



Hansen and Associates, Inc.
Consulting Engineers & Land Surveyors

August 8, 2012

Dave Marble
Division of Dam Safety
Utah Division of Water Rights
1594 West North Temple Suite 220,
P.O. Box 146300, Salt Lake City, Utah 84114-6300

Re: Small Dam Application for Tim Charlwood, developer of the Sanctuary

Dear Mr. Marble:

Our client, Tim Charlwood is developing a 6 lot subdivision with lots having 40 acres minimum. The subdivision is located in Weber County east of the Townsite of Huntsville. In getting Weber County's approval, the engineering department stated that we needed to get the states dam safety approval for two small detention basins that are proposed at the lower end (west end) of the development.. As stated in my email to you, I really do not think these detention basins constitute being a dam. They each have little or no dike being built. We are submitting these required documents just incase your approval is required.

Please find enclosed signed copies of the "Historic Property Effect Evaluation" application and the "Application for Dam Not Requiring Submission of Formal Plans" for your review. Also enclosed are the required associated documents and drawings.

Let me know if you have any questions or need more information.

Respectfully,
Hansen and Associates, Inc.



K. Greg Hansen, Pres. P.L.S.
Job No. 07-129

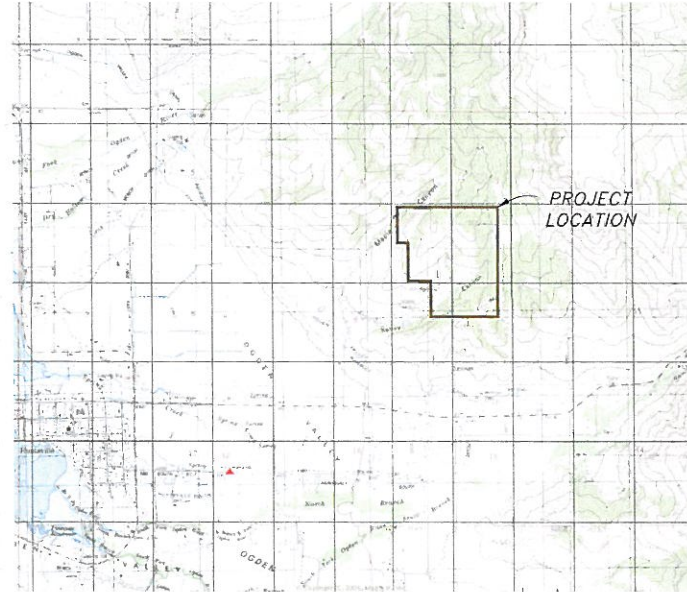
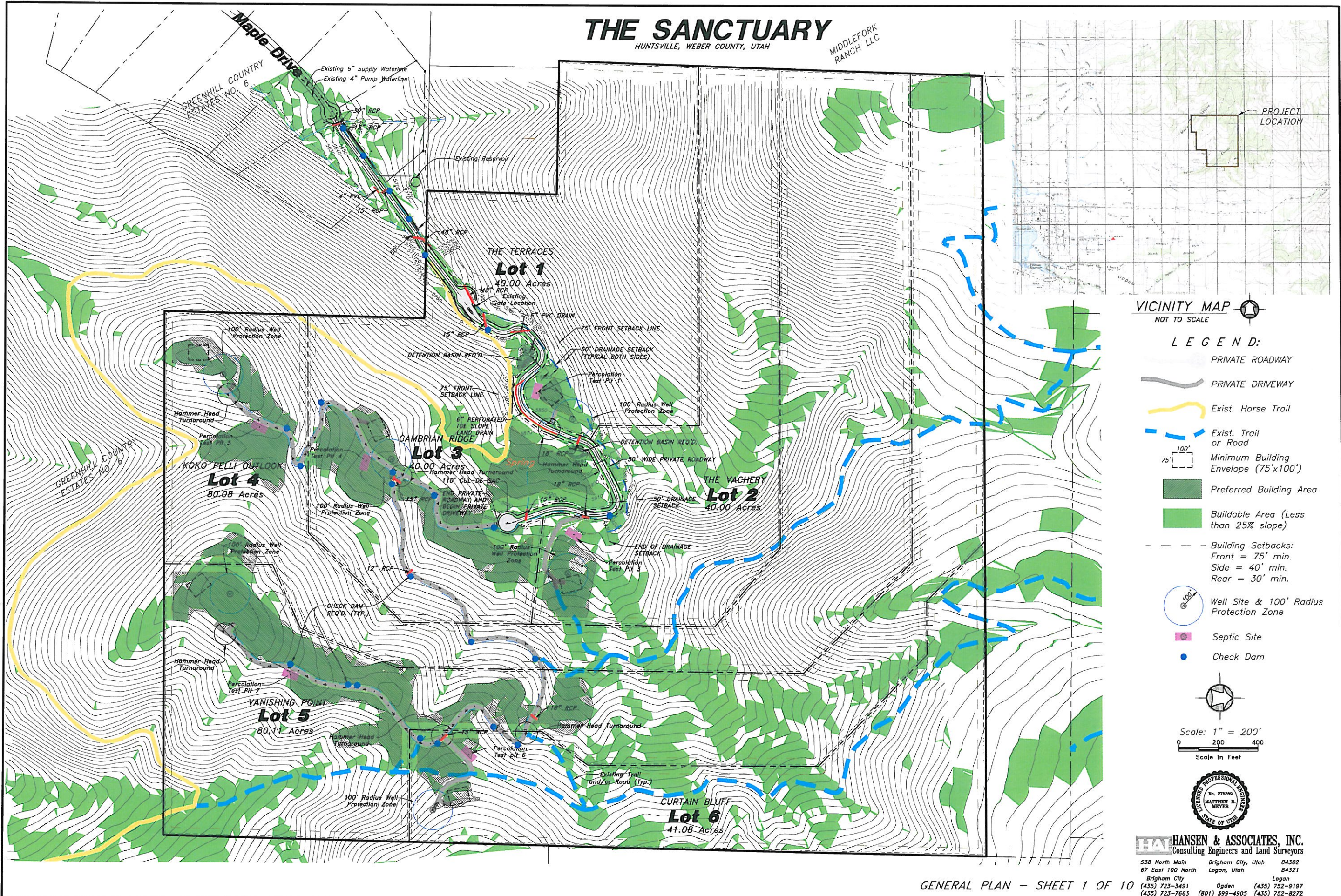
H a n s e n a n d A s s o c i a t e s , I n c .

