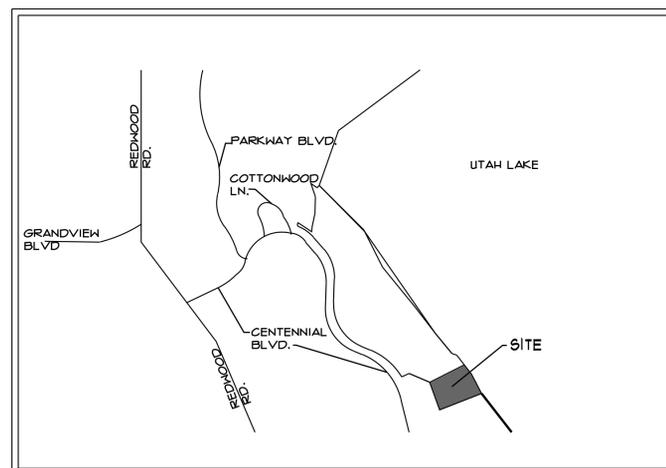


# SARATOGA SPRINGS 16A FINAL PLAT

SARATOGA SPRINGS, UTAH

## SUBDIVISION PLAT

- C-1 PLAT 16A
- C-2 GRADING AND DRAINAGE PLAN
- C-3 UTILITY PLAN
- C-4 EROSION CONTROL PLAN
- C-5.0 SITE DETAILS
- C-5.1 SITE DETAILS
- C-5.2 SITE DETAILS
- PP-1 STREET PLAN & PROFILE ( STA. 1+00 - 4+09.55 )
- PP-2 STORM DRAIN PLAN & PROFILE ( STA. 5+42.20 - 10+36.57 )
- L1.0 LANDSCAPE AND IRRIGATION DESIGN
- L2.0 LANDSCAPE AND IRRIGATION DETAILS



VICINITY MAP



March 20, 2014

### SUBDIVIDER:

WARDLEY DEVELOPMENT  
5296 SOUTH COMMERCE DR. SUITE 303  
MURRAY, UTAH, 84107  
(801) 293-9674

### ENGINEER/SURVEYOR:



**SALT LAKE CITY**  
45 West 10000 South  
Suite 500  
Sandy, UT 84070  
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Fax: 801.255.4449

**LAYTON**  
Phone: 801.547.1100

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Phone: 435.843.3590

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Phone: 435.865.1453

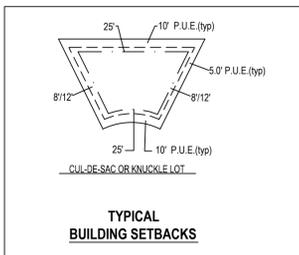
WWW.ENSIGNUTAH.COM

PROJECT MANAGER: CLARKE MCFARLANE

SARATOGA SPRINGS 16A FINAL PLAT

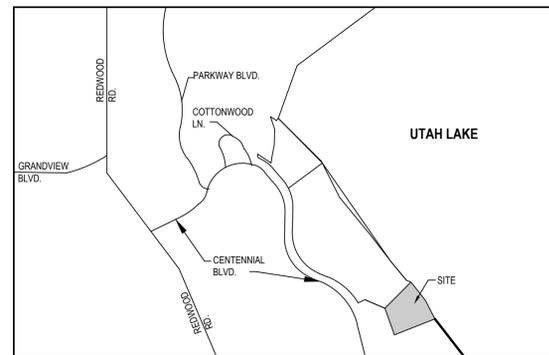


CALL BLUESTAKES  
@ 1-800-662-4111 AT LEAST 48  
HOURS PRIOR TO THE  
COMMENCEMENT OF ANY  
CONSTRUCTION.



