge)	
Area of orifice (sq. ft.)	
gravitational constant (32.2 ft/sec ²)	
Head above orifice (ft)	
Determine the radius of orifice to pass allowable discharge at minimum head	
radius of orifice (ft)	0.31 ft
radius of orifice (in)	3.72 in
Discharge (cfs) at 2.5 ft head	2.30 cfs



Subject to approval by
Drainage District

GRANITE RIDGE SUBDIVISION
PHASE 3/4
PART OF THE SOUTHEAST QUARTER OF SECTION 26,
TOWNSHIP 8 NORTH, RANGE 2 WEST,
SALT LAKE BASELINE AND MERIDIAN
WILLARD, UTAH
GRADING/DRAINAGE PLAN PG1
DATE: SEPT, 2016
DRAWING



GRANITE RIDGE SUBDIVISION
PHASE 3/4
PART OF THE SOUTHEAST QUARTER OF SECTION 26,
TOWNSHIP 8 NORTH, RANGE 2 WEST,
SALT LAKE BASELINE AND MERIDIAN
WILLARD, UTAH
GRADING/DRAINAGE PLAN PG2



ALLIANCE CONSULTING
ENGINEERS
150 EAST 200 NORTH SUITE P
LOGAN, UTAH 84321
(435)755-5121

- Legend:
- BOUNDARY LINE
 - LOT LINE
 - EXISTING FENCE
 - EXISTING SANITARY SEWER
 - EXISTING WATERLINE
 - EXISTING STORM
 - PROPOSED PVC C-800 WATER/VALVE/FIRE HYDRANT
 - PROPOSED CATCH BASIN AND LINES
 - PROPOSED SEWER
 - EXISTING ASPHALT
 - PROPOSED ASPHALT
 - MAJOR CONTOUR EXISTING (10')
 - MINOR CONTOUR EXISTING (2')
 - MAJOR CONTOUR PROPOSED (10')
 - MINOR CONTOUR PROPOSED (2')
 - PROPOSED LIGHT PER CITY SPEC

Notes:
1. Trees/landscaping will be installed per the development agreement. In particular final landscaping shall include two trees per lot, (4) per corner lot (1-2" caliber honey locust).

GRANITE RIDGE SUBDIVISION PHASE 3
Determination of Detention Pond Storage Requirements

Drainage Area to Pond	3.10 acres
Weighted C value for Paved Drainage Area	0.35
Allowable Discharge Rate	0.2 cfs/acre

10-Year Return Period									
Interval (min)	Precip. Intensity (in/hr)	Precip. Depth (in)	Area (ac)	C Value	CvAv 3630 (ft ³ /min)	Accum. Inflow (ft ³ /min)	Allowable Discharge (ft ³ /min)	Accum. Discharge (ft ³)	Required Storage (ft ³)
15	2.37	0.39	3.10	0.35	4701	2732	44	1556	2117
30	1.53	0.60	3.10	0.35	4701	3742	44	1332	2410
50	0.90	0.99	3.10	0.35	4701	4635	44	3664	1971
300	0.29	1.67	3.10	0.35	4701	7841	44	15084	0
720	0.15	2.16	3.10	0.35	4701	10154	44	31968	0
1440	0.13	3.02	3.10	0.35	4701	14215	44	65936	0

