

# THE RETREAT AT WOLF CREEK CONDOMINIUMS

## CONSTRUCTION DOCUMENTS EDEN, WEBER , UTAH

### TRAFFIC CONTROL & SAFETY NOTES

1. BARRICADING AND DETOURING SHALL BE IN CONFORMANCE WITH THE REQUIREMENTS OF THE CURRENT STATE OF UTAH DEPARTMENT OF TRANSPORTATION MANUAL OF TRAFFIC CONTROLS FOR CONSTRUCTION AND MAINTENANCE WORK ZONES, AND THE CURRENT CITY STANDARD DRAWING, AND SHALL BE APPROVED BY THE CITY ENGINEER PRIOR TO ANY WORK.
2. NO STREET SHALL BE CLOSED TO TRAFFIC WITHOUT WRITTEN PERMISSION FROM THE CITY TRAFFIC ENGINEER, EXCEPT WHEN DIRECTED BY LAW ENFORCEMENT OR FIRE OFFICIALS.
3. THE CONTRACTOR SHALL MAKE EVERY EFFORT TO PROVIDE FOR SMOOTH TRAFFIC FLOW AND SAFETY. ACCESS SHALL BE MAINTAINED FOR ALL PROPERTIES ADJACENT TO THE WORK.
4. DETOURING OPERATIONS FOR A PERIOD OF SIX CONSECUTIVE CALENDAR DAYS, OR MORE, REQUIRE THE INSTALLATION OF TEMPORARY STREET STRIPING AND REMOVAL OF INTERFERING STRIPING BY SANDBLASTING. THE DETOURING STRIPING PLAN OR CONSTRUCTION TRAFFIC CONTROL PLAN MUST BE SUBMITTED TO THE CITY TRAFFIC ENGINEER FOR REVIEW AND APPROVAL.
5. ALL TRAFFIC CONTROL DEVICES SHALL BE RESTORED TO THEIR ORIGINAL CONDITION AT THE END OF THE WORK TO THE SATISFACTION OF THE CITY TRAFFIC ENGINEER
6. TRAFFIC CONTROL DEVICES (TCDs) SHALL REMAIN VISIBLE AND OPERATIONAL AT ALL TIMES.

### UTILITY DISCLAIMER

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

### NOTICE TO CONTRACTOR

ALL CONTRACTORS AND SUBCONTRACTORS PERFORMING WORK SHOWN ON OR RELATED TO THESE PLANS SHALL CONDUCT THEIR OPERATIONS SO THAT ALL EMPLOYEES ARE PROVIDED A SAFE PLACE TO WORK AND THE PUBLIC IS PROTECTED. ALL CONTRACTORS AND SUBCONTRACTORS SHALL COMPLY WITH THE "OCCUPATIONAL SAFETY AND HEALTH REGULATIONS OF THE U.S. DEPARTMENT OF LABOR AND THE STATE OF UTAH DEPARTMENT OF INDUSTRIAL RELATIONS CONSTRUCTION SAFETY ORDERS". THE CIVIL ENGINEER SHALL NOT BE RESPONSIBLE IN ANY WAY FOR CONTRACTORS AND SUBCONTRACTORS COMPLIANCE WITH SAID REGULATIONS AND ORDERS.

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

### SANITARY SEWER GENERAL NOTES

1. ALL SANITARY SEWER CONSTRUCTION SHALL BE IN CONFORMANCE WITH CITY STANDARDS AND SPECIFICATIONS.
2. ALL GRAVITY SANITARY SEWER LINES SHALL BE SDR-35 PVC MATERIAL. SEWER LINE CONSTRUCTION AND MATERIALS SHALL CONFORM TO ASTM STANDARDS AND SPECIFICATIONS.
3. DISTANCES SHOWN ON PLANS ARE APPROXIMATE AND COULD VARY DUE TO VERTICAL ALIGNMENT.
4. RIM ELEVATIONS SHOWN ARE APPROXIMATE ONLY AND ARE NOT TO BE TAKEN AS FINAL ELEVATION. PIPELINE CONTRACTOR SHALL USE PRECAST CONCRETE ADJUSTMENT RINGS, GROUT AND STEEL SHIMS TO ADJUST THE MANHOLE FRAME TO THE REQUIRED FINAL GRADE IN CONFORMANCE WITH THE STANDARD SPECIFICATIONS. ALL FRAMES SHALL BE ADJUSTED TO FINAL GRADE.
5. ALL SANITARY SEWER MAIN TESTING SHALL BE IN ACCORDANCE WITH THE CITY STANDARDS AND SPECIFICATIONS. COPIES OF ALL TEST RESULTS SHALL BE PROVIDED TO THE PUBLIC WORKS SANITARY SEWER DEPARTMENT HEAD PRIOR TO FINAL ACCEPTANCE.
6. COMPACTION TESTING OF ALL TRENCHES WITH THE PROJECT SITE MUST BE ATTAINED AND RESULTS SUBMITTED TO THE CITY ENGINEER PRIOR TO FINAL ACCEPTANCE.
7. CONTRACTOR IS RESPONSIBLE TO PROTECT ALL EXISTING STRUCTURES AND IMPROVEMENTS DURING INSTALLATION OF SANITARY SEWER LINE.
8. WHERE CONNECTION TO EXISTING UTILITY IS PROPOSED, CONTRACTOR SHALL VERIFY LOCATION AND ELEVATION AND NOTIFY OWNER/ENGINEER IF LOCATION AND ELEVATION OF EXISTING UTILITY VARIES FROM THE DESIGN.
9. CAMERA TESTING AND PRESSURE TESTING PER CITY STANDARD.

### GENERAL NOTES

1. ALL MATERIALS, WORKMANSHIP AND CONSTRUCTION OF SITE IMPROVEMENTS SHALL MEET OR EXCEED THE STANDARDS AND SPECIFICATIONS SET FORTH BY THE CITY ENGINEER, PLANNING, CODES AND SPECIFICATIONS AND APPLICABLE STATE AND FEDERAL REGULATIONS. WHERE THERE IS CONFLICT BETWEEN THESE PLANS AND SPECIFICATIONS, OR ANY APPLICABLE STANDARDS, THE HIGHER QUALITY STANDARD SHALL APPLY.
2. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND OR ELEVATION OF EXISTING UTILITIES, AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED UPON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE LOCAL UTILITY LOCATION CENTER AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATIONS OF THE UTILITIES. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL VERIFY PERTINENT LOCATIONS AND ELEVATIONS, ESPECIALLY AT THE CONNECTION POINTS AND AT POTENTIAL UTILITY CONFLICTS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES THAT CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THESE PLANS.
3. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS FROM ALL APPLICABLE AGENCIES. THE CONTRACTOR SHALL NOTIFY THE DESIGNATED PUBLIC WORKS INSPECTOR AT LEAST 48 HOURS PRIOR TO THE START OF ANY EARTH DISTURBING ACTIVITY, OR CONSTRUCTION ON ANY AND ALL PUBLIC IMPROVEMENTS.
4. THE CONTRACTOR SHALL COORDINATE AND COOPERATE WITH THE CITY AND ALL UTILITY COMPANIES INVOLVED WITH REGARD TO RELOCATIONS OR ADJUSTMENTS OF EXISTING UTILITIES DURING CONSTRUCTION AND TO ASSURE THAT THE WORK IS ACCOMPLISHED IN A TIMELY FASHION AND WITH A MINIMUM DISRUPTION OF SERVICE.
5. THE CONTRACTOR SHALL HAVE ONE (1) COPY OF APPROVED PLANS, AND ONE (1) COPY OF THE APPROPRIATE STANDARDS AND SPECIFICATIONS AND A COPY OF ANY PERMITS AND EXTENSION AGREEMENTS NEEDED FOR THE JOB, ON SITE AT ALL TIMES.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ASPECTS OF SAFETY INCLUDING BUT NOT LIMITED TO, EXCAVATION, TRENCHING, SHORING, TRAFFIC CONTROL, AND SECURITY.
7. IF DURING THE CONSTRUCTION PROCESS CONDITIONS ARE ENCOUNTERED BY THE CONTRACTOR, HIS SUBCONTRACTORS, OR OTHER AFFECTED PARTIES, WHICH COULD INDICATE A SITUATION THAT IS NOT IDENTIFIED IN THE PLANS OR SPECIFICATIONS, THE CONTRACTOR SHALL CONTACT THE ENGINEER IMMEDIATELY.
8. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL LABOR AND MATERIALS NECESSARY FOR THE COMPLETION OF THE INTENDED IMPROVEMENTS SHOWN ON THESE DRAWINGS OR DESIGNATED TO BE PROVIDED, INSTALLED, CONSTRUCTED, REMOVED AND RELOCATED UNLESS SPECIFICALLY NOTED OTHERWISE.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING ROADWAYS FREE AND CLEAR OF ALL CONSTRUCTION DEBRIS AND DIRT TRACKED FROM THE SITE.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RECORDING AS-BUILT DRAWINGS ON A SET OF RECORD DRAWINGS KEPT AT THE CONSTRUCTION SITE, AND AVAILABLE TO THE CITY INSPECTOR AT ALL TIMES.
11. THE CONTRACTOR SHALL SEQUENCE INSTALLATION OF UTILITIES IN SUCH A MANNER AS TO MINIMIZE POTENTIAL UTILITY CONFLICTS. IN GENERAL, STORM SEWER AND SANITARY SEWER SHOULD BE CONSTRUCTED PRIOR TO INSTALLATION OF WATER LINES AND DRY UTILITIES.
12. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE ALL UTILITY RELOCATIONS CONSISTENT WITH THE CONTRACTORS SCHEDULE FOR THIS PROJECT, WHETHER SHOWN OR NOT SHOWN AS IT RELATES TO THE CONSTRUCTION ACTIVITIES CONTEMPLATED IN THESE PLANS.

### SWPPP GENERAL NOTES

1. CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AS REQUIRED BY THE CITY AND STATE.
2. ALL STRUCTURAL EROSION MEASURES SHALL BE INSTALLED AS SHOWN ON THE SWPPP PLAN, PRIOR TO ANY OTHER GROUND-DISTURBING ACTIVITY. ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED IN GOOD REPAIR BY THE CONTRACTOR, UNTIL SUCH TIME AS THE ENTIRE DISTURBED AREAS ARE STABILIZED WITH HARD SURFACE OR LANDSCAPING.

### STORM SEWER GENERAL NOTES

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE FOLLOWING:  
A) OBTAIN ALL REQUIRED PERMITS FROM THE CITY OR REGULATORY AGENCIES, INCLUDING PERMITS TO WORK IN THE RIGHT-OF-WAY.  
B) RESTORATION OF EXISTING IMPROVEMENTS INCLUDING BUT NOT LIMITED TO FENCES, SOD, LANDSCAPING, PAVEMENT, SPRINKLER SYSTEM.  
C) VERIFICATION AND PROTECTION OF ALL EXISTING IMPROVEMENTS WITHIN THE LIMITS OF CONSTRUCTION.  
D) PROVIDING AS-BUILT DRAWINGS TO THE CITY AND THE ENGINEER.  
E) ALL PERMITTING, DEVELOPMENT, LOCATION, CONNECTION AND INSPECTION AND SCHEDULING FOR SUCH.
2. ALL STORM SEWER CONNECTIONS SHALL BE IN CONFORMANCE WITH CITY STANDARDS AND SPECIFICATIONS.
3. RIM ELEVATIONS SHOWN ARE APPROXIMATE ONLY AND ARE NOT TO BE TAKEN AS FINAL ELEVATION. PIPELINE CONTRACTOR SHALL USE PRECAST CONCRETE ADJUSTMENT RINGS, GROUT AND STEEL SHIMS TO ADJUST THE MANHOLE FRAME TO THE REQUIRED FINAL GRADE IN CONFORMANCE WITH CITY STANDARDS AND SPECIFICATIONS AND PLANS. ALL FRAMES SHALL BE ADJUSTED TO FINAL GRADE PRIOR TO PLACEMENT OF ASPHALT PAVING.
4. COMPACTION OF ALL TRENCHES WITHIN THE PROJECT SITE MUST BE ATTAINED AND COMPACTION RESULTS SUBMITTED TO THE ENGINEER AND THE CITY PRIOR TO FINAL ACCEPTANCE.
5. ALL STORM DRAIN PIPES IN THE CITY RIGHT-OF-WAY SHALL BE RCP CL III.
6. ALL STORM SEWER MANHOLES IN PAVED AREAS SHALL BE FLUSH WITH THE PAVEMENT AND SHALL HAVE TRAFFIC BEARING LIDS. ALL STORM SEWER LIDS SHALL BE LABELED "STORM DRAIN".
7. WHERE CONNECTION TO EXISTING UTILITY IS PROPOSED, CONTRACTOR SHALL VERIFY LOCATION AND ELEVATION AND NOTIFY OWNER/ENGINEER IF LOCATION AND ELEVATION OF EXISTING UTILITY VARIES FROM THE DESIGN.

### GENERAL GRADING NOTES

1. ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST APWA STANDARDS AND SPECIFICATION FOR PUBLIC WORKS AND THE CITY STANDARDS. CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE AWAY FROM BUILDING FOUNDATIONS AND ENTRIES. FINISHED GRADE AT FOUNDATION FOR WOOD FRAMED STRUCTURES SHALL BE 8 INCHES BELOW TOP OF FOUNDATION AND DRAINAGE SHALL BE A MINIMUM OF 5% WITHIN 10 FEET FROM THE BUILDING.
2. MAXIMUM SLOPES SHALL BE 3:1 FOR CUT AND FILL UNLESS OTHERWISE NOTED.
3. COMPACTION REQUIREMENTS AND TESTING SHALL BE PERFORMED TO MEET THE CITY STANDARDS.
4. NO FILL SHALL BE PLACED UNTIL VEGETATION HAS BEEN REMOVED AND SUB-GRADE PREPARED PER THE SOILS REPORT.
5. DUST SHALL BE CONTROLLED BY WATERING OR OTHER APPROVED METHODS.
6. CONTRACTOR SHALL COMPLY WITH STORM WATER POLLUTION PREVENTION PLAN BY INSTALLING BMP'S PRIOR TO COMMENCEMENT OF EXCAVATION ACTIVITIES. CONTACT THE CITY INSPECTOR FOR INSPECTION.
7. ALL RECOMMENDATIONS OF THE GEOTECHNICAL REPORT AND ALL SUBSEQUENT REPORTS, ADDENDUM ETC. SHALL BE CONSIDERED A PART OF THIS GRADING PLAN AND SHALL BE COMPLIED WITH.
8. THE CONTRACTOR SHALL CONTACT BLUE STAKES FOR LOCATION MARKING PRIOR TO COMMENCING EXCAVATION ACTIVITIES.
9. CITY MAY REQUIRE A PRE-CONSTRUCTION MEETING BEFORE A PERMIT IS ISSUED.
10. STREETS ADJACENT TO THE PROJECT SHALL BE CLEAN AT ALL TIMES.
11. CONTRACTOR IS RESPONSIBLE FOR ARRANGING FOR ALL REQUIRED INSPECTIONS.
12. PRIOR TO TAKING WATER FROM A CITY FIRE HYDRANT, THE CONTRACTOR SHALL MAKE ARRANGEMENTS WITH THE WATER UTILITY TO OBTAIN A WATER METER.

### CULINARY WATER GENERAL NOTES

1. ALL INSTALLATION AND MATERIALS SHALL CONFORM TO WATER UTILITY STANDARDS, SPECIFICATIONS AND PLANS.
2. THRUST BLOCKING IS REQUIRED AT ALL BENDS AND FITTINGS. TIE RODS SHALL BE USED AT ALL BENDS AND FITTINGS WHERE THRUST BLOCKS DO NOT BEAR AGAINST UNDISTURBED SOIL.
3. ALL WATERLINES AT SEWER CROSSINGS SHALL BE LOCATED ABOVE AND HAVE AN 18-INCH VERTICAL SEPARATION FROM THE SEWER PIPE. IF THIS IS NOT PROVIDED, THE WATERLINE SHALL BE INSTALLED WITH 20 L.F. OF CONCRETE CASING CENTERED OVER THE SEWER PIPE.
4. DISINFECTION TESTS SHALL BE PERFORMED BY THE WATER UTILITY WITH COOPERATION FROM THE CONTRACTOR IN PERFORMING ANY NECESSARY EXCAVATION AND SUBSEQUENT BACKFILLING AT NO COST TO THE CITY.
5. CHLORINATION OF COMPLETED WATER LINE. THE NEW WATER LINES SHALL BE DISINFECTED BY CHLORINATION. THE CONTRACTOR WILL BE RESPONSIBLE FOR ALL RELATED COSTS AND FEES RELATED TO THE CHLORINATION OF THE COMPLETED WATER LINE. THIS TEST SHALL BE PERFORMED PRIOR TO CONNECTION OF THE NEW WATER LINES TO THE EXISTING WATER SYSTEM. THE CONTRACTOR SHALL NOTIFY THE WATER UTILITY AT LEAST 24 HOURS BEFORE THE CHLORINATION IS DESIRED.
6. A MINIMUM HORIZONTAL CLEARANCE OF 10 FEET SHALL BE MAINTAINED FROM SANITARY SEWER MAINS.
7. UNLESS OTHERWISE SPECIFIED, ALL WATERLINES SHALL BE AWWA C900 PVC CLASS 150, PER ASTM D2241.
8. CONTRACTOR SHALL LOCATE VALVES PRIOR TO CONNECTION WITH EXISTING SYSTEM, BUT SHALL NOT OPERATE ANY VALVE WITHOUT PERMISSION FROM THE WATER UTILITY.
9. ALL WATER MAINS, VALVES, FIRE HYDRANTS, SERVICES AND APPURTENANCES SHALL BE INSTALLED, TESTED, AND APPROVED PRIOR TO PAVING.
10. THERE SHALL BE A WATER SUPPLY TO THE DEVELOPMENT BEFORE ANY WOOD CONSTRUCTION STARTS.
11. THE WATER UTILITY REQUIRES THE USE OF CORROSION RESISTANT MATERIALS FOR ALL CULINARY WATER IMPROVEMENTS. SPECIFICALLY, ROMAC BLUE BOLTS OR STAINLESS STEEL BOLTS MUST BE USED ON ALL FITTINGS. FURTHER, ALL METAL FITTINGS SHALL BE POLY WRAPPED.