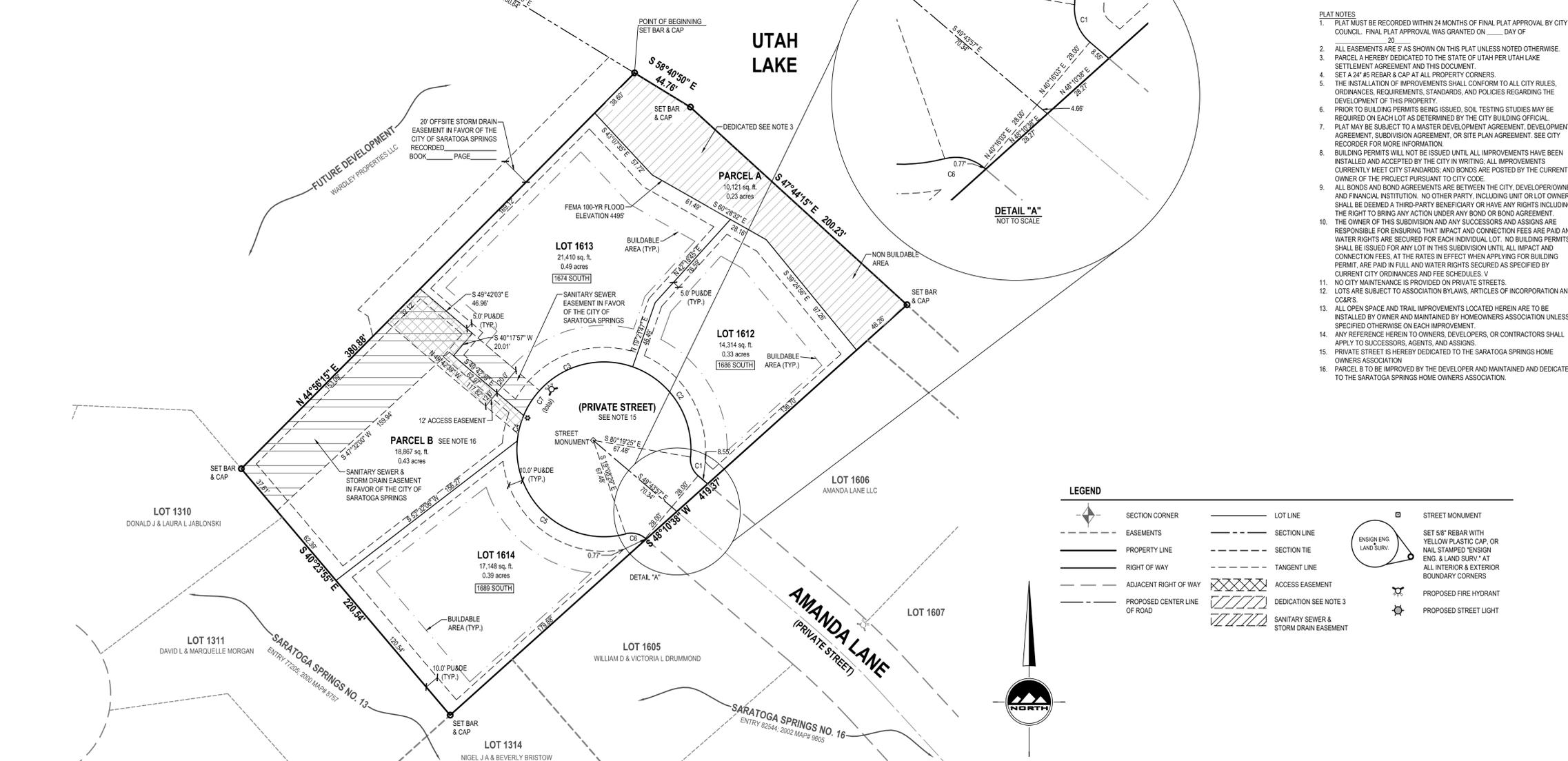
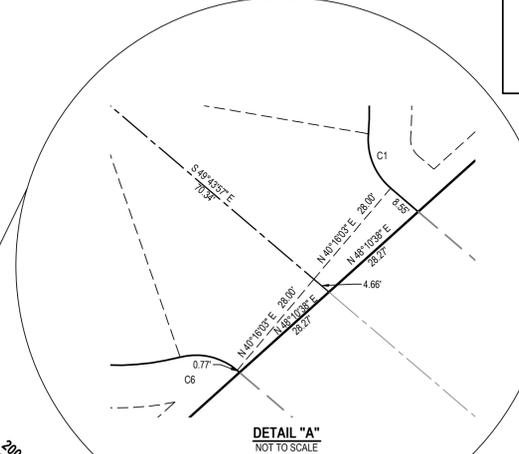
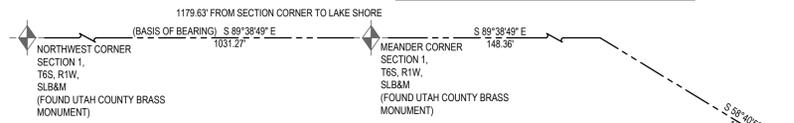
# SARATOGA SPRINGS 16A

**FINAL PLAT**  
LOCATED IN THE NORTHWEST QUARTER OF  
SECTION 1, TOWNSHIP 6 SOUTH, RANGE 1 WEST,  
SALT LAKE BASE AND MERIDIAN,  
SARATOGA SPRINGS CITY, UTAH COUNTY, UTAH



