

SCALE: 1" = 80'

REVISIONS	DATE	DESCRIPTION

DATE: JUN 2019
 DESIGN: C.P./P.R.W.S.
 DRAWN: W.S.
 CHECKED: R.C.
 DWG: EL WATTS, ENTERPRISES/ TRAPPERS RIDGE PHASE 7, DESIGN/ TRAPPERS PHASE 7, DESIGN/ DWG



DRAINAGE OVERVIEW
 TRAPPERS RIDGE
 EDEN, WEBER COUNTY, UTAH

Trappers Ridge
Eden, Weber County, Utah
12/4/2017

GARDNER ENGINEERING

Basin 2	Sq. Ft.	Acres	C
Handsurface Trappers	166,051	3.81	0.90
East Buchhorn Dr	25,000	0.57	0.80
Total/Weighted	191,051	4.39	0.90

Allow Release Rate (cfs/acre): 0.10
Q Allowable (cfs): 0.44

Runoff Vol (cf)	Inch/Hr	Total Vol (cf)	Detain Vol (cf)
5	1.32	1,020	9,300
10	2.63	6.1	14,447
15	3.95	5.04	17,268
30	7.89	3.4	24,158
60	1,579	2.1	29,842
120	3,158	1.23	34,957
180	4,737	0.848	36,151
360	9,474	0.485	41,252
720	18,947	0.311	53,033
1440	37,894	0.157	64,792

100 YR DRAINAGE VOLUME (CUBIC FEET)

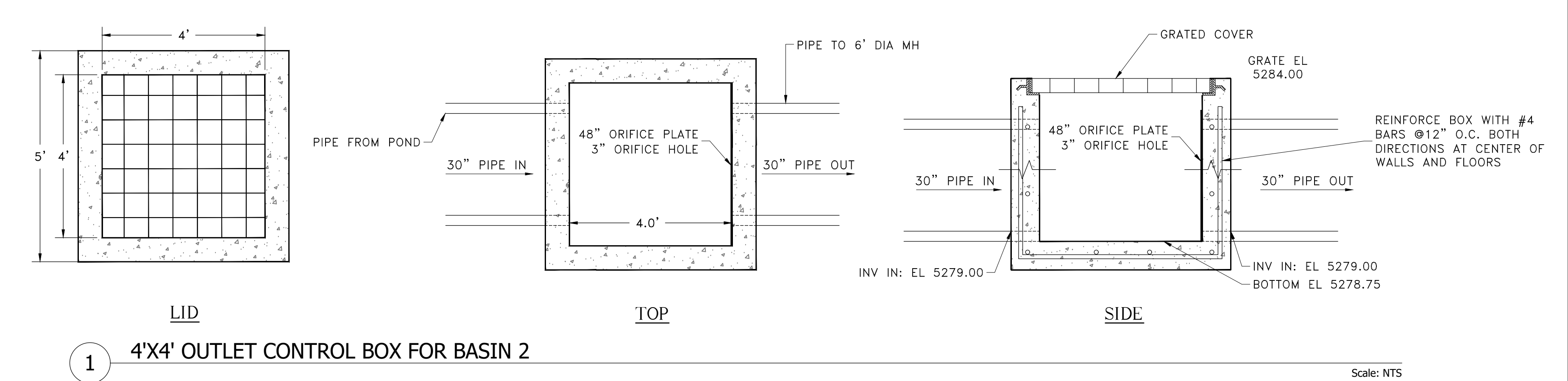
Orifice Calculation

H = 5.5	Maximum water height (ft)
Q = 0.44	Flowrate out of orifice (cfs)
Cc = 0.62	Coefficient of Contraction
Cv = 0.98	Coefficient of Velocity
Area = 0.035	Orifice Area (ft ²)
l = 3.14	
g = 32.17	Gravitational Constant
d = 2.5	Orifice Diameter (in)
Use 3"	Orifice Diameter (in)

100 YEAR STORM RECOMMENDED MIN. VOLUME DETAINED: **34,056** CUBIC FEET

Current Capacity: **40,800** / **1,511**

*Recommend cleaning out the built up silt in Basin 2.



Trappers Ridge
Eden, Weber County, Utah
11/16/2017

GARDNER ENGINEERING

Basin 1A	Sq. Ft.	Acres	C
Handsurface	54,094	1.25	0.90
Total/Weighted	54,094	1.25	0.90

Allow Release Rate (cfs/acre): 0.10
Q Allowable (cfs): 0.13

Runoff Vol (cf)	Inch/Hr	Total Vol (cf)	Detain Vol (cf)
5	3.8	8,022	2,719
10	7.5	6.1	4,138
15	11.3	5.04	5,125
30	22.6	3.4	6,915
60	45.2	2.1	8,542
120	90.4	1.23	10,008
180	135.6	0.848	10,347
360	271.2	0.485	11,836
720	542.4	0.311	15,179
1440	1,084.8	0.157	18,547

100 YR DRAINAGE VOLUME (CUBIC FEET)

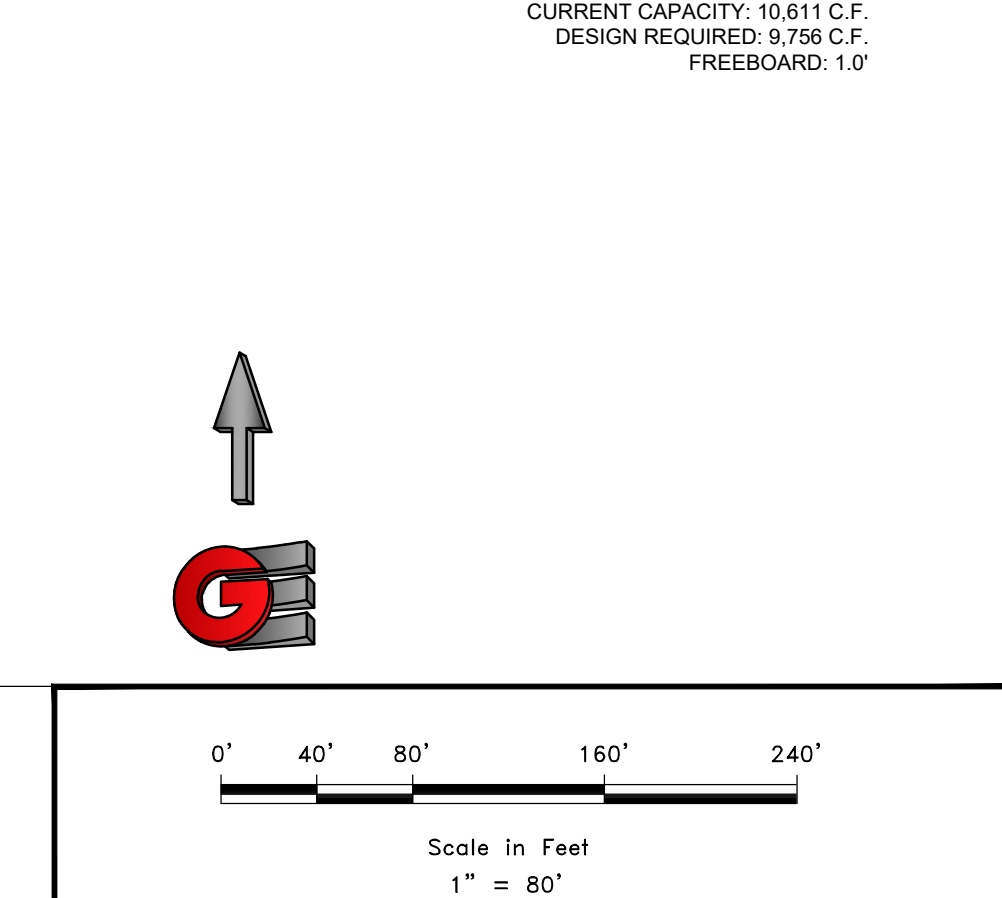
Orifice Calculation

H = 7	Maximum water height (ft)
Q = 0.13	Flowrate out of orifice (cfs)
Cc = 0.62	Coefficient of Contraction
Cv = 0.98	Coefficient of Velocity
Area = 0.010	Orifice Area (ft ²)
l = 3.14	
g = 32.17	Gravitational Constant
d = 1.3	Orifice Diameter (in)
Use 3"	Orifice Diameter (in)