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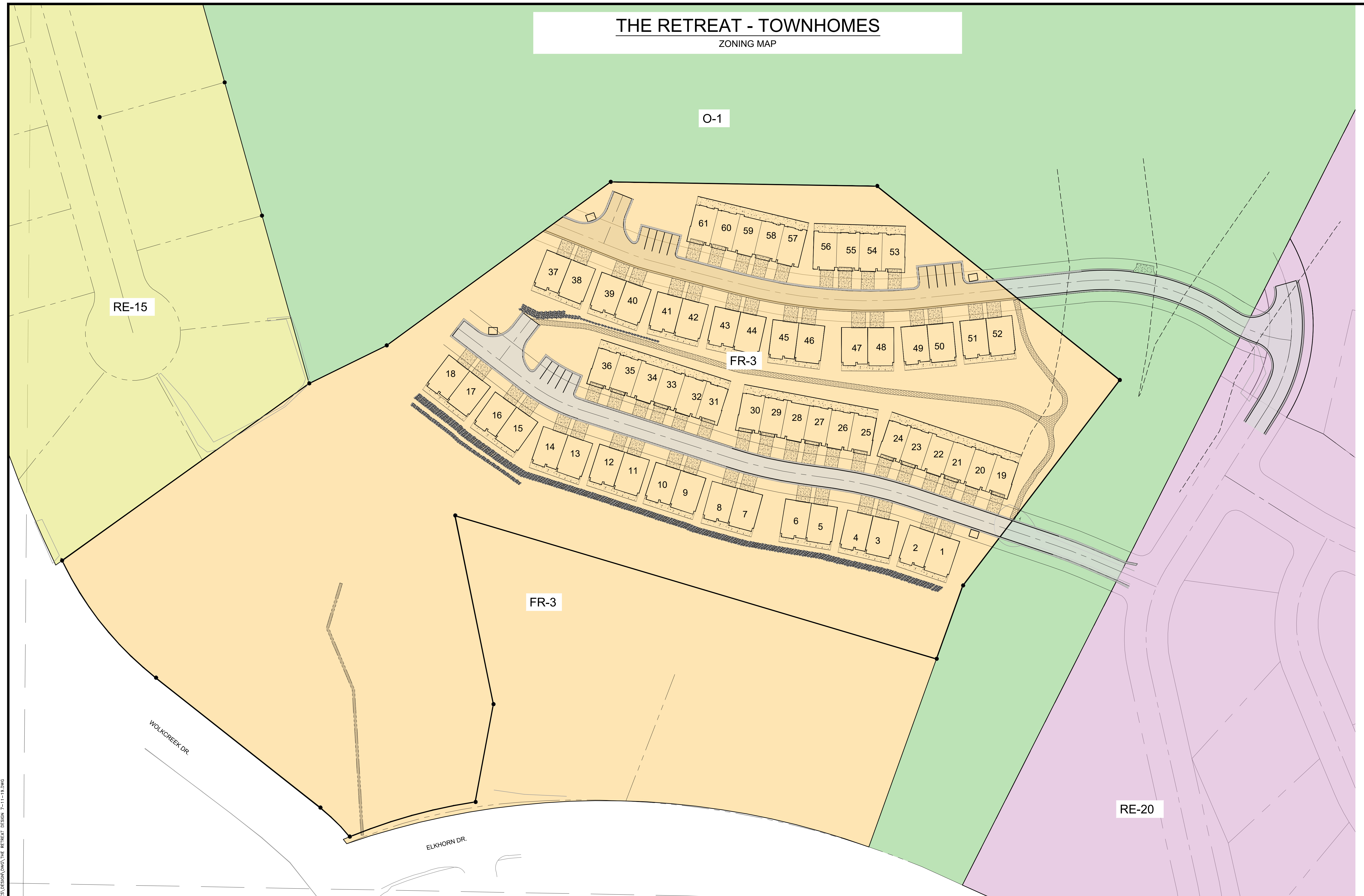
ALL IMPROVEMENTS TO CONFORM TO CURRENT CITY STANDARDS AND SPECIFICATIONS  
CULINARY WATER IMPROVEMENTS TO CONFORM TO THE WATER UTILITY'S STANDARDS AND SPECIFICATIONS  
SECONDARY WATER IMPROVEMENTS TO CONFORM TO THE SECONDARY WATER UTILITY'S STANDARDS AND SPECIFICATIONS



THE RETREAT AT WOLF CREEK CONDOMINIUMS  
CONSTRUCTION DOCUMENTS

# THE RETREAT - TOWNHOMES

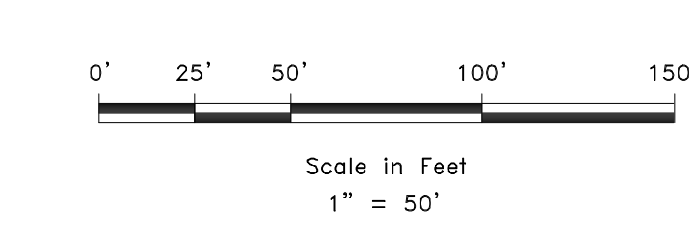
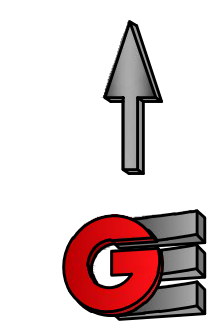
ZONING MAP



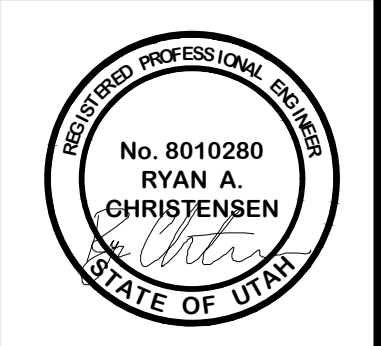
PRUD DEVELOPMENT

TOTAL PRUD BOUNDARY DEVELOPMENT 10.75 ACRES

ZONE FR-3 10.75 ACRES



| REVISIONS | DATE | DESCRIPTION |
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|           |      |             |
|           |      |             |



ZONING MAP  
 THE RETREAT AT WOLF CREEK CONDOMINIUMS  
 TOWNHOMES  
 EDEN, WEBER, UTAH

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P1

P:\0271 - BRENNY WOLF CREEK TOWNHOMES\DESIGN\DWG\THE RETREAT DESIGN 7-1-17.DWG

SCALE: 1" = 50'  
 DATE: 7-1-17  
 DESIGN: KAN  
 DRAWN: KAN  
 CHECKED: CHECKED

DWG:

# THE RETREAT - TOWNHOMES

PARCEL # 220160093

PROPOSED CONCRETE DRIVEWAY

PROPOSED ASPHALT



Rock Walls will need to be engineered w/ stamped plans

Is this drainage swale existing or proposed?

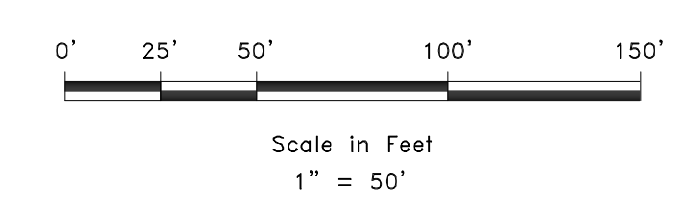
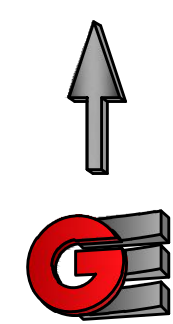
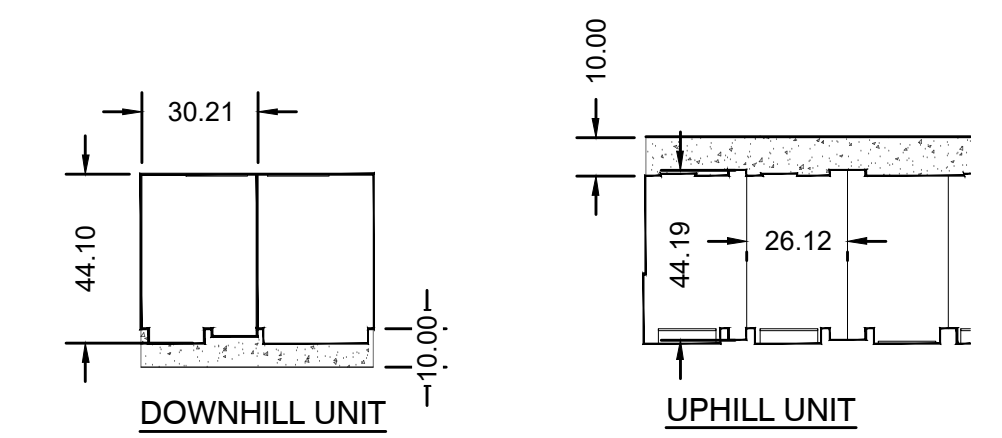
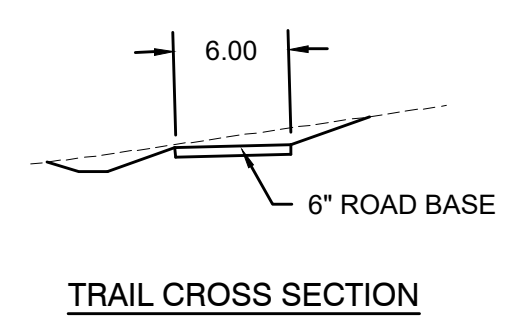
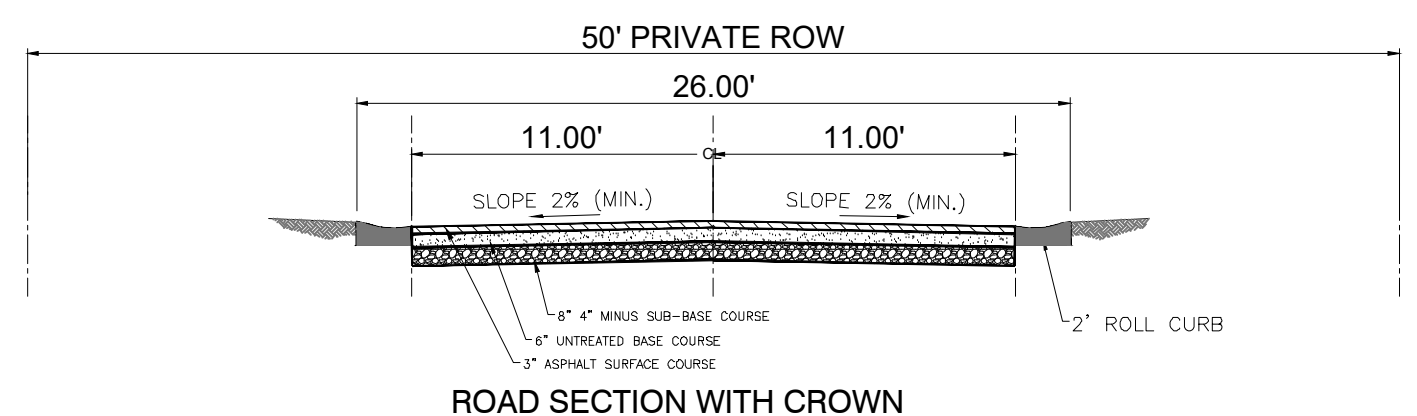
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SITE PLAN  
 THE RETREAT AT WOLF CREEK CONDOMINIUMS  
 TOWNHOMES  
 EDEN, WEBER, UTAH

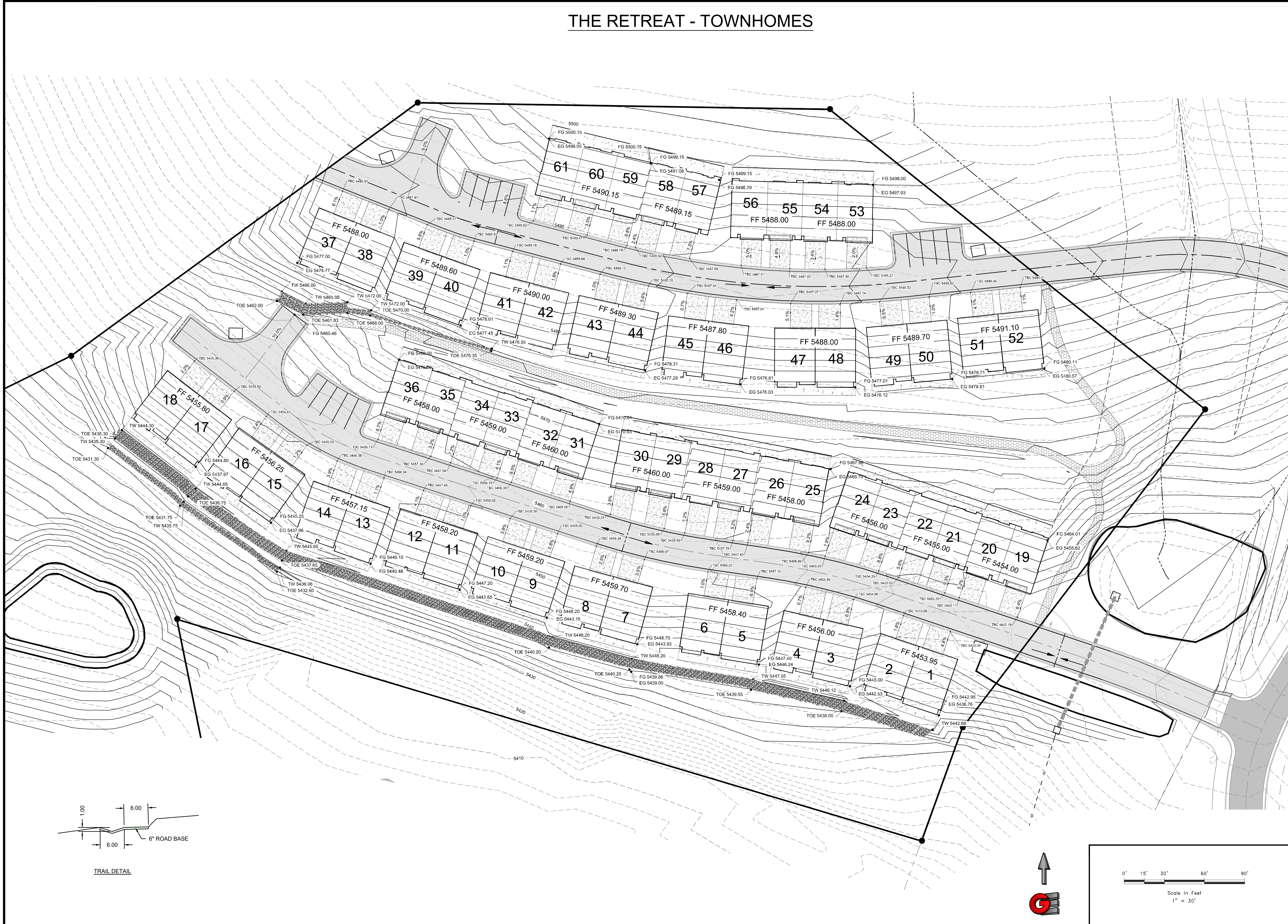
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| Site Plan Information - Zone F3 |             |            |
|---------------------------------|-------------|------------|
| Total Parcel Area               | 10.75 Acres | Percentage |
| Building Area                   | 1.73 Acres  | 16.1%      |
| Roadway Area                    | 1.34 Acres  | 12.5%      |
| Landscape/OpenSpace             | 7.68 Acres  | 71.5%      |
| Parking                         |             |            |
| 2 Car Garage (2 parking)        | 122         |            |
| Driveways (2 parking)           | 122         |            |
| Additional Parking Spaces       | 16          |            |
| Total Parking                   | 260         |            |
| Townhomes                       |             |            |
| Uphill Units                    | 27          |            |
| Downhill Units                  | 34          |            |
| Total Units                     | 61          |            |



04/2021 - BRENNY KIMBLE, RETREAT TOWNHOMES DESIGN, THE RETREAT DESIGN, 2-11-10.DWG

# THE RETREAT - TOWNHOMES



SCALE: 1" = 30'

DATE: 1-15-19

DESIGN: KAN

DRAWN: KAN

CHECKED: [ ]

| REVISIONS | DESCRIPTION |
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DWG: [ ]



