

# Planning Commission Staff Report



**Subject:** Park City Heights MPD  
**Author:** Kirsten Whetstone  
**Date:** February 23, 2011  
**Type of Item:** Master Planned Development-work session

## Summary Recommendation

Staff recommends the Planning Commission conduct a public hearing, review and discuss the additional information provided by the applicant as requested at the work session on February 9, 2011, and continue the public hearing to March 9, 2011.

## Description

**Project Name:** Park City Heights Master Planned Development  
**Project #:** PL-10-01028  
**Applicants:** The Boyer Company and Park City Municipal Corporation  
**Location:** Southwest corner of the intersection of SR248 and US40  
**Zoning:** Community Transition (CT)  
**Adjacent Land Uses:** Municipal open space; single family residential; vacant parcel to the north zoned County- RR; vacant parcel to the south zoned County- MR; Park City Medical Center (IHC) and the Park City Ice Arena/Quinn's Fields Complex northwest of the intersection.  
**Reason for Review:** Applications for Master Planned Developments require Planning Commission review and approval  
**Owner:** The Boyer Company and Park City Municipal Corporation

## Proposal

The proposed Park City Heights MPD application is a request for a mixed residential development of 239 units on 239 acres of land in the CT zoning district. The residential mix includes a) 160 market rate units in a mix of cottage units on smaller lots (6,000 to 8,000 sf) and single family detached units on 9,000 sf to 10,000 sf lots, b) 28 deed restricted townhouse units (IHC affordable), configured as seven four-plex buildings, and c) 32 AUE (PC Heights affordable) configured approximately as 16 deed restricted units in a mix of unit types from single family detached to townhouse units. Approximately 175 acres of the property are proposed to be open space. A public park, community gardens, trails and trail connections to the Rail Trail, bus stops, and a community center/club house area are included in the MPD.

## **Background**

On June 30, 2010 the City received a complete application for the MPD following approval of the Park City Heights annexation by City Council on May 27, 2010. On September 22, October 13<sup>th</sup>, November 10<sup>th</sup>, and December 8<sup>th</sup>, 2010 and February 9, 2011, the Planning Commission conducted work sessions and/or public hearings on the MPD. On December 8, 2010, the applicants presented a revised MPD site plan and design guideline concepts with a photo study of architectural ideas for the different types of housing proposed with the Park City Heights MPD.

At the February 9, 2011, meeting the Commission reviewed the physical and computer models, discussed the draft design guidelines, and requested additional information regarding visual from vantage points around the site, perspectives, and preliminary plat information, i.e. lot dimensions and lot and street layouts with preliminary utility plans. The following information is provided for the Commission's review and discussion:

- Preliminary plat and utility plans
- Most current MPD site plan
- Visuals from various vantage points
- Perspectives shown at the previous meetings
- Wildlife study
- Physical model will be available for the discussion and public hearing

This information is supplemental to the information included in the Park City Heights binder. A comprehensive staff analysis will be prepared for the March 9, 2011 meeting.

## **Public Comment**

The Commission should conduct a public hearing and may continue the hearing to the March 9, 2011 meeting for additional public input. Written public comment may also be provided to the Planning Staff and it will be forwarded to the Commission.

## **Staff Recommendation**

Staff recommends the Planning Commission conduct a public hearing, review and discuss the additional information and continue the public hearing to March 9, 2011.

## **Exhibit**

- Exhibit A- preliminary subdivision plat
- Exhibit B- MPD site plan
- Exhibit C- Visuals from various vantage points
- Exhibit D- Perspectives
- Exhibit E- Wildlife study



CALL BLUESTAKES  
@ 1-800-862-4111  
AT LEAST 48 HOURS PRIOR TO  
THE COMMENCEMENT OF ANY  
CONSTRUCTION.

# PARK CITY HEIGHTS

PARK CITY, UTAH

## INDEX OF DRAWINGS

|       |                                 |       |                        |
|-------|---------------------------------|-------|------------------------|
| C 1.0 | OVERALL PRELIMINARY PLAT        | C 3.0 | OVERALL UTILITY PLAN   |
| C 1.1 | PRELIMINARY PLAT                | C 3.1 | UTILITY PLAN           |
| C 2.0 | OVERALL GRADING & DRAINAGE PLAN | C 3.2 | UTILITY PLAN           |
| C 2.1 | GRADING & DRAINAGE PLAN         | C 3.3 | UTILITY PLAN           |
| C 2.2 | GRADING & DRAINAGE PLAN         | C 3.4 | UTILITY PLAN           |
| C 2.3 | GRADING & DRAINAGE PLAN         | C 3.5 | UTILITY PLAN           |
| C 2.4 | GRADING & DRAINAGE PLAN         | C 3.6 | UTILITY PLAN           |
| C 2.5 | GRADING & DRAINAGE PLAN         | C 4.0 | ROADWAY CROSS SECTIONS |
| C 2.6 | GRADING & DRAINAGE PLAN         |       |                        |

### UTILITY DISCLAIMER

THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE LOCATION AND DEPTHS OF EXISTING UTILITIES AS SHOWN ON THESE PLANS BY MEANS OF RECORDS OF THE WORKS, UTILITY COMPANIES, AND WHERE POSSIBLE MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE LOCAL UTILITY LOCATION CENTER AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO LOCATE UTILITIES AND TO OBTAIN ANY NECESSARY PERMITS AND APPROVALS FOR THE RELOCATION AND PROTECTION OF UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO UTILITIES AND FOR THE COST OF REPAIRS AND REPLACEMENTS.

### NOTICE TO CONTRACTOR

ALL CONTRACTORS AND SUBCONTRACTORS PERFORMING WORK SHOWN OR RELATED TO THESE PLANS SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF PARK CITY. 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 AND CONSTRUCTION SAFETY DIVISION. THE CITY ENGINEER SHALL NOT BE RESPONSIBLE IN ANY WAY FOR THE CONTRACTORS AND SUBCONTRACTORS' COMPLIANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH REGULATIONS.

CONTRACTOR FURTHER AGREES TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB-SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF PARK CITY. THE CONTRACTOR SHALL UPHOLD IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR ENGINEER.

### NOTICE TO DEVELOPER/CONTRACTOR

UNAPPROVED DRAWINGS, SPECIFICATIONS, WORK IN PROGRESS, ARE SUBJECT TO CHANGE AND DO NOT CONSTITUTE A FINISHED ENGINEERING PRODUCT. ANY WORK UNDERTAKEN BY DEVELOPER, CONTRACTOR, BEFORE PLANS ARE APPROVED IS UNDERTAKEN AT THE SOLE RISK OF THE DEVELOPER, INCLUDING BUT NOT LIMITED TO ESTIMATION, PERMITS, BIDDING, SITE CLEARING, GRADING, INFRASTRUCTURE CONSTRUCTION, ETC.

### CITY ENGINEER ACCEPTANCE OF IMPROVEMENT PLANS

THE IMPROVEMENT PLANS FOR THIS SUBDIVISION HAVE BEEN REVIEWED BY THE CITY ENGINEER FOR GENERAL COMPLIANCE WITH THE CITY ENGINEER'S STANDARDS AND SPECIFICATIONS. THE CITY ENGINEER'S REVIEW IS LIMITED TO THE GENERAL COMPLIANCE OF THE PLANS WITH THE CITY ENGINEER'S STANDARDS AND SPECIFICATIONS. THE DEVELOPER'S ENGINEER, WHOSE STAMP IS ON THESE DRAWINGS, IS RESPONSIBLE FOR THE DESIGN, DESIGN, LAYOUT AND RELATED FIELD INFORMATION. THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN, DESIGN, LAYOUT AND RELATED FIELD INFORMATION AT THE JOB SITE. THE CONTRACTOR'S PERFORMANCE SHALL BE COMPARED TO THE DESIGN, DESIGN, LAYOUT AND RELATED FIELD INFORMATION AND THE CITY ENGINEER'S STANDARDS AND SPECIFICATIONS. THE CITY ENGINEER'S REVIEW IS LIMITED TO THE GENERAL COMPLIANCE OF THE PLANS WITH THE CITY ENGINEER'S STANDARDS AND SPECIFICATIONS.

BY \_\_\_\_\_ DATE \_\_\_\_\_

**DEVELOPER**  
BOYER PARK CITY JUNCTION, LC  
90 SOUTH 400 WEST SUITE 200  
SALT LAKE CITY, UT 84101  
(801) 521-4131

**GENERAL NOTES**

1. ALL ROADWAY, WATERLINE AND DRAINAGE IMPROVEMENT WORK SHALL CONFORM WITH PARK CITY STANDARDS AND SPECIFICATIONS.
2. CALL BLUE STAKES 48 HOURS PRIOR TO BIDDING.
3. ALL EXISTING UTILITIES SHALL BE IDENTIFIED BY THE ENGINEER AND SHOWN ON THE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION AND DEPTHS OF EXISTING UTILITIES BEFORE CONSTRUCTING ANY IMPROVEMENTS.
4. UTILITIES SHALL BE STUBBED A MINIMUM OF TWELVE FEET INSIDE PROPERTY LINES.

**VICINITY MAP**

**ENGINEER/SURVEYOR:**

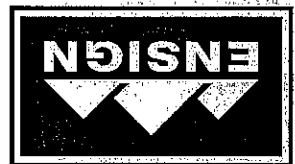
SALT LAKE CITY  
1000 FIFTH AVENUE  
SUITE 200  
SALT LAKE CITY, UT 84102  
PHONE: 801.252.6225  
FAX: 801.252.6449  
WWW.ENSIGN.COM

LAYTON  
PHONE: 801.541.1100  
PLEASANT GROVE  
PHONE: 801.252.6225  
TOOELE  
PHONE: 801.252.6225  
WWW.ENSIGN.COM

# PARK CITY HEIGHTS

PRELIMINARY REVIEW - January 17, 2011

EXHIBIT A





# PARK CITY HEIGHTS SUBDIVISION

LOCATED IN PORTIONS OF SECTION 11,  
AND THE SOUTH HALF OF SECTION 2,  
TOWNSHIP 2 SOUTH, RANGE 4 EAST, SALT LAKE BASE & MERIDIAN  
PARK CITY, SUMMIT COUNTY, UTAH

**UNIT/LOT COUNT**  
8 STACKED FLATS  
16 DUPLEXES  
28 TOWNHOMES  
187 SINGLE FAMILY

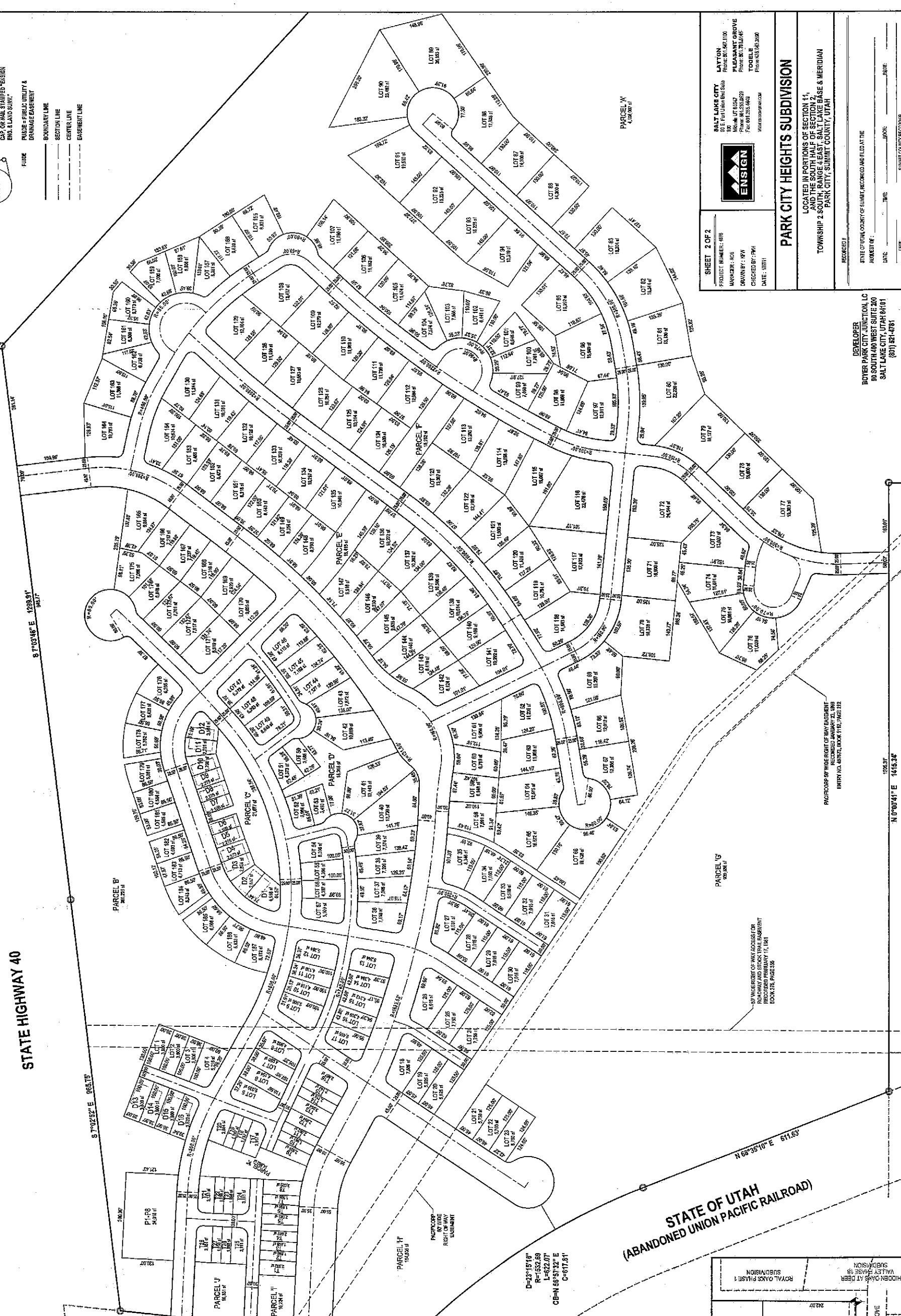
## LEGEND

- SECTION CORNER SET BY  
ENGINERS LAND SURV.  
REBAR WITH YELLOW PLASTIC  
CAP OR GALV. STAINED DESIGN  
ENG. & LAND SURV.
- FLUIDE = PUBLIC UTILITY &  
DRAINAGE EASEMENT
- BOUNDARY LINE
- SECTION LINE
- CENTERLINE
- EASEMENT LINE

STATE HIGHWAY 40

RICHARDSON FLAT ROAD

STATE OF UTAH  
(ABANDONED UNION PACIFIC RAILROAD)



**SHEET 2 OF 2**

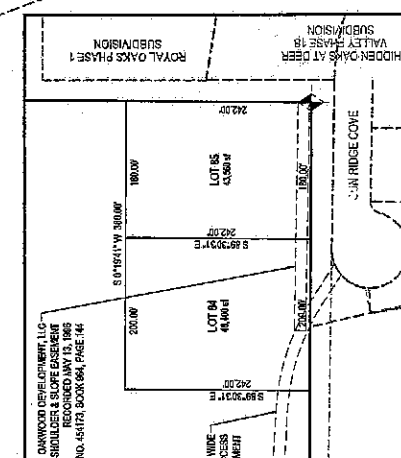
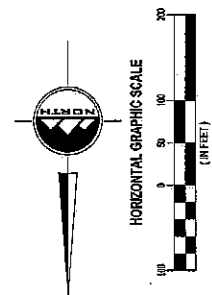
PROJECT NUMBER: 618  
MANAGER: BOE  
DRAWN BY: JPH  
CHECKED BY: JPH  
DATE: 10/11

**ENSIGN**  
SALT LAKE CITY  
22 E. FORT LEE BLVD.  
SALT LAKE CITY, UT 84143  
PHONE: 801.463.4444  
FAX: 801.463.4444  
WWW.ENSIGNUTAH.COM

**PARK CITY HEIGHTS SUBDIVISION**  
LOCATED IN PORTIONS OF SECTION 11,  
AND THE SOUTH HALF OF SECTION 2,  
TOWNSHIP 2 SOUTH, RANGE 4 EAST, SALT LAKE BASE & MERIDIAN  
PARK CITY, SUMMIT COUNTY, UTAH

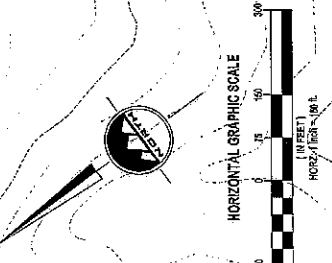
REGISTERED:  
STATE OF UTAH COUNTY OF SUMMIT RECORDED AND FILED AT THE  
RECORDS DEPT.  
DATE: \_\_\_\_\_ TIME: \_\_\_\_\_ BOOK: \_\_\_\_\_ PAGE: \_\_\_\_\_  
FEE: \_\_\_\_\_  
SUMMIT COUNTY RECORDS

DEVELOPER  
BOYER PARK CITY JUNCTION, LC  
99 SOUTH 400 WEST SUITE 200  
SALT LAKE CITY, UTAH 84101  
(801) 921-4781



**BENCHMARK**  
 NORTH QUARTER CORNER SEC. 11, TOWNSHIP  
 2 SOUTH, RANGE 4 EAST, SALT LAKE BASIN &  
 MOUNTAIN  
 BENCHMARK  
 ELEVATION \*

CALL SUBMITTERS  
 @ 1:00 PM AT LEAST 48  
 HOURS PRIOR TO THE  
 COMMENCEMENT OF ANY  
 CONSTRUCTION



**SALT LAKE CITY**  
 90 E. Fort Union Blvd  
 Suite 100  
 Midvale UT 84047  
 Phone: 801.255.0529  
 Fax: 801.255.4449

**LAYTON**  
 Phone: 801.547.1100

**PLEASANT GROVE**  
 Phone: 801.796.5145

**TOOELE**  
 Phone: 435.848.3550  
 WWW.ENSIGNUTAH.COM

FOR: **EVERETT CITY MUNICIPAL**  
 85 SOUTH WEST QUINCY  
 SALT LAKE CITY, UTAH 84111

CONTRACT: **PATRICK MORFAT**  
 PHONE: 801.517.4781  
 FAX:

**PARK CITY HEIGHTS**  
**PARK CITY, UTAH**



DATE: 11/11/11  
 SHEET: 104

**OVERALL GRADING  
 PLAN**

DESIGNED BY: **ROBERT C. ELBER**  
 CHECKED BY: **STANLEY J. FORD**  
 PROJECT MANAGER:  
**R. ELBER**

**C 2.0**



**SALT LAKE CITY**  
 90 E. Front Union Blvd  
 Suite 100  
 Midvale UT 84047  
 Phone: 801.285.0529  
 Fax: 801.285.4449

**LAYTON**  
 Phone: 801.547.1100

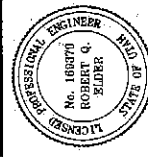
**PLEASANT GROVE**  
 Phone: 801.796.8145

**TODELE**  
 Phone: 435.943.3590  
 WWW.ENSIGNUTAH.COM

BOYER PARK CITY, UTAH, LLC  
 98 SOUTH 400 WEST SUITE 200  
 SALT LAKE CITY, UTAH 84119

CONTACT:  
 PATRICK UDFRAT  
 PHONE: 801.427.4781  
 FAX:

