SITE DEVELOPMENT CONSTRUCTION PLANS

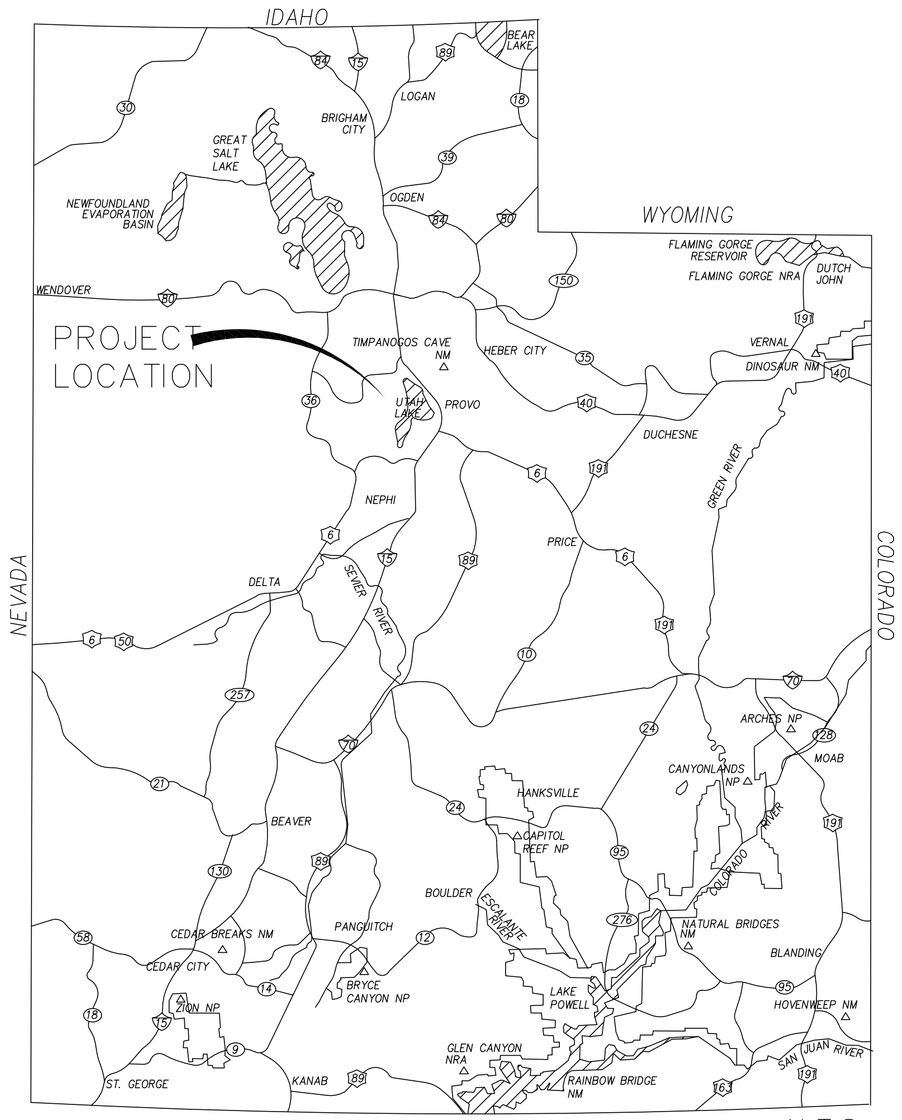
BEACON POINT SUBDIVISION

PHASE 1

LOCATION

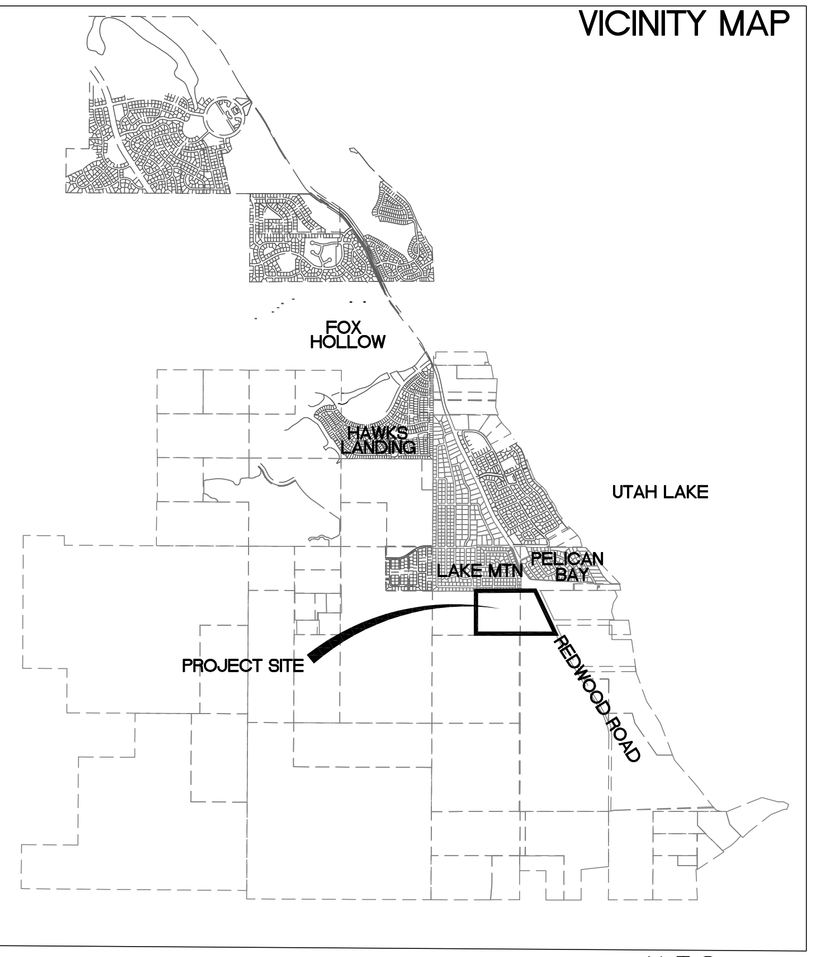
NORTH HALF OF SECTION 19 TOWNSHIP 6 SOUTH, RANGE 1 EAST,
SALT LAKE BASE AND MERIDIAN

PHASE 1 PRELIMINARY



N.T.S.

VICINITY MAP



N.T.S.

VICINITY MAP
N.T.S.

SEPT. 15, 2014

REVISIONS

DESCRIPTION	DATE	SHEETS AFFECTED

INDEX OF SHEETS

1	TITLE SHEET
1A	PROJECT NOTES
N/A	PLATS (2)
2	EXISTING CONDITIONS/DEMOLITION PLAN
3	OVERALL SITE PLAN
G	GRADING AND DRAINAGE SHEET INDEX
G1–G4	GRADING SHEETS (1"=40')
U1	CULINARY WATER UTILITY PLAN
U2	IRRIGATION WATER UTILITY PLAN
U3	SANITARY SEWER UTILITY PLAN
U4	STORM WATER UTILITY PLAN
U5	REDWOOD NORTH, UTILITY PLAN
PP	OVERALL PLAN AND PROFILE SHEET INDEX
P1	ARLINGTON WAY STA: 10+00 TO REDWOOD RD
P2	BELMONT DR STA: 0+00 TO ARLINGTON WAY
P3	FAIRFIELD DR STA: 0+00 TO 10+00
P4	FAIRFIELD & CAMBRIDGE DR STA:10+00 TO DARTMOUTH DR
	EXETER DR STA: 0+00 TO END
P5	MONTIGO DR STA: 0+00 TO 5+10
P6	DARTMOUTH DR STA: 10+00 TO END
P7	REDWOOD ROAD STA: 4+00 TO 15+00
P8	REDWOOD ROAD STA: 15+00 TO 25+50
P9	REDWOOD ROAD STA: 25+00 TO 35+50
DR1–DR2	DRAINAGE REPORT
SS1–SS2	SIGNAGE AND STRIPING PLAN
SS3–SS4	UDOT SIGNAGE AND STRIPING PLAN
SWPPP	STORM WATER POLLUTION PROTECTION PLAN
ER1–ER2	EROSION CONTROL DETAILS
D1	STREET DETAILS
D2	SANITARY SEWER DETAILS
D3	CULINARY WATER DETAILS
D4A–D4B	STORM WATER DETAILS
D5	IRRIGATION WATER DETAILS
LANDSCAPE PLANS (ARCITIO)	
L–L100	OVERALL PLANTING PLAN
L–L101 to L–L108	PLANTING PLAN SHEETS
L–L501	PLANTING DETAILS
L–R100	OVERALL IRRIGATION PLAN
L–R101 to L–R108	IRRIGATION PLAN SHEETS
L–R501 to L–R502	PLANTING DETAILS

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P.O. BOX 951005 SOUTH JORDAN, UT 84095
PH: (801) 694-5848 FAX: (801) 432-7050
paul@gatewayconsultingllc.com
CIVIL ENGINEERING • CONSULTING • LAND PLANNING
CONSTRUCTION MANAGEMENT

DATE:	PROJECT:	FILE:	SHEET NO.
09-15-14	BEACON POINT	1-TITLE	1

BEACON POINT

BEACON POINT SUBDIVISION

*** SUBDIVISION ORDINANCE**

THE BEACON POINT PROJECT IS BEING PROCESSED AS A LARGE SCALE PLANED DEVELOPMENT IN THE R-2 ZONE AS A PRELIMINARY SUBDIVISION PLAT.

*** BEACON POINT**

PHASE 1= 21.22 ACRES
PHASE 2= 7.09 ACRES
PHASE 3= 22.58 ACRES
PHASE 4= 4.39 ACRES

PROJECT DESCRIPTION

CONSISTING OF:

PHASE 1 = 52 LOTS
PHASE 2 = 14 LOTS
PHASE 3 = 73 LOTS
PHASE 4 = 15 LOTS

AREA ALLOCATED TO OPEN SPACE

PHASE 1 = 3.29+5.69+4.03=13.01 ACRES OPEN SPACE
PHASE 2 = 0.92 ACRES OPEN SPACE
PHASE 3 = 0 ACRES OPEN SPACE
PHASE 4 = 0 ACRES OPEN SPACE
LAND TO UDOT=1.82 AC
LAND 30% AND GREATER=1.26 AC
TOTAL PROJECT ACREAGE = 63.64 ACRES

LAND USAGE

RESIDENTIAL

DESIGN TEAM AND CONTACT LIST

OWNER/ DEVELOPER/CLIENT
WESTERN STATES VENTURES
90 So. 154 E. SALT LAKE CITY, UT 84104
TELEPHONE 801-456-4140
FAX 801-366-7194

LAND PLANNING:
GATEWAY CONSULTING, L.L.C.
PO BOX 951005,
SOUTH JORDAN, UT 84095
TELEPHONE 801-694-5848
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PO BOX 951005,
SOUTH JORDAN, UT 84095
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FAX 801-432-7050

UTILITIES

Blue Stakes Location Center
Phone: 801-208-2100
or 1-800-662-4111

Questar Gas Co.
Main Phone:1-800-323-5517

Utah Power & Light
Main Phone: 1-888-221-7070

Qwest Phone Co.
Main Phone: 1-800-244-1111

City Public Works
Main Phone: 801-766-9793
Address: 2015 South Redwood Rd
Saratoga Springs, Utah 84043

WATER QUALITY, SURFACE AND HYDROLOGY:
GATEWAY CONSULTING, L.L.C.
PO BOX 951005,
SOUTH JORDAN, UT 84095
TELEPHONE 801-694-5848
FAX 801-432-7050

CONTRACTOR:
STILL TO BE DETERMINED

SURVEYING:
FOCAL POINT SURVEYS
CONTACT: CLIFF PETERSON
889 S. 1600 E. Springville, Ut. 84663
ph: 801-372-3810

SOILS/GEOLOGY:
CMT
CONTACT: Phil Pack
2800 S Redwood Rd, SLC, Ut 84119
ph: 801-908-5954
fax: 801-972-9074

SARATOGA SPRINGS CITY
Main Phone: 801-766-9793
Address: 2015 South Redwood Rd.
Saratoga Springs, Utah 84043

CITY ENGINEER

Saratoga Springs City (in house)
Main Phone: 801-766-9793
Address: 2015 South Redwood Rd.
Saratoga Springs, Utah 84043

ADJACENT PROPERTY OWNERS

WALDO
NEED ADDRESS

LAKE MOUNTAIN ESTATES SUB.
NEED ADDRESS

UDOT - REGION 3

STILLWATER
NEED ADDRESS

TEGUAYO

PRELIMINARY PLAN NOTES

* REGIONAL CONTEXT MAPS BASED ON THE FOLLOWING SOURCES:
  * USGS QUAD SHEET MAPS, 2000 SCALE,
  * PLANS AND DRAWING FROM NEIGHBORHOOD 1
  * CONTOURS FROM FOCAL POINT SURVEYS
  * UTAH COUNTY TOPOGRAPHIC INFORMATION - GIS INFORMATION

*** SOURCE OF TOPOGRAPHY:** TOPOGRAPHY SHOWN ON THESE PLANS WAS PREPARED FROM FIELD MAPS IN FROM CLIFF PETERSON (SEE CONTACT INFO ABOVE)

*** BASIS OF ELEVATIONS:** WEST ¼, SECTION 19, TOWNSHIP 6 SOUTH, RANGE 1 EAST, SALT LAKE BASE AND MERIDIAN
ELEVATION: 4790.65' (BENCH MARK)

*** SLOPE ANALYSIS:** THE FOLLOWING IS A SUMMARY OF THE SLOPE ANALYSIS PREPARED FOR THE SUBJECT PROPERTIES: SEE PLATS FOR SLOPE AREA.

*** INDIVIDUAL LOT DRAINAGE:**
DUE TO MANY POSSIBILITIES OF THE INDIVIDUAL LOTS BY FUTURE BUILDERS. THE DRAINAGE AROUND THE FUTURE BUILDINGS IS SUBJECT TO A INDIVIDUAL LOT STORM WATER DRAINAGE PLAN (PREPARED BY THE FUTURE LOT DEVELOPER) PER SARATOGA SPRINGS CITY STANDARDS. THE LOTS WILL BE CURRENTLY GRADED TO DRAIN WITH OVERLAND FLOW ACROSS THE LOTS. REROUTING THE STORM WATER AROUND THE BUILDINGS IS REQUIRED BY THE INDIVIDUAL LOT BUILDER.

*** SOIL/GEOLOGY:** AN ENGINEERING GEOLOGY AND SOIL ENGINEERING REPORT HAS BEEN PREPARED FOR THE SUBJECT PROPERTY: SEE CMT REPORT

*** EXISTING AND PROPOSED ZONES:** R-2 ZONE: LOW AND MEDIUM DENSITY RESIDENTIAL

*** RESTRICTED USE - OPEN SPACE:** AREAS ARE SUBJECT TO SARATOGA SPRINGS CITY CONSIDERATIONS, REVIEW, AND APPROVAL.

*** DRAINAGE PLANS:** PRELIMINARY HYDROLOGY, HYDRAULICS AND WATER QUALITY PREPARED ACCORDING TO THE FOLLOWING CRITERIA: PEAK STORM WATER RUNOFF IN THE DEVELOPMENT "AFTER" CONDITION SHALL BE NO GREATER THEN PEAK STORM WATER RUNOFF IN THE "BEFORE" PROJECT CONDITION. NO BUILDINGS WILL BE ALLOWED WITHIN 10 YEAR & 100 YEAR FLOOD PLAINS.

*** PROJECT SEWER MAINS:** ARE TO BE CONNECTED TO SARATOGA SERVICE DISTRICT.

*** UTILITIES:**
* POWER: OVERHEAD AND UNDERGROUND POWER - UTAH POWER AND LIGHT
* TELEPHONE: UNDERGROUND TELEPHONE - QWEST.
* NATURAL GAS: QUESTAR
* GARBAGE COLLECTION: CITY OF SARATOGA SPRINGS

*** STREET PLAN AND PROFILES:**
* ALL PRIVATE STREET CONSTRUCTION PER SARATOGA SPRINGS TYPICAL ROAD SECTIONS FOR A 56 FOOT AND A 77 FOOT CITY STANDARD CROSS SECTION.
* STRUCTURAL PAVEMENT SECTION SHALL BE CONSTRUCTED PER ABOVE REFERENCED SOIL REPORT.

PROJECT TIME TABLE

NEIGHBORHOOD 1 = YEAR 2013
NEIGHBORHOOD 2 = YEAR 2014 (OR AS MARKET DICTATES)

SARATOGA SPRINGS CONSTRUCTION NOTES

SARATOGA CITY STANDARDS NOTES:

I. Contractor shall field verify locations and invert elevations of existing manholes and other utilities before staking or constructing any new sewer lines.
II. Contractor shall field verify locations and invert elevations of existing storm drain structures and other utilities before staking or constructing any new storm drain lines.
III. All construction shall comply to the Standard Technical Specifications and Drawings for the City Of Saratoga Springs, Utah. Saratoga Springs / Design / 05-2013 00500 - 14 DESIGN STANDARDS
IV. Existing Utilities have been noted to the best of Engineers knowledge, it is owners and contractors responsibility to locate utilities in field and notify Engineer and City if discrepancies exist.
V. Post-approval alterations to lighting plans or intended substitutions for approved lighting equipment shall be submitted to the City for review and approval.
VI. The City reserves the right to conduct post-installation inspections to verify compliance with the City's requirements and approved Lighting Plan commitments, and if deemed appropriate by the City, to require remedial action at no expense to the City.
VII. All exterior lighting shall meet IESNA full-cutoff criteria unless otherwise approved by the City."

GENERAL

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE SPECIFICATIONS ORDINANCES & REQUIREMENTS OF SARATOGA SPRINGS CITY & THE LATEST APWA STANDARDS.
2. A PRE-CONSTRUCTION CONFERENCE WITH CITY ENGINEER, CITY PUBLIC WORKS, AND CONTRACTOR WILL BE HELD A MINIMUM OF 48 HOURS PRIOR TO START OF WORK.
3. THE CONTRACTOR SHALL MAINTAIN ALL EXISTING DRAINAGE FACILITIES WITHIN THE CONSTRUCTION AREA UNTIL THE DRAINAGE IMPROVEMENTS ARE IN PLACE AND FUNCTIONING.
4. ALL CONTRACTORS WORKING WITHIN THE PROJECT BOUNDARIES ARE RESPONSIBLE FOR COMPLIANCE WITH ALL APPLICABLE SAFETY LAWS OF ANY JURISDICTIONAL BODY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL BARRICADES, SAFETY DEVICES AND CONTROL OF TRAFFIC WITHIN AND AROUND THE CONSTRUCTION AREA.
5. EXISTING A.C. PAVEMENT SHALL BE CUT TO A NEAT STRAIGHT LINE PARALLEL OR PERPENDICULAR TO THE STREET OR DRIVEWAY CENTERLINE OR AS SHOWN ON PLANS AND THE EXPOSED EDGE SHALL BE TACKED WITH EMULSION PRIOR TO PAVING AS PER SARATOGA SPRINGS CITY. SPECIFICATIONS.
6. ALL MATERIALS FURNISHED ON OR FOR THE PROJECT MUST MEET THE MINIMUM REQUIREMENTS OF THE APPROVING AGENCIES OR AS SET FORTH HEREIN, WHICHEVER IS MORE RESTRICTIVE.
7. CONTRACTORS MUST FURNISH PROOF THAT ALL MATERIALS INSTALLED ON THIS PROJECT MEET THE REQUIREMENTS OF THE SPECIFICATIONS AT THE REQUEST OF THE AGENCY AND/OR THE ENGINEER.
8. THE LOCATIONS OF EXISTING UNDERGROUND OR OVERHEAD UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY.THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION & ELEVATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. HE AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND OR OVERHEAD UTILITIES. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CALL BLUE STAKES PRIOR TO ANY CONSTRUCTIONS.
9. ALL CONTRACTORS WORKING WITHIN THE PUBLIC ROAD RIGHT-OF-WAY ARE REQUIRED TO SECURE A RIGHT-OF-WAY PERMIT FROM SARATOGA SPRINGS CITY AT LEAST 24 HOURS PRIOR TO ANY CONSTRUCTION. ALSO ANY PERMITS REQUIRED FOR STATE AND FEDERAL RIGHT-OF-WAYS NEED TO BE OBTAINED FROM THE ASSOCIATED GOVERNING BODY.
10. ALL COSTS OF RETESTING AND RE-SURVEYING FOR PREVIOUSLY FAILED TESTS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
11. ALL COSTS TO THE CONTRACTOR INCURRED IN CORRECTING DEFICIENT WORK SHALL BE TO THE CONTRACTORS ACCOUNT. FAILURE TO CORRECT SUCH WORK WILL BE CAUSE FOR A STOP WORK ORDER AND POSSIBLE TERMINATION.
12. THE CONTRACTOR'S) SHALL REMOVE ALL OBSTRUCTIONS, BOTH ABOVE, AND BELOW GROUND, AS REQUIRED FOR THE CONSTRUCTION OF THE PROPOSED IMPROVEMENTS. THIS SHALL INCLUDE CLEARING AND GRUBBING WHICH CONSIST OF CLEARING THE GROUND SURFACE OF ALL TREES, STUMPS, BRUSH, UNDERGROWTH, HEDGES, HEAVY GROWTH OF GRASS OR WEEDS, FENCES, STRUCTURES, DEBRIS, RUBBISH, AND SUCH MATERIAL WHICH, IN THE OPINION OF THE ENGINEER, IS UNSUITABLE FOR THE FOUNDATION OF PAVEMENTS. ALL MATERIAL NOT SUITABLE FOR FUTURE USE ON SITE SHALL BE DISPOSED OF OFF SITE.
13. ALL ROADWAYS, CULINARY WATER, STORM DRAIN IMPROVEMENTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST EDITION OF THE APWA.
14. UTILITY CONDUITS TO BE INSTALLED AT EVERY INTERSECTION PER SARATOGA SPRINGS CITY STANDARDS. "T" SECTIONS TO HAVE CONDUITS ON TWO SIDES (MIN.) 4 WAY INTERSECTIONS TO HAVE CONDUITS ON 3 SIDES (MIN.).
15. ALL CONTRACTORS ARE TO FIELD VERIFY ALL EXISTING CURB & GUTTER, STORM DRAIN, CHANNEL CROSSINGS, UTILITIES AND SEWER ELEVATIONS FOR INVERTS PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER WHEN ELEVATIONS OR INVERTS DO NOT MATCH PLANS.

WATER

1. THE WATER SYSTEM SHALL BE CONSTRUCTED TO CONFORM WITH THE STANDARDS SET FORTH IN THE "STATE OF UTAH RULES FOR PUBLIC DRINKING WATER SYSTEMS", AND THE LATEST APWA SPECIFICATIONS AND STANDARD DRAWING.
2. WATER DISTRIBUTION MAINS SHALL BE CONSTRUCTED WITH C900 PIPE. THE PIPE SHALL BE INSTALLED IN WORKMANLIKE MANNER BY PERSONS PROPERLY QUALIFIED TO PERFORM SAID WORK AND SHALL BE IN CONFORMANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AS APPROVED BY THE CITY ENGINEER. ALL WORK AND MATERIALS MUST CONFORM TO CURRENT REQUIREMENTS OF THE UTAH PUBLIC WORKS GENERAL CONDITIONS AND STANDARDS SPECIFICATIONS FOR CONSTRUCTION AND/OR SARATOGA SPRINGS CITY.
3. ALL WATER MAINS SHALL HAVE A MINIMUM COVER OF 4 FEET. AFTER INSTALLATION OF THE WATER MAINS, THE TRENCHES SHALL BE COMPACTED TO 95% MODIFIED PROCTOR OF MAXIMUM DENSITY TO PREVENT FURTHER SETTLEMENT. ALL MAINS SHALL BE LEAK-TESTED, FLUSHED AND SANITIZED BEFORE CONNECTION TO THE MUNICIPAL SYSTEM.
4. HORIZONTAL AND VERTICAL SEPARATION OF CULINARY WATER AND SEWER SHALL BE IN COMPLIANCE WITH SARATOGA SPRINGS CITY STANDARDS AND THOSE SET FORTH IN THE STATE CODES.
5. ALL GATE VALVES SHALL BE FLANGED AND/OR M.J. AND SHALL CONFORM TO THE LATEST APWA SPECIFICATIONS AND SHALL HAVE A 200 P.S.I. WORKING PRESSURE RATING. ALL VALVES SHALL BE ANCHORED IN CONFORMANCE WITH SARATOGA SPRINGS CITY SPECIFICATIONS.
6. ALL TEES, PLUGS, CAPS AND BENDS, AND AT OTHER LOCATIONS WHERE UNBALANCED FORCES EXIST, SHALL BE SECURED AND ANCHORED BY SUITABLE THRUST BLOCKING AS SHOWN IN THE SARATOGA SPRINGS CITY SPECIFICATIONS.
7. THE DISTRIBUTION SYSTEM SHALL BE PRESSURE TESTED IN ACCORDANCE WITH A.W.W.A. STANDARDS.
8. CONTRACTOR SHALL NOTIFY THE ENGINEER, THREE (3) WORKING DAYS BEFORE INITIAL CONSTRUCTION BEGINS AND SHALL ALSO REQUEST SARATOGA SPRINGS CITY DEPARTMENT OF PUBLIC WORKS INSPECTION OF WATER LINES AND APPURTENANCES TWENTY-FOUR (24) HOURS IN ADVANCE OF BACKFILLING.
9. CONTRACTOR TO FIELD VERIFY ALL VALVE BOX LID ELEVATIONS TO ASSURE THAT SAID LID ELEVATIONS MATCH FINAL STREET GRADE, AND ALL METER LID ELEVATIONS TO MATCH AN EXTENSION OF THE SIDEWALK GRADE.
10. UPON THE COMPLETION OF WORK, THE CONTRACTOR SHALL SUBMIT A SET OF AS-BUILT PLANS TO THE ENGINEER.
11. RESIDENTIAL WATER SERVICE CONNECTIONS SHALL BE 1" IPS POLYETHYLENE WATER PIPE W/ 3/4" METER SETTER & BOX AND THE STUB SHALL BE MARKED WITH A 4X4 BATTER BOARD PAINTED BLUE FOR FUTURE IDENTIFICATION. THE WATER METER WILL BE FURNISHED AND INSTALLED BY THE CITY OR BUILDING CONTRACTOR.
12. THE SECONDARY WATERLINE SHALL BE CONSTRUCTED TO CONFORM WITH THE STANDARDS SET FORTH IN SARATOGA SPRINGS SPECIFICATION SECTION 02680. ALL SECONDARY PIPE SHALL BE PURPLE PIPE. (SEE D-2)

ROADWAY/PARKING/STORM DRAIN

1. ALL PARKING LOT CONSTRUCTION SHALL MEET THE MINIMUM REQUIREMENTS OF THE SARATOGA SPRINGS CITY SPECIFICATIONS.
2. WHEN DISCREPANCIES OCCUR BETWEEN PLANS AND SPECIFICATIONS, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY GATEWAY CONSULTING LLC. UNTIMELY NOTIFICATION SHALL NEGATE ANY CONTRACTORS CLAIM FOR ADDITIONAL COMPENSATION.
3. INSPECTION OF WORK WITHIN THE PUBLIC RIGHT-OF WAY SHALL BE BY SARATOGA SPRINGS CITY.
4. ALL TOPS OF VALVE BOXES AND SEWER MANHOLES SHALL BE SET FLUSH WITH THE SLOPE OF THE FINISHED STREET GRADES. THE ROADWAY CONTRACTOR SHALL INSTALL AND ADJUST ALL SPACERS, GRADE RINGS, MANHOLE RINGS AND LIDS. CONCRETE COLLARS SHALL BE INSTALLED IN ACCORDANCE WITH SARATOGA SPRINGS CITY STANDARDS & SPECIFICATIONS. CONTRACTOR SHALL NOTIFY SARATOGA SPRINGS CITY AND THE ENGINEER 24 HOURS PRIOR TO POURING CONCRETE COLLARS.
5. ALL COSTS OF TESTING & RETESTING FOR PREVIOUSLY FAILED TESTS SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
6. ALL COSTS TO THE CONTRACTOR INCURRED IN CORRECTING DEFICIENT WORK SHALL BE TO THE CONTRACTORS ACCOUNT. FAILURE TO CORRECT SUCH WORK WILL BE CAUSE FOR A STOP WORK ORDER AND POSSIBLE TERMINATION.
7. ALL STORM DRAINAGE APPURTENANCES SHALL BE INSPECTED AND CERTIFIED BY SARATOGA SPRINGS CITY.
8. ALL WATER VALVES WILL BE PLACED SO AS NOT TO CONFLICT WITH ANY CONCRETE CURB, GUTTER, VALLEY GUTTER, AND SIDEWALK IMPROVEMENTS.
9. ALL WATER METERS AND FIRE HYDRANTS ARE TO BE LOCATED OUTSIDE OF THE ROADWAYS AREA AND THERE MUST BE AT LEAST A ONE (1) FOOT SEPARATION BETWEEN ANY BACK OF SIDEWALK (OR CURB IF NO SIDEWALK) AND THE LEADING EDGE OF ANY FIRE HYDRANT.
10. ALL WORK SHALL BE INSPECTED BY THE CITY OF SARATOGA SPRINGS.
11. ALL MATERIAL PLACED AS FILL OR BACKFILL SHALL BE PLACED AND COMPACTED IN ACCORDANCE WITH SARATOGA SPRINGS CITY STANDARD & SPECIFICATION.
12. OVER EXCAVATION AND ADDITIONAL GRANULAR BACKFILL MAY BE REQUIRED IN HIGH GROUNDWATER AREAS WHICH ARE TO BE DETERMINED BY SARATOGA SPRINGS CITY.
13. COLLAPSIBLE SOILS IN THE AREA MAY REQUIRE A GEOTECHNICAL ENGINEER TO VERIFY SUB-BASE CONDITIONS PRIOR TO PLACEMENT OF GRANULAR FILL TO ELIMINATE THE COLLAPSIBLE SOILS WITHIN DEDICATED ROADWAYS.

SEWER

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST SARATOGA SPRINGS CITY DESIGN STANDARDS & CONSTRUCTION SPECIFICATIONS AND STANDARD DRAWINGS.
2. FINAL APPROVAL AND ACCEPTANCE OF ALL SEWER CONSTRUCTION WILL BE BY SARATOGA SPRINGS CITY.
3. MANHOLES SHALL BE CONSTRUCTED AS PER SARATOGA SPRINGS CITY.
4. SEWER PIPE WITH COVER OF GREATER THAN 4 FEET , SHALL BE BELL AND SPIGOT, POLYVINYL CHLORIDE (PVC), SDR 35, ASTM D-3034.
5. SEWER INSPECTIONS WILL BE BY THE SARATOGA SPRINGS CITY SUCH APPROVAL SHALL NOT RELIEVE THE CONTRACTOR FROM THE RESPONSIBILITY OF PERFORMING THE WORK IN AN ACCEPTABLE MANNER. THE CONTRACTOR WILL NOTIFY SARATOGA SPRINGS CITY 48 HOURS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL REIMBURSE SARATOGA SPRINGS CITY AT RATES ESTABLISHED BY THE SARATOGA SPRINGS CITY FOR INSPECTION IN EXCESS OF THE NORMAL WORK WEEK, INCLUDING LEGAL HOLIDAYS, AND OVERTIME INSPECTION RATES.
6. STUBOUTS FOR SERVICE LINES SHALL BE MARKED IN ACCORDANCE WITH THE CITY SPECIFICATIONS. THE CONTRACTOR IS TO NOTIFY THE ENGINEER WHEN THIS IS ACCOMPLISHED SO THAT ANY DESTRUCTION OF SAME IS NOT BACK CHARGED TO THE SEWER CONTRACTOR.
7. PRIOR TO FINAL ACCEPTANCE, AFTER ALL UTILITIES ARE IN AND PRIOR TO PAVING, AN AIR TEST SHALL BE CONDUCTED. THE CONTRACTOR SHALL CONTACT SARATOGA SPRINGS CITY A MINIMUM OF 24 HOURS PRIOR TO TESTING.
8. ALL MANHOLES SHALL BE CONSTRUCTED SO AS TO BE WATER TIGHT AND WITH THE TOP OF CONE LOCATED WITHIN ONE (1) FOOT OF THE FINISHED GRADE. THE SEWER CONTRACTOR SHALL SUPPLY ALL LID ASSEMBLIES AND THE REQUIRED NUMBER OF RISER AND GRADE RINGS. THE SEWER CONTRACTOR SHALL FIELD VERIFY THE ELEVATION OF THE TOP OF THE MANHOLE CONE TO ASSURE THAT ALL RING ELEVATIONS MATCH FINAL STREET GRADES. MANHOLES SHALL HAVE 12 INCH MAXIMUM GRADE RINGS.
9. THE CONTRACTOR SHALL NOTIFY THE DEVELOPER'S ENGINEER AND SARATOGA SPRINGS CITY A MINIMUM OF 48 HOURS PRIOR TO COMMENCING CONSTRUCTION OF THE SANITARY SEWER. SARATOGA SPRINGS CITY SHALL HAVE THE RIGHT TO INSPECT AND REJECT ALL CONSTRUCTION ASSOCIATED WITH SAID SANITARY SEWER CONSTRUCTION.
10. SERVICE STUBOUTS SHALL BE 4" IN DIA. AND WILL BE TO THE POINTS SHOWN ON THE DRAWINGS (PUE.) OR AS MARKED BY THE ENGINEER IN THE FIELD. ALL STUBOUTS SHALL BE MARKED BY A 4X4 BATTER BOARD PAINTED GREEN. SERVICE LINES SHALL BE CONSTRUCTED IN ACCORDANCE WITH SARATOGA SPRINGS CITY STANDARDS. THOSE SEWER SERVICE STUBOUTS BEGINNING AT A MANHOLE IF ANY WILL HAVE THE TOP OF THE FOUR (4) INCH PIPE MATCH THE TOP OF THE EIGHT INCH PIPE. THE SEWER SERVICE MARKER SHALL BE IN PLACE FOR THE FINAL INSPECTION.
11. THE HORIZONTAL SEPARATION OF THE WATER AND SEWER MAINS SHALL BE A MINIMUM OF TEN (10) FEET.
12. GROUNDWATER LEVELS SHALL BE MAINTAINED BELOW THE BOTTOM OF THE TRENCH DURING THE PIPE LAYING AND PIPE JOINING OPERATIONS. BEDDING MATERIAL SHALL CONFORM TO THE SARATOGA SPRINGS CITY REQUIREMENTS.
13. THE TRENCH BACKFILL ABOVE THE PIPE ZONE SHALL BE INSPECTED BY SARATOGA SPRINGS CITY. COMPACTION TESTS FOR SAID BACKFILL SHALL BE CONDUCTED AND THE RESULTS SUBMITTED TO THE FOR FINAL ACCEPTANCE. CONTRACTOR IS RESPONSIBLE FOR ALL COMPACTION COSTS.
14. THE CONTRACTOR WILL BE RESPONSIBLE FOR COMPACTION TESTING IN ACCORDANCE WITH THE UTAH PUBLIC WORKS STANDARDS CONSTRUCTION AND SARATOGA SPRINGS CITY AND SARATOGA SPRINGS CITY.
15. ALL SEWER TRENCHES SHALL BE BACKFILLED IN ACCORDANCE WITH SARATOGA SPRINGS CITY SPECIFICATIONS. THE SEWER PIPE BEDDING SHALL BE IN ACCORDANCE WITH SARATOGA SPRINGS CITY SPECIFICATIONS.
16. THE CONTRACTOR SHALL LEAVE THE EXCAVATION FOR THE UPSTREAM END OF ALL SERVICE LINES OPEN FOR FIELD VERIFICATION OF THE INVERT ELEVATION BY THE INSPECTOR. THE CONTRACTOR SHALL NOT BACKFILL THE ENDS OF SERVICE LINES UNTIL HE HAS OBTAINED APPROVAL FROM THE INSPECTOR.
17. THE CONTRACTOR SHALL PROVIDE SARATOGA SPRINGS CITY INSPECTOR WITH "CUT SHEETS" FOR THE STAKING PROVIDED FOR CONSTRUCTION OF THE SANITARY SEWER. "CUT SHEETS" SHALL BE PROVIDED TO SARATOGA SPRINGS CITY PRIOR TO CONSTRUCTION. ADDITIONALLY, A BENCH MARK MUST BE PROVIDED TO SARATOGA SPRINGS CITY, INSPECTION DEPARTMENT, BY THE OWNER, PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
18. THE CONTRACTOR SHALL CONSTRUCT THE SANITARY SEWER IN ACCORDANCE WITH THE STAMPED PLANS APPROVED BY THE SARATOGA SPRINGS SEWER DISTRICT. THESE PLANS WILL BE PROVIDED TO THE CONTRACTOR BY THE PROJECT INSPECTOR PRIOR TO CONSTRUCTION. WORK SHALL NOT BE DONE WITHOUT THE CURRENT SET OF APPROVED PLANS.

NOTE.

ROAD DEDICATION PLAT AND EASEMENTS FOR DRAINAGE OUTFALL AND DETENTION BASIN MUST BE RECORDED AND BOND POSTED PRIOR TO ACCEPTANCE OF IMPROVEMENTS AND BEGINNING OF WARRANTY PERIOD.