538 North Main Street Brigham City, UT 84302 (435)723-3491 Logan (435) 752-8272 Ogden (801) 399-4905 Fax (435)723-3492 ww.haics.net

THE SANCTUARY

HUNTSVILLE, WEBER COUNTY, UTAH

MIDDLEFORK RANCH LLC



LEGEND:

- PRIVATE ROADWAY
- PRIVATE DRIVEWAY
- Exist. Horse Trail
- Exist. Trail or Road
- Minimum Building Envelope (75'x100')
- Preferred Building Area
- Buildable Area (Less than 25% slope)
- Building Setbacks: Front = 75' min. Side = 40' min. Rear = 30' min.
- Well Site & 100' Radius Protection Zone
- Septic Site
- Check Dam

Scale: 1" = 200'

Scale In Feet



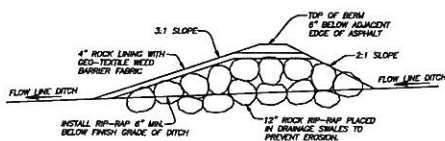
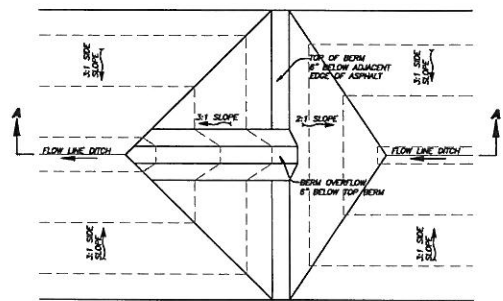
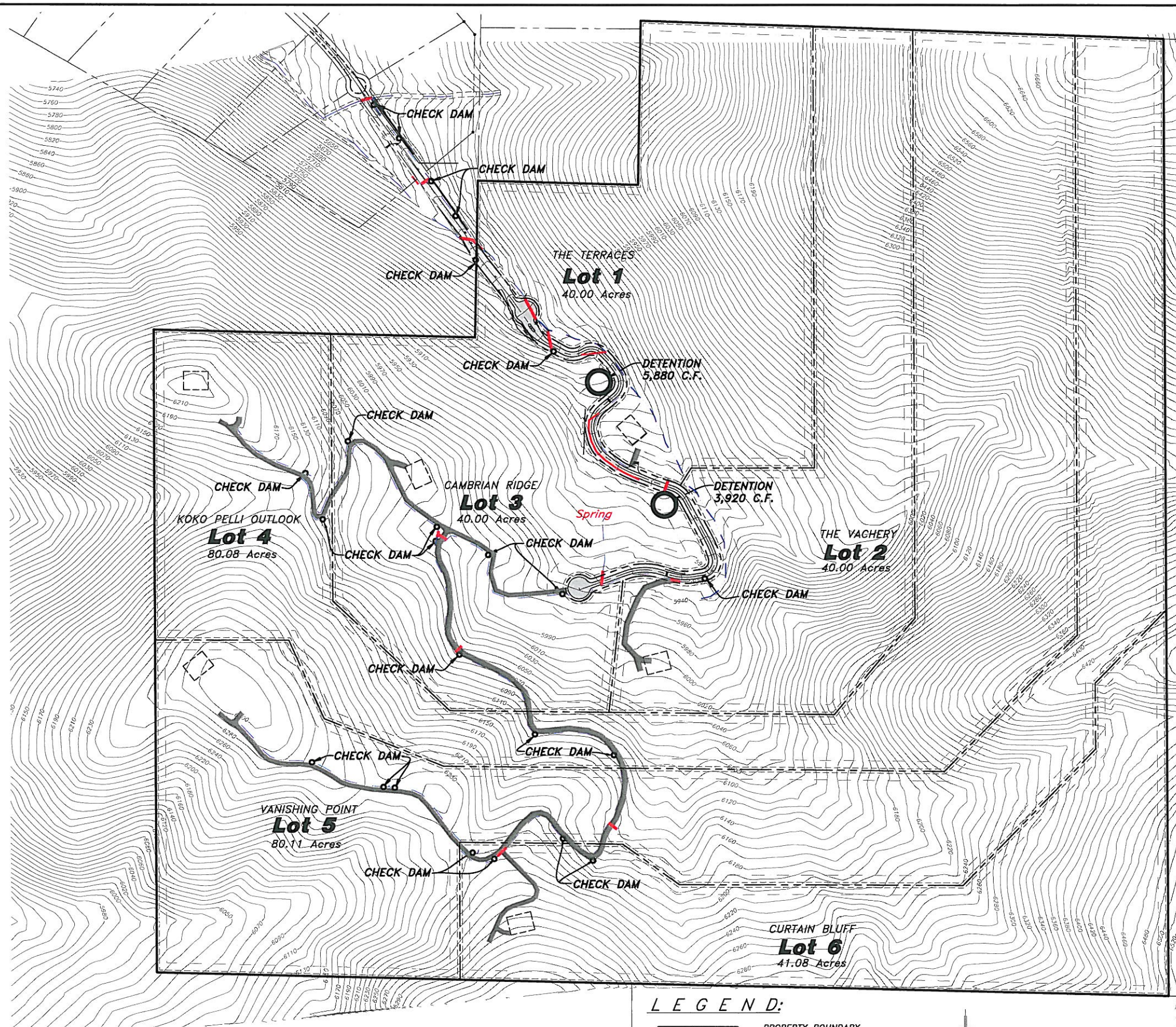
HANSEN & ASSOCIATES, INC.
Consulting Engineers and Land Surveyors