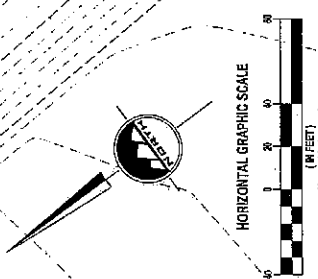
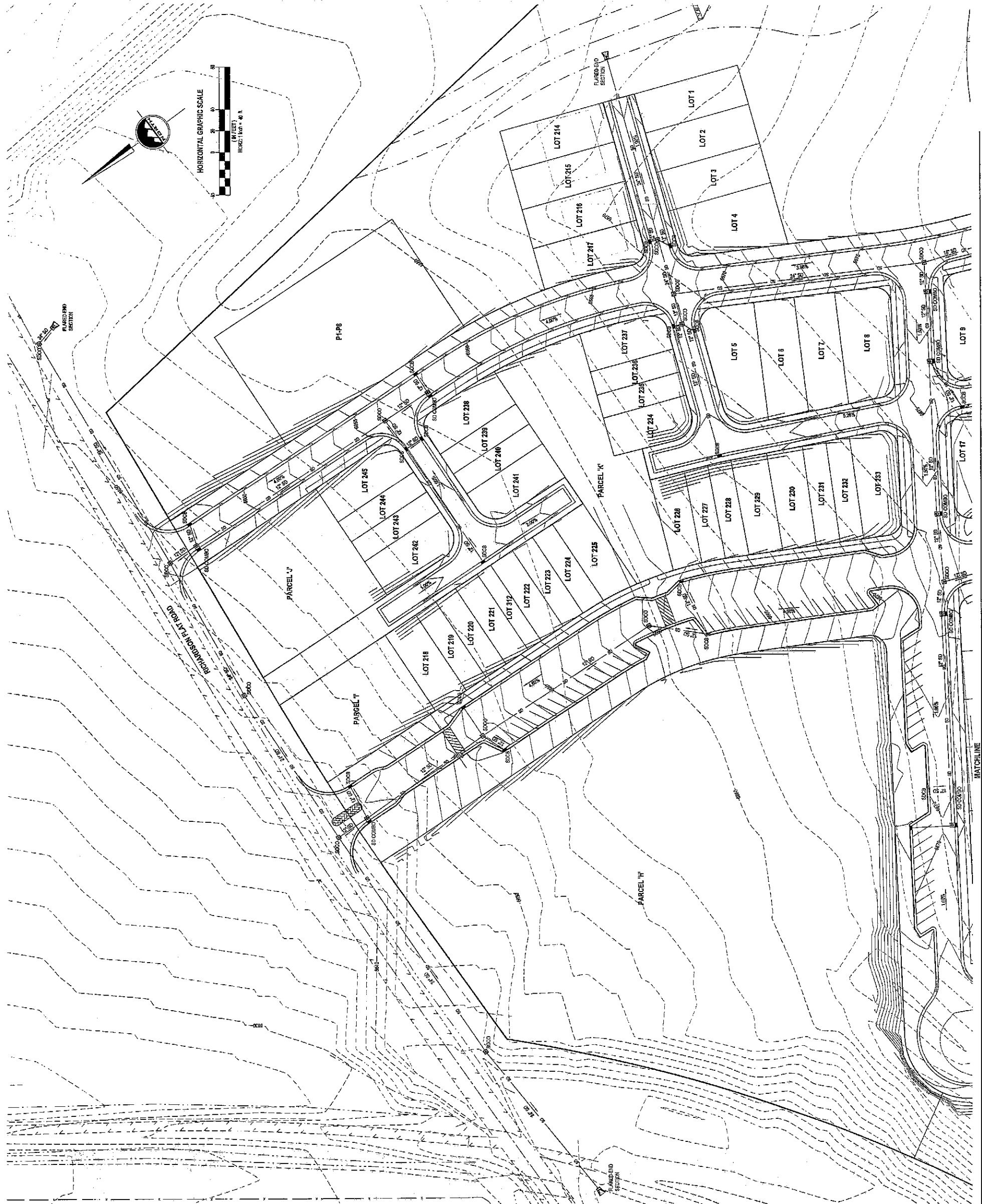
**PARK CITY HEIGHTS**  
**PARK CITY, UTAH**



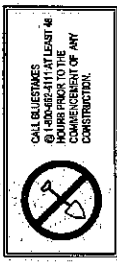
PROJECT NUMBER: 011711  
 DATE: 2/27/09  
 DRAWN BY: B. HANLEY  
 CHECKED BY: J. PETERSON  
 RELEASED BY: R. ELDER

**GRADING AND DRAINAGE PLAN**

**C 2.1**



**BENCHMARK**  
 NORTH QUARTER CORNER SEC. 11, TOWNSHIP 2 SOUTH, RANGE 1 EAST, SALT LAKE BASIN 6 MERIDIAN  
 ELEVATION =



CALL OUT LINES  
 @ 1/8" = 1' AT LEAST 48 HOURS PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION.

- LEGEND**
- PRO STORM DRAIN CLEAN OUT (POCO)
  - PRO STORM DRAIN CATCH BASIN (EDCB)
  - PRO STORM DRAIN COMBO BOX (ED COMBO)
  - PRO STORM DRAIN FLARED END SECTION
  - EXIST HATCH CONTROLS FINISHMENT
  - EXIST MAJOR CONTIGURS FINISHMENT
  - HATCH CONTIGURS FINISHMENT
  - MAJOR CONTIGURS FINISHMENT
  - EXIST FLOW LINE
  - PRO FLOW LINE
  - GRADE BRIMS
  - EXIST STORM DRAIN LINE
  - PRO STORM DRAIN LINE
  - PROPOSED ROAD GRADE

MATCH LINE  
 SEE SHEET C 2.4



**SALT LAKE CITY**  
 90 E. Fort Union Blvd  
 Suite 100  
 Midvale UT 84047  
 Phone: 801.265.0629  
 Fax: 801.265.4419

**LAYTON**  
 Phone: 801.547.1100

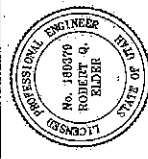
**PLEASANT GROVE**  
 Phone: 801.796.8145

**TOOLE**  
 Phone: 801.433.3500  
 www.ensignutah.com

FOR:  
 BOVEN PARK CITY JUNCTION, LLC  
 80 SOUTH WEST CENTER 200  
 SALT LAKE CITY, UT 84115

DESIGNER:  
 PATRICK W. KRAFT  
 PHONE: 801.547.1100  
 FAX:

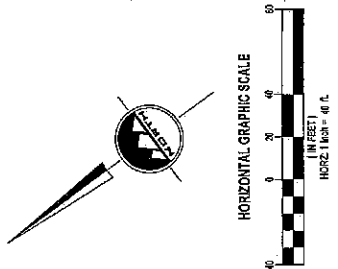
# PARK CITY HEIGHTS PARK CITY, UTAH



## GRADING AND DRAINAGE PLAN

PROJECT NUMBER: 4714  
 DATE: 11/11/11  
 DRAWN BY: STANLEY J. FORD  
 CHECKED BY: R. ELDER

**C 2.2**



**BENCHMARK**  
 NORTH QUARTER CORNER SEC. 11, TOWNSHIP  
 2 S. 36 N., RANGE 4 EAST, SALT LAKE BASIN &  
 MERIDIAN  
 ELEVATION =

**CALL SURVEYORS**  
 @ 1490 S. 620 E. AT LEAST 48  
 HOURS PRIOR TO THE  
 COMMENCEMENT OF ANY  
 CONSTRUCTION.

- LEGEND**
- PROPOSED STORM DRAIN CLEANOUT (SDC)
  - PROPOSED STORM DRAIN CATCH BASIN (SDCB)
  - PROPOSED STORM DRAIN CATCH BASIN (SDCB) WITH INLET
  - PROPOSED STORM DRAIN FLARED END SECTION
  - EXISTING MAJOR CONTOUR LINE 5' INCREMENT
  - EXISTING MAJOR CONTOUR LINE 1' INCREMENT
  - MAJOR CONTOUR LINE 5' INCREMENT
  - MAJOR CONTOUR LINE 1' INCREMENT
  - EAST FLOW LINE
  - PROPOSED FLOW LINE
  - GRADE BRAKES
  - EXISTING STORM DRAIN LINE
  - PROPOSED STORM DRAIN LINE
  - PROPOSED ROAD GRADE





**SALT LAKE CITY**  
 30 E. First Union Blvd  
 Suite 100  
 Midvale UT 84047  
 Phone: 801.255.0525  
 Fax: 801.255.4449

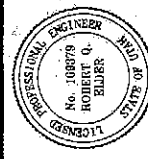
**LAYTON**  
 Phone: 801.547.1100

**PLEASANT GROVE**  
 Phone: 801.798.8145

**TOOELE**  
 Phone: 435.843.3530  
 WWW.ENSIGNUTAH.COM

**BOYER PARK CITY JUNCTION, LLC**  
 30 SOUTH 400 WEST SUITE 300  
 SALT LAKE CITY, UT 84119  
 OFFICE: 801.451.4711  
 PHONE: 801.451.4711  
 FAX:

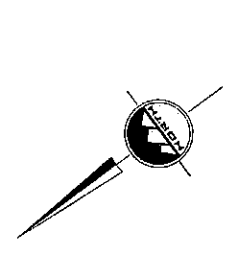
**PARK CITY HEIGHTS**  
 PARK CITY, UTAH



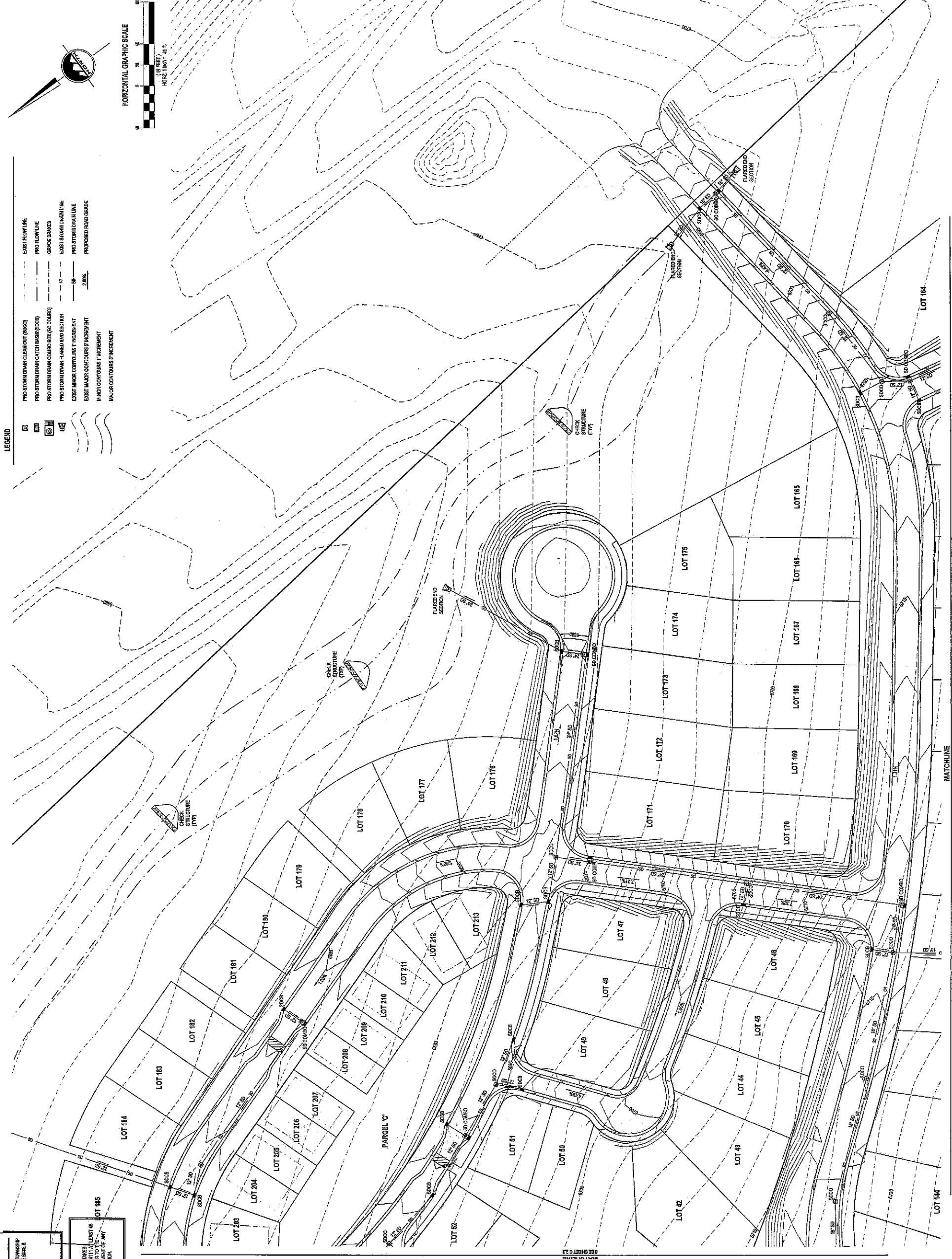
**GRADING AND DRAINAGE PLAN**

PROJECT NUMBER: 11111  
 DATE: 11/11/11  
 COUNTY: SUTTER  
 CITY: PARK CITY  
 DRAWN BY: R. BLUM

**C 2.3**



- LEGEND**
- PRO STORM DRAIN CLEAN OUT (SODD)
  - PRO STORM DRAIN CATCH BASIN (SOD)
  - PRO STORM DRAIN COARED BOX (SOD COLUMN)
  - PRO STORM DRAIN FLARED END SYSTEM
  - EXIST MINOR CONTOURS 1' INCREMENT
  - EXIST MAJOR CONTOURS 5' INCREMENT
  - MAJOR CONTOURS 5' INCREMENT
  - EXIST FLOW LINE
  - PRO FLOW LINE
  - GRADE BENCHMARK
  - EXIST STORM DRAIN LINE
  - PRO STORM DRAIN LINE
  - PROPOSED ROAD GRADE
  - 200%



**BENCHMARK**  
 NORTH QUARTER CORNER SEC 11, TOWNSHIP 2 NORTH, RANGE 4 EAST, SALT LAKE BASE & MERIDIAN  
 ELEVATION: \*

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



**SALT LAKE CITY**  
 80 E. Fort Union Blvd  
 Suite 100  
 Midvale UT 84047  
 Phone: 801.255.0629  
 Fax: 801.263.4448

**LAYTON**  
 Phone: 801.647.1100

**PLEASANT GROVE**  
 Phone: 801.796.3145

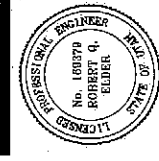
**TOOELE**  
 Phone: 435.843.3590

WWW.ENSIGNUTAH.COM

OWNER:  
 BOYER PARK CITY - JUNCTION, LC  
 86 SOUTH 600 WEST SUITE 200  
 SALT LAKE CITY, UTAH 84119

CONTRACT:  
 PATRICK MCFAT  
 PHONE: 801-581-4181  
 FAX:

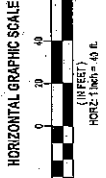
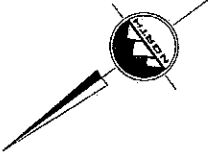
**PARK CITY HEIGHTS**  
**PARK CITY, UTAH**



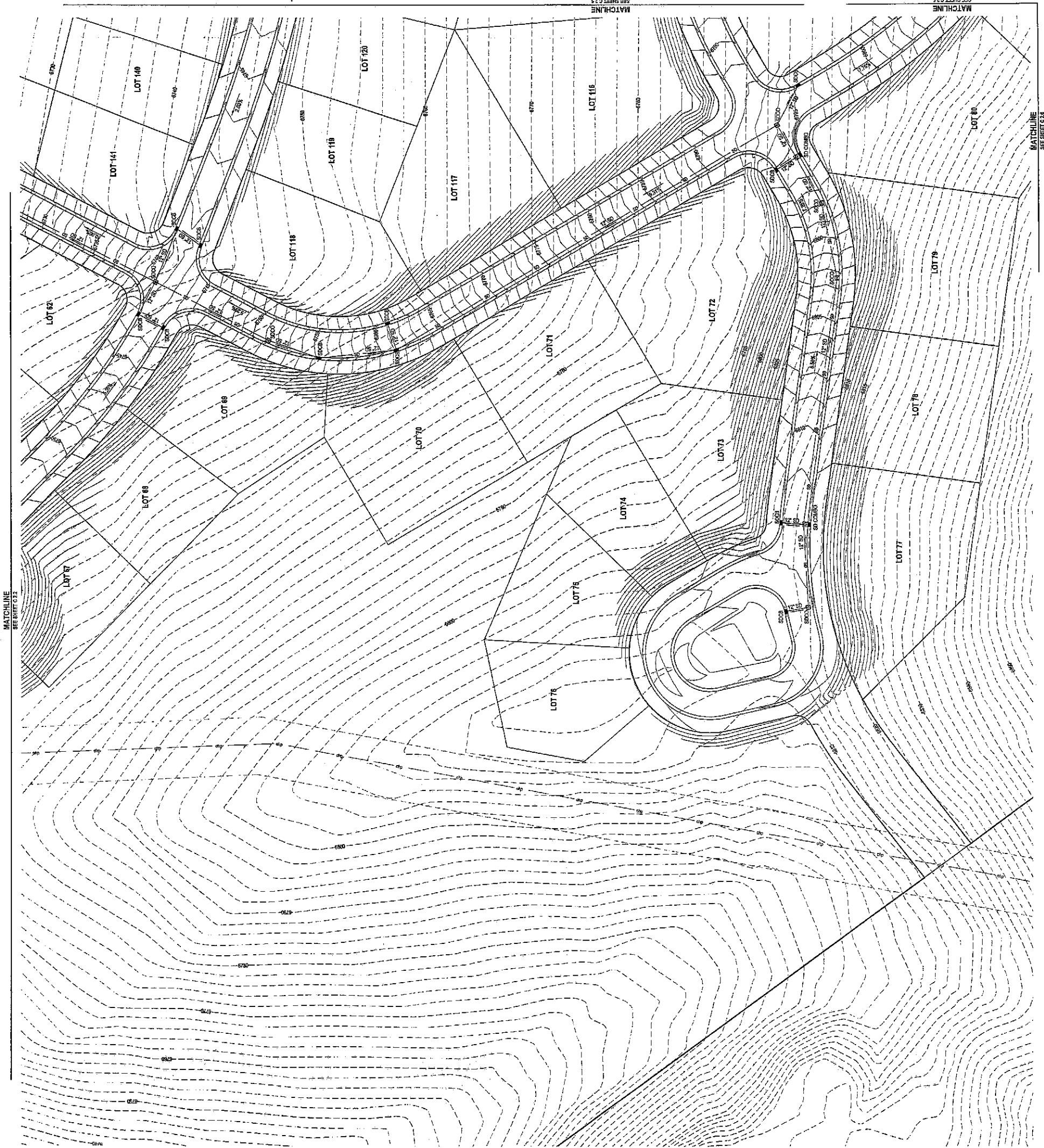
**GRADING AND DRAINAGE PLAN**

DESIGNED BY: V. W. H. B. W. H. B.  
 CHECKED BY: B. W. H. B. W. H. B.  
 PROJECT MANAGER: R. ELDER

**C 2.4**



- LEGEND**
- PRO STORM DRAIN CLEAN OUT (S&O)
  - PRO STORM DRAIN CATCH BASIN (S&O)
  - PRO STORM DRAIN COMB BOX (S&O)
  - PRO STORM DRAIN FLARED END SECTION
  - EXIST MINOR CONTOURS 1' INCREMENT
  - EXIST MAJOR CONTOURS 5' INCREMENT
  - MAJOR CONTOURS 1' INCREMENT
  - EXIST FLOW LINE
  - PRO FLOW LINE
  - GRADE BRAKES
  - EXIST 6\"/>



**BENCHMARK**  
 NORTH QUARTER CORNER SEC 11, TOWNSHIP 2 SOUTH, RANGE 4 EAST, SMT LANE SUB A  
 ELEVATION =

CALL BLUEPRINTS AT LEAST 48 HOURS PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION.