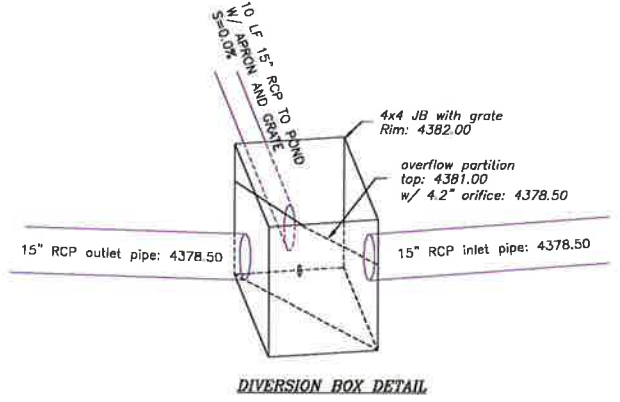
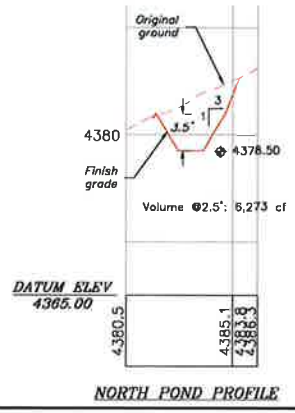
100-Year Return Period									
Interval (min)	Precip. Intensity (in/hr)	Precip. Depth (in)	Area (ac)	C Value	CvAv 3630 (ft ³ /min)	Accum. Inflow (ft ³ /min)	Allowable Discharge (ft ³ /min)	Accum. Discharge (ft ³)	Required Storage (ft ³)
15	4.05	1.14	3.10	0.35	4706	5587	44	659	6684
30	3.02	1.53	3.10	0.35	4706	7192	44	1352	5867
50	1.92	1.90	3.10	0.35	4706	8931	44	2656	6268
120	1.10	2.20	3.10	0.35	4706	10341	44	5326	5014
300	0.44	2.64	3.10	0.35	4706	12410	44	15084	0
720	0.25	3.36	3.10	0.35	4706	15734	44	31968	0
1440	0.12	2.55	3.10	0.35	4706	18397	44	65936	0

Size of the Office Openings for Discharge Pipe for Basin

Total Discharge	3.14 cfs
Number of Offices	1
Evaluated Discharge	3.14 cfs
Crest of Pond	4306.8 ft
Inset of Downstream Line	4307.8 ft
Diameter of Discharge Pipe	18 in
Head at Center of Office	2.5 ft

Office Size:
Based on maximum head and opening size using
 $Q = C A \sqrt{2gh}$
where:
 Q = discharge (cfs)
 C = orifice coefficient (default = 0.6)
 A = area of orifice (sq ft)
 g = gravitational constant (32.2 ft/sec²)
 h = head above orifice (ft)
Determine the radius of orifice to pass allowable discharge at minimum head
 $r = \sqrt{4Q / (\pi C \sqrt{2gh})}$
 $r = 0.18$ ft
 $r = 2.1$ in
Diameter of opening: 4.22 in 4.2 in hrs