538 North Main Brigham City, Utah 84302
67 East 100 North Logan, Utah 84321

Brigham City (435) 723-3491
Ogden (435) 752-9197
(435) 723-7663 (801) 399-4905 (435) 752-8272

H:\2007\07-125_Sanctuary\Map\Map07-125.dwg, 7/17/2012, 1:53:08 PM, 1:00, 117

M:\2007\07-129 Sanctuary\mmap\07-129 Drainage Study.dwg, 7/17/2013 3:07:09 PM, 11, 117

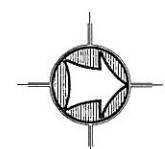


TYPICAL ROCK CHECK DAM DETAIL
SCALE: NONE

NOTE:
CONTRACTOR SHALL PROVIDE AN INTERMEDIATE CHECK DAM EVERY 400' TO 500' OR MORE FREQUENT AS SLOPE AND CONTRIBUTION AREAS DICTATE. (SEE DETAIL THIS SHEET)

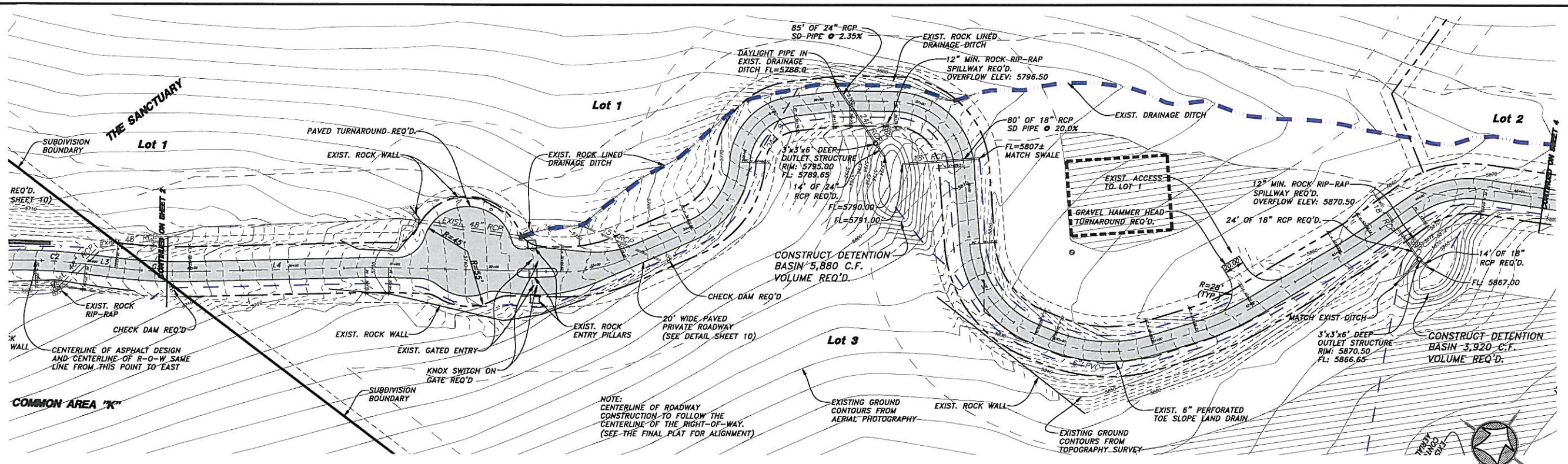
LEGEND:

- PROPERTY BOUNDARY
- EXISTING CONTOUR
- CHECK DAM
- DETENTION POND



SCALE: 1"=200'
0 200 400
Scale in Feet

HANSEN & ASSOCIATES, INC. Consulting Engineers and Land Surveyors 538 North Main Street, Brigham, Utah 84302 Visit us at www.haies.net Logan Brigham City (435) 723-4491 (607) 399-4905 (435) 752-8272	
Drawn By: MJB Date: 9/29/10 Designed By: Checked By: Approved By: Scale: 1"=200' Drawing File: 07-129 DRAINAGE JOB NUMBER: 07-129	No. 1 Date 7-16-2012 By MBL Revision 1. Revise drawing to match new storm drain study.
DRAINAGE MAP FOR THE SANCTUARY A PART OF SECTION 3 & 4, 16N, R2E, AND A PART OF SECTION 34, 17N, R2E, S1E&M WEBER COUNTY, UTAH	
SHEET 2 OF 2 SHEETS	