**SALT LAKE CITY**  
 90 E. Fort Union Blvd  
 Suite 100  
 West Valley City, UT 84143  
 Phone: 801.255.6529  
 Fax: 801.255.4449

**LAYTON**  
 Phone: 801.547.1100

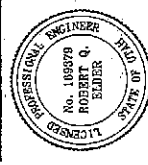
**PLEASANT GROVE**  
 Phone: 801.798.5145

**TOOELE**  
 Phone: 435.843.3500  
 WWW.ENSGN.UTAH.COM

4000  
 SOUTHERN PARK CITY JUNCTION, LC  
 80 SOUTH 400 WEST SUITE 200  
 SALT LAKE CITY, UT 84143

CONTRACT  
 PATRICK KOFFERT  
 PHONE: 801.547.4141  
 FAX:

**PARK CITY HEIGHTS**  
**PARK CITY, UTAH**



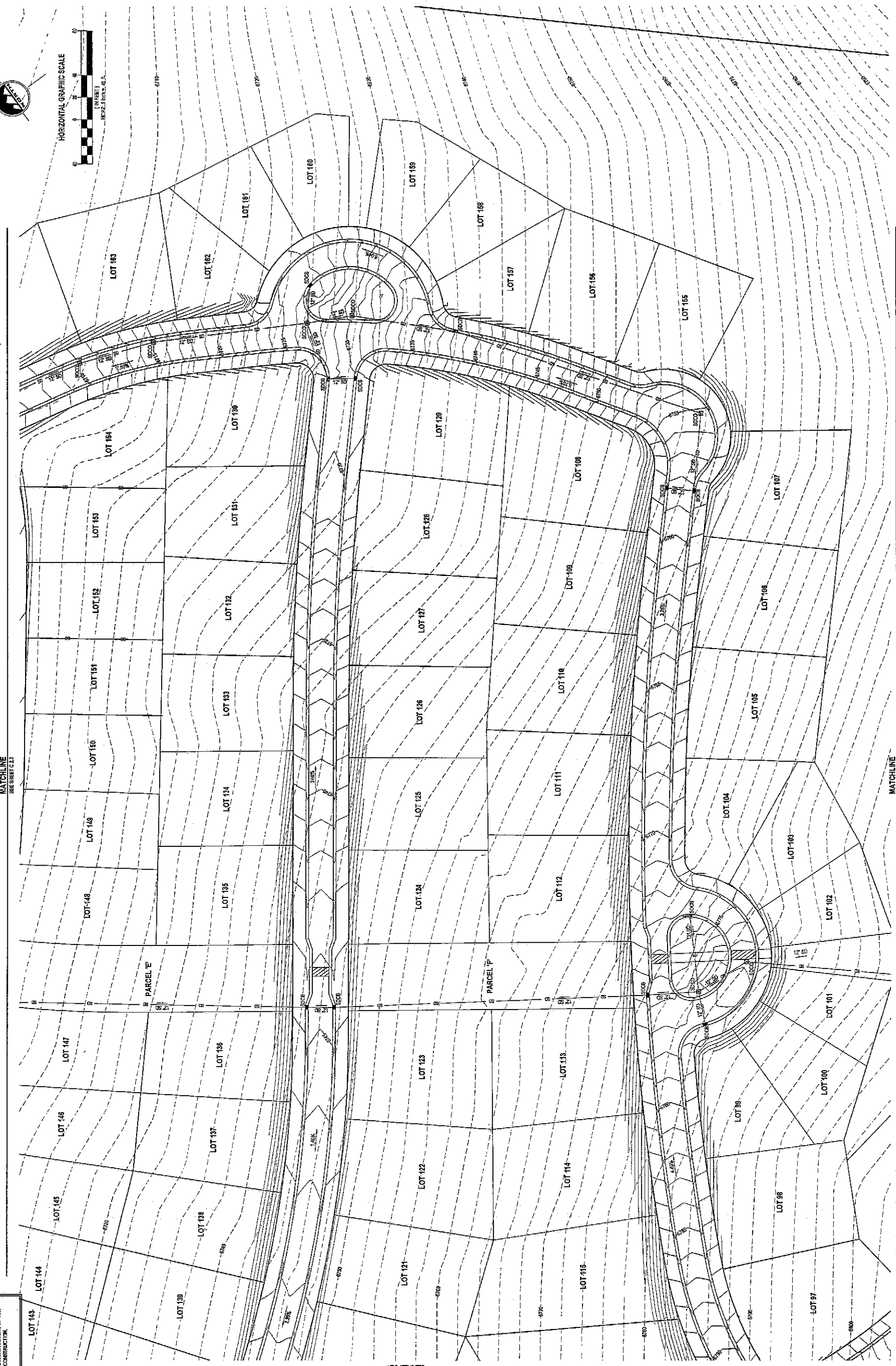
NO. 0000000000  
 STATE OF UTAH

**GRADING AND DRAINAGE PLAN**

PROJECT NUMBER: 1400-024-111  
 DATE: 10/11/11  
 DRAWN BY: STANLEY  
 CHECKED BY: J. FORD  
 SCALE: AS SHOWN  
 REVISIONS:

**C 2.5**

- LEGEND**
- PRO STORM DRAIN CLEANOUT (SUDS)
  - PRO STORM DRAIN CATCH BASIN (SUDS)
  - PRO STORM DRAIN COMBED BOX (SUDS)
  - PRO STORM DRAIN FLARED END SECTION
  - EAST MAJOR CONTOUR 5' INCREMENT
  - EAST MAJOR CONTOUR 1' INCREMENT
  - MAJOR CONTOUR 5' INCREMENT
  - MAJOR CONTOUR 1' INCREMENT
  - EXIST FLOW LINE
  - PRO FLOW LINE
  - GRADE BANKS
  - EXIST STORM DRAIN LINE
  - PRO STORM DRAIN LINE
  - 2.00%
  - PROPOSED ROAD GRADE



**BENCHMARK**  
 NORTH QUARTER CORNER SEC. 11, TOWNSHIP 2 SOUTH, RANGE 4 EAST, SALT LAKE BASE & MERIDIAN  
 ELEVATION =

**CALL LISTENERS**  
 1400-024-111 AT LEAST 8 HOURS PRIOR TO THE START OF ANY CONSTRUCTION.

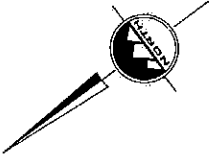


**BENCHMARK**  
 NORTH QUARTER CORNER SEC 11, TOWNSHIP  
 2 SOUTH, RANGE 4 EAST, MAINLAND T8 S  
 MERIDIAN  
 ELEVATION =

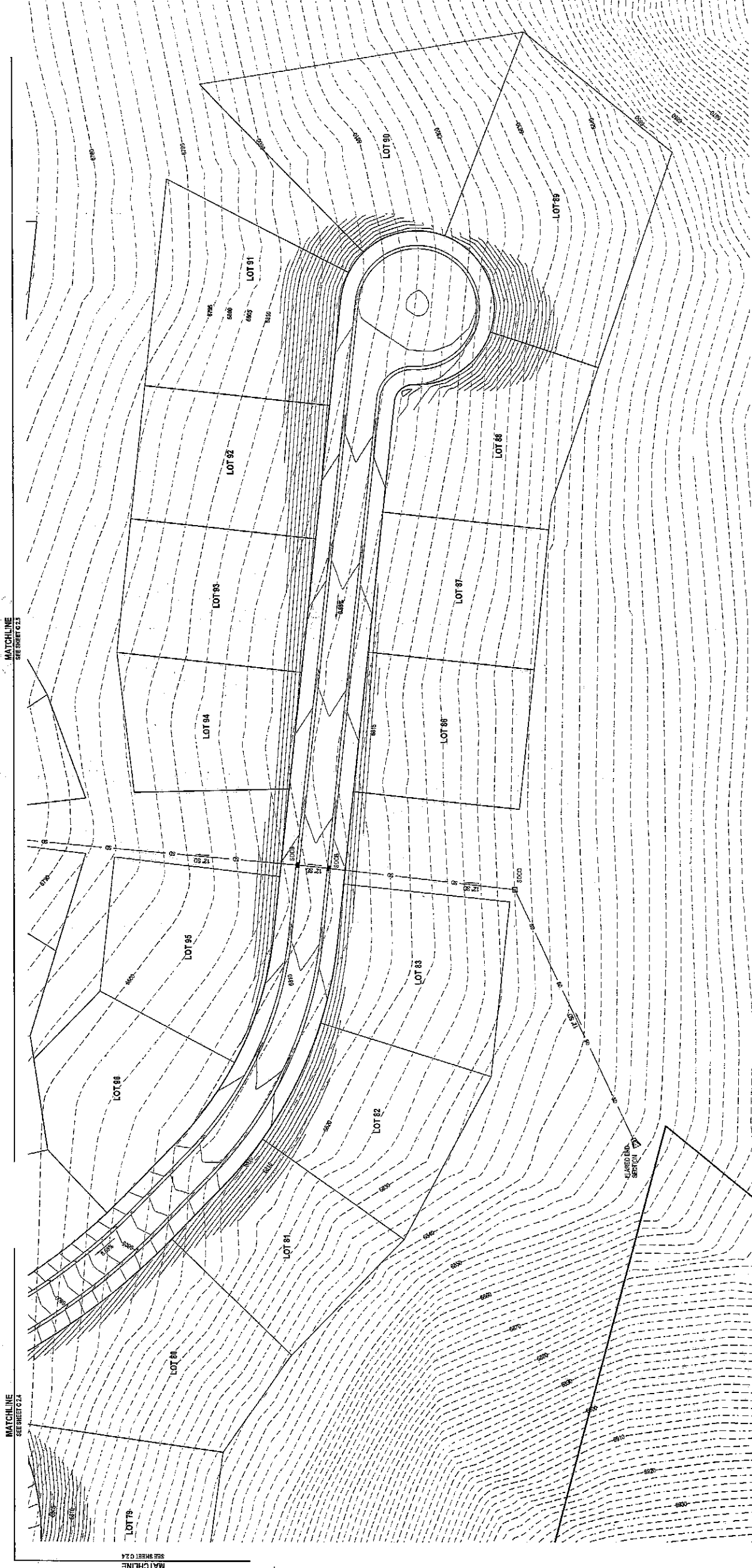
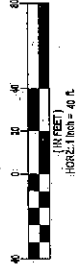
CALL SURVEYORS  
 @ 1-800-551-1111 AT LEAST 48  
 HOURS PRIOR TO THE  
 BEGINNING OF ANY  
 CONSTRUCTION.



- LEGEND**
- PRO STORM DRAIN CLEAN OUT (SCCO)
  - PRO STORM DRAIN CATCH BASIN (SCOB)
  - PRO STORM DRAIN COMBO BOX (SCOCB)
  - PRO STORM DRAIN FLARED END SECTION
  - EXIST MAJOR CONTOURS 1' INCREMENT
  - MAJOR CONTOURS 1' INCREMENT
  - EXIST MAJOR CONTOURS 5' INCREMENT
  - MAJOR CONTOURS 5' INCREMENT
  - EXIST FLOW LINE
  - PRO FLOW LINE
  - GRADE BENCHES
  - 15' - EAST STORM DRAIN LINE
  - 30' - PRO STORM DRAIN LINE
  - 2.0% - PROPOSED ROAD GRADE



HORIZONTAL GRAPHIC SCALE



**SALT LAKE CITY**  
 90 E. Fort Union Blvd  
 Suite 100  
 Midvale UT 84047  
 Phone: 801.255.0929  
 Fax: 801.255.4149

**LAYTON**  
 Phone: 801.547.1100

**PLEASANT GROVE**  
 Phone: 801.795.8145

**TOOELE**  
 Phone: 435.643.3580

WWW.ENSIGNUTAH.COM

FOR:  
 EBYER PARK CITY JUNCTION, LLC  
 80 SOUTH MAIN WEST SUITE 200  
 SALT LAKE CITY, UT 84143

CONTACT:  
 PATRICK WEFAT  
 PHONE: 801-541-1781  
 FAX:

**PARK CITY HEIGHTS**  
**PARK CITY, UTAH**



DATE: 05/11/11

**GRADING PLAN**

DESIGNER: R. ELDER  
 CHECKED BY: J. FORD  
 PROJECT MANAGER: R. ELDER

**C 2.6**

**BENCHMARK**  
 NORTH QUARTER CORNER SEC. 11, TOWNSHIP  
 2 SOUTH RANGE 4 EAST, SALT LAKE MERIDIAN  
 ELEVATION =

CALL BLUEPRINTS  
 @ 1-800-624-4111 AT LEAST 48  
 HOURS PRIOR TO THE  
 COMMENCEMENT OF ANY  
 CONSTRUCTION



**PARK CITY HEIGHTS**  
**PARK CITY, UTAH**



**SALT LAKE CITY**  
 90 E. Fort Union Blvd  
 Suite 100  
 Merivale UT 84047  
 Phone: 801.253.0629  
 Fax: 801.253.4449

**LAYTON**  
 Phone: 801.547.1100

**PLEASANT GROVE**  
 Phone: 801.798.8145

**TOOELE**  
 Phone: 435.843.3890  
 WWW.ENSIGNUTAH.COM

**ENR**  
 1000 PARK CITY JUNCTION, LC  
 30 SOUTH 40 WEST SUITE 200  
 SALT LAKE CITY, UTAH 84111

**PROJECT:**  
 PARK CITY HEIGHTS  
 PHONE: 801.547.4487  
 FAX:



**OVERALL UTILITY PLAN**

PROJECT NUMBER: 044  
 CITY: UTAH  
 DATE: 1/2011  
 DRAWN BY: STANLEY  
 CHECKED BY: ELDER  
 DATE: 1/2011

**C 3.0**



**SALT LAKE CITY**  
 80 E. Fort Union Blvd.  
 Suite 100  
 Midvale UT 84047  
 Phone: 801.255.0523  
 Fax: 801.255.4449

**LAYTON**  
 Phone: 801.547.1100

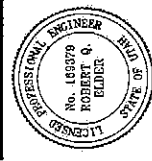
**PLEASANT GROVE**  
 Phone: 801.796.8146

**TOOELE**  
 Phone: 435.843.3590  
 WWW.ENSIGNUTL.COM

BY: ROYCE PARK CITY JUNCTION, LC  
 99 SOUTH 400 WEST SUITE 200  
 SALT LAKE CITY, UTAH 84101

PROJECT MANAGER  
 SAUNDRA MOSEBY  
 PHONE: 801.541.1781  
 FAX:

**PARK CITY HEIGHTS**  
 PARK CITY, UTAH



**UTILITY PLAN**

DATE: 07/21  
 PROJECT NUMBER: 010  
 DRAWN BY: S. HADLEY  
 CHECKED BY: J. FORD  
 PROJECT NUMBER: 010  
 DATE: 07/21

**C 31**



HORIZONTAL GRAPHIC SCALE



**BENCHMARK**  
 NORTH QUARTER CORNER SEC 11, TOWNSHIP  
 2 SOUTH, RANGE 4 EAST, SALT LAKE BASE &  
 MERIDIAN  
 ELEVATION \*

CALL BUREAUS  
 8-1-800-841-1147 AT LEAST 48  
 HOURS PRIOR TO THE  
 COMMENCEMENT OF ANY  
 CONSTRUCTION.



CONNECT TO EXISTING SEWER

EXISTING 24" SAN SWR LINE



**SALT LAKE CITY**  
 90 E. First Urban Bldg  
 Suite 100  
 Midvale UT 84047  
 Phone: 801.265.0229  
 Fax: 801.265.4449

**LAYTON**  
 Phone: 801.547.1100

**PLEASANT GROVE**  
 Phone: 801.798.8145

**TOOELE**  
 Phone: 435.433.3550

WWW.ENSIGNUTAH.COM

BOYER PARK CITY JUNCTION, LC  
 80 SOUTH MAIN WEST SUITE 200  
 SALT LAKE CITY, UT 84143

OWNER:  
 BAYBERRY DEVELOPMENT  
 PHONE: 801.547.1100  
 FAX:

**PARK CITY HEIGHTS**  
**PARK CITY, UTAH**

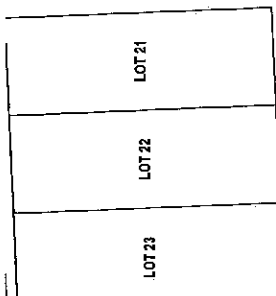


|         |                   |
|---------|-------------------|
| DATE    | 1/11/11           |
| BY      | ROBERT O. ELDER   |
| PROJECT | PARK CITY HEIGHTS |
| SCALE   | AS SHOWN          |

**UTILITY PLAN**

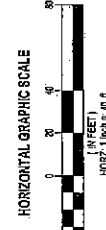
PROJECT MANAGER: R. ELDER  
 DESIGNER: J. FORD  
 CHECKER: J. FORD  
 DATE: 1/11/11

**C 3.2**



**BENCHMARK**  
 NORTH QUARTER CORNER SEC. 11, TOWNSHIP  
 2 SOUTH RANGE 4 EAST, SALT LAKE BASE &  
 MERIDIAN  
 ELEVATION =

CALL SURVEYOR AT LEAST 48  
 HOURS PRIOR TO THE  
 COMMENCEMENT OF ANY  
 CONSTRUCTION.





**SALT LAKE CITY**  
80 E. First Union Blvd  
Suite 100  
Midvale UT 84047  
Phone: 801.263.5229  
Fax: 801.265.4449

**LAYTON**  
Phone: 801.547.1100

**PLEASANT GROVE**  
Phone: 801.796.8145

**TOOLE**  
Phone: 435.843.3590  
WWW.ENSIGNUTAH.COM

OWNER:  
BOYER PARK CITY, INC. 1000 W. 1200 N.  
SALT LAKE CITY, UT 84119

DESIGNER:  
ENSIGN UTAH  
PHONE: 801.547.1100  
FAX:

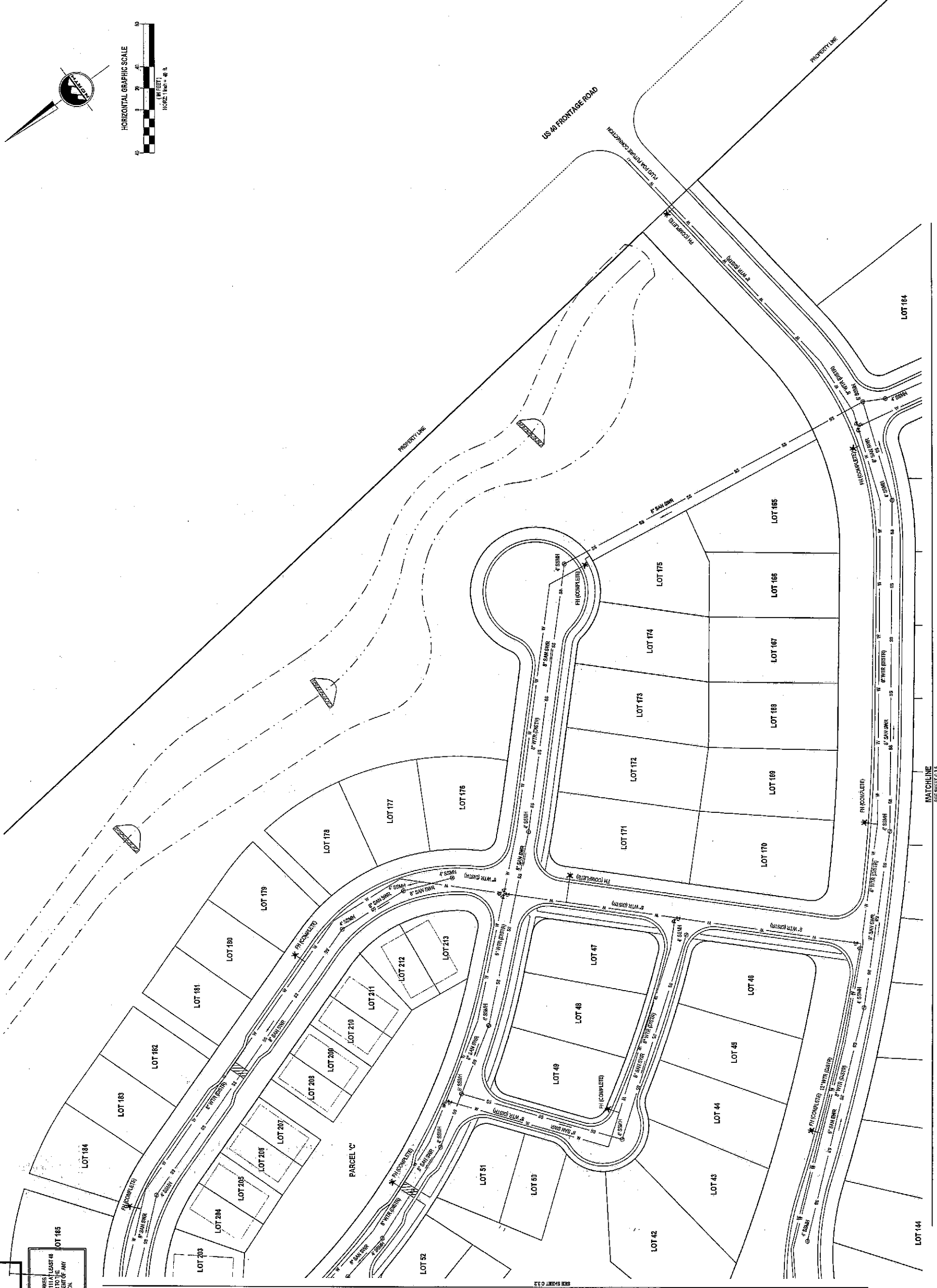
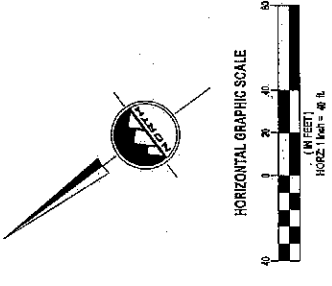
**PARK CITY HEIGHTS**  
**PARK CITY, UTAH**



**UTILITY PLAN**

PROJECT NUMBER: 4610  
DATE: 1/11/11  
DRAWN BY: J. FORD  
CHECKED BY: J. FORD  
PROJECT NUMBER: PC 0329

**C 3.3**



**BENCHMARK**  
NORTH QUARTER CORNER SEC. 11, TOWNSHIP 2 SOUTH, RANGE 4 EAST, SALT LAKE BASIN 6 REGION  
ELEVATION =

CALL UTILITIES @ 1-800-462-1111 AT LEAST 48 HOURS PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION.