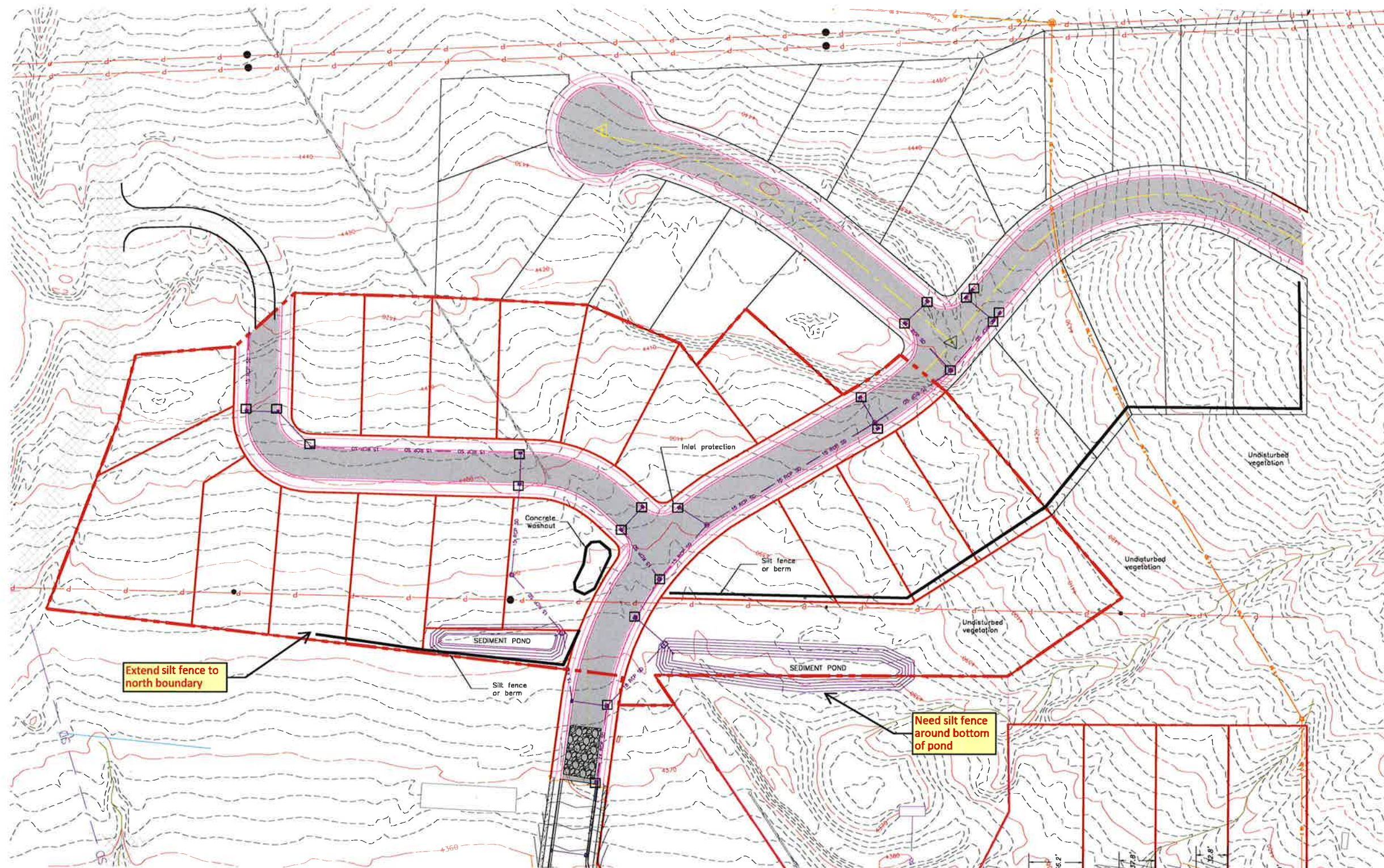
Show contours
Need space around one side of pond for maintenance access.



1. Show drainage areas/calcs for both ponds.
2. Show pond volumes on plans

PART OF THE SOUTHEAST QUARTER OF SECTION 26,
TOWNSHIP 8 NORTH, RANGE 2 WEST,
SALT LAKE BASELINE AND MERIDIAN
WILLARD, UTAH
SWPPP

SCALE: 1" = 50' (22x34 PLAN SET)
SCALE: 1" = 100' (11x17 PLAN SET)



ALLIANCE CONSULTING
ENGINEERS
150 EAST 200 NORTH SUITE P
LOGAN, UTAH 84321
(435)755-5121

[illegible]

GRANITE RIDGE SUBDIVISION
PHASE 3
PART OF THE SOUTHEAST QUARTER OF SECTION 26,
TOWNSHIP 8 NORTH, RANGE 2 WEST,
SALT LAKE BASINE AND MERIDIAN,
WILLARD, UTAH