100 YEAR STORM RECOMMENDED MIN. VOLUME DETAINED: **10,611** CUBIC FEET

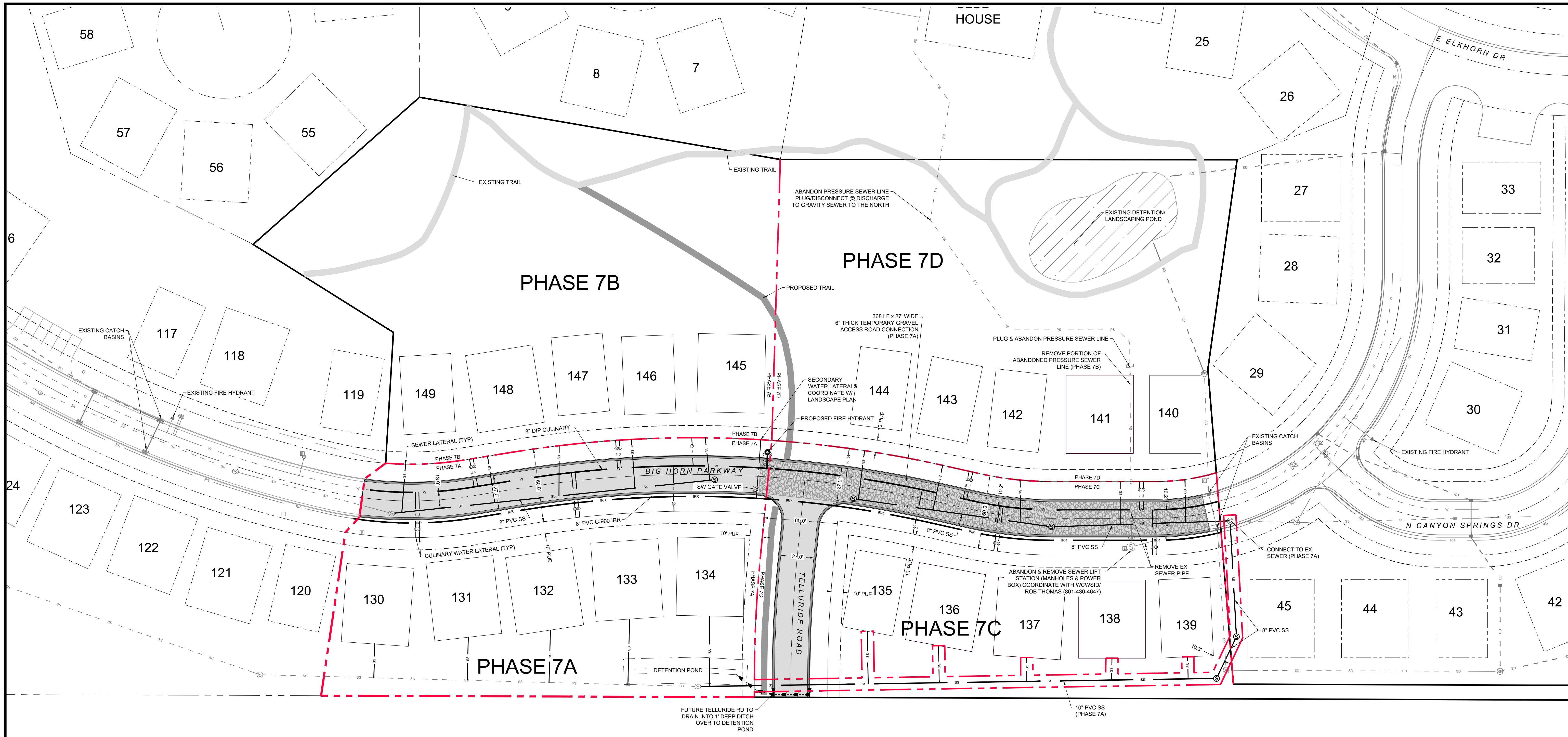
Current Capacity: **10,611** / **393**

*Recommend cleaning out the built up silt in Basin 1A.



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 CIVIL - LAND PLANNING
 MUNICIPAL - LAND SURVEYING
 5150 SOUTH 375 EAST OGDEN, UT
 OFFICE: 801-476-0202 FAX: 801-476-0066

C -01



REVISIONS	DESCRIPTION
DATE	



UTILITY OVERVIEW
 TRAPPERS RIDGE PHASE 7
 PHASE 7
 EDEN, WEBER COUNTY, UTAH

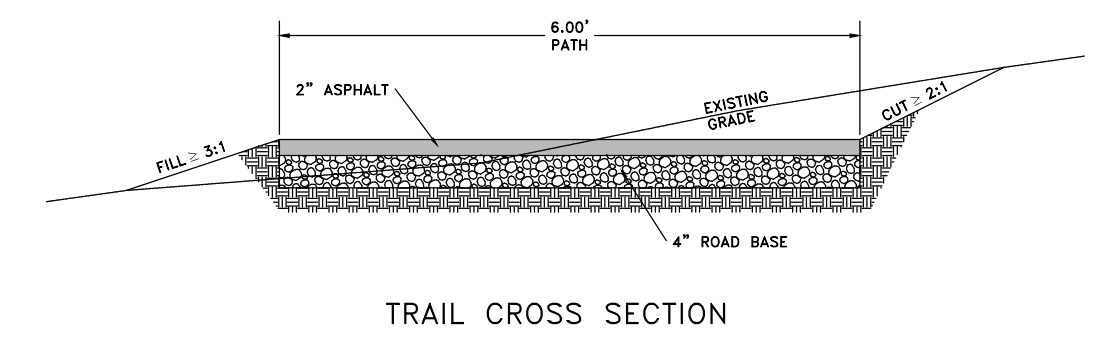
GARDNER ENGINEERING
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 MUNICIPAL-LAND SURVEYING
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EXISTING IMPROVEMENTS

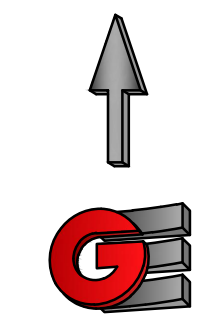
- ASPHALT
- - - LOT
- - - STORM
- - - IRRIGATION
- - - PRESSURE SEWER
- - - SANITARY SEWER
- - - WATER
- - - TBC
- - - TOP OF BANK
- - - EXISTING TRAIL
- Ⓜ ELECTRICAL BOX
- Ⓜ STORM DRAIN BOX
- Ⓜ STORM DRAIN MANHOLE
- Ⓜ FIRE HYDRANT
- Ⓜ SEWER MANHOLE

PROPOSED IMPROVEMENTS

- PHASE BOUNDARY
- - - ASPHALT
- - - LOT
- - - RIGHT OF WAY
- - - EASEMENT
- - - STORM
- - - IRRIGATION
- - - SANITARY SEWER
- - - WATER
- - - WATER LATERAL
- - - TBC
- - - PROPOSED TRAIL
- Ⓜ WATER METER
- Ⓜ WATER VALVE
- Ⓜ FIRE HYDRANT
- Ⓜ SEWER MANHOLE



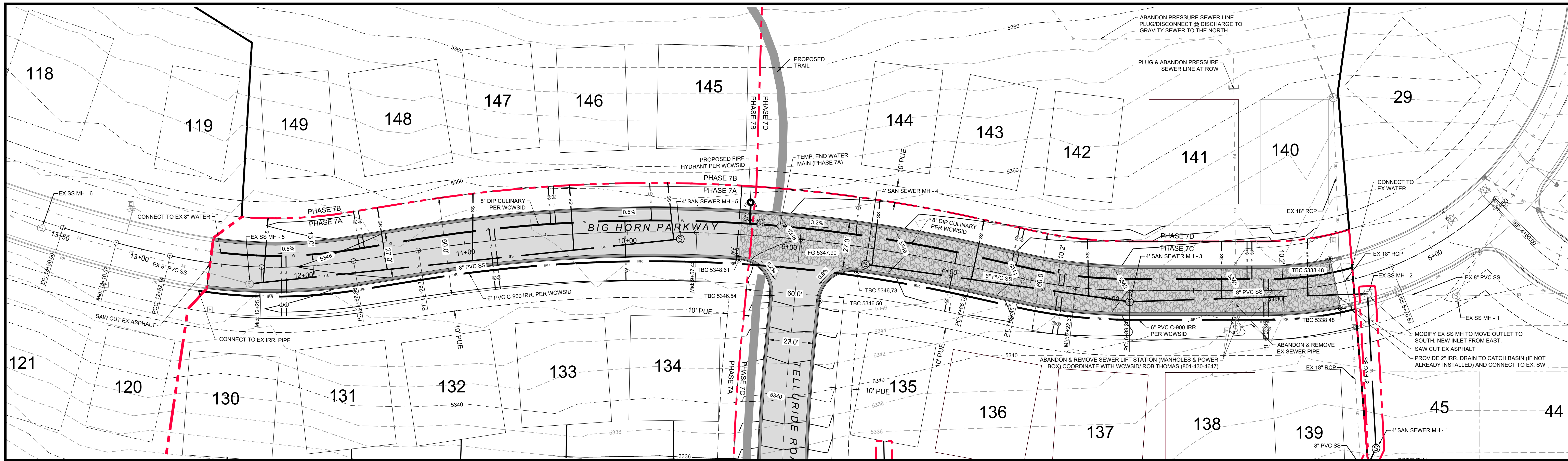
TRAIL CROSS SECTION



Scale in Feet
 1" = 40'

GENERAL NOTES:

- THE LOCATION OF EXISTING UTILITIES SHOWN ARE APPROXIMATE ONLY AND THE CONTRACTOR SHALL VERIFY THE LOCATION AND ELEVATION OF ALL UTILITIES SHOWN OR NOT SHOWN ON THESE PLANS.
- ALL CONSTRUCTION SHALL CONFORM TO WEBER COUNTY STANDARDS.
- ALL CONSTRUCTION SHALL CONFORM TO WOLF CREEK WATER AND SEWER STANDARDS.
- THE STREET STRUCTURAL CROSS SECTION IS PER DETAILS CONTAINED WITHIN THESE PLANS.
- THE SEPARATION BETWEEN THE CULINARY WATER AND SEWER SHALL BE 10' MIN.