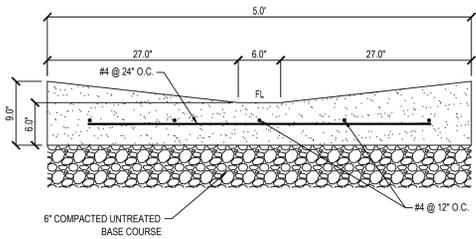
VICINITY MAP  
NOT TO SCALE

- PLAT NOTES**
- PLAT MUST BE RECORDED WITHIN 24 MONTHS OF FINAL PLAT APPROVAL BY CITY COUNCIL. FINAL PLAT APPROVAL WAS GRANTED ON \_\_\_\_ DAY OF \_\_\_\_ 20\_\_.
  - ALL EASEMENTS ARE 5' AS SHOWN ON THIS PLAT UNLESS NOTED OTHERWISE.
  - PARCEL A HEREBY DEDICATED TO THE STATE OF UTAH PER UTAH LAKE SETTLEMENT AGREEMENT AND THIS DOCUMENT.
  - SET A 2" #8 REBAR & CAP AT ALL PROPERTY CORNERS.
  - THE INSTALLATION OF IMPROVEMENTS SHALL CONFORM TO ALL CITY RULES, ORDINANCES, REQUIREMENTS, STANDARDS, AND POLICIES REGARDING THE DEVELOPMENT OF THIS PROPERTY.
  - PRIOR TO BUILDING PERMITS BEING ISSUED, SOIL TESTING STUDIES MAY BE REQUIRED ON EACH LOT AS DETERMINED BY THE CITY BUILDING OFFICIAL.
  - PLAT MAY BE SUBJECT TO A MASTER DEVELOPMENT AGREEMENT, DEVELOPMENT AGREEMENT, SUBDIVISION AGREEMENT, OR SITE PLAN AGREEMENT. SEE CITY RECORDER FOR MORE INFORMATION.
  - BUILDING PERMITS WILL NOT BE ISSUED UNTIL ALL IMPROVEMENTS HAVE BEEN INSTALLED AND ACCEPTED BY THE CITY IN WRITING. ALL IMPROVEMENTS CURRENTLY MEET CITY STANDARDS, AND BONDS ARE POSTED BY THE CURRENT OWNER OF THE PROJECT PURSUANT TO CITY CODE.
  - ALL BONDS AND BOND AGREEMENTS ARE BETWEEN THE CITY, DEVELOPER/OWNER AND FINANCIAL INSTITUTION. NO OTHER PARTY, INCLUDING UNIT OR LOT OWNERS, SHALL BE DEEMED A THIRD-PARTY BENEFICIARY OR HAVE ANY RIGHTS INCLUDING THE RIGHT TO BRING ANY ACTION UNDER ANY BOND OR BOND AGREEMENT.
  - THE OWNER OF THIS SUBDIVISION AND ANY SUCCESSORS AND ASSIGNS ARE RESPONSIBLE FOR ENSURING THAT IMPACT AND CONNECTION FEES ARE PAID AND WATER RIGHTS ARE SECURED FOR EACH INDIVIDUAL LOT. NO BUILDING PERMITS SHALL BE ISSUED FOR ANY LOT IN THIS SUBDIVISION UNTIL ALL IMPACT AND CONNECTION FEES, AT THE RATES IN EFFECT WHEN APPLYING FOR BUILDING PERMIT, ARE PAID IN FULL AND WATER RIGHTS SECURED AS SPECIFIED BY CURRENT CITY ORDINANCES AND FEE SCHEDULES. Y
  - NO CITY MAINTENANCE IS PROVIDED ON PRIVATE STREETS.
  - LOTS ARE SUBJECT TO ASSOCIATION BYLAWS, ARTICLES OF INCORPORATION AND CC&RS.
  - ALL OPEN SPACE AND TRAIL IMPROVEMENTS LOCATED HEREIN ARE TO BE INSTALLED BY OWNER AND MAINTAINED BY HOMEOWNERS ASSOCIATION UNLESS SPECIFIED OTHERWISE ON EACH IMPROVEMENT.
  - ANY REFERENCE HEREIN TO OWNERS, DEVELOPERS, OR CONTRACTORS SHALL APPLY TO SUCCESSORS, AGENTS, AND ASSIGNS.
  - PRIVATE STREET IS HEREBY DEDICATED TO THE SARATOGA SPRINGS HOME OWNERS ASSOCIATION.
  - PARCEL B TO BE IMPROVED BY THE DEVELOPER AND MAINTAINED AND DEDICATED TO THE SARATOGA SPRINGS HOME OWNERS ASSOCIATION.

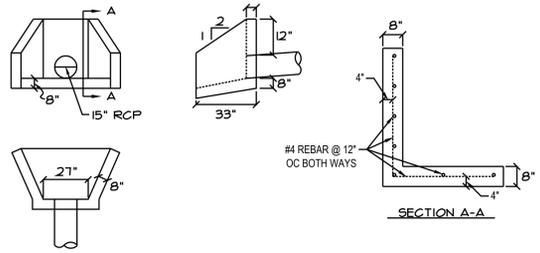


CALL BLUESTAKES @ 1-800-662-4111 AT LEAST 48 HOURS PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION.

**BENCHMARK**  
NORTH QUARTER CORNER  
SECTION 2,  
T6S, R14W,  
SLB41M  
ELEVATION = 4518.74 PER NGVD 1929  
PER UTAH COUNTY SURVEYORS OFFICE



**DETENTION POND WATERWAY**  
SCALE: NONE



**SLOPED CONCRETE HEADWALL DETAIL**  
SCALE: NONE

**CUT FILL QUANTITIES**  
CUT 3860 CYD  
FILL 2689 CYD  
NET 1171 CYD

EN SIGN engineering . planning . surveying  
Project: Wiltshire Estates  
By: D. Cowley  
Date: 20-Mar-2014  
Project No.: U1237  
Checked By:  
Sheet: 1 of 1

**DRAINAGE CALCULATION**

Area Calculations				Area Runoff Coefficients			
Hardscaped Area (A <sub>p</sub> ):	5.41 acres	C <sub>p</sub> :	0.85	Hardscaped Area (A <sub>p</sub> ):	5.41 acres	C <sub>p</sub> :	0.85
Landscape Area (A <sub>l</sub> ):	15.53 acres	C <sub>l</sub> :	0.15	Landscape Area (A <sub>l</sub> ):	15.53 acres	C <sub>l</sub> :	0.15
TOTAL AREA (A):	20.94 acres	WEIGHTED C:	0.35	TOTAL AREA (A):	20.94 acres	WEIGHTED C:	0.35

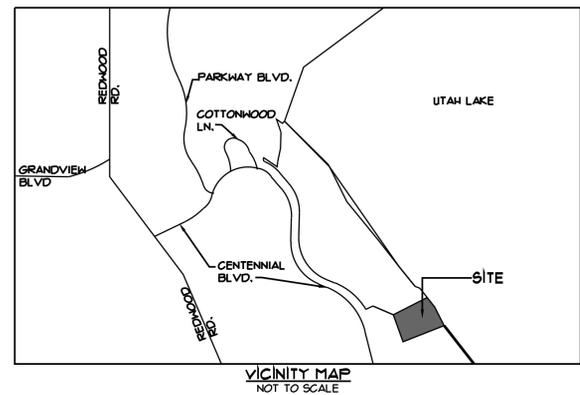
  

Runoff Calculations							
				Allowable Runoff			
				Total allowable runoff			
				3.788 cfs			
Time (min)	CA (Acres)	Precipitation (in)	Time (sec)	Cumulative Runoff (ft <sup>3</sup> )	Allowed Runoff (ft <sup>3</sup> )	Storage (ft <sup>3</sup> )	
15	6.63	0.85	900	22,812	3,409	19,202	
30	6.63	1.28	1,800	30,427	6,819	23,609	
60	6.63	1.58	3,600	37,706	13,637	24,069	
120	6.63	1.70	7,200	40,665	27,274	13,391	
180	6.63	1.71	10,800	40,787	40,910	-174	
360	6.63	1.81	21,600	43,242	81,821	-38,579	
720	6.63	1.89	43,200	47,538	163,642	-116,104	
<b>NOTE: 100 Year Storm</b>				STORAGE REQUIRED: 24,069			
				STORAGE PROVIDED Pond: 24,908			