SWPPP

DATE: AUG, 2019
DRAWING: 8

SPECIAL CONDITIONS, MANAGEMENT PRACTICES & RESPONSIBILITIES

1. This Storm Water Pollution Prevention Plan (SWPPP) was developed at the request of: Eric Hausholder.
For the construction of: Granite Ridge Subdivision Phase 3/4 in Willard City, Utah.
2. This plan identifies potential sources of pollution which may reasonably be expected to affect the quality of storm water discharges from the construction site.
3. Except as permitted in # 4 below, all discharges covered by the plan shall be composed entirely of storm water.
4. The following non-storm water discharges occurring at this site may be permissible, providing the implementation of appropriate pollution prevention measures has been taken.
- a. Discharges from fire fighting and fire hydrant discharges.
 - b. Water used to wash vehicles or control dust.
 - c. Potable water sources including waterline flushing.
 - d. Irrigation drainage.
 - e. Routing external building wash down which does not use detergents; pavement washwaters where spills or leaks of hazardous materials (including oils and fuels) have not occurred (unless all spilled material has been removed) and where detergents are not used.
 - f. Air conditioning condensation.
 - g. Springs, uncontaminated ground water, foundation or footing drains where flows are not contaminated with process materials such as solvents.
5. The discharge of hazardous substances or oil in the storm water discharge(s) from this facility shall be prevented or minimized in accordance with the SWPPP for the facility. This plan does not relieve the permittee of the reporting requirements of 40 CFR part 117, 40 CFR part 110, and 40 CFR part 302. Where a release containing a hazardous substance in an amount equal to or in excess of a reportable quantity established under either 40 CFR part 117, 40 CFR part 110, or 40 CFR part 302, occurs during a 24-hour period.
- a. Notify the National Response Center (NRC) 800-424-8802.
 - b. Notify the Division of Water Quality (DWQ) 801-538-6146 (or the DWQ answering service at 801-536-4123)
 - c. Notify Willard City
6. Within 14 calendar day of knowledge of the release, the permittee shall file a written description, the date of release, the circumstances leading to the release, the measures taken/or planned to cleanup the release, and steps to be taken to minimize the chance of future occurrences.
7. Within 14 calendar day of knowledge of the release, this plan must be reviewed to identify measures to prevent the recurrence of such releases, and to respond to such releases, and the plan must be modified where appropriate.

STORM WATER POLLUTION PREVENTION PLAN

1. This plan shall be retained on-site at the facility. If the site is inactive or does not have on on-site locations adequate to store the SWPPP, the location of the plan, along with a contact phone number shall be posted on site. Reasonable local access to the plan, during normal working hours, must be provided.
2. Site Description:
- a. Construction Activity: Construction of a residential subdivision.
 - b. Sequence of major activities: Site clearing, rough grading, utilities installation, finish grading, paving.
 - c. Total Area of Site: 15.18± acres
 - d. Existing Soil: Sx (31.9%), WcC (69.1%)
 - e. Site Location: 600 East, 820 South in Willard Utah.
 - f. Discharges other than from construction: None.
 - g. Receiving Water: None.
3. Erosion and Sediment Controls.
- a. The construction-phase erosion and sediment controls should be installed to retain sediment of site to the maximum extent possible.
 - b. All control measures must be properly selected, installed and maintained in accordance with the manufacturer's specifications and good engineering practices. If periodic inspections or other information indicates a control has been used inappropriately, or incorrectly, the permittee must replace or modify the control for site situations.
 - c. If sediment escapes the construction site, off-site accumulations of sediment must be removed immediately to minimize off-site impacts (e.g. fugitive sediment in street could be washed into storm sewers by the next rain and/or pose safely hazard to users of public streets).
 - d. Sediment traps shall be placed around all storm water inlets as shown on the plan. Allow only clean storm water to enter the inlets (e.g. fugitive sediment in street could be washed into storm sewers by the next rain and/or pose safety hazard to users of public streets).
 - e. Sediment must be removed from sediment traps, silt fences, or sedimentation ponds when design capacity has been reduced by 50%.
 - f. Litter, construction debris, and construction chemicals exposed to storm water shall be picked up prior to anticipated storm events (e.g. forecasted by local weather reports), or otherwise prevented from becoming a pollutant source for storm water discharges (e.g. screening outfalls, picked up daily, etc.).
 - g. Offsite material storage areas (also including overburden and stockpiles of dirt, etc.) used solely by the permitted project are considered a part of the project.
4. Other Controls:
- a. Waste Disposal – No solid materials, including building materials, shall be discharged to water of the State, except as authorized by a CWA Section 404 permit.
 - b. Off-site Tracking – Off-site vehicle tracking of sediments and the generation of dust shall be minimized.

- c. Septic, Waste and Sanitary Sewer Disposal – Comply with State and/or local waste disposal, sanitary sewer or septic system regulations. Provide portable toilets that are serviced weekly and pumped clean by a waste disposal company. No toxic or hazardous waste shall be disposed of in portable toilets or on-site sanitary sewer.
- d. On Site Storage – Perform regular inventaris of construction materials stored onsite (including waste materials). Practice storage procedures to minimize exposure of the materials to storm water. Provide covered disposal containers in convenient locations on the site. Provide for weekly (more often if required) waste disposal.