SCALE: 1" = 30'

DATE: JAN 2019

DESIGN: C/P/PRO/MS

DRAWN: WS

CHECKED: RC

DATE

REVISIONS

DESCRIPTION

DATE

REVISIONS

DESCRIPTION



BIG HORN PARKWAY PLAN AND PROFILE

TRAPPERS RIDGE PHASE 7

PHASE 7

EDEN, WEBER COUNTY, UTAH

GARDNER ENGINEERING

CIVIL - LAND PLANNING

MUNICIPAL - LAND SURVEYING

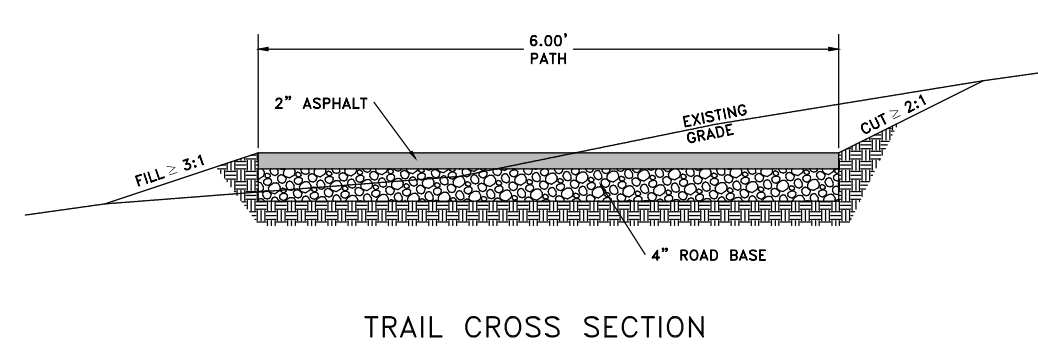
5150 SOUTH 375 EAST OGDEN, UT

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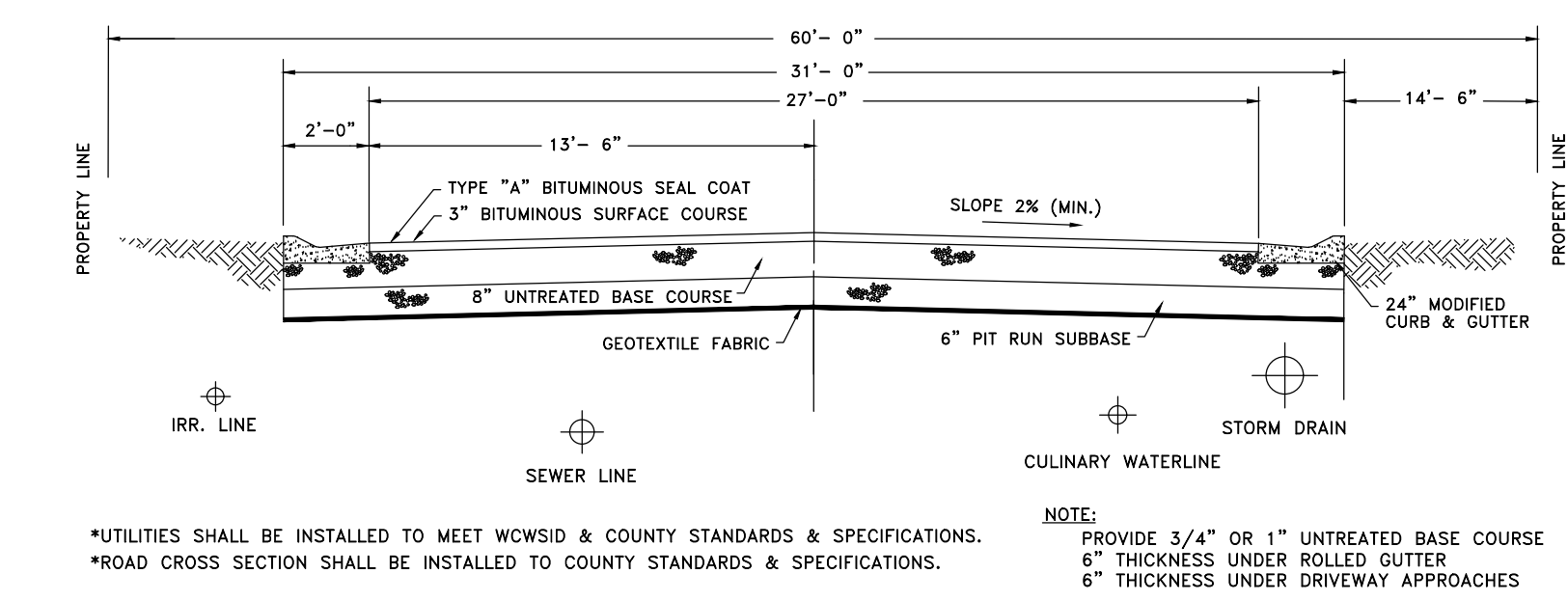
C -03

GENERAL NOTES:

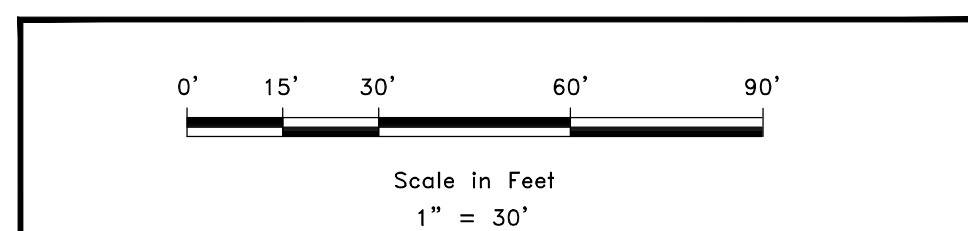
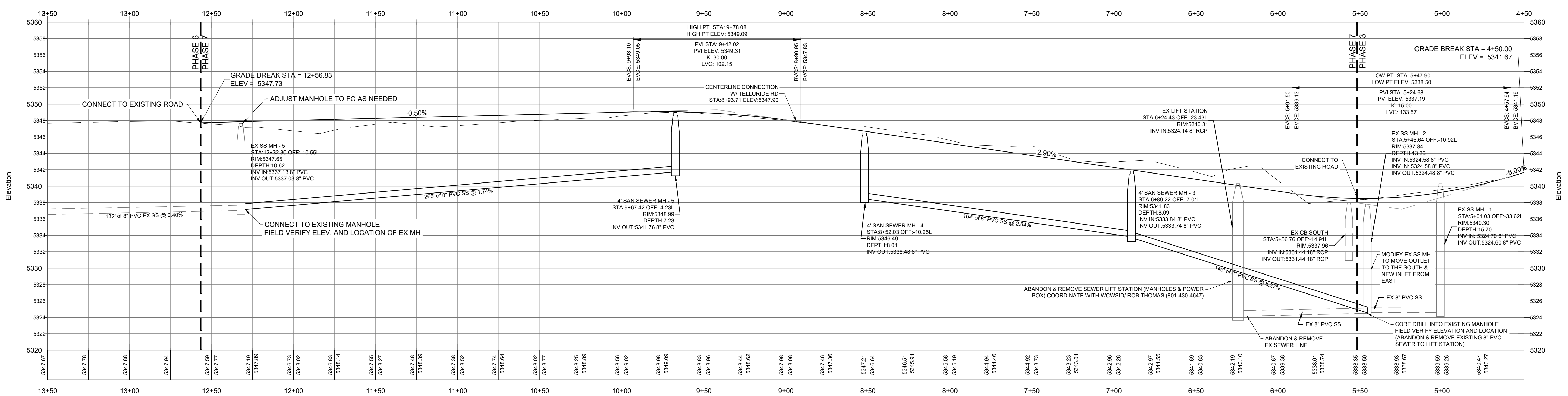
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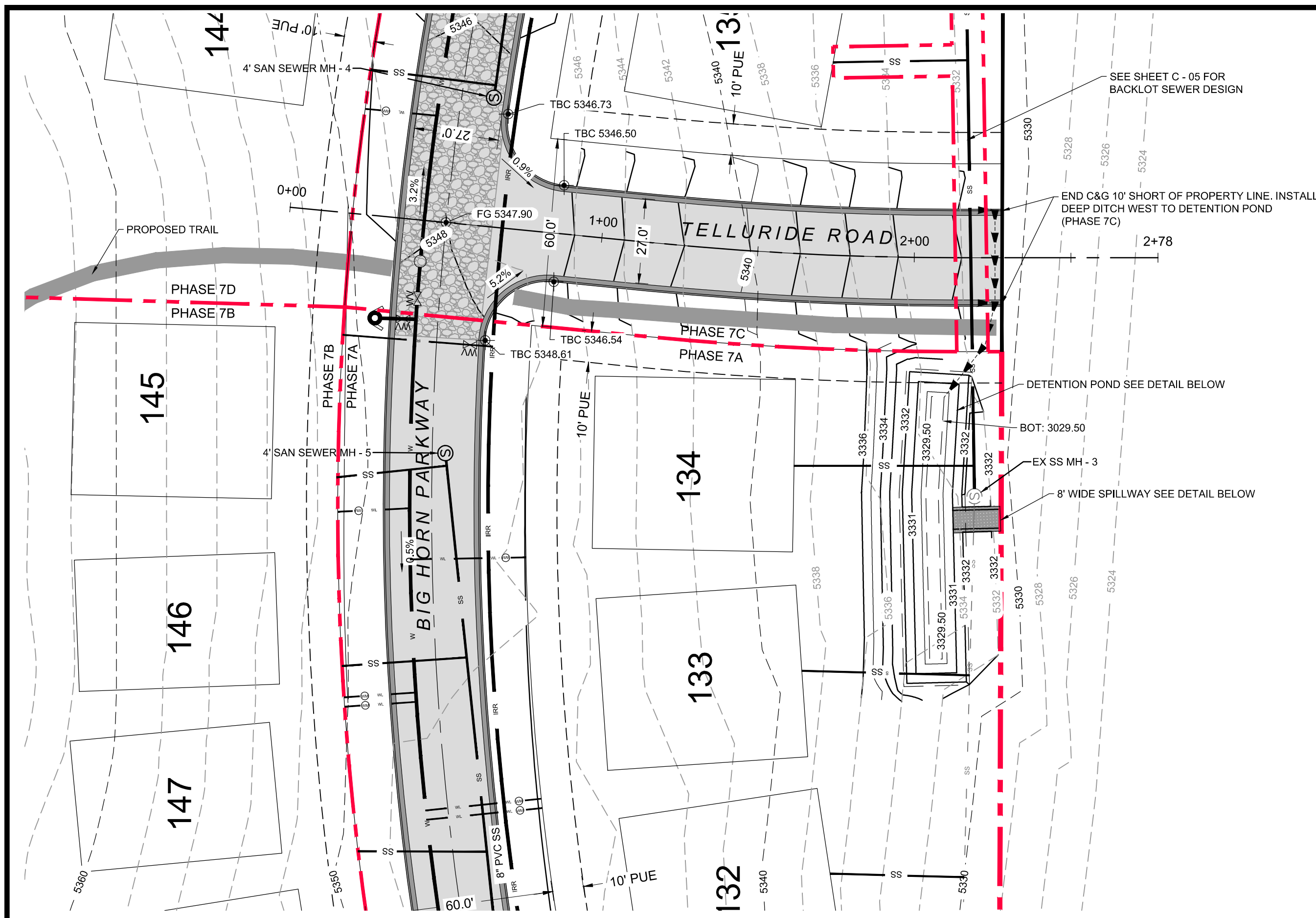