MATCHLINE SEE SHEET C 3.2

MATCHLINE SEE SHEET C 3.3





**SALT LAKE CITY**  
 90 E. Fort Union Blvd  
 Suite 100  
 Midvale UT 84047  
 Phone: 801.250.0629  
 Fax: 801.255.4449

**LAYTON**  
 Phone: 801.647.1100

**PLEASANT GROVE**  
 Phone: 801.796.8145

**TOOLE**  
 Phone: 435.843.3590  
 WWW.ENSIGNUTAH.COM

BOYER PARK CITY JUNCTION, LLC  
 89 SOUTH 400 WEST SUITE 200  
 SALT LAKE CITY, UTAH 84101

PROJECT MANAGER  
 PATRICK AMPFERT  
 PHONE: 801.671.0781  
 FAX:

**PARK CITY HEIGHTS**  
 PARK CITY, UTAH

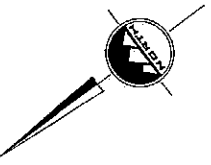


NO. 168879  
 ROBERT Q. ELDER  
 LICENSED PROFESSIONAL ENGINEER  
 STATE OF UTAH

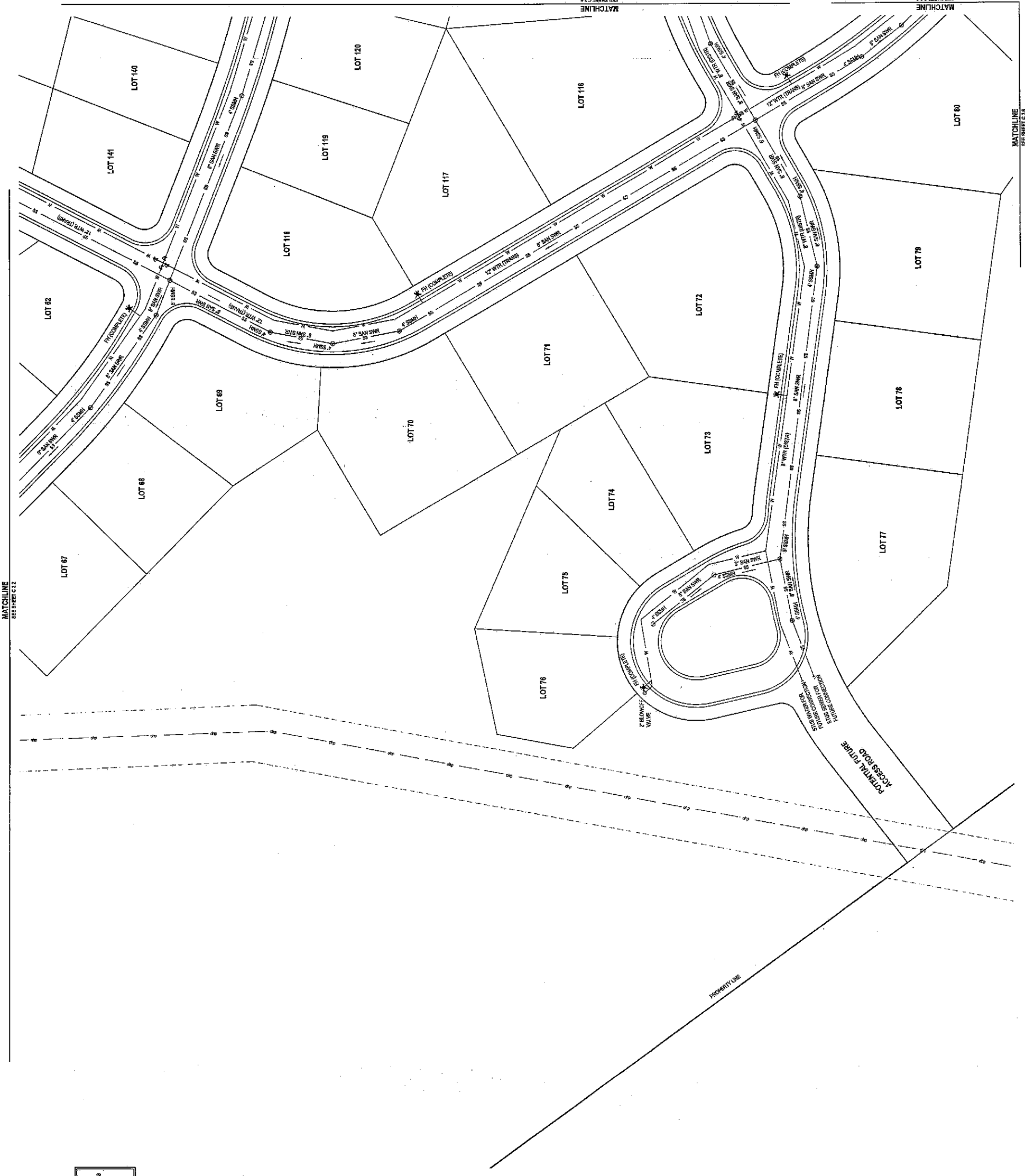
**UTILITY PLAN**

DATE: 10/11/11  
 PROJECT NO.: 1000000000  
 DRAWN BY: J. FORD  
 CHECKED BY: J. FORD  
 PERFORMED BY: J. FORD

**C 3.4**




HORIZONTAL GRAPHIC SCALE  
 1" = 40'  
 HORIZONTAL SCALE = 40:1



**BENCHMARK**  
 NORTH QUARTER CORNER SEC 11, T19N R19E  
 2.50MTR. RANGE 4 EAST, SALT LAKE BASE 4  
 MERRILL  
 ELEVATION =

CALL UTILITIES  
 @ 1.800.488.4111 AT LEAST 48  
 HOURS PRIOR TO THE  
 COMMENCEMENT OF ANY  
 CONSTRUCTION.





**SALT LAKE CITY**  
80 E. Fort Union Blvd  
Suite 100  
Midvale UT 84047  
Phone: 801-255-0529  
Fax: 801-255-4449


**LAYTON**  
Phone: 801-547-1100

**PLEASANT GROVE**  
Phone: 801-795-8145

**TOOELE**  
Phone: 435-813-3590  
WWW.ENSIGNUTL.COM

**PARK CITY HEIGHTS**

**PARK CITY, UTAH**

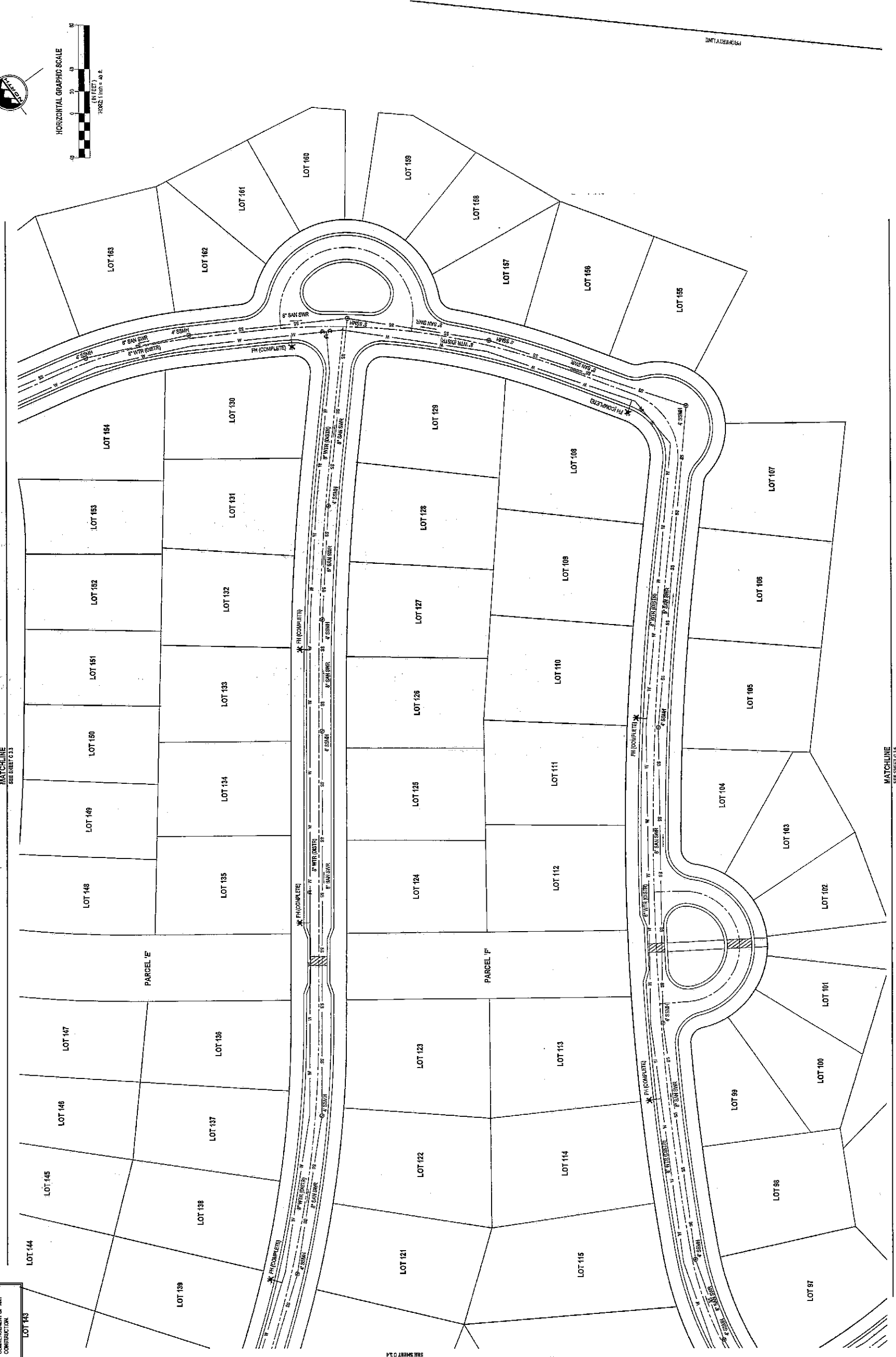
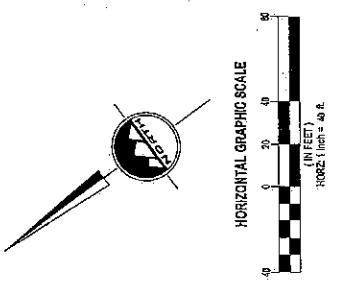


**UTILITY PLAN**

DATE: 11/11/11  
SCALE: AS SHOWN

DESIGNED BY: J. HAYLEY  
CHECKED BY: J. HAYLEY  
PROJECT MANAGER: R. EIBER  
DATE: 11/11/11

**C 3.5**



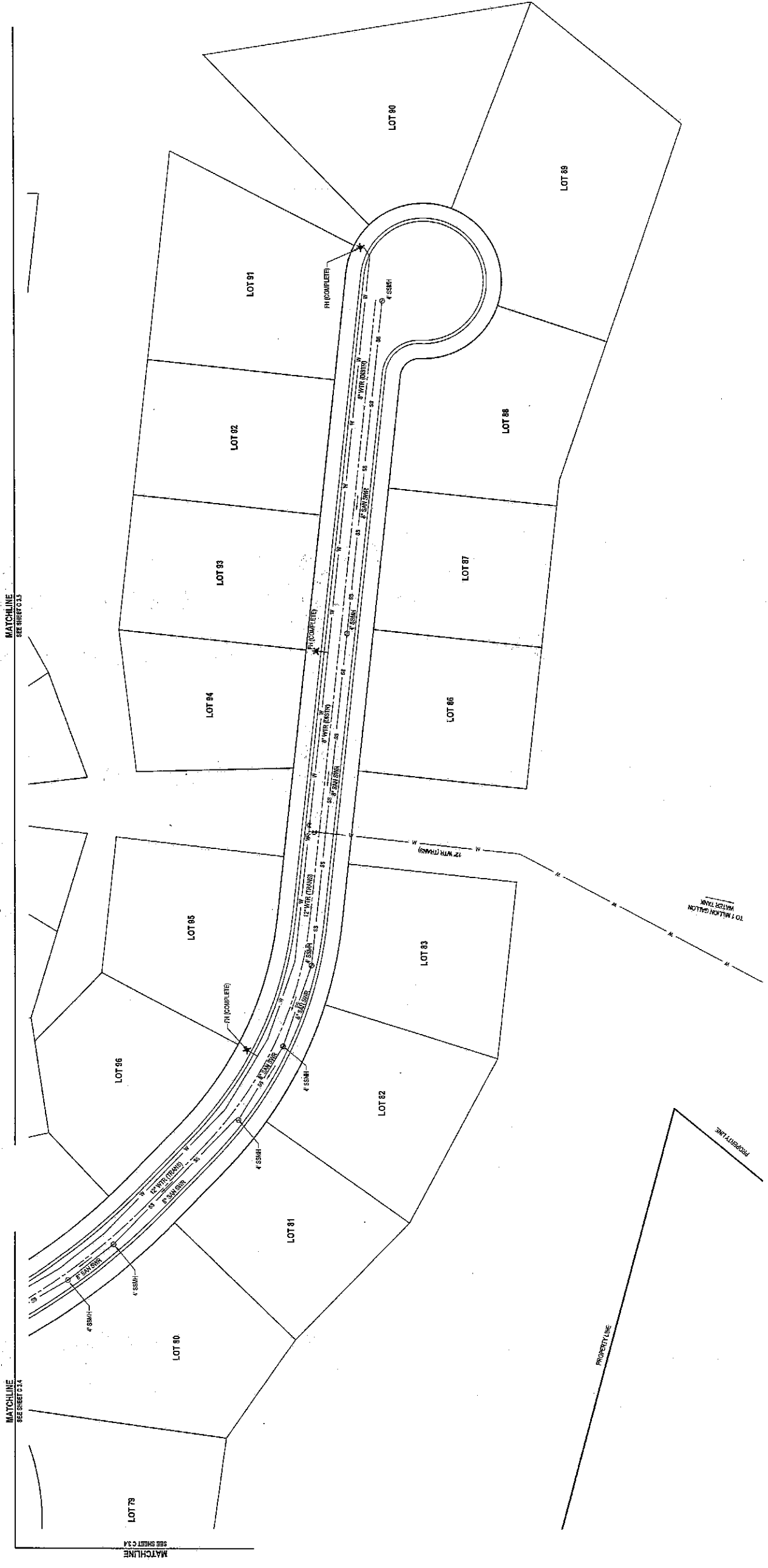
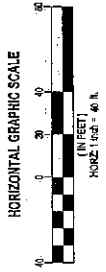
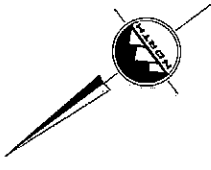
**BENCHMARK**  
NORTH QUARTER CORNER 11' TOWNSHIP  
2 SOUTH RANGE 4 EAST, SALT LAKE BASE &  
MERIDIAN  
ELEVATION =

CALL BUSINESSES  
(8) 1-800-462-4111 AT LEAST 48  
HOURS PRIOR TO THE  
COMMENCEMENT OF ANY  
CONSTRUCTION.



**BENCHMARK**  
 NORTH QUARTER CORNER SEC 14, TOWNSHIP  
 2 SOUTH, RANGE 4 EAST, GUNLAW BASIN &  
 MENDON  
 ELEVATION\*

CALL BLUESTAGES  
 @ 1-800-924-1111 AT LEAST 48  
 HOURS PRIOR TO THE  
 COMMENCEMENT OF ANY  
 CONSTRUCTION.

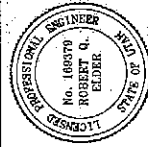


MATCHLINE  
SEE SHEET C24

MATCHLINE  
SEE SHEET C33

MATCHLINE  
SEE SHEET C24

**PARK CITY HEIGHTS**  
**PARK CITY, UTAH**



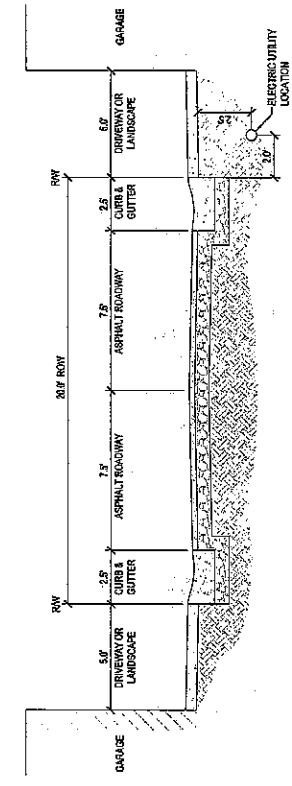
UTILITY PLAN

DESIGNED BY  
 R. ELDER  
 CHECKED BY  
 J. FORD  
 PROJECT MANAGER  
 R. ELDER

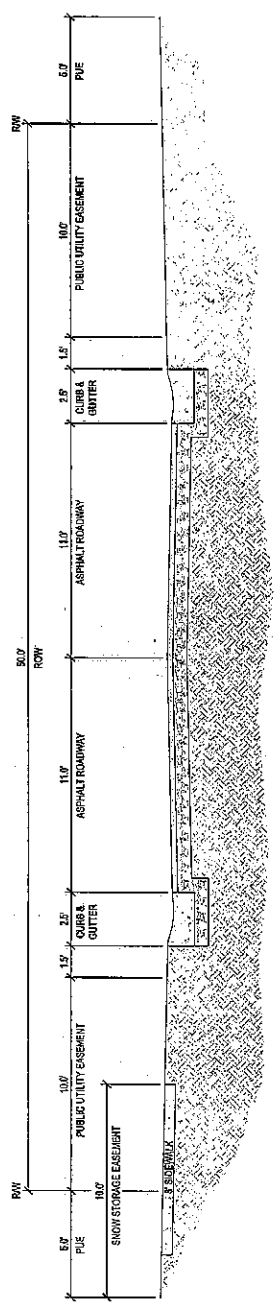
**C 3.6**

**BENCHMARK**  
 NORTH QUARTER CORNER SEC 11, TOWNSHIP  
 2 SOUTH, RANGE 4 EAST, SALT LAKE BASE &  
 MERIDIAN  
 ELEVATION =

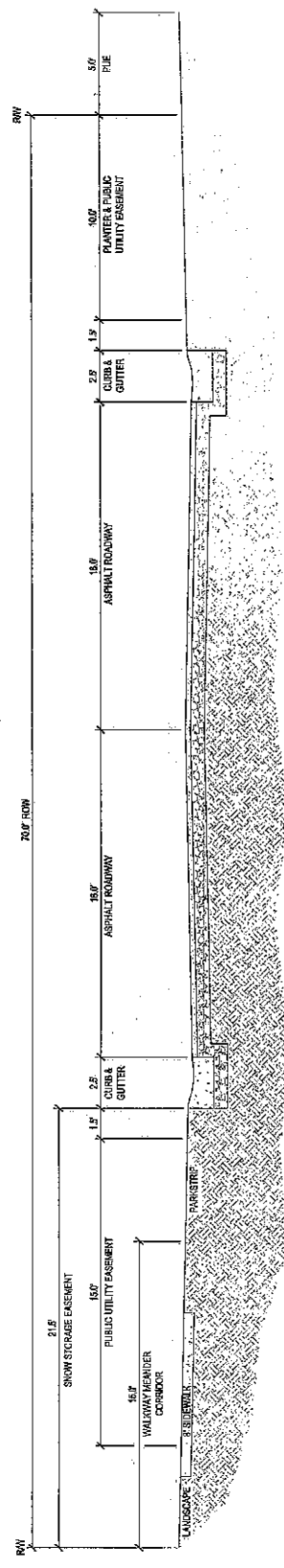
CALL BUREAUS  
 @ 1:30-4:30 PM AT LEAST 48  
 HOURS PRIOR TO THE  
 BEGINNING OF ANY  
 CONSTRUCTION