PRELIMINARY GRADING PLAN final grading

THE RETREAT AT WOLF CREEK CONDOMINIUMS

TOWNHOMES

EDEN, WEBER, UTAH

**GARDNER ENGINEERING**

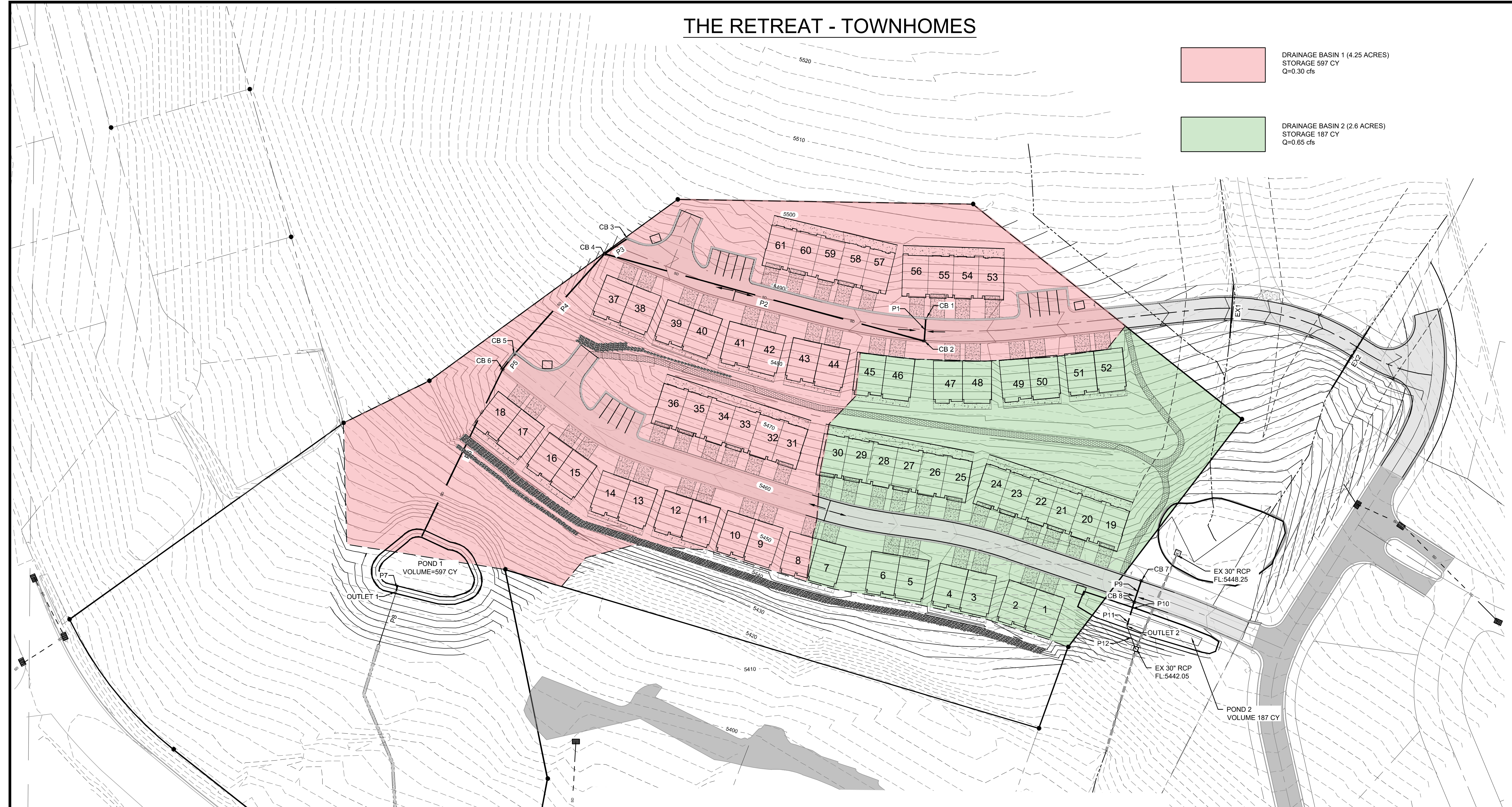
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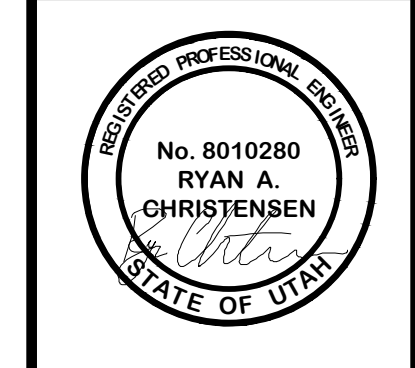
P:\0271 - BRENNY MCKEY RETREAT TOWNHOMES\DESIGN\DWG\THE RETREAT DESIGN 2-11-19.DWG

# THE RETREAT - TOWNHOMES

- DRAINAGE BASIN 1 (4.25 ACRES)  
STORAGE 597 CY  
Q=0.30 cfs
- DRAINAGE BASIN 2 (2.6 ACRES)  
STORAGE 187 CY  
Q=0.65 cfs



| REVISIONS | DATE | DESCRIPTION |
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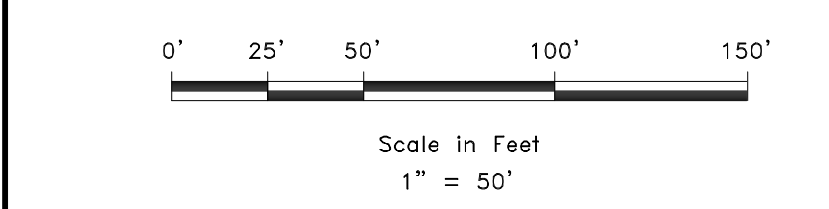
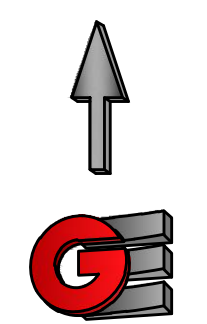
PRELIMINARY DRAINAGE PLAN  
THE RETREAT AT WOLF CREEK CONDOMINIUMS  
TOWNHOMES  
EDEN, WEBER, UTAH

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| NAME | SIZE | LENGTH  | SLOPE  | MATERIAL |
|------|------|---------|--------|----------|
| P1   | 15"  | 23.63'  | 0.51%  | 15" RCP  |
| P2   | 15"  | 345.09' | 0.55%  | 15" RCP  |
| P4   | 15"  | 140.58' | 21.82% | 15" RCP  |
| P5   | 15"  | 19.60'  | 4.26%  | 15" RCP  |
| P6   | 15"  | 193.37' | 23.22% | 15" RCP  |
| P3   | 15"  | 28.73'  | 0.50%  | 15" RCP  |
| EX1  | 15"  | 54.62'  | 8.03%  | 15" RCP  |
| EX2  | 24"  | 74.30'  | 15.40% | 24" RCP  |
| P8   | 4"   | 58.07'  | 13.19% | 4" HDPE  |
| P7   | 15"  | 6.89'   | 1.00%  | 15" RCP  |
| P9   | 15"  | 23.60'  | 0.50%  | 15" RCP  |
| P10  | 15"  | 13.94'  | 0.43%  | 15" RCP  |
| P12  | 4"   | 25.80'  | 9.19%  | 4" HDPE  |
| P11  | 15"  | 8.23'   | 0.43%  | 15" RCP  |

| STRUCTURE NAME:        | DETAILS:   | PIPES IN:   | PIPES OUT:                 |
|------------------------|--|---|----------------------------|
| CB 1 - Catch Basin     | GRATE = 5486.76<br>INV OUT = 5483.20   |   | 15" RCP INV (S) = 5483.20  |
| CB 2 - Catch Basin     | GRATE = 5486.76<br>INV IN = 5483.08<br>INV OUT = 5482.98                     | 15" RCP INV (N) = 5483.08                               | 15" RCP INV (W) = 5482.98  |
| CB 3 - Catch Basin     | GRATE = 5486.61<br>INV OUT = 5481.23   |   | 15" RCP INV (SW) = 5481.23 |
| CB 4 - Catch Basin     | GRATE = 5484.27<br>INV IN = 5481.09<br>INV IN = 5481.09<br>INV OUT = 5480.99 | 15" RCP INV (E) = 5481.09<br>15" RCP INV (NE) = 5481.09 | 15" RCP INV (SW) = 5480.99 |
| CB 5 - Catch Basin     | GRATE = 5455.16<br>INV IN = 5450.31<br>INV OUT = 5450.60                     | 15" RCP INV (NE) = 5450.31                              | 15" RCP INV (SW) = 5450.60 |
| CB 6 - Catch Basin     | GRATE = 5455.16<br>INV IN = 5449.77<br>INV OUT = 5447.46                     | 15" RCP INV (NE) = 5449.77                              | 15" RCP INV (SW) = 5447.46 |
| CB 7 - Catch Basin     | GRATE = 5452.44<br>INV OUT = 5450.64   |   | 15" RCP INV (S) = 5450.64  |
| CB 8 - Catch Basin     | GRATE = 5452.44<br>INV IN = 5450.52<br>INV OUT = 5450.48                     | 15" RCP INV (N) = 5450.52                               | 15" RCP INV (S) = 5450.48  |
| OUTLET 1 - POND OUTLET | GRATE = 5405.00<br>INV IN = 5401.93<br>INV OUT = 5400.57                     | 15" RCP INV (N) = 5401.93                               | 4" RCP INV (S) = 5400.57   |
| OUTLET 2 - POND OUTLET | GRATE = 5453.25<br>INV IN = 5450.38<br>INV OUT = 5447.05                     | 15" RCP INV (N) = 5450.38                               | 4" RCP INV (S) = 5447.05   |

Check elevations of FL for CB 5

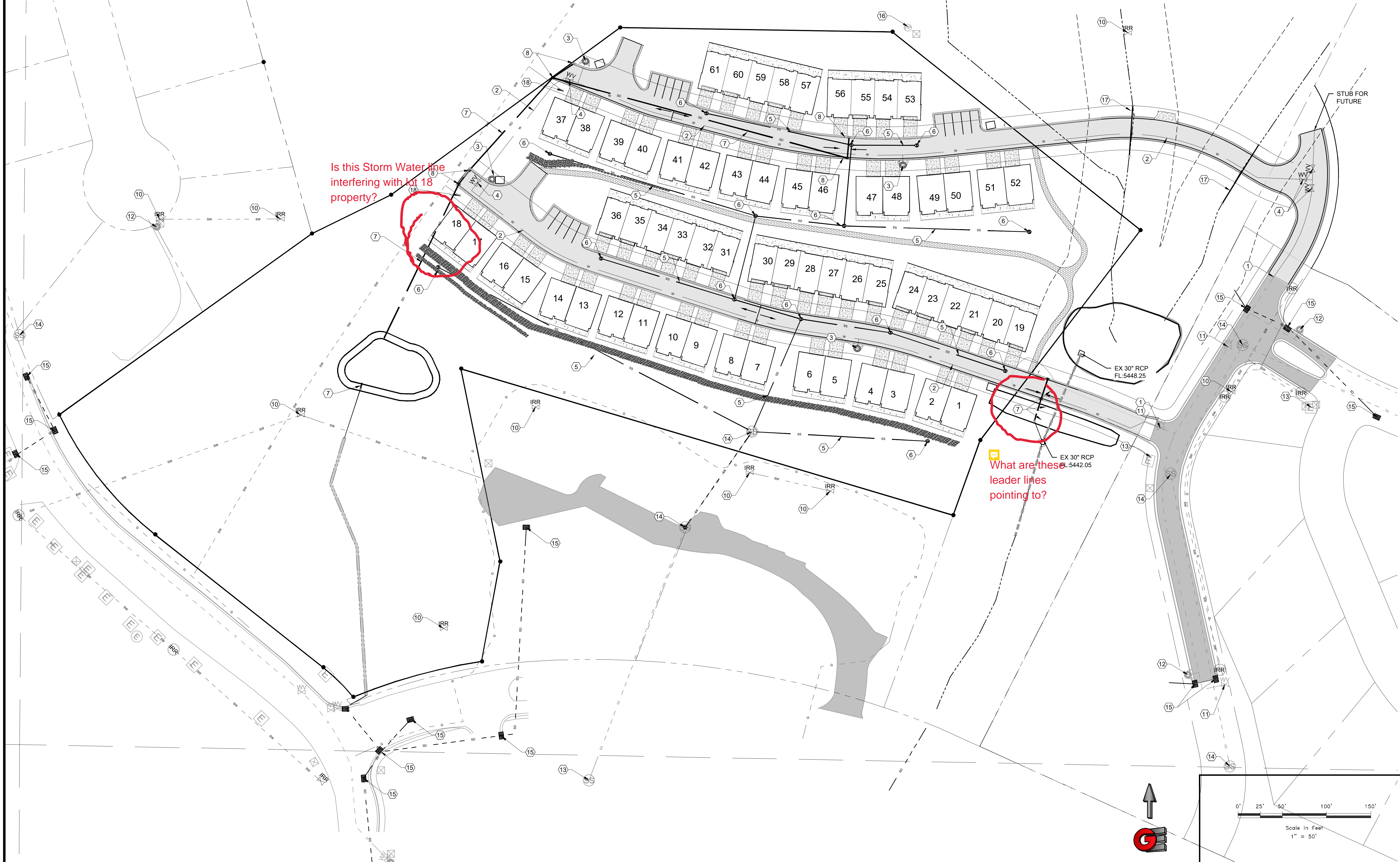


P:\2021 - BRENNY MEECE\RETREAT TOWNHOMES\DESIGN\DWG\THE RETREAT DESIGN 7-11-19.DWG

# THE RETREAT - TOWNHOMES

KEY NOTES

- ① CONNECT TO EXISTING WATER
- ② 8" DUCTILE IRON WATER
- ③ FIRE HYDRANT
- ④ WATER VALVE
- ⑤ 8" SEWER - SDR 35 PVC
- ⑥ 4" SS MH
- ⑦ STORM DRAIN - RCP
- ⑧ CATCH BASIN
- ⑨ SECONDARY VALVE
- ⑩ EX IRR VALVE
- ⑪ EX WATER VALVE
- ⑫ EX FIRE HYDRANT
- ⑬ EX ELEC BOX
- ⑭ EX SEWER MH
- ⑮ EX CATCH BASIN
- ⑯ EX POWER POLE
- ⑰ PROPOSED CULVERT
- ⑱ PROPOSED SECONDARY WATER STUB



Is this Storm Water line interfering with lot 18 property?

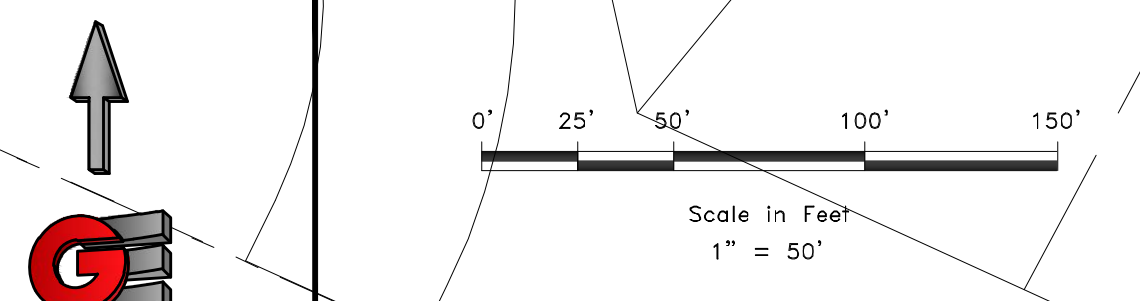
What are these leader lines pointing to?

| REVISIONS | DATE | DESCRIPTION |
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PRELIMINARY UTILITY PLAN  
 THE RETREAT AT WOLF CREEK CONDOMINIUMS  
 TOWN HOMES  
 EDEN, WEBER, UTAH

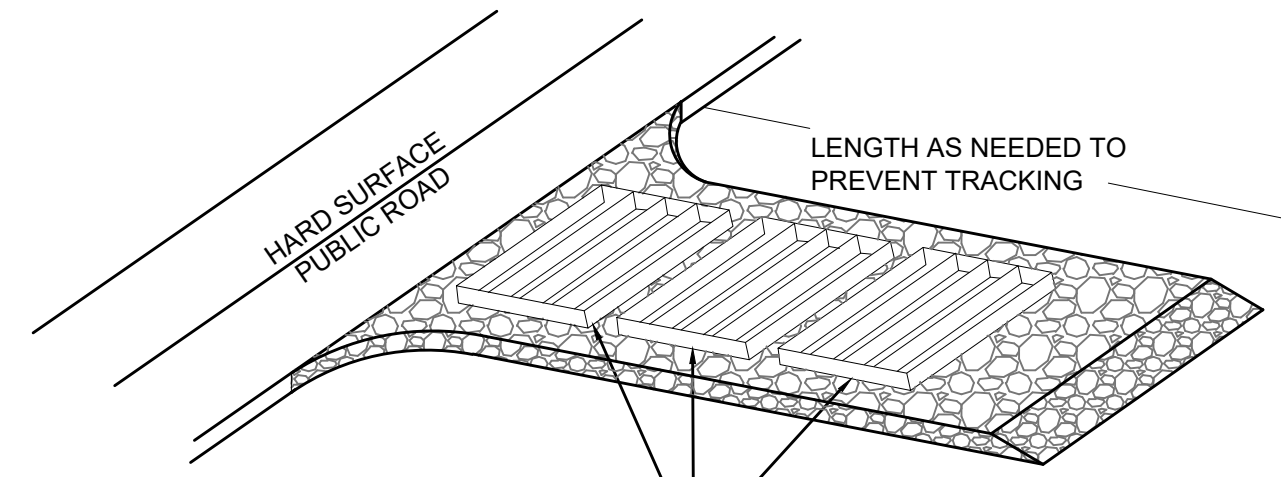
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 CIVIL & LAND PLANNING  
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P:\0371 - BRENNY WEBER TOWNHOMES DESIGN\DWG\THE RETREAT DESIGN 7-11-19.DWG

**EROSION CONTROL NOTES:**

- SANDBAGS WILL BE PLACED AT DISCHARGE LOCATIONS TO CONTAIN AND DIVERT STORM WATER THROUGH THE INLET PROTECTION.
- AN EARTHEN BERM 6" HIGH WILL BE CONSTRUCTED TO CONTAIN THE STORM WATER AND DIVERT IT TO DISCHARGE AREAS.
- STORM WATER WILL BE DISCHARGED INTO AN EXISTING DRAINAGE SYSTEM. EXISTING LINES SHALL BE INSPECTED PRIOR TO CERTIFICATE OF OCCUPANCY AND CLEANED IF NECESSARY.
- THE STORM WATER POLLUTION PREVENTION PLAN SHALL CONFORM TO ALL STATE DIVISION OF ENVIRONMENTAL PROTECTION REGULATIONS.



A SERIES OF STEEL PLATES (3 OR MORE) WITH RUMBLE STRIPS OR MIN. 3" COARSE AGGREGATE.