5. Other Laws and Requirements:

- a. Comply with local storm water control requirements
- b. Comply with Federal or State laws pertaining to threatened or endangered species or historic properties.
- c. Dischargers seeking variance to permit requirements shall submit an individual permit application along with a description of why requirements in approved State or local plans or permits should not be applicable as a condition of a UPDES permit.

6. Maintenance:

- a. The controls and measures indicated on the plan shall be maintained in good and effective operating condition.
- b. Maintenance needs identified in inspection or by other means shall be accomplished before the next anticipated storm event, or as necessary to maintain the continued effectiveness of storm water controls.
- c. If maintenance prior to the next anticipated storm event is impracticable, maintenance must be scheduled and accomplished as soon as possible.

7. Inspection:

- a. Inspect disturbed areas of the construction site that have not been finally stabilized, areas disturbed for the storage of materials that are exposed to precipitation, structural control measures and locations where vehicles enter or exit the site:
 - 1. At least once every 14 calendar days.
 - 2. Before anticipated storm events.
 - 3. Within 24 hours of the end of a storm that is 0.5 inches or greater.
- b. Where the site has been finally or temporarily stabilized, or runoff is unlikely due to winter conditions (e.g. site covered with snow, ice, or frozen ground, inspection shall be conducted at least once every month.
- c. Points, Areas, BMP's, and Activities to be inspected.

- (1) Disturbed areas and areas used for storage of materials that are exposed to precipitation shall be inspected for evidence of, or the potential for, pollutants entering the drainage system.
- (2) Erosion and sediment control measures shall be observed to ensure they are operating correctly.
- (3) Accessible discharge locations or points shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters.
- (4) Locations where vehicles enter or exit the site shall be inspected for evidence of offsite sediment tracking.

8. Inspection Induced Plan Revisions:

Based on the results of the inspection, this plan shall be revised as appropriate within 7 calendar days following the inspection.

9. Inspection Report:

- a. Prepare an inspection report for each inspection. It shall contain:
 - (1) The scope of the inspection
 - (2) Name(s) and qualifications of personnel making the inspection.
 - (3) The date of the inspection.
 - (4) Major observations relating to the implementation of the SWPPP
 - (a) locations of discharges of sediment or other pollutants from the site.
 - (b) control devices that failed to operate or proved inadequate or a particular location.
 - (c) actions taken.
- b. Reports shall be retained as part of the SWPPP for at least three years from the date that the site is finally stabilized.
- c. Reports shall identify any incidents of non-compliance.
- d. When a report does not identify any incidents of non-compliance, the report shall contain a certification that the facility is in compliance with the SWPPP and the permit.
- e. The report shall be signed in accordance with the permit certification (that is the same as the certification signed by the engineer on this sheet).

10. Accessibility

The permittee shall retain a copy of the SWPPP at the construction site (or other location accessible the public) from the date of project initiation to the date of final stabilization. The permittees with day to day operational control over the SWPPP implementation shall have a copy of the plan available at a central location onsite for the use of all operators and those identified as having responsibilities under the plan whenever they are on the construction site.

11. Final Stabilization:

- 1. Means that all soil disturbing activities at the site have been completed.
- 2. After construction has been completed, paved areas of the site shall be swept clean. Storm water inlets and pipe shall be leaned. All waste including storm water control measures shall be removed from the site.
- 3. Perennial vegetative cover with a density of 70% of the native background vegetative cover for the area has been established on all unpaved areas, or equivalent permanent stabilization measures (such as the use of rip rap, gabions, or geotextiles) have been employed.
- 4. Landscaping shall not be overwatered so that soil erosion occurs.
- 5. When all construction activity on the site has been completed, the owner shall file a Notice of Termination with the State DEQ Division of Water Quality.

DEFINITIONS:

A Best Management Practices (BMP's) means schedule of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of the waters of the State. BMP's also include treatment requirements, operating procedures and practices to control site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw materials storage.

B. Commencement of Construction means the initial disturbance of soils associated with clearing, grading or excavating activities or other construction activities.

C. Control Measure means any Best Management Practice or other method used to prevent or reduce the discharge of pollutants to waters of the State.