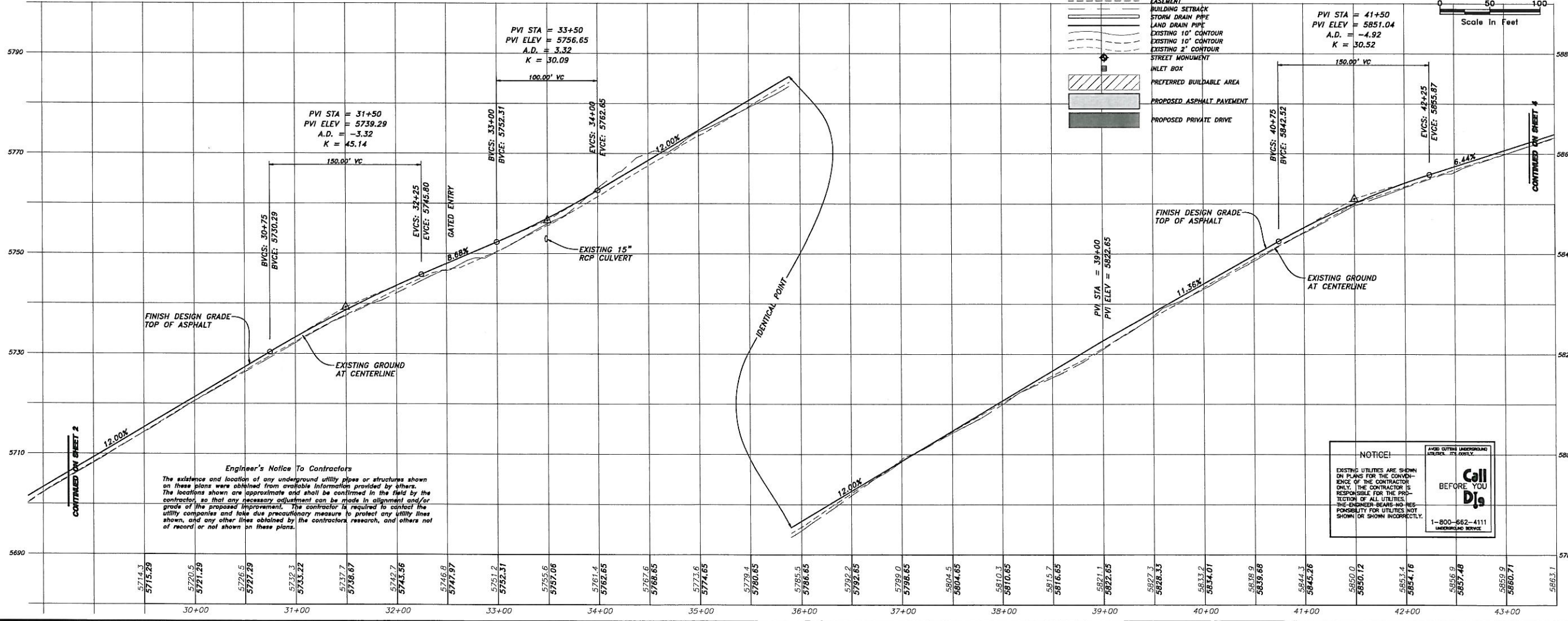


NOTE:
ROUGH GRADING, INSTALLATION OF GRANULAR BORROW, RETAINING WALLS AND STORM DRAIN PIPING LABELED AS EXISTING HAVE BEEN INSTALLED AS PART OF THIS PROJECT.

LEGEND:

- PROPERTY BOUNDARY LINE
- LOT LINE
- CENTERLINE
- EASEMENT
- BUILDING SETBACK
- STORM DRAIN PIPE
- LAND DRAIN PIPE
- EXISTING 10' CONTOUR
- EXISTING 10' CONTOUR
- EXISTING 2' CONTOUR
- STREET MONUMENT
- INLET BOX
- PREFERRED BUILDABLE AREA
- PROPOSED ASPHALT PAVEMENT
- PROPOSED PRIVATE DRIVE

SCALE: 1" = 50' HORIZ.
1" = 10' VERT.
Scale In Feet



Engineer's Notice To Contractors
The existence and location of any underground utility pipes or structures shown on these plans were obtained from available information provided by others. The locations shown are approximate and shall be confirmed in the field by the contractor, so that any necessary adjustment can be made in alignment and/or grade of the proposed improvement. The contractor is required to contact the utility companies and take due precautionary measure to protect any utility lines shown, and any other lines obtained by the contractor's research, and others not of record or not shown on these plans.

NOTICE!
EXISTING UTILITIES ARE SHOWN ON PLANS FOR THE CONVI-
NIENCE OF THE CONTRACTOR
ONLY. THE CONTRACTOR IS
RESPONSIBLE FOR THE PRO-
TECTION OF ALL UTILITIES.
THE ENGINEER BEARS NO RE-
SPONSIBILITY FOR UTILITIES NOT
SHOWN OR SHOWN INCORRECTLY.