**ENTRANCE STABILIZATION NOTES:**

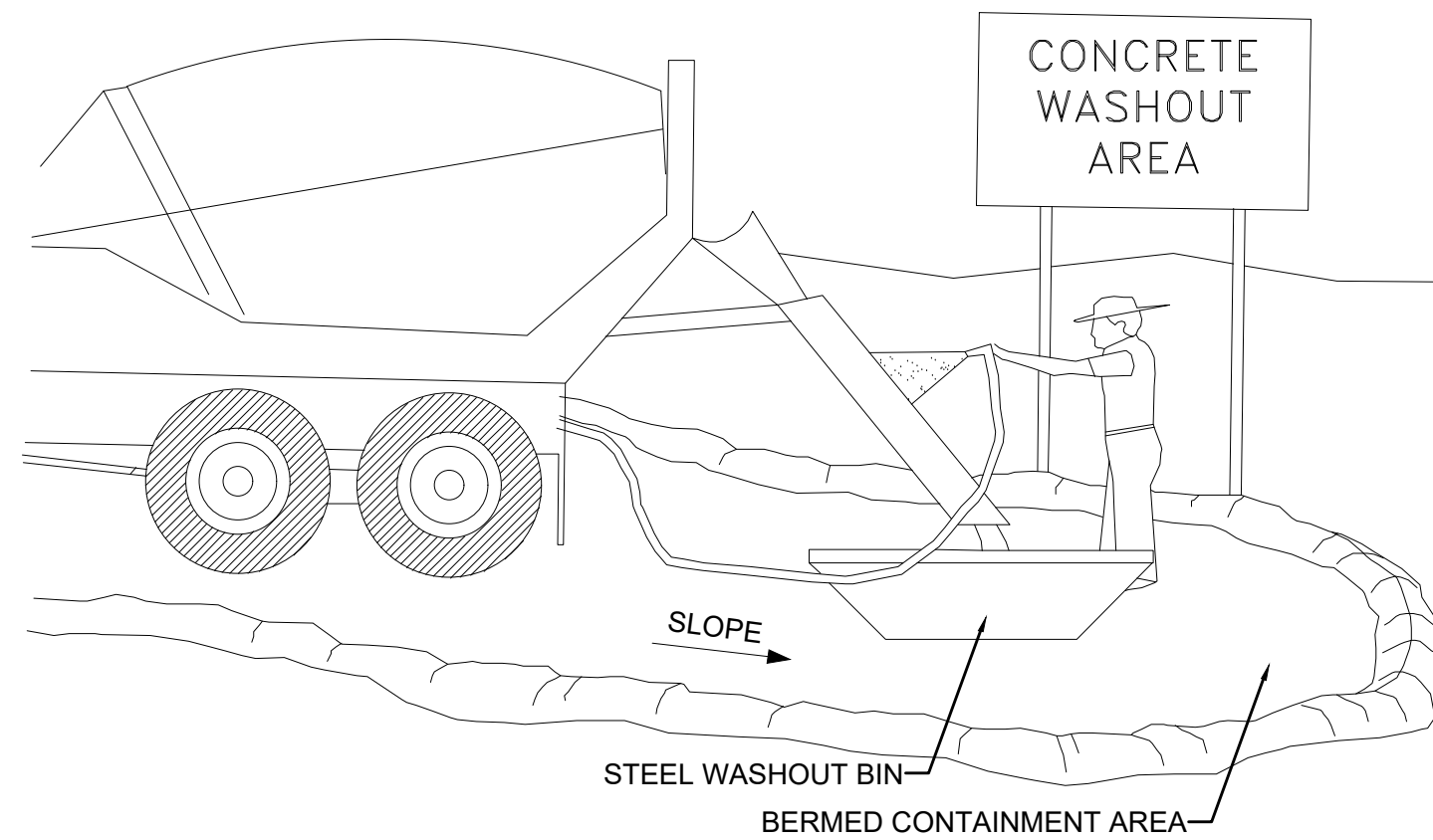
- SEDIMENTS AND OTHER MATERIALS SHALL NOT BE TRACKED FROM THE SITE BY VEHICLE TRAFFIC. THE CONSTRUCTION ENTRANCE ROADWAYS SHALL BE STABILIZED SO AS TO PREVENT SEDIMENTS FROM BEING DEPOSITED INTO THE STORM DRAIN SYSTEMS. DEPOSITIONS MUST BE SWEEPED UP IMMEDIATELY AND MAY NOT BE WASHED DOWN BY RAIN OR OTHER MEANS INTO THE STORM DRAIN SYSTEM.
- STABILIZED CONSTRUCTION ENTRANCE SHALL BE:
  - LOCATED AT ANY POINT WHERE TRAFFIC WILL BE ENTERING OR LEAVING A CONSTRUCTION SITE TO OR FROM A PUBLIC RIGHT-OF-WAY, STREET, ALLEY AND SIDEWALK OR PARKING AREA.
  - A SERIES OF STEEL PLATES WITH "RUMBLE STRIPS", AND/OR MIN. 3" COARSE AGGREGATE WITH LENGTH, WIDTH AND THICKNESS AS NEEDED TO ADEQUATELY PREVENT ANY TRACKING ONTO PAVED SURFACES.
- ADDING A WASH RACK WITH A SEDIMENT TRAP LARGE ENOUGH TO COLLECT ALL WASH WATER CAN GREATLY IMPROVE EFFICIENCY.
- ALL VEHICLES ACCESSING THE CONSTRUCTION SITE SHALL UTILIZE THE STABILIZED CONSTRUCTION ENTRANCE SITES.

**STREET MAINTENANCE NOTES:**

- REMOVE ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS IMMEDIATELY.
- SWEEP PAVED AREAS THAT RECEIVE CONSTRUCTION TRAFFIC WHENEVER SEDIMENT BECOMES VISIBLE.
- PAVEMENT WASHING WITH WATER IS PROHIBITED IF IT RESULTS IN A DISCHARGE TO THE STORM DRAIN SYSTEM.

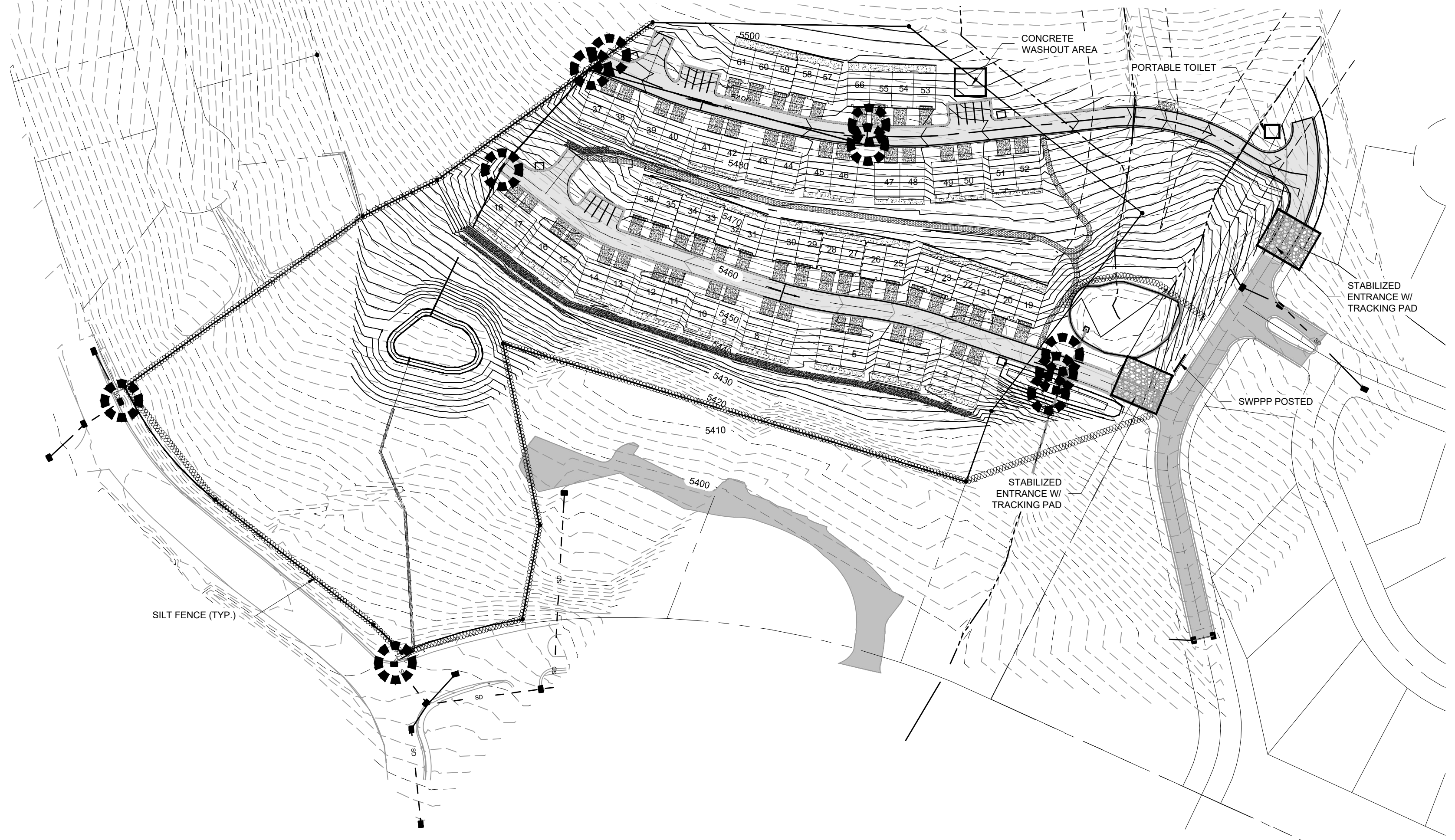
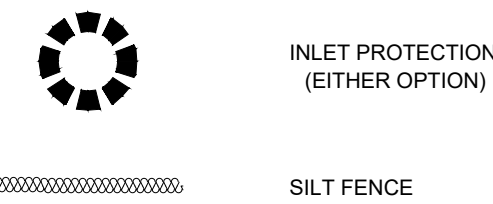
**NOTE:**

CONTRACTOR SHALL COMPLETE AND SUBMIT A STATE NOTICE OF INTENT (NOI) AND A STORM WATER POLLUTION PREVENTION PLAN BOOKLET



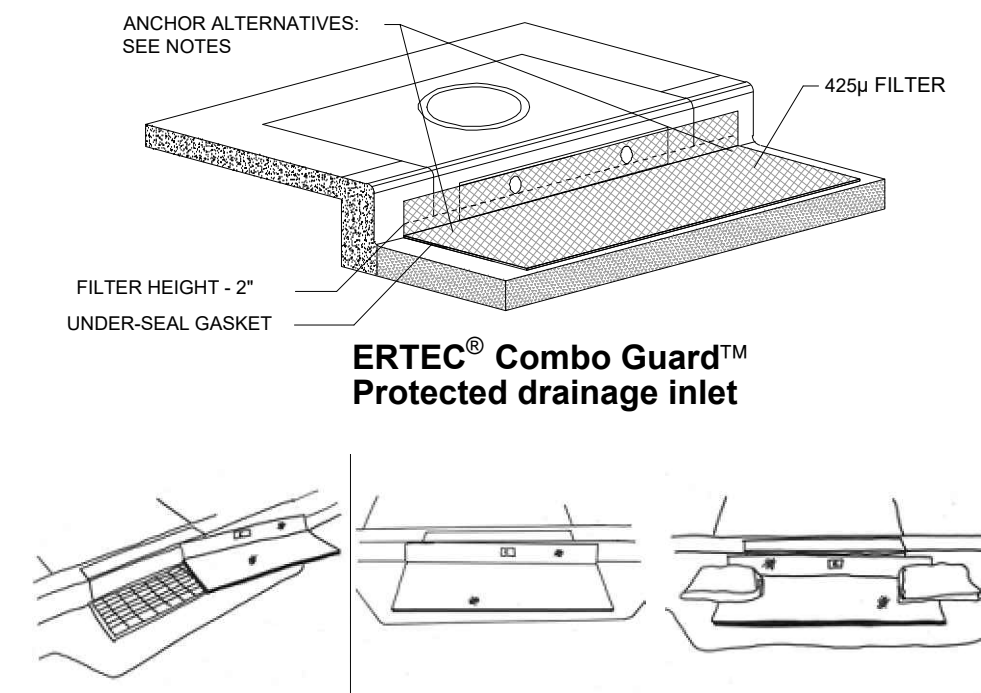
**NOTES:**

- EXCESS AND WASTE CONCRETE SHALL BE DISPOSED OF OFF SITE OR AT DESIGNATED AREAS ONLY.
- EXCESS AND WASTE CONCRETE SHALL NOT BE WASHED INTO THE STREET OR INTO A DRAINAGE SYSTEM.
- FOR WASHOUT OF CONCRETE AND MORTAR PRODUCTS ONSITE, A DESIGNATED CONTAINMENT FACILITY OF SUFFICIENT CAPACITY TO RETAIN LIQUID AND SOLID WASTE SHALL BE PROVIDED.
- ONSITE CONCRETE WASHOUT CONTAINMENT FACILITY SHALL BE A STEEL BIN OR APPROVED ALTERNATE.
- SLURRY FROM CONCRETE AND ASPHALT SAW CUTTING SHALL BE VACUUMED OR CONTAINED, DRIED, PICKED UP AND DISPOSED OF PROPERLY.



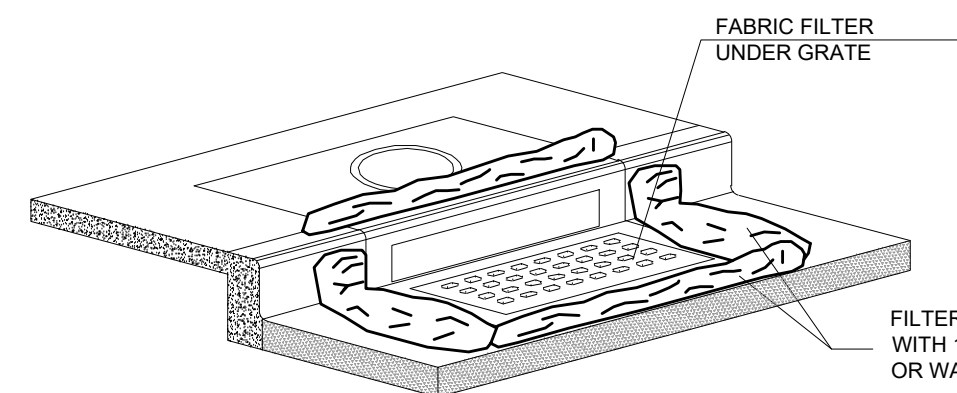
**INSTALLATION NOTES**

- PLACEMENT: PLACE CG TIGHTLY AGAINST CURB OPENING AND COVER ENTIRE GRATE. CG SHOULD EXTEND AT LEAST 2 INCHES PAST GRATE TOWARDS STREET.
- OVERLAP FOR LONG OPENINGS: OVERLAP CG UNITS AT LONGER OPENINGS.
- ANCHOR: ANCHOR CG SO THAT WATER CANNOT FLOW BEHIND IT.
- ALTERNATE ANCHOR METHODS: A) INSTALL GRAVEL BAGS AT EACH SIDE OF CG - HALF-ON AND HALF-OFF THE EDGES. USE HALF-FILLED GRAVEL BAGS (15 OR 20 LBS). ROUND ROCK IS RECOMMENDED. OR B) ATTACH WITH 16 GAUGE TIE-WIRE. CUT WIRE TO 18" LENGTH. AT EACH CORNER OF CG, FEED ONE END OF WIRE DOWN THROUGH CG, AROUND GRATE BAR, AND BACK UP THRU CG. ABOVE GROUND, TWIST WIRES SEVERAL TIMES, CUT-OFF EXCESS. OR C) FASTEN WITH CONCRETE ANCHORS/NAILS AT THE OUTSIDE EDGES OF CG.