NO.	DESCRIPTION	DATE	APP'D

ORIG. DATE: 11-1-12
SURVEY BY:
DRAWN BY: GPW
DESIGNED BY: GPW
CHECKED BY: GPW
SCALE: NTS

GATEWAY CONSULTING, inc.
P.O. BOX 951005 SOUTH JORDAN, UT 84095
PH: (801) 694-5848 FAX: (801) 432-7050
paul@gatewayconsultingllc.com
CIVIL ENGINEERING - CONSULTING - LAND PLANNING
CONSTRUCTION MANAGEMENT

BEACON POINT

PROJECT NOTES
Saratoga Springs Utah

dwgs= beacon point
DRAWING FILE
PROJECT NUMBER
9-15-14
PLOT DATE

SARATOGA CITY

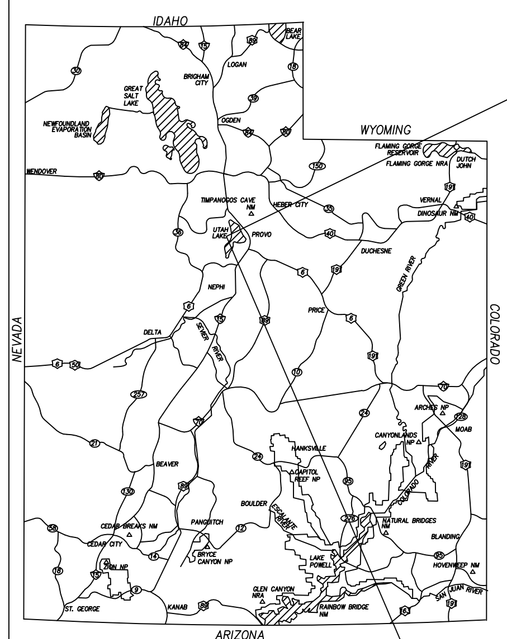
PRELIMINARY NOT FOR CONSTRUCTION

SHEET NO. 1A

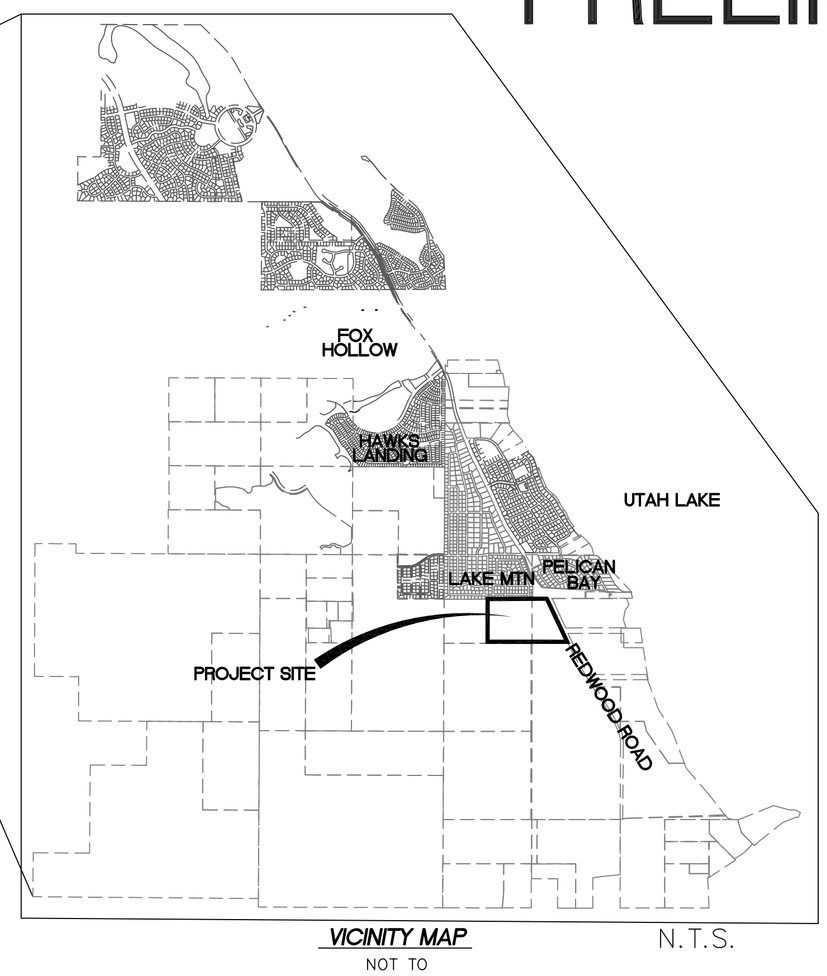
BEACON POINT PHASE 1

LOCATED IN
NORTH HALF OF SECTION 19 TOWNSHIP 6 SOUTH, RANGE 1 EAST,
SALT LAKE BASE AND MERIDIAN

PRELIMINARY PLAT



VICINITY MAP
NOT TO SCALE

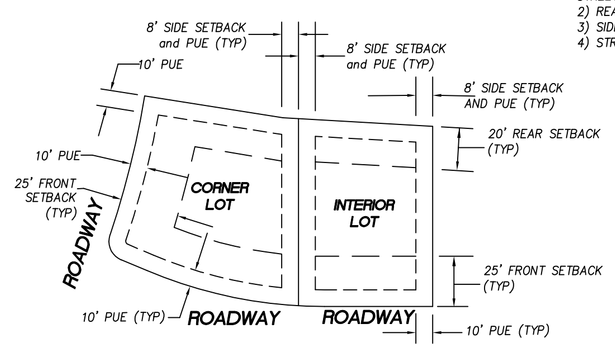


VICINITY MAP
NOT TO SCALE

N.T.S.

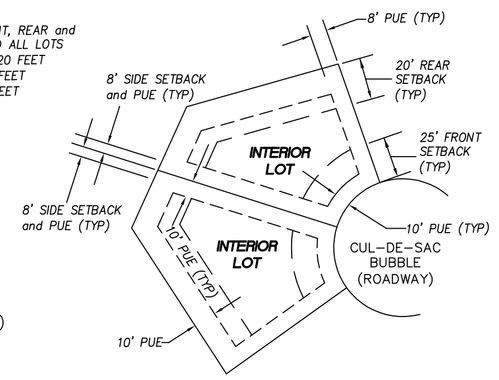
TYPICAL SETBACK AND P.U.E. DETAILS

NOTES:
1) 8' SIDE YARD, 10' FRONT, REAR and STREET SIDE PUE, AROUND ALL LOTS
2) REAR YARD SETBACK=20 FEET
3) SIDEYARD SETBACK=8 FEET
4) STREET SETBACK=25 FEET



NOT TO SCALE

INTERIOR AND CORNER LOTS



KNUCKLE AND CUL-DE-SAC LOTS

PLAT NOTES

1) *The installation of improvements shall conform to all city rules, ordinances, requirements, standards, and policies regarding the development of this property.*
2) *Prior to building permits being issued, soil studies may be required on each lot as determined by the city building official.*
3) *Plat may be subject to a master development agreement, development agreement, subdivision agreement, or site plan agreement. See City Recorder for more information.*
4) *Building permits will not be issued until all improvements have been installed and accepted by the city in writing; all improvements currently meet city standards, and bonds area posted by the current owner of the project pursuant to city code.*
5) *All bonds and bond agreements are between the city, developer/owner and financial institution. No other party, including unit or lot owners, shall be deemed a third-party beneficiary or have any rights, including the right to bring any action under any bond or bond agreement.*
6) *The owner of this subdivision and any successors and assigns area responsible for ensuring that impact and connection fees are paid and water rights area secured for each individual lot. No building permits shall be issued for any lot in this subdivision until all impact and connection fees, at the rates in effect when applying for building permit, are paid in full and water rights secured as specified by current city ordinances and fee schedules.*
7) *All open space and trail improvements located herein area to be installed by owner and maintained by Home Owners Association (HOA) unless specifies otherwise on each improvement.*
8) *Any reference herein to owners, developers, or contractors shall apply to successors, agents, and assigns.*
9) *There are no private streets in this development phase.*
10) *Lots area subject to CC&R's.*
11) *ALL Public utility easements (PUE) are also drainage easements.*
12) *All lots adjacent to undeveloped land are subject to Wildland Urban Interface requirements and 30' buffer regulations per code.*
13) *Lots 36 and 37 share a 20' common access driveway off of Arlington Way. Arlington Way is a collector road and does not allow individual lot direct access. Backing up a vehicle on to a collector road is discouraged. Common driveways are combined together to allow limited one-way access to Arlington Way. Each lot is responsible for construction and maintenance of driveway right-of-way within their lot boundaries. Driveways will follow 20' concrete driveway standards. Each said lot has an irrevocable right-of-way over adjacent lots for ingress and egress to their lot.*

LEGAL DESCRIPTION #1
50' TEMP TURN AROUND
XXXXXXXXXX

CURVE TABLE

CURVE	LENGTH	RADIUS	CHORD DIST.	CHORD BRG.	DELTA
C1	23.55'	14.99'	21.20'	N44°52'46"W	89°59'17"
C2	23.54'	14.99'	21.20'	N45°10'07"E	89°59'17"
C3	23.56'	15.00'	21.21'	S44°51'14"E	89°59'17"
C4	23.57'	15.00'	21.22'	N45°08'46"E	90°00'43"
C5	23.55'	15.00'	21.21'	N45°09'55"E	89°58'24"
C6	23.57'	15.00'	21.22'	S44°50'05"E	90°01'36"
C7	25.89'	15.00'	22.79'	N49°15'54"W	98°53'13"
C8	17.43'	15.00'	16.46'	S33°27'33"W	66°33'41"
C9	80.76'	261.50'	80.44'	N81°18'15"E	17°41'45"
C10	68.57'	261.50'	68.37'	N64°56'41"E	15°01'23"
C11	52.34'	338.50'	52.29'	S85°43'18"W	8°51'36"
C12	23.55'	15.00'	21.21'	S45°09'34"W	89°57'41"
C13	23.57'	15.00'	21.22'	N44°50'27"W	90°02'19"
C14	20.21'	15.00'	18.72'	N38°47'07"E	77°12'48"
C15	83.23'	278.00'	82.92'	N68°48'53"E	17°09'17"
C16	34.48'	222.00'	34.45'	N64°41'13"E	8°53'58"
C17	41.88'	278.00'	41.84'	S64°33'09"W	8°37'50"
C18	41.05'	222.00'	40.99'	S65°32'03"W	10°35'38"
C19	74.81'	222.00'	74.46'	S80°29'08"W	19°18'32"
C20	23.56'	15.00'	21.21'	S44°51'14"E	89°59'17"

CURVE TABLE

CURVE	LENGTH	RADIUS	CHORD DIST.	CHORD BRG.	DELTA
C21	23.57'	15.00'	21.22'	N45°08'46"E	90°00'43"
C22	23.57'	15.00'	21.22'	N44°50'05"W	90°01'36"
C23	12.74'	15.00'	12.36'	S24°30'45"W	48°40'05"
C24	70.99'	50.00'	65.17'	S8°10'30"W	81°20'35"
C25	79.62'	50.00'	71.47'	S78°07'05"E	91°14'35"
C26	31.08'	50.00'	30.58'	N38°27'13"E	35°36'49"
C27	18.20'	15.00'	17.10'	N55°23'58"E	69°30'19"
C30	38.18'	250.00'	38.14'	N64°36'44"E	8°45'00"
C31	74.85'	250.00'	74.57'	S68°48'53"W	17°09'17"
C32	33.92'	250.00'	33.89'	S81°16'43"W	7°46'24"
C33	21.71'	250.00'	21.70'	S87°39'09"W	4°58'29"
C34	31.97'	200.00'	31.93'	N85°16'52"W	9°09'29"
C35	30.66'	200.00'	30.63'	N76°18'37"W	8°47'00"
C36	98.69'	200.00'	97.69'	N57°46'57"W	28°16'21"
C37	166.62'	172.00'	160.18'	N62°06'32"W	55°30'09"
C38	87.98'	228.00'	87.43'	N60°51'53"W	22°06'29"
C39	18.88'	15.00'	17.65'	S35°52'12"E	72°05'50"
C40	171.32'	300.00'	169.00'	N73°47'33"E	32°43'08"
C41	46.39'	300.00'	46.35'	N85°43'19"E	8°51'38"
C42	52.89'	300.00'	52.82'	N76°14'28"E	10°06'04"

CURVE TABLE

CURVE	LENGTH	RADIUS	CHORD DIST.	CHORD BRG.	DELTA
C43	23.30'	300.00'	23.30'	N68°57'55"E	4°27'03"
C44	48.73'	300.00'	48.68'	N62°05'11"E	9°18'24"
C45	161.32'	200.00'	156.98'	N66°45'11"W	46°12'49"
C46	130.48'	250.00'	129.00'	S75°11'19"W	29°54'10"
C47	38.50'	1203.89'	38.50'	S33°13'53"E	1°49'57"
C48	38.50'	1366.45'	38.50'	S31°50'03"E	1°36'52"
C49	93.67'	1660.87'	93.66'	N35°30'45"W	3°13'53"
C50	218.62'	1635.47'	218.45'	N27°27'55"W	7°39'32"
C51	81.33'	200.00'	80.77'	N50°54'54"E	23°18'01"
C53	84.79'	228.00'	84.30'	N51°21'20"E	21°18'24"
C54	72.20'	172.00'	71.67'	N51°17'27"E	24°03'07"
C55	6.12'	328.00'	6.12'	S39°47'57"W	1°04'06"
C56	20.68'	15.00'	19.08'	N89°18'03"W	79°00'18"
C57	68.43'	278.00'	68.26'	S58°14'56"W	14°06'14"
C58	54.98'	338.50'	54.92'	S62°05'11"W	9°18'24"
C59	373.65'	1681.55'	372.88'	N30°01'34"W	12°43'53"
C60	46.35'	172.00'	46.21'	S42°04'41"E	15°26'26"

PREPARED FOR

WESTERN STATES VENTURES
90 So. 154 E. SALT LAKE CITY, UT 84104
TELEPHONE 801-456-4140
FAX 801-366-7194

CORPORATE ACKNOWLEDGMENT

STATE OF UTAH } S.S.
COUNTY OF UTAH }

ON THE _____ DAY OF _____, A.D. 20____, PERSONALLY APPEARED BEFORE ME _____ AND _____ , WHO BEING BY ME DULY SWORN DID SAY EACH FOR HIMSELF, THAT HE, THE SAID _____ IS THE PRESIDENT AND HE, THE SAID _____ , IS THE SECRETARY OF _____ CORPORATION, AND THAT THE WITHIN AND FOREGOING INSTRUMENT WAS SIGNED IN BEHALF OF SAID CORPORATION BY AUTHORITY OF A RESOLUTION OF ITS BOARD OF DIRECTORS AND SAID _____ AND _____ EACH DULY ACKNOWLEDGE TO ME THAT SAID CORPORATION EXECUTED THE SAME AND THAT THE SEAL AFFIXED IS THE SEAL OF SAID CORPORATION.

NOTARY PUBLIC

SURVEYOR'S CERTIFICATE

I, _____, do hereby certify that I am a Professional Land Surveyor and that I hold Certificate No. _____ as prescribed under the laws of the State of Utah, I further certify that a survey has been made of the land shown on this plat and described hereon and have subdivided said tract of land into lots and streets, hereafter to be know as:

BEACON POINT PHASE 1

and that the same has been correctly surveyed and staked on the ground as shown on this plat.

BOUNDARY DESCRIPTION

Beginning at a point that is N 89°55'49" E 1321.192 feet along the ¼ Section Line and N 89°54'47" E 480.70 feet along the ¼ Section Line from the West ¼ of Section 19, Township 6 South, Range 1 East, Salt Lake Base and Meridian, and running thence N0°04'50"W 103.97 feet, thence N49°24'05"W 54.47 feet, thence N31°57'24"W 54.77 feet, thence N33°36'05"W 171.49 feet, thence N10°16'03"W 150.08 feet, thence N 43°40'11" W 52.90 feet, thence N89°44'40"W 249.72 feet, thence N0°15'20"E 558.83 feet', thence S89°50'53"E 30.00 feet, thence S0°15'20"W 147.50 feet, thence S89°50'50"E 319.72 feet, thence S0°10'43"W 387.50 feet, thence S10°21'31"E 183.21 feet, thence S34°28'03"E 147.62 feet, thence S38°46'30"E 57.44 feet, thence S50°50'10"E 120.00 feet, thence N47°54'45"E 70.00 feet, thence N78°54'41"E 68.58 feet, thence S89°51'36"E 525.00 feet, thence N0°08'24"E 138.94 feet, thence N22°11'51"W 56.01 feet, thence N0°10'43"E 85.00 feet, thence N18°59'08"E 39.69 feet, thence N8°22'52"W 163.81 feet, thence N89°50'53"W 190.90 feet, thence N0°14'04"E 120.00 feet, thence N25°33'09"E 61.99 feet, thence N0°08'24"E 244.95' feet, thence N1°00'32"E 77.01 feet, thence N0°10'43"E 159.95 feet, thence S89°51'36"E 276.06', thence N0°20'43"E 3.16 feet, thence S89°53'42"E 469.82' feet to the Redwood Road ROW, thence along said ROW the following 4 calls, 1) thence S35°32'59"E 41.08 feet, 2) thence S27°48'33"E 395.34 feet, 3) thence S24°13'02"E 413.64 feet, 4) thence S23°47'31"E 598.23 feet to the ¼ Section Line, thence along ¼ Section Line S89°55'37"W 62.18 feet, thence N23°41'33"W 566.60 feet, thence S65°18'03"W 294.34 feet to a point on a 278.00' radius curve to the left, thence along arc of said curve 68.43 feet through a delta of 14°06'14" (chord bears S58°14'56"W 68.26 feet) to a point on a reverse 15.00' radius curve to the right, thence along arc of said curve 20.68 feet through a delta of 79°00'18" (chord beans N89°18'03"W 19.08 feet), thence S40°12'06"W 56.00 feet to a point on a 172.00' radius curve to the right, thence along arc of said curve 46.35 feet through a delta of 15°26'26" (chord bears S 42°04'41" E 46.21 feet) , thence S51°09'40"W 105.03 feet, thence S11°45'02"W 98.20 feet, thence S20°24'27"E 130.06 feet to the ¼ Section Line thence along ¼ Section line the following 2 calls, 1) thence S89°55'37"W 396.90 feet, 2) thence S89°54'47"W 841.25 feet to the point of beginning. Parcel Contains 31.25 ac

DATE:

OWNER'S DEDICATION

KNOW ALL MEN BY THESE PRESENTS THAT WE, ALL OF THE UNDERSIGNED OWNERS OF ALL THE PROPERTY DESCRIBED IN THE SURVEYOR'S CERTIFICATE HEREON AND SHOWN ON THIS MAP, HAVE CAUSED THE SAME TO BE SUBDIVIDED INTO LOTS, STREETS, AND EASEMENTS AND DO HEREBY DEDICATE THE STREETS AND OTHER PUBLIC AREAS AS INDICATED HEREON FOR PERPETUAL USE OF THE PUBLIC.

IN WITNESS HEREOF WE HAVE HEREUNTO SET OUR HANDS THIS _____ DAY OF _____, A.D. 20____.

MY COMMISSION EXPIRES:_____

NOTARY PUBLIC
RESIDING IN SUMMIT COUNTY

ACCEPTANCE BY LEGISLATIVE BODY

THE MAYOR OF CITY OF SARATOGA SPRINGS, COUNTY OF UTAH, APPROVES THIS SUBDIVISION AND HEREBY ACCEPTS THE DEDICATION OF ALL STREETS, EASEMENTS, AND OTHER PARCELS OF LAND INTENDED FOR PUBLIC PURPOSES FOR THE PERPETUAL USE OF THE PUBLIC
THIS _____ DAY OF _____ A.D. 20 _____ .

APPROVED _____ ATTEST _____
CITY ENGINEER (SEE SEAL) CITY RECORDER (SEE SEAL)

BEACON POINT PHASE 1

LOCATED IN
NORTH HALF OF SECTION 19 TOWNSHIP 6 SOUTH, RANGE 1 EAST,
SALT LAKE BASE AND MERIDIAN

PUBLIC UTILITIES APPROVAL

	DATE
QUESTAR	
ROCKY MOUNTAIN POWER	
QWEST	
COMCAST CABLE	

LEHI CITY POST OFFICE

APPROVED THIS _____ DAY OF _____, A.D. 20____, BY LEHI CITY POST OFFICE.

LEHI CITY POST OFFICE REPRESENTATIVE

BASIS OF BEARINGS

THE PROJECT BASIS OF BEARINGS IS SOUTH 00°15'21" WEST, 2633.90 FEET ALONG THE SECTION LINE BETWEEN THE NORTHWEST QUARTER AND WEST CORNERS OF SECTION 19, TOWNSHIP 6 SOUTH, RANGE 1 EAST, SALT LAKE BASE & MERIDIAN

SURVEYOR OF RECORD

surveyor logo here

PROJECT ENGINEER:

GATEWAY CONSULTING, inc.
P.O. BOX 951005 SOUTH JORDAN, UT 84095
PH: (801) 694-5848 FAX: (801) 432-7050
paul@gatewayconsultingllc.com

CIVIL ENGINEERING • CONSULTING • LAND PLANNING
CONSTRUCTION MANAGEMENT

FIRE CHIEF APPROVAL

APPROVED THIS _____ DAY OF _____, A.D. 20____, BY THE FIRE CHIEF.

CITY FIRE CHIEF

PLANNING COMMISSION APPROVAL

APPROVED THIS _____ DAY OF _____, A.D. 20____, BY THE PLANNING COMMISSION.

CHAIRMAN, PLANNING COMMISSION

SARATOGA SPRINGS ENGINEER APPROVAL

APPROVED THIS _____ DAY OF _____, A.D. 20____, BY THE CITY ENGINEER.

CITY ENGINEER

SARATOGA SPRINGS ATTORNEY

APPROVED THIS _____ DAY OF _____, A.D. 20____, BY THE FIRE CHIEF.

SARATOGA SPRINGS ATTORNEY

SHEET NO
1/2

CORPORATE SEAL | SURVEYOR'S SEAL | NOTARY PUBLIC SEAL | CITY ENGINEER'S SEAL | CLERK-RECORDER SEAL

Date: SEPT 12, 2014
File: BEACON POINT_PPLAT PH1

BEACON POINT PHASE 1

LOCATED IN
NORTH HALF OF SECTION 19 TOWNSHIP 6 SOUTH, RANGE 1 EAST,
SALT LAKE BASE AND MERIDIAN

PRELIMINARY PLAT

CASI WAY (4180 SOUTH)

EX. LAKE MOUNTAIN ESTATES

LIGHT HOUSE

SEE LEGAL DESC #1

TEMP. TURN AROUND NEED EASEMENT

N00°20'43"E 3.16'

S89°51'36"E 276.06'

S89°53'42"E 469.82'

S35°32'59"E 41.08'

PARCEL A

PARCEL B

EXISTING CENTERLINE REDWOOD ROAD 90' (1/2 row)

S27°48'33"E 599.34'

S24°39'02"E 413.64'

S24°41'35"E 105.84

S24°41'35"E 1052.52

S89°50'53"E 30.00'

PAUL TO CHECK DBASE

30' TRAIL/POND ACCESS

N0°15'20"E 558.83'

S0°15'20"W 147.50'

S89°50'50"E 319.72'

S0°10'43"W 387.50'

FUTURE PHASE

WESTERN STATES VENTURES

debris/det. pond
4.06 ac
(OPEN SPACE)
debris basin
dedicated to city,
maintained by city
Parcel E

N0°10'43"E 159.95'

N1°00'32"E 77.01'

N0°08'24"E 244.95'

N25°39'09"E 31.07'

N0°10'43"E 120.00'

MONTIGO DR

EXETER DR

ARLINGTON WAY

BELMONT DR

FAIRFIELD DR

CAMBRIDGE DRIVE

DARTMOUTH DR

LIME KILN CANYON

STATE OF DRIVEWAY

8 9020 SF
7 9344 SF
4 9560 SF
3 9664 SF
1 13583 SF
9 9931 SF
6 9946 SF
5 9911 SF
2 11200 SF
10 10152 SF
35 9901 SF
36 11198 SF
10,063 sf buildable
37 11319 SF
10,181 sf buildable
38 10050 SF
52 12226 SF
11 9000 SF
34 9000 SF
32 12356 SF
39 9000 SF
51 9000 SF
12 10152 SF
33 9903 SF
31 12272 SF
40 9000 SF
50 9000 SF
41 9000 SF
49 9000 SF
13 9000 SF
14 9000 SF
15 9000 SF
16 11643 SF
30 9000 SF
42 9000 SF
48 9000 SF
29 9000 SF
43 9000 SF
47 9000 SF
17 9686 SF
28 9000 SF
44 9000 SF
46 9000 SF
18 9656 SF
27 9920 SF
26 9049 SF
25 9911 SF
45 9843 SF
19 11202 SF
21 9612 SF
22 9139 SF
23 9000 SF
24 9414 SF
20 10175 SF

190.90' N89°50'53"W

N89°59'08"E 38.68'

N0°21'51"E 98.50'

N0°08'24"E 138.94'

S89°51'36"E 525.00'

S0°10'43"W 664.56'

N0°10'43"E 439.38'

S0°10'43"W 622.88'

S0°10'43"W 337.12'

N89°50'53"W 20' TRAIL/POND ACCESS

NO DRIVEWAY ACCESS

PARCEL A
0.76 ac
dedicated to UDOT for 60' 1/2 width

PARCEL B
1.00 ac (OPEN SPACE)
30' trail corridor
dedicated to city

det pond open space

PARCEL C
3.78 ac (OPEN SPACE)
drainage and detention
dedicated to city
maintained by city

30% SLOPE TO BE FILLED IN WITHIN LOT BOUNDARIES

REDWOOD ROAD
existing asphalt 21'+/-

90' (1/2 row)

FUTURE ROAD

EXISTING CENTERLINE REDWOOD ROAD 90' (1/2 row)

S65°16'03"W 294.34'

S40°12'06"W 56.00'

S23°47'31"E 598.23'

N23°48'53"W 560.60'

S89°55'37"W 62.18'

S1°45'02"W 98.20'

S20°24'27"E 130.06'

105.03

S5°09'40"W

parcel D
detention/ OPEN SPACE
5.68 ac
dedicated to city
maintained by city

debris basin

WALDO CO.
49094–1978

N89°44'40"W 249.72'

N43°40'11"W 52.90'

N1°09'38"W 150.00'

S0°15'20"W 153.21'

S46°28'03"E 141.62'

S89°46'30"E 57.44'

S65°50'10"E 120.00'

N78°54'41"E 68.58'

N47°54'45"E 70.00'

N36°36'05"W 17.49'

N57°17'24"W 54.47'

N49°24'05"W 54.47'

N0°04'50"W 103.97'

POINT OF BEGINNING

N89°54'47"E 480.70'

S89°54'47"W 841.25'

S89°55'37"W 396.90'

FOUND REBAR AND CAP AS CALLED FOR IN DEEDS 73636–2001 AND 44417–1992

IRECO
DEED #17264–1990

IRECO
DEED #44417–1992

FOUND REBAR AND CAP AS CALLED FOR IN DEED 44417–1992

NW 19

S0°15'20"W

N 0°15'21" E SECTION LINE

W 1/4 19
T6S, R1E
SLB&M

N89°55'49"E 1321.192'
QUARTER SECTION LINE

LEGEND

- PHASE BOUNDARY LINE
- SECTION LINE
- CENTER LINE
- P.U.E. LINE
- SETBACK LINE
- REBAR AND CAP TO BE SET
- NEW FIRE HYDRANT
- NEW STREETLIGHT
- EXISTING FIRE HYDRANT
- EXISTING STREETLIGHT
- 30% and GREATER SLOPES
- C156 CURVE (SEE CURVE TABLE)
- L6 LINE (SEE LINE TABLE)
- 3165 S 490 W MONUMENT

80 0 80 160
SCALE IN FEET
1"=80' (24"x36" SIZE ONLY)

SEE SHEET 1 FOR CURVE AND LINE TABLES

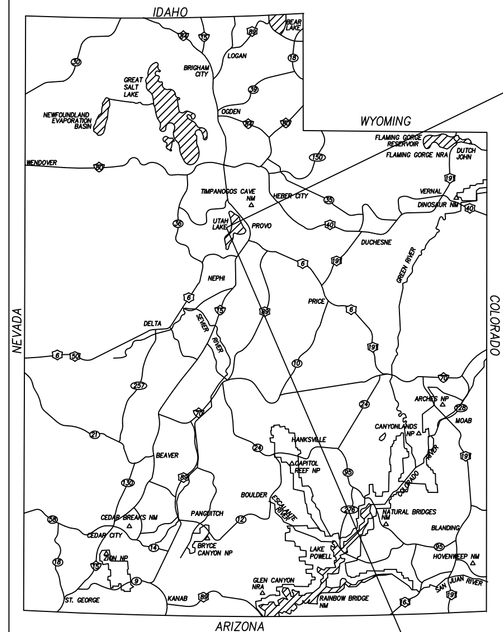
SHEET NO	PREPARED BY:	surveyor logo here
2 / 2	GATEWAY CONSULTING, inc. P.O. BOX 951005 SOUTH JORDAN, UT 84095 PH: (801) 694-5848 FAX: (801) 432-7050 paul@gatewayconsultingllc.com CIVIL ENGINEERING • CONSULTING • LAND PLANNING CONSTRUCTION MANAGEMENT	

Date: SEPT 12, 2014
File: BEACON POINT_PPLAT PH1

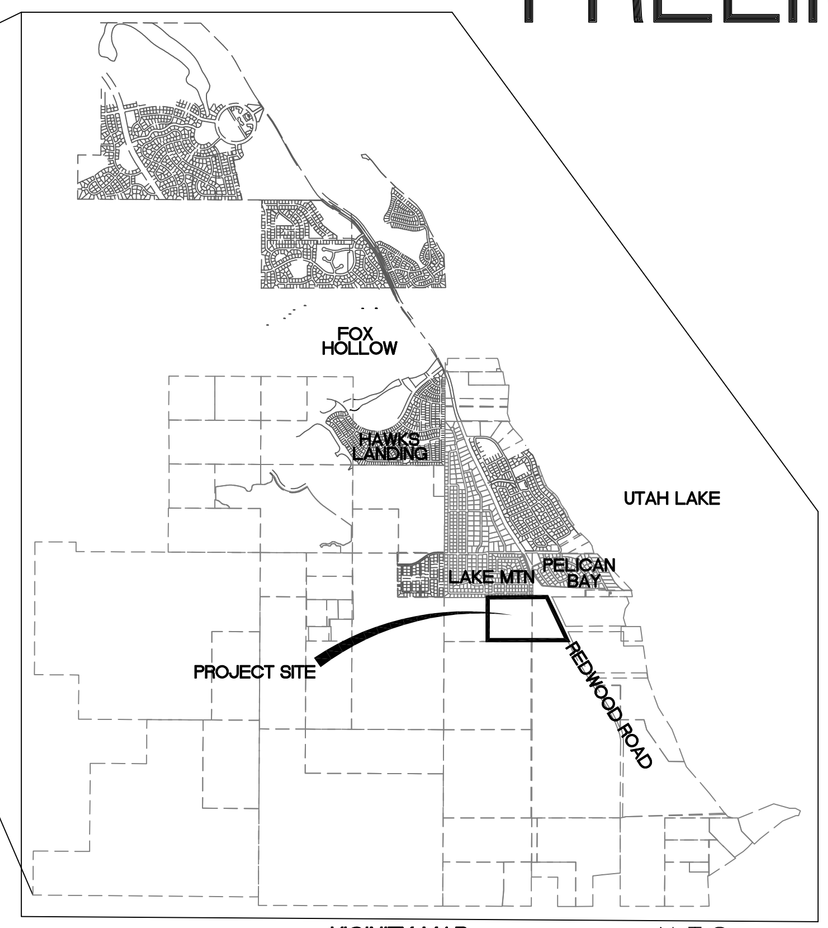
BEACON POINT PHASE 2

LOCATED IN
NORTH HALF OF SECTION 19 TOWNSHIP 6 SOUTH, RANGE 1 EAST,
SALT LAKE BASE AND MERIDIAN

PRELIMINARY PLAT



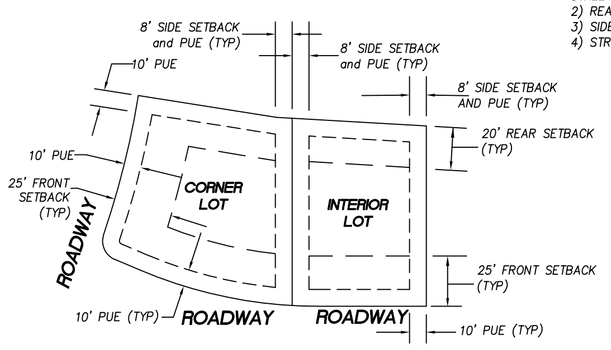
VICINITY MAP
NOT TO SCALE



VICINITY MAP N.T.S.
NOT TO SCALE

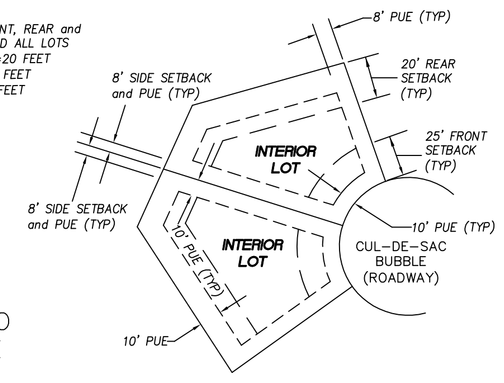
TYPICAL SETBACK AND P.U.E. DETAILS

NOTES:
1) 8' SIDE YARD, 10' FRONT, REAR and STREET SIDE PUE, AROUND ALL LOTS
2) REAR YARD SETBACK=20 FEET
3) SIDEYARD SETBACK=8 FEET
4) STREET SETBACK=25 FEET



NOT TO SCALE

INTERIOR AND CORNER LOTS



KNUCKLE AND CUL-DE-SAC LOTS

PLAT NOTES

1) The installation of improvements shall conform to all city rules, ordinances, requirements, standards, and policies regarding the development of this property.
2) Prior to building permits being issued, soil studies may be required on each lot as determined by the city building official.
3) Plat may be subject to a master development agreement, development agreement, subdivision agreement, or site plan agreement. See City Recorder for more information.
4) Building permits will not be issued until all improvements have been installed and accepted by the city in writing; all improvements currently meet city standards, and bonds area posted by the current owner of the project pursuant to city code.
5) All bonds and bond agreements are between the city, developer/owner and financial institution. No other party, including unit or lot owners, shall be deemed a third-party beneficiary or have any rights, including the right to bring any action under any bond or bond agreement.
6) The owner of this subdivision and any successors and assigns area responsible for ensuring that impact and connection fees are paid and water rights area secured for each individual lot. No building permits shall be issued for any lot in this subdivision until all impact and connection fees, at the rates in effect when applying for building permit, are paid in full and water rights secured as specified by current city ordinances and fee schedules.
7) All open space and trail improvements located herein area to be installed by owner and maintained by Home Owners Association (HOA) unless specifies otherwise on each improvement.
8) Any reference herein to owners, developers, or contractors shall apply to successors, agents, and assigns.
9) There are no private streets in this development phase.
10) Lots area subject to CC&R's.
11) ALL Public utility easements (PUE) are also drainage easements.
12) All lots adjacent to undeveloped land are subject to City Wild Land Urban Interface requirements and 30' buffer regulations.

SURVEYOR'S CERTIFICATE

I, _____, do hereby certify that I am a Professional Land Surveyor and that I hold Certificate No. _____ as prescribed under the laws of the State of Utah, I further certify that a survey has been made of the land shown on this plat and described hereon and have subdivided said tract of land into lots and streets, hereafter to be know as:

BEACON POINT PHASE 2

and that the same has been correctly surveyed and staked on the ground as shown on this plat.

BOUNDARY DESCRIPTION

Beginning at a point that is N 89°55'49" E 1,321.192 feet along the ¼ Section Line and N 89°54'47" E 1,321.95 feet along the ¼ Section Line , and N 89° 55'37" E 396.90 feet from the West ¼ of Section 19, Township 6 South, Range 1 East, Salt Lake Base and Meridian, and running thence N20°24'27"W 130.06 feet, thence N11°45'02"E 98.20 feet, thence N51°09'40"E 105.03 feet to a point on a 172.00' radius curve to the left, thence along arc of said curve 46.35 feet through a delta of 15°26'26" (chord bears N 42°04'41" W 46.21 feet, thence N 40°12'06" E 56.00 feet to a 15.00' radius curve to the left, thence along arc of said curve 20.68 feet through a delta of 79°00'18" (chord bears S 89°18'03"E 19.08 feet) to a point on a 278.00' radius curve to the right, thence along arc of said curve 68.43 feet through a delta of 14°06'14" (chord bears S 58°14'56" W 68.26 feet), thence N 65°18'03"E 294.34 feet, thence S23°41'33"E 566.60 feet, thence S89°55'37"W 633.85 feet to the point of beginning. Parcel Contains 5.38 ac

.

_____ DATE: _____

OWNER'S DEDICATION

KNOW ALL MEN BY THESE PRESENTS THAT WE, ALL OF THE UNDERSIGNED OWNERS OF ALL THE PROPERTY DESCRIBED IN THE SURVEYOR'S CERTIFICATE HEREON AND SHOWN ON THIS MAP, HAVE CAUSED THE SAME TO BE SUBDIVIDED INTO LOTS, STREETS, AND EASEMENTS AND DO HEREBY DEDICATE THE STREETS AND OTHER PUBLIC AREAS AS INDICATED HEREON FOR PERPETUAL USE OF THE PUBLIC.

IN WITNESS HEREOF WE HAVE HEREUNTO SET OUR HANDS THIS _____ DAY OF _____, A.D. 20_____.

_____ _____
_____ _____
_____ _____

MY COMMISSION EXPIRES:_____ _____
NOTARY PUBLIC
RESIDING IN SUMMIT COUNTY

ACCEPTANCE BY LEGISLATIVE BODY

THE MAYOR OF CITY OF SARATOGA SPRINGS, COUNTY OF UTAH, APPROVES THIS SUBDIVISION AND HEREBY ACCEPTS THE DEDICATION OF ALL STREETS, EASEMENTS, AND OTHER PARCELS OF LAND INTENDED FOR PUBLIC PURPOSES FOR THE PERPETUAL USE OF THE PUBLIC _____.
THIS _____ DAY OF _____ A.D. 20 _____.

_____ _____
_____ _____
_____ _____

APPROVED _____ ATTEST _____
CITY ENGINEER (SEE SEAL) CITY RECORDER (SEE SEAL)

CORPORATE ACKNOWLEDGMENT

STATE OF UTAH } S.S.
COUNTY OF UTAH }

ON THE _____ DAY OF _____, A.D. 20_____, PERSONALLY APPEARED BEFORE ME _____ AND _____ , WHO BEING BY ME DULY SWORN DID SAY EACH FOR HIMSELF, THAT HE, THE SAID _____ IS THE PRESIDENT AND HE, THE SAID _____ , IS THE SECRETARY OF _____ CORPORATION, AND THAT THE WITHIN AND FOREGOING INSTRUMENT WAS SIGNED IN BEHALF OF SAID CORPORATION BY AUTHORITY OF A RESOLUTION OF ITS BOARD OF DIRECTORS AND SAID _____ AND _____ EACH DULY ACKNOWLEDGE TO ME THAT SAID CORPORATION EXECUTED THE SAME AND THAT THE SEAL AFFIXED IS THE SEAL OF SAID CORPORATION.

_____
NOTARY PUBLIC

PREPARED FOR

WESTERN STATES VENTURES
90 So. 154 E. SALT LAKE CITY, UT 84104
TELEPHONE 801-456-4140
FAX 801-366-7194

BEACON POINT PHASE 2

LOCATED IN
NORTH HALF OF SECTION 19 TOWNSHIP 6 SOUTH, RANGE 1 EAST,
SALT LAKE BASE AND MERIDIAN

PUBLIC UTILITIES APPROVAL

	DATE
QUESTAR _____	_____
ROCKY MOUNTAIN POWER _____	_____
QWEST _____	_____
COMCAST CABLE _____	_____

LEHI CITY POST OFFICE

APPROVED THIS _____ DAY OF _____, A.D. 20_____, BY LEHI CITY POST OFFICE.

_____
LEHI CITY POST OFFICE REPRESENTATIVE

BASIS OF BEARINGS

THE PROJECT BASIS OF BEARINGS IS SOUTH 00°15'21" WEST, 2633.90 FEET ALONG THE SECTION LINE BETWEEN THE NORTHWEST QUARTER AND WEST CORNERS OF SECTION 19, TOWNSHIP 6 SOUTH, RANGE 1 EAST, SALT LAKE BASE & MERIDIAN

SURVEYOR OF RECORD

surveyor logo here

PROJECT ENGINEER:

GATEWAY CONSULTING, inc.
P.O. BOX 951005 SOUTH JORDAN, UT 84095
PH: (801) 694-5848 FAX: (801) 432-7050
paul@gatewayconsultingllc.com

CIVIL ENGINEERING • CONSULTING • LAND PLANNING
CONSTRUCTION MANAGEMENT

FIRE CHIEF APPROVAL

APPROVED THIS _____ DAY OF _____, A.D. 20_____, BY THE FIRE CHIEF.

_____
CITY FIRE CHIEF

PLANNING COMMISSION APPROVAL

APPROVED THIS _____ DAY OF _____, A.D. 20_____, BY THE PLANNING COMMISSION.