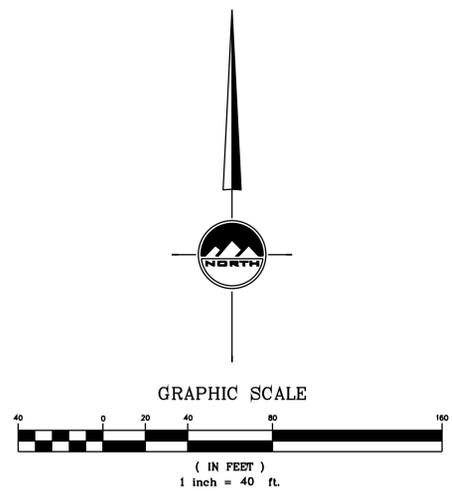
Outlet Control

Q through orifice:		Gate Size		Pipe Parameters	
3.788 cfs		Area (in <sup>2</sup> ) = 38.12 = Q / (C(2gh) <sup>0.5</sup> )		TYPE OF PIPE = CONCRETE	
C = 0.6	g (ft/s <sup>2</sup> ) = 32.2	Width (in) = 5.5	ROUGHNESS (n) = 0.015	PIPE DIA. (d) = 15	
HWM = 4510.3	FL @ Gate = 4501.5	Height (in) = 8.95	%SLOPE (s) = 0.50%	Q allow = 4.58	
h (ft) = 8.8	Unity Check of Q (cfs) ok				

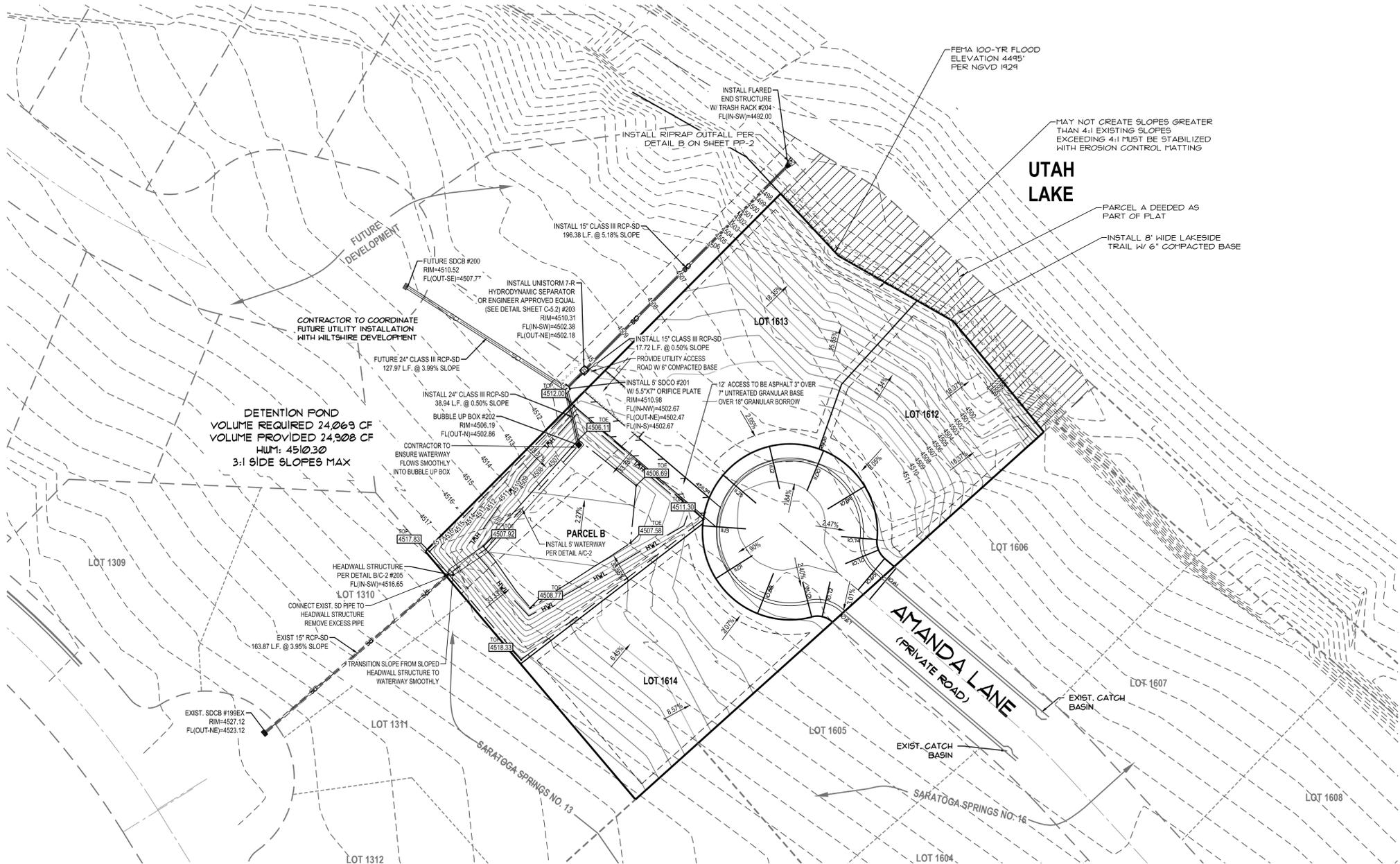
**PROVIDE:**  
15" Dia. CONCRETE Pipe With 5.5" x 7" Vertical Slot in Metal Headgate  
(Orifice coefficient is taken from McCuen, Richard / Hydrologic Design Methods for 1998 p.424)