Call Us BEFORE YOU Dig!
1-800-662-4111
UNDERGROUND SERVICE

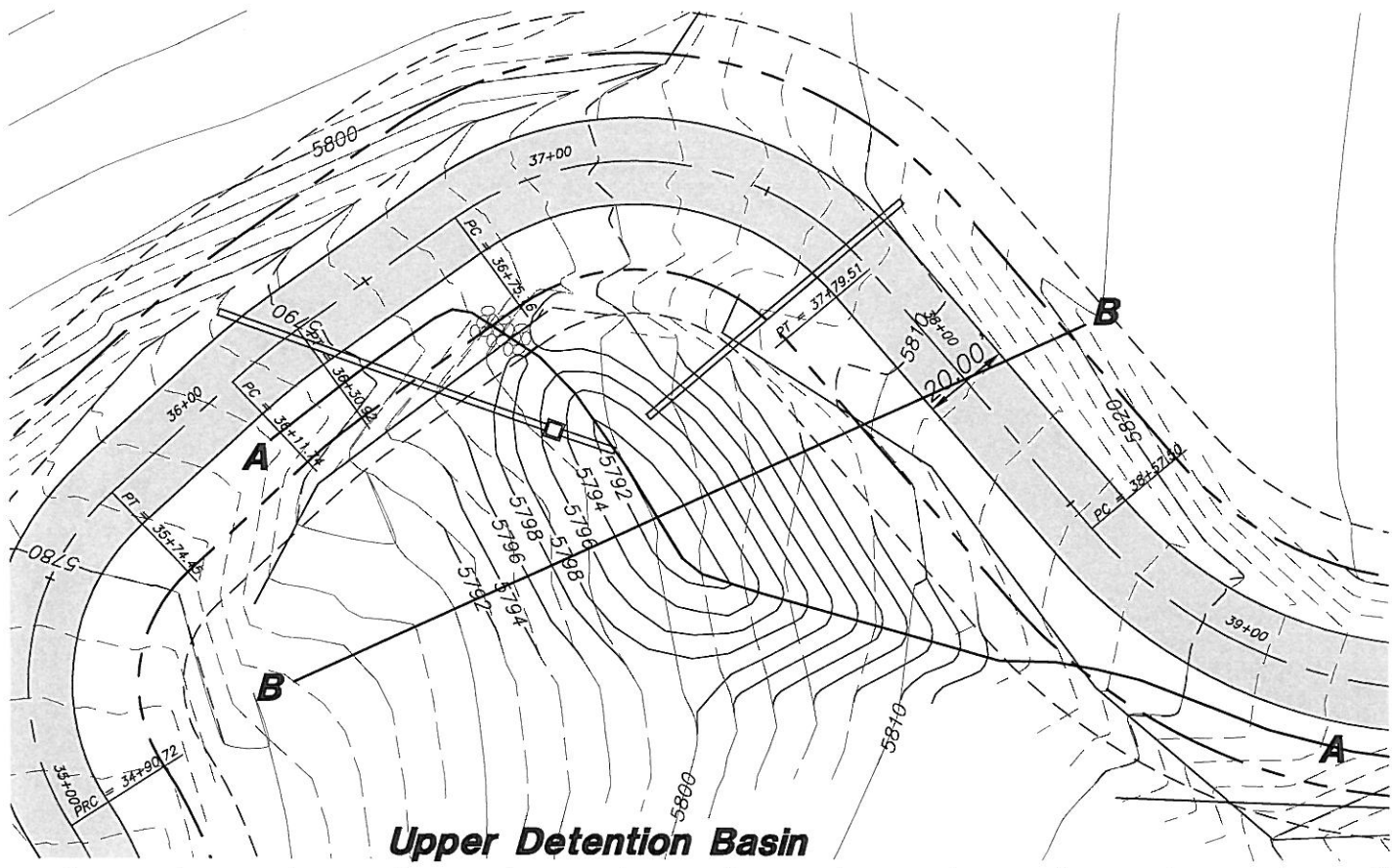
HANSEN & ASSOCIATES, INC.
Consulting Engineers and Land Surveyors
538 North Mall
87 East 100 North
(435) 733-3491
(435) 733-7663

Drawn By: MBL Date: 3/29/2010
Designed By: MBL
Checked By: MBL
Approved By: MBL
Scale: 1"=50' HORIZ 1"=10' VERT.
Drawing File: 07-12890.dwg
JOB NUMBER: 07-129

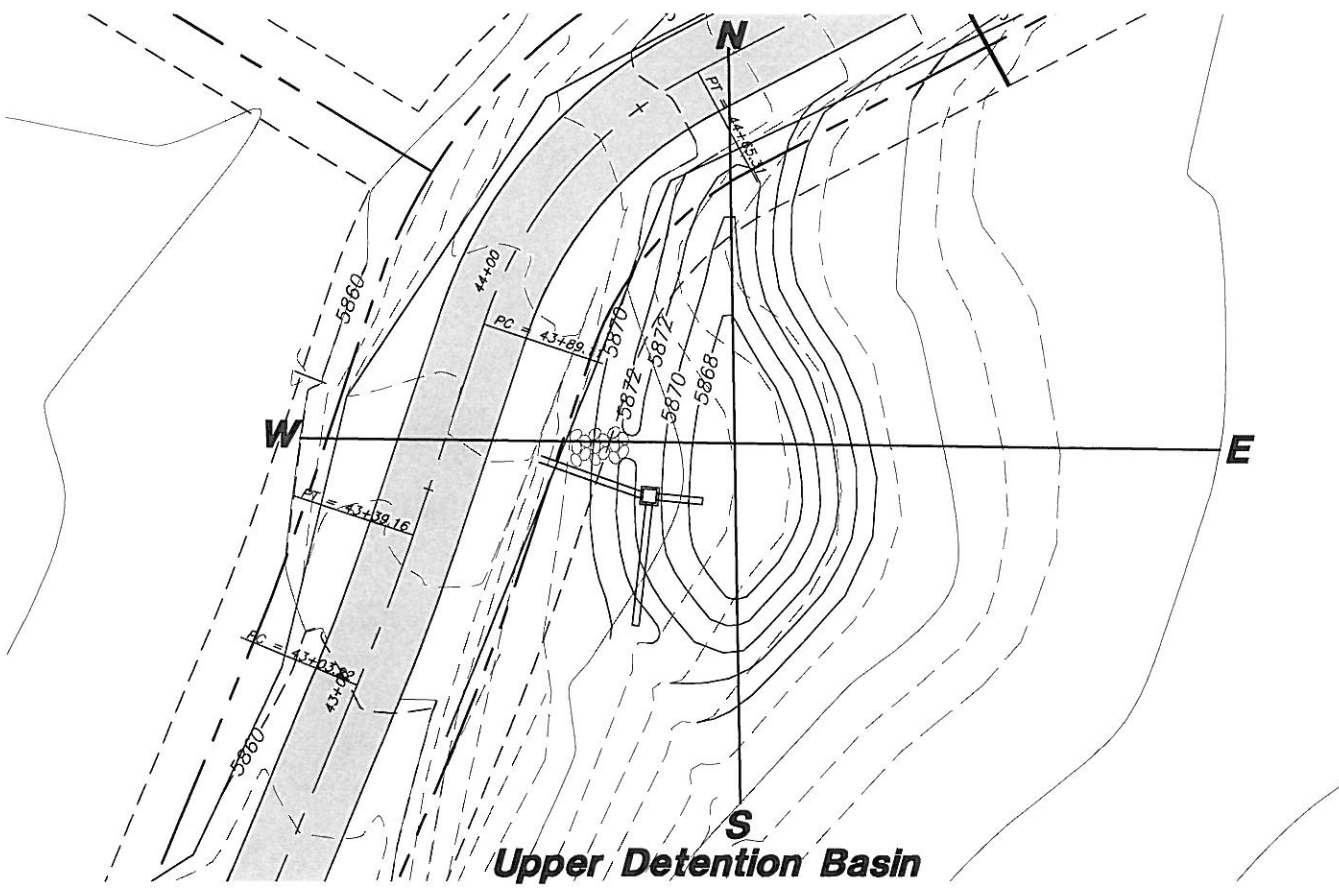
THE SANCTUARY
A PART OF SECTION 3 & 4, T6N, R2E, AND
A PART OF SECTION 34, T7N, R2E, SLR&M
WEBER COUNTY, UTAH