_____
CHAIRMAN, PLANNING COMMISSION

SARATOGA SPRINGS ENGINEER APPROVAL

APPROVED THIS _____ DAY OF _____, A.D. 20_____, BY THE CITY ENGINEER.

_____
CITY ENGINEER

SARATOGA SPRINGS ATTORNEY

APPROVED THIS _____ DAY OF _____, A.D. 20_____, BY THE FIRE CHIEF.

_____
SARATOGA SPRINGS ATTORNEY

SHEET NO 1/2

CORPORATE SEAL	SURVEYOR'S SEAL	NOTARY PUBLIC SEAL	CITY ENGINEER'S SEAL	CLERK-RECORDER SEAL

Date: SEPT 12, 2014
File: BEACON POINT_PPLAT PH1

BEACON POINT PHASE 2

LOCATED IN
NORTH HALF OF SECTION 19 TOWNSHIP 6 SOUTH, RANGE 1 EAST,
SALT LAKE BASE AND MERIDIAN

PRELIMINARY PLAT

CURVE TABLE					
CURVE	LENGTH	RADIUS	CHORD DIST.	CHORD BRG.	DELTA
C1	20.68'	15.00'	19.08'	S89°18'03"E	79°00'18"
C2	68.43'	278.00'	68.26'	S58°14'56"W	14°06'14"
C3	61.52'	250.00'	61.37'	S58°15'04"W	14°05'59"
C4	60.09'	250.00'	59.94'	S58°24'55"W	13°46'16"
C5	53.36'	222.00'	53.23'	S58°24'55"W	13°46'16"
C6	3.55'	250.00'	3.55'	S50°47'39"W	0°48'50"
C7	4.99'	250.00'	4.99'	S50°57'31"W	1°08'34"
C8	35.61'	200.00'	35.57'	N34°30'42"W	10°12'08"
C9	21.19'	15.00'	19.47'	S11°03'35"W	80°56'25"
C10	79.99'	200.00'	79.46'	N17°57'10"W	22°54'56"
C11	77.60'	228.00'	77.23'	S19°39'36"E	19°30'04"
C12	79.55'	172.00'	78.84'	N21°06'30"W	26°29'55"
C13	14.63'	15.00'	14.06'	N20°05'03"E	55°53'11"
C14	32.58'	55.00'	32.11'	N31°03'22"E	33°56'33"
C15	75.25'	55.00'	69.52'	N25°06'45"W	78°23'41"
C16	61.84'	55.00'	58.63'	S83°28'53"W	64°25'04"
C17	57.79'	55.00'	55.16'	S21°10'23"W	60°11'55"
C18	45.23'	55.00'	43.96'	S32°29'03"E	47°06'58"
C19	12.97'	15.00'	12.57'	S31°16'07"E	49°32'51"
C20	10.01'	200.00'	10.01'	N5°03'40"W	2°52'03"

CURVE TABLE					
CURVE	LENGTH	RADIUS	CHORD DIST.	CHORD BRG.	DELTA
C21	14.77'	200.00'	14.77'	N5°44'36"W	4°13'54"
C22	13.59'	261.82'	13.59'	S8°12'08"E	2°58'24"
C23	146.40'	200.00'	143.15'	N28°49'43"W	41°56'21"
C24	35.55'	200.00'	35.51'	N44°42'20"W	10°11'08"
C27	20.10'	15.00'	18.63'	N14°42'04"E	76°47'13"
C28	48.98'	55.00'	47.38'	N27°34'51"E	51°01'39"
C29	79.93'	55.00'	73.08'	N39°33'49"W	83°15'41"
C30	61.88'	55.00'	58.67'	S66°34'29"W	64°27'43"
C31	55.71'	55.00'	53.36'	S5°19'33"W	58°02'11"
C32	46.35'	172.00'	46.21'	N42°04'41"W	15°26'26"

LEGEND
- PHASE BOUNDARY LINE
- SECTION LINE
- CENTER LINE
- P.U.E. LINE
- SETBACK LINE
- REBAR AND CAP TO BE SET
- NEW FIRE HYDRANT
- NEW STREETLIGHT
- EXISTING FIRE HYDRANT
- EXISTING STREETLIGHT
- 30% and GREATER SLOPES
- C156 CURVE (SEE CURVE TABLE)
- L6 LINE (SEE LINE TABLE)
- 3165 S 490 W MONUMENT

50 0 50 100
SCALE IN FEET
1"=50' (24"x36" SIZE ONLY)

SEE SHEET 1 FOR CURVE AND LINE TABLES

FAIRFIELD DR
CAMBRIDGE DRIVE
BELMONT DR
DARTMOUTH DR
REDWOOD ROAD
EXISTING CENTERLINE REDWOOD ROAD 90' (1/2 row)
WESTERN STATES VENTURES
EX PHASE 1
EX PHASE 1 PARCEL C
det pond open space
FUTURE PHASE
EX PHASE 1
EX PHASE 1 parcel D detention/ OPEN SPACE
debris basin
LIME KILN CANYON
ST JAMES DR
DARTMOUTH COURT
GREEN AC COURT
EX PHASE 1 - PARCEL B LDOT
EX PHASE 1 - PARCEL A SARATOGA SPRINGS

NW 19
N 0°15'21" E SECTION LINE W 1/4 19 T6S, R1E SLB&M
N89°55'49"E 1321.192' N89°54'47"E 1321.95' N89°55'37"E 396.90'
QUARTER SECTION LINE

N65°18'03"E 294.34'
N40°12'06"E 56.00'
N65°18'03"E 293.85'
122.07'
S23°41'33"E 566.60'
N66°00'28"E 100.00
S66°18'27"W 100.00
S7°7'32"E 101.95
N23°41'33"W 187.76'
N23°41'33"W 109.35'
N87°54'26"E 109.51
N23°41'33"W 35.20
N66°18'27"E 109.57
S66°18'27"W 118.82
S66°18'27"W 51.47'
S23°41'33"E 146.18
S21°10'27"W 146.18
S66°18'27"W 101.67
N5°39'22"W 218.80
N1°45'02"E 98.20'
N20°24'27"W 130.06'
105.03' N5°09'40"E
S89°55'37"W 633.85'
41.58' 200.30' 130.91' 250.05' 10.45'
2.12'

POINT OF BEGINNING

53 9967 SF
54 9000 SF
55 9072 SF
56 16878 SF
57 17651 SF
58 15013 SF
59 11572 SF
60 11912 SF
61 9942 SF
62 9279 SF
63 14143 SF
64 13942 SF
65 13850 SF
66 11271 SF

FOUND REBAR AND CAP AS CALLED FOR IN DEEDS 73636-2001 AND 44417-1992

IRECO
DEED #44417-1992

FOUND REBAR AND CAP AS CALLED FOR IN DEED 44417-1992

SHEET NO 2/2

PREPARED BY:
GATEWAY CONSULTING, inc.
P.O. BOX 951005 SOUTH JORDAN, UT 84095
PH: (801) 694-5848 FAX: (801) 432-7050
paul@gatewayconsultingllc.com
CIVIL ENGINEERING • CONSULTING • LAND PLANNING
CONSTRUCTION MANAGEMENT

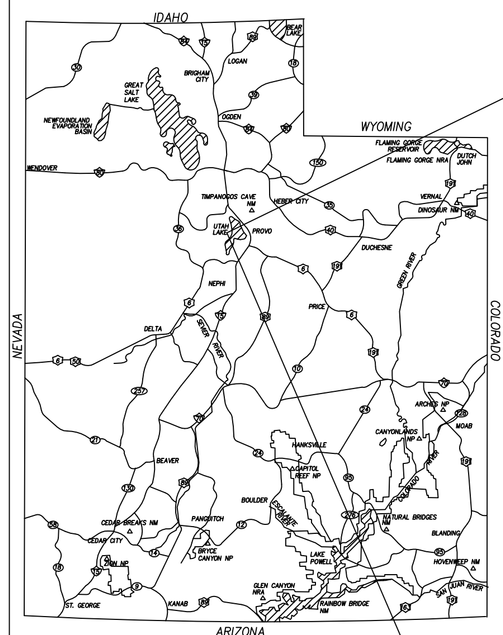
surveyor logo here

Date: SEPT 12, 2014
File: BEACON POINT_PPLAT PH1

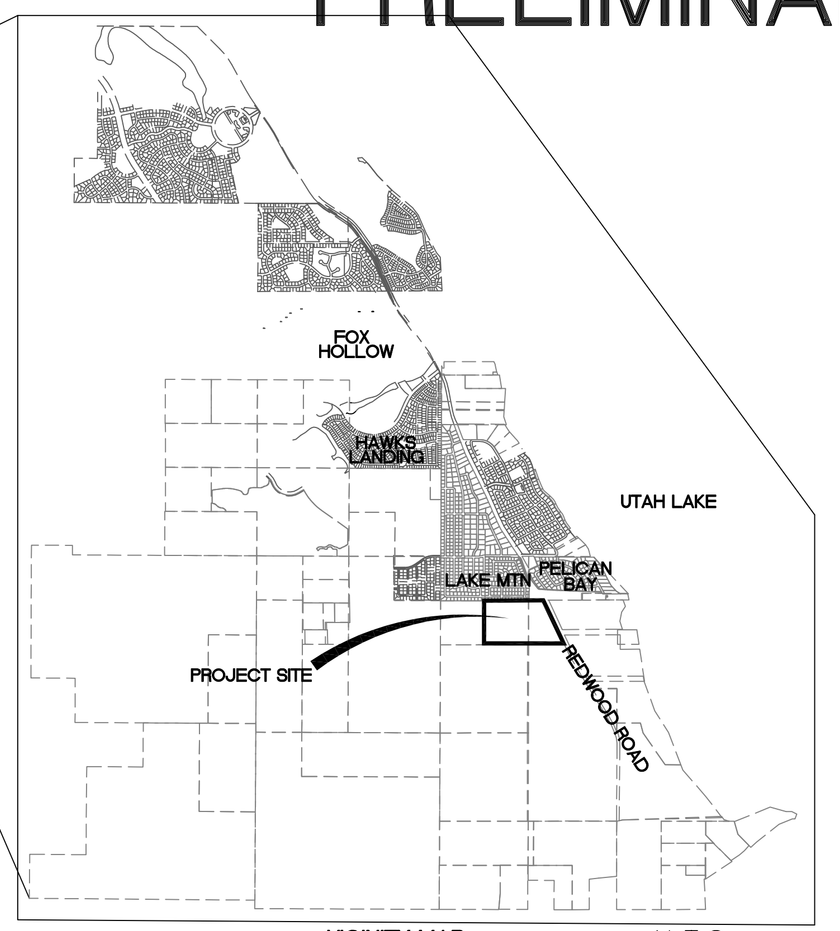
BEACON POINT PHASE 3

LOCATED IN
NORTH HALF OF SECTION 19 TOWNSHIP 6 SOUTH, RANGE 1 EAST,
SALT LAKE BASE AND MERIDIAN

PRELIMINARY PLAT



VICINITY MAP
NOT TO SCALE



VICINITY MAP
NOT TO SCALE

N.T.S.

PLAT NOTES

1) The installation of improvements shall conform to all city rules, ordinances, requirements, standards, and policies regarding the development of this property.

2) Prior to building permits being issued, soil studies may be required on each lot as determined by the city building official.

3) Plat may be subject to a master development agreement, development agreement, subdivision agreement, or site plan agreement. See City Recorder for more information.

4) Building permits will not be issued until all improvements have been installed and accepted by the city in writing; all improvements currently meet city standards, and bonds area posted by the current owner of the project pursuant to city code.

5) All bonds and bond agreements are between the city, developer/owner and financial institution. No other party, including unit or lot owners, shall be deemed a third-party beneficiary or have any rights, including the right to bring any action under any bond or bond agreement.

6) The owner of this subdivision and any successors and assigns area responsible for ensuring that impact and connection fees are paid and water rights area secured for each individual lot. No building permits shall be issued for any lot in this subdivision until all impact and connection fees, at the rates in effect when applying for building permit, are paid in full and water rights secured as specified by current city ordinances and fee schedules.

7) All open space and trail improvements located herein area to be installed by owner and maintained by Home Owners Association (HOA) unless specifies otherwise on each improvement.

8) Any reference herein to owners, developers, or contractors shall apply to successors, agents, and assigns.

9) There are no private streets in this development phase.

10) Lots area subject to CC&R's.

11) ALL Public utility easements (PUE) are also drainage easements.

12) All lots adjacent to undeveloped land are subject to City Wild Land Urban Interface requirements and 30' buffer regulations.

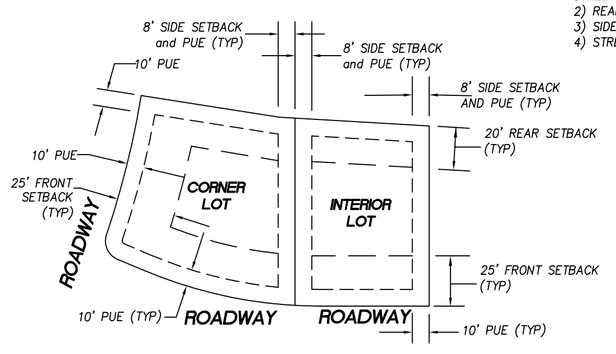
13) Lots 67 to 71, 76 to 80, 81 to 85, and 136 to 139 share a 20' common access driveway off of Arlington Way. Arlington Way is a collector road and does not allow individual lot direct access. Backing up a vehicle on to a collector road is discouraged. Common driveways are combined together to allow limited one-way access to Arlington Way. Each lot is responsible for construction and maintenance of driveway right-of-way within their lot boundaries. Driveways will follow 20' concrete driveway standards. Each said lot has an irrevocable right-of-way over adjacent lots for ingress and egress to their lot.

CURVE TABLE					
CURVE	LENGTH	RADIUS	CHORD DIST.	CHORD BRG.	DELTA
C1	23.55'	15.00'	21.21'	N45°09'55"E	89°58'24"
C2	23.57'	15.00'	21.22'	S44°50'05"E	90°01'36"
C3	23.55'	15.00'	21.21'	S45°09'55"W	89°58'24"
C4	23.57'	15.00'	21.22'	N44°50'05"W	90°01'36"
C5	44.19'	197.00'	44.09'	S6°14'50"E	12°51'05"
C6	43.08'	197.00'	42.99'	S18°56'14"E	12°31'44"
C7	99.67'	225.00'	98.86'	S12°30'42"E	25°22'49"
C8	40.04'	253.00'	40.00'	N4°21'21"W	9°04'07"
C9	70.23'	253.00'	70.00'	N16°50'31"W	15°54'13"
C10	1.80'	253.00'	1.80'	N24°59'52"W	0°24'29"
C11	22.27'	15.00'	20.28'	S67°44'29"E	85°04'46"
C12	21.08'	15.00'	19.38'	N15°03'04"E	80°30'20"
C13	85.72'	328.00'	85.47'	N47°49'02"E	14°58'24"
C14	83.78'	300.00'	83.51'	S47°18'11"W	16°00'04"
C15	36.13'	300.00'	36.11'	S58°45'14"W	6°54'01"
C16	39.35'	300.00'	39.32'	S65°57'41"W	7°30'54"
C17	266.18'	300.00'	257.54'	S64°43'17"W	50°50'15"
C18	106.92'	300.00'	106.36'	S79°55'46"W	20°25'16"
C19	113.19'	272.00'	112.37'	S50°27'58"W	23°50'34"
C20	129.48'	272.00'	128.26'	S76°01'28"W	27°16'25"
C21	72.84'	328.00'	72.69'	N76°04'51"E	12°43'27"
C22	44.06'	328.00'	44.03'	N86°17'29"E	7°41'50"
C23	2.27'	272.00'	2.27'	S89°54'02"W	0°28'44"
C24	23.52'	15.00'	21.19'	N45°12'40"E	89°51'27"
C25	23.59'	15.00'	21.23'	S44°48'47"E	90°05'39"

CURVE TABLE					
CURVE	LENGTH	RADIUS	CHORD DIST.	CHORD BRG.	DELTA
C26	12.72'	15.00'	12.34'	N24°03'26"W	48°34'58"
C27	5.43'	50.00'	5.43'	N45°14'17"W	6°13'15"
C28	69.88'	50.00'	64.33'	N2°05'24"W	80°04'30"
C29	54.14'	50.00'	51.53'	N68°57'55"E	62°02'08"
C30	33.82'	50.00'	33.18'	N60°38'28"W	38°45'07"
C31	12.72'	15.00'	12.34'	N65°33'24"W	48°34'58"
C32	23.54'	15.00'	21.20'	S45°11'35"W	89°55'04"
C33	23.55'	15.00'	21.21'	N45°09'33"E	89°57'41"
C34	23.57'	15.00'	21.22'	S44°50'27"E	90°02'19"
C35	12.72'	15.00'	12.34'	N24°06'46"W	48°34'58"
C36	12.72'	15.00'	12.34'	S24°28'12"W	48°34'58"
C37	50.47'	51.89'	48.51'	N19°24'53"W	55°43'44"
C38	56.56'	48.48'	53.41'	N41°54'25"E	66°50'10"
C39	51.75'	50.00'	49.47'	S76°11'15"E	59°18'11"
C40	83.16'	50.00'	73.90'	S1°06'45"W	95°17'51"
C41	81.38'	222.00'	80.93'	N79°38'18"E	21°00'12"
C42	92.30'	250.00'	91.77'	N79°33'49"E	21°09'10"
C43	77.32'	278.00'	77.07'	S76°50'08"W	15°56'06"
C44	25.90'	278.00'	25.89'	S87°28'17"W	5°20'13"

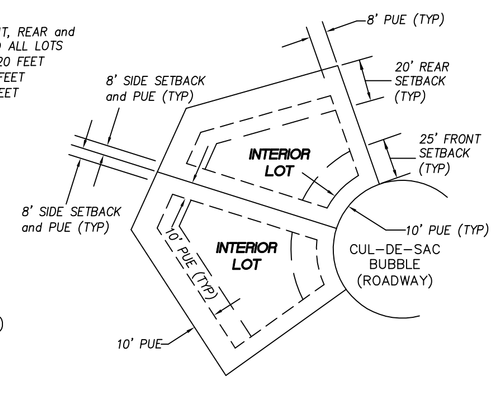
TYPICAL SETBACK AND P.U.E. DETAILS

NOTES:
1) 8' SIDE YARD, 10' FRONT, REAR and STREET SIDE PUE, AROUND ALL LOTS
2) REAR YARD SETBACK=20 FEET
3) SIDEYARD SETBACK=8 FEET
4) STREET SETBACK=25 FEET



INTERIOR AND CORNER LOTS

NOT TO SCALE



KNUCKLE AND CUL-DE-SAC LOTS

SURVEYOR'S CERTIFICATE

I, _____, do hereby certify that I am a Professional Land Surveyor and that I hold Certificate No. _____ as prescribed under the laws of the State of Utah, I further certify that a survey has been made of the land shown on this plat and described hereon and have subdivided said tract of land into lots and streets, hereafter to be know as:

BEACON POINT PHASE 3

and that the same has been correctly surveyed and staked on the ground as shown on this plat.

BOUNDARY DESCRIPTION

Beginning at a point that is N 89°55'49" E 1321.192 feet along the ¼ Section Line and N 00°15'20" E 1,074.25 feet along the ¼ Section Line from the West ¼ of Section 19, Township 6 South, Range 1 East, Salt Lake Base and Meridian, and running thence N 00°15'20" E 237.00 feet; thence S 89°51'36" E 1043.80 feet ; thence S 00°10'43" W 159.95 feet; thence S 01°00'32" W 77.01 feet ;thence S 00°08'24" W 245.00 feet ;thence S 25°33'09" W 61.99 feet ;thence S 00°14'03" W 120.00 feet ; thence S 89°50'53" E of 190.90 feet ;thence S 08°22'52" E 163.81 feet; thence S18°59'08" W 39.69 feet ;thence S 00°10'43" W 85.00 feet ;thence S 22°11'51" E 56.01 feet ;thence S 00°08'24" W 138.94 feet ;thence N 89°51'36" W 525.00 feet ;thence S 78°54'41" W 68.58 feet ; thence S 47°54'45" W 70.00 feet N 50°50'10" W 120.00 feet, thence N 38°46'30 W 57.44; thence bearing N 34°28'03" W 147.62 feet; thence N 10°21'31 W 183.21 feet ; thence N 0°10'43" E 387.50 feet ; thence N 89°50'50" W 319.72 feet ; thence N 00°15'20"E 147.50 feet ; thence N 89°50'53" W 30.00 feet ;to the point of beginning. Parcel Contains 22.57 ac OR 73 LOTS

_____ DATE:

OWNER'S DEDICATION

KNOW ALL MEN BY THESE PRESENTS THAT WE, ALL OF THE UNDERSIGNED OWNERS OF ALL THE PROPERTY DESCRIBED IN THE SURVEYOR'S CERTIFICATE HEREON AND SHOWN ON THIS MAP, HAVE CAUSED THE SAME TO BE SUBDIVIDED INTO LOTS, STREETS, AND EASEMENTS AND DO HEREBY DEDICATE THE STREETS AND OTHER PUBLIC AREAS AS INDICATED HEREON FOR PERPETUAL USE OF THE PUBLIC.

IN WITNESS HEREOF WE HAVE HEREUNTO SET OUR HANDS THIS _____ DAY OF _____, A.D. 20____.

MY COMMISSION EXPIRES:_____ _____
NOTARY PUBLIC
RESIDING IN SUMMIT COUNTY

ACCEPTANCE BY LEGISLATIVE BODY

THE MAYOR OF CITY OF SARATOGA SPRINGS, COUNTY OF UTAH, APPROVES THIS SUBDIVISION AND HEREBY ACCEPTS THE DEDICATION OF ALL STREETS, EASEMENTS, AND OTHER PARCELS OF LAND INTENDED FOR PUBLIC PURPOSES FOR THE PERPETUAL USE OF THE PUBLIC.
THIS DAY OF A.D. 20 .

APPROVED _____ ATTEST _____
CITY ENGINEER (SEE SEAL) CITY RECORDER (SEE SEAL)

CORPORATE ACKNOWLEDGMENT

STATE OF UTAH } S.S.
COUNTY OF UTAH }

ON THE _____ DAY OF _____, A.D. 20____, PERSONALLY APPEARED BEFORE ME _____ AND _____ , WHO BEING BY ME DULY SWORN DID SAY EACH FOR HIMSELF, THAT HE, THE SAID _____ IS THE PRESIDENT AND HE, THE SAID _____ , IS THE SECRETARY OF _____ CORPORATION, AND THAT THE WITHIN AND FOREGOING INSTRUMENT WAS SIGNED IN BEHALF OF SAID CORPORATION BY AUTHORITY OF A RESOLUTION OF ITS BOARD OF DIRECTORS AND SAID _____ AND _____ EACH DULY ACKNOWLEDGE TO ME THAT SAID CORPORATION EXECUTED THE SAME AND THAT THE SEAL AFFIXED IS THE SEAL OF SAID CORPORATION.

_____
NOTARY PUBLIC

PREPARED FOR

WESTERN STATES VENTURES
90 So. 154 E. SALT LAKE CITY, UT 84104
TELEPHONE 801-456-4140
FAX 801-366-7194

BASIS OF BEARINGS

THE PROJECT BASIS OF BEARINGS IS SOUTH 00°15'21" WEST, 2633.90 FEET ALONG THE SECTION LINE BETWEEN THE NORTHWEST QUARTER AND WEST CORNERS OF SECTION 19, TOWNSHIP 6 SOUTH, RANGE 1 EAST, SALT LAKE BASE & MERIDIAN

SURVEYOR OF RECORD

surveyor logo here

PROJECT ENGINEER:

GATEWAY CONSULTING, inc.
P.O. BOX 951005 SOUTH JORDAN, UT 84095
PH: (801) 694-5848 FAX: (801) 432-7050
paul@gatewayconsultingllc.com

CIVIL ENGINEERING • CONSULTING • LAND PLANNING
CONSTRUCTION MANAGEMENT

PUBLIC UTILITIES APPROVAL

	DATE
QUESTAR _____	_____
ROCKY MOUNTAIN POWER _____	_____
QWEST _____	_____
COMCAST CABLE _____	_____

LEHI CITY POST OFFICE

APPROVED THIS _____ DAY OF _____, A.D. 20____, BY LEHI CITY POST OFFICE.

_____
LEHI CITY POST OFFICE REPRESENTATIVE

FIRE CHIEF APPROVAL

APPROVED THIS _____ DAY OF _____, A.D. 20____, BY THE FIRE CHIEF.

_____
CITY FIRE CHIEF

PLANNING COMMISSION APPROVAL

APPROVED THIS _____ DAY OF _____, A.D. 20____, BY THE PLANNING COMMISSION.

_____
CHAIRMAN, PLANNING COMMISSION

SARATOGA SPRINGS ENGINEER APPROVAL

APPROVED THIS _____ DAY OF _____, A.D. 20____, BY THE CITY ENGINEER.

_____
CITY ENGINEER

SARATOGA SPRINGS ATTORNEY

APPROVED THIS _____ DAY OF _____, A.D. 20____, BY THE FIRE CHIEF.

_____
SARATOGA SPRINGS ATTORNEY

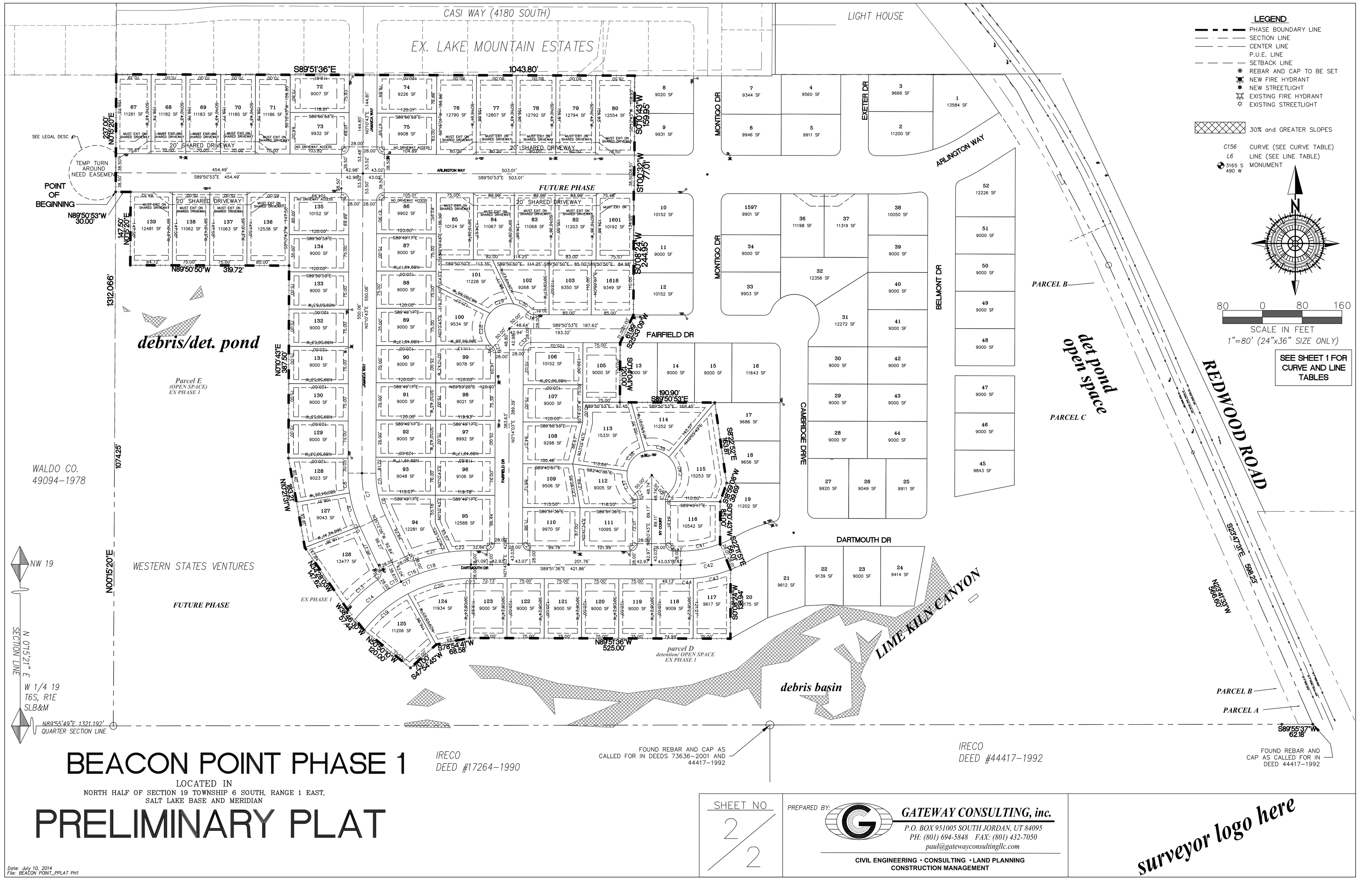
SHEET NO
1/2

CORPORATE SEAL | SURVEYOR'S SEAL | NOTARY PUBLIC SEAL | CITY ENGINEER'S SEAL | CLERK-RECORDER SEAL

Date: SEPT 12, 2014
File: BEACON POINT_PPLAT PH1

BEACON POINT PHASE 3

LOCATED IN
NORTH HALF OF SECTION 19 TOWNSHIP 6 SOUTH, RANGE 1 EAST,
SALT LAKE BASE AND MERIDIAN



BEACON POINT PHASE 1

LOCATED IN
NORTH HALF OF SECTION 19 TOWNSHIP 6 SOUTH, RANGE 1 EAST,
SALT LAKE BASE AND MERIDIAN

PRELIMINARY PLAT

Date: July 10, 2014
File: BEACON POINT_PPLAT PH1

SHEET NO 2/2

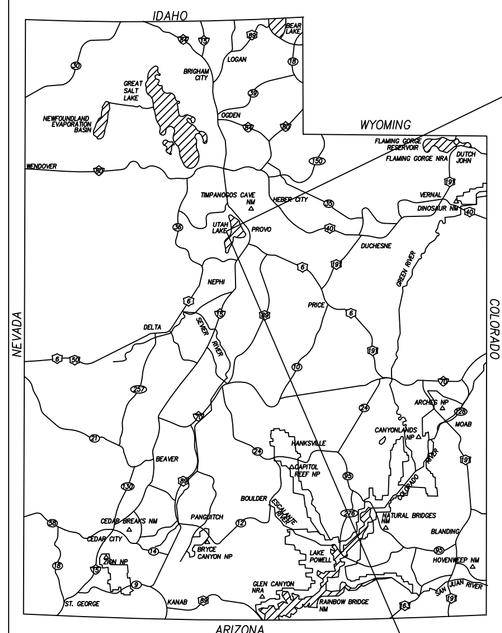
PREPARED BY:
GATEWAY CONSULTING, inc.
P.O. BOX 951005 SOUTH JORDAN, UT 84095
PH: (801) 694-5848 FAX: (801) 432-7050
paul@gatewayconsultingllc.com
CIVIL ENGINEERING • CONSULTING • LAND PLANNING
CONSTRUCTION MANAGEMENT

surveyor logo here

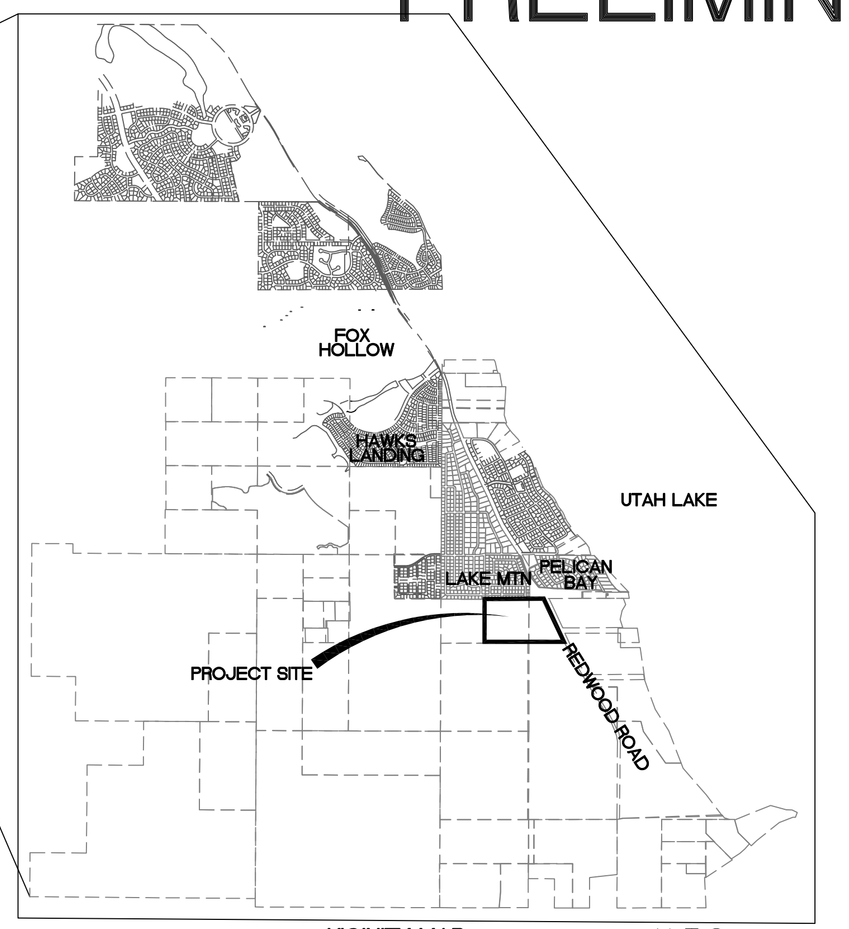
BEACON POINT PHASE 4

LOCATED IN
NORTH HALF OF SECTION 19 TOWNSHIP 6 SOUTH, RANGE 1 EAST,
SALT LAKE BASE AND MERIDIAN

PRELIMINARY PLAT



VICINITY MAP
NOT TO SCALE

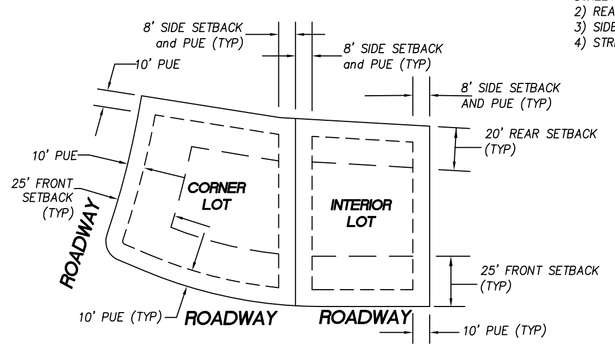


VICINITY MAP
NOT TO SCALE

N.T.S.

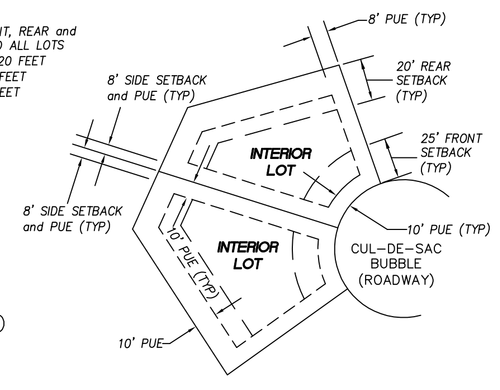
TYPICAL SETBACK AND P.U.E. DETAILS

NOTES:
1) 8' SIDE YARD, 10' FRONT, REAR and STREET SIDE PUE, AROUND ALL LOTS
2) REAR YARD SETBACK=20 FEET
3) SIDEYARD SETBACK=8 FEET
4) STREET SETBACK=25 FEET



INTERIOR AND CORNER LOTS

NOT TO SCALE



KNUCKLE AND CUL-DE-SAC LOTS

PLAT NOTES

1) The installation of improvements shall conform to all city rules, ordinances, requirements, standards, and policies regarding the development of this property.
2) Prior to building permits being issued, soil studies may be required on each lot as determined by the city building official.
3) Plat may be subject to a master development agreement, development agreement, subdivision agreement, or site plan agreement. See City Recorder for more information.
4) Building permits will not be issued until all improvements have been installed and accepted by the city in writing; all improvements currently meet city standards, and bonds area posted by the current owner of the project pursuant to city code.
5) All bonds and bond agreements are between the city, developer/owner and financial institution. No other party, including unit or lot owners, shall be deemed a third–party beneficiary or have any rights, including the right to bring any action under any bond or bond agreement.
6) The owner of this subdivision and any successors and assigns area responsible for ensuring that impact and connection fees are paid and water rights area secured for each individual lot. No building permits shall be issued for any lot in this subdivision until all impact and connection fees, at the rates in effect when applying for building permit, are paid in full and water rights secured as specified by current city ordinances and fee schedules.
7) All open space and trail improvements located herein area to be installed by owner and maintained by Home Owners Association (HOA) unless specifies otherwise on each improvement.
8) Any reference herein to owners, developers, or contractors shall apply to successors, agents, and assigns.
9) There are no private streets in this development phase.
10) Lots area subject to CC&R's.
11) ALL Public utility easements (PUE) are also drainage easements.
12) All lots adjacent to undeveloped land are subject to Wildland Urban Interface requiements and 30' buffer regulations per code.

CURVE TABLE

CURVE	LENGTH	RADIUS	CHORD DIST.	CHORD BRG.	DELTA
C46	23.47'	15.00'	21.15'	N45°05'15"E	89°39'50"
C47	73.67'	174.43'	73.12'	S75°29'51"W	24°11'52"
C48	95.46'	200.00'	94.56'	N76°14'43"E	27°20'54"
C49	11.76'	15.00'	11.46'	N22°12'08"W	44°54'55"
C50	15.35'	15.00'	14.69'	S29°34'31"W	58°38'22"
C51	23.65'	15.00'	21.28'	S44°54'45"E	90°20'10"
C52	50.87'	228.00'	50.76'	N68°24'00"E	12°46'56"
C53	60.20'	228.00'	60.03'	N82°21'19"E	15°07'41"
C54	55.22'	55.00'	52.93'	N15°53'57"W	57°31'15"
C56	61.04'	55.00'	57.95'	S44°48'54"E	63°35'08"
C57	69.04'	55.00'	64.59'	S22°56'11"W	71°55'03"

SURVEYOR'S CERTIFICATE

I, _____, do hereby certify that I am a Professional Land Surveyor and that I hold Certificate No. _____ as prescribed under the laws of the State of Utah, I further certify that a survey has been made of the land shown on this plat and described hereon and have subdivided said tract of land into lots and streets, hereafter to be know as:

BEACON POINT PHASE 4

and that the same has been correctly surveyed and staked on the ground as shown on this plat.

BOUNDARY DESCRIPTION

Beginning at a point that is N 89°55'49" E 1321.192 feet along the ¼ Section Line from the West ¼ of Section 19, Township 6 South, Range 1 East, Salt Lake Base and Meridian, and running thence N 00°15'20" E 516.51 feet; thence S 89°44'40" E 249.72 feet ; thence S 43°40'11" E 52.90 feet; thence S 10°16'03" E 150.08 feet ; thence S 33°36'05" E 171.49 feet ; thence S 31°57'24" E 54.77 feet ; thence S 49°24'05" E 54.47 feet ; thence S 00°04'50" E of 103.97 feet to the 1/4 Section line; thence along said line S 89°54'47" W 480.70 feet to the point of beginning. Parcel Contains 4.42 ac OR 15 LOTS

_____ DATE:

OWNER'S DEDICATION

KNOW ALL MEN BY THESE PRESENTS THAT WE, ALL OF THE UNDERSIGNED OWNERS OF ALL THE PROPERTY DESCRIBED IN THE SURVEYOR'S CERTIFICATE HEREON AND SHOWN ON THIS MAP, HAVE CAUSED THE SAME TO BE SUBDIVIDED INTO LOTS, STREETS, AND EASEMENTS AND DO HEREBY DEDICATE THE STREETS AND OTHER PUBLIC AREAS AS INDICATED HEREON FOR PERPETUAL USE OF THE PUBLIC.