**LEGEND**  
--- PROPOSED CONTOUR  
--- EXISTING CONTOUR  
--- PROPOSED CENTERLINE OR ROAD  
--- DRAINAGE FLOW



LOCATED IN THE EAST HALF OF THE  
SOUTHWEST QUARTER  
OF SECTION 23  
TOWNSHIP 3 SOUTH, RANGE 4 WEST,  
SALT LAKE BASE AND MERIDIAN  
SARATOGA SPRINGS, UTAH COUNTY, UTAH



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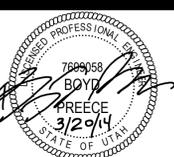
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FOR:  
WARDLEY PROPERTIES  
5298 SOUTH COMMERCE DR. SUITE 303  
MURRAY, UT

CONTACT:  
LYNN WARDLEY  
PHONE: 801-293-9674  
FAX:

SARATOGA SPRINGS 16A

1680 SOUTH AMANDA LANE  
SARATOGA SPRINGS, UTAH



FINAL PLAT SUBMITTAL 3/20/14

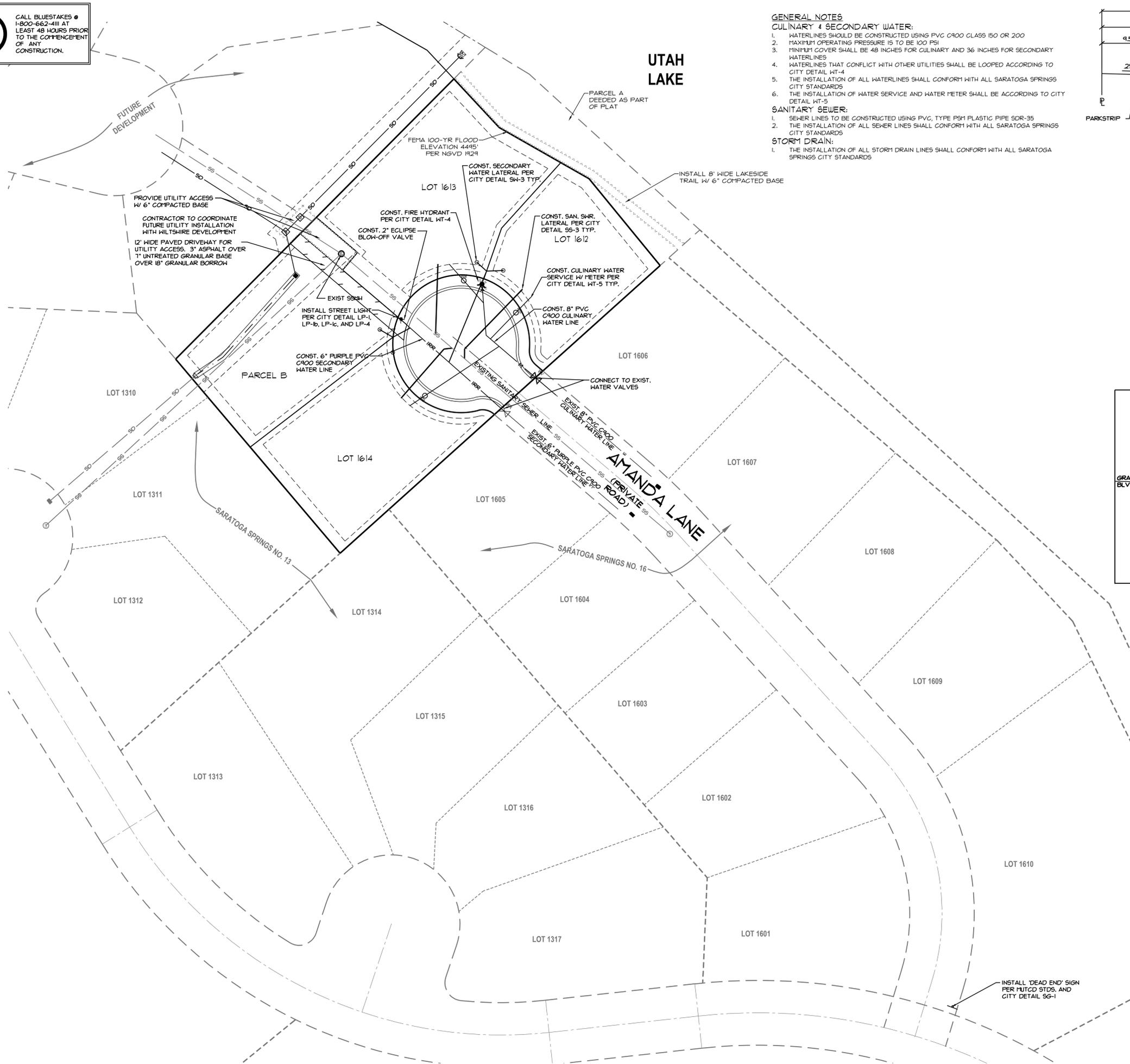
GRADING &  
DRAINAGE PLAN

PROJECT NUMBER: U1237  
PRINT DATE: 3/21/14

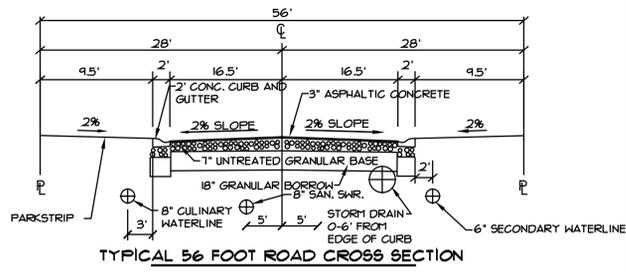
DRAWN BY: [blank]  
CHECKED BY: [blank]