SHEET **3** OF **10** SHEETS

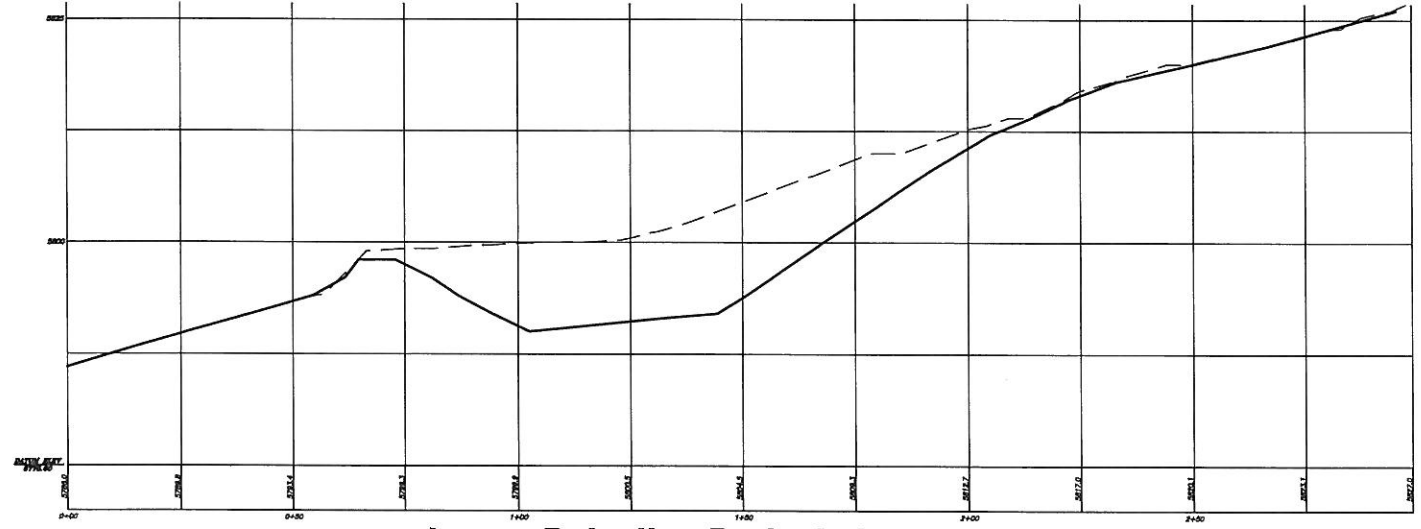
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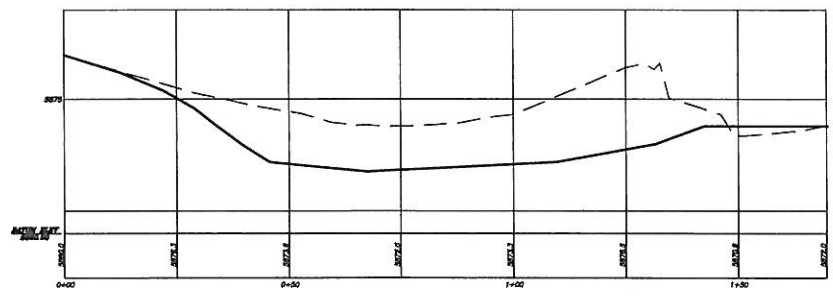
Upper Detention Basin