IN WITNESS HEREOF WE HAVE HEREUNTO SET OUR HANDS THIS _____ DAY OF _____, A.D. 20____.

MY COMMISSION EXPIRES:_____ _____
NOTARY PUBLIC
RESIDING IN SUMMIT COUNTY

ACCEPTANCE BY LEGISLATIVE BODY

THE MAYOR OF CITY OF SARATOGA SPRINGS, COUNTY OF UTAH, APPROVES THIS SUBDIVISION AND HEREBY ACCEPTS THE DEDICATION OF ALL STREETS, EASEMENTS, AND OTHER PARCELS OF LAND INTENDED FOR PUBLIC PURPOSES FOR THE PERPETUAL USE OF THE PUBLIC
THIS DAY OF A.D. 20 .

APPROVED _____ ATTEST _____
CITY ENGINEER (SEE SEAL) CITY RECORDER (SEE SEAL)

CORPORATE ACKNOWLEDGMENT

STATE OF UTAH } S.S.
COUNTY OF UTAH }

ON THE _____ DAY OF _____, A.D. 20____, PERSONALLY APPEARED BEFORE ME _____ AND _____ , WHO BEING BY ME DULY SWORN DID SAY EACH FOR HIMSELF, THAT HE, THE SAID _____ IS THE PRESIDENT AND HE, THE SAID _____ , IS THE SECRETARY OF _____ CORPORATION, AND THAT THE WITHIN AND FOREGOING INSTRUMENT WAS SIGNED IN BEHALF OF SAID CORPORATION BY AUTHORITY OF A RESOLUTION OF ITS BOARD OF DIRECTORS AND SAID _____ AND _____ EACH DULY ACKNOWLEDGE TO ME THAT SAID CORPORATION EXECUTED THE SAME AND THAT THE SEAL AFFIXED IS THE SEAL OF SAID CORPORATION.

_____
NOTARY PUBLIC

PREPARED FOR

WESTERN STATES VENTURES
90 So. 154 E. SALT LAKE CITY, UT 84104
TELEPHONE 801–456–4140
FAX 801–366–7194

BASIS OF BEARINGS

THE PROJECT BASIS OF BEARINGS IS SOUTH 0015'21" WEST, 2633.90 FEET ALONG THE SECTION LINE BETWEEN THE NORTHWEST QUARTER AND WEST CORNERS OF SECTION 19, TOWNSHIP 6 SOUTH, RANGE 1 EAST, SALT LAKE BASE & MERIDIAN

SURVEYOR OF RECORD

surveyor logo here

PROJECT ENGINEER:

GATEWAY CONSULTING, inc.
P.O. BOX 951005 SOUTH JORDAN, UT 84095
PH: (801) 694-5848 FAX: (801) 432-7050
paul@gatewayconsultingllc.com

CIVIL ENGINEERING • CONSULTING • LAND PLANNING
CONSTRUCTION MANAGEMENT

PUBLIC UTILITIES APPROVAL

	DATE
QUESTAR _____	_____
ROCKY MOUNTAIN POWER _____	_____
QWEST _____	_____
COMCAST CABLE _____	_____

LEHI CITY POST OFFICE

APPROVED THIS _____ DAY OF _____, A.D. 20____, BY LEHI CITY POST OFFICE.

_____
LEHI CITY POST OFFICE REPRESENTATIVE

FIRE CHIEF APPROVAL

APPROVED THIS _____ DAY OF _____, A.D. 20____, BY THE FIRE CHIEF.

_____
CITY FIRE CHIEF

PLANNING COMMISSION APPROVAL

APPROVED THIS _____ DAY OF _____, A.D. 20____, BY THE PLANNING COMMISSION.

_____
CHAIRMAN, PLANNING COMMISSION

SARATOGA SPRINGS ENGINEER APPROVAL

APPROVED THIS _____ DAY OF _____, A.D. 20____, BY THE CITY ENGINEER.

_____
CITY ENGINEER

SARATOGA SPRINGS ATTORNEY

APPROVED THIS _____ DAY OF _____, A.D. 20____, BY THE FIRE CHIEF.

_____
SARATOGA SPRINGS ATTORNEY

SHEET NO 1/2

CORPORATE SEAL | SURVEYOR'S SEAL | NOTARY PUBLIC SEAL | CITY ENGINEER'S SEAL | CLERK–RECORDER SEAL

Date: SEPT 12, 2014
File: BEACON POINT_PPLAT PH1

BEACON POINT PHASE 4

LOCATED IN
NORTH HALF OF SECTION 19 TOWNSHIP 6 SOUTH, RANGE 1 EAST,
SALT LAKE BASE AND MERIDIAN

BEACON POINT PHASE 4

LOCATED IN
NORTH HALF OF SECTION 19 TOWNSHIP 6 SOUTH, RANGE 1 EAST,
SALT LAKE BASE AND MERIDIAN

PRELIMINARY PLAT

N

40 0 40 80
SCALE IN FEET
1"=80' (24"x36" SIZE ONLY)

WALDO CO.
49094-1978

NW 19

N 0°15'21" E
SECTION LINE

W 1/4 19
T6S, R1E
SLB&M

N89°55'49"E 1321.192'
QUARTER SECTION LINE

POINT OF BEGINNING

S89°54'47"W 480.70'

S89°44'40"E 249.72'

S43°40'11"E 52.90'

S10°16'03"E 150.08'

S33°36'05"E 171.49'

S31°57'24"E 54.77'

S49°24'05"E 54.47'

S0°04'50"E 103.97'

516.51'

N00°15'20"E

(OPEN SPACE)
EX PHASE 1

EX PHASE 1

EX PHASE 3

GREEN AC COURT

DARTMOUTH DR

FAIRFIELD DR

JA

143 13835 SF
144 10966 SF
142 9091 SF
145 9102 SF
141 9000 SF
146 9000 SF
140 10153 SF
147 10151 SF
148 10841 SF
154 9081 SF
153 9040 SF
152 9040 SF
151 9040 SF
150 9122 SF
149 10239 SF

130 129 128 127 126 125 124 123 122 121 120
91 98 92 97 93 96 94 95 107 108 113 109 112 110 111

SEE SHEET 1 FOR CURVE AND LINE TABLES

IRECO
DEED #17264-1990

CALLE

LEGEND

- PHASE BOUNDARY LINE
- SECTION LINE
- CENTER LINE
- P.U.E. LINE
- SETBACK LINE
- REBAR AND CAP TO BE SET
- NEW FIRE HYDRANT
- NEW STREETLIGHT
- EXISTING FIRE HYDRANT
- EXISTING STREETLIGHT
- 30% and GREATER SLOPES
- C156 CURVE (SEE CURVE TABLE)
- L6 LINE (SEE LINE TABLE)
- 3165 S 490 W MONUMENT

Date: SEPT 12, 2014
File: BEACON POINT_PPLAT PH1

SHEET NO 2/2

PREPARED BY:
GATEWAY CONSULTING, inc.
P.O. BOX 951005 SOUTH JORDAN, UT 84095
PH: (801) 694-5848 FAX: (801) 432-7050
paul@gatewayconsultingllc.com
CIVIL ENGINEERING • CONSULTING • LAND PLANNING
CONSTRUCTION MANAGEMENT

surveyor logo here

PELICAN BAY

PELICAN BAY

1/4 1/4 SECTION LINE

JAMAICA WAY (700 WEST)

CASI WAY (4180 SOUTH)

MONTEGO DRIVE (50 WEST)

EX. LAKE MOUNTAIN ESTATES

EP: 10+36.45

EP: 12+11.58

FUTURE LIGHTHOUSE PROJECT

lighthouse possible 4 lot sub

OPEN SPACE 0.06 AC

EX SEW, WTR, IRR, SD

LAKESIDE

EX. DRAINAGE CHANNEL TO BE FILLED

UNNAMED CANYON

1
983592 SF

EX. DRAINAGE SWALE TO BE FILLED

145
9102 SF

61
9942 SF

EX. DRAINAGE CHANNEL

1092.929

D.S. 3.09 AC

D.S. 11.00 AC

10
Commercial/Retail

N

100 0 100 200

SCALE IN FEET

1"=100' HORIZONTAL 24"x36"

LEGEND

SEWER LINE
SEWER APPARATUS
STORM LINE
STORM APPARATUS
WATER LINE
WATER APPARATUS
FIRE HYDRANT
IRRIGATION LINE
IRRIGATION APPARATUS
DRAINAGE AREA (DRAINAGE REPORT)

EXISTING SEWER LINE
EXISTING STORM LINE
EXISTING WATER LINE
EXISTING IRRIGATION LINE
EXISTING CONTOURS (2FT)
EXISTING EDGE OF ASPHALT
EXISTING FENCE
EXISTING OVERHEAD POWER
10' FINISH CONTOUR
2' FINISH CONTOUR
PHASE LINE
CURB & GUTTER
PROPOSED TRAIL
PUE
SETBACK
30% SLOPE AND GREATER
PROPOSED OPEN SPACE
DRAINAGE DIRECTION

NO.	DESCRIPTION	DATE	APP'D

ORIG. DATE: 11-1-12
SURVEY BY:
DRAWN BY: GPW
DESIGNED BY: GPW
CHECKED BY: GPW
SCALE: 1"=100'

GATEWAY CONSULTING, inc.
P.O. BOX 951005 SOUTH JORDAN, UT 84095
PH: (801) 694-5848 FAX: (801) 432-7050
paul@gatewayconsultingllc.com
CIVIL ENGINEERING - CONSULTING - LAND PLANNING
CONSTRUCTION MANAGEMENT

BEACON POINT

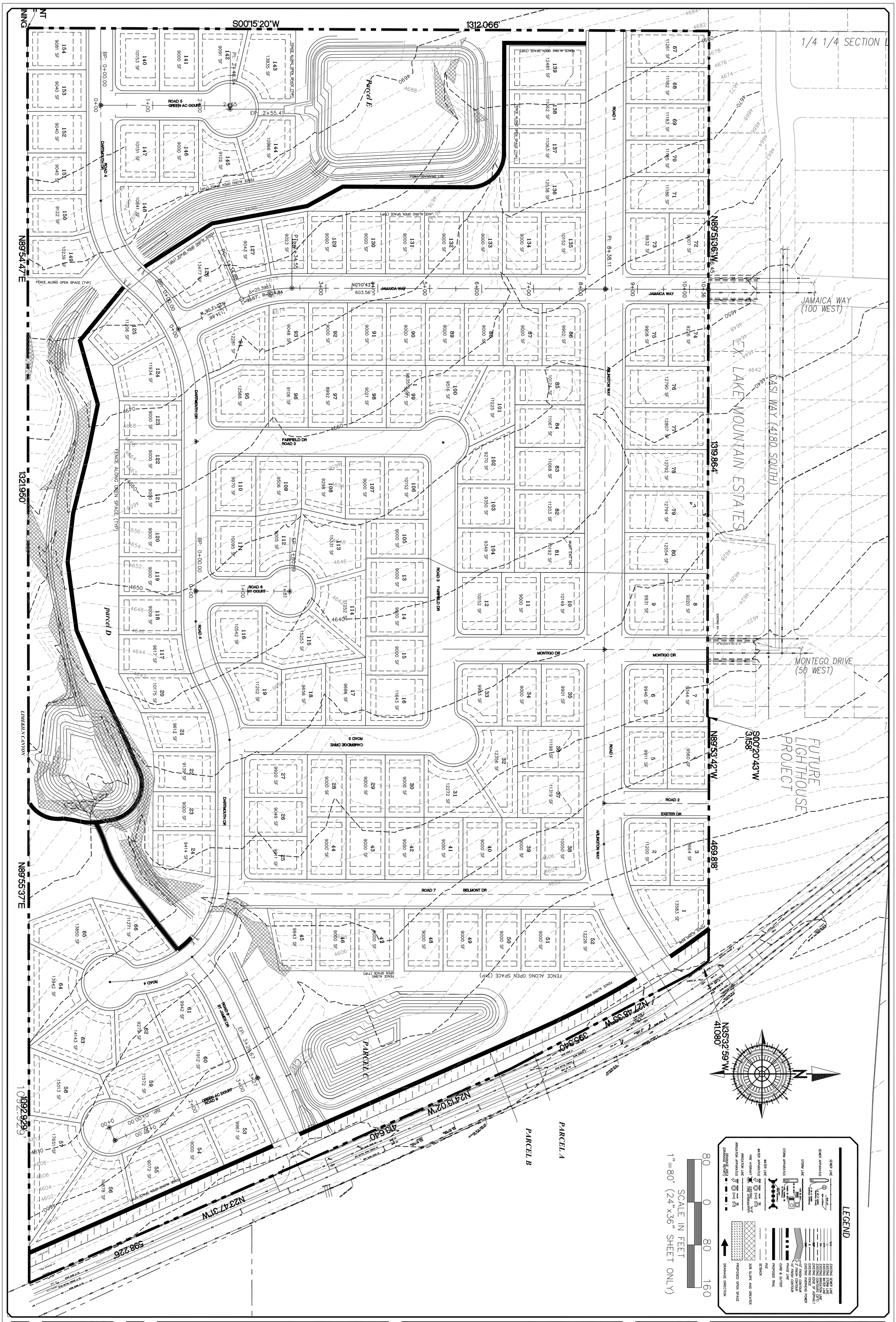
EXISTING AND DEMOLITION PLAN

PROJECT NUMBER
DRAWING FILE
9-15-14
PLOT DATE

SARATOGA CITY

PRELIMINARY NOT FOR CONSTRUCTION

SHEET NO. 2



SHEET NO. 3

PRELIMINARY NOT FOR CONSTRUCTION

SARATOGA CITY

BEACON POINT PHASE 1

OVERALL SITE PLAN

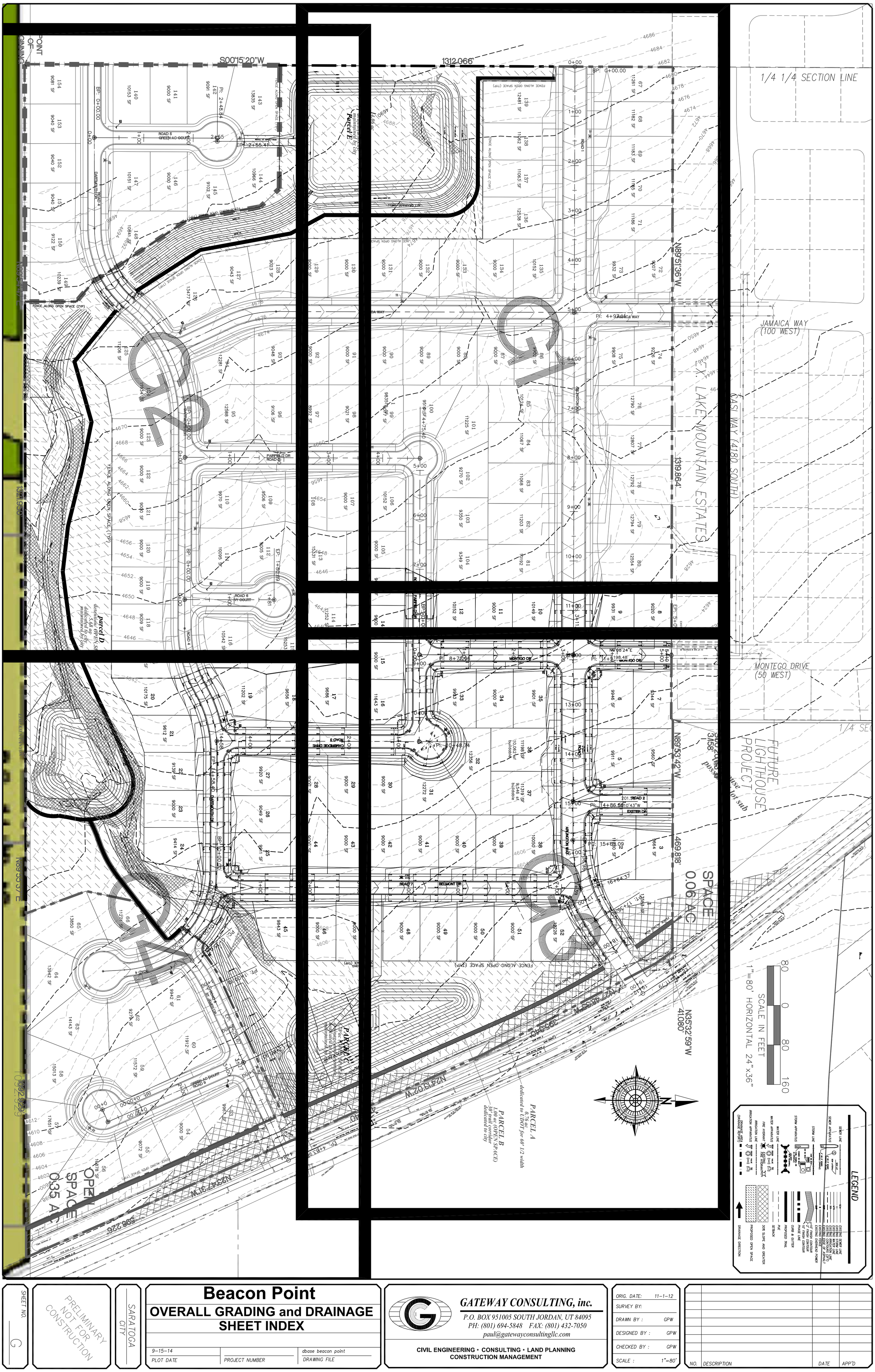
9-15-14		3-OVERALL SITE 3D
PLOT DATE	PROJECT NUMBER	DRAWING FILE

GATEWAY CONSULTING, inc.
P.O. BOX 951005 SOUTH JORDAN, UT 84095
PH: (801) 694-5848 FAX: (801) 432-7050
paul@gatewayconsultingllc.com

CIVIL ENGINEERING • CONSULTING • LAND PLANNING
CONSTRUCTION MANAGEMENT

ORIG. DATE:	07/01/12
SURVEY BY:	
DRAWN BY :	GPW
DESIGNED BY :	GPW
CHECKED BY :	GPW
SCALE :	1"=80'

NO.	DESCRIPTION	DATE	APP'D



SHEET NO. G

PRELIMINARY NOT FOR CONSTRUCTION

SARATOGA CITY

Beacon Point

OVERALL GRADING and DRAINAGE

SHEET INDEX

9-15-14		dbase beacon point
PLOT DATE	PROJECT NUMBER	DRAWING FILE

GATEWAY CONSULTING, inc.
P.O. BOX 951005 SOUTH JORDAN, UT 84095
PH: (801) 694-5848 FAX: (801) 432-7050
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CIVIL ENGINEERING • CONSULTING • LAND PLANNING
CONSTRUCTION MANAGEMENT

ORIG. DATE:	11-1-12
SURVEY BY:	
DRAWN BY :	GPW
DESIGNED BY :	GPW
CHECKED BY :	GPW
SCALE :	1"=80'

NO.	DESCRIPTION	DATE	APP'D

BEACON POINT
PHASE 1

GRADING PAGE 1of4 (1"=40')

9-15-14 | PLOT DATE
PROJECT NUMBER
dbase beacon point | DRAWING FILE

SHEET NO. G1

PRELIMINARY NOT FOR CONSTRUCTION

SARATOGA CITY

GATEWAY CONSULTING, inc.
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CIVIL ENGINEERING • CONSULTING • LAND PLANNING
CONSTRUCTION MANAGEMENT

ORIG. DATE:	11-1-12
SURVEY BY:	
DRAWN BY :	GPW
DESIGNED BY :	GPW
CHECKED BY :	GPW
SCALE :	1"=40'

NO.	DESCRIPTION	DATE	APP'D

SCALE IN FEET
1"=40' HORIZONTAL
1"=4' VERTICAL
0 40 80

LEGEND
- EXISTING SEWER LINE
- EXISTING WATER LINE
- EXISTING IRRIGATION LINE
- EXISTING STORM DRAIN LINE
- EXISTING EDGE OF ASPHALT
- EXISTING FENCE
- EXISTING OVERHEAD POWER
- PROPOSED CONTOUR
- 10' FINISH CONTOUR
- PHASE LINE
- CURB & GUTTER
- PROPOSED TRAIL
- PUE
- SETBACK
- 30% SLOPE AND GREATER
- PROPOSED OPEN SPACE
- DRAINAGE DIRECTION
- SEWER LINE
- SEWER APPARATUS
- WATER LINE
- WATER APPARATUS
- FIRE HYDRANT
- IRRIGATION LINE
- IRRIGATION APPARATUS
- STORM LINE
- STORM APPARATUS
- DRAINAGE AREA (DRAINAGE REPORT)

temp cut off trench
temp cut off trench
temp cut off trench
drainage swale to be relocated
drainage swale
drainage swell
drainage swell
sd pipe to be abandoned
temp cut off trench
EXISTING FH
FENCE ALONG OPEN SPACE (TYP)
FENCE ALONG OPEN SPACE (TYP)
FENCE ALONG OPEN SPACE (TYP)
30' TRAIL/ROND ACCESS
TEMP TURN AROUND NEED EASEMENT
DEBRIS/ DETENTION BASIN #1
4.06 ac (OPEN SPACE) debris basin dedicated to city, maintained by city
Parcel E
RELEASE RATE=0.2CFS/AC MAX
BOWEN COLLINS 100 YEAR Q IN= 61 CFS
Q IN designed =63.9 CFS
Q out designed =23.6 CFS
DEBRIS BASIN 1
INSTALL ONXP ALL STRUCTURE
100 YR STORM ELEV= 84.0
100 YR STORM VOL= 1.54ac-ft
TOP POND= 4689
FF POND= 4689
OVERALL VOL. POND AVAILABLE @ SPILLWAY= 7.34 AF
USED VOL. POND = 4.45 AF
100 YR Q FROM CITY REPORT=65.9 CFS
ALLOWED 0.2 CFS/AC=19.4 CFS FROM CITY
6FT DRAINAGE SWELL
TOP DEBRIS BASIN 4689
12' TOP DAM
3:1 SLOPE
2:1 SLOPE
FF POND 80.00
INSTALL 42" FLARED END SECTIONS
CLASS III @ X.X% REQ'D
4' SMH STA: 4+33.12 RIM= 71.05 FL IN= 59.05 FL OUT= 58.85
4' SMH STA: 3+52.55 RIM= 69.78 FL IN= 54.37 FL OUT= 54.37
4' SMH STA: 4+52.61 RIM= 60.64 FL IN= 48.64 FL OUT= 48.64
COMBO STA: 3+41.59 TBC= 73.78 FL IN= 69.08 FL OUT= 69.08
COMBO STA: 3+58.86 TBC= 58.18 FL IN= 53.68 FL OUT= 53.48
COMBO STA: 4+91.20 RIM= 54.09 FL IN= 50.39 FL OUT= 50.19
COMBO STA: 8+54.26 RIM= 59.09 FL IN= 54.09 FL OUT= 53.89
COMBO STA: 7+84.61 TBC= 67.29 FL IN= 56.79 FL OUT= 56.59
COMBO STA: 11+84.56 STA: 3+30.77 RIM= 27.70 FL IN= 23.70 FL OUT= 23.50
Catch Basin STA: 5+64.96 TBC= 63.26 FL IN= 63.25 FL OUT= 63.08
Catch Basin STA: 5+52.55 TBC= 54.37 FL OUT= 54.37
Catch Basin STA: 3+33.12 RIM= 71.05 FL IN= 59.05 FL OUT= 58.85
Catch Basin STA: 3+19.59 TBC= 69.78 FL OUT= 69.78
Catch Basin STA: 6+26.23 TBC= 58.37 FL OUT= 58.37
Catch Basin STA: 6+13.20 TBC= 57.45 FL OUT= 57.45
Catch Basin STA: 7+98.23 TBC= 58.24 FL OUT= 58.24
Catch Basin STA: 7+85.21 TBC= 57.29 FL OUT= 57.29
Catch Basin STA: 9+72.18 TBC= 57.88 FL OUT= 57.88
Catch Basin STA: 9+59.15 TBC= 57.45 FL OUT= 57.45
Catch Basin STA: 11+42.50 RIM= 25.95 FL OUT= 25.95
Catch Basin STA: 11+29.47 RIM= 25.95 FL OUT= 25.95
4" SMH STA: 4+91.20 RIM= 54.09 FL IN= 50.39 FL OUT= 50.19
4" SMH STA: 8+54.26 RIM= 59.09 FL IN= 54.09 FL OUT= 53.89
4" SMH STA: 10+36.45 RIM= 53.40 FL IN= 49.40 FL OUT= 41.20 MATCH EX CONTRACTOR TO VERIFY FL FOR DESIGN
4" SMH STA: 7+71.43 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 8+45.23 RIM= 59.72 FL IN= 55.72 FL OUT= 55.72
4" SMH STA: 9+32.18 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 10+19.13 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 11+06.08 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 11+93.03 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 12+79.98 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 13+66.93 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 14+53.88 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 15+40.83 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 16+27.78 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 17+14.73 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 18+01.68 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 18+88.63 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 19+75.58 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 20+62.53 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 21+49.48 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 22+36.43 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 23+23.38 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 24+10.33 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 24+97.28 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 25+84.23 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 26+71.18 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 27+58.13 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 28+45.08 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 29+32.03 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 30+18.98 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 31+05.93 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 31+92.88 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 32+79.83 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 33+66.78 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 34+53.73 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 35+40.68 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 36+27.63 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 37+14.58 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 38+01.53 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 38+88.48 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 39+75.43 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 40+62.38 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 41+49.33 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 42+36.28 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 43+23.23 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 44+10.18 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 44+97.13 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 45+84.08 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 46+71.03 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 47+57.98 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 48+44.93 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 49+31.88 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 50+18.83 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 51+05.78 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 51+92.73 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 52+79.68 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 53+66.63 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
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4" SMH STA: 55+40.53 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 56+27.48 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 57+14.43 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 58+01.38 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 58+88.33 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
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4" SMH STA: 62+36.13 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
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4" SMH STA: 65+83.93 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 66+70.88 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 67+57.83 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 68+44.78 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
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4" SMH STA: 70+18.68 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 71+05.63 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 71+92.58 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 72+79.53 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 73+66.48 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 74+53.43 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 75+40.38 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 76+27.33 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 77+14.28 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 78+01.23 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
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4" SMH STA: 79+75.13 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 80+62.08 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 81+49.03 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 82+35.98 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 83+22.93 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
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4" SMH STA: 84+96.83 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 85+83.78 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 86+70.73 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 87+57.68 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 88+44.63 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 89+31.58 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 90+18.53 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 91+05.48 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 91+92.43 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 92+79.38 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 93+66.33 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 94+53.28 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 95+40.23 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 96+27.18 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 97+14.13 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 98+01.08 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 98+88.03 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 99+74.98 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 100+61.93 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 101+48.88 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 102+35.83 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 103+22.78 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 104+09.73 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 104+96.68 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 105+83.63 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 106+70.58 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 107+57.53 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 108+44.48 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 109+31.43 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 110+18.38 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 111+05.33 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 111+92.28 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 112+79.23 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 113+66.18 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 114+53.13 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 115+40.08 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 116+27.03 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 117+13.98 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 118+00.93 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 118+87.88 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 119+74.83 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 120+61.78 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 121+48.73 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 122+35.68 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 123+22.63 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 124+09.58 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 124+96.53 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 125+83.48 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 126+70.43 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
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4" SMH STA: 128+44.33 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 129+31.28 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 130+18.23 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 131+05.18 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
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4" SMH STA: 132+79.08 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 133+66.03 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 134+52.98 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 135+39.93 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 136+26.88 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 137+13.83 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 138+00.78 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 138+87.73 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
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4" SMH STA: 142+35.53 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 143+22.48 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
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4" SMH STA: 147+57.23 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
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4" SMH STA: 149+31.13 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 150+18.08 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 151+05.03 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 151+91.98 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 152+78.93 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 153+65.88 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
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4" SMH STA: 155+39.78 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 156+26.73 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 157+13.68 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 158+00.63 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
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4" SMH STA: 159+74.53 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 160+61.48 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 161+48.43 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 162+35.38 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 163+22.33 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 164+09.28 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 164+96.23 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 165+83.18 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 166+70.13 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 167+57.08 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 168+44.03 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 169+30.98 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 170+17.93 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 171+04.88 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 171+91.83 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 172+78.78 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 173+65.73 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 174+52.68 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 175+39.63 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 176+26.58 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 177+13.53 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 178+00.48 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 178+87.43 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 179+74.38 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 180+61.33 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 181+48.28 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 182+35.23 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 183+22.18 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 184+09.13 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 184+96.08 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 185+83.03 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 186+69.98 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 187+56.93 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 188+43.88 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 189+30.83 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 190+17.78 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 191+04.73 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 191+91.68 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 192+78.63 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 193+65.58 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 194+52.53 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 195+39.48 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 196+26.43 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 197+13.38 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 198+00.33 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
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4" SMH STA: 199+74.23 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 200+61.18 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 201+48.13 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 202+35.08 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 203+22.03 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 204+08.98 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 204+95.93 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 205+82.88 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 206+69.83 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 207+56.78 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 208+43.73 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 209+30.68 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 210+17.63 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 211+04.58 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 211+91.53 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 212+78.48 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 213+65.43 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 214+52.38 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 215+39.33 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 216+26.28 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 217+13.23 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 218+00.18 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 218+87.13 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 219+74.08 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 220+61.03 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 221+47.98 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 222+34.93 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 223+21.88 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 224+08.83 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 224+95.78 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 225+82.73 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 226+69.68 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 227+56.63 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 228+43.58 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 229+30.53 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 230+17.48 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 231+04.43 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 231+91.38 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 232+78.33 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 233+65.28 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 234+52.23 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 235+39.18 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 236+26.13 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 237+13.08 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 238+00.03 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 238+86.98 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 239+73.93 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 240+60.88 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 241+47.83 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 242+34.78 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 243+21.73 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 244+08.68 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 244+95.63 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 245+82.58 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 246+69.53 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 247+56.48 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 248+43.43 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 249+30.38 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 250+17.33 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 251+04.28 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 251+91.23 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 252+78.18 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 253+65.13 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 254+52.08 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 255+39.03 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 256+25.98 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 257+12.93 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 257+99.88 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 258+86.83 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 259+73.78 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 260+60.73 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 261+47.68 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 262+34.63 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 263+21.58 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 264+08.53 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 264+95.48 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 265+82.43 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 266+69.38 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 267+56.33 RIM= 58.72 FL IN= 54.72 FL OUT= 54.72
4" SMH STA: 268+43.28 RI

DEBRIS/ DETENTION BASIN #1

BOWEN COLLINS 100 YEAR Q IN= 61 CFS
Q IN designed =65.9 CFS
Q out designed =23.8 CFS

4.06 ac
(OPEN SPACE)
debris basin
dedicated to city
maintained by city
Parcel E
RELEASE RATE=0.2CFS/AC MAX

DEBRIS BASIN
INSTALL CMP ALL STRUCTURE
100 YR STORM ELEV. 84.0
ORIFICE SIZE 'NAN"= 13.54in
FF POND=4680
TOP BOND = 4684
FL SPILLWAY= 4680
100 YR VOL AVAILABLE @ SPILLWAY= 7.34 AF
USED VOL 2YR0= 4.5 AF
100 YR RESON Q OUT=9.5 CFS
100 YR Q FROM QTY W/OPEN=53.9 CFS
ALLOWED 0.2 CFS/AC=75.6 CFS FROM QTY

PHASE 3
73 lot

PHASE 4
15 lots

ROAD 8 | FAIRFIELD DR

ROAD 5
GREEN HOLLOW CT

ROAD 6
HAY COURT

ROAD 4

DARTMOUTH DR

FAIRFIELD DR
ROAD 38

JAMAICA WAY

drainage swell

drainage

FENCE ALONG OPEN SPACE (TYP)

FENCE ALONG OPEN SPACE (TYP)

FENCE ALONG OPEN SPACE (TYP)

parcel D
detention/ OPEN SPACE
5.68 ac
dedicated to city
maintained by city

S00°15'20"W

N89°54'47"E 1321.950'

LEGEND

SEWER LINE
SEWER APPARATUS
STORM LINE
STORM APPARATUS
WATER LINE
WATER APPARATUS
FIRE HYDRANT
IRRIGATION LINE
IRRIGATION APPARATUS
DRAINAGE AREA (DRAINAGE REPORT)

EXISTING SEWER LINE
EXISTING STORM LINE
EXISTING WATER LINE
EXISTING IRRIGATION LINE
EXISTING CONTOURS (5FT)
EXISTING EDGE OF ASPHALT
EXISTING FENCE
EXISTING OVERHEAD POWER
5FT FINISH CONTOUR
1' FINISH CONTOUR
10' FINISH CONTOUR
PHASE LINE
CURB & GUTTER
PROPOSED TRAIL
PUE
SETBACK
30% SLOPE AND GREATER
PROPOSED OPEN SPACE
DRAINAGE DIRECTION

40 0 40 80
SCALE IN FEET
1"=40' HORIZONTAL
1"=4' VERTICAL

NO.	DESCRIPTION	DATE	APP'D

ORIG. DATE: 11-1-12
SURVEY BY:
DRAWN BY: GPW
DESIGNED BY: GPW
CHECKED BY: GPW
SCALE: 1"=40'

GATEWAY CONSULTING, inc.
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CIVIL ENGINEERING - CONSULTING - LAND PLANNING
CONSTRUCTION MANAGEMENT

BEACON POINT
GRADING SHEET

GRADING PAGE 2of4 (1"=40')

PROJECT NUMBER: dbase beacon point
PLOT DATE: 8-12-14 DRAWING FILE

SARATOGA CITY

PRELIMINARY NOT FOR CONSTRUCTION

SHEET NO. G2

0.06 AC

TEMP TURN AROUND NEED EASEMENT

temp cut off trench

MUST EXIT ON SHARED DRIVEWAY

NO DRIVEWAY ACCESS

ROAD 1 — MONTIGO DR

ROAD 2 — EXETER DR

ROAD 3 — FAIRFIELD DR

ARLINGTON WAY

BELMONT DR

CAMBRIDGE DRIVE

drainage swell

drainage swell

RELEASE RATE=0.2 CFS/AC
DET BASIN #1 & 2

PARCEL A
0.76 ac
dedicated to UDOT for 60' 1/2 width

PARCEL B
1.00 ac (OPEN SPACE)
30' trail corridor
dedicated to city

PARCEL C
3.78 ac (OPEN SPACE)
drainage and detention
dedicated to city
maintained by city

DET BASIN 1
INSTALL OUTFALL STRUCTURE
100 YR STORM ELEV: 4589.5
ORIFICE SIZE DIAM= 13.84 in
FT POND=4582.8
TOP POND = 4601
FL SPILLWAY=4598
OVERALL VOL POND AVAILABLE @ SPILLWAY= 7.72 AF
USED VOL. POND =1.9 AF
100 YR DESIGN Q OUT=12.4 CFS
ALLOWED 0.2 CFS/AC=7.31 AC =1.46 CFS FROM CITY

10' 15% ACCESS ROAD

SCALE IN FEET
1"=40' HORIZONTAL
1"=4' VERTICAL

LEGEND

SEWER LINE
SEWER APPARATUS
STORM LINE
STORM APPARATUS
WATER LINE
WATER APPARATUS
FIRE HYDRANT
IRRIGATION LINE
IRRIGATION APPARATUS
DRAINAGE SWALE (DRAINAGE BLVD)

EXISTING SEWER LINE
EXISTING STORM LINE
EXISTING WATER LINE
EXISTING IRRIGATION LINE
EXISTING CONTOURS (2FT)
EXISTING EDGE OF ASPHALT
EXISTING FENCE
EXISTING OVERHEAD POWER
1FT FINISH CONTOUR
2' FINISH CONTOUR
5' FINISH CONTOUR
PHASE LINE
CURB & GUTTER
PROPOSED TRAIL
PUE
SETBACK
30% SLOPE AND GREATER
PROPOSED OPEN SPACE
DRAINAGE DIRECTION

NO.	DESCRIPTION	DATE	APP'D

ORIG. DATE: 11-1-12
SURVEY BY:
DRAWN BY: GPW
DESIGNED BY: GPW
CHECKED BY: GPW
SCALE: 1"=40'

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BEACON POINT
PHASE 1

GRADING PAGE 3of4 (1"=40')

C3-GRADING
DRAWING FILE

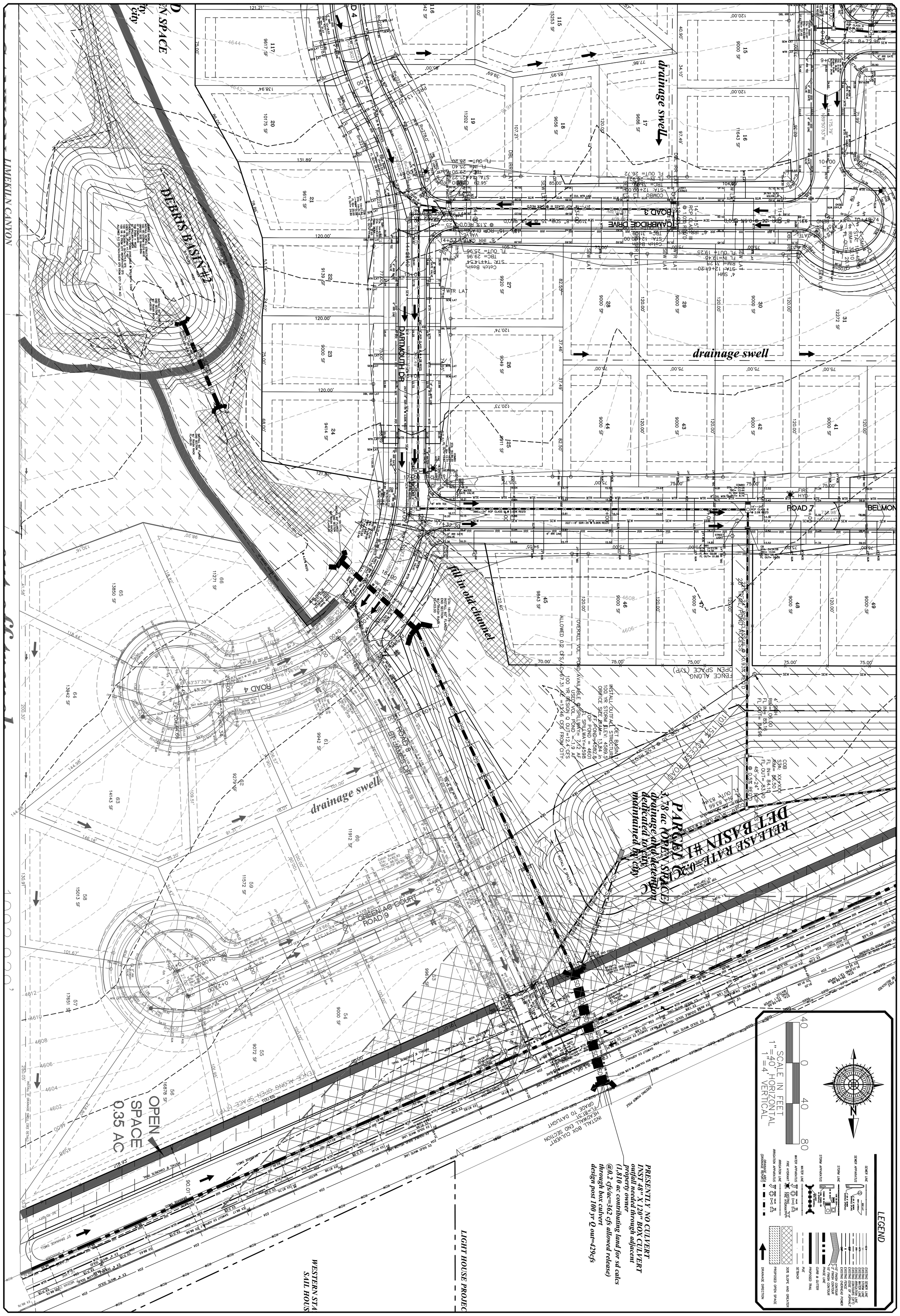
PROJECT NUMBER

9-15-14
PLOT DATE

SARATOGA CITY

PRELIMINARY NOT FOR CONSTRUCTION

SHEET NO. G3



SHEET NO. G4

PRELIMINARY NOT FOR CONSTRUCTION

SARATOGA CITY

BEACON POINT
PHASE 1

GRADING PAGE 4of4 (1"=40')