PROJECT MANAGER:  
D. KINSMAN

C-2

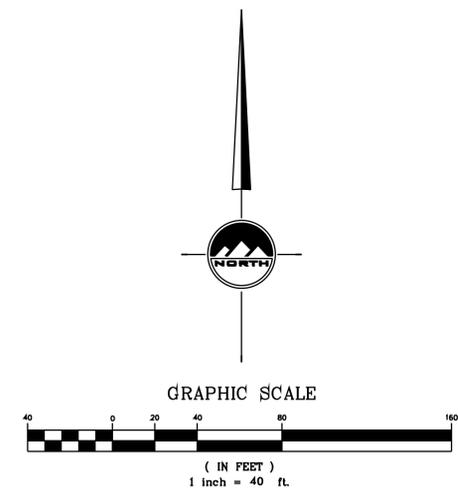
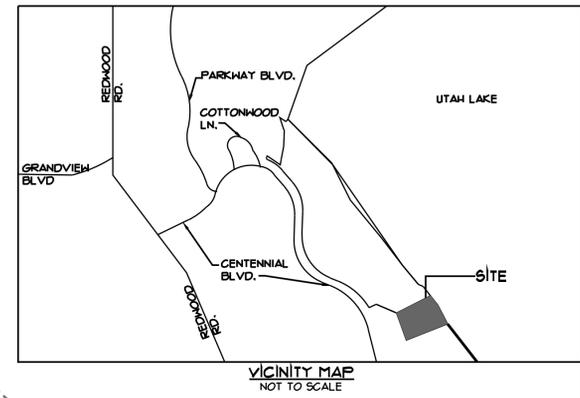


**GENERAL NOTES**  
**CULINARY & SECONDARY WATER:**  
 1. WATERLINES SHOULD BE CONSTRUCTED USING PVC C900 CLASS 150 OR 200  
 2. MAXIMUM OPERATING PRESSURE IS TO BE 100 PSI  
 3. MINIMUM COVER SHALL BE 48 INCHES FOR CULINARY AND 36 INCHES FOR SECONDARY WATERLINES  
 4. WATERLINES THAT CONFLICT WITH OTHER UTILITIES SHALL BE LOOPED ACCORDING TO CITY DETAIL WT-4  
 5. THE INSTALLATION OF ALL WATERLINES SHALL CONFORM WITH ALL SARATOGA SPRINGS CITY STANDARDS  
 6. THE INSTALLATION OF WATER SERVICE AND WATER METER SHALL BE ACCORDING TO CITY DETAIL WT-5  
**SANITARY SEWER:**  
 1. SEWER LINES TO BE CONSTRUCTED USING PVC, TYPE PS1 PLASTIC PIPE SDR-35  
 2. THE INSTALLATION OF ALL SEWER LINES SHALL CONFORM WITH ALL SARATOGA SPRINGS CITY STANDARDS  
**STORM DRAIN:**  
 1. THE INSTALLATION OF ALL STORM DRAIN LINES SHALL CONFORM WITH ALL SARATOGA SPRINGS CITY STANDARDS



**LEGEND**

- EDGE OF ASPHALT
- EXISTING BUILDING
- PROPOSED CULINARY WATER LINE
- PROPOSED SECONDARY WATER LINE
- EXISTING SANITARY SEWER LINE
- EXISTING CULINARY WATER LINE
- EXISTING SECONDARY WATER LINE



LOCATED IN THE EAST HALF OF THE  
 SOUTHWEST QUARTER  
 OF SECTION 23  
 TOWNSHIP 3 SOUTH, RANGE 4 WEST,  
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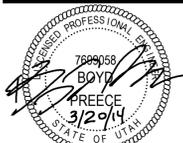
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 WARDLEY PROPERTIES  
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 MURRAY, UT

CONTACT:  
 LYNN WARDLEY  
 PHONE: 801-293-9674  
 FAX:

**SARATOGA SPRINGS 16A**

**1680 SOUTH AMANDA LANE  
 SARATOGA SPRINGS, UTAH**



FINAL PLAT SUBMITTAL 3/20/14

**UTILITY PLAN**

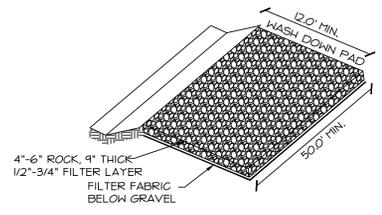
PROJECT NUMBER: U1237  
 PRINT DATE: 3/21/14  
 DRAWN BY:  
 CHECKED BY:

PROJECT MANAGER:  
 D. KINSMAN

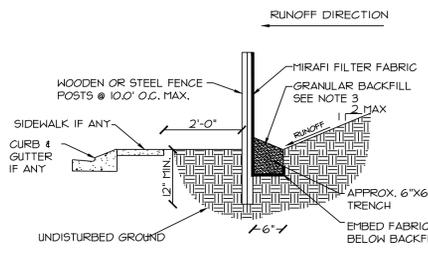
**C-3**

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 1-800-662-4111 AT  
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**BENCHMARK**  
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 ELEVATION = 4578.79 PER NGVD 1929  
 PER UTAH COUNTY SURVEYORS OFFICE