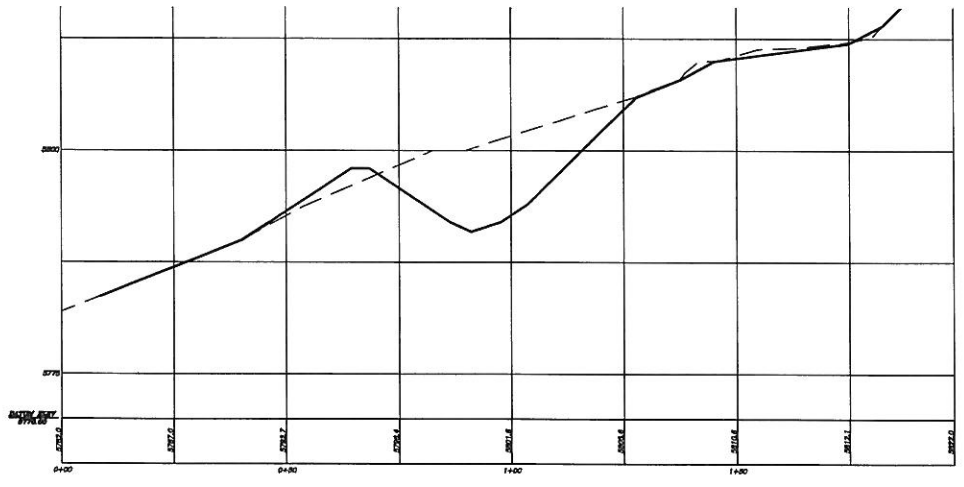
Upper Detention Basin



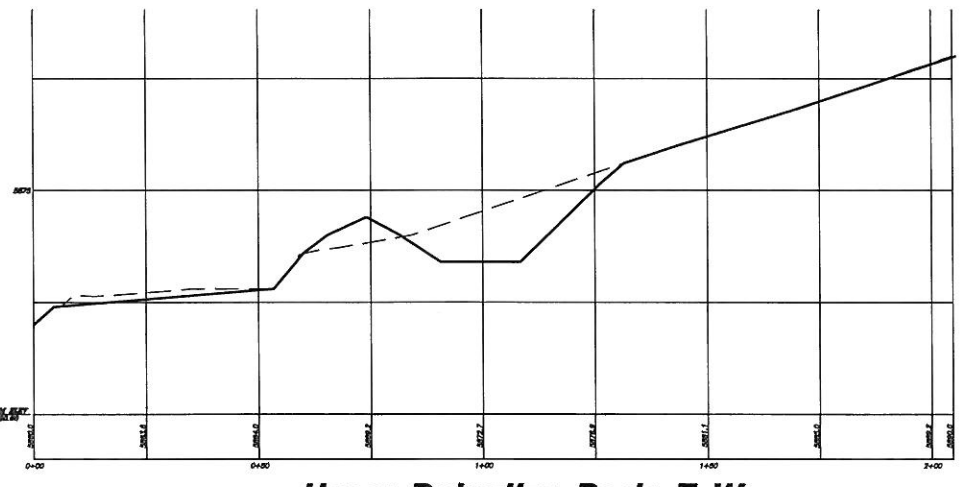
Lower Detention Basin A-A



Upper Detention Basin N-S



Lower Det Basin X-Section B-B



Upper Detention Basin E-W



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 67 East 100 North
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 (435) 723-7663
 Ogden (435) 252-9197
 Logan (435) 752-8272

Drawn By: MJB Date: 9/28/2010
 Designed By: SRM
 Checked By:
 Approved By:
 Scale: NIS
 Drawing File: 07-129PP.dwg
 JOB NUMBER: 07-129

DETENTION BASIN X-SECTIONS FOR
THE SANCTUARY
 A PART OF SECTION 3 & 4, T6N, R2E, AND
 A PART OF SECTION 34, T7N, R2E, SLB&H
 WEBER COUNTY, UTAH

SHEET
1
 OF
1
 SHEETS

No.	Date	By	Revision
1.	7/18/2012	MBJ	Revised drawing per W.C. Engineer review

**HISTORIC PROPERTY EFFECT EVALUATION
UTAH DIVISION OF WATER RIGHTS**

In accordance with Sec. 9-8-404, Utah Code Annotated, before approving any undertaking the Division must take into account the effect of the undertaking on historic properties and provide the State Historic Preservation officer with a written evaluation.

Project Number (Water Right, Non-Production Well, or Dam Application Number) : _____
Project Location : Section _____ Township _____ Range _____ Base & Meridian _____

Project Description: If the accompanying application is approved, what physical effects will occur to the land surface (i.e. buildings, pipelines, roads, wells, etc.)?
2 detention basins are to be constructed with the associated piping, outlet structures and rip-rap spillways. The West pond will hold 5880 c.f. (0.135 a.f.) of water. The East pond will hold 3920 c.f. (0.09 a.f.) of water. They both drain into an existing drainage channel on the opposite side of each of the existing road. (see attached drawing)

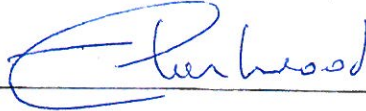
Describe any historic properties that you are aware could be effected by the proposed project.
To the best of my knowledge there are not any historic properties that will be effected by the construction of these detention basins.

Describe any historic property survey you are aware has been conducted at or near the site where the proposed project is to occur.

None that I am aware of.

Is there a federal or state connection to this project that has/will require a historic property evaluation? Y / N

It is the opinion of the Division the above-described undertaking may / will not affect historic property. For additional information on the proposed undertaking please visit the Division's website at <http://waterrights.utah.gov> or call 801-538-7240.



08, 08, 2012
Date

**APPLICATION FOR A DAM NOT REQUIRING
SUBMISSION OF FORMAL PLANS
UNDER SECTION 73-5A-502
STATE OF UTAH**

Received / / Entered / / Application No - -

The following application is submitted pursuant to Section 73-5a-204

1. APPLICANT INFORMATION

Name(s): Tim Charwood Telephone: 435-901-2337
Address: P.O. Box 980400
City: Park City State: UT Zip Code: 84098

2. PURPOSE OF RESERVOIR

Stock Pond _____ Flood Control X Recreation _____
Irrigation _____ Debris Basin _____ Fishery _____
Regulating Reservoir _____ Sedimentation _____ Wildlife _____
Diversion Dam _____ Evaporation _____ Tailings _____
Other (describe) _____

3. LEGAL LOCATION OF DAM

County Weber Quarter/Quarter SW Section 3
Township 6N Range 2E Base & Meridian SLB&M

4A. FOR DAMS BUILT ON A NATURAL STREAM OR DRAINAGE

Name of Natural Stream or Drainage _____
OR Drainage Area above dam _____ (square miles)
Distance below dam to nearest structure occupied by humans _____ (miles)