STANDARD 60' SUBDIVISION ROADWAY SECTION



BIG HORN PARKWAY PH 7 PROFILE

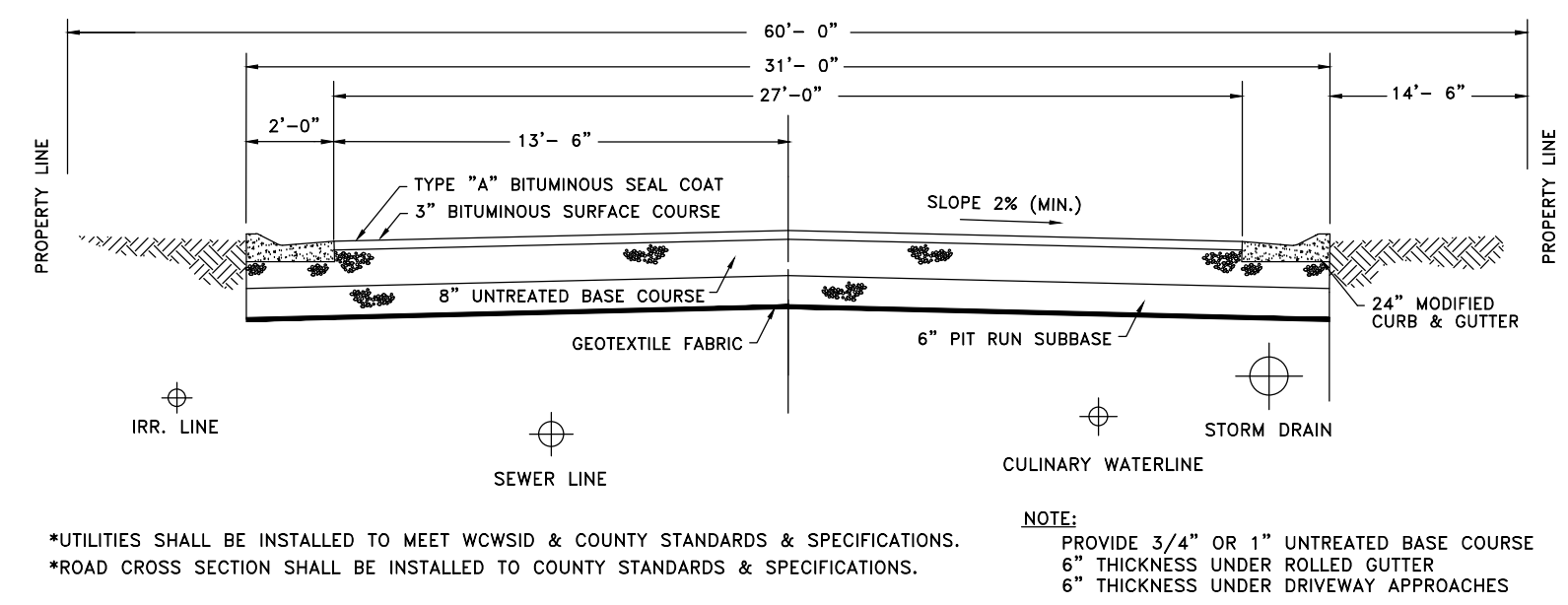




GENERAL NOTES:

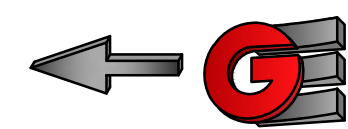
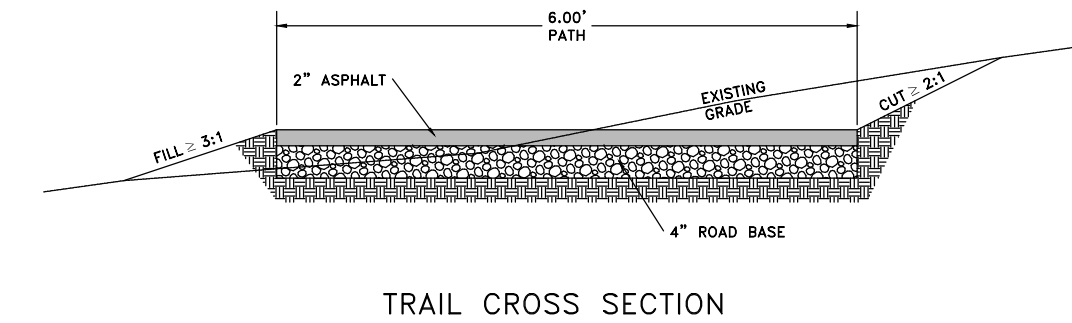
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STANDARD 60' SUBDIVISION ROADWAY SECTION



*UTILITIES SHALL BE INSTALLED TO MEET WCWSID & COUNTY STANDARDS & SPECIFICATIONS.
 *ROAD CROSS SECTION SHALL BE INSTALLED TO COUNTY STANDARDS & SPECIFICATIONS.

NOTE:
 PROVIDE 3/4" OR 1" UNTREATED BASE COURSE
 6" THICKNESS UNDER ROLLED GUTTER
 6" THICKNESS UNDER DRIVEWAY APPROACHES