9-15-14		G4-GRADING
PLOT DATE	PROJECT NUMBER	DRAWING FILE

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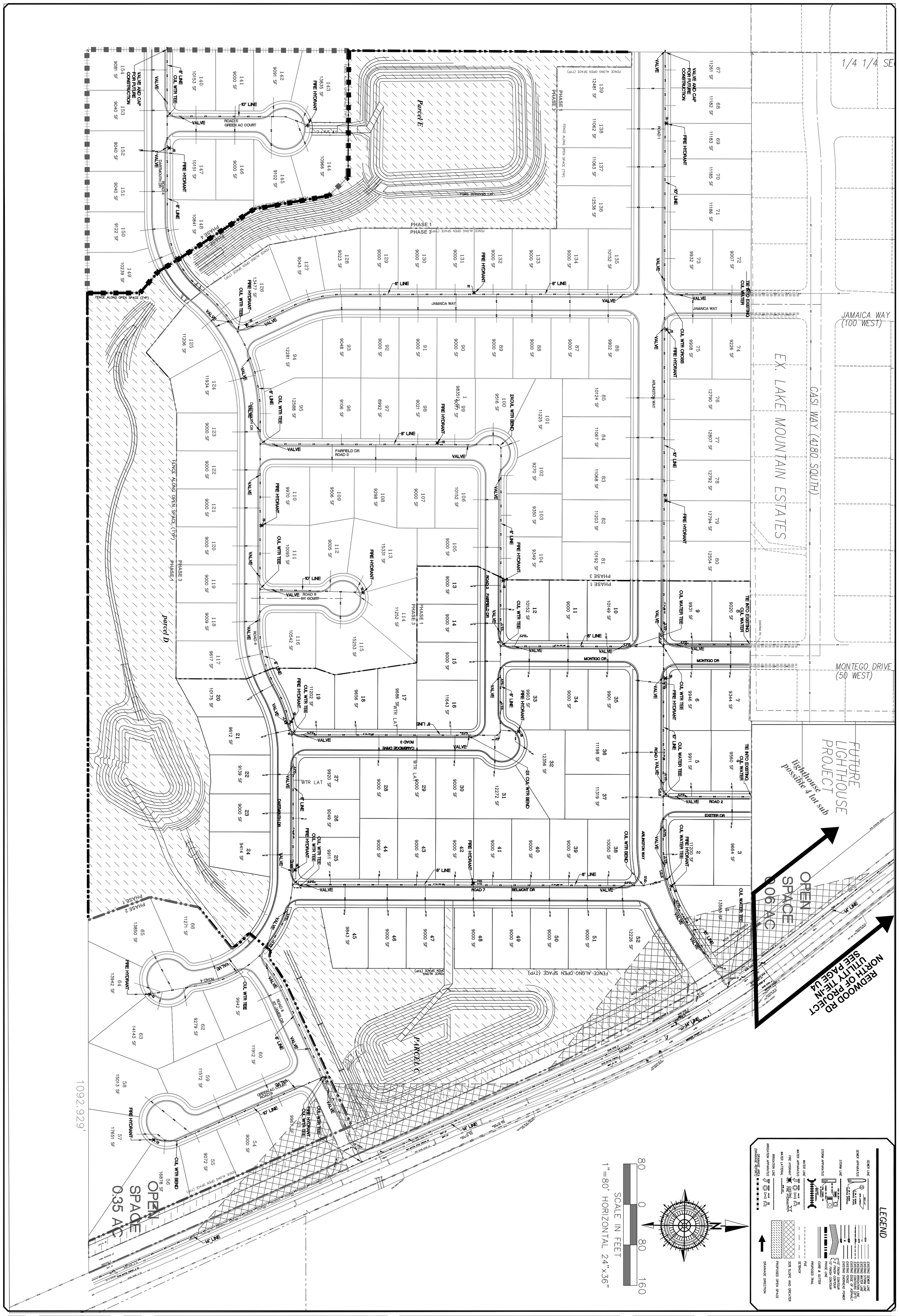
CONSTRUCTION MANAGEMENT

ORIG. DATE:	11-1-12
SURVEY BY:	
DRAWN BY :	GPW
DESIGNED BY :	GPW
CHECKED BY :	GPW
SCALE :	1"=100'

NO.	DESCRIPTION	DATE	APP'D



SHEET NO. U1

PRELIMINARY NOT FOR CONSTRUCTION

SARATOGA CITY

BEACON POINT

PHASE 1

CULINARY WATER UTILITY PLAN

9-15-14		UTILITY PLAN
PLOT DATE	PROJECT NUMBER	DRAWING FILE

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CONSTRUCTION MANAGEMENT

ORIG. DATE:	11-1-12
SURVEY BY:	
DRAWN BY :	GPW
DESIGNED BY :	GPW
CHECKED BY :	GPW
SCALE :	1"=80'

NO.	DESCRIPTION	DATE	APP'D

BEACON POINT

PHASE 1

IRRIGATION WATER UTILITY PLAN

9-15-14		utility plan
PLOT DATE	PROJECT NUMBER	DRAWING FILE

SHEET NO. U2

PRELIMINARY NOT FOR CONSTRUCTION

SARATOGA CITY

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ORIG. DATE:	11-1-12
SURVEY BY:	
DRAWN BY :	GPW
DESIGNED BY :	GPW
CHECKED BY :	GPW
SCALE :	1"=80'

NO.	DESCRIPTION	DATE	APP'D

1/4 1/4 SECTION LIN

JAMAICA WAY (100 WEST)

CASI WAY (4180 SOUTH)

EX. LAKE MOUNTAIN ESTATES

MONTEGO DRIVE (50 WEST)

1/4

FUTURE LIGHTHOUSE PROJECT
lighthouse possible 4 lot sub

OPEN SPACE 0.06 AC

OPEN SPACE 0.35 AC

UTILITY TIE-IN REDWOOD RD NORTH OF PROJECT SEE PAGE U4

Parcel E

PARCEL C

parcel D

1092.929'

PHASE 1
PHASE 2
PHASE 3
PHASE 4

ROAD 1
ROAD 2
ROAD 3 FAIRFIELD DR
ROAD 4
ROAD 5 GREEN AC COURT
ROAD 6 IVY COURT
ROAD 7 BELMONT DR
ROAD 8 ST JAMES DR
ROAD 9 GREEN AC COURT
DARTMOUTH DR
ARLINGTON WAY
CAMBRIDGE DRIVE
EXETER DR
JAMAICA WAY
MONTIGO DR

FENCE ALONG OPEN SPACE (TYP)

IRR VALVE
IRR TEE
6" LINE
8" LINE
12" LINE
BLOWOFF VALVE
VALVE AND CAP FOR FUTURE CONSTRUCTION
IRR VALVE W/BEND
IRR VALVE W/ REDUCER
IRR VALVE W/TEE REDUCER
IRR VALVE W/ BEND
2X IRR BEND IRR VALVE
IRR VALVE W/ TEE REDUCER
IRR VALVE IRR BEND
IRR VALVE W/ IRR WTR CROSS W/2xREDUCERS

SCALE IN FEET
80 0 80 160
1"=80' HORIZONTAL 24"x36"

N

LEGEND

- EXISTING SEWER LINE
- EXISTING STORM LINE
- EXISTING WATER LINE
- EXISTING CONTOURS (5FT)
- EXISTING CONTOURS (1FT)
- EXISTING EDGE OF ASPHALT
- EXISTING OVERHEAD POWER
- 10' FINISH CONTOUR
- 1' FINISH CONTOUR
- PHASE LINE
- CURB & GUTTER
- PROPOSED TRAIL
- SETBACK
- 30% SLOPE AND GREATER
- PROPOSED OPEN SPACE
- DRAINAGE DIRECTION
- SEWER LINE
- SEWER APPARATUS
- STORM LINE
- STORM APPARATUS
- WATER LINE
- FIRE HYDRANT
- WATER APPARATUS
- IRRIGATION LINE
- IRRIGATION APPARATUS
- IRRIGATION LATERAL
- DRAINAGE AREA (DRAINAGE BASIN)

1/4 1/4 SECTION

JAMAICA WAY (100 WEST)

MONTEGO DRIVE (50 WEST)

CASI WAY (4180 SOUTH)

EX. LAKE MOUNTAIN ESTATES

FUTURE LIGHTHOUSE PROJECT

lighthouse possible 4 lot sub

REDWOOD RD NORTH OF PROJECT UTILITY TIE-IN SEE PAGE U4

LEGEND

SEWER LINE
SEWER APPARATUS
STORM LINE
STORM APPARATUS
WATER LINE
WATER APPARATUS
FIRE HYDRANT
IRRIGATION LINE
IRRIGATION APPARATUS
DRAINAGE AREA (DRAINAGE REPORT)

EXISTING SEWER LINE
EXISTING STORM LINE
EXISTING WATER LINE
EXISTING IRRIGATION LINE
EXISTING CONTOURS (2FT)
EXISTING EDGE OF ASPHALT
EXISTING FENCE
EXISTING OVERHEAD POWER
10' FINISH CONTOUR
2' FINISH CONTOUR
PHASE LINE
CURB & GUTTER
PROPOSED TRAIL
PUE
SETBACK
30% SLOPE AND GREATER
PROPOSED OPEN SPACE
DRAINAGE DIRECTION

N

80 0 80 160

SCALE IN FEET

1"=80' HORIZONTAL 24"x36"

PARCEL A
(0.76 ac dedicated to UDOT for 60' 1/2 width

PARCEL B
1.00 ac (OPEN SPACE) 30' trail corridor dedicated to city

PARCEL C
1.78 ac (OPEN SPACE) drainage and detention dedicated to city, maintained by city

4.06 ac (OPEN SPACE) debris basin dedicated to city, maintained by city
Parcel E

parcel D
detention/ OPEN SPACE 5.66 ac dedicated to city, maintained by city

1092.929'

PARK

DRAINAGE

NO.	DESCRIPTION	DATE	APP'D

ORIG. DATE: 11-1-12
SURVEY BY:
DRAWN BY: GPW
DESIGNED BY: GPW
CHECKED BY:
SCALE: 1"=80'

GATEWAY CONSULTING, inc.
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BEACON POINT
PHASE 1
SANITATION SEWER PLAN

UTILITY PLAN 3D
DRAWING FILE
PROJECT NUMBER
9-15-14
PLOT DATE

SARATOGA CITY

PRELIMINARY NOT FOR CONSTRUCTION

SHEET NO. U3

1/4 1/4 SECTION

JAMAICA WAY (100 WEST)

MONTEGO DRIVE (50 WEST)

CASI WAY (4180 SOUTH)

EX. LAKE MOUNTAIN ESTATES

FUTURE LIGHTHOUSE PROJECT

lighthouse possible 4 lot sub

REDWOOD RD NORTH OF PROJECT UTILITY TIE-IN SEE PAGE U4

OPEN SPACE 0.06 AC

LEGEND

SEWER LINE
SEWER APPARATUS
STORM LINE
STORM APPARATUS
WATER LINE
WATER APPARATUS
FIRE HYDRANT
IRRIGATION LINE
IRRIGATION APPARATUS
DRAINAGE AREA (DRAINAGE REPORT)

EXISTING SEWER LINE
EXISTING STORM LINE
EXISTING WATER LINE
EXISTING IRRIGATION LINE
EXISTING CONTOURS (2FT)
EXISTING EDGE OF ASPHALT
EXISTING FENCE
EXISTING OVERHEAD POWER
10' FINISH CONTOUR
2' FINISH CONTOUR
PHASE LINE
CURB & GUTTER
PROPOSED TRAIL
PUE
SETBACK
30% SLOPE AND GREATER
PROPOSED OPEN SPACE
DRAINAGE DIRECTION

N

80 0 80 160

SCALE IN FEET

1"=80' HORIZONTAL 24"x36"

PARCEL A
0.76 ac
dedicated to UDOT for 60' 1/2 width

PARCEL B
1.00 ac (OPEN SPACE)
30' trail corridor
dedicated to city

PARCEL C
1.76 ac (OPEN SPACE)
drainage and detention
dedicated to city
maintained by city

4.06 ac
(OPEN SPACE)
debris basin
dedicated to city
maintained by city
Parcel E

parcel D
detention OPEN SPACE
5.68 ac
dedicated to city
maintained by city

1092.929'

PARK

DRAINAGE

NO.	DESCRIPTION	DATE	APP'D

ORIG. DATE: 11-1-12
SURVEY BY:
DRAWN BY: GPW
DESIGNED BY: GPW
CHECKED BY: GPW
SCALE: 1"=80'

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BEACON POINT
PHASE 1
STORM WATER PLAN

draw beacon point
DRAWING FILE
PROJECT NUMBER
9-15-14
PLOT DATE

SARATOGA CITY

PRELIMINARY NOT FOR CONSTRUCTION

SHEET NO. U4

WTR VALVE TIE INTO EXISTING

WTR VALVE TIE INTO EXISTING

12" IRR LINE

14" WATER LINE

MONTEGO DRIVE (50 WEST)

1/4 SECTION LINE

FUTURE LIGHTHOUSE PROJECT

12" IRR LINE

14" WATER LINE

4' SEWER MANHOLE

8" SEWER LINE

5' SEWER MANHOLE CAST-IN-PLACE

8" SEWER LINE

3
9664 SF

1
13583 SF

FENCE ALONG ROW

14" WTR LINE

12" IRR LINE

WTR VALVE

IRR VALVE

24" SD LINE

10" WTR LINE

24" SD LINE

WTR TEE

COMBO

4' SEWER MANHOLE

8" SEWER LINE

24" SD LINE

WTR VALVE

IRR VALVE

8" IRR LINE

COMBO

WTR VALVE

14" WTR LINE

12" IRR LINE

4' SEWER MANHOLE

8" SEWER LINE

REDWOOD RD NORTH OF UTILITY PROJECT TIE-IN

SCALE IN FEET
0 80 160
1" = 80' HORIZONTAL 24" x 36"

N

LEGEND

SEWER LINE
SEWER APPARATUS
STORM LINE
STORM APPARATUS
WATER LINE
WATER APPARATUS
FIRE HYDRANT
IRRIGATION LINE
IRRIGATION APPARATUS
DRAINAGE AREA (DRAINAGE REPORT)
EXISTING SEWER LINE
EXISTING SEWER APPARATUS
EXISTING STORM LINE
EXISTING STORM APPARATUS
EXISTING IRRIGATION LINE
EXISTING CONTOURS (2FT)
EXISTING EDGE OF ASPHALT
EXISTING FENCE
EXISTING OVERHEAD POWER
10' FINISH CONTOUR
2' FINISH CONTOUR
PHASE LINE
CURB & GUTTER
PROPOSED TRAIL
PUE
SETBACK
30% SLOPE AND GREATER
PROPOSED OPEN SPACE
DRAINAGE DIRECTION

SHEET NO. U5

PRELIMINARY NOT FOR CONSTRUCTION

SARATOGA CITY

BEACON POINT

PHASE 1

REDWOOD ROAD (NORTH) UTILITY TIE-IN PLAN

9-15-14		UTILITY PLAN 3D
PLOT DATE	PROJECT NUMBER	DRAWING FILE

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CONSTRUCTION MANAGEMENT

ORIG. DATE:	11-12
SURVEY BY:	
DRAWN BY :	GPW
DESIGNED BY :	GPW
CHECKED BY :	GPW
SCALE :	1"=80'

NO.	DESCRIPTION	DATE	APP'D

PHASE 4 NOT A PART OF THIS SUBMITTAL

PHASE 3 NOT A PART OF THIS SUBMITTAL

PHASE 2 NOT A PART OF THIS SUBMITTAL

CHANNEL AND DETENTION PART OF PHASE 1 IMPROVEMENTS IS PART OF THIS SUBMITTAL

SHEET P1

SHEET P2

SHEET P3

SHEET P4

SHEET P5

SHEET P6

SHEET P7

SHEET P8

1/4 1/4 SECTION LINE

1/4 SECTION LINE

JAMAICA WAY (100 WEST)

CASL WAY (4180 SOUTH)

EX. LAKE MOUNTAIN ESTATES

MONTEGO DRIVE (50 WEST)

FUTURE LIGHTHOUSE PROJECT

possible 4 lot sub

LIMEKILN CANYON

1092.929'

PARCEL A
0.76 ac
dedicated to UDOT for 60' 1/2 width

PARCEL B
1.00 ac (OPEN SPACE)
detention basin
dedicated to city

PARCEL C
2.28 ac (OPEN SPACE)
detention basin
dedicated to city
maintained by city

PARCEL D
detention OPEN SPACE
dedicated to city
maintained by city

4.06 ac (OPEN SPACE)
detention basin
dedicated to city
maintained by city
Parcel E

SCALE IN FEET
1"=100' HORIZONTAL

100 0 100 200

LEGEND

EXISTING SEWER LINE
EXISTING SEWER MH
EXISTING WATER LINE
EXISTING FIRE HYDRANT
EXISTING CONTOURS (2FT)
EXISTING EDGE OF ASPHALT
EXISTING FENCE
EXISTING OVERHEAD POWER
1' FT FINISH CONTOUR
10' FINISH CONTOUR
PHASE LINE
CURB & GUTTER
PROPOSED TRAIL
PUE
SETBACK
30% SLOPE AND GREATER
PROPOSED OPEN SPACE
DRAINAGE DIRECTION

SEWER LINE
SEWER APPARATUS
STORM LINE
STORM APPARATUS
WATER LINE
WATER APPARATUS
FIRE HYDRANT
IRRIGATION LINE
IRRIGATION APPARATUS
DRAINAGE AREA (DRAINAGE REPORT)

SHEET NO. PP

PRELIMINARY NOT FOR CONSTRUCTION

SARATOGA CITY

BEACON POINT
PLAN AND PROFILE
PHASE 1
SHEET INDEX

9-15-14		PP-PLANPRO OVERALL
PLOT DATE	PROJECT NUMBER	DRAWING FILE

GATEWAY CONSULTING, inc.
P.O. BOX 951005 SOUTH JORDAN, UT 84095
PH: (801) 694-5848 FAX: (801) 432-7050
paul@gatewayconsultingllc.com

CIVIL ENGINEERING • CONSULTING • LAND PLANNING
CONSTRUCTION MANAGEMENT

ORIG. DATE:	11-1-12
SURVEY BY:	
DRAWN BY :	GPW
DESIGNED BY :	GPW
CHECKED BY :	GPW
SCALE :	1"=100'

NO.	DESCRIPTION	DATE	APP'D

BEACON POINT
PLAN AND PROFILE

ARLINGTON WAY

STA: 10+00 TO END

9-15-14 | PLOT DATE | PROJECT NUMBER | DRAWING FILE

SHEET NO. P1

PRELIMINARY NOT FOR CONSTRUCTION

SARATOGA CITY

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CIVIL ENGINEERING • CONSULTING • LAND PLANNING
CONSTRUCTION MANAGEMENT

ORIG. DATE:	03-01-06
SURVEY BY:	
DRAWN BY :	GPW
DESIGNED BY :	GPW
CHECKED BY :	GPW
SCALE :	1"=40'

NO.	DESCRIPTION	DATE	APP'D

SCALE IN FEET
1"=40' HORIZONTAL
1"=4' VERTICAL

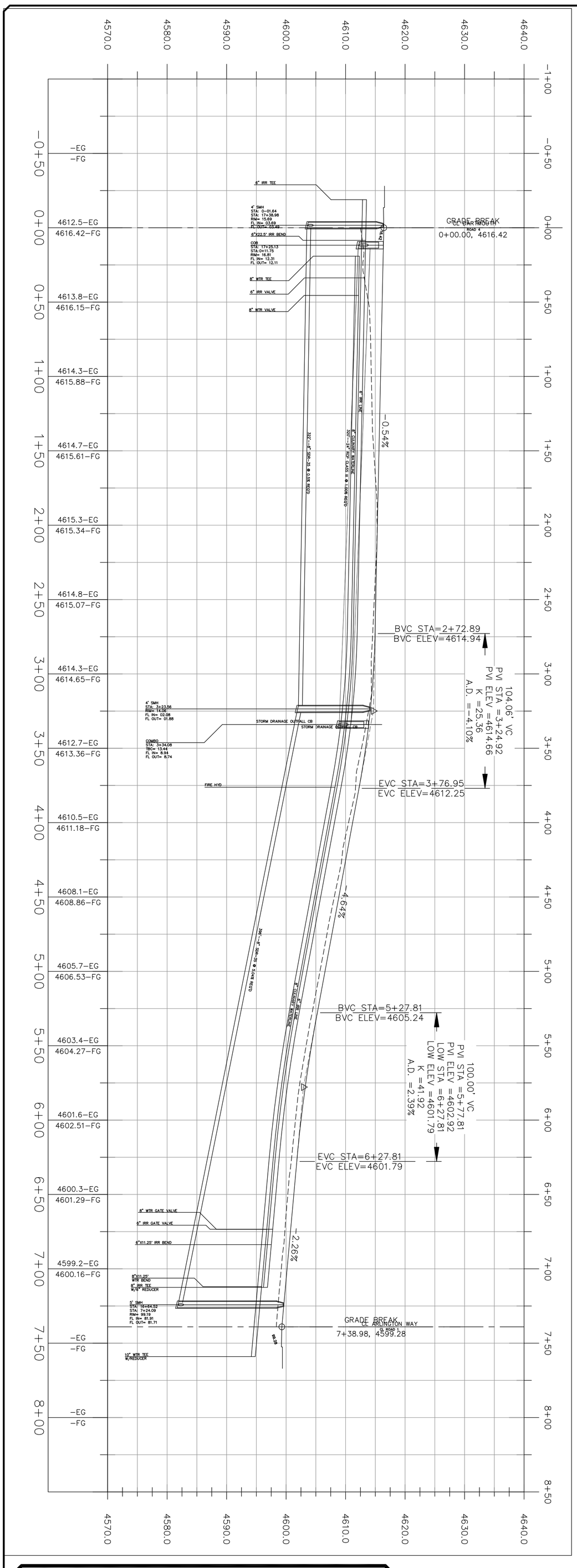
LEGEND

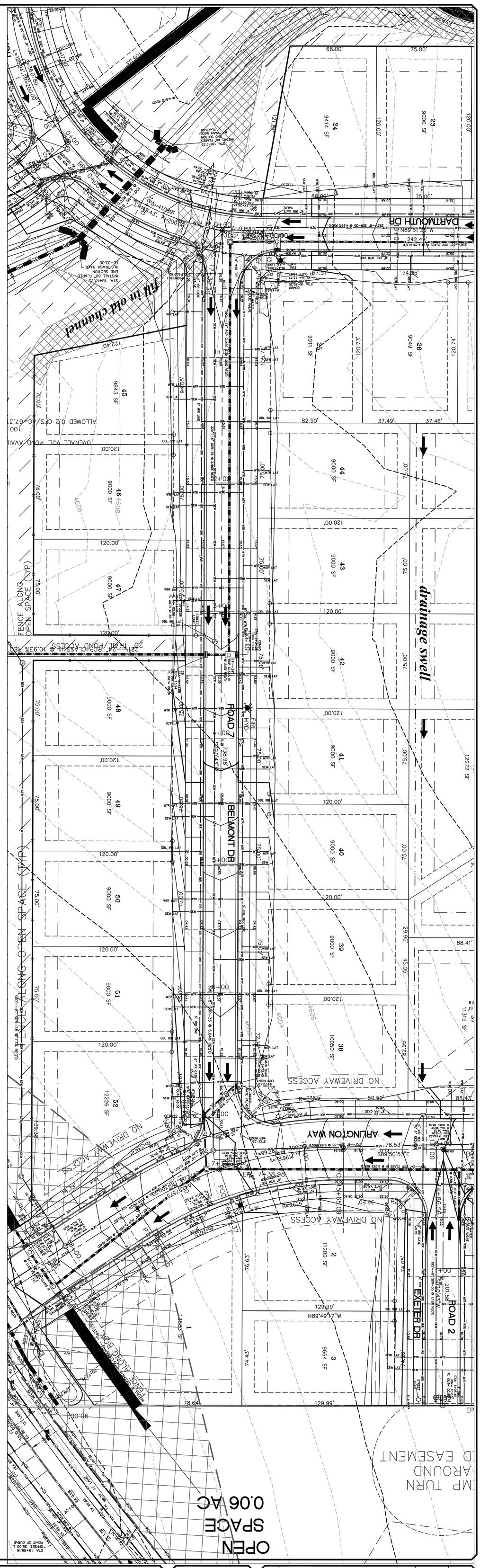
DRAINAGE DIRECTION (DRAINAGE REAR)
PROPOSED OPEN SPACE
30% SLOPE AND GREATER
SETBACK
PIPE
PROPOSED TRAIL
CURB & GUTTER
PHASE LINE
10' FINISH CONTOUR
2' FINISH CONTOUR
EXISTING OVERHEAD POWER
EXISTING EDGE OF ASPHALT
EXISTING CONTOURS (2FT)
EXISTING WATER LINE
EXISTING STORM LINE
EXISTING SEWER LINE
SEWER APPARATUS
SEWER LINE
STORM APPARATUS
STORM LINE
WATER APPARATUS
WATER LINE
FIRE HYDRANT
EXISTING FIRE HYDRANT
IRRIGATION APPARATUS
IRRIGATION LINE

BVC STA=10+45.94
BVC ELEV=4635.69
EVC STA=10+98.68
EVC ELEV=4633.22
PVI ELEV =4634.80
K =20.00
A.D. =-2.64%
-3.36%
-6.00%
-5.00%
-4.00%
GRADE BREAK
CL MONTIGO DR
11+90.56, 4627.71
GRADE BREAK
EXETER DR
CL ROAD 2
14+86.56, 4609.96
GRADE BREAK
BELMONT DR
CL ROAD 7
16+64.37, 4599.28
GRADE BREAK
18+50.00, 4590.01
GRADE BREAK
EX EDGE OF ASPHALT 88.00
EX EDGE OF ASPHALT 88.00
EX CL REDWOOD ELEV 88.26
REDWOOD ROAD
0.00', 4588.00

9+00 9+50 10+00 10+50 11+00 11+50 12+00 12+50 13+00 13+50 14+00 14+50 15+00 15+50 16+00 16+50 17+00 17+50 18+00 18+50 19+00 19+50 20+00
4640.0–EG –FG
4638.5–EG –FG
4636.3–EG –FG
4634.0–EG –FG
4632.2–EG –FG
4630.4–EG –FG
4628.3–EG –FG
4626.1–EG –FG
4623.6–EG –FG
4620.0–EG –FG
4615.9–EG –FG
4611.9–EG –FG
4607.6–EG –FG
4604.7–EG –FG
4601.8–EG –FG
4599.1–EG –FG
4596.5–EG –FG
4594.0–EG –FG
4591.8–EG –FG
4589.8–EG –FG
4588.0–EG –FG
–EG –FG
4560.0 4570.0 4580.0 4590.0 4600.0 4610.0 4620.0 4630.0 4640.0 4650.0

20' SHARED DRIVEWAY
MUST EXIT ON SHARED DRIVEWAY
NO DRIVEWAY ACCESS
MONTIGO DR
EXETER DR
ROAD 2
ROAD 1
ARLINGTON WAY
temp cut off trench
EXISTING FH
FENCE ALONG ROW





SHEET NO. P2

PRELIMINARY NOT FOR CONSTRUCTION

SARATOGA CITY

BEACON POINT
PLAN AND PROFILE

BELMONT DR

9-15-14		P2-PLANPRO 3D
PLOT DATE	PROJECT NUMBER	DRAWING FILE

GATEWAY CONSULTING, inc.
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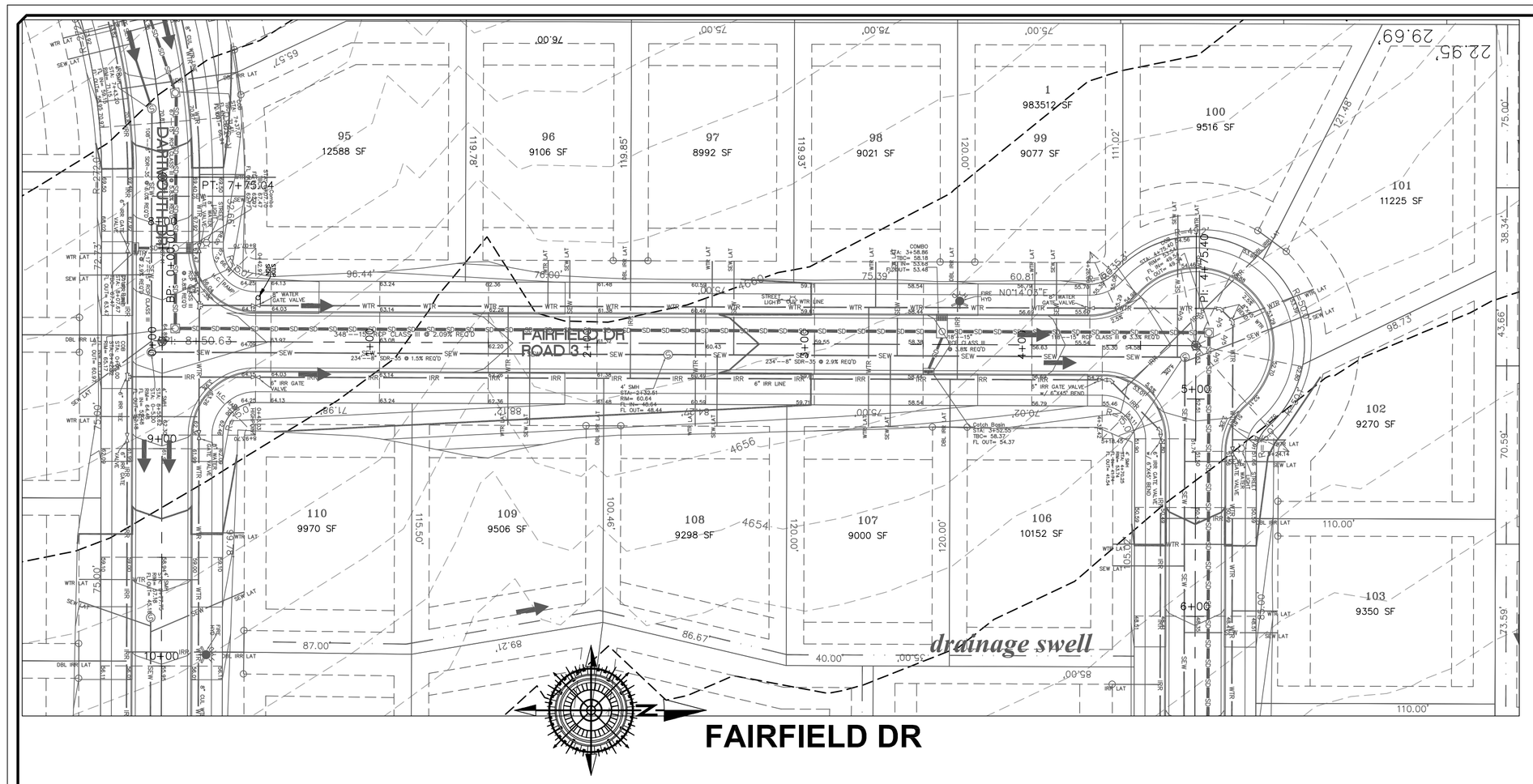
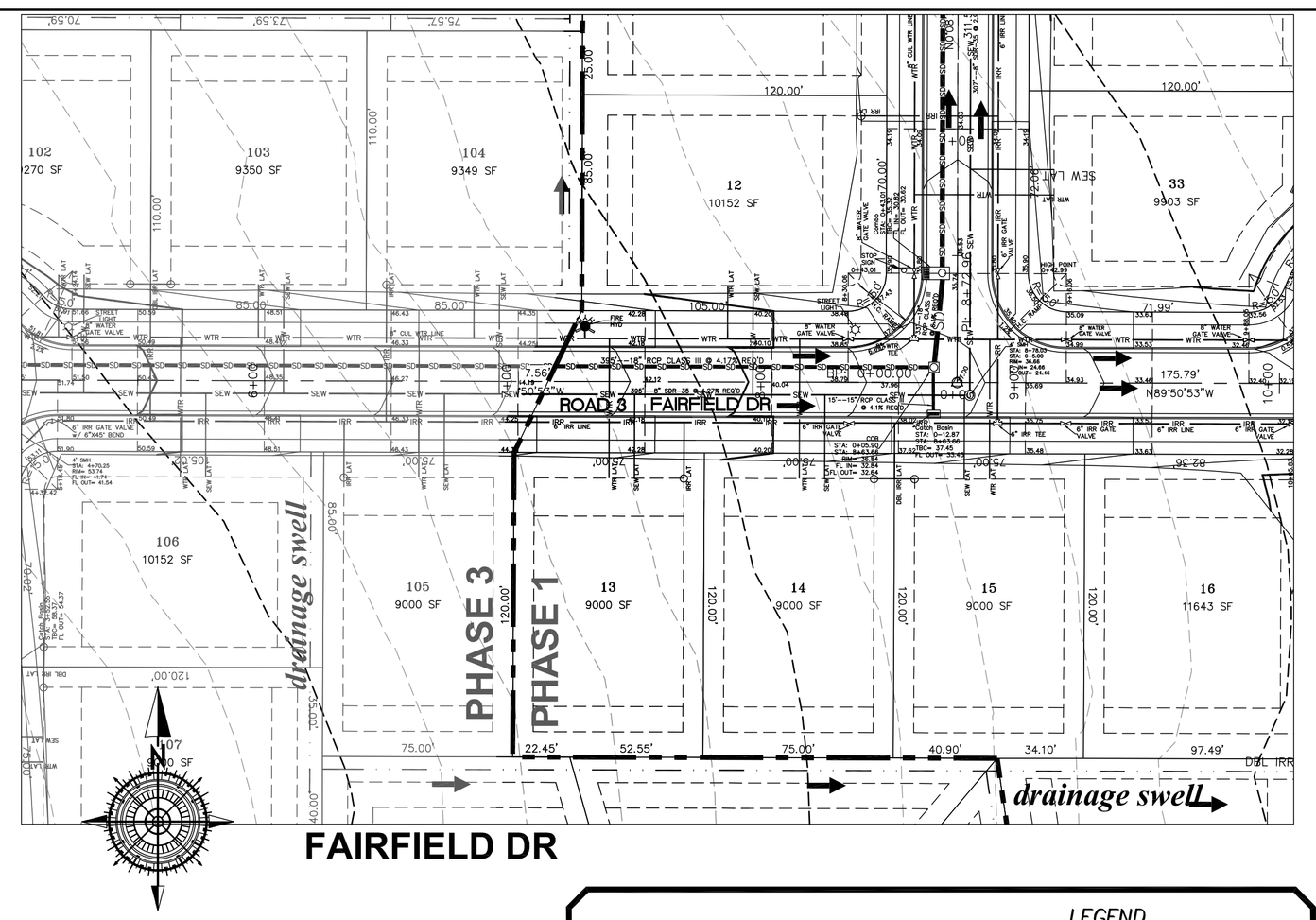
PH: (801) 694-5848 FAX: (801) 432-7050
paul@gatewayconsultingllc.com

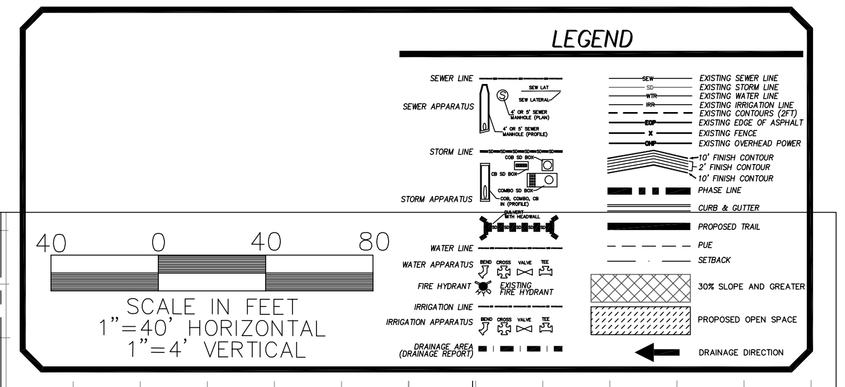
CIVIL ENGINEERING • CONSULTING • LAND PLANNING
CONSTRUCTION MANAGEMENT

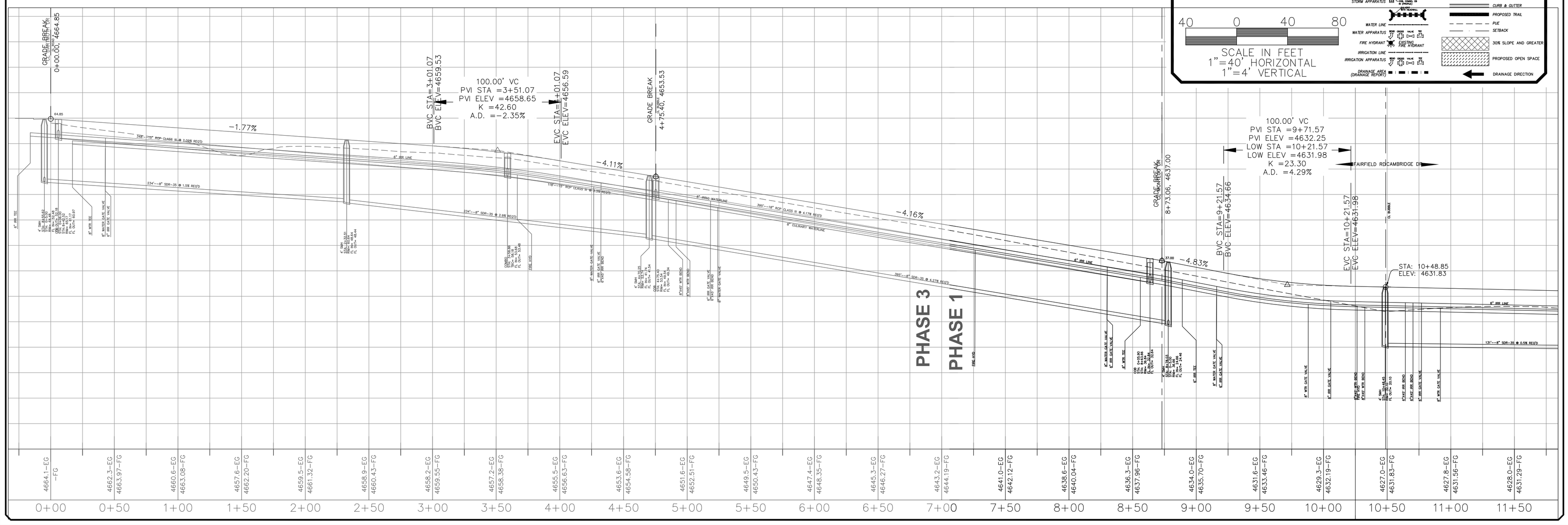
ORIG. DATE:	03-01-06
SURVEY BY:	
DRAWN BY :	GPW
DESIGNED BY :	GPW
CHECKED BY :	GPW
SCALE :	1"=40'