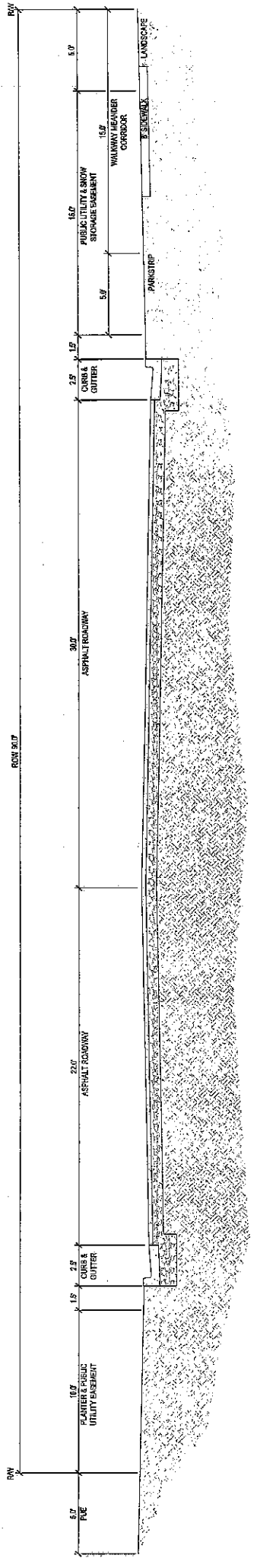
**1 LOCAL STREET**  
 (PUBLIC RIGHT-OF-WAY)  
 Scale: NTS



**2 LOCAL RESIDENTIAL STREET**  
 (PUBLIC RIGHT-OF-WAY)  
 Scale: NTS



**3 MINOR RESIDENTIAL COLLECTOR STREET**  
 (PUBLIC RIGHT-OF-WAY)  
 Scale: NTS



**4 COMMERCIAL COLLECTOR STREET**  
 (PUBLIC RIGHT-OF-WAY)  
 Scale: NTS

**NOTE:**  
 1. PARKING TO BE LOCATED ON UPHILL SIDE OF ROAD  
 2. SNOW STORAGE TO BE LOCATED ON DOWNHILL SIDE OF ROAD

**NOTE:**  
 1. PARKING TO BE LOCATED ON UPHILL SIDE OF ROAD  
 2. SNOW STORAGE AND WALKWAY TO BE LOCATED ON DOWNHILL SIDE OF ROAD

**NOTE:**  
 1. PARKING TO BE LOCATED ON UPHILL SIDE OF ROAD  
 2. SNOW STORAGE AND WALKWAY TO BE LOCATED ON DOWNHILL SIDE OF ROAD

**PARK CITY HEIGHTS**  
**PARK CITY, UTAH**



**SALT LAKE CITY**  
 90 E. Red Union Blvd  
 Suite 100  
 Midvale UT 84047  
 Phone: 801.255.0529  
 Fax: 801.255.4469

**LAYTON**  
 Phone: 801.547.1100

**PLEASANT GROVE**  
 Phone: 801.786.8145

**TOOELE**  
 Phone: 435.843.3590  
 WWW.ENSIGNUTAH.COM

**PROJECT:**  
 80785 PARK CITY JUNCTION, LLC  
 76 SOUTH AND WEST STATE 200  
 SALT LAKE CITY, UTAH 84141

**ARCHITECT:**  
 PATRICK MOFFAT  
 PHONE: 801.421.4311  
 FAX:



NO. SHEET: \_\_\_\_\_  
 TOTAL SHEETS: \_\_\_\_\_

**ROADWAY CROSS SECTIONS**

DATE: \_\_\_\_\_  
 DRAWN BY: S. WAREY  
 CHECKED BY: J. FORD  
 PROJECT NUMBER: P. 1101  
 P. ELDER

**C 4.0**



EXHIBIT B

# PARK CITY HEIGHTS

NEIGHBORHOOD MASTER PLAN

entry corridor & visual assessment - 1

park city heights  
park city, utah &  
summit county, utah

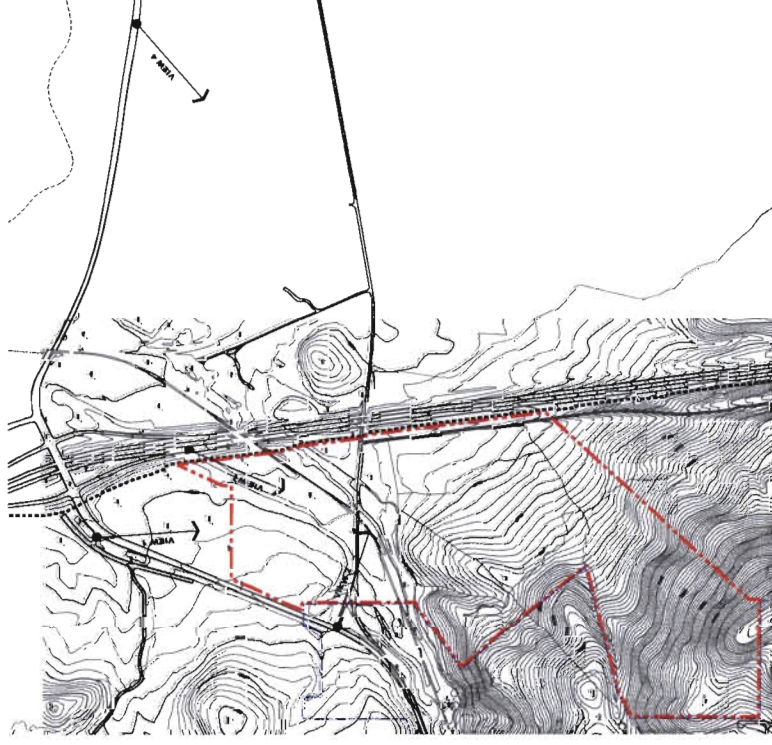
june 2010

DESIGNATED ENTRY CORRIDORS AND VANTAGE POINTS PRESENT WITHIN OR ADJACENT TO THE SITE

- VIEW 1
- UTAH HIGHWAY 248 AT THE TURN-OUT ONE QUARTER MILE WEST FROM U.S. HIGHWAY 40

OTHER DESIGNATED VANTAGE POINTS

- VIEW 2
- UTAH HIGHWAY 248 AT THE TURN-OUT TO OLD DUMP ROAD
- VIEW 3
- U.S. HIGHWAY 40 SOUTHBOUND AT TOP OF ON-RAMP FROM UTAH HIGHWAY 248
- VIEW 4
- UTAH HIGHWAY 248 WESTBOUND AT SIDE OF ROAD FROM KAMAS



after development - view 1



after development - view 2



before development - view 1



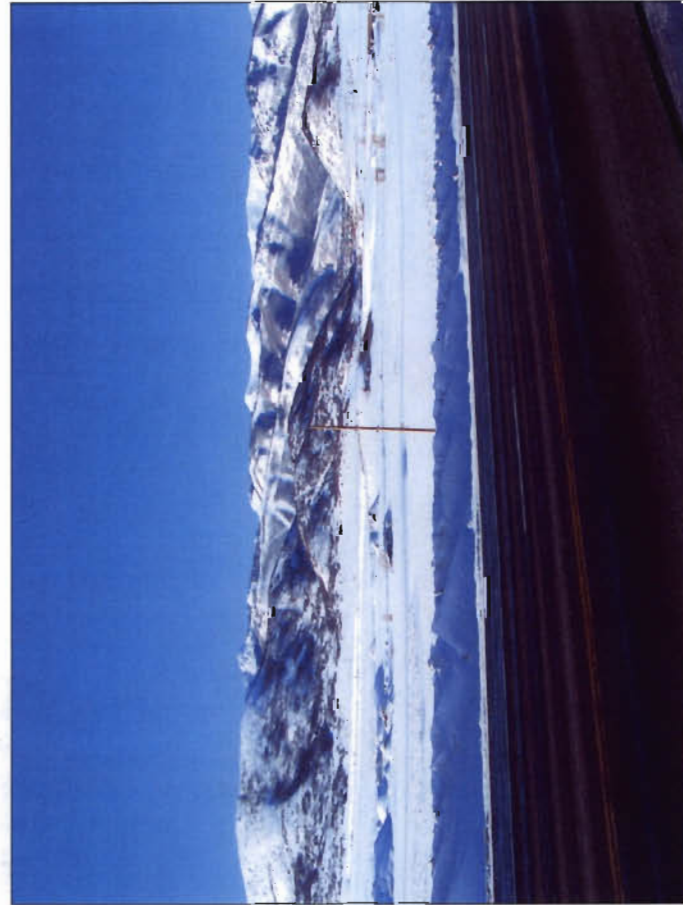
before development - view 2



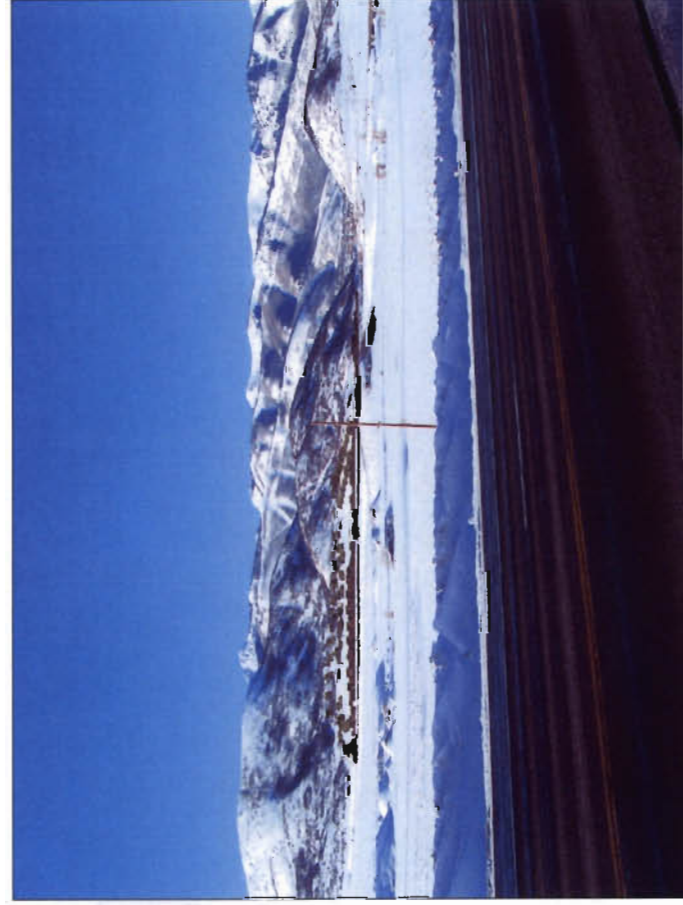
before development - view 3



after development - view 3



before development - view 4



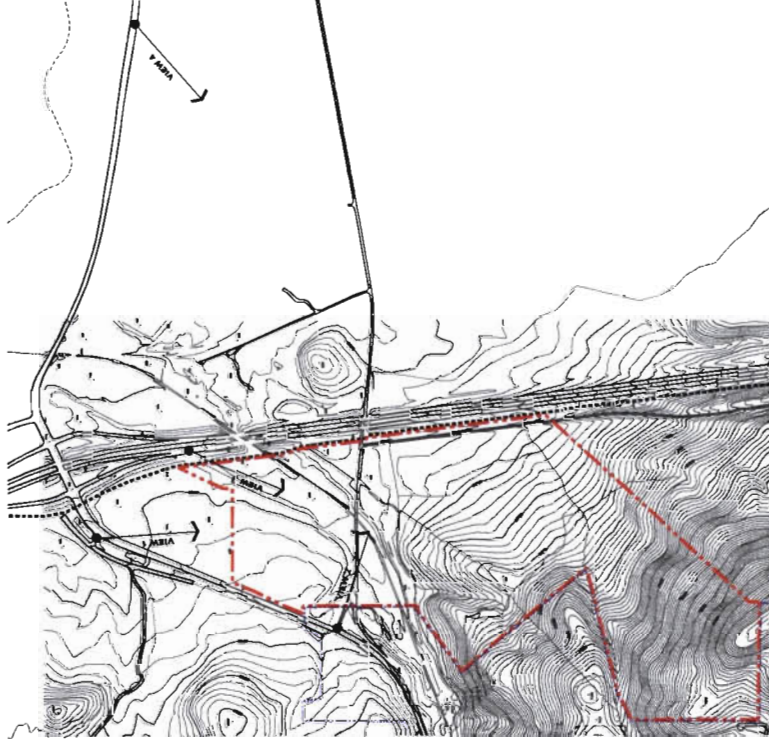
after development - view 4

**DESIGNATED ENTRY CORRIDORS AND VANTAGE POINTS PRESENT WITHIN OR ADJACENT TO THE SITE**

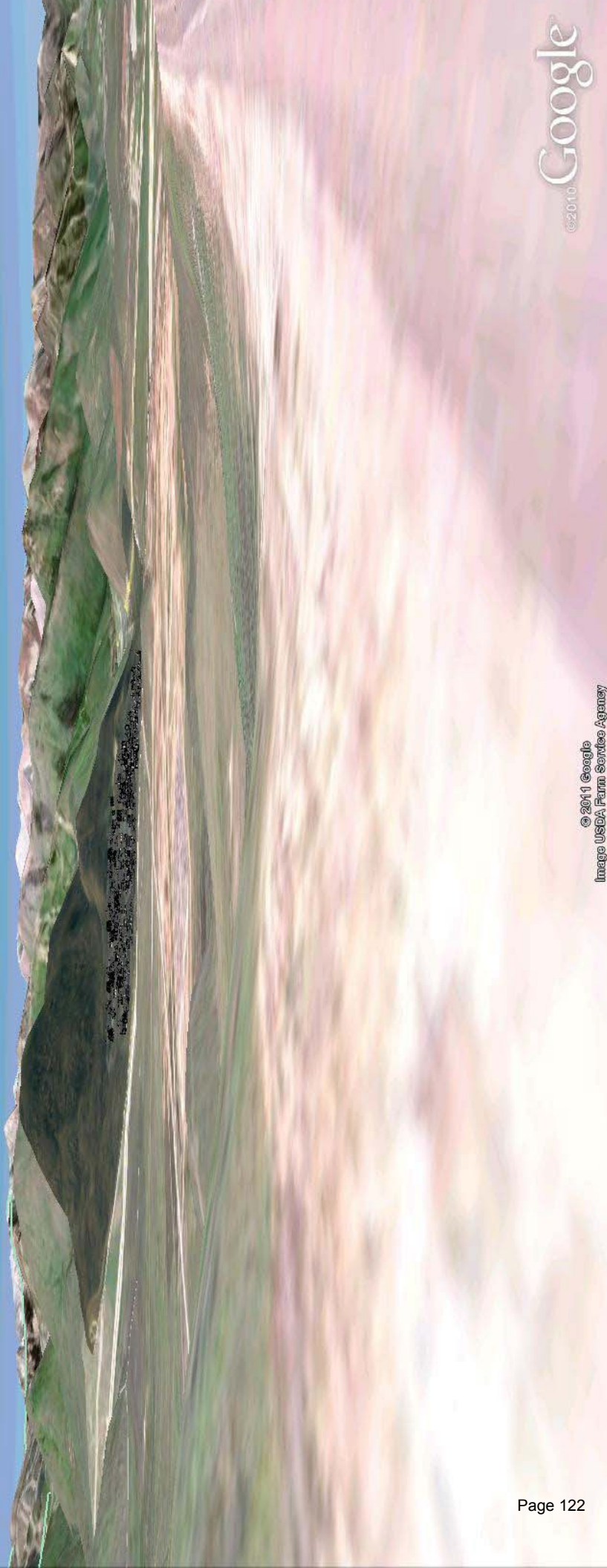
- VIEW 1**  
 - UTAH HIGHWAY 248 AT THE TURN-OUT ONE QUARTER MILE WEST FROM U.S. HIGHWAY 40

**OTHER DESIGNATED VANTAGE POINTS**

- VIEW 2**  
 - UTAH HIGHWAY 248 AT THE TURN-OUT TO OLD DUMP ROAD
- VIEW 3**  
 - U.S. HIGHWAY 40 SOUTHBOUND AT TOP OF ON-RAMP FROM UTAH HIGHWAY 248
- VIEW 4**  
 - UTAH HIGHWAY 248 WESTBOUND AT SIDE OF ROAD FROM KAMAS



Exit ground-level view



©2010 Google

© 2011 Google  
Image USDA Farm Service Agency  
Image © 2011 DigitalGlobe

40°40'42.15" N 111°27'56.64" W elev 6765 ft

Imagery Date: 6/17/2010 1993

Eye alt 6763 ft





Planning Commission - February 23, 2011



View 2



Exit ground-level view



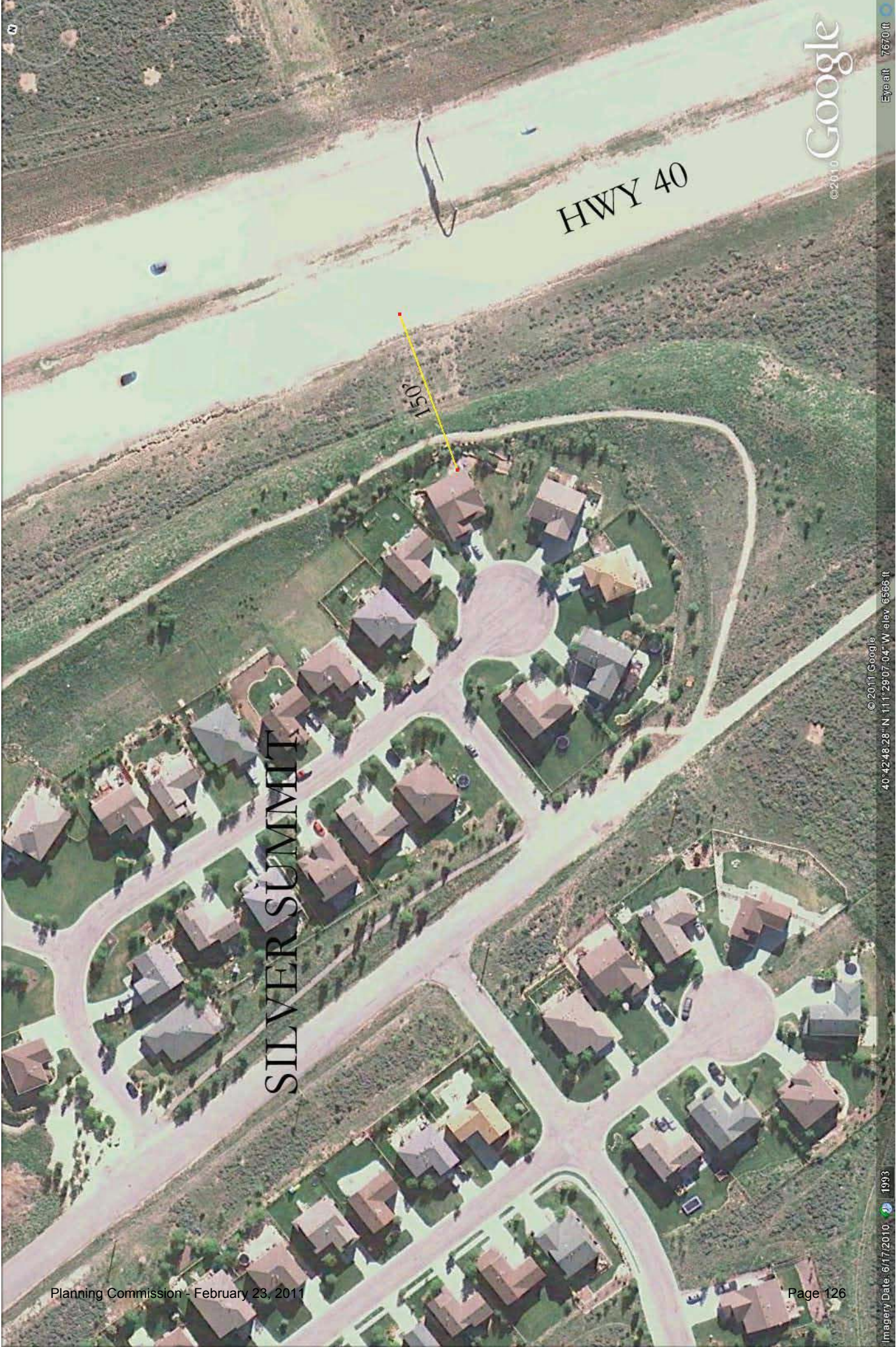
© 2011 Google  
Image State of Utah  
Image USDA Farm Service Agency





View 1





SILVER SUMMIT

HWY 40

150?