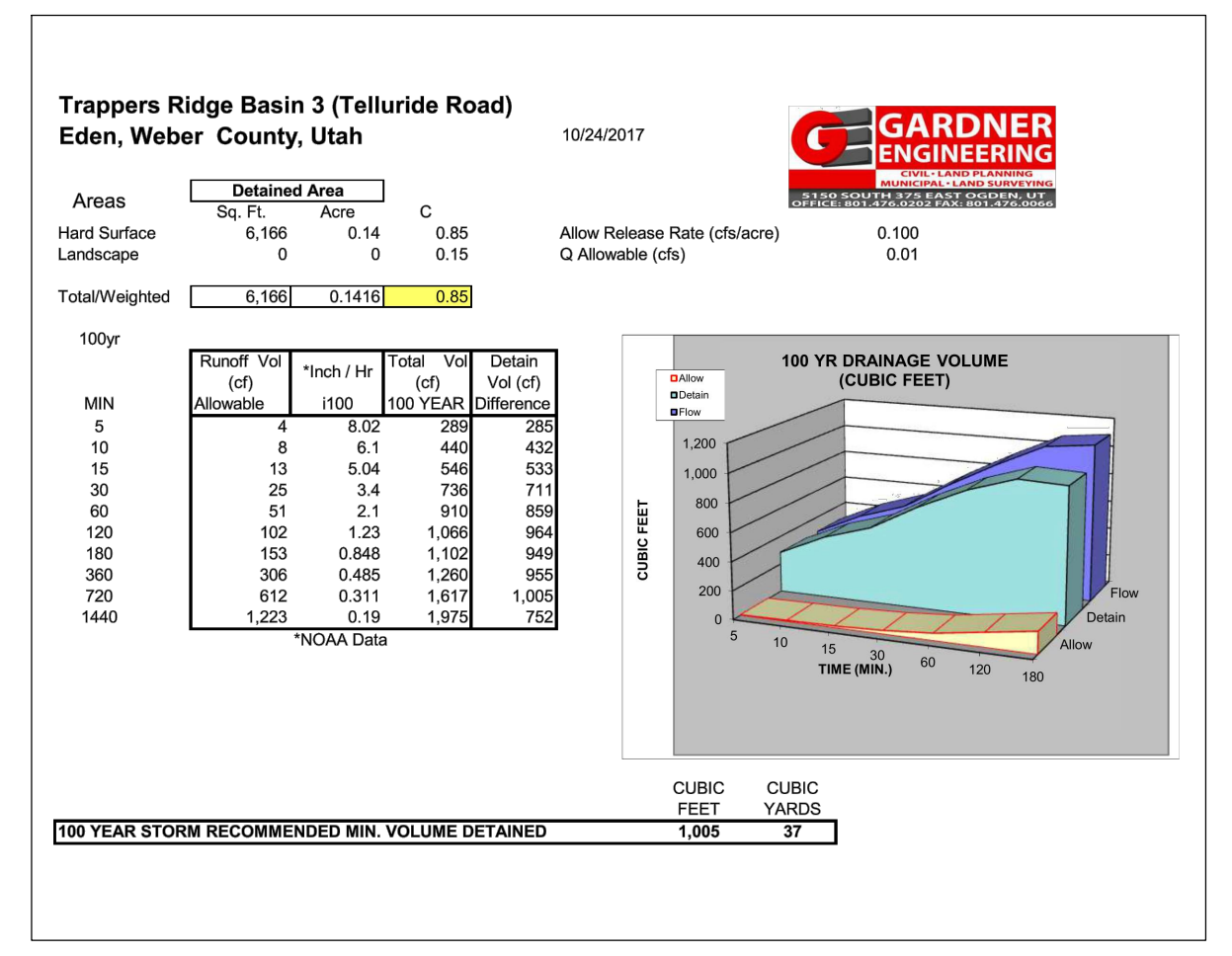
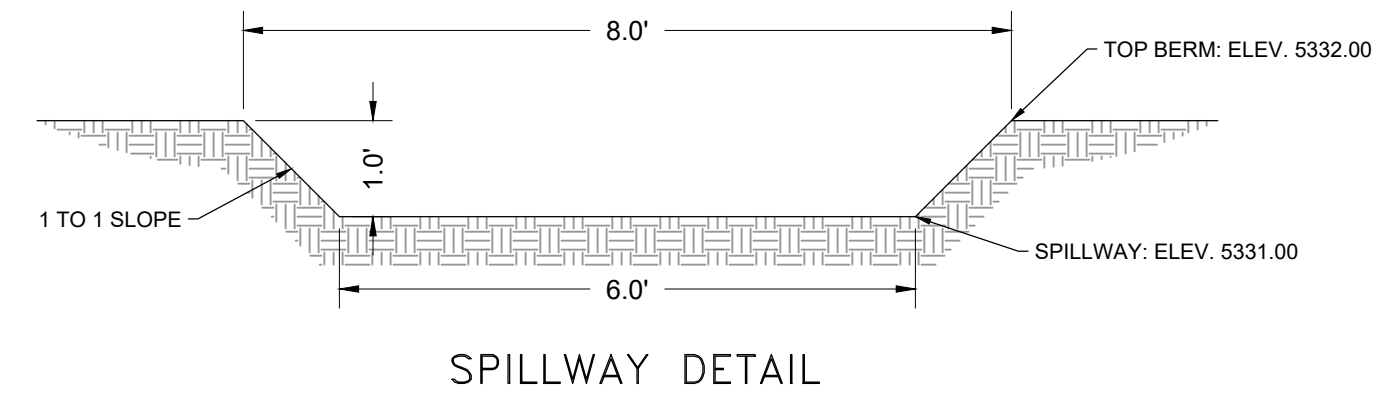
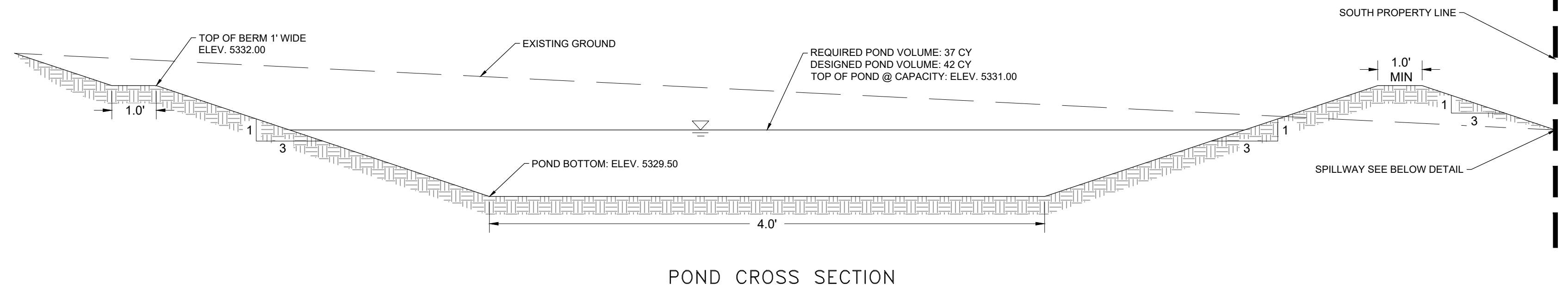
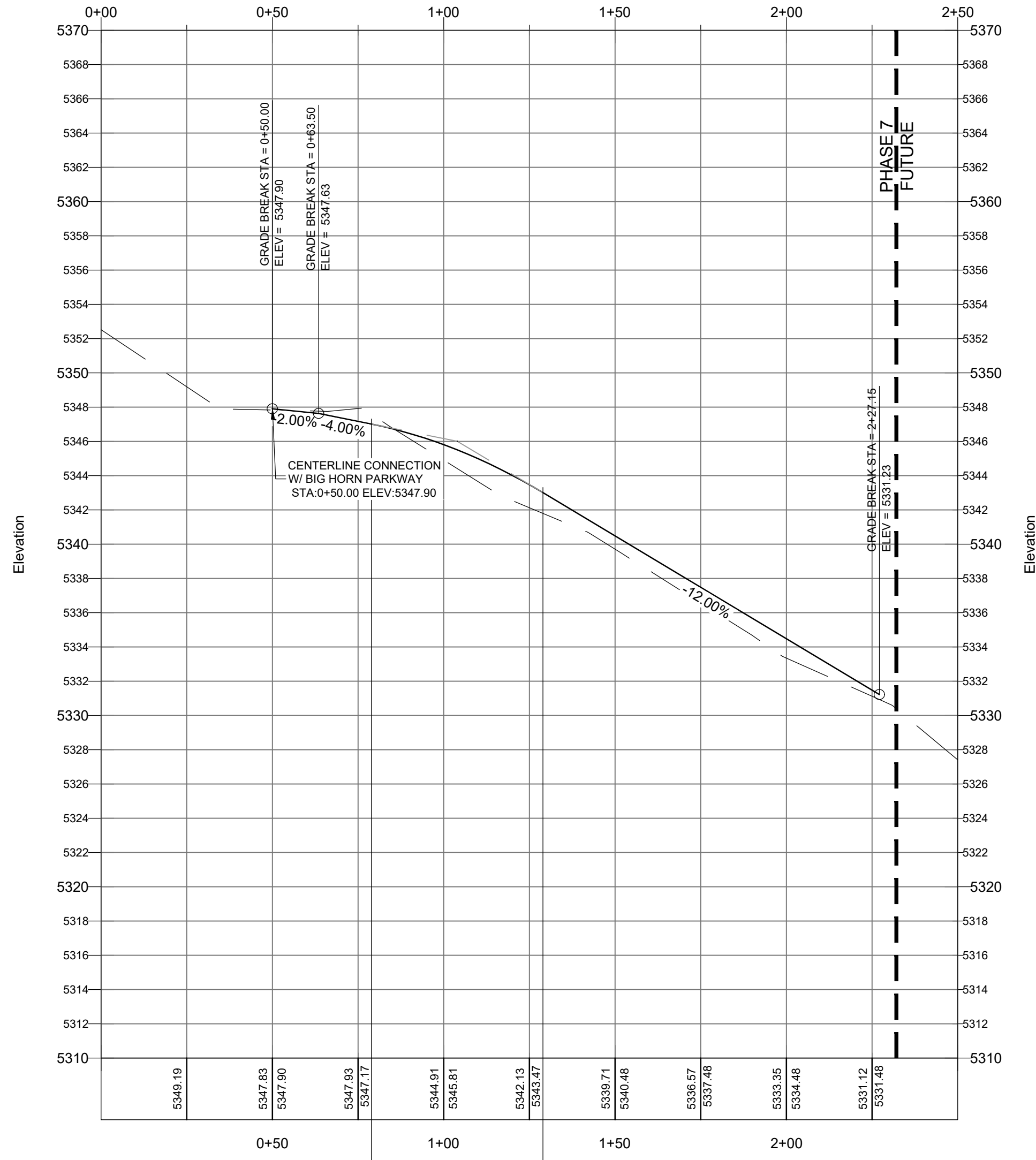