NO.	DESCRIPTION	DATE	APP'D









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PH: (801) 694-5645 FAX: (801) 432-7050
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CONSTRUCTION MANAGEMENT

NO.	DESCRIPTION	DATE	APP'D

ORIG. DATE: 03-01-06
SURVEY BY: GPW
DRAWN BY: GPW
DESIGNED BY: GPW
CHECKED BY: GPW
SCALE: 1"=40'

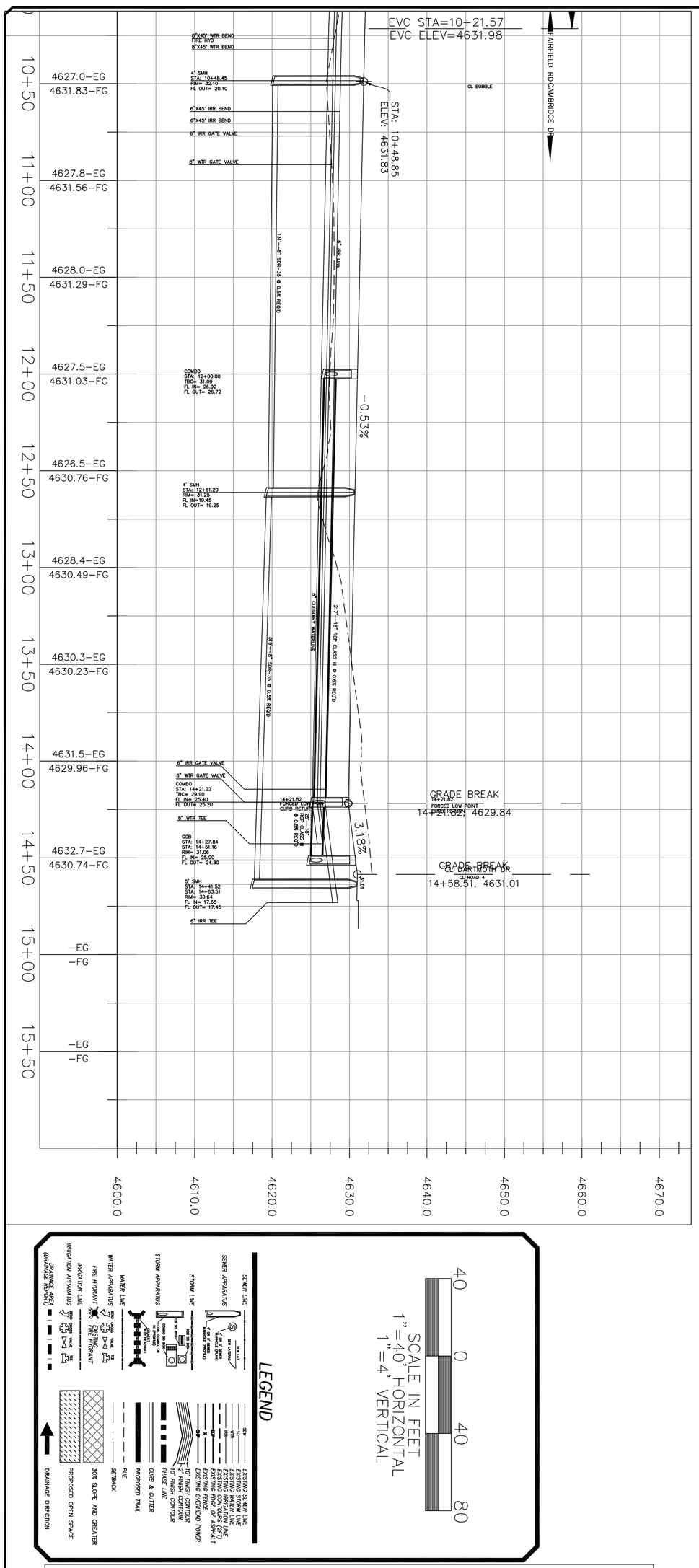
BEACON POINT
PLAN AND PROFILE
FAIRFIELD DR
STA: 0+00 TO 10+00

PROJECT NUMBER
P3-PLANPRO 3D
DRAWING FILE
9-15-14
PLOT DATE

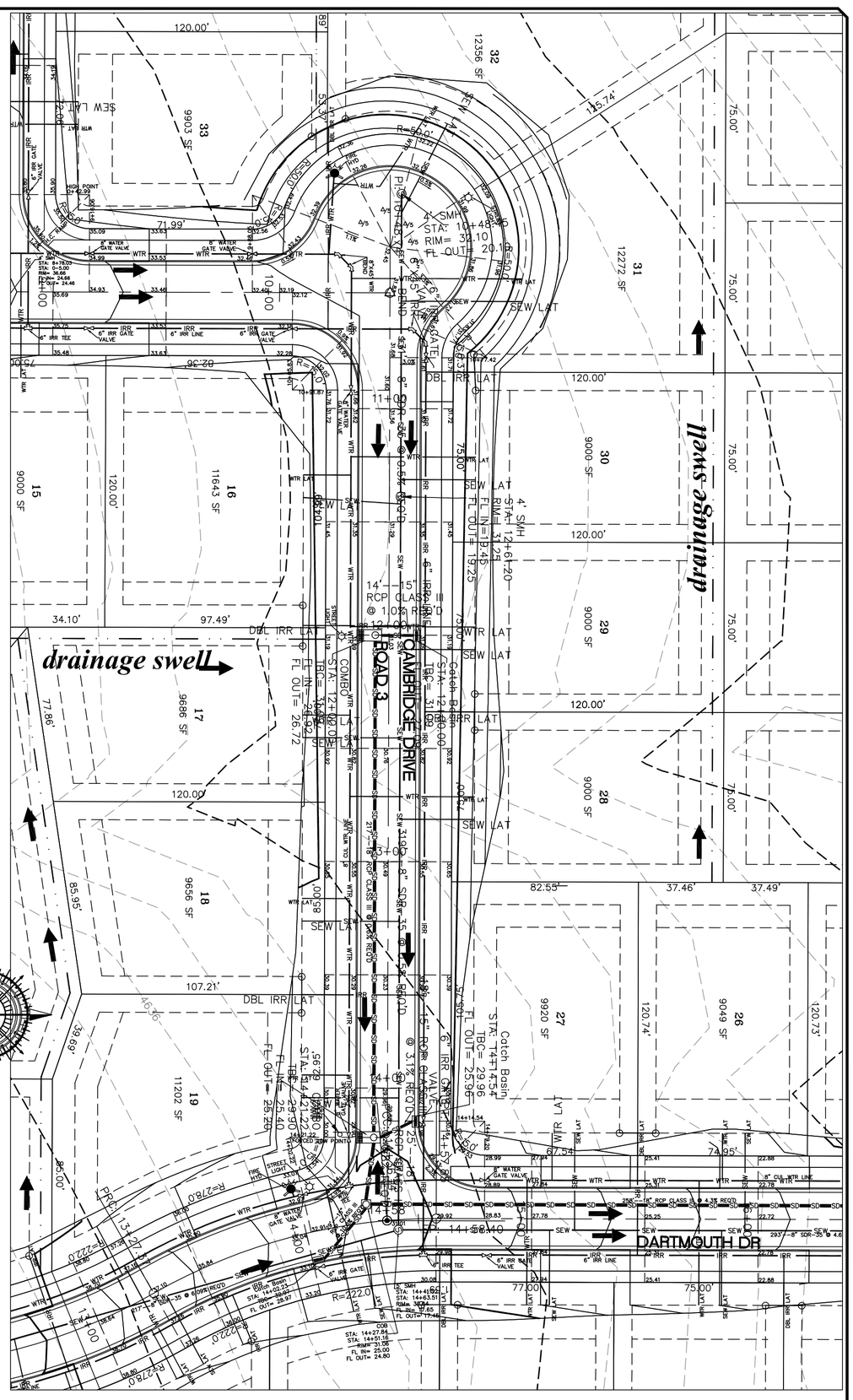
SARATOGA CITY

PRELIMINARY NOT FOR CONSTRUCTION

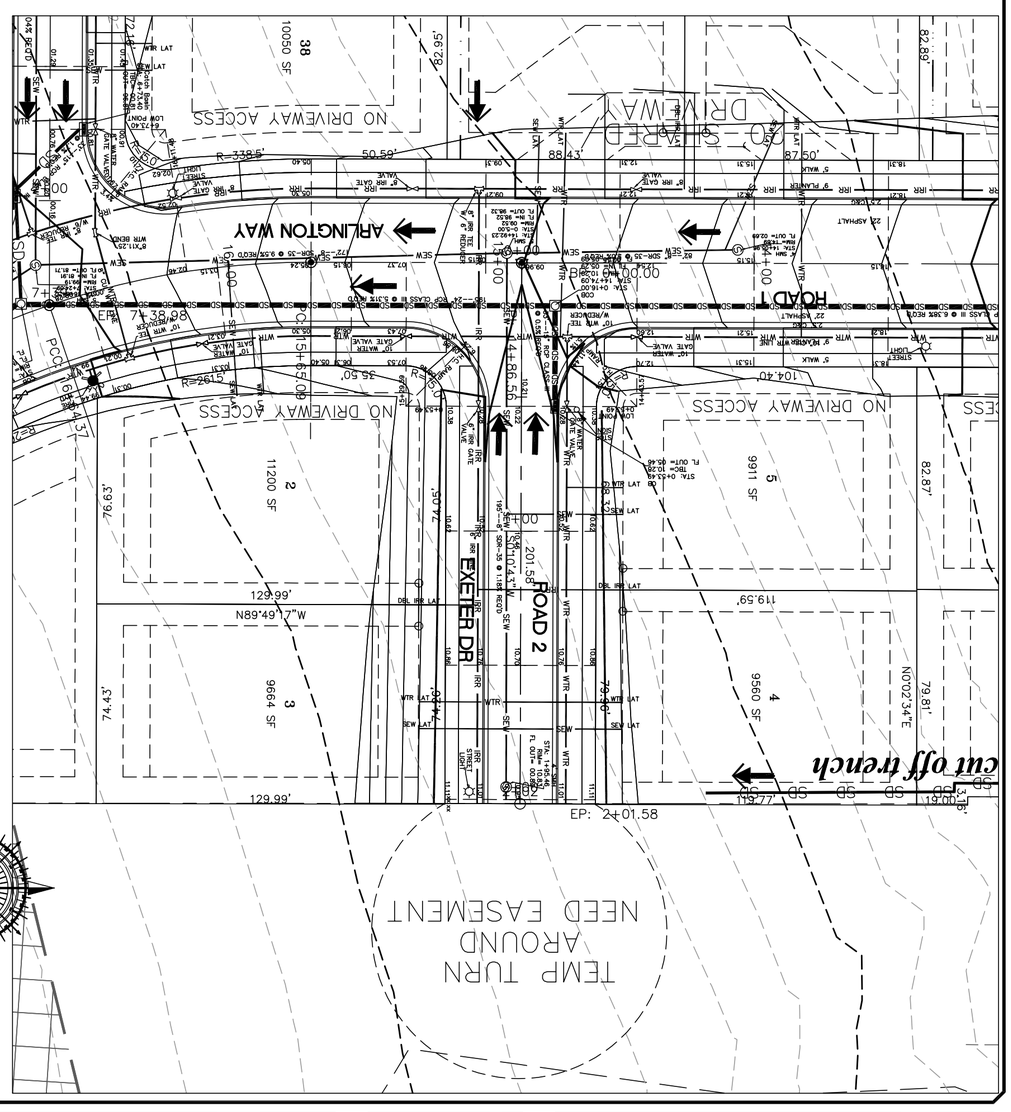
SHEET NO. P3



CAMBRIDGE DR



EXETER DR



SHEET NO. P4	PRELIMINARY NOT FOR CONSTRUCTION	SARATOGA CITY	

BEACON POINT
PLAN AND PROFILE

FAIRFIELD DR TO CAMBRIDGE DR
EXETER DR

9–15–14		P4–PLANPRO 3D
PLOT DATE	PROJECT NUMBER	DRAWING FILE

GATEWAY CONSULTING, inc.
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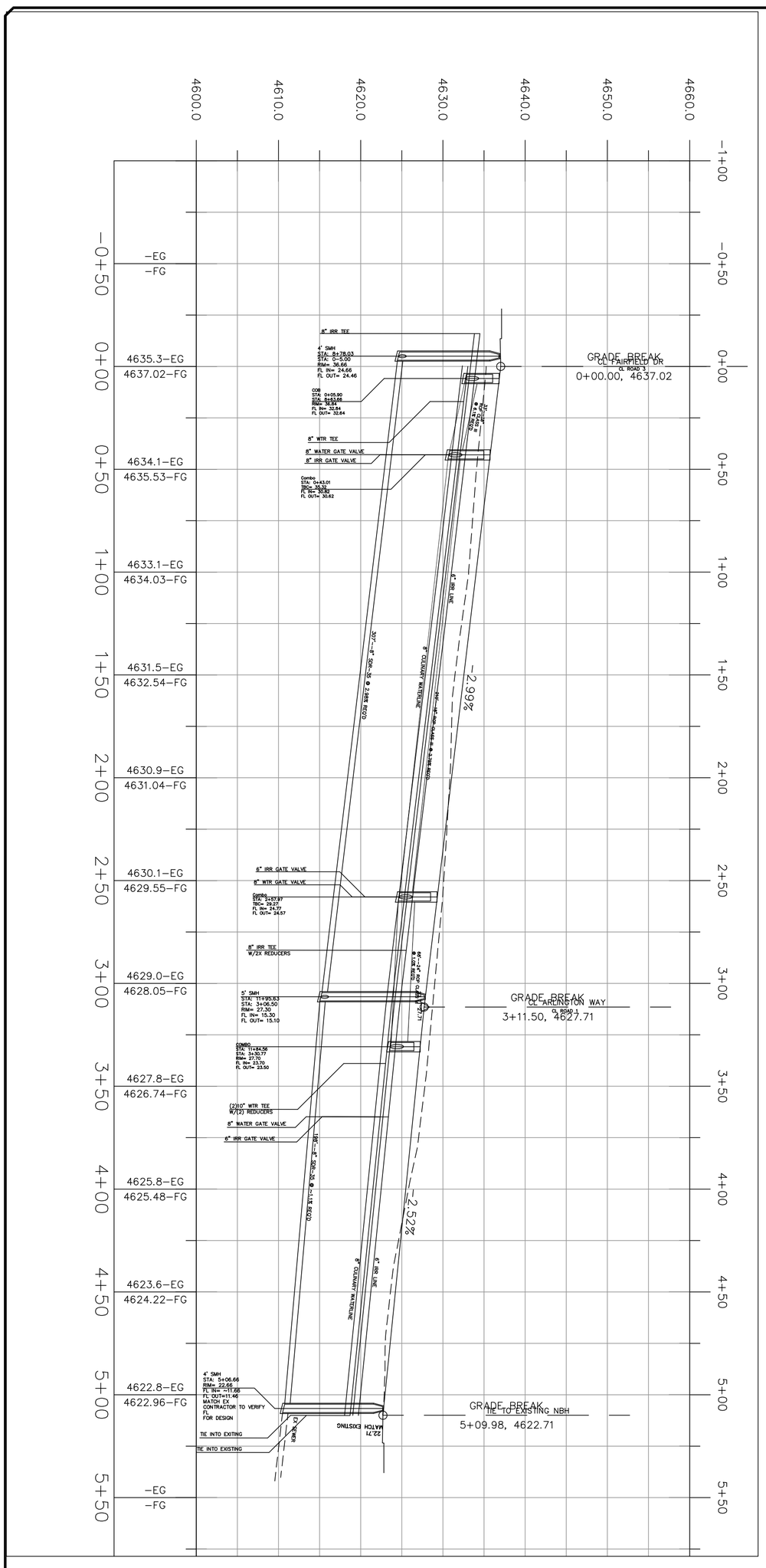
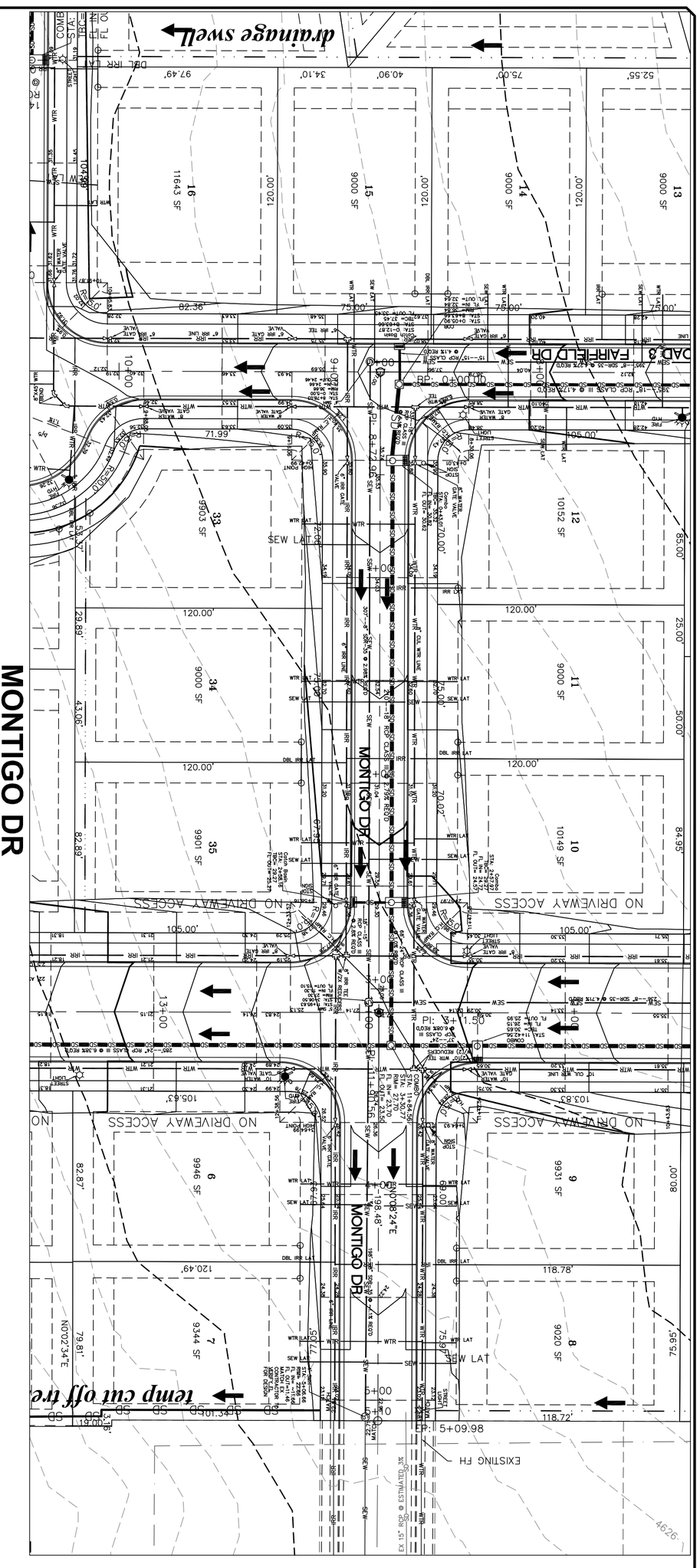
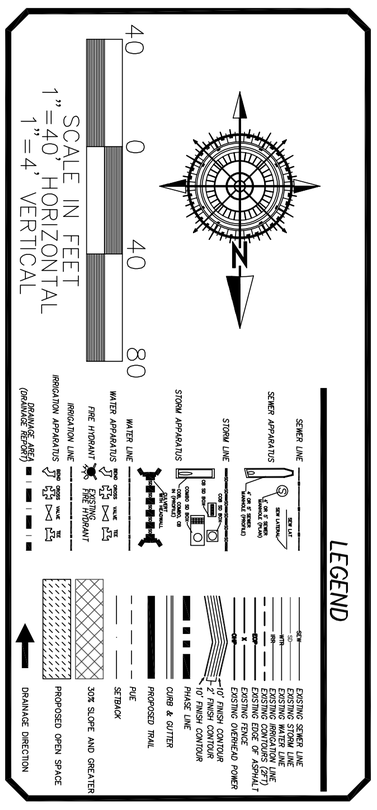
CONSTRUCTION MANAGEMENT

ORIG. DATE:	03–01–06
SURVEY BY:	
DRAWN BY :	GPW
DESIGNED BY :	GPW
CHECKED BY :	GPW
SCALE :	1"=40'

NO.	DESCRIPTION	DATE	APP'D







SHEET NO. P5

PRELIMINARY NOT FOR CONSTRUCTION

SARATOGA CITY

BEACON POINT
PLAN AND PROFILE
MONTIGO DR

9-15-14		P5-PLANPRO 3D
PLOT DATE	PROJECT NUMBER	DRAWING FILE

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ORIG. DATE:	03-01-06
SURVEY BY:	
DRAWN BY :	GPW
DESIGNED BY :	GPW
CHECKED BY :	GPW
SCALE :	1"=40'

NO.	DESCRIPTION	DATE	APP'D

LIMEKILN CANYON DRAINAGE CHANNEL
429 cfs per city docs

parcel D
detention/ OPEN SPACE
5.68 ac
dedicated to city
maintained by city

DEBRIS BASIN #2

fill in old channel

drainage swell

DARTMOUTH DR

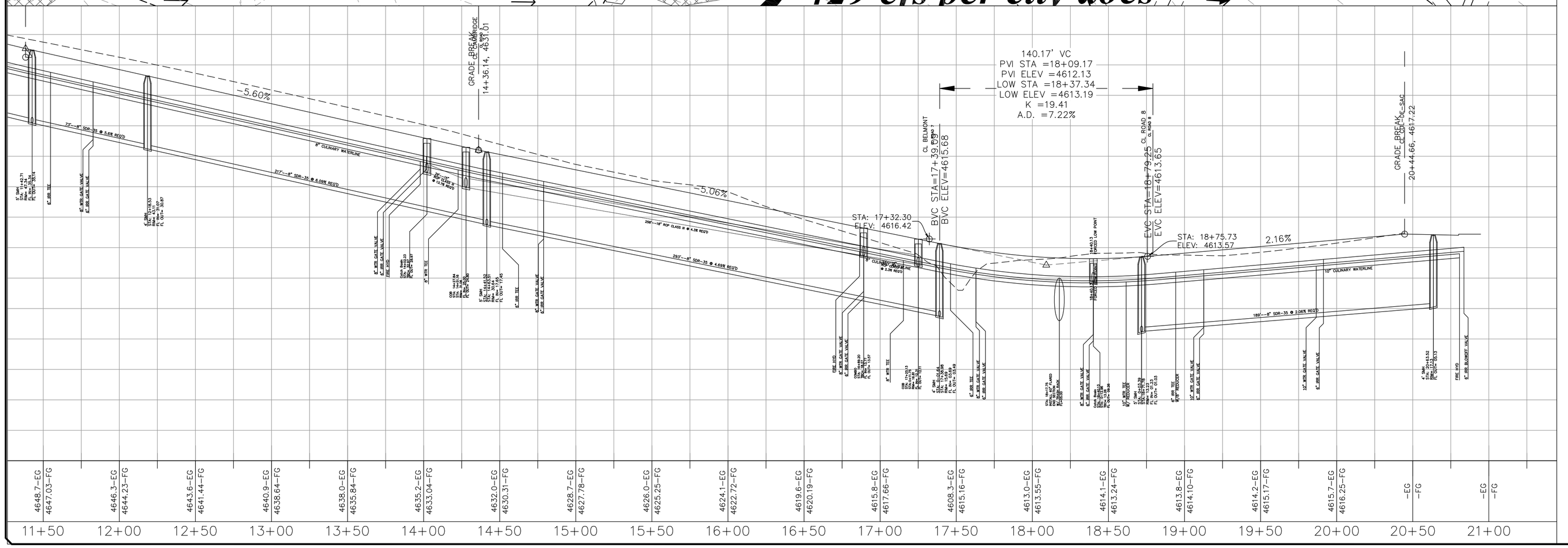
ROAD 6
NY COURT

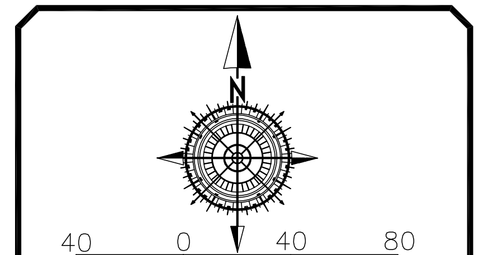
ROAD 4

ROAD 8
ST JAMES DR

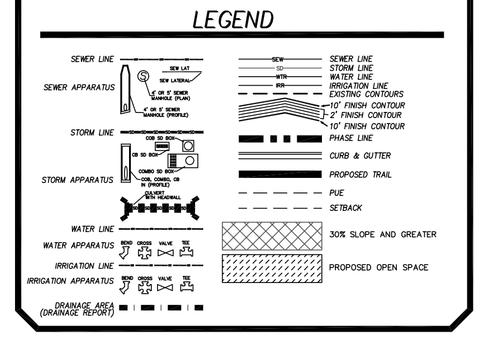
Cotton Road
STA: 14+14.54
700' @ 25.96%

19 11202 SF
116 10542 SF
21 9612 SF
22 9139 SF
23 9000 SF
24 9414 SF
119 9000 SF
118 9009 SF
117 9617 SF
20 10175 SF
9920 SF
9049 SF
8911 SF
60 11912 SF
61 9942 SF
62 9279 SF
66 11271 SF
65 13850 SF
64 13942 SF
63 14143 SF





LEGEND



NO.	DESCRIPTION	DATE	APP'D

ORIG. DATE: 03-01-06
SURVEY BY:
DRAWN BY: GPW
DESIGNED BY: GPW
CHECKED BY: GPW
SCALE: 1"=40'

GATEWAY CONSULTING, inc.
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CONSTRUCTION MANAGEMENT

BEACON POINT
PLAN AND PROFILE

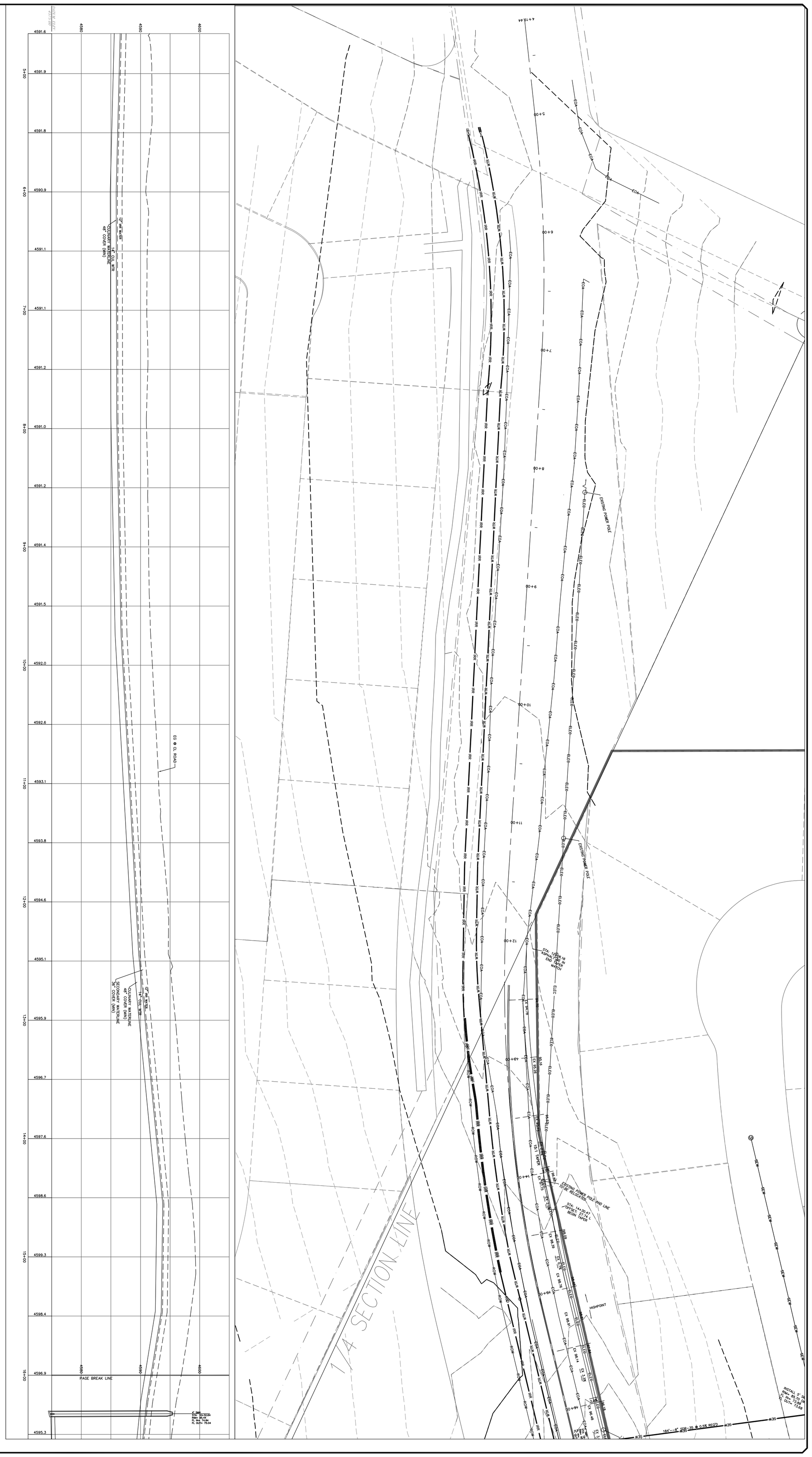
DARTMOUTH DR
STA: 12+00 TO END

PROJECT NUMBER
PS-PLANPRO 3D
DRAWING FILE
PLOT DATE 9-15-14

SARATOGA CITY

PRELIMINARY NOT FOR CONSTRUCTION

SHEET NO. P6



SCALE IN FEET
1"=40' HORIZONTAL
1"=4' VERTICAL

40 0 40 80

LEGEND

- SEWER LINE
- SEWER APPARATUS
- STORM LINE
- STORM APPARATUS
- WATER LINE
- WATER APPARATUS
- FIRE HYDRANT
- IRRIGATION LINE
- IRRIGATION APPARATUS
- DRAINAGE AREA (DRAINAGE REPORT)
- EXISTING SEWER LINE
- EXISTING SEWER APPARATUS
- EXISTING WATER LINE
- EXISTING IRRIGATION LINE
- EXISTING IRRIGATION APPARATUS
- EXISTING EDGE OF ASPHALT
- EXISTING FENCE
- EXISTING OVERHEAD POWER
- 2' FINISH CONTOUR
- 10' FINISH CONTOUR
- PHASE LINE
- CURB & GUTTER
- PROPOSED TRAIL
- PVE
- SETBACK
- PROPOSED OPEN SPACE
- 30% SLOPE AND GREATER
- DRAINAGE DIRECTION

PRELIMINARY NOT FOR CONSTRUCTION

SHEET NO. P7

SARATOGA CITY

BEACON POINT
PLAN AND PROFILE

REDWOOD ROAD
STA: 4+00 TO 15+00

9-15-14		P7-PLANPRO 3D
PLOT DATE	PROJECT NUMBER	DRAWING FILE

GATEWAY CONSULTING, inc.
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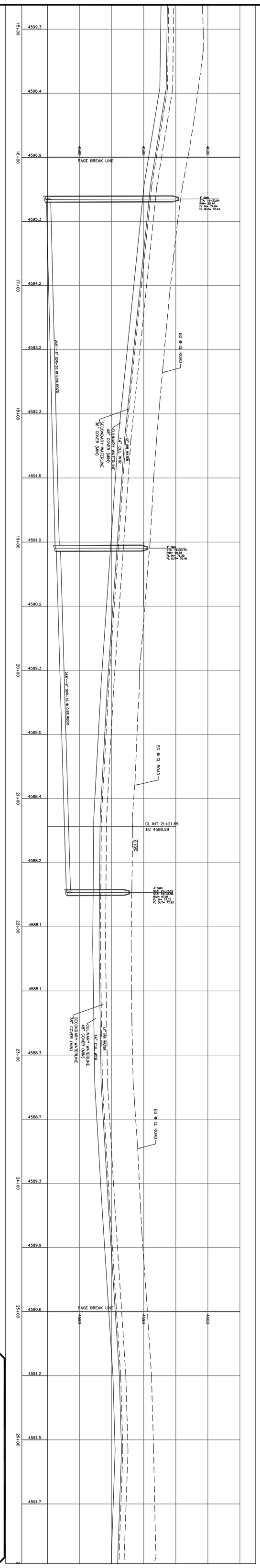
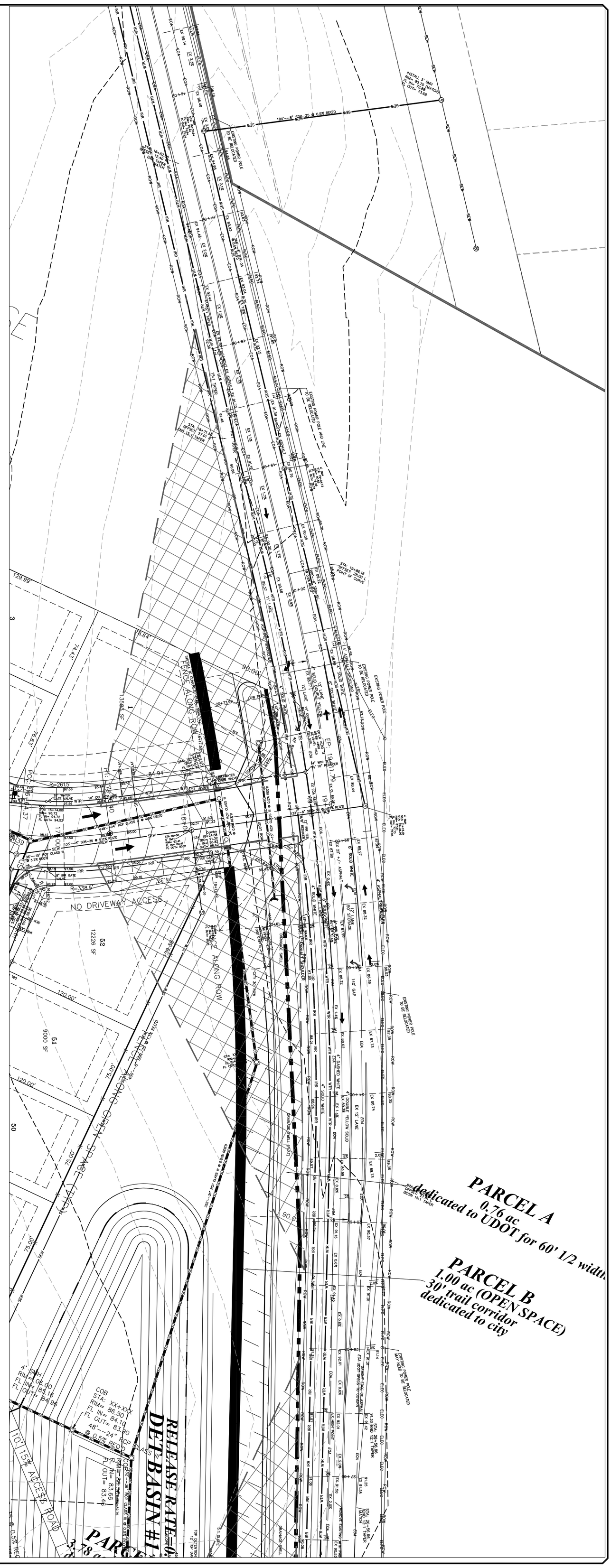
CONSTRUCTION MANAGEMENT

ORIG. DATE:	03-01-06
SURVEY BY:	
DRAWN BY :	GPW
DESIGNED BY :	GPW
CHECKED BY :	GPW
SCALE :	1"=40'

NO.	DESCRIPTION	DATE	APP'D




INSTALL 5' SMH
RIM= 85.70 (MATCH)
FL IN= 73.68
FL OUT= 73.68
184'--8" SDR-35 @ 0.5% REQ'D
EXISTING POWER POLE TO BE RELOCATED
EXISTING POWER POLE AND LINE TO BE RELOCATED
EXISTING POWER POLE TO BE RELOCATED
EXISTING POWER POLE MAY NEED TO BE RELOCATED
16+93.12 TAPER MATCH
STA: 16+71.95 OFFSET: 17.01' END 15:1 TAPER
STA: 19+88.16 OFFSET: 28.00' POINT OF CURVE
STA: 25+56.66 OFFSET: 27.00' BEGIN 15:1 TAPER
STA: 25+56.66 OFFSET: 27.00' BEGIN 12:1 TAPER
12' LANE
50' STORAGE
140' GAP
12' LANE
COURTESY TURN LANE
12' LANE
DOUBLE YELLOW
EX 12' LANE
4" SOLID WHITE
4" DOUBLE YELLOW SOLID
4" DASHED WHITE
4" ASPHALT SHOULDER
4' ASPHALT SHOULDER
8" SOLID WHITE
EX 22' +/- ASPHALT
EX 12' +/- ASPHALT
EX HIGH POINT
REMOVE EXISTING WITH PAVING
REMOVE EXISTING WITH PAVING
REMOVE EXISTING WITH PAVING

PARCEL A
0.76 ac
dedicated to UDOT for 60' 1/2 width

PARCEL B
1.00 ac (OPEN SPACE)
30' trail corridor
dedicated to city

RELEASE RATE=0.2CFS/AC
DET BASIN #1 SIZE
PARCEL C (OPEN SPACE)
3.78 ac
drainage and detention
dedicated to city
maintained by city

PRESENTLY NO CULVERT
INST 48" X 120" BOX CULVERT
outfall needed through adjacent
property owner
(1,810 ac contributing land for sd calcs
@0.2 cfs/ac=362 cfs allowed release)
through box culvert
design post 100 yr Q out=429cfs