©2010 Google

Eye alt 7670ft

© 2011 Google  
40°42'48.28"N 111°29'07.04"W elev. 6566 ft

Imagery Date: 6/17/2010 1993



©2010 Google

Eye alt 7,749 ft

©2011 Google  
40°43'08.66" N 111°32'37.22" W elev 6413 ft

Imagery Date: 6/17/2010 1993



# PARK WEST VILLAGE

140'

HWY 224

Google

Eye alt - 7490 ft

© 2011 Google  
40°41'18.46" N 111°32'38.49" W elev 6683 ft

Imagery Date: 6/17/2010 1993

N

©2010 Google

Eye alt. 10086 ft

HWY 40

40

Richardson Flat Rd

# PARK CITY HEIGHTS

1735'

1365'

350'

350'

425'

425'

©2011 Google

40°40'16.56" N 111°27'47.42" W elev 6692 ft



HWY 40

IHC HOSPITAL

700'

©2010 Google

Imagery Date: 6/17/2010 1993  
©2011 Google  
40°41'16.87" N 111°28'05.63" W elev. 6688 ft  
Eye alt 8189 ft



# ICE ARENA & SPORTS COMPLEX

1,250'

HWY 248

©2010 Google

Eye alt 8932 ft

©2011 Google  
40°40'52.68" N 111°28'07.33" W elev 6656 ft

Imagery Date: 6/17/2010 1993



HWY 224

HOTEL PARK CITY

Google  
©2010

Eye alt 7601 ft

©2011 Google  
40°39'42.79" N 111°30'45.54" W elev 6815 ft

Imagery Date: 6/17/2010 1993



CANYON CREEK CLUB

INTERSTATE 80

225

Google

Eye alt 7415 ft

©2011 Google  
40° 43' 24.00" N 111° 31' 40.44" W elev 6384 ft

Imagery Date: 6/17/2010 1993



BLACK HAWK  
STATION

INTERSTATE 80

250'

Google

©2010

Eye alt 7826 ft

©2011 Google

40°43'28.48" N 111°31'58.00" W elev 6385 ft

Imagery Date: 6/17/2010 1993



# ASPEN VILLAS

65'

HWY 248

©2010 Google

Eye alt 7297 ft

©2011 Google  
40°39'55.73" N 111°29'50.05" W elev 6768 ft

Imagery Date: 6/17/2010 1993



# PARK CITY HEIGHTS

HOMESTEADS PERSPECTIVE

FEBRUARY 9, 2010



# PARK CITY HEIGHTS

PARK HOMES PERSPECTIVE



FEBRUARY 9, 2010



# PARK CITY HEIGHTS

COTTAGE HOMES PERSPECTIVE

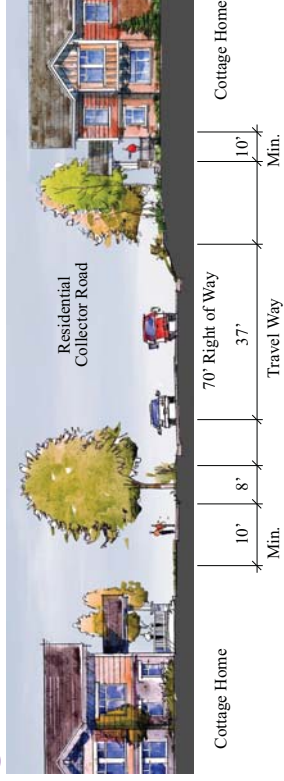
**A Park Homes Section**



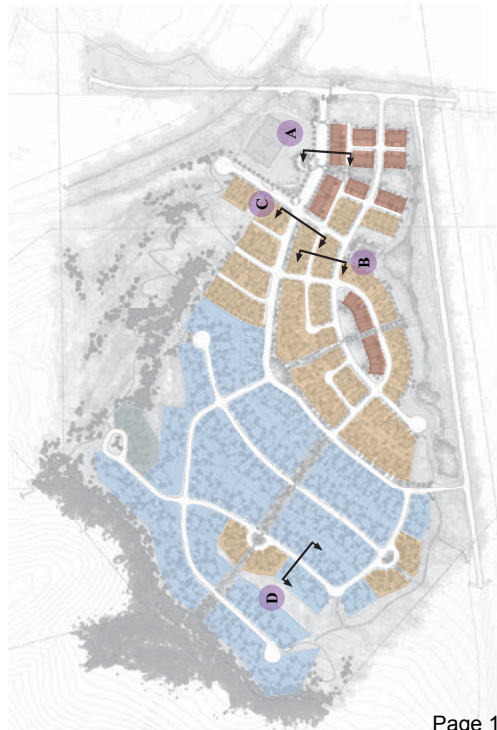
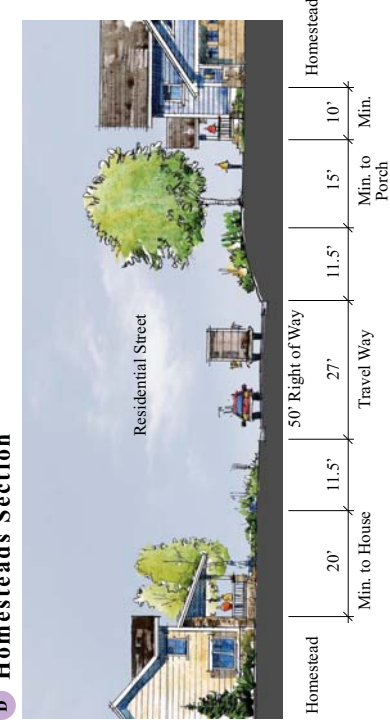
**B Cottage Homes Section**



**C Cottage Homes Section**



**D Homesteads Section**



# PARK CITY HEIGHTS

## STREET SECTIONS

# **Biological Resources Overview**

**for**  
**Park City Heights**

**Prepared for**

**The Boyer Corporation**  
90 South 400 West, Suite 200  
Salt Lake City, UT 84101

**Prepared by**



**Logan Simpson Design Inc.**  
8 East Broadway, Suite 300  
Salt Lake City, UT 84111

December 2010

# Table of Contents

---

|  |    |
|--|----|
| 1. Background.....                                       | 1  |
| 2. Project Location .....                                | 1  |
| 3. Ecological Setting.....                               | 4  |
| 4. Species Identification .....                          | 9  |
| 5. Habitat Suitability for the Greater Sage-grouse ..... | 13 |
| 6. Findings .....  | 17 |
| 7. Recommendations .....                                 | 17 |
| 8. Conclusions.....                                      | 18 |
| 9. Literature Cited.....                                 | 18 |
| 10. Additional Information.....                          | 19 |
| 11. Signatures.....                                      | 20 |

## List of Figures

|   |   |
|---|---|
| Figure 1. Project location.....   | 2 |
| Figure 2. Project area.....   | 3 |
| Figure 3. Vegetation communities and disturbed land types on the developable property ..... | 5 |

## List of Tables

|   |    |
|---|----|
| Table 1. Special status species potentially occurring in the project area ..... | 10 |
|---|----|

## List of Appendixes

|  |     |
|--|-----|
| Appendix A. Preliminary Site Plan..... | A-1 |
| Appendix B. Photographs.....           | B-1 |
| Appendix C. UDWR Letter .....          | C-1 |

## **1. Background**

The Boyer Company has proposed a residential development for a parcel of land along Richardson Flat Road, called Park City Heights. The Boyer Company requested that Logan Simpson Design Inc. (LSD) visit the Park City Heights project area and evaluate biological resources present in the area. This includes identifying any protected or sensitive biological resources that may occur in the project area or could be affected by the proposed development; documenting the ecological setting of the project area; providing a qualitative assessment of wildlife habitats within the area; identifying the common plant and animal species occupying the property; identifying and determining the suitability of habitats within the project area for endangered, threatened, or special concern plants and animals known from Summit County, Utah; providing an evaluation of the suitability of habitat for greater sage-grouse, which has been documented near the project area; and providing a review of the Park City Sensitive Lands Overlay (SLO) Zoning Regulations.

Throughout this Biological Resources Overview, the term “project site” is used to represent the development footprint (area of disturbance); the term “developable property” is a 216 acre contiguous parcel of land within which the project site is located; and the term “project area” includes lands generally surrounding the developable property. The term “project vicinity” is used to denote a more expansive landscape context. Note, a non-contiguous parcel of approximately 23 acres will be included in the zoning permit request; however this land was not considered in this biological study because it will not to be developed.

## **2. Project Location**

The developable property is an approximately 216-acre parcel located south of Utah State Route (SR) 248 and west of US Highway 40 (US 40) in Park City, Summit County, Utah (Figures 1 and 2). The property lies adjacent to, but outside the city limits of Park City. Approximately one third of the property is proposed for development – a site plan is included in Appendix A. The proposed development is at the base of the mountains, east to US 40, and north to nearly Richardson Flat Road. Lands adjacent to the property are a combination of mountain slopes with undeveloped shrublands in conservation easements (to the west), residential developments (to the west and southwest), riparian corridors and agricultural land (to the north) and an embankment for a controlled access highway (to the east). The developable property’s legal description includes portions of the southern half of section 2 and the northern half of section 11, Township 2 South, Range 4 East (Salt Lake Baseline and Meridian).

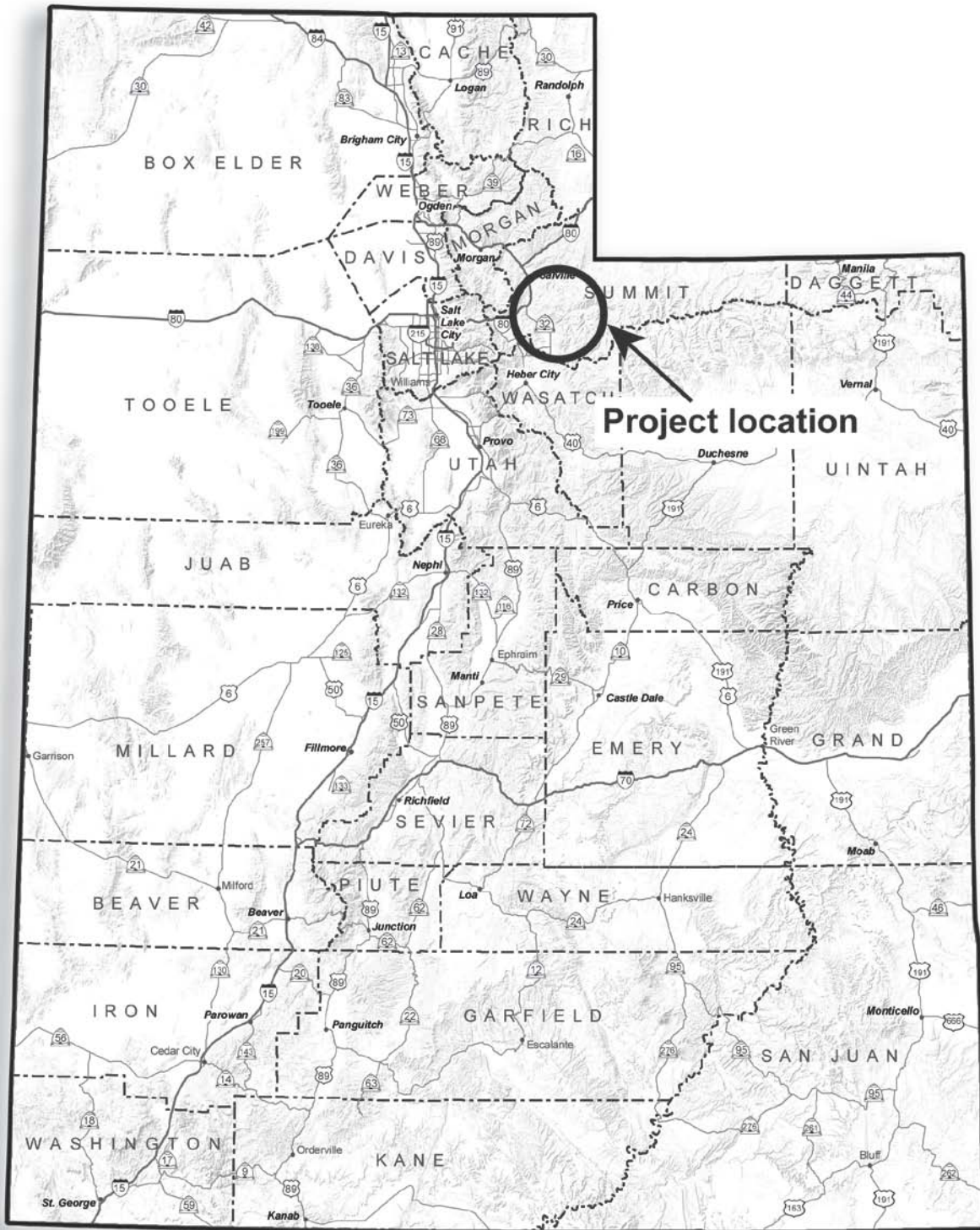
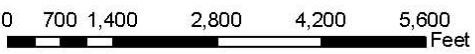


Figure 1. Project location.



**Legend**

Project\_Boundary



**Figure 2. Project area.**

### 3. Ecological Setting

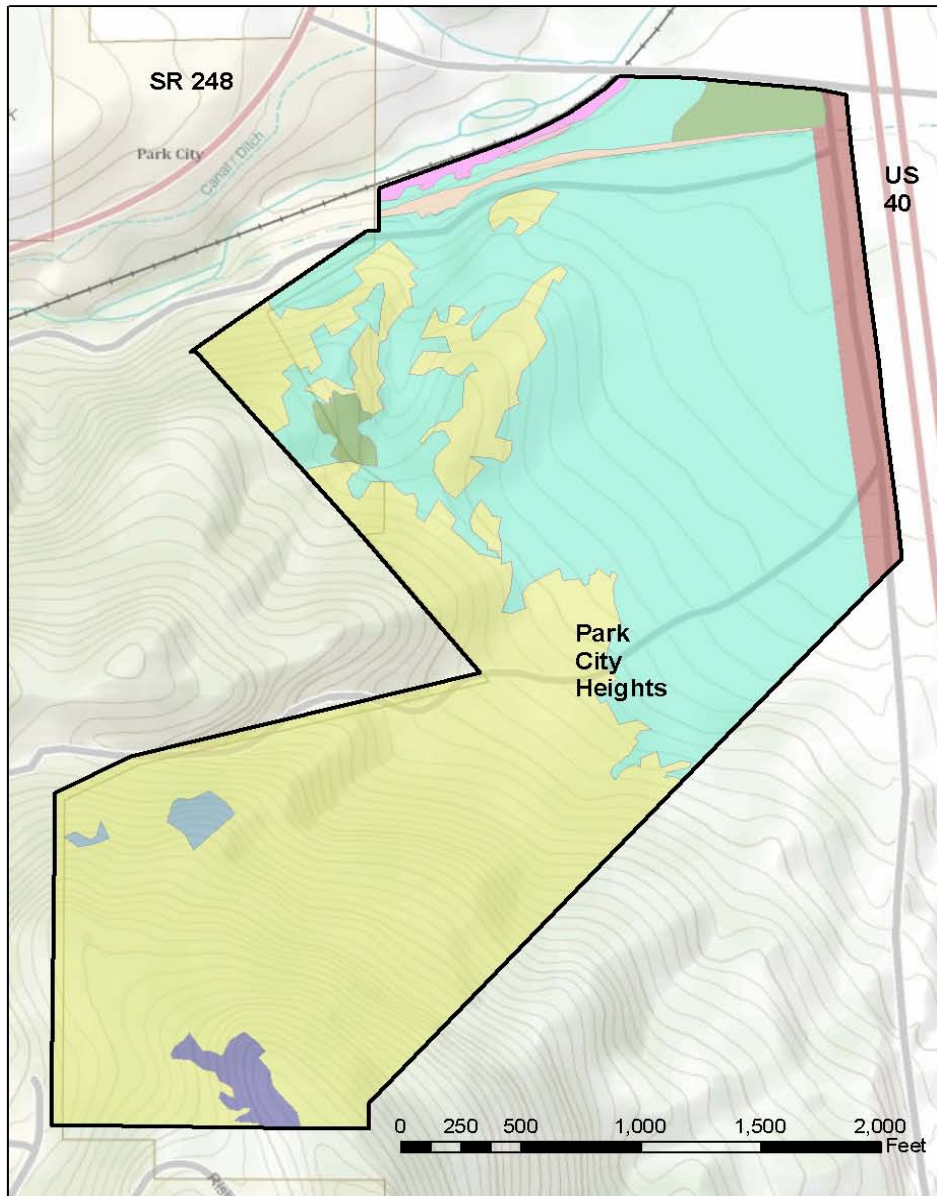
LSD biologist Gary Reese conducted a site visit to the Park City Heights project area on December 6 and 7, 2010. Data was collected on the existing biological resources of the project area. Site visit photographs are included in Appendix B. While snow depth averaged nine inches on uplands, conditions were ideal for evaluating the suitability of the habitat for wintering greater sage-grouse. A collapsible snow shovel was used to remove the snow in those areas where the herbaceous flora needed to be evaluated (Photograph 1). A four wheel drive vehicle aided in navigating the unimproved roads; areas not accessible by vehicle were surveyed on foot.

The project area is located within the Utah-Wyoming Rocky Mountains Ecological Region, which includes the mountains just north of Yellowstone National Park in south-central Montana, the Bighorn Mountains in northeast Wyoming, the Uinta Mountains of northeast Utah and Northwest Colorado, Utah's Wasatch Range, and the mountains and valleys of the southeastern corner of Idaho (Noss et al. 2001). Park City, which encompasses approximately 12 square miles with a resident population of approximately 7,300 people (2000 Census) and a substantial tourism industry, is located on the east side of the Wasatch Range. Park City consists of a core downtown area that is surrounded by lower-density residential and commercial developments, golf courses, and ski resorts.

The developable property is a 216-acre vegetated parcel that is situated south of Silver Creek, in the part of Richardson Flat lying west of the US 40 grade (Photograph 2). Elevation ranges from 6,640 to 7,580 feet. The highway realignment in the late 1980s resulted in an embankment being built across the western side of Richardson Flat (Photograph 3). Richardson Flat is located in a low gradient valley surrounded by hills of about 1,000 feet relief. The hills are comprised of either Woodside Shale or Weber Quartzite (Bromfield and Crittenden 1971). The erosion and weathering of these hills formed the old alluvial soils of the foothills. These soils are rich in clay and exhibit very low water permeability. The flat is drained by Silver Creek (Photograph 4), which flows from Park City to its east, then turns north from the developable property and passes the Richardson Flat tailings. The tailings and the riparian zone for Silver Creek have been undergoing remediation for heavy metal toxicity, left as a legacy of historic mining around Park City.

Figure 3 provides a map of the vegetation communities on the developable property, which includes six natural habitats and two types of disturbed areas. The vegetation communities are: Gambel oak shrubland (108 acres), mountain big sagebrush shrubland (99 acres), mountain big sagebrush - Saskatoon serviceberry shrubland (2 acres), sparsely vegetated wet meadow (1 acre), Douglas-fir woodland (1 acre), and quaking aspen shrubland (less than 1 acre). Disturbed areas include ruderal vegetation (7 acres highway grade and 2 acres abandoned railroad grade); and excavated land (4 acres). The wet meadow and part of the aspen shrubland are riparian wetland habitat, the remainder is upland.