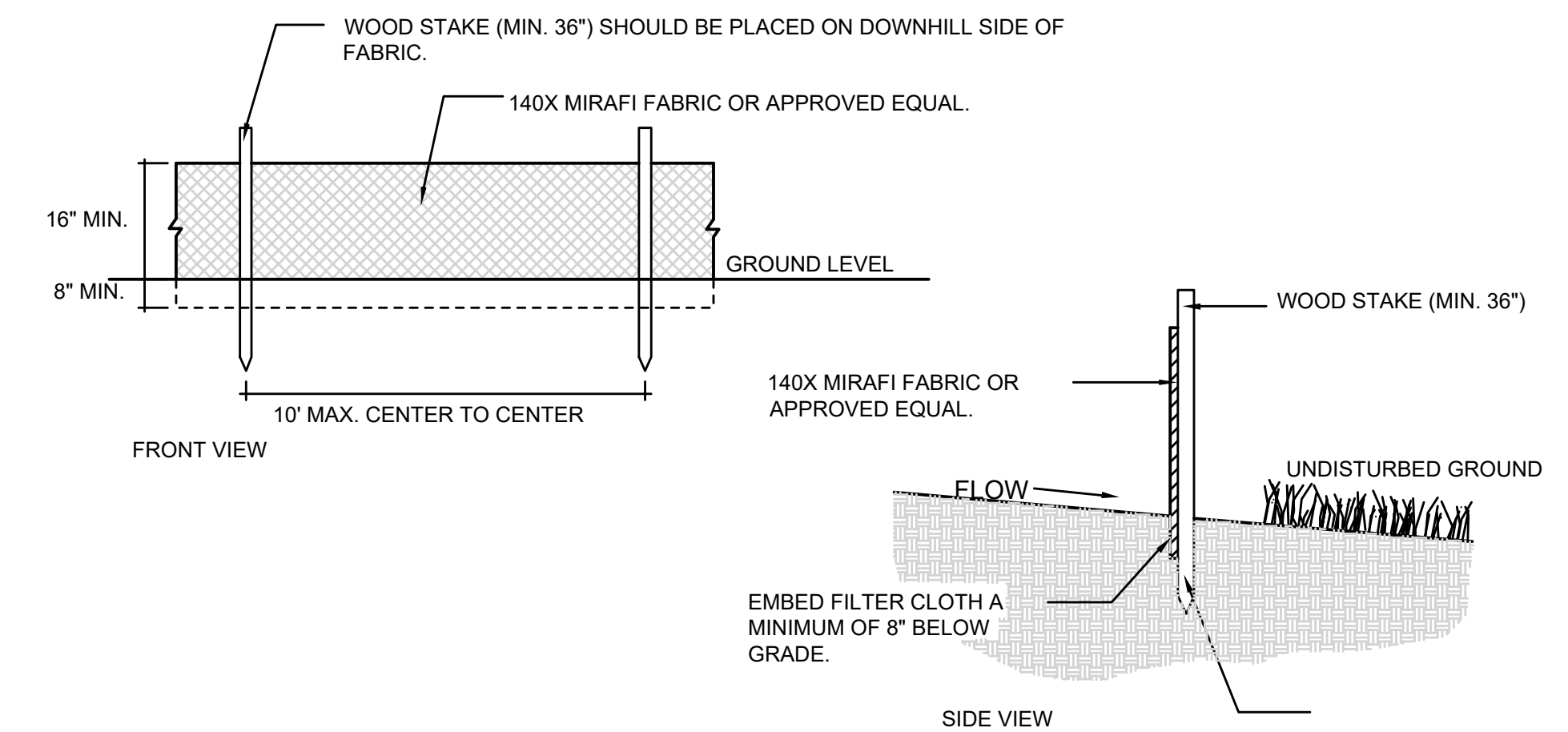
1A INLET PROTECTION - OPTION 1

Scale: NTS



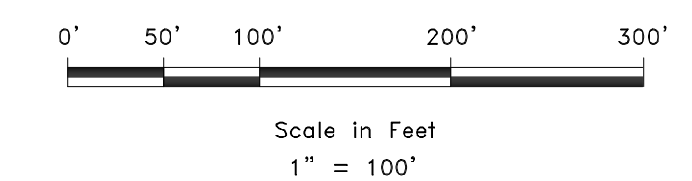
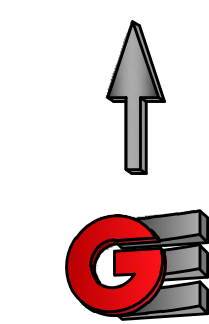
1B INLET PROTECTION - OPTION 2

Scale: NTS



2 SILT FENCE

Scale: NTS



SCALE: 1" = 100'

|          |         |
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| DATE:    | 1-15-19 |
| DESIGN:  | KAN     |
| DRAWN:   | KAN     |
| CHECKED: | CHECKED |

| REVISIONS | DESCRIPTION | DATE |
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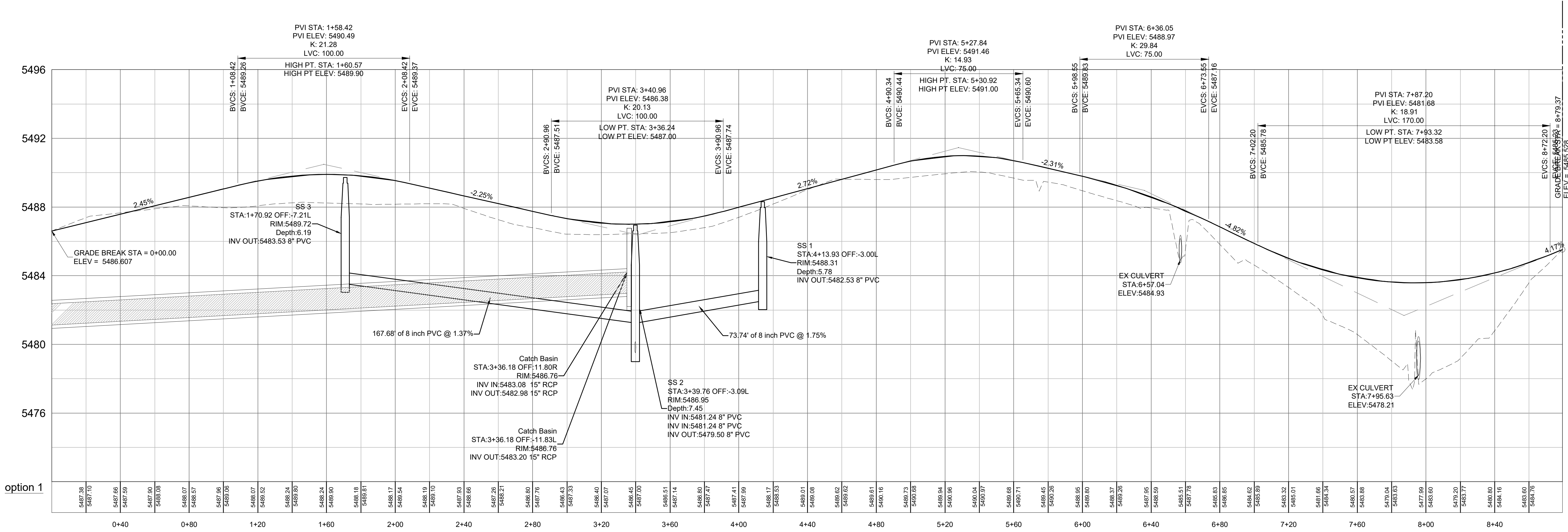
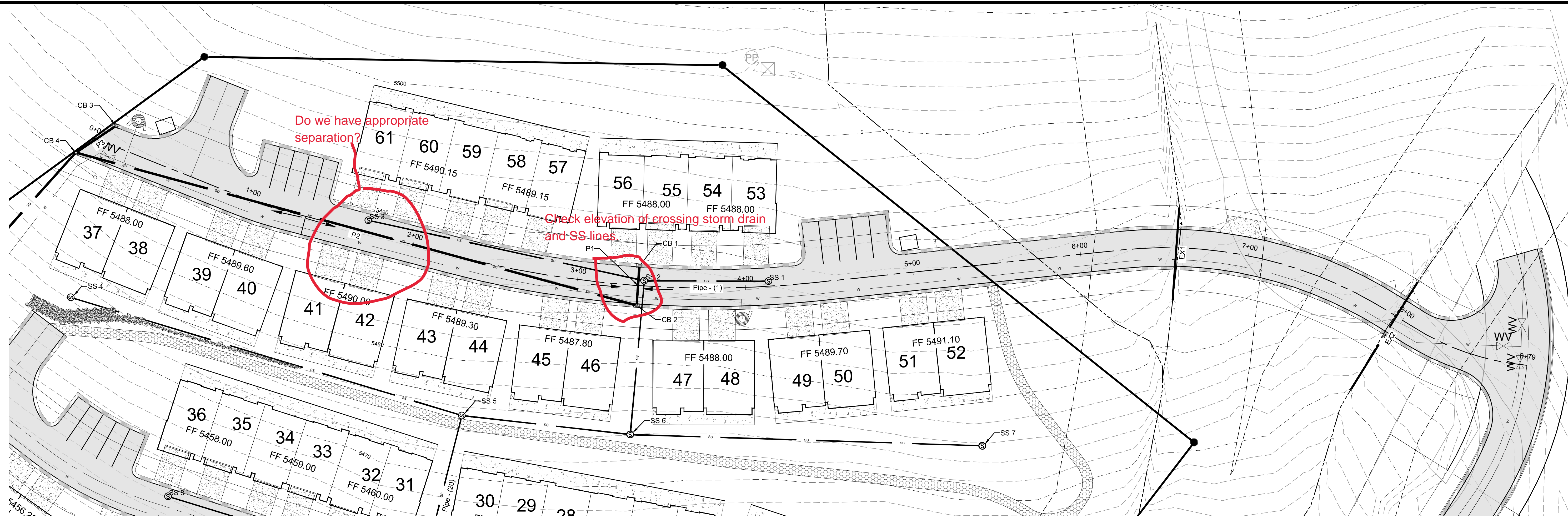
DWG:



PRELIMINARY SWPPP  
 THE RETREAT AT WOLF CREEK CONDOMINIUMS  
 TOWNHOMES  
 EDEN, WEBER, UTAH

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P:\0271 - BRENNY MUEK\RETREAT TOWNHOMES\DESIGN\DWG\THE RETREAT DESIGN 7-11-19.DWG



SCALE 1"=30'

DATE 1-15-19

DESIGN KAN

DRAWN KAN

CHECKED

REVISIONS

| DATE | DESCRIPTION |
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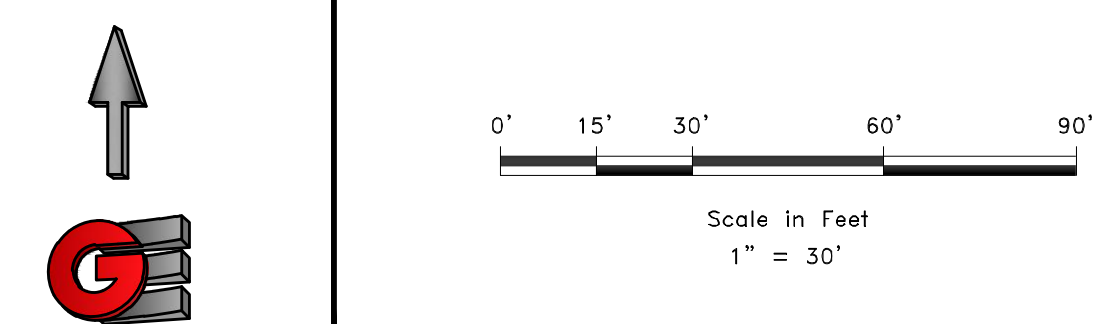
DWG: RA.0271 - BRENNY MOVE/RETREAT TOWNHOMES DESIGN/DWG THE RETREAT DESIGN 7-11-19.DWG



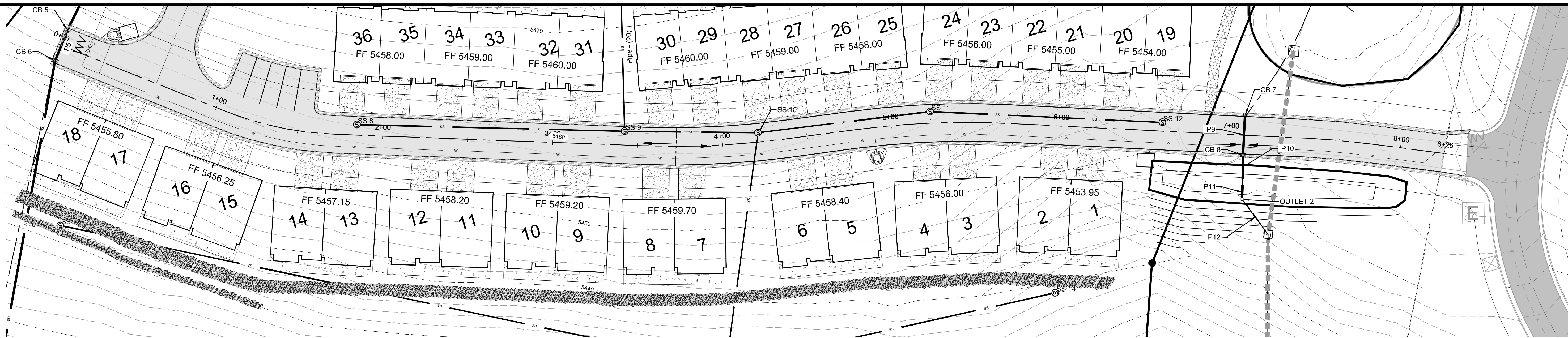
PLAN AND PROFILE UPPER ROAD  
 THE RETREAT AT WOLF CREEK CONDOMINIUMS  
 RETREAT DR  
 EDEN, WEBER, UTAH

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SCALE: 1" = 30'

DATE: 11-19-19

DESIGN: KAN

DRAWN: KAN

CHECKED: [Signature]

DWG: R\10271 - BRINNY MUEV RETREAT TOWNHOMES DESIGN DWG THE RETREAT DESIGN 7-11-19.DWG

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PLAN AND PROFILE DOWNHILL ROAD

THE RETREAT AT WOLF CREEK CONDOMINIUMS

RETREAT DR

EDEN, WEBER, UTAH

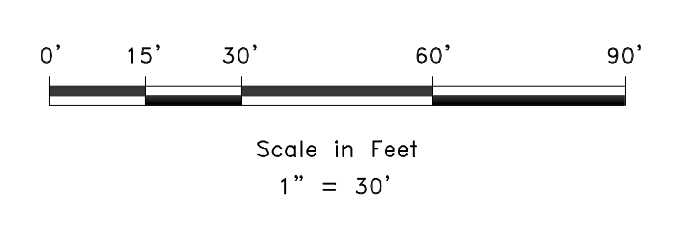
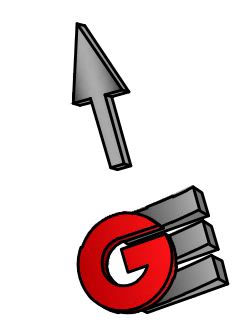
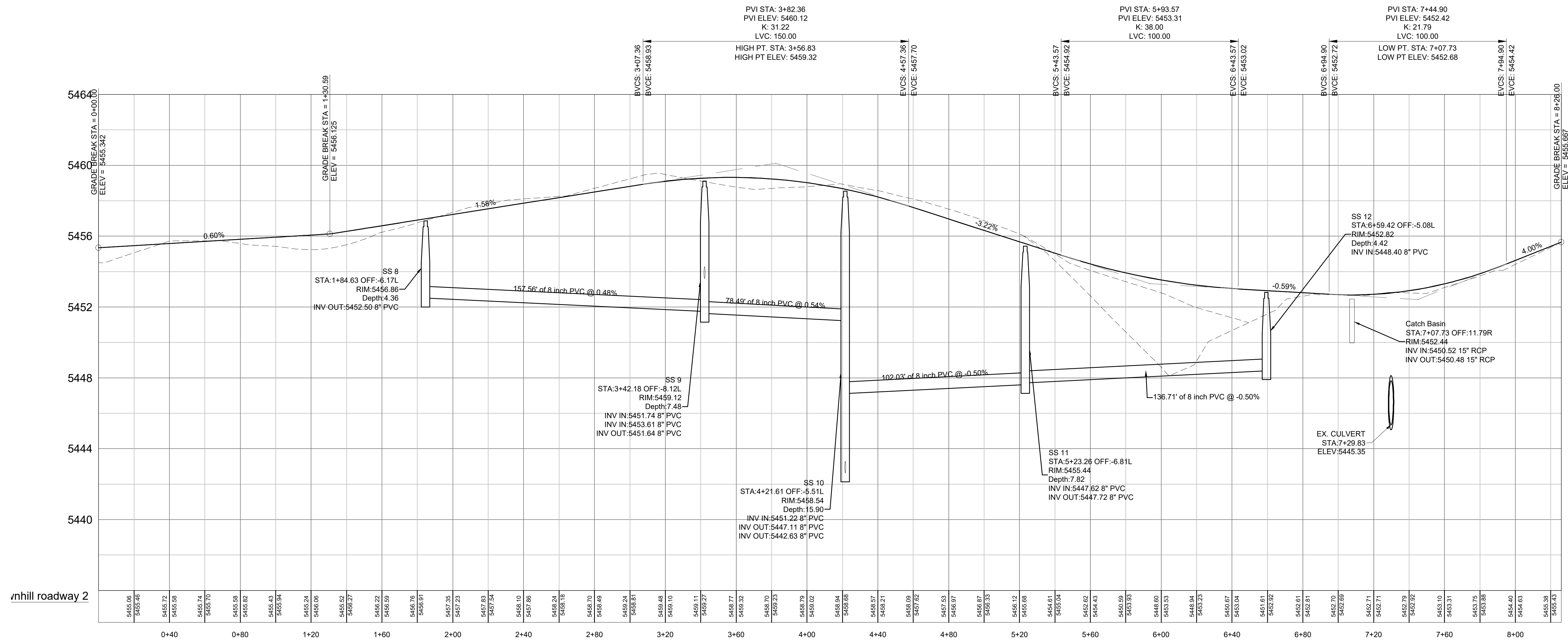
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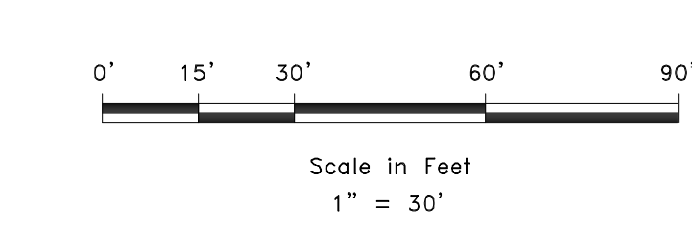
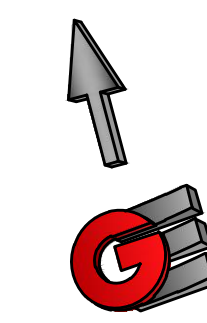
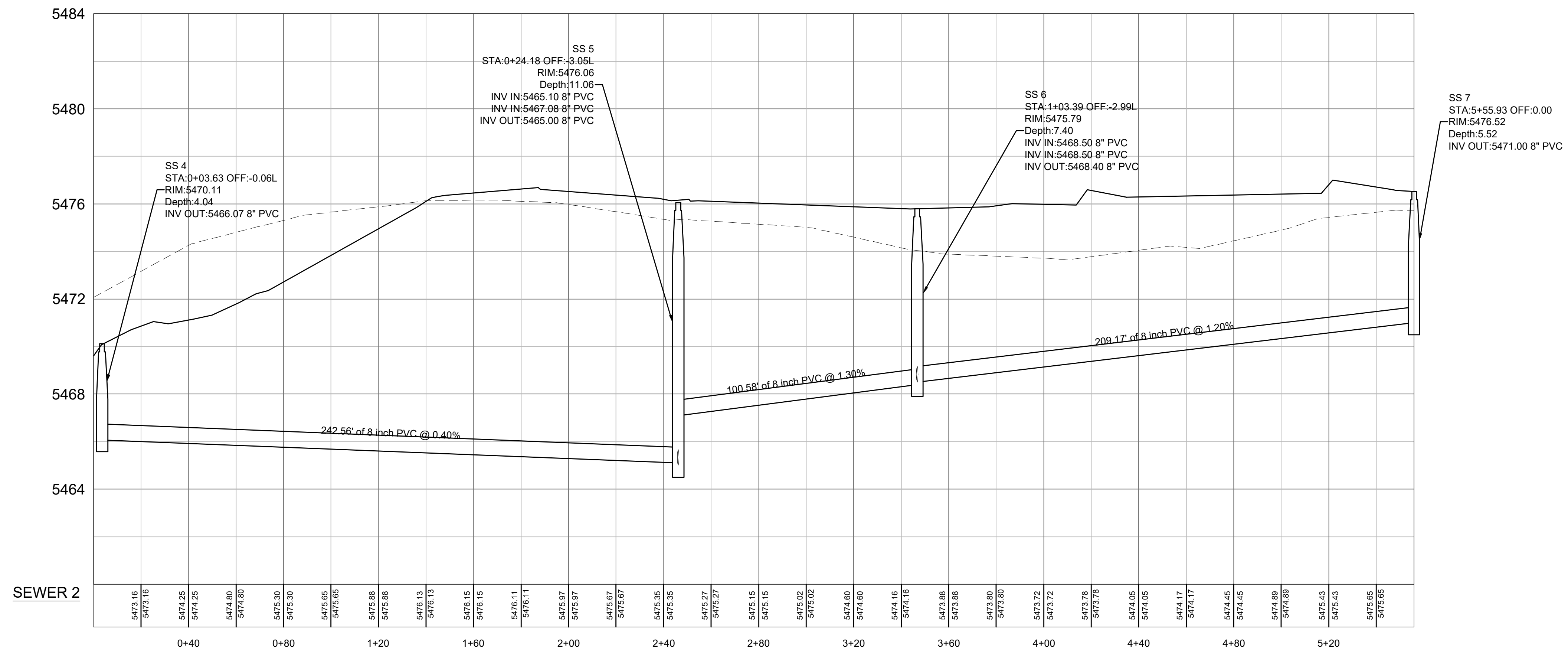
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PP2



Will SS 4 be exposed on the down slope side?  
check elevation.