INSTALL BOX CULVERT"
HEADWALL END SECTION
-FL=81.51
GRADE TO DAYLIGHT

LIGHT HOUSE PROJECT

WESTERN STATES VENTURES
SAIL HOUSE PROJECT

PAGE BREAK LINE

SCALE IN FEET
1"=40' HORIZONTAL
1"=4' VERTICAL

LEGEND

SEWER LINE
SEWER APPARATUS
STORM LINE
STORM APPARATUS
WATER LINE
WATER APPARATUS
FIRE HYDRANT
IRRIGATION LINE
IRRIGATION APPARATUS
DRAINAGE AREA (DRAINAGE REPORT)
EXISTING SEWER LINE
EXISTING STORM LINE
EXISTING WATER LINE
EXISTING IRRIGATION LINE
EXISTING CONTOUR
EXISTING OVERHEAD POWER
EXISTING FENCE
EXISTING EDGE OF ASPHALT
2' FINISH CONTOUR
10' FINISH CONTOUR
PHASE LINE
CURB & GUTTER
PROPOSED TRAIL
PUE
SETBACK
30% SLOPE AND GREATER
PROPOSED OPEN SPACE
DRAINAGE DIRECTION

PRELIMINARY
NOT FOR
CONSTRUCTION

SHEET NO. P9

SARATOGA CITY

BEACON POINT
PLAN AND PROFILE
REDWOOD ROAD
STA: 25+00 TO 35+50

9-15-14 PLOT DATE | PROJECT NUMBER | P8-PLANPO 3D DRAWING FILE

GATEWAY CONSULTING, inc.
P.O. BOX 951005 SOUTH JORDAN, UT 84095
PH: (801) 694-5848 FAX: (801) 432-7050
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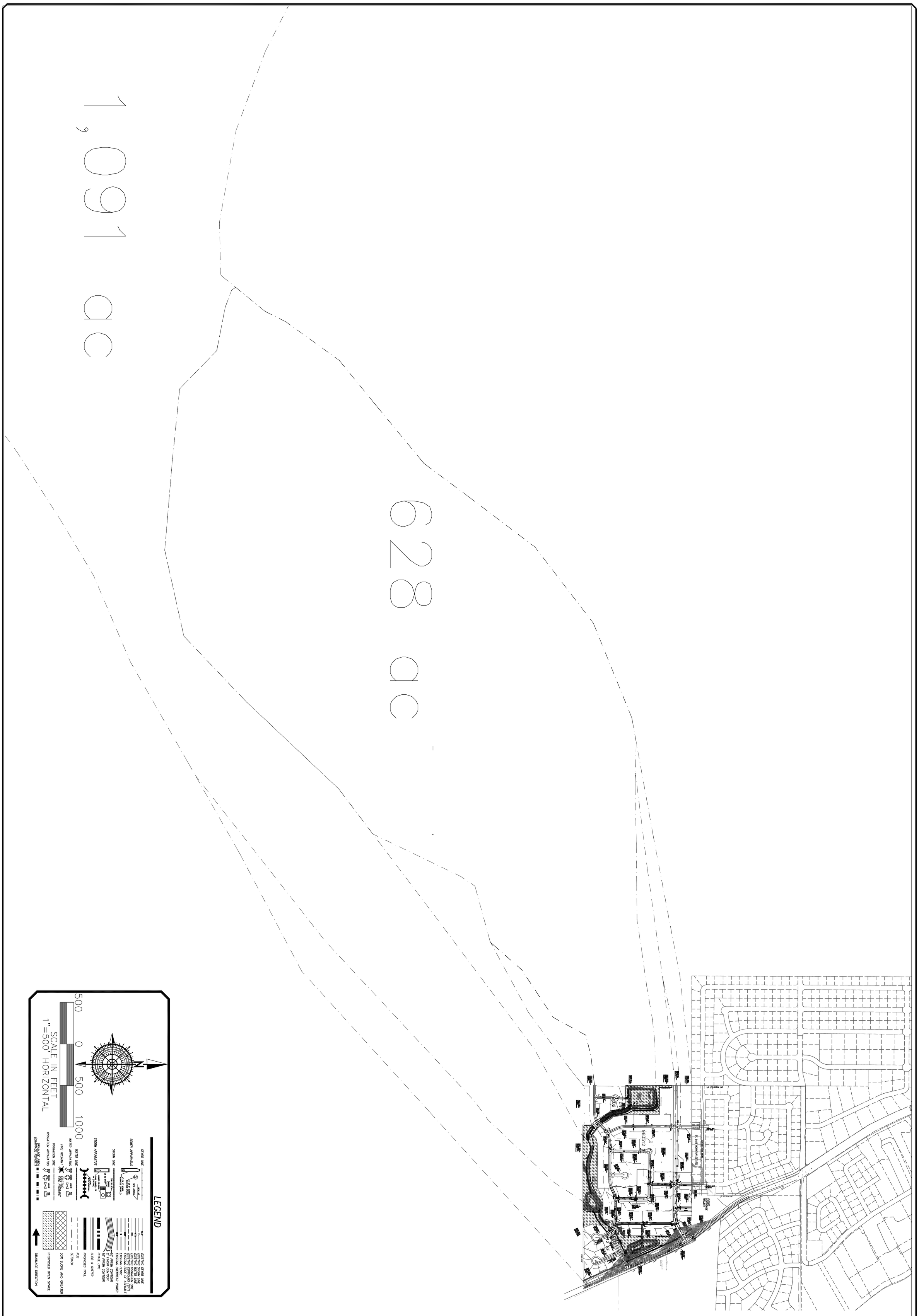
CIVIL ENGINEERING • CONSULTING • LAND PLANNING
CONSTRUCTION MANAGEMENT

ORIG. DATE:	03-01-06
SURVEY BY:	
DRAWN BY :	GPW
DESIGNED BY :	GPW
CHECKED BY :	GPW
SCALE :	1"=40'

NO.	DESCRIPTION	DATE	APP'D



BEACON POINT
PHASE 1
DRAINAGE REPORT
OVERALL AREA

9-15-14		DR1-2 DRAINAGE REPORT
PLOT DATE	PROJECT NUMBER	DRAWING FILE

SHEET NO. DR1

PRELIMINARY NOT FOR CONSTRUCTION

SARATOGA CITY

GATEWAY CONSULTING, inc.
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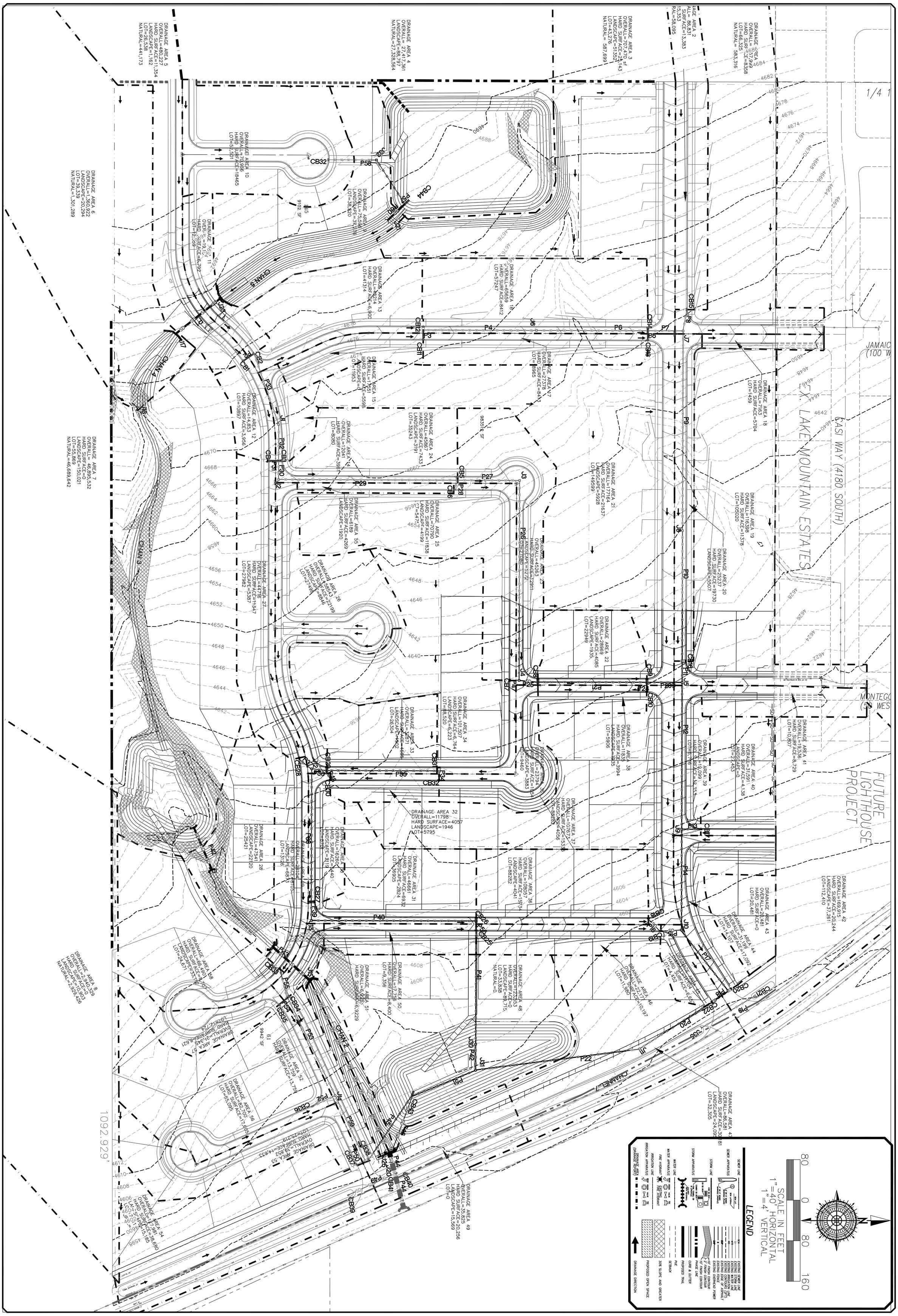
CONSTRUCTION MANAGEMENT

ORIG. DATE:	11-1-12
SURVEY BY:	
DRAWN BY :	GPW
DESIGNED BY :	GPW
CHECKED BY :	GPW
SCALE :	1"=500'

NO.	DESCRIPTION	DATE	APP'D



SHEET NO. DR2

PRELIMINARY NOT FOR CONSTRUCTION

SARATOGA CITY

BEACON POINT PHASE 1
DRAINAGE REPORT
1:80 SCALE

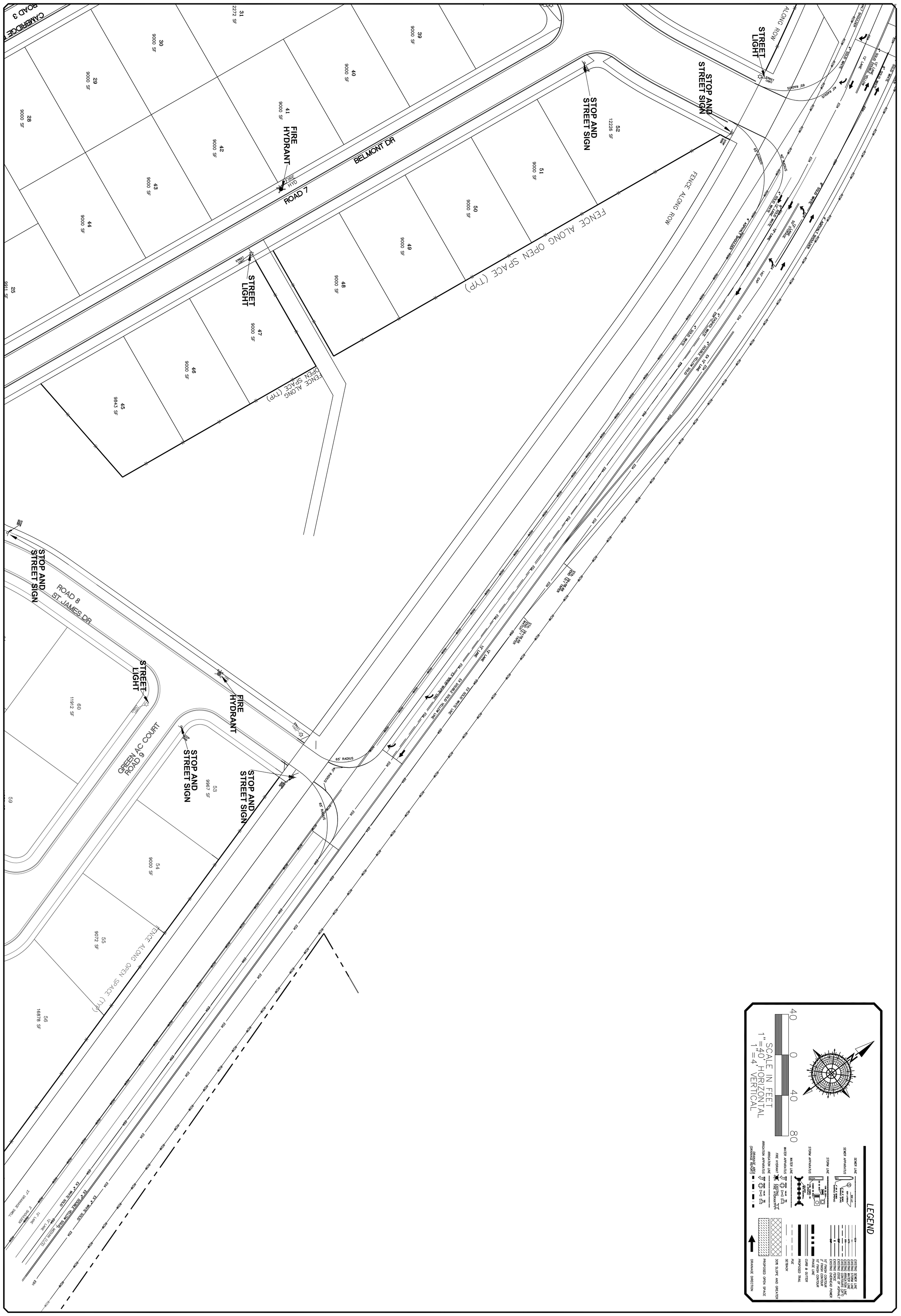
9-15-14		DR1-2 DRAINAGE REPORT
PLOT DATE	PROJECT NUMBER	DRAWING FILE

GATEWAY CONSULTING, inc.
P.O. BOX 951005 SOUTH JORDAN, UT 84095
PH: (801) 694-5848 FAX: (801) 432-7050
paul@gatewayconsultingllc.com

CIVIL ENGINEERING • CONSULTING • LAND PLANNING
CONSTRUCTION MANAGEMENT

ORIG. DATE:	11-1-12
SURVEY BY:	
DRAWN BY :	GPW
DESIGNED BY :	GPW
CHECKED BY :	GPW
SCALE :	1"=80'

NO.	DESCRIPTION	DATE	APP'D



SHEET NO. SS1

PRELIMINARY NOT FOR CONSTRUCTION

SARATOGA CITY

BEACON POINT
PHASE 1

SIGNAGE AND STRIPING

9-15-14		SS1-2 SIGN STRIPE
PLOT DATE	PROJECT NUMBER	DRAWING FILE

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CIVIL ENGINEERING • CONSULTING • LAND PLANNING
CONSTRUCTION MANAGEMENT

ORIG. DATE:	11-1-12
SURVEY BY:	
DRAWN BY :	GPW
DESIGNED BY :	GPW
CHECKED BY :	GPW
SCALE :	1"=40'

NO.	DESCRIPTION	DATE	APP'D

lighthouse
possible 4 lot sub

fill in old channel

ROAD 1

ROAD 2

ROAD 3 FAIRFIELD DR

ROAD 4

ROAD 7

ARLINGTON WAY

BELMONT DR

MONTIGO DR

CAMBRIDGE DRIVE

DARTMOUTH DR

EXETER DR

80

81

1	13583 SF	
2	11200 SF	
3	9664 SF	
4	9560 SF	
5	9911 SF	
6	9946 SF	
7	9344 SF	
8	9020 SF	
9	9931 SF	
10	10149 SF	
11	9000 SF	
12	10152 SF	
13	9000 SF	
14	9000 SF	
15	9000 SF	
16	11643 SF	
17	9686 SF	
18	9656 SF	
19	11202 SF	
20	10175 SF	
21	9612 SF	
22	9139 SF	
23	9000 SF	
24	9414 SF	
25	9911 SF	
26	9049 SF	
27	9920 SF	
28	9000 SF	
29	9000 SF	
30	9000 SF	
31	12272 SF	
32	12356 SF	
33	9903 SF	
34	9000 SF	
35	9901 SF	
36	11198 SF	
37	11319 SF	
38	10050 SF	
39	9000 SF	
40	9000 SF	
41	9000 SF	
42	9000 SF	
43	9000 SF	
44	9000 SF	
45	9843 SF	
46	9000 SF	
47	9000 SF	
48	9000 SF	
49	9000 SF	
50	9000 SF	
51	9000 SF	
52	12226 SF	
66	11271 SF	
	9942 SF	

STREET LIGHT
STOP AND STREET SIGN
FIRE HYDRANT
STOP SIGN
STREET LIGHT
FIRE HYD
4" ASPHALT SHOULDER
8" SOLID WHITE
4" SOLID DOUBLE YELLOW
12' LANE
11' LANE
40' RADIUS
65' RADIUS
EOA
ROW

SCALE IN FEET
1"=40' HORIZONTAL
1"=4' VERTICAL

0 40 80

N

LEGEND

- SEWER LINE
- SEWER APPARATUS
- STORM LINE
- STORM APPARATUS
- WATER LINE
- WATER APPARATUS
- FIRE HYDRANT
- IRRIGATION LINE
- IRRIGATION APPARATUS
- DRAINAGE AREA (DRAINAGE REPORT)
- EXISTING SEWER LINE
- EXISTING STORM LINE
- EXISTING WATER LINE
- EXISTING IRRIGATION LINE
- EXISTING CONTOUR
- EXISTING EDGE OF ASPHALT
- EXISTING FENCE
- EXISTING OVERHEAD POWER
- 2' FINISH CONTOUR
- 10' FINISH CONTOUR
- PHASE LINE
- CURB & GUTTER
- PROPOSED TRAIL
- PUE
- SETBACK
- 30% SLOPE AND GREATER
- PROPOSED OPEN SPACE
- DRAINAGE DIRECTION

SHEET NO. SS2

PRELIMINARY NOT FOR CONSTRUCTION

SARATOGA CITY

BEACON POINT
PHASE 1

SIGNAGE AND STRIPING

9-15-14		SS1-SS3 SIGN STRIPE
PLOT DATE	PROJECT NUMBER	DRAWING FILE

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CIVIL ENGINEERING • CONSULTING • LAND PLANNING
CONSTRUCTION MANAGEMENT

ORIG. DATE:	11-1-12
SURVEY BY:	
DRAWN BY :	GPW
DESIGNED BY :	GPW
CHECKED BY :	GPW
SCALE :	1"=40'

NO.	DESCRIPTION	DATE	APP'D

EXISTING PELICAN BAY SUBDIVISION

EXISTING LAKE MOUNTAIN SUBDIVISION

REDWOOD ROAD

ACEL LANE TIE IN

1/4 SECTION LINE

CL INT TO CL INT=1,675 LF

DECEL LANE TIE IN

MONTEGO DRIVE (50' WEST)

FUTURE LIGHTHOUSE PROJECT

lighthouse possible 4 lot sub

PROJECT BOUNDARY

NEW EDGE OF ASPHALT
PROPOSED 12' ACEL LANE
PROPOSED 11' DECEL LANE
EXISTING EOA

INSTALL UDOT GW-4B RADIUS RETURN
PROPOSED 12' DECEL LANE
PROPOSED 12' ACEL LANE
INSTALL UDOT PG ASPHALT
SEE UDOT SPECS
EXISTING EDGE OF ASPHALT
EXISTING UDOT ROW BOUNDARY
NEW UDOT ROW BOUNDARY

PROPOSED ACCESS #1
APPROX 4300 So.

PROPOSED BEACON POINT SUBDIVISION
PHASE 1

NOTE: CL INT TO CL INT=840LF
660 lf needed

SARATOGA CITY ROW

40-17-02 : 111-52-24

INSTALL UDOT GW-4B RADIUS RETURN

PROPOSED ACCESS #2

CL INT TO ACCESS=4,500 LF +/-

PHASE 2

1092.929'

Note: All construction within the UDOT Right-of-way shall conform to the most current UDOT standard drawings and specifications.

SCALE IN FEET
1"=80' HORIZONTAL 24"x36"
80 0 80 160

SHEET NO. SS3

PRELIMINARY NOT FOR CONSTRUCTION

SARATOGA CITY

Beacon Point
Redwood Road
UDOT ACCESS PLAN

9-15-14 PLOT DATE | PROJECT NUMBER | dbase beacon point DRAWING FILE

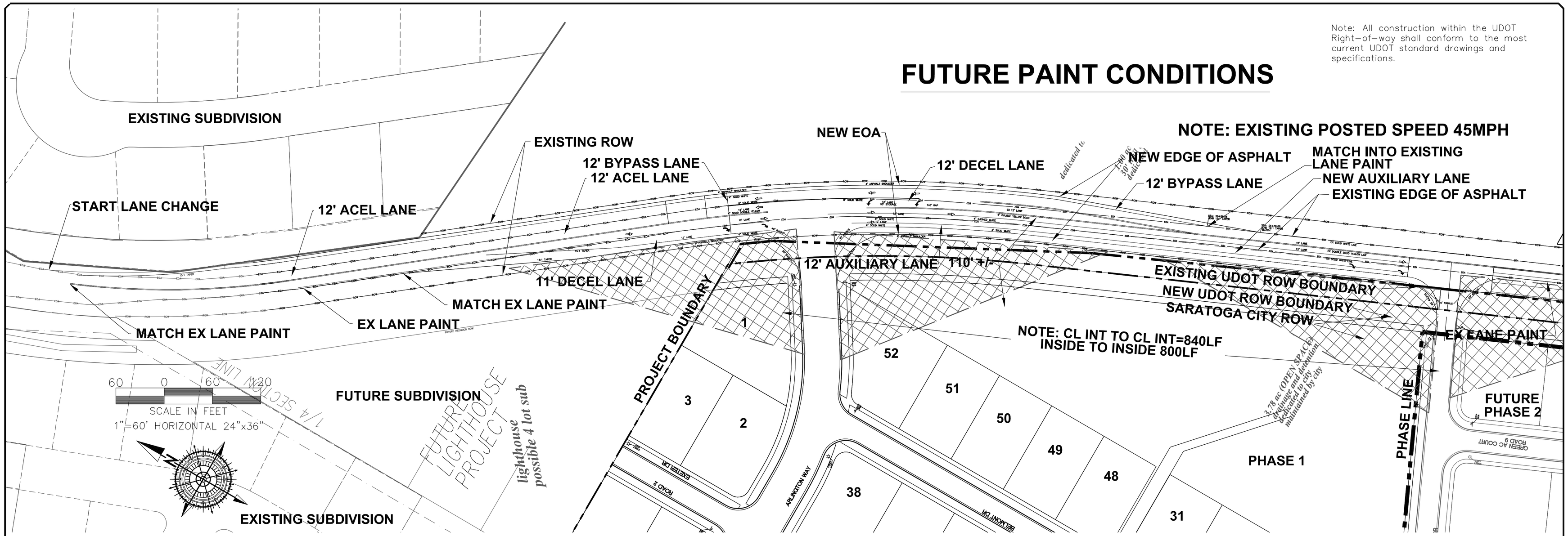
GATEWAY CONSULTING, inc.
P.O. BOX 951005 SOUTH JORDAN, UT 84095
PH: (801) 694-5848 FAX: (801) 432-7050
paul@gatewayconsultingllc.com
CIVIL ENGINEERING • CONSULTING • LAND PLANNING
CONSTRUCTION MANAGEMENT

ORIG. DATE: 11-1-12
SURVEY BY:
DRAWN BY : GPW
DESIGNED BY : GPW
CHECKED BY : GPW
SCALE : 1"=80'

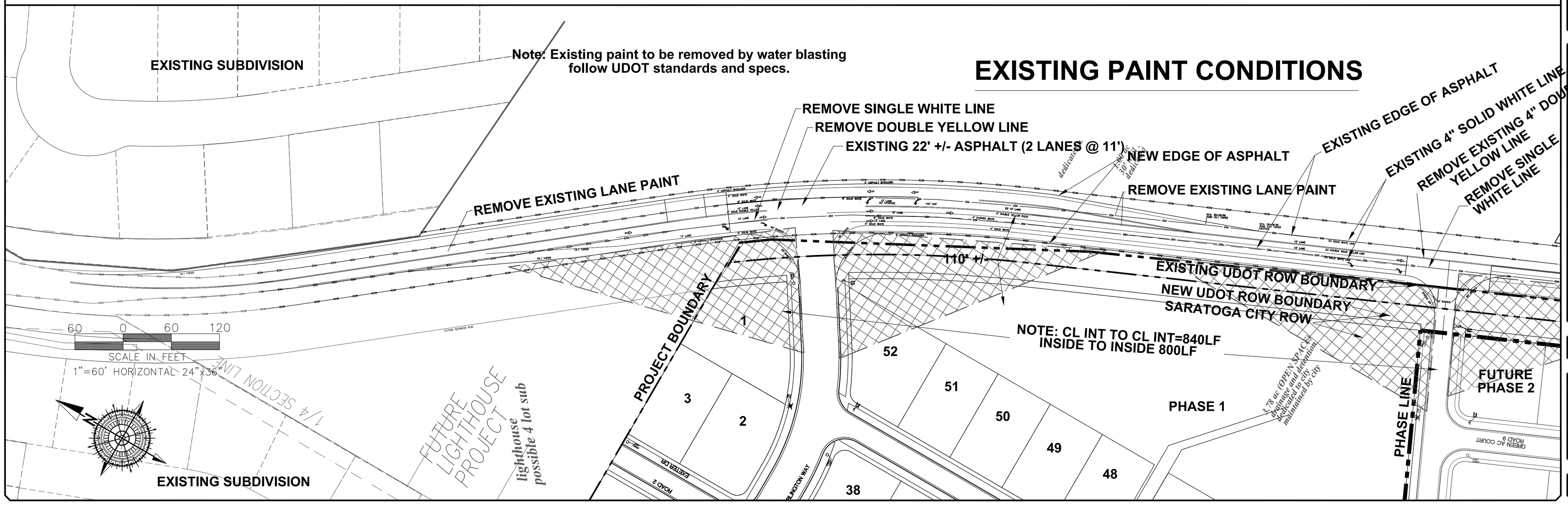
NO.	DESCRIPTION	DATE	APP'D

Note: All construction within the UDOT Right-of-way shall conform to the most current UDOT standard drawings and specifications.

FUTURE PAINT CONDITIONS



EXISTING PAINT CONDITIONS



NO.	DESCRIPTION	DATE	APP'D

ORIG. DATE: 11-1-12
SURVEY BY:
DRAWN BY: GPW
DESIGNED BY: GPW
CHECKED BY: GPW
SCALE: 1"=60'

GATEWAY CONSULTING, inc.
P.O. BOX 951005 SOUTH JORDAN, UT 84095
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CIVIL ENGINEERING - CONSULTING - LAND PLANNING
CONSTRUCTION MANAGEMENT

Beacon Point
Redwood Road
UDOT PAINT STRIPPING PLAN
TRENCH CROSSING

above beacon point
DRAWING FILE
PROJECT NUMBER
9-15-14
PLOT DATE

SARATOGA CITY

PRELIMINARY NOT FOR CONSTRUCTION

SHEET NO. SS4

CONCRETE WASH-OUT

TRACKING PAD

PARCEL A
0.76 ac
dedicated to UDOT for 60' 1/2 width

PARCEL B
1.00 ac (OPEN SPACE)
30' trail corridor
dedicated to city

PARCEL C
3.78 ac (OPEN SPACE)
drainage and detention
dedicated to city
maintained by city

4.06 ac
(OPEN SPACE)
debris basin
dedicated to city
maintained by city
Parcel E

parcel D
detention/ OPEN SPACE
5.68 ac
dedicated to city
maintained by city

LIMEKILN CANYON

FENCE ALONG OPEN SPACE (TYP)

LEGEND

- TEMP DRAINAGE CHANNEL
- STORM LINE
- SILT FENCE
- INLET PROTECTION
- GUTTER PROTECTION
- TRACKING PAD

SEE PAGES ER1 and ER2 FOR DETAILS

N

80 0 80 160

SCALE IN FEET
1"=80' (24"x36" SHEET ONLY)

NO.	DESCRIPTION	DATE	APP'D

ORIG DATE: 07-01-12
SURVEY BY:
DRAWN BY: GPW
DESIGNED BY: GPW
CHECKED BY: GPW
SCALE: 1"=80'

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CIVIL ENGINEERING • CONSULTING • LAND PLANNING
CONSTRUCTION MANAGEMENT

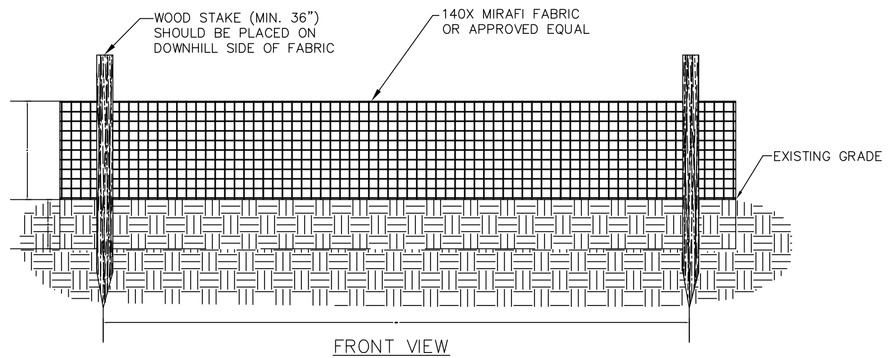
BEACON POINT
PHASE 1
STORM WATER POLLUTION PREVENTION PLAN

SWPPP 3D
DRAWING FILE
PROJECT NUMBER
9-15-14
PLOT DATE:

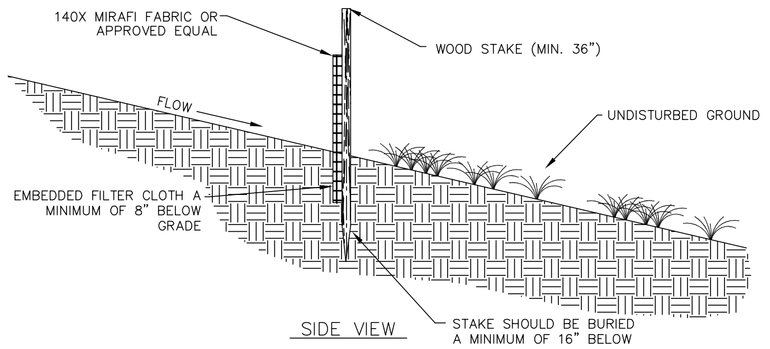
SARATOGA
CITY

PRELIMINARY
NOT FOR
CONSTRUCTION

SHEET NO. SWPPP



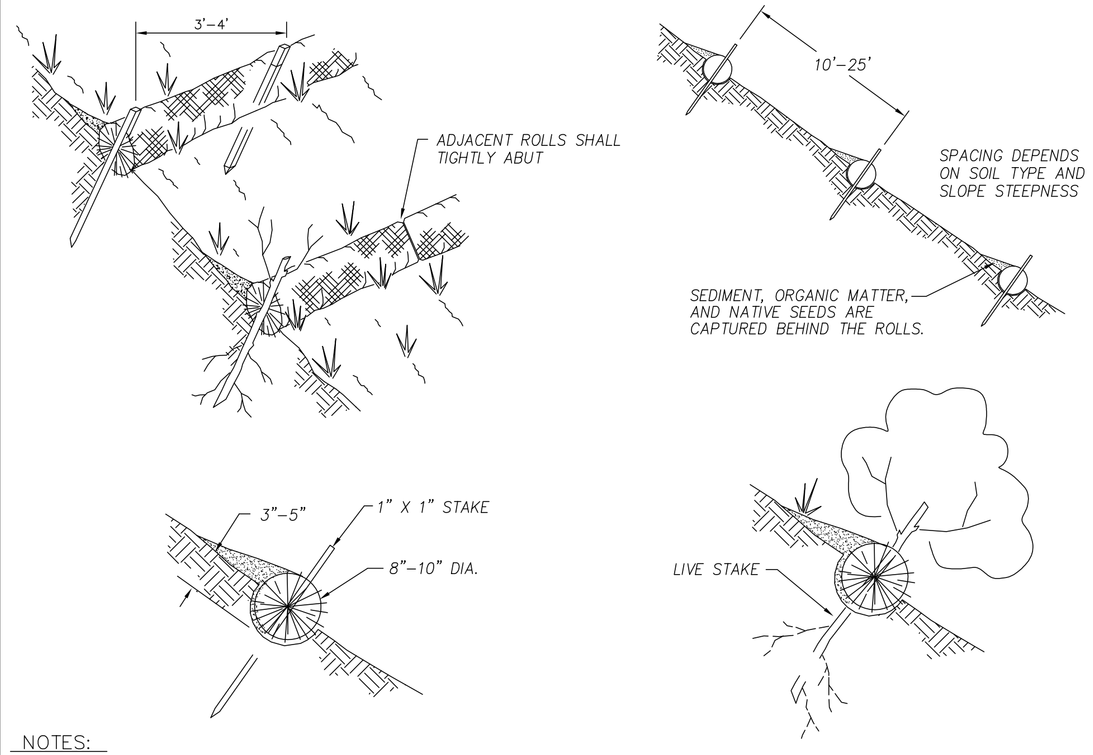
FRONT VIEW



SIDE VIEW

SILT FENCE DETAIL

NOT TO SCALE



NOTES:

Straw wattles shall be installed as soon as construction will allow or when designated by the Engineer. Straw wattles shall be placed in shallow trenches and staked along the contour of disturbed or newly constructed slopes, in accordance with the Plans, perpendicular to the flow direction and parallel to the slope contour.

The wattles shall be installed at the intervals designated by the Engineer.

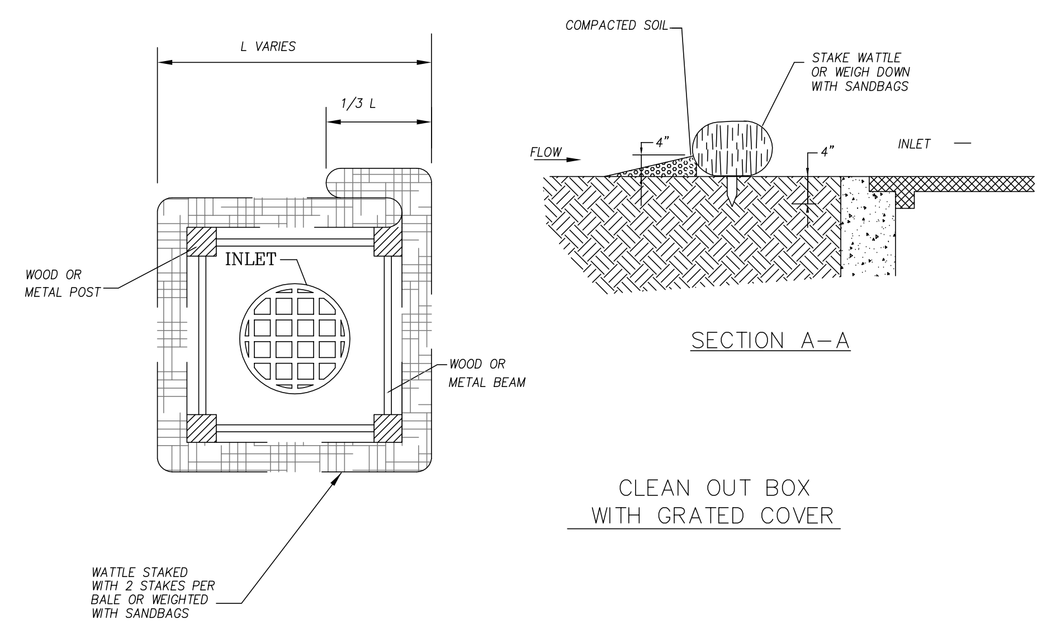
Trench construction and wattle installation shall begin from the base of the slope and work uphill. Excavated material shall be spread evenly along the uphill slope and compacted using hand tamping or other method approved by the Engineer. On gradually sloped or clay-type soils trenches shall be 2 to 3 inches deep. On loose soils, in high rainfall areas, or on steep slopes, trenches shall be 3 to 5 inches deep, or half the thickness of the wattle.

The wattle shall be install snugly into the trench, abutting adjacent wattles tightly, end to end, without overlapping the ends. Wattles shall be staked at each end and at 4 foot centers along their entire length. When trench conditions require, pilot holes for the stakes shall be driven through the wattle and into the soil using a straight bar. Stakes shall be driven through the middle of the wattle, leaving 2 to 3 inches of the stake protruding above the wattle.

Wattles shall be inspected regularly to ensure they remain thoroughly entrenched and in contact with the soil, and immediately after a runoff producing rainfall.

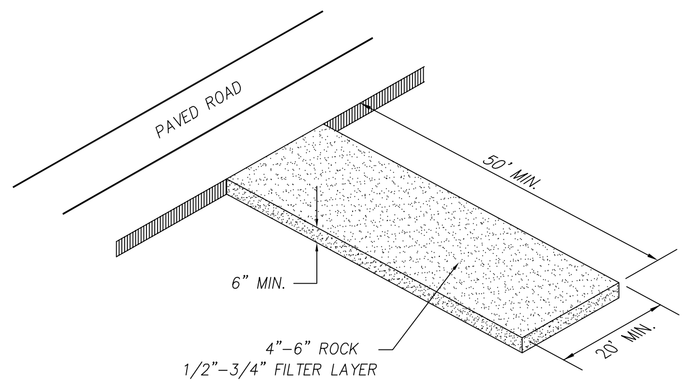
STRAW WATTLE (SILT FENCE ALTERNATIVE)

NOT TO SCALE



SECTION A-A

CLEAN OUT BOX WITH GRATED COVER



NOTES:

1-CLEAR AND GRUB AREA AND GRADE TO PROVIDE MAXIMUM SLOPE OF 2%
2-COMPACT SUBGRADE AND PLACE FILTER FABRIC IF DESIRED (RECOMMENDED FOR ENTRANCES TO REMAIN IN USE FOR MORE THEN 3 MONTHS)
3-PLACE COURSE AGGREGATE, 1 TO 2-$\frac{1}{2}$ INCHES SIZE, TO A MINIMUM DEPTH OF 8 INCHES
4-DAILY INSPECTIONS ARE REQUIRED FOR LOSS OF GRAVEL OR SEDIMENT. SWEEPING OF ASPHALT ROADWAY MAY BE REQUIRED TO ELIMINATE GRAVEL FROM TRACKED TO SURFACE.