D. CWA means Clean Water Act or the Federal Water Pollution Control Act.

E. Point Source means any discernible, confined and discrete conveyance including, but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural storm water runoff.

F. Runoff Coefficient means the fraction of total rainfall that will appear at a conveyance as runoff.

G. Storm Water means storm water runoff, snow melt runoff, and surface runoff and drainage.

H. Water of the State means all lakes, ponds, marshes, water courses, waterways, wells, springs, irrigation systems, drainage systems, and all other bodies or accumulations of water, surface and underground, natural or artificial, public or private, which are contained within, flow through, or border upon this State or any portion thereof, except that bodies of water confined to and retained within the limits of private property, and which do not develop into or constitute a nuisance, or a public health hazard, or a menace to fish and wildlife, shall not be "water of the state" under this definition.

I. Waste Pile means any noncontainerized accumulation of solid, nonflowing waste that is used for treatment or storage.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations.

_____ Date: _____
Adam Mackelprang, PE

SCALE

ALLIANCE CONSULTING
ENGINEERS
150 EAST 200 NORTH SUITE P
LOGAN, UTAH 84321
(435)755-5121



DATE

REVISIONS

No.

DATE

REVISIONS

DATE

REVISIONS

DATE

REVISIONS

GRANITE RIDGE SUBDIVISION
PHASE 3
PART OF THE SOUTHEAST QUARTER OF SECTION 26,
TOWNSHIP 8 NORTH, RANGE 2 WEST,
SALT LAKE BASELINE AND MERIDIAN
WILLARD, UTAH

SWPPP SPECIFICATIONS

DATE: AUG, 2019

DRAWING

PART OF THE SOUTHEAST QUARTER OF SECTION 26,
TOWNSHIP 8 NORTH, RANGE 2 WEST,
SALT LAKE BASELINE AND MERIDIAN
WILLARD, UTAH

Need temporary access easement for new road and space for a turn around.

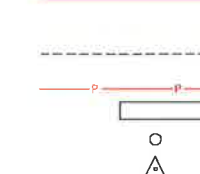
Bearings are labeled 180 degrees from written legal description. They should be adjusted to be the same as the written description.

Show 15' min.
easement width

Call out as parcel to be dedicated to Flood District or City. (Need to discuss)

Call out as parcel to be dedicated to Flood District or City. (Need to discuss)

Easement for
turn around
req'd



BOUNDARY LINE

LOT LINE

CL

EASEMENT—PUBLIC UTILITY EASEMENT
UNLESS NOTED OTHERWISE

POWER LINE

ADDRESS BLOCK

FOUND REBAR (AS NOTED)

CL MONUMENT

CURVE TABLE

CURVE	LENGTH	RADIUS	DELTA ANGLE	CHORD BEARING	CHORD LENGTH
C80	148.73	300.00	28°24'22"	N61°43'26"W	147.21
C81	91.50	300.00	17°28'31"	N38°47'00"W	91.15
C82	67.62	300.00	12°54'49"	S36°30'10"E	67.47
C83	89.74	125.00	41°07'56"	N21°54'45"E	87.82
C84	78.54	50.00	90°00'00"	S46°20'48"W	70.21
C85	42.01	330.00	7°17'36"	N72°58'35"W	41.98
C86	68.20	95.00	41°07'56"	N21°54'45"E	66.74
C87	18.08	12.50	82°52'12"	N43°54'53"E	16.54
C88	84.55	329.81	14°41'21"	N61°59'26"W	84.32
C89	29.35	80.00	21°01'26"	S11°51'31"W	29.19
C90	48.73	80.00	34°53'53"	S39°49'10"W	47.98
C91	47.58	80.00	34°04'41"	S74°18'27"W	46.88
C92	31.42	20.00	90°00'00"	S46°20'48"W	28.28
C93	26.20	155.00	9°41'08"	N06°11'21"E	26.17
C94	62.00	155.00	22°55'06"	N22°29'28"E	61.59
C95	59.60	330.00	10°20'50"	N35°13'10"W	59.51
C96	18.08	12.50	82°52'12"	S01°02'34"W	16.54
C97	23.07	155.00	8°31'42"	N38°12'52"E	23.05
C98	66.00	330.00	11°27'33"	S37°58'41"E	65.89
C99	12.69	330.00	2°12'09"	S31°08'50"E	12.68
C100	123.38	270.00	26°10'55"	N43°08'12"W	122.31
C101	119.21	270.00	25°17'54"	N68°52'36"W	118.25
C102	56.54	270.00	11°59'51"	S36°02'41"E	56.43