SCALE: 1" = 30'

DATE: 1-15-19

DESIGN: KAN

DRAWN: KAN

CHECKED: [ ]

| REVISIONS | DESCRIPTION | DATE |
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PLAN AND PROFILE SEWER 1

THE RETREAT AT WOLF CREEK CONDOMINIUMS

RETREAT DR

EDEN, WEBER, UTAH

**GARDNER ENGINEERING**

CIVIL - LAND PLANNING

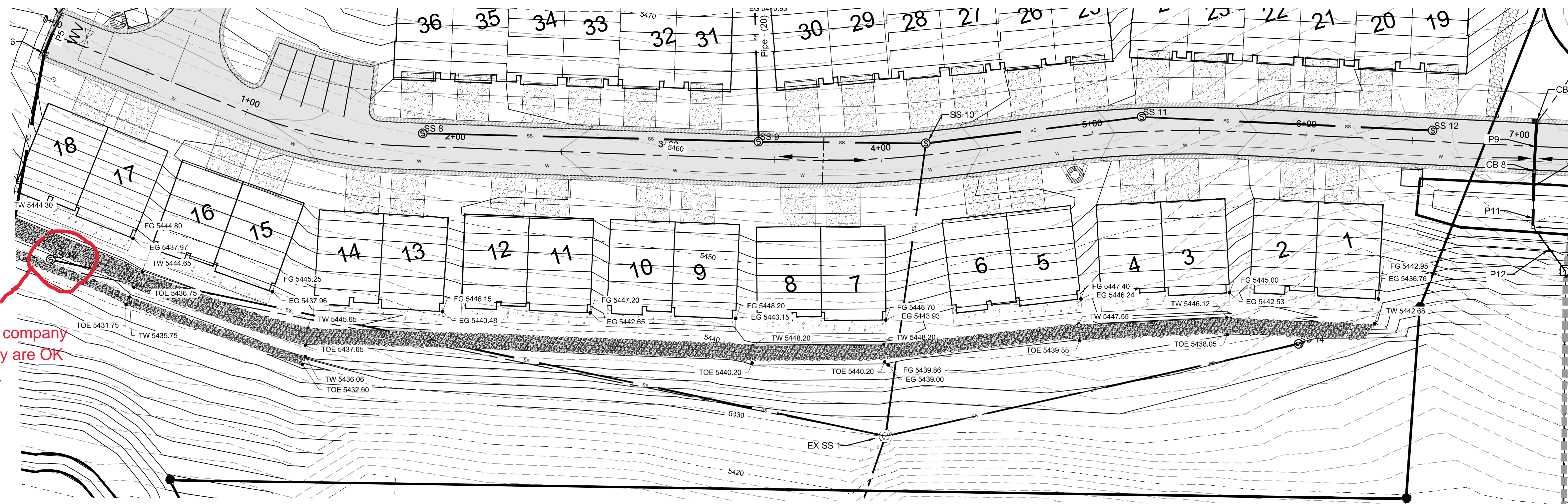
MUNICIPAL - LAND SURVEYING

5150 SOUTH 375 EAST OGDEN, UT

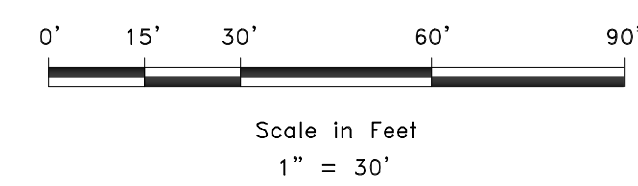
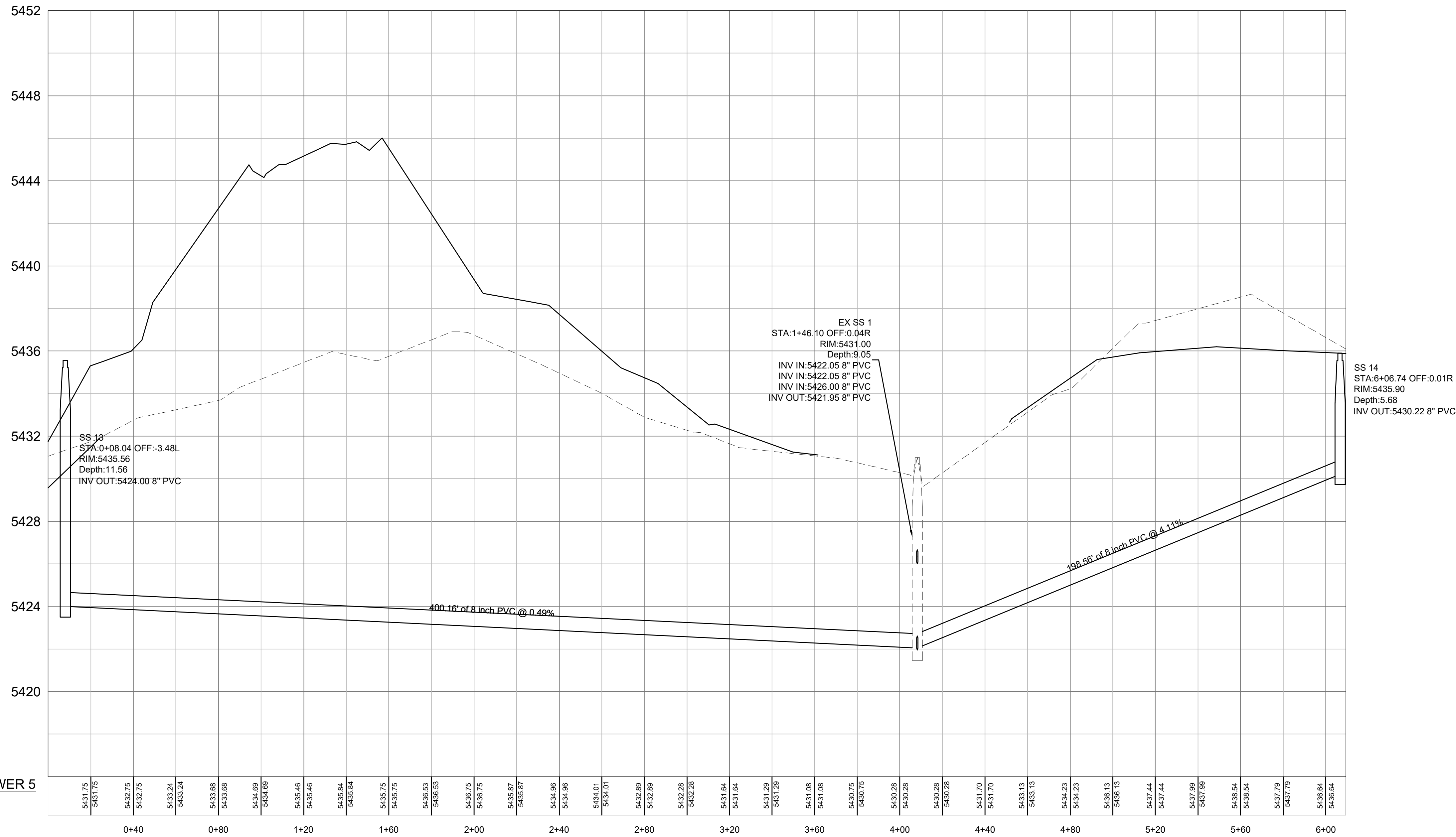
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PP3

P:\0371 - BRENNY MIKE\RETREAT TOWNHOMES\DESIGN\DWG\THE RETREAT DESIGN 7-11-19.DWG



Check with the water and sewer company to make sure they are OK with this location.



SCALE: T = 30'

DATE: 1-15-19

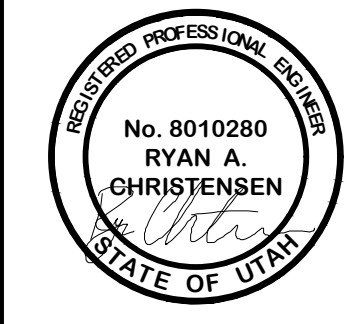
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PLAN AND PROFILE SEWER 3

THE RETREAT AT WOLF CREEK CONDOMINIUMS

RETREAT DR

EDEN, WEBER, UTAH

**GARDNER ENGINEERING**

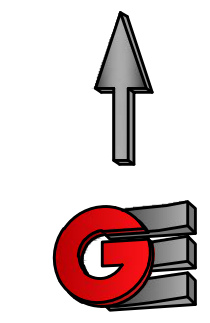
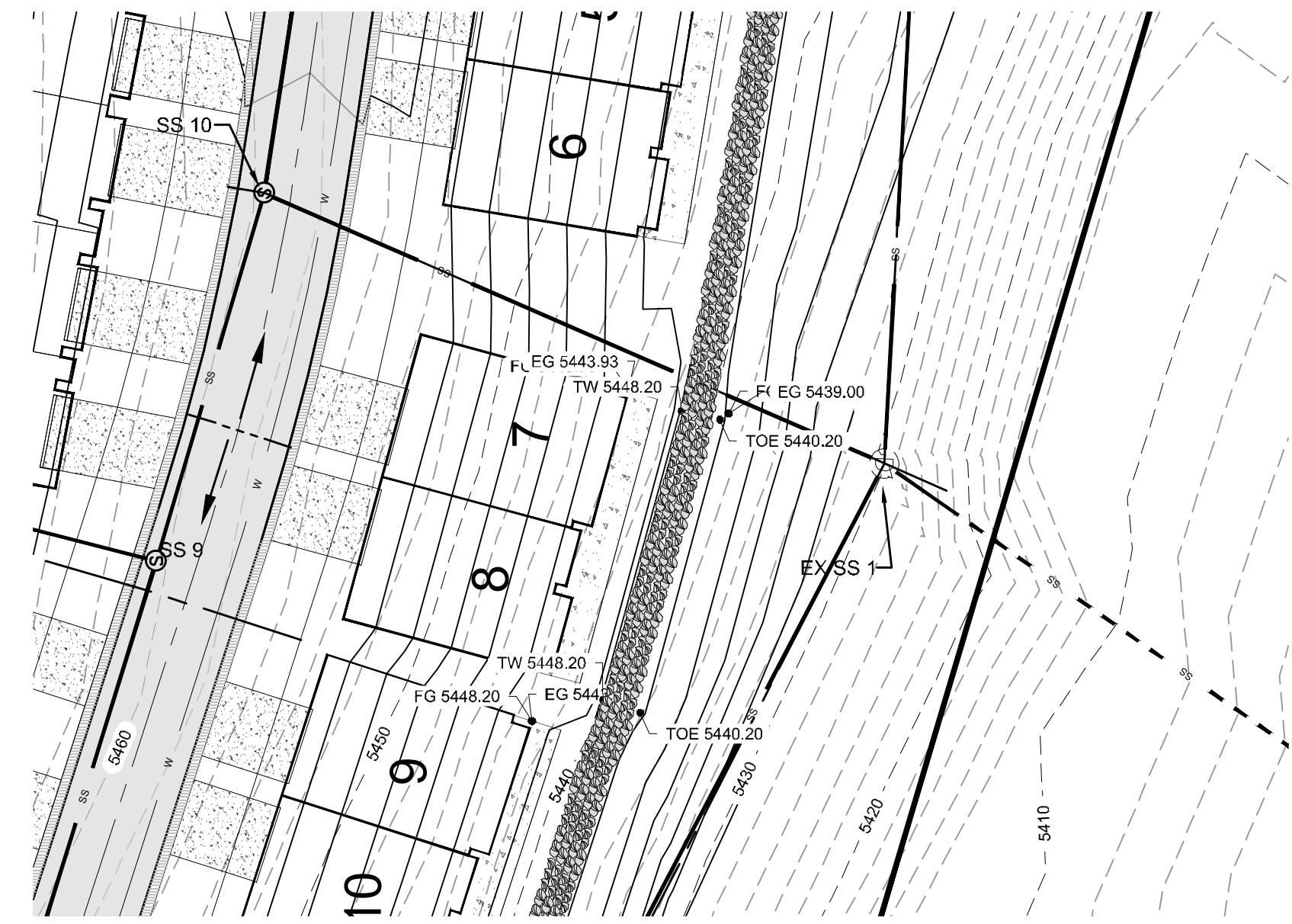
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P:\0271 - BRENNY WICKS\RETREAT TOWNHOMES\DESIGN\DWG\THE RETREAT DESIGN 7-11-19.DWG



SCALE: 1" = 30'

DATE: 1-15-19

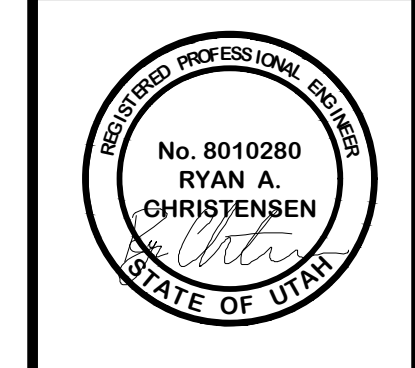
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PLAN AND PROFILE SEWER 4