4B. FOR DAMS BUILT OFF- CHANNEL

Source of Water (ie: well, canal, ditch, etc.) Surface runoff from roadways
Capacity of source to reservoir 35 (cubic feet per second)
Distance below dam to nearest structure occupied by humans Currently 0.5 (miles)
Future 0.25 miles

5. DIMENSIONS OF DAM

Height (vertical) 4 feet Length (at top) 75 feet Width (at top) 6 feet
Upstream Slope 100 Horizontal on 20 Vertical
Downstream Slope 140 Horizontal on 20 Vertical
Surface Area at Spillway Crest 0.007 (acres) Capacity at Spillway Crest 0.135 (acre-feet)
Type of Dam (ie: earthfill, concrete, masonry, rockfill, etc.) Earthfill

6. LOW LEVEL OUTLET

Inside diameter of outlet 24 (inches) Total outlet length 85' (feet)
Type of Pipe RCP Type of gate or valve none
Location of gate or valve (ie: upstream, downstream, center, etc.) none
Outlet capacity with gate open and reservoir at maximum capacity 33 (cubic feet per second)

7. SPILLWAY

Crest Length (width of spillway) 12 (feet) Depth (bottom of spillway to top of dam) 2 (feet)
Type of Spillway (ie: earth channel, pipe, concrete, rock channel, Rock)
Spillway capacity with water at top of dam 35 (cubic feet per second)
Control (i.e. gates, flashboards, etc.) none

8. **WATER RIGHTS**

Describe: I have water rights assigned to each of the 6 lots E 4905 (35-12223)
E 4906 (35-12224), E 4907 (35-12225), E 4908 (35-12226), E 4909 (35-12227)
& E 4910 (35-12228)

9. **COMMENTS**

10. **PLANS**

The following drawings, including appropriate scales and dimensions, must be attached to the application:

- 1) A location map, such as a 7.5 minute USGS Quad Map, showing the exact location of the dam
- 2) A plan view of the dam and reservoir including the location of the spillway, outlet, and channel or supply source.
- 3) A profile of the dam along the centerline of the dam showing the natural ground, the top of the dam, and the depth to clearing, keyway bottom or cutoff trench.
- 4) A Cross Section of the dam through the outlet showing the location of the outlet and the types of materials the dam is to be constructed of.
- 5) Details of the spillway, outlet, drains, gates or valves, or other features of the dam or appurtenant structures.

The undersigned acknowledge they have read the instructions included with this application, and are aware no construction is to begin until this application has been approved by the Utah State Engineer.

08/08/2012
Date

[Signature]
Signature

- For Office Use Only -

Water Rights in Order By _____ Date _____
 Water Right Numbers if Applicable _____
 Regional Engineer's Hazard Rating (High, Moderate, Low) _____
 Reviewed by Dam Safety By _____ Date _____
 Estimated Breach Flow at Dam _____ (cubic feet per second)
 Comments _____

Date of Approval

State Engineer or Dam Safety Director

01/2000

**APPLICATION FOR A DAM NOT REQUIRING
SUBMISSION OF FORMAL PLANS
UNDER SECTION 73-5A-502
STATE OF UTAH**

Received / / Entered / / Application No - -

The following application is submitted pursuant to Section 73-5a-204

1. APPLICANT INFORMATION

Name(s): Tim Charwood Telephone: 435-901-2337
 Address: P.O. Box 980400
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Stock Pond _____ Flood Control X Recreation _____
 Irrigation _____ Debris Basin _____ Fishery _____
 Regulating Reservoir _____ Sedimentation _____ Wildlife _____
 Diversion Dam _____ Evaporation _____ Tailings _____
 Other (describe) _____

3. LEGAL LOCATION OF DAM

County Weber Quarter/Quarter NW Section 3
 Township 6N Range 2E Base & Meridian SLB&M

4A. FOR DAMS BUILT ON A NATURAL STREAM OR DRAINAGE

Name of Natural Stream or Drainage _____
 OR
 Drainage Area above dam _____ (square miles)
 Distance below dam to nearest structure occupied by humans _____ (miles)

4B. FOR DAMS BUILT OFF- CHANNEL

Source of Water (ie: well, canal, ditch, etc.) Surface runoff from roadways
 Capacity of source to reservoir 35 (cubic feet per second)
 Distance below dam to nearest structure occupied by humans current 0.5 (miles)
future 0.25

5. DIMENSIONS OF DAM

Height (vertical) 4 feet Length (at top) 90 feet Width (at top) 6 feet
 Upstream Slope 12 Horizontal on 100 Vertical
 Downstream Slope 20 Horizontal on 250 Vertical
 Surface Area at Spillway Crest 0.007 (acres) Capacity at Spillway Crest 0.09 (acre-feet)
 Type of Dam (ie: earthfill, concrete, masonry, rockfill, etc.) Earth Fill

6. LOW LEVEL OUTLET

Inside diameter of outlet 18 (inches) Total outlet length 24' (feet)
 Type of Pipe RCP Type of gate or valve none
 Location of gate or valve (ie: upstream, downstream, center, etc.) none
 Outlet capacity with gate open and reservoir at maximum capacity 33 (cubic feet per second)

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Date

[Signature]
Signature

- For Office Use Only -

Water Rights in Order By _____ Date _____
 Water Right Numbers if Applicable _____
 Regional Engineer's Hazard Rating (High, Moderate, Low) _____
 Reviewed by Dam Safety By _____ Date _____
 Estimated Breach Flow at Dam _____ (cubic feet per second)
 Comments _____

Date of Approval

State Engineer or Dam Safety Director

NATIONAL