LEGAL DESCRIPTION

Part of the Southeast Quarter of Section 26, Township 8 North, Range 2 West, Salt Lake Baseline and Meridian described as follows:

Commencing at the Southeast Corner of Section 26, Township 8 North, Range 2 West, Salt Lake Baseline and Meridian monumented with a brass cap; thence N 00°45'40" W 1212.15 feet along the east line of the the Southeast Quarter of said Section 26; thence West 875.96 feet to the POINT OF BEGINNING and running

thence S 04°53'29" E 103.47 feet;
thence S 42°11'59" E 82.78 feet;
thence S 01°20'48" W 145.00 feet;
thence S 02°33'52" W 157.95 feet;
thence S 22°29'28" W 102.91 feet;
thence S 52°02'07" W 26.75 feet;
thence S 46°51'09" E 77.13 feet;
thence S 41°08'32" W 134.18 feet;
thence S 30°02'45" E 15.69 feet;
thence Southeasterly, 35.54 feet along a curve to the left having a radius of
270.00 feet, a central angle of 11°59'51" and a chord that bears S 36°02'41" E
55.43 feet;
thence S 38°51'39" W 60.62 feet;
thence S 49°10'53" W 280.68 feet;
thence N 34°20'08" W 144.19 feet to an H&J rebar;
thence N 00°08'43" E 385.07 feet;
thence S 55°52'26" W 37.41 feet;
thence N 00°05'43" E 57.89 feet along the boundary of Granite Ridge Phase 2;
thence along the boundary of Willard Peak Ranches, No. 1 the next two courses:
1) thence S 82°22'11" E 30.26 feet;
2) thence N 06°27'56" E 599.82 feet;
thence S 69°05'47" E 206.89 feet;
thence S 75°40'28" E 71.29 feet to the point of beginning, containing 7.53 acres,
more or less.

ALLIANCE CONSULTING
ENGINEERS
150 EAST 200 NORTH SUITE P
LOGAN, UTAH 84321
(435)758-5121

OWNER:
Granite Ridge Development, Co
3718 north wolfcreek drive

GRANITE RIDGE SUBDIVISION
PHASE 3
PART OF THE SOUTHEAST QUARTER OF SECTION 26,
TOWNSHIP 8 NORTH, RANGE 2 WEST,
SALT LAKE BASELINE AND MERIDIAN
WILLARD, UTAH

FINAL PLAT

MAR5,2020
1
OF 2

GRANITE RIDGE SUBDIVISION
PHASE 3
PART OF THE SOUTHEAST QUARTER OF SECTION 26,
TOWNSHIP 8 NORTH, RANGE 2 WEST,
SALT LAKE BASELINE AND MERIDIAN
WILLARD, UTAH
FINAL PLAT

GENERAL NOTES

1. 27 RESIDENTIAL LOTS
2. TYPICAL EASEMENTS AS FOLLOWS UNLESS OTHERWISE NOTED:
FRONT: 10'
REAR: 10'
SIDE: 5'
3. 8" REBAR TO BE SET AT ALL REAR PROPERTY CORNERS. CURB PINS TO BE SET AT LOT LINE PROJECTIONS.

SURVEYOR'S CERTIFICATE

I, Brian G. Lyon, a Registered Land Surveyor, hold Certificate No. 275617, as prescribed by the laws of the State of Utah, and do hereby certify that by authority of the owners, I have made a survey of the tract of land shown on this plat, which is accurately described therewith, and have subdivided said tract of land into lots to be hereafter known as GRANITE RIDGE SUBDIVISION, PHASE 3, and that the same has been surveyed and staked on the ground as shown on this plat.
Signed on this _____ day of _____, 20____.