THE RETREAT AT WOLF CREEK CONDOMINIUMS

RETREAT DR

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**GARDNER ENGINEERING**

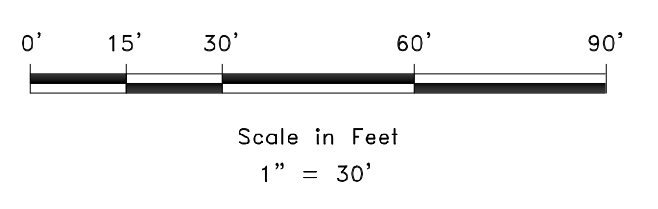
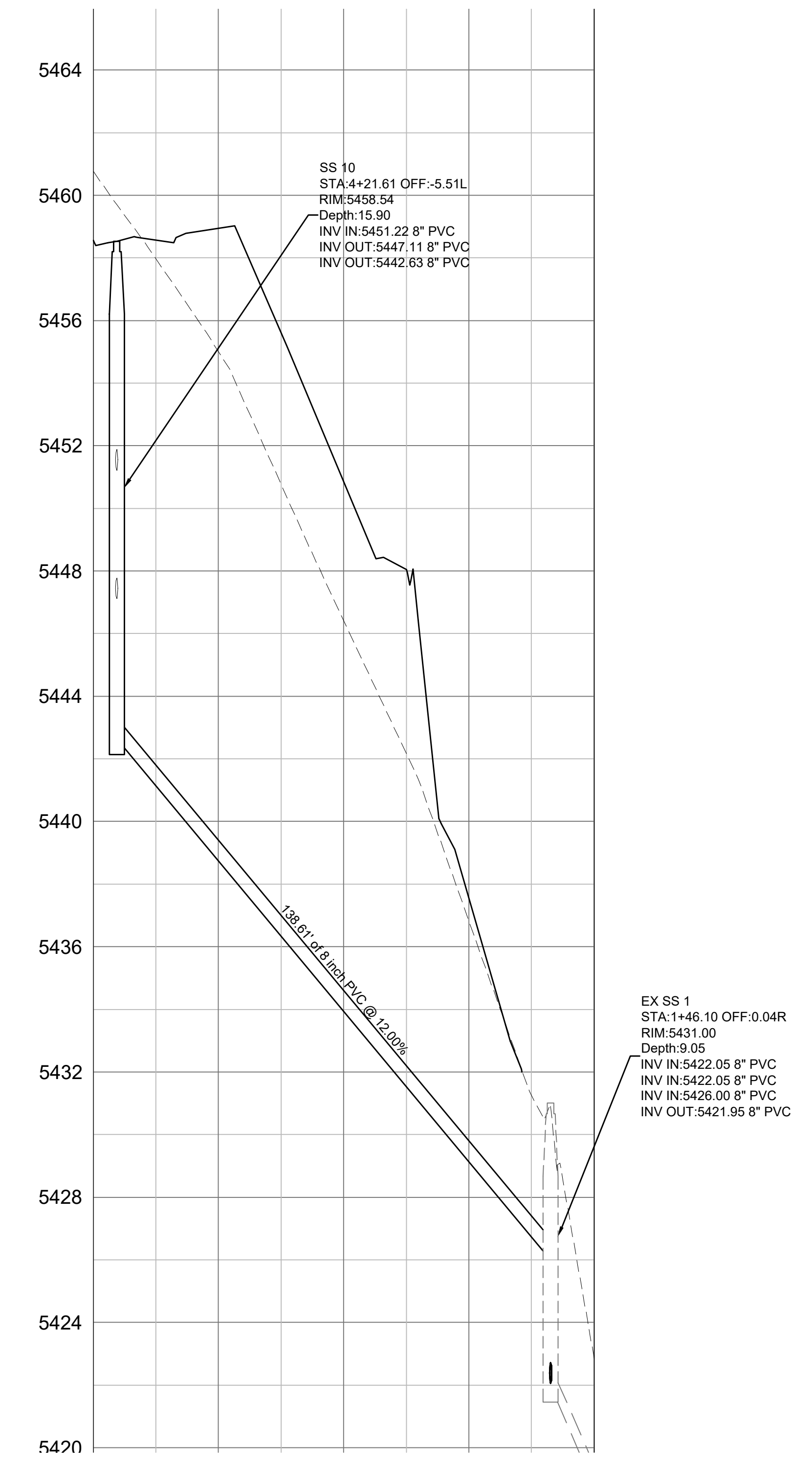
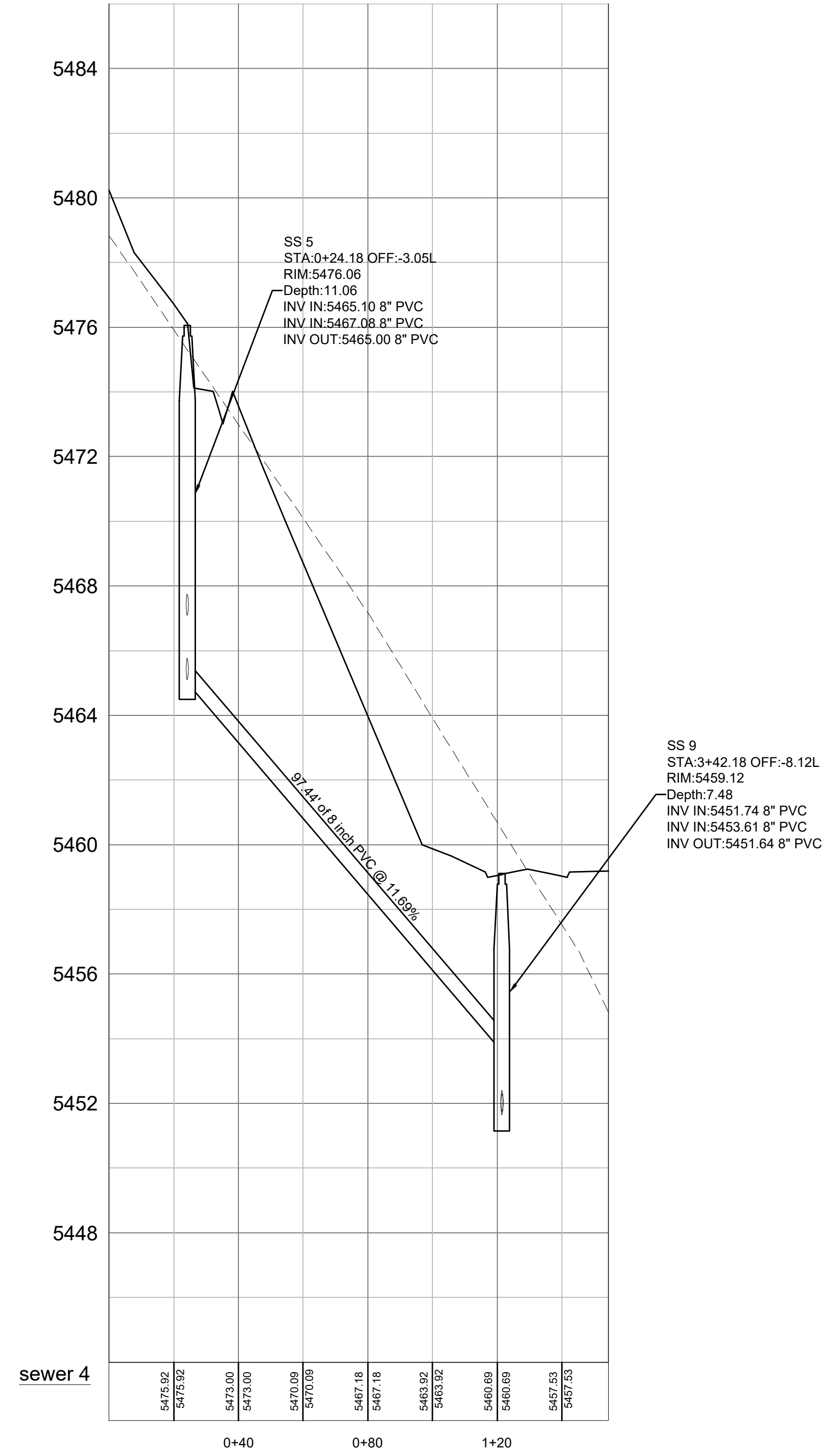
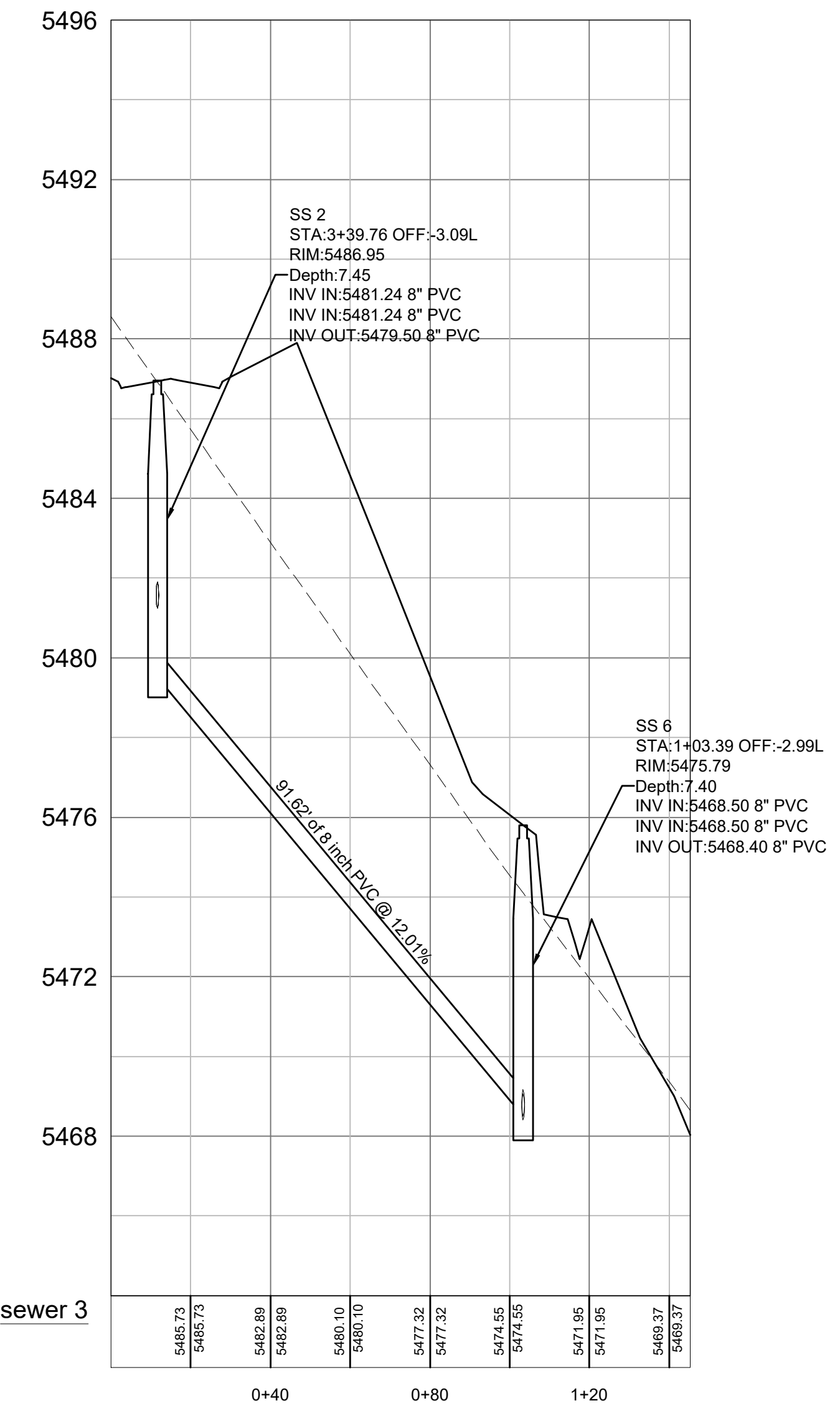
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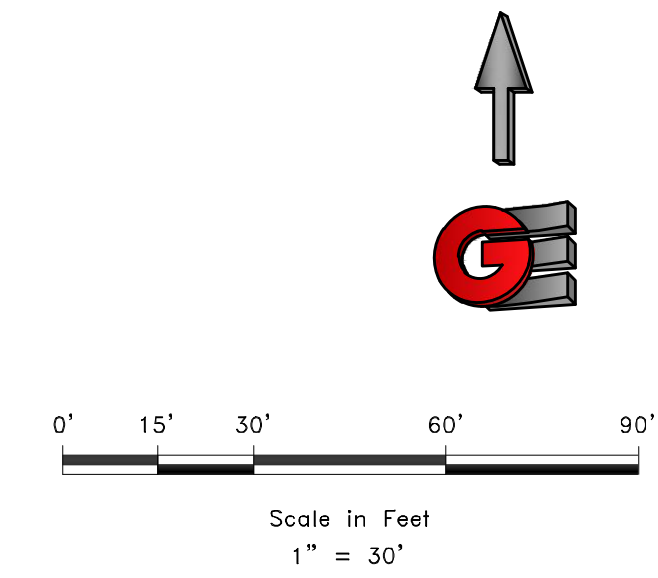
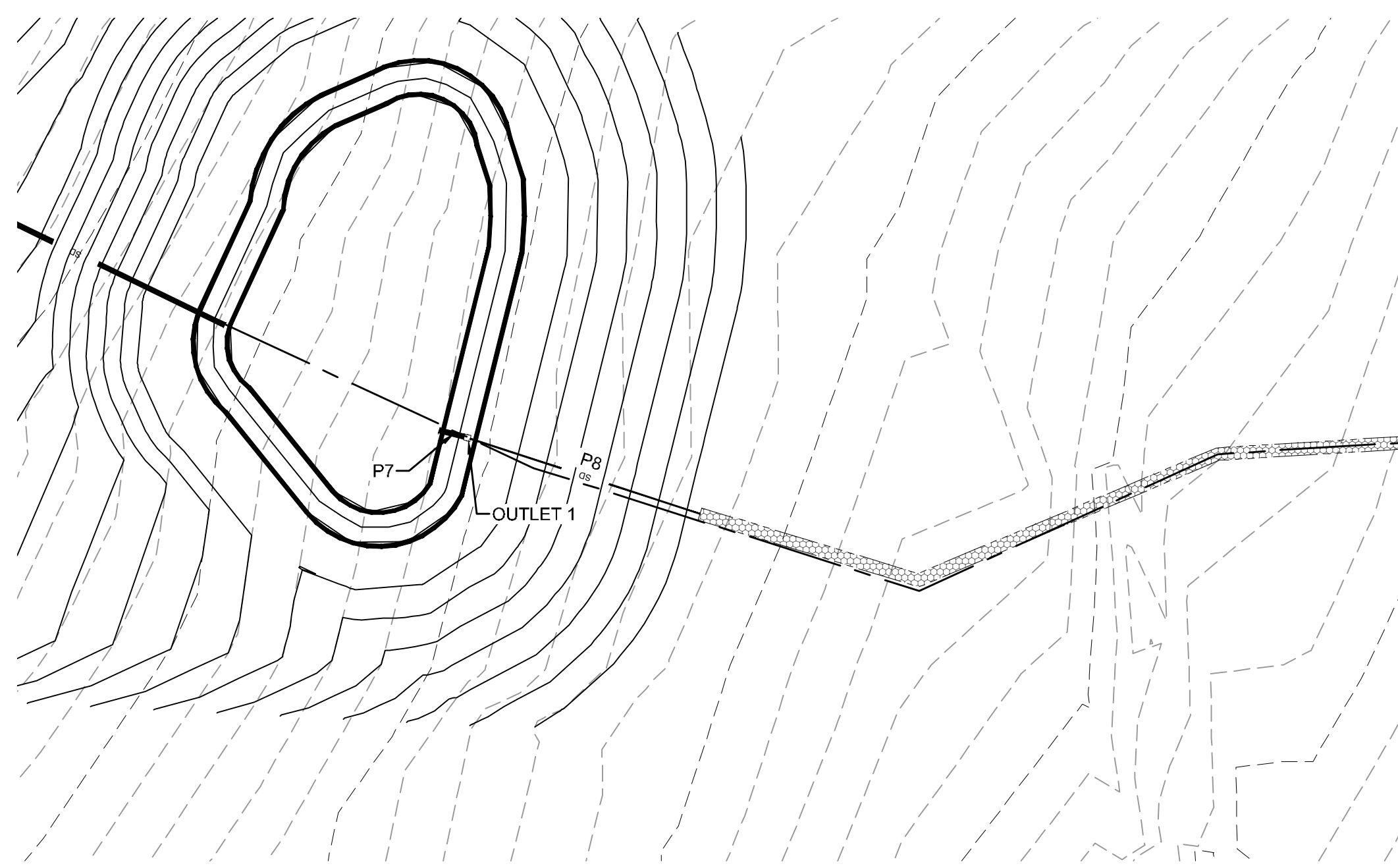
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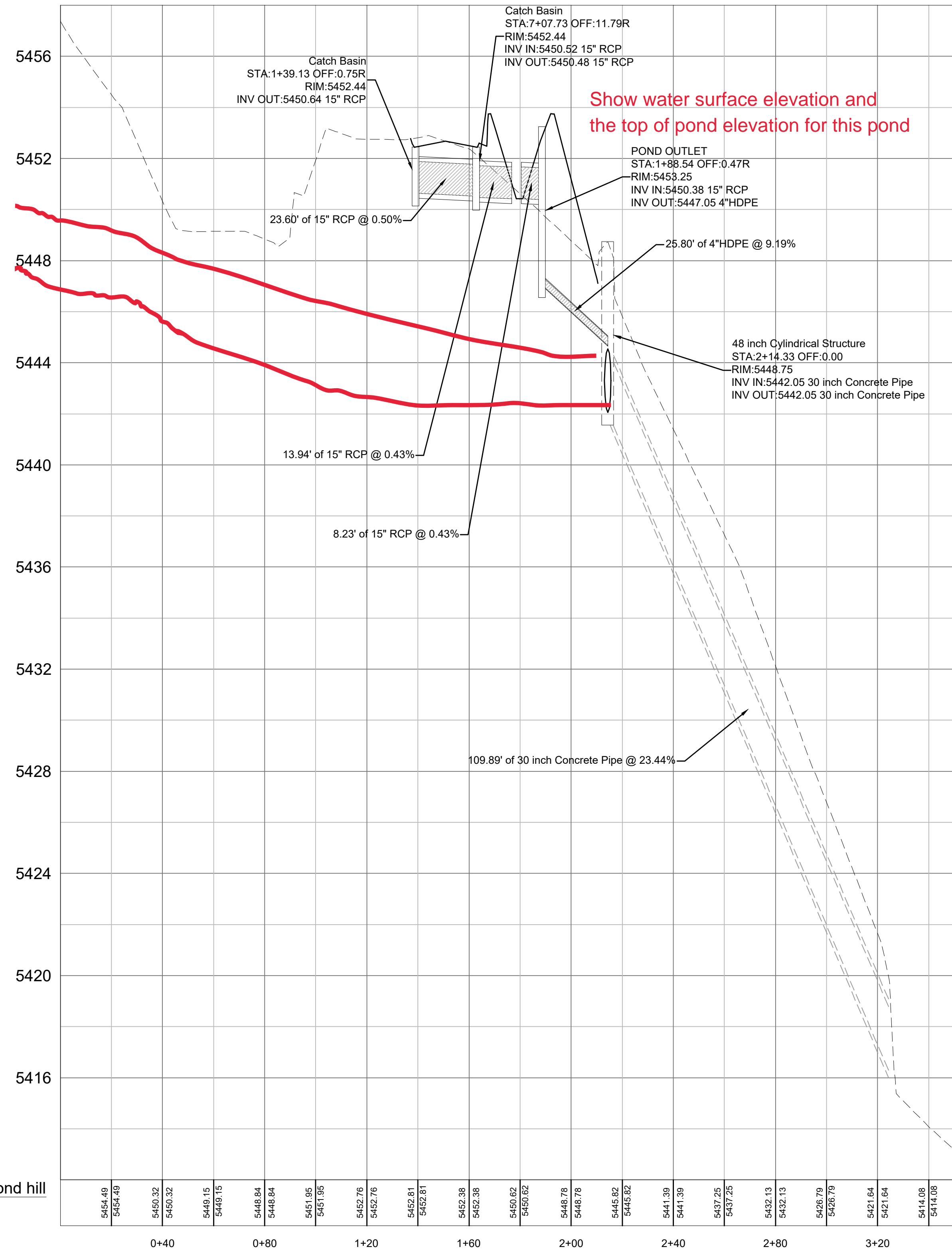
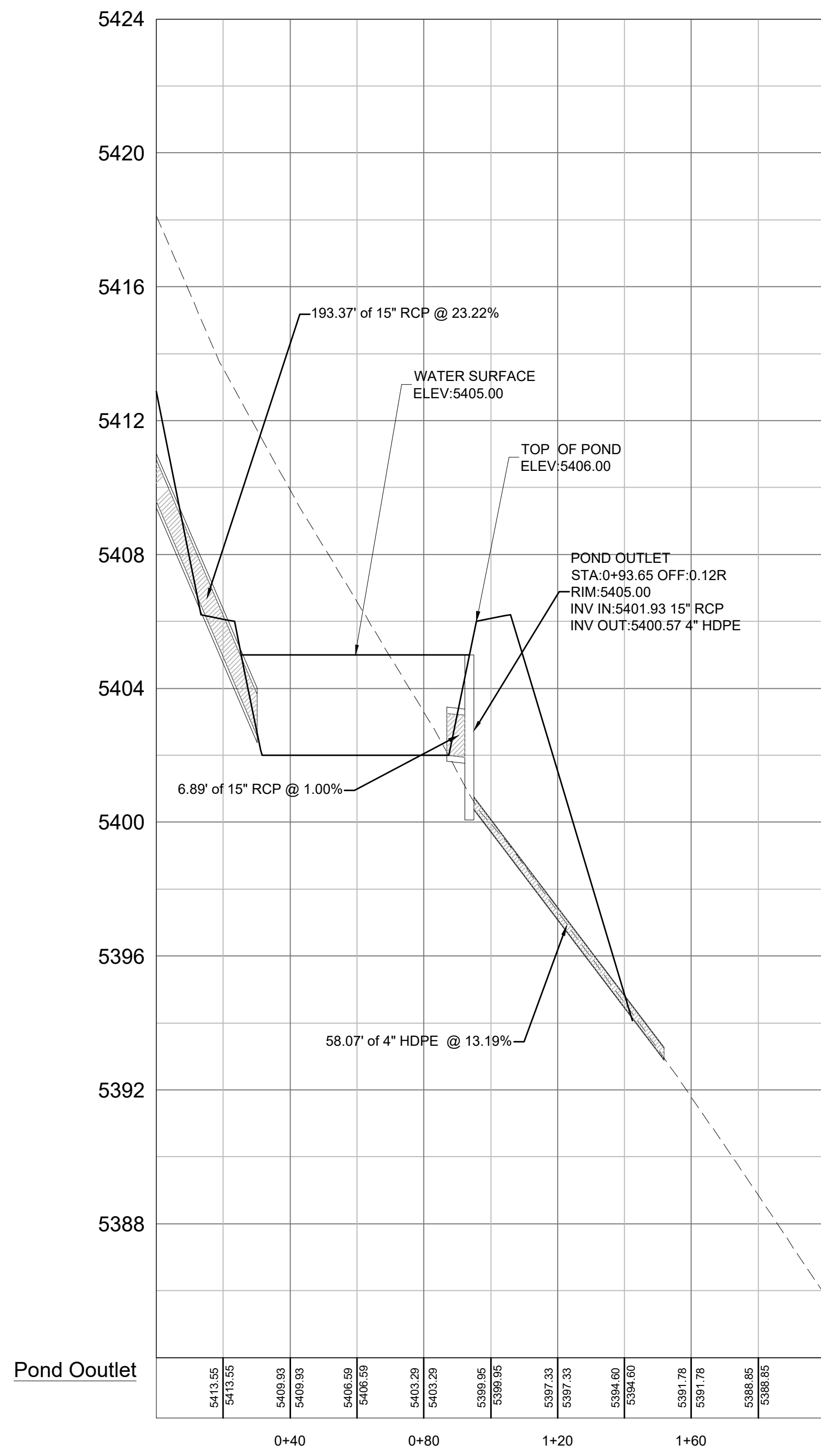
PP5