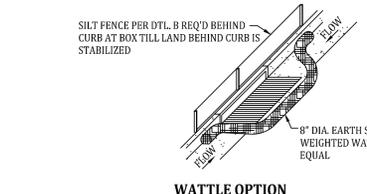


NOTE: PLACE SIGN ADJACENT TO ENTRANCE \* CONSTRUCTION TRAFFIC ONLY - ALL CONSTRUCTION TRAFFIC SHALL ENTER AND EXIT SITE AT THIS LOCATION \*  
**TEMPORARY VEHICLE WASHDOWN & STABILIZED CONSTRUCTION ENTRANCE**  
 SCALE: NONE

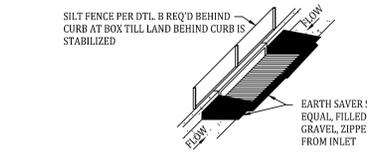


**TEMPORARY SILT FENCE**  
 SCALE: NONE

- EXCAVATE 6" X 6" TRENCH ALONG LIMITS OF DISTURBANCE AS SHOWN ON CONSTRUCTION DRAWINGS.
- POSTS SHALL BE POSITIONED ON DOWNSTREAM SIDE OF FENCE.
- LAY TOE-IN FABRIC FLAP IN BOTTOM OF TRENCH. BACKFILL TRENCH WITH FREE DRAINING GRANULAR MATERIAL. COMPACT TRENCH TO SATISFACTION OF THE ENGINEER OF RECORD.
- SILT FENCE GEOTEXTILE SHALL MEET AASHTO M288-92 REQUIREMENTS.
- REMOVE & DISPOSE OF SEDIMENT WHEN ACCUMULATION IS 50% OF EXPOSED FENCE HEIGHT.
- 10' MAX. SPACING BETWEEN STAKES.
- SILT FENCES SHALL BE INSTALLED ALONG CONTOURS, NOT UP AND DOWN SLOPES, WITH 10' OVERLAP AT BREAKS.



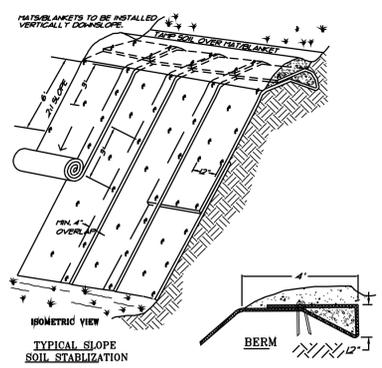
**WATTLE OPTION**



**SANDBAG OPTION**

- NOTES:
- PLACE WATTLES OR GRAVEL BAGS TIGHT AGAINST CURB TO PREVENT SEDIMENT-LADEN WATER FROM GETTING BETWEEN CURB AND WATTLE/BAG.
  - PLACE WATTLES OR GRAVEL BAGS SUCH THAT FLOW DOES NOT OVERTOP CURB OR ROAD CENTERLINE.
  - INSPECT INLET PROTECTION AFTER EVERY LARGE STORM EVENT AND AT LEAST BI-WEEKLY, OR PER SWPPP REQUIREMENTS, WHICHEVER IS MORE STRINGENT, TO ENSURE THAT SEDIMENT CONTROL IS MEETING ITS DESIGN INTENT. MAINTAIN AND/OR REPLACE AS NEEDED.
  - REMOVE SEDIMENT ACCUMULATED WHEN IT REACHES 50% OF GRAVEL BAG OR WATTLE HEIGHT.
  - CONTRACTOR MAY SUBMIT AN ALTERNATIVE METHOD OF INLET PROTECTION. THE ALTERNATIVE METHOD SHALL BE APPROVED BY THE CITY INSPECTOR AND THE ENGINEER OF RECORD.
  - BEFORE PLACEMENT OF CURB, STABILIZATION OF LAND BEHIND CURB, AND/OR PAVING, MAINTAIN TOP OF INLET AT 6" ABOVE GRADE, AND SURROUND WITH SILT FENCE FOR SEDIMENTATION AROUND BOX. MAINTAIN SILT FENCE BEHIND BOX UNTIL LAND BEHIND CURB IS STABILIZED.