SCALE: 1" = 30'	DATE: JUN 2019	DESIGN: C-JP/PCWS	DRAWN: WS	CHECKED: PC
REVISIONS	DATE	DESCRIPTION		

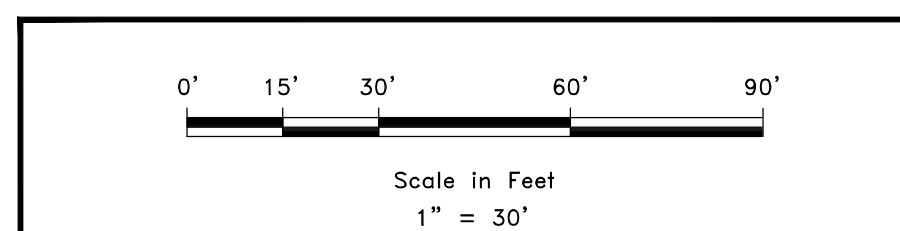


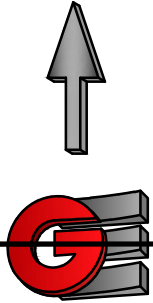
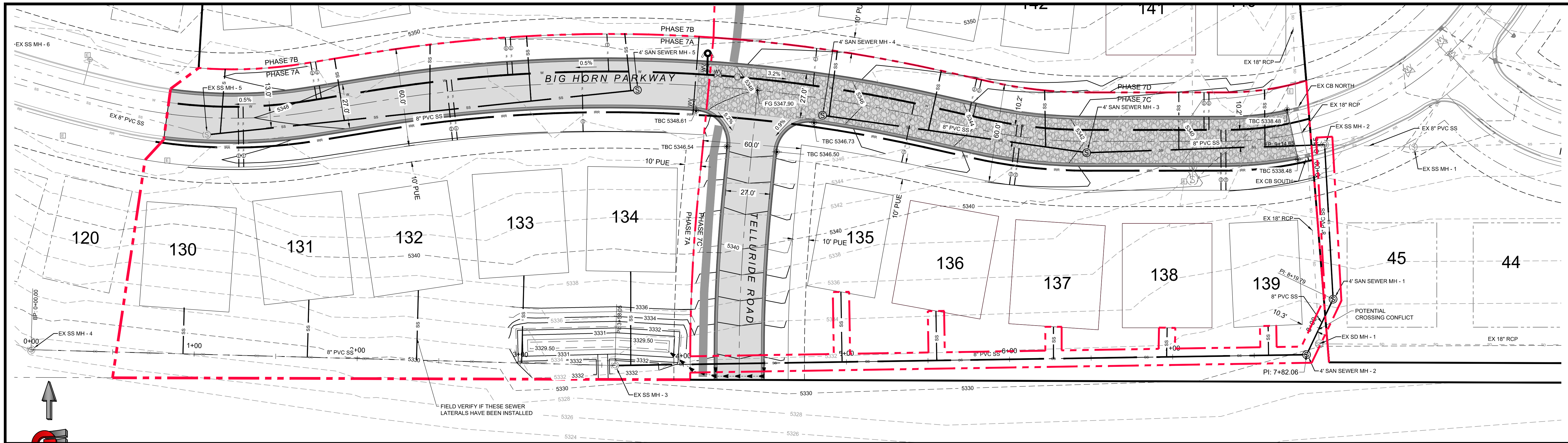
TELLURIDE ROAD PLAN AND PROFILE
 TRAPPERS RIDGE PHASE 7
 PHASE 7
 EDEN, WEBER COUNTY, UTAH

TELLURIDE ROAD PROFILE

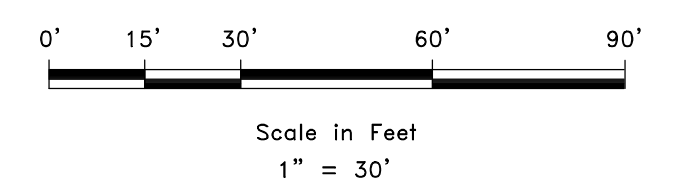
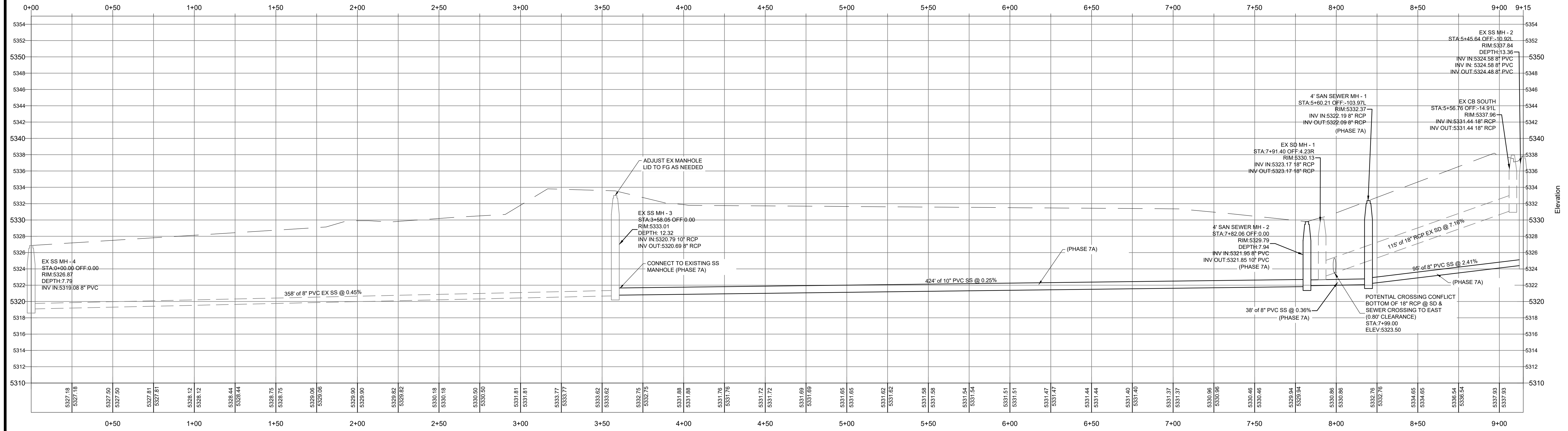


STORM WATER CALCULATIONS FOR TELLURIDE ROAD





BACK LOT SEWER PROFILE



REVISIONS	DESCRIPTION
DATE	

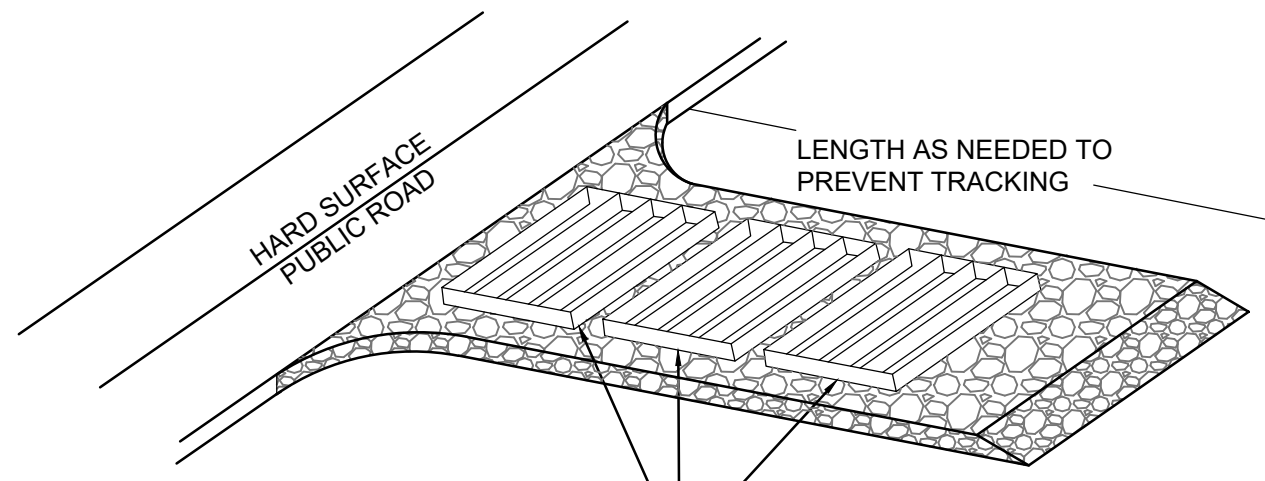
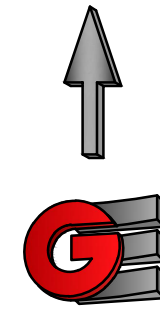


BACK LOT SEWER PLAN AND PROFILE
 TRAPPERS RIDGE PHASE 7
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EROSION CONTROL NOTES:

1. SANDBAGS WILL BE PLACED AT DISCHARGE LOCATIONS TO CONTAIN AND DIVERT STORM WATER THROUGH THE INLET PROTECTION.
2. AN EARTHEN BERM 6" HIGH WILL BE CONSTRUCTED TO CONTAIN THE STORM WATER AND DIVERT IT TO DISCHARGE AREAS.
3. STORM WATER WILL BE DISCHARGED INTO AN EXISTING DRAINAGE SYSTEM. EXISTING LINES SHALL BE INSPECTED PRIOR TO CERTIFICATE OF OCCUPANCY AND CLEANED IF NECESSARY.
4. 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:

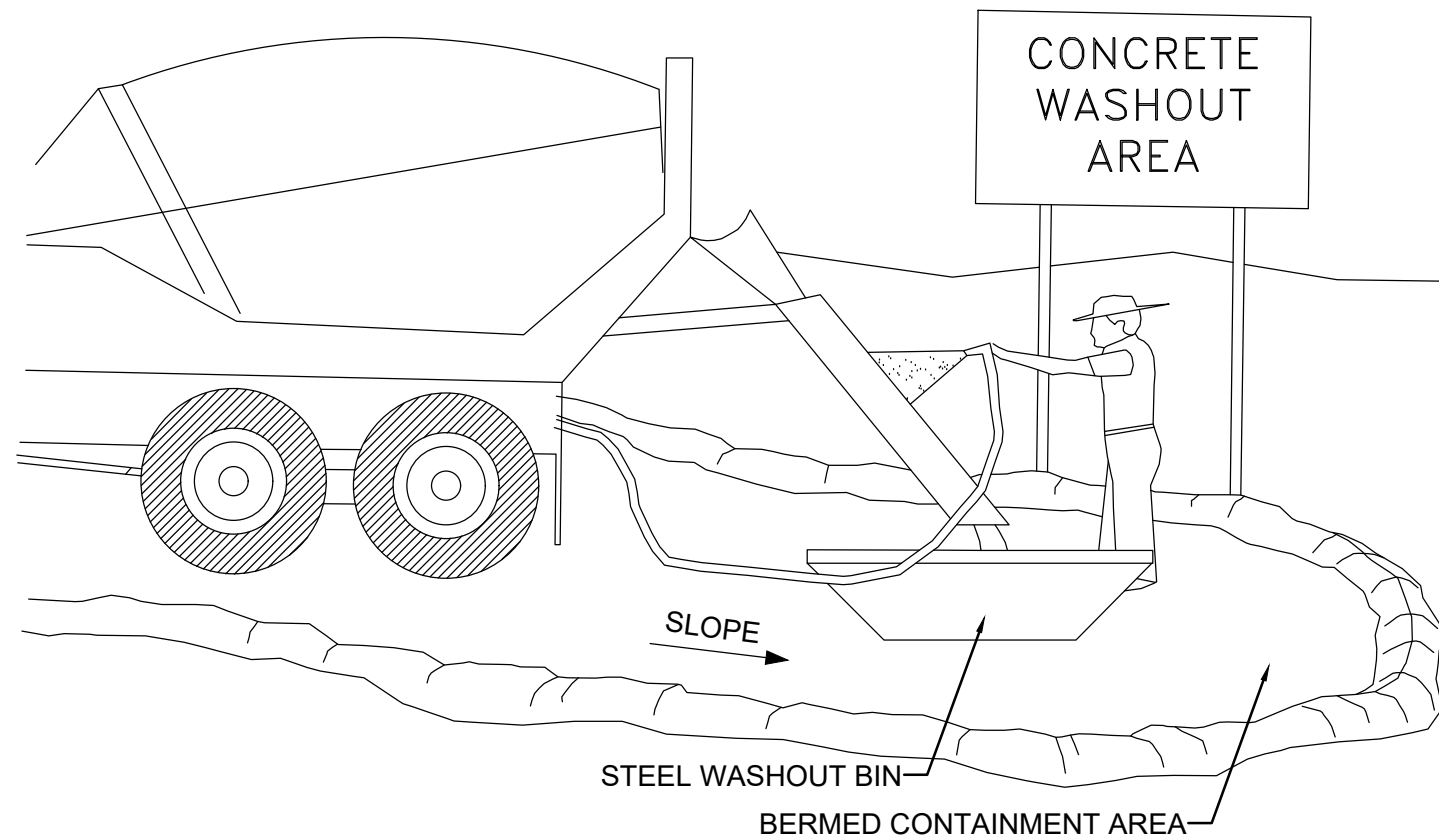
1. SEDIMENTS AND OTHER MATERIALS SHALL NOT BE TRACKED FROM THE SITE BY VEHICLE TRAFFIC. THE CONSTRUCTION ENTRANCE ROADWAYS SHALL BE STABILIZED SO AS TO PREVENT SEDIMENTS FROM BEING DEPOSITED INTO THE STORM DRAIN SYSTEMS. DEPOSITIONS MUST BE SWEEPED UP IMMEDIATELY AND MAY NOT BE WASHED DOWN BY RAIN OR OTHER MEANS INTO THE STORM DRAIN SYSTEM.
2. STABILIZED CONSTRUCTION ENTRANCE SHALL BE:
 - a. 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.
 - b. 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.
3. ADDING A WASH RACK WITH A SEDIMENT TRAP LARGE ENOUGH TO COLLECT ALL WASH WATER CAN GREATLY IMPROVE EFFICIENCY.
4. ALL VEHICLES ACCESSING THE CONSTRUCTION SITE SHALL UTILIZE THE STABILIZED CONSTRUCTION ENTRANCE SITES.

STREET MAINTENANCE NOTES:

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

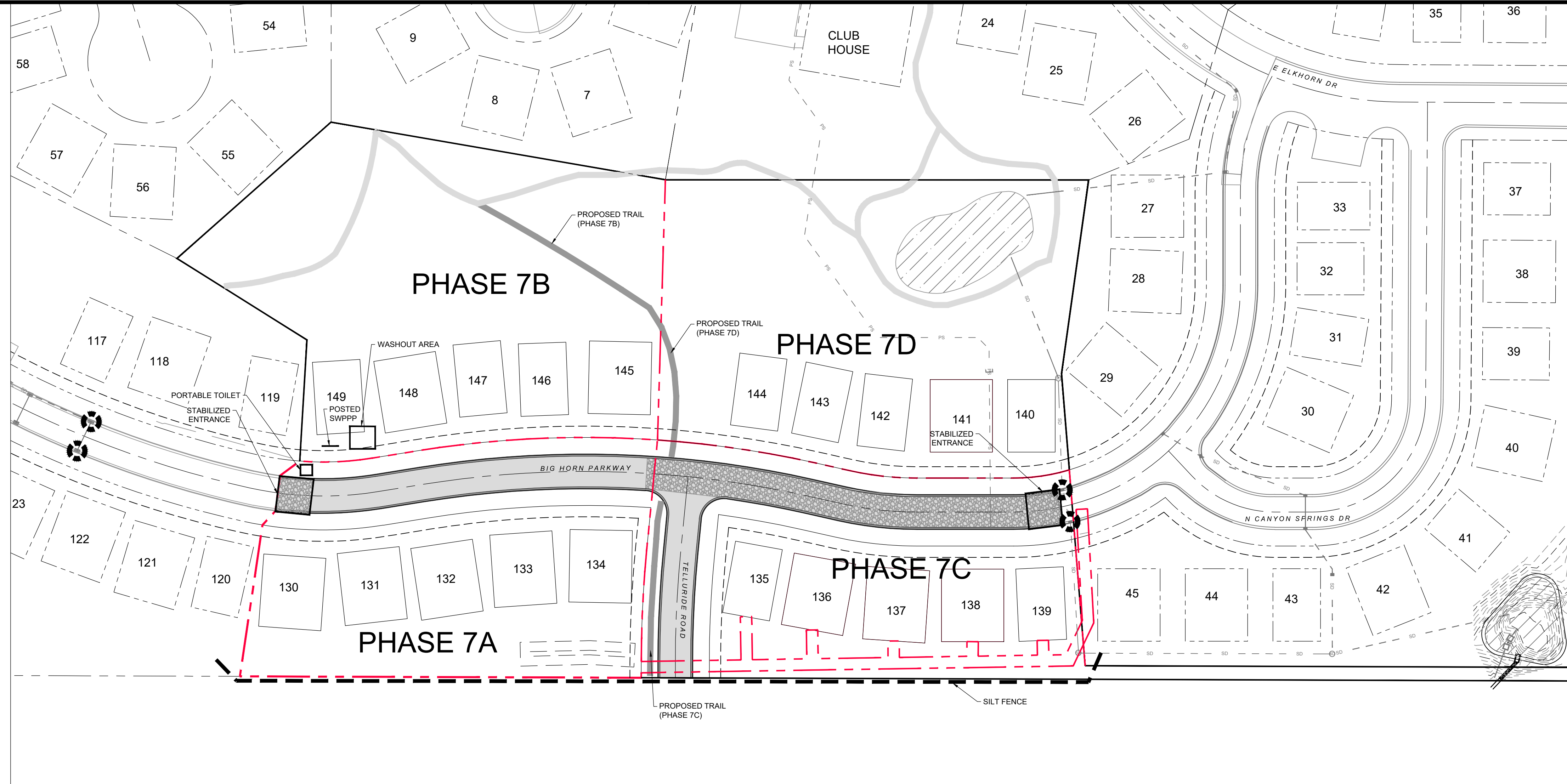
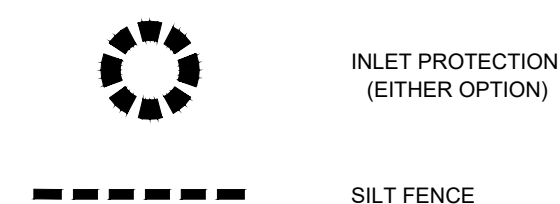
NOTE:

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



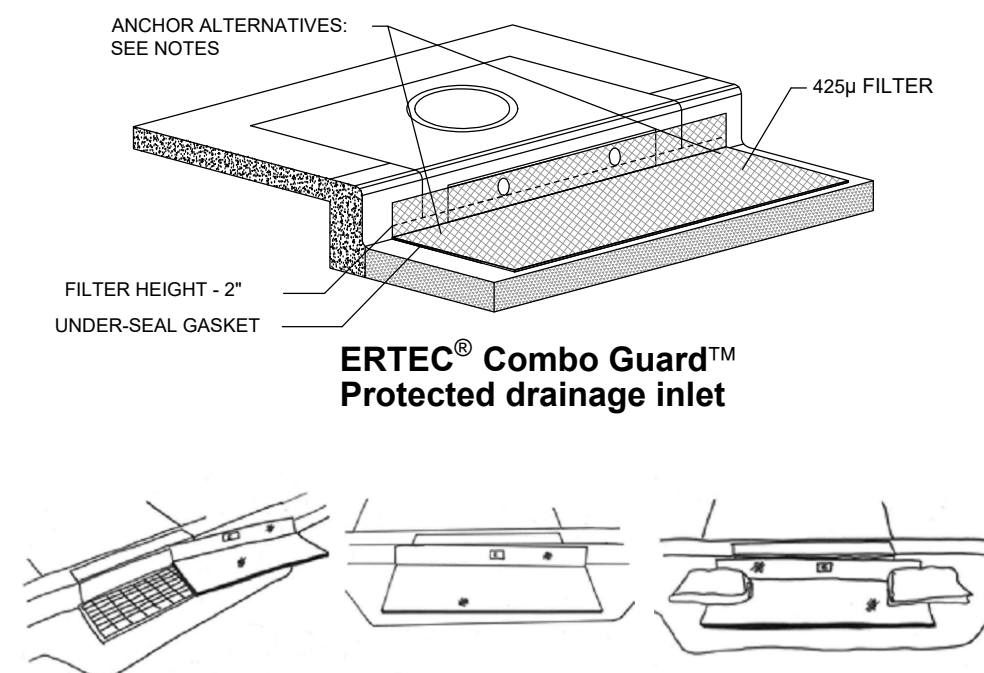
NOTES:

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



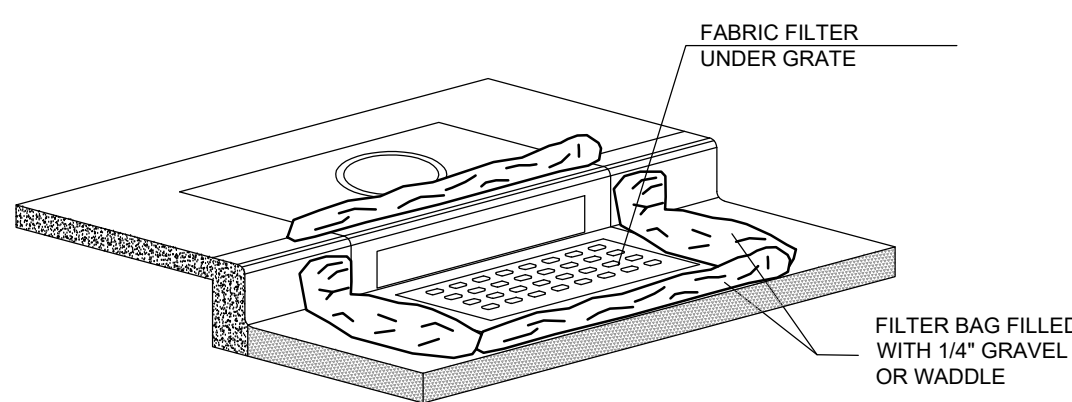
INSTALLATION NOTES

1. PLACEMENT: PLACE CG TIGHTLY AGAINST CURB OPENING AND COVER ENTIRE GRATE. CG SHOULD EXTEND AT LEAST 2 INCHES PAST GRATE TOWARDS STREET.
2. OVERLAP FOR LONG OPENINGS: OVERLAP CG UNITS AT LONGER OPENINGS.
3. ANCHOR: ANCHOR CG SO THAT WATER CANNOT FLOW BEHIND IT.
4. 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 INCHES 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.



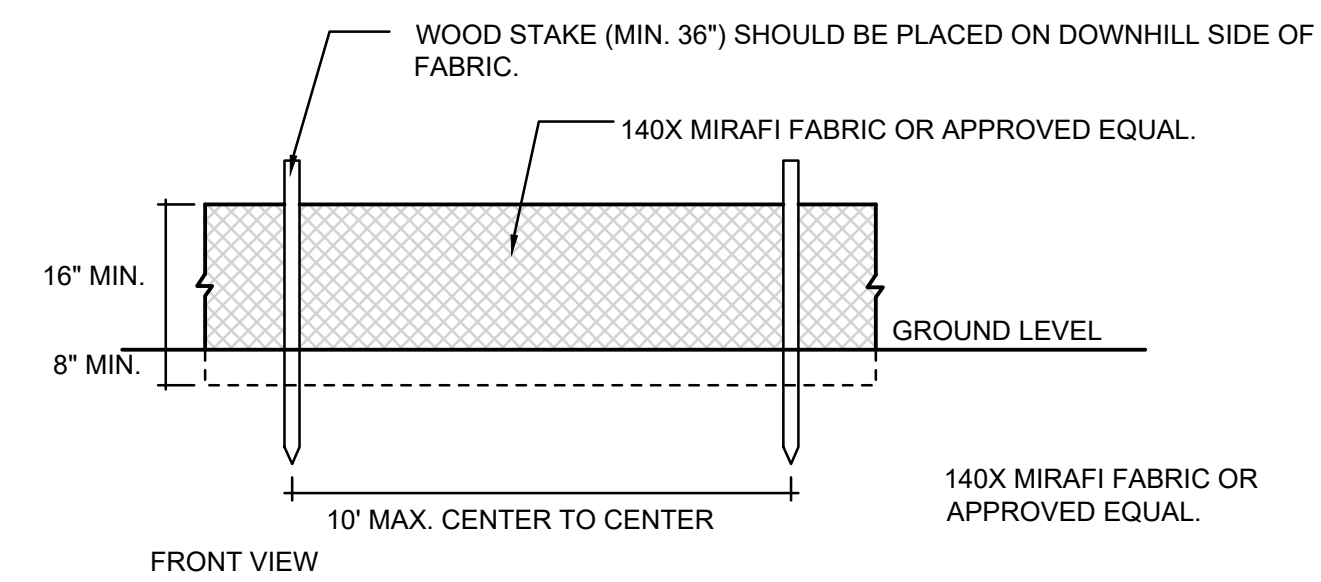
1A INLET PROTECTION - OPTION 1

Scale: NTS



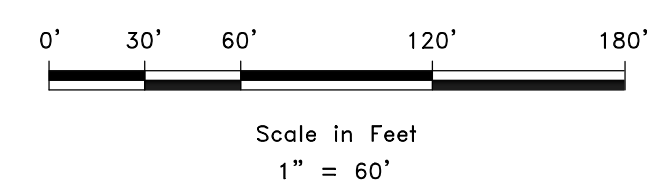
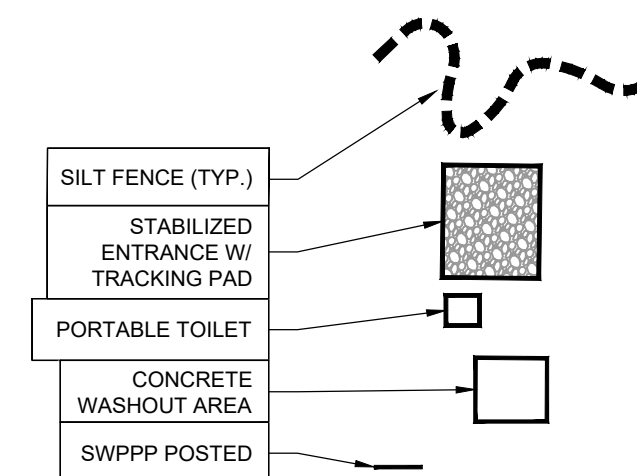
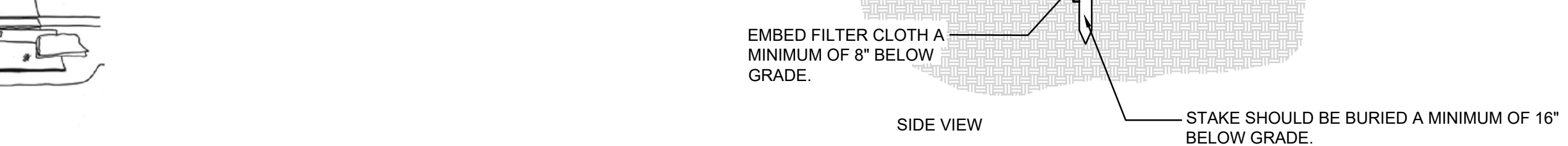
1B INLET PROTECTION - OPTION 2

Scale: NTS



2 SILT FENCE

Scale: NTS



SCALE: 1" = 60'	DATE: JAN 2019	DESIGN: CJP/PCWS	DRAWN: WS	CHECKED: PC
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SWPPP
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 EDEN, WEBER COUNTY, UTAH

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