**Legend**

**Vegetation**

**Habitat Type**

- Douglas fir woodland
- Excavated land
- Gambel oak shrubland
- Mountain big sagebrush - Saskatoon serviceberry shrubland

- Mountain big sagebrush shrubland
- Quaking aspen shrubland
- Ruderal vegetation (abandoned railroad grade)
- Ruderal vegetation (highway grade)
- Sparsely vegetated wet meadow



**Figure 3. Vegetation communities and disturbed land types on the developable property.**

## **Gambel Oak Shrubland**

Shrublands dominated by Gambel oak (*Quercus gambelii*) are the most common habitat type in the developable property. The oaks form thickets averaging 20 feet high and have sparse understories of shrubs, grasses, and herbs. These shrublands generally occupy steeper slopes and higher elevations in the project area (Photograph 5) than does the Mountain big sagebrush shrubland. The dense bushy environment provides cover for animals and their young. The high tannin content of Gambel oak doesn't seem to bother mule deer, who browse year-round on its foliage. Oak acorns which are rich in carbohydrates, fats, and proteins take a year to mature. Oak acorns are important food sources for ravens, jays, turkeys, squirrels, chipmunk, and deer.

Park City's SLO Zone Regulations limits the density of residential development in oak shrublands. They are recognized as both a sensitive wildlife habitat and because they occupy steep slopes generally unsuitable for development. Within the project area, this habitat will not be directly impacted by the proposed development.

## **Mountain Big Sagebrush Shrubland**

Mountain big sagebrush (*Artemisia tridentata* ssp. *vaseyana*) shrubland is the second most extensive habitat on the developable property (Photograph 6). It extends throughout the eastern side of the developable property, occupying moderate slopes. Mountain big sagebrush dominates the shrub canopy, with localized Saskatoon serviceberry (*Amelanchier alnifolia*) as an associated species. The average cover of sagebrush emerging from 9 inches of snow was 28 percent, with an average height of 23 inches emergent above snow. The herbaceous understory has been diminished from many years of grazing by cattle, sheep and horses. The understory appears to be dominated by cheatgrass (*Bromus tectorum*), an exotic grass which has invaded sagebrush rangelands throughout the region.

Big sagebrush is highly preferred and nutritious winter forage for mule deer, and provides habitat for a diverse assemblage of birds and mammals across the western United States (Welsh 2005). Songbirds such as dark-eyed juncos, horned larks, and white-crowned sparrows occupy sagebrush and consume big sagebrush seed. Additionally, the greater sage grouse requires sagebrush for its survival.

## **Mountain Big Sagebrush – Saskatoon Serviceberry Shrubland**

The transition zone between Gambel oak and mountain big sagebrush is where Saskatoon serviceberry is most common. These edge areas are highly variable in vegetative composition and are not readily mappable on aerial photography. However, this plant community forms a mappable habitat on ridgelines, a topographic feature protected under the Park City SLO Zone Regulations. Mountain big sagebrush – Saskatoon serviceberry shrubland is important wildlife habitat due to the proximity of protective oak cover

to serviceberry plants and its fruits. Deer and moose browse serviceberry and its fruit is relished by a variety of song and game birds (NRCS 2006). The ridgeline will not be directly impacted by the proposed development.

Sagebrush and serviceberry are co-dominants on the ridge along the southern edge of the developable property (Photograph 7). This area had abundant wildlife tracks (Photograph 8) and was the only area with a significant herbaceous component to the shrubland. The grasses identified included slender wheatgrass (*Elymus trachycaulus*) and crested wheatgrass (*Agropyron cristatum*). Except in times of high winter wind, this ridgeline appears to provide excellent wildlife habitat. Deer Valley subdivisions are immediately below the ridge. Lack of cover and proximity to homes limit the utilization of this habitat to species which tolerate human presence.

### **Sparsely Vegetated Wet Meadow**

Silver Creek flows within 5 to 100 feet of the northeastern edge of the developable property. The floodplain is bisected by a historic Union Pacific railroad grade, now converted to a rail trail. The ballast which built up the railroad bed is from mining operations and is toxic. The rail trail and Richardson Flat Road are the northern boundary for the developable property. Silver Creek is classified as a cold water fishery and supports willows (*Salix* spp.), cattails (*Typha latifolia*), and emergent and floating vegetation. The density and height of this riparian vegetation is quite variable, depending on the influence of beaver dams.

Along the rail trail is a sparsely vegetated wet meadow where the vegetation is dominated by sedges, with a small patch of aspen (*Populus tremuloides*) (Photograph 9). The wet meadow may be sparsely vegetated due to soil toxicity, or having been covered with soil.

Riparian habitats associated with Silver Creek are adjacent to the developable property and will not be disturbed by the proposed development. These riparian habitats will continue to offer forage and cover for birds, mammals (including resident beavers), fish, amphibians, reptiles, and aquatic invertebrates. Birds expected in the area include: red-tailed hawk, bald eagle (non-nesting), killdeer, rock pigeon, belted kingfisher, northern flicker, black-billed magpie, common raven, black-capped chickadee, European starling, song sparrow, dark-eyed junco, and house finch.

### **Douglas-fir Woodland**

Two small groves of Douglas-fir (*Pseudotsuga menziesii*) occupy a sheltered area below the ridge line and in a valley between two hills within the Gambel oak shrubland. This vegetation type was only examined through binoculars due to deep snow buildup and hazardous walking conditions. These groves can provide nesting sites and cover for birds such as owls and woodpeckers, as well as tree canopy habitat for squirrels. Douglas-fir groves are protected within Park City under the SLO Zone Regulations.

## **Quaking Aspen Shrubland**

Twelve 20 feet high quaking aspen (*Populus tremuloides*) saplings occupy the upland edge of the sparsely vegetated wet meadow (Photograph 9). There are 4 to 6 feet high suckers colonizing the wet meadow near the saplings. This appears to be vegetative recovery after beaver removal. With time, these saplings will probably be felled by the beaver lodging immediately north in Silver Creek. This vegetative type is narrow and barely evident on the 2009, 1:945 scale aerial photography that was used for mapping the vegetation of the developable property.

## **Ruderal Vegetation**

The area between the riparian habitat and the sagebrush uplands is bisected by an historic alignment of the Richardson Flat Road (now a two-track on the south side of Silver Creek) and an abandoned railroad spur (Photograph 10). The abandoned railroad grade and its cut embankments are dominated by weedy plants which have spontaneously colonized the site after the tracks were removed.

A steep embankment on the east side of the developable property is a highway re-seeding after construction of a grade for US 40 in the late 1980s. The seeding is a mix of grasses and herbs (Photograph 11). The top of the embankment is flat and has an unimproved road running parallel to the US 40 right-of-way fence.

## **Excavated Land**

A 4-acre excavated site in the northeast corner of the developable property is used in winter as the Park City snow storage area (Photograph 12). It is also used as an unimproved parking lot and staging area for heavy equipment.

## **Wildlife**

Various owls and raptors may occur incidentally throughout the project area. While there were perch sites on power line poles near the riparian area, no large nests were observed. Fresh tracks representing bobcat, turkey, coyote, and fox were observed during the site visit. Large mammal (e.g. ungulates, such as deer, elk, and moose) have been reported in the area by Utah Big Game Range Trend Studies and migrate across Silver Creek, crossing SR 248 both north and south (Dynamac Corporation 2002). They may be attracted to the willows to forage; however, because of the small size of the riparian area, large-scale vegetation removal in the last 20 years, and nearby human presence, it does not provide adequate cover areas for breeding. The riparian corridor may see occasional foraging use by these species.

Use of the project area by wildlife would be relatively similar between different seasons, with the exception that fewer species would be present in winter because many species migrate or hibernate to escape cold temperatures and scarce resources. Winter is when larger species such as deer and elk are more likely to

risk entering the developed areas of Park City to browse on the supplemental vegetation available in landscaped areas, particularly golf courses and gardens.

The steep oak shrublands and riparian corridor can serve as linkages for wildlife movements in fragmented landscapes. But the portion of the developable property to be developed currently has reduced value as a movement corridor because of the extent of human presence, the barrier fence along US 40, and the openness of the habitat in full view to any predator perched on the US 40 embankment. These factors preclude the movements of many wildlife species through the proposed developable property.

In summary, the project area currently provides various habitats for wildlife species that tolerate the presence of human development and disturbance. These species consist of small bird and mammal species with relatively small home range requirements. The surrounding habitat not proposed for development offers habitat for a variety of species. Although the area proposed for development may receive occasional use by wildlife for cover, foraging, roosting, and perching, occurrences by these species would be incidental and the habitat in the proposed development area is not critical to the survival of these species in the greater Park City area.

#### **4. Species Identification**

##### **Threatened, Endangered, and Sensitive Species**

The US Fish and Wildlife Service (USFWS) list of endangered, threatened, proposed, candidate, and conservation agreement species occurring in Summit County and the Utah Division of Wildlife Resources (UDWR) list of sensitive species for Summit County were reviewed to determine if any of these special status species have the potential to occur within the project area. Species included on the USFWS and UDWR lists are addressed in Table 1. No plants were included on either the USFWS or UDWR lists for Summit County. A project coordination letter from UDWR revealed that UDWR has not documented the presence of any special status species within the project area. The project area does not include any critical habitat that has been designated or proposed under the Endangered Species Act (16 U.S. Code 1531–1544, as amended).

**Table 1.** Special status species potentially occurring in the project area

| Species   | Status <sup>a</sup> | Habitat Requirements  | Suitable Habitat Present?  |
|---|---------------------|---|--|
| <b>Invertebrates</b>  |                     |   |  |
| Deseret mountainsnail<br>( <i>Oreohelix peripherica</i> )                     | SPC                 | Closely associated with limestone outcrops under vegetation and associated leaf litter, specifically mountain maple ( <i>Acer</i> sp.), scrub oak ( <i>Quercus gambelii</i> ), and balsam root ( <i>Balsamorhiza</i> sp.).                          | Project area is outside of species' known distribution.                                    |
| Western pearlshell<br>( <i>Margaritifera falcata</i> )                        | SPC                 | Small streams. Possibly extirpated in Utah, although small populations may exist in historical localities.  | Project area is outside of species' known distribution.                                    |
| <b>Fish</b>   |                     |   |  |
| Bluehead sucker<br>( <i>Catostomus discobolus</i> )                           | CS                  | A benthic species of small or mid-sized tributaries of moderate-to-fast velocity in high gradient reaches of mountain rivers of the Upper Colorado River system, the Snake River, and the Lake Bonneville basin.                                    | Project area is outside of species' known distribution.                                    |
| Boneytail<br>( <i>Gila elegans</i> )  | ESA LE              | Colorado River drainage   | Project area is outside of species' known distribution.                                    |
| Bonneville cutthroat trout<br>( <i>Oncorhynchus clarkia utah</i> )            | ESA LE              | Found in a number of habitat types, ranging from high elevation mountain streams and lakes to low elevation grassland streams. In all habitats, a functional stream riparian zone providing structure, cover, shade and bank stability is required. | Historically present throughout the region; there are no recent records from Silver Creek. |
| Colorado River cutthroat trout<br>( <i>Oncorhynchus clarkia pleuriticus</i> ) | CS                  | This subspecies of the cutthroat trout that is native to the upper Colorado River drainage of UT, WY, CO, AZ, and NM has been reintroduced into lakes in the Uinta Mountains, in the northeastern part of the state.                                | Project area is outside of species' known distribution.                                    |
| Colorado pikeminnow<br>( <i>Ptychocheilus lucius</i> )                        | ESA LE              | Colorado river drainage   | Project area is outside of species' known distribution.                                    |
| Humpback chub<br>( <i>Gila cypha</i> )  | ESA LE              | Colorado river drainage   | Project area is outside of species' known distribution.                                    |
| Least chub<br>( <i>Lotichthys phlegethontis</i> )                             | ESA C               | Springs, streams and lakes associated with the Bonneville Basin   | Project area is outside of species' known distribution.                                    |
| Razorback sucker<br>( <i>Xyrauchen texanus</i> )                              | ESA LE              | Colorado river drainage   | Project area is outside of species' known distribution.                                    |
| Northern Leatherside chub<br>( <i>Lepidomeda Copei</i> )                      | SPC                 | Native to streams and rivers of the southeastern portion of the Bonneville Basin.   | Project area is outside of species' known distribution.                                    |

**Table 1.** Special status species potentially occurring in the project area (continued)

| Species   | Status <sup>a</sup> | Habitat Requirements  | Suitable Habitat Present?   |
|---|---------------------|---|---|
| <b>Reptiles and Amphibians</b>                              |                     |   |   |
| Columbia River spotted frog<br>( <i>Rana luteiventris</i> ) | CS                  | Isolated springs and seeps that have a permanent water source, although individuals are known to move overland in spring and summer after breeding.   | Historical records for this species in the vicinity of the project area, but unsuitable habitat within the project area.      |
| Smooth green snake<br>( <i>Opheodrys vernalis</i> )         | SPC                 | Moist areas, especially moist grassy areas and meadows where it is camouflaged due to its solid green dorsal coloration.  | According to UDWR natural heritage records, there are no documented occurrences of this species in Summit County.             |
| Western toad<br>( <i>Bufo boreas</i> )                      | SPC                 | Found in a variety of habitats, including slow moving streams, wetlands, desert springs, ponds, lakes, meadows, and woodlands.  | Project area is outside of species' known distribution.   |
| <b>Birds</b>  |                     |   |   |
| Bald eagle<br>( <i>Haliaeetus leucocephalus</i> )           | SPC                 | Nests in tall trees near bodies of water where fish and waterfowl prey are available. Winters in sheltered stands of trees near open water. Generally avoid human activity and development.   | Occurrence in project area is unlikely. Occurrence would be incidental; no foraging, roosting, or nesting habitat is present. |
| Bobolink<br>( <i>Dolichonyx oryzivorus</i> )                | SPC                 | Wet meadows, grasslands, and agricultural areas associated with riparian or wetland areas. Populations in Utah are found in the northern half of the state near Logan, Brigham City, Kamas, Heber, Morgan, Mountain Green, Huntsville, West Layton, Provo, and Bear Lake.                               | Not expected to occur in the project area due to a limited area of potential suitable habitat.                                |
| Ferruginous hawk<br>( <i>Buteo regalis</i> )                | SPC                 | Flat and rolling terrain in grasslands, agriculture lands, sagebrush/saltbush/greasewood shrub lands, and at the periphery of pinyon-juniper forests. In the winter, uses farmlands, grasslands, deserts, and other arid regions where lagomorphs, prairie dogs, or other major prey items are present. | Occurrence in project area is unlikely. Occurrence would be incidental; no foraging, roosting, or nesting habitat is present. |
| Grasshopper Sparrow<br>( <i>Ammodramus Savannarum</i> )     | SPC                 | Summer resident, nesting in Utah in grasslands or shrub-steppe with a minor component of sagebrush.   | No suitable habitat in the project area.  |
| Greater sage-grouse<br>( <i>Centrocercus urophasianus</i> ) | ESA C               | Plains, foothills, and mountain valleys with an overstory of sagebrush and an understory of grasses and forbes for breeding habitat which maybe adjacent to wet meadow areas for brooding habitat. Low density sagebrush on south and southwestern slopes below ca. 6500 feet for winter habitat.       | Occupied habitat within a ½-mile radius of the project area, but unsuitable habitat within the project area.                  |

**Table 1.** Special status species potentially occurring in the project area (continued)

| Species   | Status <sup>a</sup> | Habitat Requirements  | Suitable Habitat Present?   |
|---|---------------------|---|---|
| <b>Birds (continued)</b>  |                     |   |   |
| Lewis's woodpecker<br>( <i>Melanerpes lewis</i> )                           | SPC                 | Within Utah, found in central part of state in open park-like ponderosa pine forests. Attracted to burned Douglas-fir, mixed conifer, pinyon-juniper, riparian, and oak woodlands. Prefers understory of grasses and shrubs to support insect prey populations. Nests in dead trees and stumps. | No suitable nesting habitat in the project area. Occurrence in the project area is unlikely based on the lack of Ponderosa pine or burned habitat and lack of understory in Douglas fir and Gambel oak. |
| Northern goshawk<br>( <i>Accipiter gentilis</i> )                           | CS                  | Uncommon, permanent resident in Utah. Prefers montane forests and riparian zone habitats.   | No suitable habitat in the project area.  |
| Short-eared owl<br>( <i>Asio flammeus</i> )                                 | SPC                 | Large open grassland or wetland areas, such as hayland, retired cropland, small-grain stubble, shrub-steppe and wet meadow zones of wetlands.   | Occupied habitat in the vicinity of the project area, but no suitable habitat within the project area   |
| Three-toed woodpecker<br>( <i>Picoides tridactylus</i> )                    | SPC                 | Engelmann spruce, sub-alpine fir, Douglas fir, grand fir, ponderosa pine, tamarack, aspen, and lodgepole pine forests, generally above 8,000 feet. Require soft wood for excavation and scaly barked trees or snags infested with boring insects for foraging.                                  | No suitable habitat in the project area.  |
| Western Yellow-billed cuckoo<br>( <i>Coccyzus americanus occidentalis</i> ) | ESA C               | Rare breeder in Utah. Large blocks of riparian habitat with dense sub-canopies below 6,500 feet.  | No suitable habitat in the project area.  |
| <b>Mammals</b>  |                     |   |   |
| Black-footed ferret<br>( <i>Mustela nigripes</i> )                          | ESA LE              | Underground prairie dog borrows. Reintroduced to the Coyote Basin of Uintah County, Utah.   | Project area is outside of species' known distribution.   |
| Canada lynx<br>( <i>Lynx canadensis</i> )                                   | ESA LT              | Montane conifer forests. Rare in Utah.  | Project area is outside of species' known distribution.   |
| White-tailed prairie dog<br>( <i>Cynomys leucurus</i> )                     | SPC                 | Similar to other prairie-dogs, these form colonies and spend much of their time in underground burrows.   | Project area is outside of species' known distribution.   |

Source: Utah Conservation Data Center, <[http://dwrcdc.nr.utah.gov/ucdc/ViewReports/te\\_cnty.htm](http://dwrcdc.nr.utah.gov/ucdc/ViewReports/te_cnty.htm)>; <<http://dwrcdc.nr.utah.gov/ucdc/ViewReports/sscounty.htm>>; and <[http://www.fws.gov/utahfieldoffice/Documents/Species%20by%20County\\_12092010.pdf](http://www.fws.gov/utahfieldoffice/Documents/Species%20by%20County_12092010.pdf)>. Accessed December 15 2010.

<sup>a</sup> Status definitions: SPC=Wildlife of Special Concern in Utah, CS=Species receiving special management under a Conservation Agreement in order to preclude the need for Federal listing, ESA=Endangered Species Act, C=Candidate, LE=Listed Endangered, LT=Listed Threatened



## 5. Habitat Suitability for the Greater Sage-grouse

This section provides an informed evaluation of the habitat suitability of the developable property for greater sage-grouse (*Centrocercus urophasianus*) in various seasons. It is based on field surveys and 2009 aerial imagery interpretation of the vegetation types in the project area. It is also based upon findings in recent published research studies and from the greater sage-grouse conservation plan for Morgan and Summit Counties, Utah (MSARM 2006).

The proposed Park City Heights development project lies within an area presently mapped by the UDWR as greater sage-grouse habitat. The property boundaries were submitted to the UDWR along with a request for a sensitive species overview of the area. A response letter dated December 13, 2010 (Appendix C) stated that "Within a ½-mile radius of the project area (section 2 & 8, Township. 2 South Range. 4 East), the Utah Division of Wildlife Resources (UDWR) has recent records for greater sage-grouse." No additional information on the sage-grouse occurrences was provided by UDWR.

In 1999, the UDWR mapped at a 1:980,000 scale the extent of seasonal habitat types for greater sage-grouse in the Morgan and Summit Counties Resource Area (MSARM 2006). Figure 4 from that report depicts sage-grouse nesting and brood habitat. It is of sufficient resolution to depict occupied nesting and brood habitat in the valley drained by Silver Creek, including the Richardson Flat area. Figure 5 from that report depicts winter habitat over the entire project area and region. These maps appear to be derived from the SGID93\_BIOSCIENCE-Habitat-SageGrouseBrood and SGID93\_BIOSCIENCE-Habitat-SageGrouseWinter geographical information system (GIS) data layers available at the Utah GIS Portal. Those data sets represent sage-grouse brooding and winter use areas in Utah as determined by UDWR field biologists in spring 1999. They show brood habitat extending into the project area and winter habitat over the entire property. Noteworthy is that boundaries of both potential habitats are highly generalized at this mapping scale, and thus included areas which scientific studies have shown are not preferred habitat.