OWNERS DEDICATION

Know all by these presents that we the undersigned owners of the above-described tract of land, having caused the same to be subdivided into lots and streets to hereafter be known as GRANITE RIDGE SUBDIVISION PHASE 3, do hereby dedicate for perpetual use of the public all parcels of land shown on this plat as intended for public use, and do warrant, defend and save the municipality harmless against any easements or other encumbrances on the dedicated streets which will interfere with the municipality's use, operation and maintenance of the streets and do further dedicate the easements as shown, with the same warranty as given for other dedicated property.
In witness whereof, we have hereunto set our hands this _____ day of _____, 2016.

LIMITED LIABILITY ACKNOWLEDGEMENT

STATE OF UTAH }
COUNTY OF BOX ELDER }
On the _____ day of _____, A.D., 20____, personally appeared before me, _____, who being by me duly sworn did say, for him/herself, that he/she is the Manager/Member of Granite Ridge Development Company, a Utah Limited Liability Company and that the within and foregoing instrument was signed on behalf of said Corporation by authority of its Articles of Organization and each duly acknowledged to me that said Limited Liability Company executed the same.
My commission expires: _____
Notary Public _____
Residing at: _____

SURVEYOR'S NOTES/NARRATIVE

1. THE PURPOSE OF THIS SURVEY WAS TO DEVELOP A RESIDENTIAL SUBDIVISION ON THE SUBJECT PROPERTY. THE SURVEY WAS REQUESTED BY ERIC HOUSEHOLDER.
2. THE BASIS OF BEARING IS N 00°45'40" W BETWEEN THE SOUTHEAST CORNER OF SECTION 26 MONUMENTED BRASS CAP AND THE EAST QUARTER CORNER OF SECTION 26 MONUMENTED WITH A BRASS CAP. THE CENTERLINE MONUMENTS AND BASIS OF SAID WILLARD PEAK RANCHES NO. 1 APPALOOSA RANCH WAS ALSO USED AS BASIS OF BEARING.

CITY COUNCIL APPROVAL AND ACCEPTANCE

Presented to the Willard City Mayor this _____ day of _____, A.D., 20____, at which time this subdivision was approved and accepted.
Mayor _____ Date _____

COUNTY SURVEYOR'S CERTIFICATE

I certify that I have examined this plat and find it to be correct and in accordance with information on file in this office and further it meets the minimum standards for plats required by county ordinance, and state law.
Date _____ County Surveyor _____

APPROVAL AS TO FORM

Approved as to form this _____ day of _____, A.D., 20____.
City Attorney _____

ENGINEER'S CERTIFICATE

I certify that I have examined this plat and find it to be correct and in accordance with information on file in this office and the city ordinance.
Date _____ City Engineer _____

UTILITY COMPANY APPROVALS

The utility easements shown on this plat are approved
Rocky Mtn Power _____
Quesada Gas _____
Comcast Cable _____
CenturyLink Communications _____

PLANNING COMMISSION CHAIRMAN APPROVAL AND ACCEPTANCE

Presented to the Willard City Planning Commission chairman this _____ day of _____, A.D., 20____, at which time this subdivision was recommended to the City Council for approval.
Planning Commission Chairman _____ Date _____

COUNTY RECORDER'S NO.

State of Utah, County of Box Elder, recorded and filed at the request of _____ Time _____ Fee _____
Date _____ Entry _____
Index _____
Filed in: File of plats _____ County Recorder _____

VICINITY MAP:

SEALED

ALLIANCE CONSULTING ENGINEERS
150 EAST 200 NORTH SUITE P
LOGAN, UTAH 84321
(435)755-5121

OWNER:
Granite Ridge Development, Co
3718 North Willard Drive
Eaton, Utah 84310

NO.	REVISIONS / SUBMITTALS	DATE

REVIEWED: _____
DATE: _____
PROJECT NO.: _____

GRANITE RIDGE SUBDIVISION
PHASE 3
PART OF THE SOUTHEAST QUARTER OF SECTION 26,
TOWNSHIP 8 NORTH, RANGE 2 WEST,
SALT LAKE BASELINE AND MERIDIAN
WILLARD, UTAH
FINAL PLAT

DATE: MAR, 2020
DRAWING No. 2
OF 2