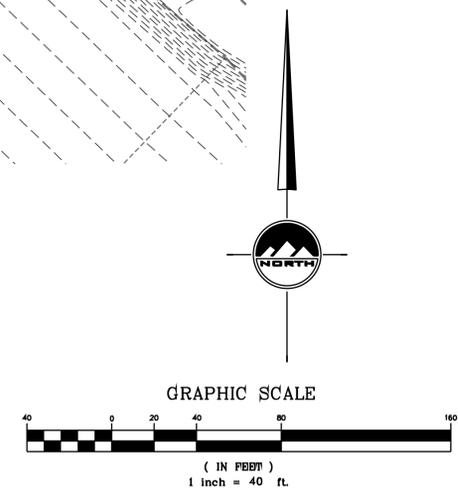
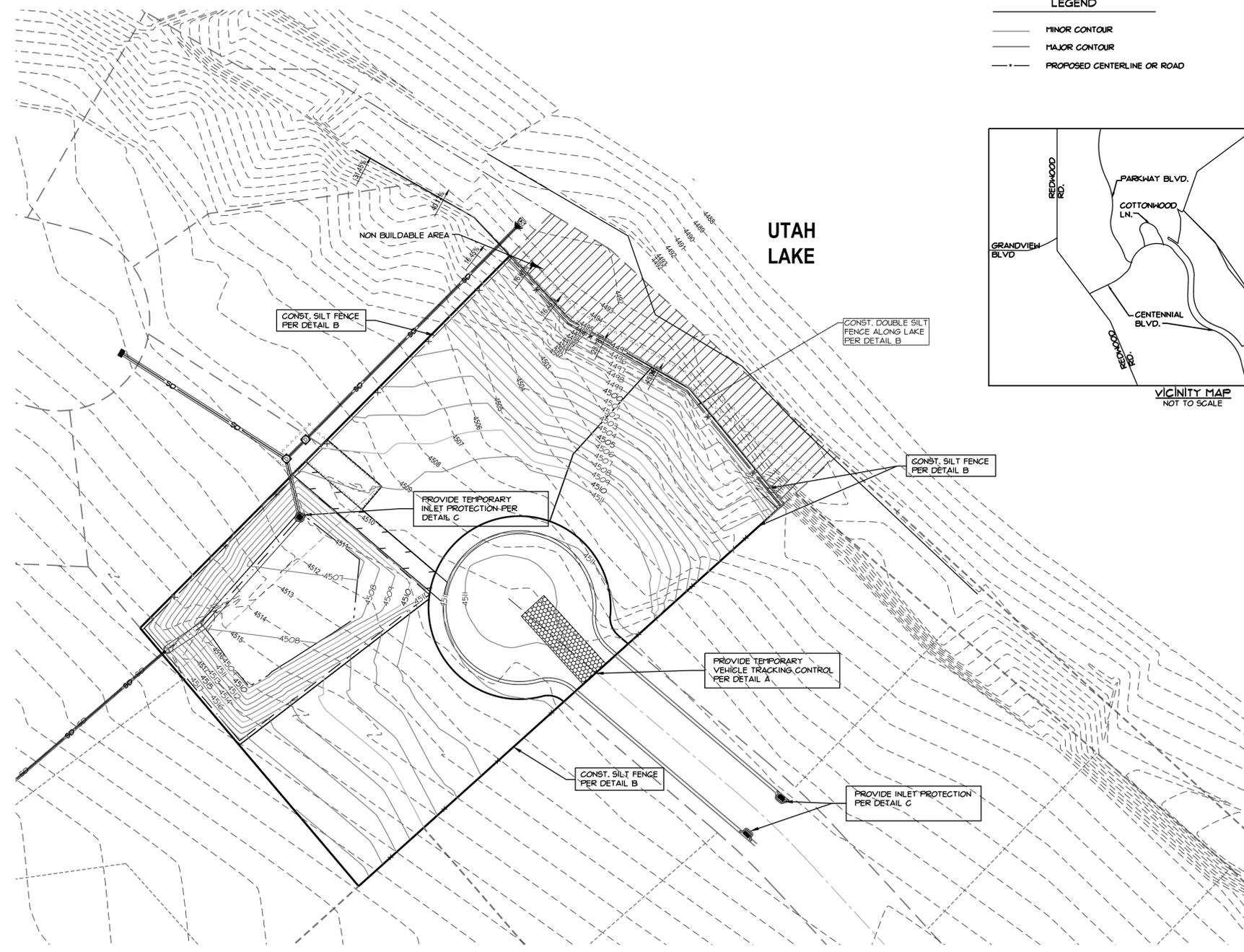
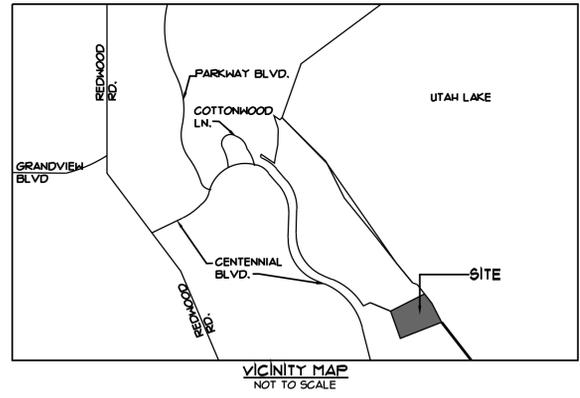
**SAG INLET PROTECTION**  
 SCALE: NONE



**EROSION BLANKETS INSTALLATION DETAIL**  
 SCALE: NONE

- NOTES:
- SLOPE SURFACE SHALL BE FREE OF ROCKS, CLODS, STICKS, SNOW, AND GRASS. MATS/ BLANKETS SHALL HAVE GOOD SOIL CONTACT.
  - APPLY PERMANENT SEEDING BEFORE PLACING BLANKETS.
  - LAY BLANKETS LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH THE SOIL. DO NOT STRETCH.
  - STAPLES LENGTH TO BE LONG ENOUGH TO BE EMBEDDED INTO UNDISTURBED SOIL.

**LEGEND**  
 --- MINOR CONTOUR  
 --- MAJOR CONTOUR  
 --- PROPOSED CENTERLINE OR ROAD



LOCATED IN THE EAST HALF OF THE SOUTHWEST QUARTER OF SECTION 23 TOWNSHIP 3 SOUTH, RANGE 4 WEST, SALT LAKE BASE AND MERIDIAN SARATOGA SPRINGS, UTAH COUNTY, UTAH



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**SARATOGA SPRINGS 16A**  
 1680 SOUTH AMANDA LANE  
 SARATOGA SPRINGS, UTAH



FINAL PLAT SUBMITTAL 3/20/14

**EROSION CONTROL PLAN**

PROJECT NUMBER: U1237  
 PRINT DATE: 3/21/14  
 DRAWN BY: [blank]  
 CHECKED BY: [blank]  
 PROJECT MANAGER: D. KINSMAN

**C-4**