Doherty, et al. 2010 produced a map depicting the location and relative population size of sage-grouse breeding areas (leks) in the western United States. For the Park City area of the map, the Silver Creek valley, extending from Richardson Flats north 4 miles to Interstate 80, has at least three leks, which are all categorized in the smallest population size class. These low density leks are shown as 8.5 kilometer (km) diameter areas, to denote the typical range around a lek within fragmented habitats like Richardson Flat. The implication of this size class analysis is that leks like the ones in the project vicinity should be considered of lower priority. Further evidence of a low density of birds in western Summit County is provided by lek survey results in a report by UDWR (2005). It reports three leks surveyed in 1995 and one lek in 2000 and 2001. There were only one male and three females birds counted. However, not all leks are counted on a reoccurring basis.

Suitable habitat depends on a wide variety of factors which can transform a habitat with preferred vegetation into one that sage-grouse won't occupy. For the property area, these exclusionary factors included poor quality habitat, such as exotic plant dominance and even-aged structure; unsuitable habitat such as oak shrubland; unsuitable topography and aspect; omnipresent human disturbance such as roads, parking lots, and construction staging areas; transmission lines and poles; presence of known predators; toxic soils; wildlife exclusion fencing; juniper encroachment; habitat fragmentation; and adjacent developed land. The following discussion provides evidence to support a hypothesis that the combination of these factors within the property area makes the developable property poorly suited to supporting sage-grouse in any season.

Preferred and suitable habitats for sage-grouse depend, in part, upon the topography, as well as the structure and composition of existing vegetation, which varies by season. Preferred topography and aspect for sage-grouse wintering habitat has been determined in research studies summarized by Connelly et al. (2011) to be on south or southwest-facing aspects. These aspects capture sun at the best angles for warming sage-grouse during sunny days. They are also on gentle slopes of less than 5 percent grade. The project area is the direct opposite, being primarily northeastern slopes and in part over 5 percent grade. Most areas of undeveloped land near known leks and within these preferred winter habitat topographic parameters are east of the property area across US 40; on the eastern side of Silver Creek and Richardson Flat.

Sage-grouse are obligate sagebrush species, meaning that sagebrush (*Artemisia* sp.) is a necessary component of their habitat. The species, height, and cover of sagebrush selected as habitat depends upon the season and type of activity the sage-grouse are engaged in (i.e., breeding, nesting/brooding, or wintering). Much of the developable property is Gambel oak, which immediately excludes it from consideration as sage-grouse habitat. Research studies summarized by Connelly et al. (2011) shows that preferred sagebrush habitat must lie within a restricted range of cover and height classes for the shrub. These parameters varied by state. In Utah, satellite imagery was used by Homer et al. (1993) to classify winter habitat of sage-grouse into seven shrub categories. Wintering grouse preferred shrub habitats with medium to tall (16-24 inch high) shrubs and moderate shrub canopy cover (20–30 percent). Sage-grouse avoided winter habitats characterized by medium (16-20 inch high) shrub height with sparse (less than 14 percent) sagebrush canopy cover. However, Bohne et al. (2007) caution that efforts to inventory wintering areas need to validate the maps of potential sage-grouse winter habitat indicated by vegetation and snow deposition patterns developed from aerial or satellite imagery. They summarized the winter range sagebrush preferences of sage-grouse in Wyoming as 10-30 percent canopy cover, 10-14 inches in height above snow, with preference for windblown ridges with low sagebrush in a landscape mosaic of taller

sagebrush. Sage-grouse winter range in Wyoming does not occur above 7,500 feet elevation, or in areas where there is Juniper (*Juniperus osteosperma*) encroachment.

Based upon eight transects of 100-200 feet in length, completed during the site visit when there was an average of nine inches snow cover, most of the sagebrush within the developable property exceeded the optimum height or cover parameters for preferred winter habitat. The average cover along the transects was 28 percent (range 8-46), with an average height of 32 inches (i.e., 23 inches emergent above snow; height range of 21 to 41 inches). However, winter sagebrush cover is dependent on snow depth. As the depth increases, emergent cover decreases. Records compiled by the Western Regional Climate Center indicate the average winter snow depth in Park City is 5-6 inches, with a February maximum of 18-20 inches. Thus as the winter progresses, less sagebrush is exposed and a migratory sage grouse population could move 50-100 miles (Patterson 1952) to lower elevations and milder conditions. When snow depths reach 14 inches, sage-grouse abandon flat areas for drainages and steeper southwest facing slopes (Autenrieth 1981, Hupp and Braun 1989). Thus, even if an optimum combination of sagebrush cover and height were attained sometime between January and March on the developable property, the 14 inches or greater average snow depth and northeast-facing aspect of the developable property would preclude winter occupancy by sage-grouse.

Brooding habitat must have available succulent forage. The sagebrush in the project area would classify under the National Vegetation Classification system as an *Artemisia tridentata* ssp. *vaseyana* / *Bromus tectorum* (Mountain big sagebrush / cheatgrass) Semi-natural Shrubland [and Sparse Shrubland] Association. The herbaceous understory vegetation is dominated by an exotic grass and poor in the quantity and quality of forage preferred by sage-grouse during brooding season.

Sage-grouse are potentially subject to increased mortality and disturbance resulting from manmade structures including fences, power lines, and other tall structures (wind turbines, communication towers), though this threat is poorly understood (MSARM 2006). Sage-grouse may fly into these structures which can result in death or may injure them to the point where they cannot effectively avoid predators. Sage-grouse mortalities due to collision with power lines, fences, and other tall structures have been observed in Colorado, Utah, and other areas (Gunnison Sage-grouse Rangewide Steering Committee 2005). Photograph 11 shows a five foot high, hog-wire fence along US 40 and an embankment fragmenting the developable property from more extensive and diverse sagebrush habitat in Richardson Flat, to the east. It apparently was installed to prevent moderate-sized mammals from entering the highway right-of-way and being a collision risk. Given its height and orientation along the crest of the embankment, it could present a hazard to low-flying sage-grouse. The poles provide perches for avian predators of sage-grouse, which include black-billed magpie and common raven (both observed on a December 7 site visit), as well as eagles and hawks (MSARM 2006). The predators can also perch on the edge of the embankment and

command a view of the entire acreage of sagebrush in the project area (Photographs 3 and 11). Along the oak/sagebrush transition are encroaching junipers which have been highline browsed in winter by deer and serve as perches for predators. Studies in Nevada have shown sage-grouse leks and brooding areas are not found within view of junipers, due to threats from predators (Dallin 2010).

While sagebrush adjacent to riparian zones can be a preferred habitat for nesting, a combination of exclusionary factors makes the developable property unsuitable habitat. A power line crosses the north end of the developable property near to the Silver Creek riparian area. The power line poles serve as perching sites for avian predators. From atop these poles, some of which are shown in Photograph 11 the entire upland/riparian transition area within the project area is visible to predators. Ravens were observed on these poles during the December field visit.

Welsh (2005) summarized the available research on sage-grouse habitat preference and wrote that “the ideal brooding habitat would consist of big sagebrush with a canopy cover of some 25 percent with a small creek running through it. A riparian zone about 50 feet wide would reduce the big sagebrush canopy cover to zero and provide the needed forbs for the chicks to eat with the adjacent big sagebrush cover providing shading, loafing, escape, food, and a source of insects.” In contrast, the Silver Creek floodplain is approximately 500 feet wide and toxic waste underlies the riparian vegetation and pools formed by beaver activity. On the rail trail, the toxic ballast of the former Union Pacific Railroad has been partly paved over and presently provides a pedestrian rail trail through the riparian zone (SCWSG 2006). The riparian soils are also toxic from the tailings of historic mining operations (Weston 1989). The toxicity is from heavy metals, primarily zinc, lead, and arsenic (EPA 2005). Grazing and browsing the vegetation rooted in these soils leads to bioaccumulation of the heavy metals in the food chain. The combination of all these exclusionary factors makes the north end of the property area both unsuitable and unfit habitat for sage-grouse.

Sage-grouse avoid areas of human presence. The perimeter of the developable property is heavily used by humans and is laced with two-track roads. The northern boundary has vehicle traffic on the paved Richardson Flats Road. Photograph 12 shows a parking and construction staging area in the northeast corner of the developable property. A construction company operates a busy yard just across Silver Creek from the northwest corner of the project area. There are existing subdivisions adjacent to Gambel oak shrublands and mountain big sagebrush-Saskatoon serviceberry shrubland habitats just beyond the west property boundary. The entire eastern property boundary is an embankment for US 40. Only the southern property boundary is unoccupied by humans. Thus, sage-grouse within the fragmented sagebrush habitat of the property cannot escape the visual and auditory presence of humans.

## 6. Findings

### *Potential Impacts to Threatened, Endangered, and Sensitive Species*

No habitats that would be used by threatened, endangered, or sensitive species during any part of the year were identified in the project area. Therefore, the proposed project will have no effect on any threatened or endangered species or its habitat and will not impact any sensitive species.

### *Potential Impacts to Wildlife and Wildlife Habitats*

The proposed development would occur on approximately one-third (70-80 acres) of the developable property. As proposed, the development would be confined to mountain big sagebrush habitat and areas of ruderal vegetation. Because of its small size and isolated location, the project site is inhabited by a relatively small diversity of birds and small mammals, although additional species may use the area incidentally for foraging (e.g. ungulates) or during periods of migration (e.g. neotropical migrant bird species). Impacts to wildlife from the construction of the proposed development are expected to be minimal, as the proposed development would occur outside of riparian vegetation and wetlands where there is typically more productivity and a higher density and diversity of wildlife species.

The proposed project would result in a reduction in low quality wildlife habitat. Undeveloped lands on the developable property are contiguous with conservation easements on adjacent properties, thus providing interconnected habitats for wildlife occurring in the project vicinity. Species that currently occupy open space habitat are not likely to be substantially affected by a reduction in mountain sagebrush habitat. In addition, there are large areas of open space adjacent to undeveloped land within the developable property. The proposed Park City Heights development is consistent with the Park City SLO Zone Regulations.

## 7. Recommendations

- Any future project area developments could minimize impacts to riparian areas and wetlands in the project area.
- Noxious weeds in the project area could be treated to prevent their spread into adjacent areas.
- Signage could be provided along the multi-use path to alert recreational users to the presence of wetland habitats and the need to stay on paths to protect them. Alternatively, signage that highlights the opportunities for wildlife watching or ecological discovery (e.g., the identification of vegetation components or observation of ecological processes) could be provided, resulting in an enhanced recreational experience for those passing through the project area.

## 8. Coordination

UDWR was consulted for species concerns during the development of this Biological Resources Overview. A letter from the UDWR regarding the project indicated that UDWR has not documented the presence of any special status species within the developable property, although known and historical special status species occurrences are within the project vicinity (Appendix C).

## 9. Literature Cited

- Autenrieth, R. E. 1981. Sage grouse management in Idaho. Idaho Department of Fish and Game. Wildlife Bulletin Number 9.
- Bohne, J., T. Rinkes, and S. Kilpatrick. 2007. Sage-Grouse Habitat Management Guidelines for Wyoming. (accessed December 15, 2010 at <http://gf.state.wy.us/downloads/pdf/FinalHabitatMgmtGuidelines-07-24-07.pdf>).
- Bromfield, C.S. and M.D. Crittenden. 1971. Geologic map of the Park City East quadrangle, Summit and Wasatch Counties, Utah. US Geological Survey, Geologic Quadrangle Map GQ-852. 1:24,000 scale.
- Connelly, J.W., E.T. Rinkes, AND C.E. Braun. 2011. Characteristics of greater sage-grouse habitats: a landscape species at micro and macro scales. [In] S. T. Knick, S.T. and J.W. Connelly (editors). Greater sage-grouse: Ecology and conservation of a landscape species and its habitats. Studies in Avian Biology Series (vol. 38), University of California Press, Berkeley, CA. (accessed December 15, 2010 at: <http://sagemap.wr.usgs.gov/Docs/SAB/Chapter04.pdf>).
- Dallin, N. 2010. Personal communications with Gary A. Reese at Nevada Department of Wildlife Sage-grouse Lek Survey Training, March 20, 2010, Elko, NV.
- Doherty K.E., J.D. Tack, J.S. Evans, and D.E. Naugle. 2010. Mapping breeding densities of greater sage-grouse: A tool for range-wide conservation planning. BLM Completion Report: Interagency Agreement # L10PG00911, Bureau of Land Management, Washington, D.C. (accessed December 15, 2010 at [http://www.blm.gov/pgdata/etc/medialib/blm/wo/Communications\\_Directorate/public\\_affairs.Par.46599.File.tmp/GRSG%20Rangewide%20Breeding%20Density.pdf](http://www.blm.gov/pgdata/etc/medialib/blm/wo/Communications_Directorate/public_affairs.Par.46599.File.tmp/GRSG%20Rangewide%20Breeding%20Density.pdf)).
- Dynamac Corporation. 2002. Silver Maple Claims Functional Wetland Assessment. Unpublished report submitted to Bureau of Land Management, Salt Lake City Field Office, UT.
- EPA. 2005. EPA Super Fund Record of Decision: Richardson Flat Tailings Site, Park City, Utah. U.S. Environmental Protection Agency, Region 8, Denver, CO. (accessed December 15, 2010 at <http://www.epa.gov/superfund/sites/rods/fulltext/r0805046.pdf>).
- Gunnison Sage-grouse Rangewide Steering Committee. 2005. Gunnison Sage-grouse Rangewide Conservation Plan. Colorado Division of Wildlife, Denver, CO.
- Homer, C.G., T.C. Edwards, Jr., R.D. Ramsey, and K.P. Price. 1993. Use of remote sensing methods in modeling Sage Grouse winter habitat. *Journal of Wildlife Management* 57:78–84.
- Hupp, J. W., and C. E. Braun. 1989. Topographic distribution of sage grouse foraging in winter. *Journal of Wildlife Management* 53:823-829.

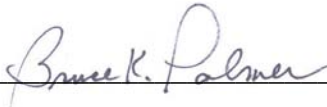
- MSARM. 2006. Morgan-Summit Greater Sage-grouse (*Centrocercus urophasianus*) Local Conservation Plan. Morgan-Summit Adaptive Resource Management Local Working Group. Utah State University Extension and Jack H. Berryman Institute and Utah Division of Wildlife Resources. Salt Lake City, UT. Unpublished Report (accessed December 15, 2010 at <http://utahcbcp.org/files/uploads/morgan/msarmsagrplan.pdf>).
- NRCS. 2006. Plant Guide: Pacific Serviceberry. Natural Resources Conservation Service, US Department of Agriculture, Washington, DC. (accessed December 15, 2010 at [http://plants.usda.gov/plantguide/pdf/pg\\_amals.pdf](http://plants.usda.gov/plantguide/pdf/pg_amals.pdf)).
- Noss, R., G. Wuerthner, K. Vance-Borland, and C. Carroll. 2001. A Biological Conservation Assessment for the Utah-Wyoming Rocky Mountains Ecoregion: Report to the Nature Conservancy, Arlington, VA.
- Patterson, R. L. 1952. The sage grouse in Wyoming. Sage Books, Inc. Denver, CO, USA.
- SCWSG. 2006. Draft Meeting Summary, Silver Creek Watershed Stakeholders' Group, January 13, 2006, Park City Library, Park City, UT. (accessed December 15, 2010 at <http://www.silvercreekpc.org/mtnngsummary11306.htm>).
- UDWR. 2001. Sage-grouse in Utah. Utah Division of Wildlife Resources. (accessed December 17, 2010 at [http://wildlife.utah.gov/pdf/sagr\\_statusrpt01.pdf](http://wildlife.utah.gov/pdf/sagr_statusrpt01.pdf))
- Welch, Bruce L. 2005. Big sagebrush: A sea fragmented into lakes, ponds, and puddles. Gen. Tech Rep. RMRS-GTR-144. U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Fort Collins, CO.
- Weston, R.F. 1989. Site Inspection Report, Silver Maple Claims, Park City, Utah. Roy F. Weston, Inc., Lakewood, CO. Report prepared for the Bureau of Land Management.

## **10. Additional Information**

Gary A. Reese conducted a field review of the project area on December 6 and 7, 2010. Photographs and field notes are on file at Logan Simpson Design Inc.

## 11. Signatures

Prepared By:  Date: December 22, 2010  
Gary A. Reese, Senior Biologist  
Logan Simpson Design Inc.

Reviewed/Approved By:  Date: December 22, 2010  
Bruce Palmer, Senior Biologist  
Logan Simpson Design Inc.



**Appendix A**  
**Preliminary Site Plan**

# PARK CITY HEIGHTS

## CONCEPTUAL MASTER PLAN

NOVEMBER 7, 2010



**Appendix B**  
**Photographs**



Photograph 1. Use of a collapsible shovel to sample vegetation under the snow pack.



Photograph 2. View of the developable property from the top of a ridge along the south west border of the property. Note US 40 running north south and SR 248 coming in from the west (left side of photograph).



Photograph 3. View of developable property looking north north-east from US 40 grade.



Photograph 4. View northeast along the rail trail. The Silver Creek riparian area is on the left and the sparsely vegetated wet meadow is on the right.



Photograph 5. View upslope along the powerline crossing the northern end of the developable property. This line passes through Gambel oak shrubland.



Photograph 6. View downslope along the powerline, looking east across the mountain big sagebrush in the northern part of the developable property. This line is close to the riparian area and the poles are perching sites for raptors.



Photograph 7. Mountain big sagebrush and Saskatoon serviceberry habitat on the ridge top at the southern end of the developable property.



Photograph 8. Detail of mountain big sagebrush emergent from the snowpack on the ridge line of the developable property. Abundant mammal tracks were present in this area, which abuts Deer Valley subdivisions.



Photograph 9. Quaking aspen shrubland illustrating aspen suckers and saplings along the wet meadow.



Photograph 10. Abandoned railroad grade along northern end of developable property.





Photograph 11. US 40 and right-of-way fence, looking south along a frontage road from the east side of developable property.



Photograph 12. Excavated area serving as a parking lot at northeast corner of the developable property.

**Appendix C**  
**UDWR Letter**



JON M. HUNTSMAN, JR.  
Governor

GARY R. HERBERT  
Lieutenant Governor

# State of Utah

## DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
Executive Director

### Division of Wildlife Resources

JAMES F. KARPOWITZ  
Division Director

December 13, 2010

Gary Reese  
Logan Simpson Design  
3753 Howard Hughes Parkway #235  
Las Vegas, NV 89169

Subject: Species of Concern Near the Richardson Flats Residential Development, Park City, Utah

Dear Gary Reese:

I am writing in response to your email dated December 8, 2010 regarding information on species of special concern proximal to the proposed Richardson Flats residential development located in Sections 2 and 11 of Township 2 South, Range 4 East, SLB&M, in Park City, Summit County, Utah.

Within a ½-mile radius of the project area noted above, the Utah Division of Wildlife Resources (UDWR) has recent records for greater sage-grouse. In addition, in the vicinity there are recent records of occurrence for short-eared owl and historical records of occurrence for Columbia spotted frog. All of the aforementioned species are included on the *Utah Sensitive Species List*.

The information provided in this letter is based on data existing in the Utah Division of Wildlife Resources' central database at the time of the request. It should not be regarded as a final statement on the occurrence of any species on or near the designated site, nor should it be considered a substitute for on-the-ground biological surveys. Moreover, because the Utah Division of Wildlife Resources' central database is continually updated, and because data requests are evaluated for the specific type of proposed action, any given response is only appropriate for its respective request.

In addition to the information you requested, other significant wildlife values might also be present on the designated site. Please contact UDWR's habitat manager for the northern region, Scott Walker, at (801) 476-2776 if you have any questions.

Please contact our office at (801) 538-4759 if you require further assistance.

Sincerely,

Sarah Lindsey  
Information Manager  
Utah Natural Heritage Program

cc: Scott Walker, NRO

1594 W. North Temple, Suite 2110, PO Box 146301, Salt Lake City, UT 84114-6301  
telephone (801) 538-4700 • facsimile (801) 538-4709 • TTY (801) 538-7458 • [www.wildlife.utah.gov](http://www.wildlife.utah.gov)