RA\0271 - BREDNY WOLF CREEK TOWNHOMES DESIGN\DWG THE RETREAT DESIGN 7-11-19.DWG



Can you show the elevation of the 30" storm drain line coming from existing pond?



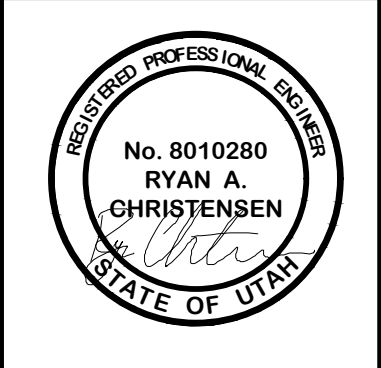
cross section ex pond hill

SCALE: 1" = 30'

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| DATE    | DESIGN | DRAWN | CHECKED |
| 1-15-19 | KAN    | KAN   |         |

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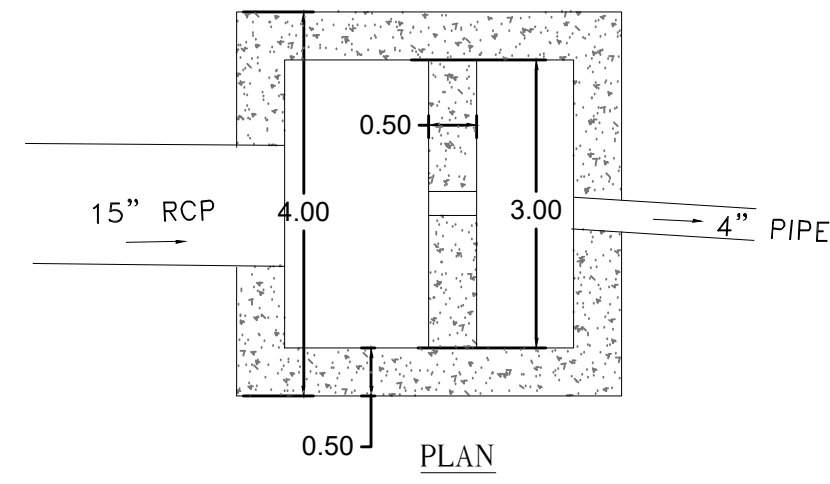
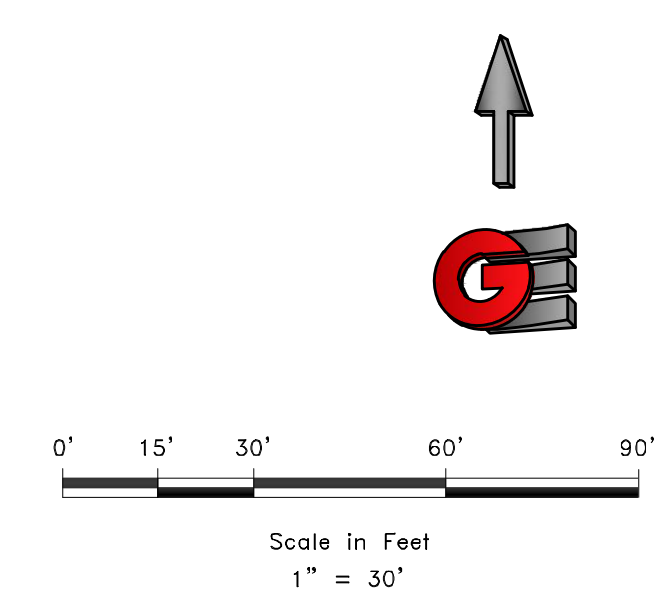
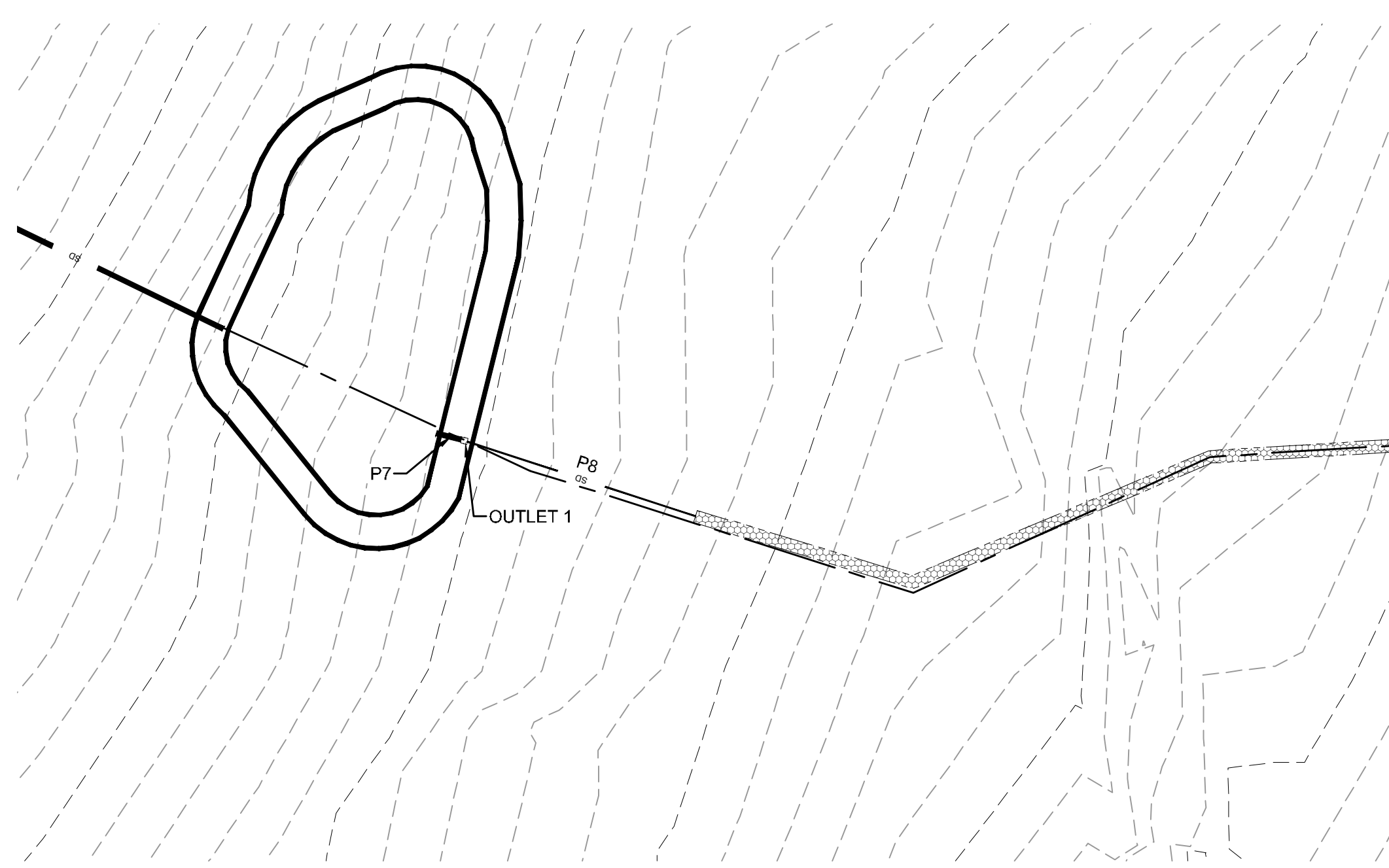


PLAN AND PROFILE PONDS  
 THE RETREAT AT WOLF CREEK CONDOMINIUMS  
 RETREAT DR  
 EDEN, WEBER, UTAH

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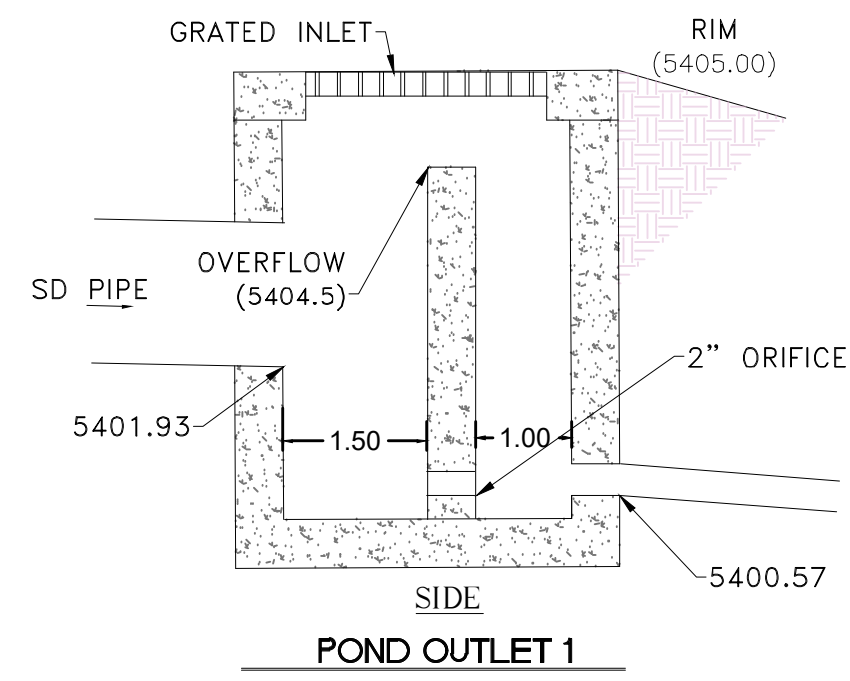
PP6

RA\0271 - BIRDEN\WOLF CREEK CONDOMINIUMS\DESIGN\DWG\THE RETREAT DESIGN 7-11-19.DWG

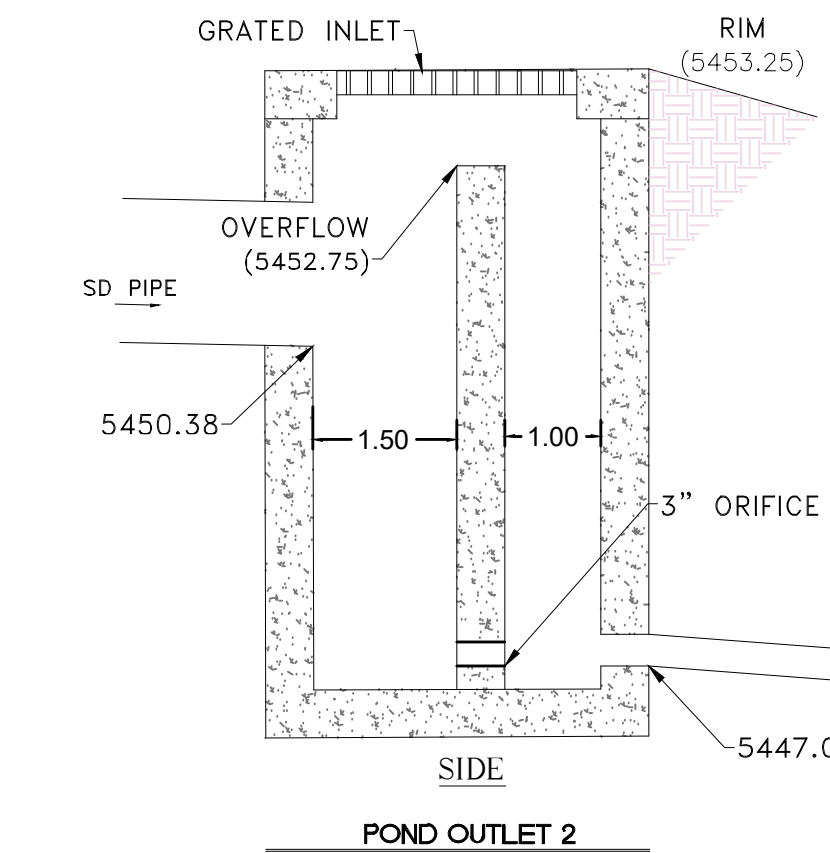
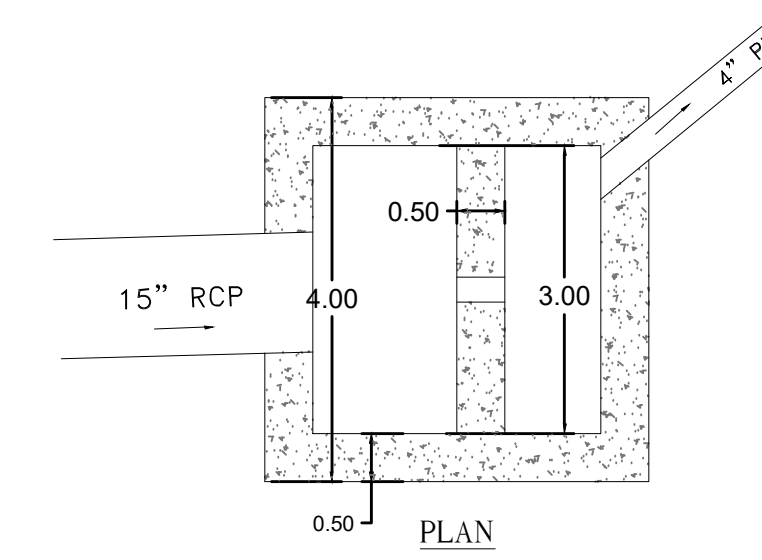


**Orifice Calculation**

- H = 3.93 Max water height (ft)
- Q = 0.30 Flowrate (cfs)
- Cc = 0.62 Coef. of Contraction
- Cv = 0.98 Coefficient of Velocity
- Area = 0.031 Orifice Area (ft<sup>2</sup>)
- II = 3.14
- g = 32.17 Gravitational Constant
- d = 2 Orifice Diameter (in)



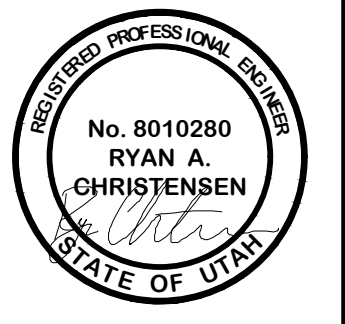
Can we get a bigger size of pipe for the outlet of both structures?



**Orifice Calculation**

- H = 5.7 Max water height (ft)
- Q = 0.65 Flowrate (cfs)
- Cc = 0.62 Coef. of Contraction
- Cv = 0.98 Coefficient of Velocity
- Area = 0.056 Orifice Area (ft<sup>2</sup>)
- II = 3.14
- g = 32.17 Gravitational Constant
- d = 3 Orifice Diameter (in)

| REVISIONS | DATE | DESCRIPTION |
|-----------|------|-------------|
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|           |      |             |



POND OUTLET DETAILS  
 THE RETREAT AT WOLF CREEK CONDOMINIUMS  
 RETREAT DR  
 EDEN, WEBER, UTAH



DT1