VEHICLE TRACKING DETAIL

NOT TO SCALE

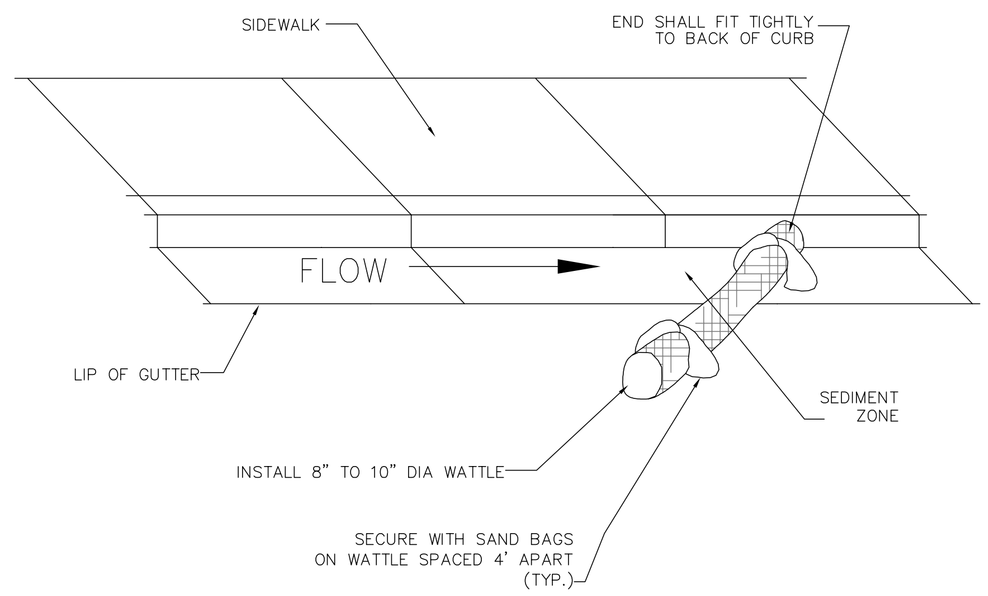
NOTE:
TYPICALLY STRAW BALES ARE NOT RECOMMENDED FOR INLET PROTECTION BARRIERS.

PLACE CURB TYPE SEDIMENT BARRIERS ON GENTLY SLOPING STREET SEGMENTS, WHERE WATER CAN POND AND ALLOW SEDIMENT TO SEPARATE FROM RUNOFF.

SANDBAGS OF EITHER BURLAP OR WOVEN "GEOTEXTILE" FABRIC TO BE USED TO WEIGH DOWN WATTLE IN AREAS WHERE THE WATER FLOW MAY MOVE THE WATTLE.

INSPECT BARRIERS AND REMOVE SEDIMENT AFTER EACH STORM EVENT. SEDIMENT AND GRAVEL MUST BE REMOVED FROM THE TRAVELED WAY IMMEDIATELY.

GUTTER PROTECTION SETUP



NOTE:
INSTALL GUTTER WATTLE MIDWAY BETWEEN IMPACTED INLETS AND CONSTRUCTION DISTURBANCE.

GUTTER PROTECTION SETUP

BMP

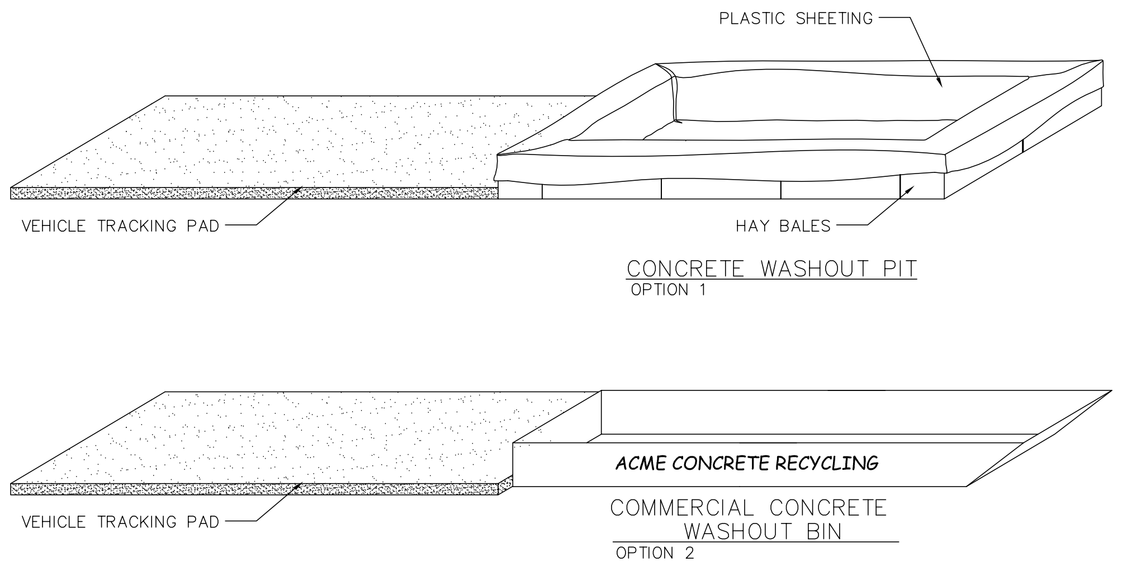
1-AVOID MIXING EXCESS AMOUNTS OF FRESH CONCRETE OR CEMENT ON SITE.
2-PERFORM CONCRETE TRUCK WASHOUT OFF SITE OR IN DESIGNATED AREA
3-DO NOT WASHOUT CONCRETE TRUCKS INTO STORM DRAIN, OPEN DITCHES, STREETS OR STREAMS
4-LOCATE ONSITE WASHOUT AREA MORE THEN 50 FT AWAY FROM NEAREST STORM INLET.
5-WASHOUT CONCRETE WASTE INTO WASHOUT PIT OR COMMERCIAL WASHOUT BIN ONLY.

USE OF CONCRETE WASHOUT

1-IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN THE CONCRETE WASHOUT AREA.
2-WASHOUT CONCRETE WASTE INTO PIT OR CONTAINER WHERE IT CAN SET AND LATER BE BROKEN UP AND DISPOSED OF PROPERLY
3-NO WASTE OR LITTER IS TO BE PERMITTED TO ACCUMULATE IN THE WASHOUT AREA. AREA SHOULD BE CLEAN AT THE END OF EACH WORK DAY.
4-INSTALL PROPER WASTE WATER PROTECTION AT ALL EFFECTED DOWNHILL STORM DRAINS AND INLETS
5-INSTALL A VEHICLE TRACKING PAD TO PROTECT THE STREETS FROM MUD AND OTHER DEBRIS FROM TRUCKS. MAKE SURE ALL TRUCKS ARE CLEAR OF MUD AND ROCK THAT CAN FALL FROM TRUCK WHILE TRAVELING ON STREETS.

CONCRETE WASHOUT AREA

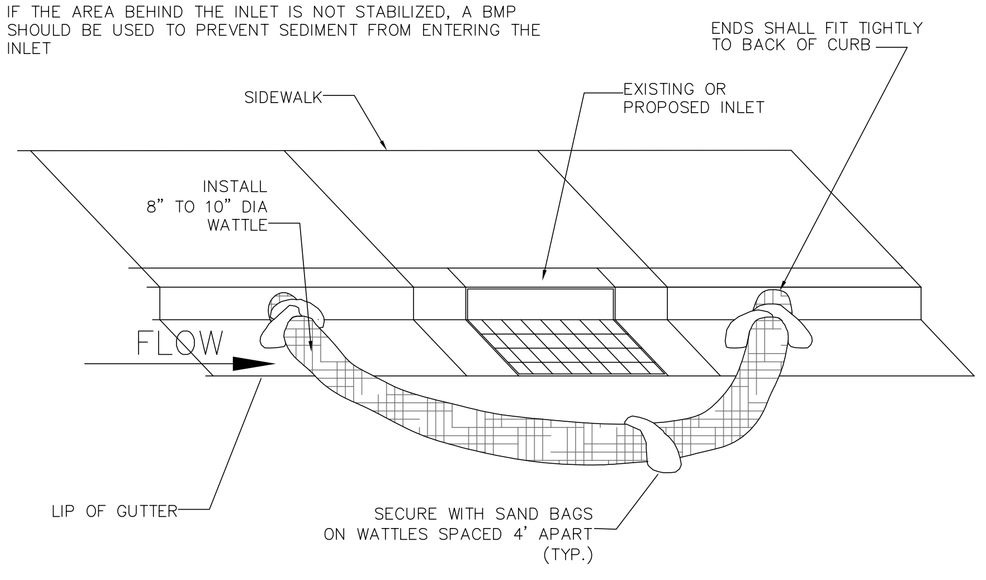
NOT TO SCALE



CONCRETE WASHOUT PIT
OPTION 1

COMMERCIAL CONCRETE WASHOUT BIN
OPTION 2

IF THE AREA BEHIND THE INLET IS NOT STABILIZED, A BMP SHOULD BE USED TO PREVENT SEDIMENT FROM ENTERING THE INLET



INLET PROTECTION BARRIERS

NOT TO SCALE

See Saratoga Springs specifications for further information.

NO.	DESCRIPTION	DATE	APP'D

ORIG. DATE: 03-01-06
SURVEY BY:
DRAWN BY: CPW
DESIGNED BY: CPW
CHECKED BY: CPW
SCALE: N/A

GATEWAY CONSULTING, inc
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CIVIL ENGINEERING - CONSULTING - LAND PLANNING
CONSTRUCTION MANAGEMENT

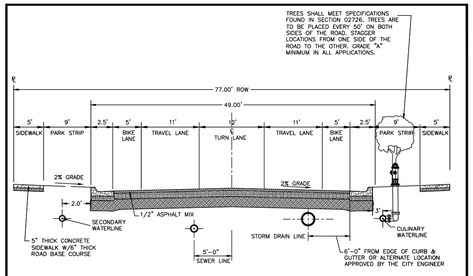
BEACON POINT
PHASE 1
EROSION CONTROL
DETAILS, NOTES, TYPICAL SECTIONS

ER-2 EROSION CONTROL DRAWING FILE
PROJECT NUMBER
8-15-14 PRINT DATE

SARATOGA CITY

PRELIMINARY NOT FOR CONSTRUCTION

SHEET NO. ER-2



NOTES:

1. MAXIMUM DIFFERENCE IN ELEVATION BETWEEN CURB ON OPPOSITE SIDES OF STREET SHALL NOT EXCEED 1'-0"
2. PAVEMENT DESIGN SHALL BE AS RECOMMENDED BY A SOILS REPORT AND A GEOTECHNICAL ENGINEER, AND AS APPROVED BY CITY ENGINEER. LOCATION OF SIDEWALK AND CURB & GUTTER MAY VARY ON INDIVIDUAL ARTERIAL STREETS PER DIRECTION OF CITY ENGINEER.
3. ALL COLLECTORS SHALL CONFORM TO THE CROSS-SECTION DRAWING ABOVE UNLESS APPROVED OTHERWISE BY THE CITY ENGINEER.
4. PROVIDE A MINIMUM 6" THICKNESS OF 3/4" OR 1" CRUSHED GRAVEL BASE COURSE UNDER SIDEWALKS, DRIVEWAY APPROACHES, AND CURB & GUTTER.
5. INSTALL TYPE 2 SLURRY SEAL.
6. HOUSES ARE DISCOURAGED FROM FRONTING ON THESE STREETS.

DESIGN CRITERIA

DESIGN SPEED: 30 M.P.H.

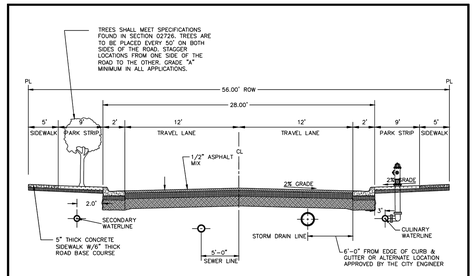
MIN CENTERLINE RADIUS: 300' MIN. UNLESS APPROVED OTHERWISE BY CITY ENGINEER.

VERTICAL CURVE REQUIREMENTS: SAG K VALUE = 49
CREST K VALUE = 29

CBR = 3 AS PER GEOTECH REPORT
ASPHALT = 3"
ROAD BASE = 8"
BORROW = 18"

COLLECTOR 77 RIGHT OF WAY
NOT TO SCALE

DATE: APRIL 2014 | DRAWING NAME: ST-5 | DRAWN BY: STL | CHECKED | APPROVED
REVISIONS: REV DATE BY COMMENTS
SARATOGA SPRINGS CITY
STANDARD DETAILS | STREET STANDARDS | **ST-9**



NOTES:

1. MAXIMUM DIFFERENCE IN ELEVATION BETWEEN CURB ON OPPOSITE SIDES OF STREET SHALL NOT EXCEED 1'-0"
2. PAVEMENT DESIGN MAY BE AS RECOMMENDED BY A SOILS REPORT AND A GEOTECHNICAL ENGINEER, AND AS APPROVED BY CITY ENGINEER. LOCATION OF SIDEWALK AND CURB & GUTTER MAY VARY ON INDIVIDUAL ARTERIAL STREETS PER DIRECTION OF CITY ENGINEER.
3. ALL RESIDENTIAL STREETS SHALL CONFORM TO THE CROSS-SECTION DRAWING ABOVE UNLESS APPROVED OTHERWISE BY THE CITY ENGINEER.
4. PROVIDE A MINIMUM 6" THICKNESS OF 3/4" OR 1" CRUSHED GRAVEL BASE COURSE UNDER SIDEWALKS, DRIVEWAY APPROACHES, AND CURB & GUTTER.
5. INSTALL TYPE 2 SLURRY SEAL.
6. HOUSES MAY FRONT ON THESE STREETS.
7. THIS ROW CROSS SECTION SHALL BE PERMITTED FOR PRIVATE ROAD CROSS SECTIONS IN THE FOLLOWING ZONES: R-2, R-3 AND R-4.

DESIGN CRITERIA

DESIGN SPEED: 25 M.P.H.

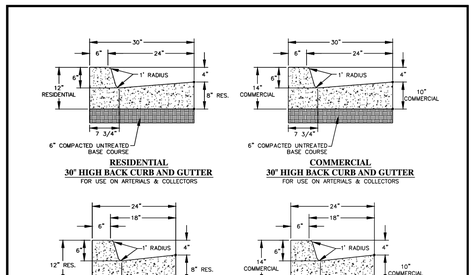
MIN CENTERLINE RADIUS: 200' MIN. UNLESS APPROVED OTHERWISE BY CITY ENGINEER.

VERTICAL CURVE REQUIREMENTS: SAG K VALUE = 37
CREST K VALUE = 20

CBR = 3 AS PER GEOTECH REPORT
ASPHALT = 3"
ROAD BASE = 8"
BORROW = 18"

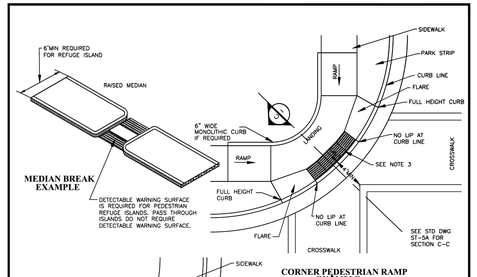
RESIDENTIAL ROADWAY 56' RIGHT-OF-WAY
NOT TO SCALE

DATE: APRIL 2014 | DRAWING NAME: ST-8 | DRAWN BY: STL | CHECKED | APPROVED
REVISIONS: REV DATE BY COMMENTS
SARATOGA SPRINGS CITY
STANDARD DETAILS | STREET STANDARDS | **ST-8**



CURB & GUTTER DETAILS
NOT TO SCALE

DATE: APRIL 2014 | DRAWING NAME: ST-2 | DRAWN BY: STL | CHECKED | APPROVED
REVISIONS: REV DATE BY COMMENTS
SARATOGA SPRINGS CITY
STANDARD DETAILS | STREET STANDARDS | **ST-2**

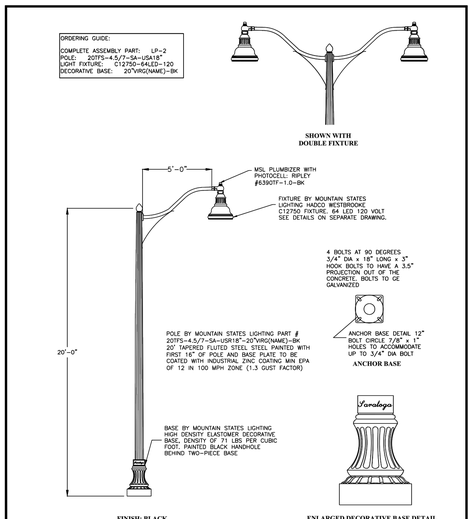


NOTES:

1. REFER TO STD DWG ST 5A FOR PEDESTRIAN ACCESS RAMP DETAIL AND SLOPE REQUIREMENTS.
2. PROVIDE DETECTABLE WARNING SURFACE FOR FULL WIDTH OF RAMP, LANDING, OR CURB CUT. SEE DETAIL A ON STD DWG ST 5A FOR DETECTABLE WARNING SURFACE DIMENSIONS.
3. LOCATE DETECTABLE WARNING SURFACE SO THAT THE EDGE NEAREST THE STREET IS 6" TO 8" FROM THE CURB LINE.
4. WHEN DETECTABLE WARNING SURFACE IS CUT, GRIND REMAINING PORTION OF ANY CUT DOMES. SEAL ALL CUT PANEL EDGES TO PREVENT WATER DAMAGE.
5. LOCATE CURB CUT WITHIN CROSSWALK.

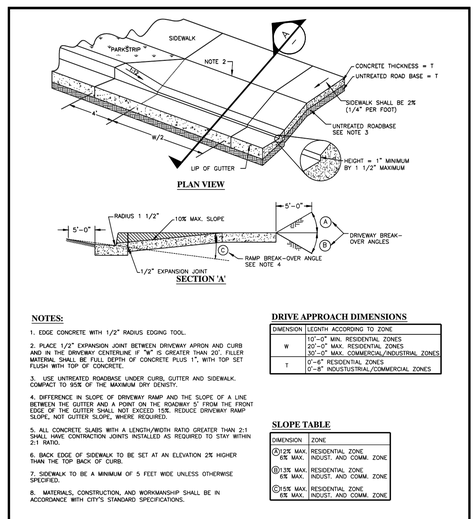
HANDICAP ACCESSIBLE RAMP
NOT TO SCALE

DATE: APRIL 2014 | DRAWING NAME: ST-5E | DRAWN BY: STL | CHECKED | APPROVED
REVISIONS: REV DATE BY COMMENTS
SARATOGA SPRINGS CITY
STANDARD DETAILS | STREET STANDARDS | **ST-5E**



20' LIGHT STANDARD FOR COLLECTOR ROADS, COMMERCIAL AREAS, & PARKING LOT LIGHTS
NOT TO SCALE

DATE: APRIL 2014 | DRAWING NAME: LP-2 | DRAWN BY: STL | CHECKED | APPROVED
REVISIONS: REV DATE BY COMMENTS
SARATOGA SPRINGS CITY
STANDARD DETAILS | STREET LIGHTS | **LP-2**



NOTES:

1. EDGE CONCRETE WITH 1/2" RADIUS EDGING TOOL.
2. PLACE 1/2" EXPANSION JOINT BETWEEN DRIVEWAY APRON AND CURB AND IN THE DRIVEWAY CENTERLINE IF "W" IS GREATER THAN 20'. FILLER MATERIAL SHALL BE FULL DEPTH OF CONCRETE PLUS 1", WITH TOP SET FLUSH WITH TOP OF CONCRETE.
3. USE UNTREATED ROADBASE UNDER CURB, GUTTER AND SIDEWALK. COMPACT TO 95% OF THE MAXIMUM DRY DENSITY.
4. DIFFERENCE IN SLOPE OF DRIVEWAY RAMP AND THE SLOPE OF A LINE BETWEEN THE GUTTER AND A POINT ON THE ROADWAY 5' FROM THE FRONT EDGE OF THE GUTTER SHALL NOT EXCEED 15%. REDUCE DRIVEWAY RAMP SLOPE, NOT GUTTER SLOPE, WHERE REQUIRED.
5. ALL CONCRETE SLABS WITH A LENGTH/WIDTH RATIO GREATER THAN 2:1 SHALL HAVE CONTRACTION JOINTS INSTALLED AS REQUIRED TO STAY WITHIN 2:1 RATIO.
6. BACK EDGE OF SIDEWALK TO BE SET AT AN ELEVATION 2% HIGHER THAN THE TOP BACK OF CURB.
7. SIDEWALK TO BE A MINIMUM OF 5 FEET WIDE UNLESS OTHERWISE SPECIFIED.
8. MATERIALS, CONSTRUCTION, AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH CITY'S STANDARD SPECIFICATIONS.

DRIVE APPROACH DIMENSIONS

DIMENSION	LEGNTH ACCORDING TO ZONE
W	10'-0" MIN. RESIDENTIAL ZONES 20'-0" MAX. RESIDENTIAL ZONES 30'-0" MAX. COMMERCIAL/INDUSTRIAL ZONES
T	0'-6" RESIDENTIAL ZONES 0'-8" INDUSTUSTRIAL/COMMERCIAL ZONES

SLOPE TABLE

DIMENSION	ZONE
(A) 2% MIN. 6% MAX.	RESIDENTIAL ZONE INDUST. AND COMM. ZONE
(B) 1% MIN. 6% MAX.	RESIDENTIAL ZONE INDUST. AND COMM. ZONE
(C) 5% MAX. 6% MAX.	RESIDENTIAL ZONE INDUST. AND COMM. ZONE

FLARE DRIVE APPROACH
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DATE: APRIL 2014 | DRAWING NAME: ST-4 | DRAWN BY: STL | CHECKED | APPROVED
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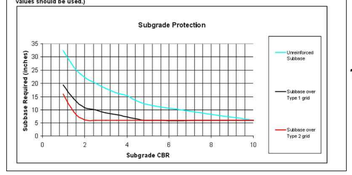
SARATOGA SPRINGS CITY
STANDARD DETAILS | STREET STANDARDS | **ST-4**

TABLE 2

(Subgrade protection layer must be placed over the subgrade soils prior to placement of the pavement section. A design CBR must be determined by a geotechnical engineer. Based on this CBR value, the chart below provides how much Granular Borrow must be placed to adequately support the typical sections referenced in Table 3. If the in-situ CBRs of the subgrade are found to be softer than the design value, those values should be used.)



18"

CBR VALUE IS 2.8%

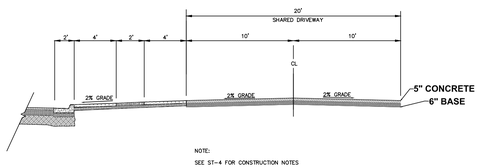
Minimum Pavement Sections Based on Classification
(The following section(s) must be placed on top of the subgrade protection layer outlined in Table 2)

Residential Typical Section (Class I)		
3" AC (Asphalt Concrete) 7" UTBC (Untreated Base Course)		
Collector Typical Section Options (Class II)		
4" AC 8" UTBC		3" AC 7" UTBC Type 1 Geogrid
Minor Arterial Typical Section Options (Class III)		
5" AC 8" UTBC		4" AC 8" UTBC Type 1 Geogrid
Major & Principle Arterial Road Typical Section Options (Class IV)		
5" AC 6" UTBC 9" GB (Granular Borrow)	5" AC 8" UTBC Type 1 Geogrid	4" AC 6" UTBC Type 1 Geogrid 9" GB

(a) Road classification and structural design must be submitted by a licensed and qualified engineer for review and approval by the City Engineer.
(b) Traffic classifications I & II require a 1/2" min HMA design
(c) Traffic classifications III & IV require a 3/4" min HMA design
(d) If collapsible soils are identified in the initial soils investigation or during construction, the subgrade soil shall be over-excavated and re-compacted a minimum of 18-inches or deeper as directed by a licensed and qualified geotechnical engineer.

MIN CITY SPEC
4"/8"/18"
SEE GEOTEC REPORT

DETAIL FOR 20FT SHARED DRIVEWAY



NOTE:
SEE ST-4 FOR CONSTRUCTION NOTES

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See Saratoga Springs specifications for further information.

NO.	DESCRIPTION	DATE	APP'D

ORIG. DATE: 07-01-12
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DESIGNED BY: CPW
CHECKED BY: CPW
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CONSTRUCTION MANAGEMENT

BEACON POINT
PHASE 1
STREET DETAILS

D1 STREET DETAILS 3D
DRAWING FILE
PROJECT NUMBER
9-15-14

SARATOGA CITY

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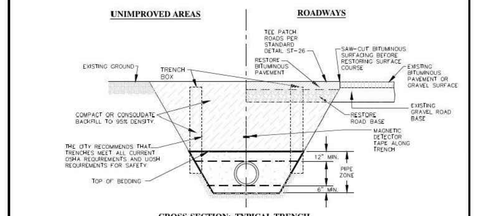
SHEET NO. D1



CROSS-SECTION: TYPICAL TRENCH

RECOMMENDED TRENCH QUANTITIES

PIPE DIAMETER (INCHES)		RECOMMENDED MAXIMUM TRENCH WIDTH FOR FILL IN PIPE ZONE		RECOMMENDED MAXIMUM WIDTH FOR FILL & SURFACING ABOVE PIPE ZONE MEASURED AT TOP OF TRENCH CENTERED ON PIPE	
inches	mm	inches	mm	inches	mm
4	101.6	72	1828.8	96	2438.4
6	152.4	72	1828.8	96	2438.4
8	203.2	72	1828.8	96	2438.4
10	254.0	72	1828.8	96	2438.4
12	304.8	72	1828.8	96	2438.4
15	381.0	72	1828.8	96	2438.4
18	457.2	72	1828.8	96	2438.4
21	533.4	72	1828.8	96	2438.4
24	609.6	72	1828.8	96	2438.4
30	762.0	84	2133.6	108	2743.2
36	914.4	84	2133.6	108	2743.2
42	1066.8	96	2438.4	120	3048.0
48	1219.2	96	2438.4	120	3048.0
54	1371.6	108	2743.2	132	3352.8
60	1524.0	120	3048.0	144	3657.6

NOTES:

1. THE CITY RECOMMENDS CONTRACTOR MEET ALL OF THE REQUIREMENTS ESTABLISHED FOR SAFE TRENCHING. (SEE OSHA AND UOSH REQUIREMENTS, LATEST EDITIONS).
2. CONTRACTOR SHALL LOCATE ALL UNDERGROUND UTILITIES BEFORE LAYING PIPE. WITHIN 50' OF SAID UTILITIES FOR WATER AND SEWER MAINS CROSSED AS SHOWN ON THE MANHOLE DRAWING AS "BLUE STAKE". THE CONTRACTOR WILL MAKE ARRANGEMENTS WITH THE UTILITY COMPANY TO MOVE THE UTILITY IF NECESSARY OR OBTAIN PERMISSION FROM THE CITY ENGINEER TO MODIFY GRADE OF PIPELINE IN ORDER TO GO AROUND UTILITIES.
3. TESTING: ALL NEW SANITARY SEWERS TO BE "TELEVISED" AND NECESSARY REPAIRS MADE BEFORE ACCEPTANCE. ALL LINES SHALL BE PRESSURE TESTED TO 3.5 psi MIN. FOR 5 MINUTES. A MANDRAL OR BALL SHALL BE PULLED THROUGH THE INFORMATION OF A PIPE AS DETERMINED FROM TABLE ABOVE UNLESS SPECIFIED OTHERWISE. MANHOLES SHALL BE TESTED AS PER CITY STANDARDS.
4. ALL SEWER LINES TO BE INSTALLED IN PUBLIC RIGHT-OF-WAY OR RECORDED SEWER EASEMENT UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.
5. WHERE COLLAPSIBLE SOILS ARE ENCOUNTERED, FURNISH, PLACE AND COMPACT IMPORTED BACKFILL MATERIALS AS REQUIRED AND AS DIRECTED.
6. MIN. DEPTH SHALL BE 4' TO TOP OF PIPE. A 2' SPACING MUST BE MAINTAINED BETWEEN ALL WATER LINE PIPE CROSSINGS AND THE TOP OF THE SEWER PIPE.
7. IF THE SEWER LINE IS NOT 13' DEEP A NOTE MUST BE PLACED ON THE PLAT "SHALLOW SEWER DEPTHS, BEFORE EXCAVATING BASEMENTS, CONTRACTOR MUST VERIFY SEWER DEPTH"
8. MAX. DEPTH SHALL BE 20' TO THE TOP OF PIPE UNLESS APPROVED OTHERWISE BY THE CITY ENGINEER.
9. INSTALL MAGNETIC DETECTOR TAPE 3' ABOVE PIPE
10. IN ROCKY SUB-GRADES A MINIMUM OF 18" CLEARANCE ON ALL SIDES OF THE PIPE SHALL BE PROVIDED.

STANDARD SEWER TRENCH

NOT TO SCALE

DATE: APRIL 2014 | DRAWING NAME: SS-1 | DRAWN BY: ETL | ENGINEER | SURVEYOR

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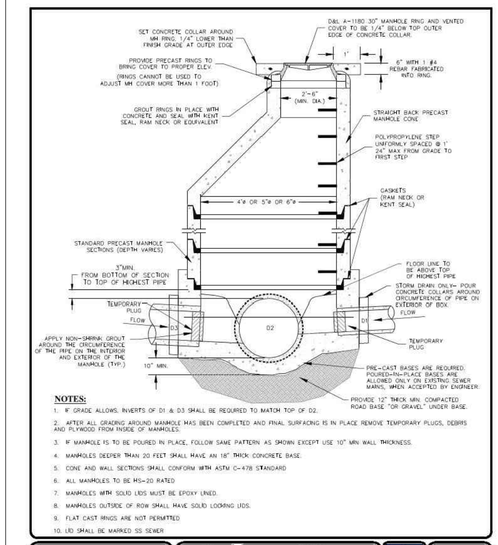
SARATOGA SPRINGS CITY

STANDARD DETAILS | SANITARY SEWER | **SS-1**



NOTES:

1. 8" GRADE ALLOWS, INVERTS OF D1 & D3 SHALL BE REQUIRED TO MATCH TOP OF D2.
2. AFTER ALL GRADING AROUND MANHOLE HAS BEEN COMPLETED AND FINAL SURFACING IS IN PLACE REMOVE TEMPORARY PLUGS, DEBRIS AND PLYWOOD FROM INSIDE OF MANHOLES.
3. IF MANHOLE IS TO BE POURED IN PLACE, FOLLOW SAME PATTERN AS SHOWN EXCEPT USE 10" MIN WALL THICKNESS.
4. MANHOLES DEEPER THAN 20 FEET SHALL HAVE AN 18" THICK CONCRETE BASE.
5. CONE AND WALL SECTIONS SHALL CONFORM WITH ASTM C-478 STANDARD
6. ALL MANHOLES TO BE H-20 RATED
7. MANHOLES WITH SOLID LIDS MUST BE EPOXY LINED.
8. MANHOLES OUTSIDE OF ROW SHALL HAVE SOLID LOCKING LIDS.
9. FLAT CAST RINGS ARE NOT PERMITTED
10. LID SHALL BE MARKED SS SEWER

SANITARY SEWER MANHOLE

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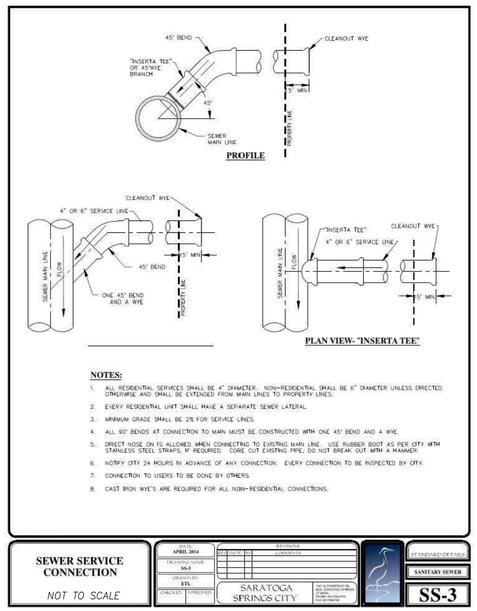
SARATOGA SPRINGS CITY

STANDARD DETAILS | SANITARY SEWER | **SS-2**



PROFILE

PLAN VIEW- "INSERTA TEE"

NOTES:

1. ALL RESIDENTIAL SERVICES SHALL BE 4" DIAMETER. NON-RESIDENTIAL SHALL BE 6" DIAMETER UNLESS DIRECTED OTHERWISE AND SHALL BE EXTENDED FROM MAIN LINES TO PROPERTY LINES.
2. EVERY RESIDENTIAL UNIT SHALL HAVE A SEPARATE SEWER LATERAL.
3. MINIMUM GRADE SHALL BE 2% FOR SERVICE LINES.
4. ALL 90° BENDS AT CONNECTION TO MAIN MUST BE CONSTRUCTED WITH ONE 45° BEND AND A WYE.
5. DIRECT NOSE-ON IS ALLOWED WHEN CONNECTING TO EXISTING MAIN LINE. USE RUBBER BOOT AS PER CITY WITH STAINLESS STEEL STRAPS, IF REQUIRED. CORE CUT EXISTING PIPE, DO NOT BREAK OUT WITH A HAMMER.
6. NOTIFY CITY 24 HOURS IN ADVANCE OF ANY CONNECTION. EVERY CONNECTION TO BE INSPECTED BY CITY.
7. CONNECTION TO USERS TO BE DONE BY OTHERS.
8. CAST IRON WYE'S ARE REQUIRED FOR ALL NON-RESIDENTIAL CONNECTIONS.

SEWER SERVICE CONNECTION

NOT TO SCALE

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REVISIONS: NO. | DATE | BY | COMMENTS

SARATOGA SPRINGS CITY

STANDARD DETAILS | SANITARY SEWER | **SS-3**

See Saratoga Springs specifications for further information.

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PHASE 1

SANITARY SEWER DETAILS

D2 SEWER DETAIL 3D
DRAWING FILE
PROJECT NUMBER
9-15-14

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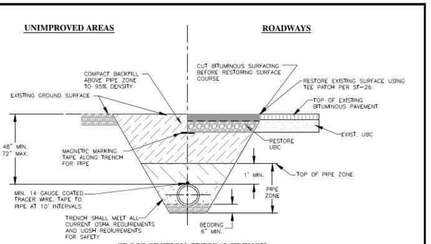


CROSS-SECTION: TYPICAL TRENCH

NOTES:

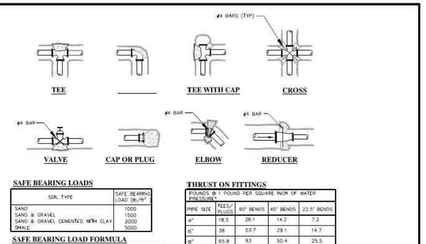
1. WATER LINES 12 INCHES AND LARGER SHALL BE DUCTILE IRON CLASS=51.
2. WATER LINES 10 INCHES AND SMALLER SHALL BE PVC AWWA C900 CLASS 200.
3. VALVES 12 INCHES AND LARGER SHALL BE BUTTERFLY VALVES.
4. WHENEVER POSSIBLE "HOT TAP" CONNECTIONS REQUIRED. HOT TAP VALVE TO BE SUPPORTED DURING CONNECTION. CONTRACTOR TO NOTIFY CITY 24 HOURS IN ADVANCE OF MAKING CONNECTION.
5. PIPE ZONE SHALL BE BACKFILLED WITH BEDDING MATERIAL, OR OTHER ACCEPTABLE MATERIAL.
6. TRACING WIRE TO BE BROUGHT OUTSIDE OF BOTTOM PORTION OF VALVE BOX AND INSIDE TOP TO SURFACE.
7. FURNISH AND INSTALL POLY-WRAP ON DUCTILE IRON PIPE.
8. WHERE COLLAPSIBLE SOILS ARE ENCOUNTERED, FURNISH, PLACE AND COMPACT IMPORTED BACKFILL MATERIALS AS REQUIRED AND AS DIRECTED.

CONSTRUCTION NOTES:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MEETING ALL OF THE REQUIREMENTS ESTABLISHED FOR SAFE TRENCHING. (SEE OSHA AND UOSH REQUIREMENTS, LATEST EDITIONS).
2. MINIMUM COVER OVER TOP OF PIPE SHALL BE 48-INCHES BELOW THE FINISHED GRADE. THIS DEPTH MAY BE INCREASED AS REQUIRED TO MISS UNDERGROUND UTILITIES, STORM DRAINS, OR OTHER OBSTRUCTIONS, OR WHERE INDICATED ON THE DRAWINGS.
3. CONTRACTOR SHALL LOCATE ALL UNDERGROUND UTILITIES BEFORE LAYING PIPE WITHIN 200 FEET OF UTILITY CROSSINGS SHOWN ON THE DRAWINGS, OR AS "BLUE-STAKED."
4. SEWER MAINS, WATER MAINS, GAS MAINS AND OTHER UTILITIES ARE SHOWN ON THE PLANS IN A GENERAL SCHEMATIC WAY ACCORDING TO INFORMATION RECEIVED FROM OTHERS AND THE CITY'S RECORDS, AND IS NOT NECESSARILY ACCURATE OR COMPLETE. THE LOCATIONS SHOWN IS NOT GUARANTEED. THE CONTRACTOR SHALL DETERMINE THE ACTUAL LOCATION OF EXISTING SERVICE CONNECTIONS AND UTILITIES AND TAKE THE NECESSARY STEPS TO AVOID THEM.
5. ANY DAMAGE TO EXISTING UTILITIES SHALL BE REPAIRED AT THE CONTRACTOR'S SOLE EXPENSE.
6. THE CONTRACTOR MAY, AT HIS DISCRETION, USE SLOPING WALLS IN UNIMPROVED TERRAIN.

CULINARY WATERLINE TRENCH
NOT TO SCALE

DATE: APRIL 2014 | REVISIONS: NO. DATE DESCRIPTION
DRAWING NAME: CW-1 | DRAWN BY: ETL | SCHEDULED | APPROVED
SARATOGA SPRINGS CITY
STANDARD DETAILS | CULINARY WATER | **CW-1**



SAFE BEARING LOADS

SOIL TYPE	SAFE BEARING LOAD (lb/ft²)
SAND	1000
SAND & GRAVEL	1500
SAND & GRAVEL CEMENTED WITH CLAY	2000
RANCK	5000

SAFE BEARING LOAD FORMULA

THRUST BLOCK AREA AGAINST TRENCH WALL (SQUARE FEET) = THRUST ON FITTING / SAFE BEARING LOAD OF SOIL

NOTES:

1. REINFORCING BARS SHALL BE EPOXY COATED.
2. RESIDENT PROJECT ENGINEER WILL CALCULATE QUANTITIES OF CONCRETE NEED AND SPECIFY PLACEMENT METHODS & REQUIREMENTS; MINIMUM SHALL BE APPROVED BY CITY ENGINEER
3. CONCRETE SHALL BE 4000 PSI MIN.
4. POUR CONCRETE AGAINST UNDISTURBED SOIL

THRUST ON FITTINGS

POUNDS @ 1 POUND PER SQUARE INCH OF WATER PRESSURE

PIPE SIZE	TEES/ PLUGS	90° BENDS	45° BENDS	22.5° BENDS
4"	18.5	26.1	14.2	7.2
6"	38	53.7	29.1	14.7
8"	65.8	93	50.4	25.5
10"	103.5	152	82.4	41.7
12"	153.1	216.4	117.2	59.4
14"	215.5	304.7	164.9	84
16"	281.5	398.1	215.4	109.8
18"	356.3	503.8	272.6	139
20"	439.8	622	336.8	171.6
24"	633.5	895.6	484.7	247.1

*MULTIPLY THRUST BY MAXIMUM WATER PRESSURE

*PIPE SIZES LARGER THAN 24" SMALL BE THRUST BLOCKED AS PER ENGINEER RECOMMENDATION

THRUST BLOCK AREA AGAINST TRENCH WALL (SQUARE FEET)

ASSUMING SAND AND MAX PRESSURE OF 150 PSI. SIZE MAY BE REDUCED WITH AN ENGINEERED SUBMITTAL AND AS APPROVED BY THE CITY ENGINEER

PIPE SIZE	TEES/ PLUGS	90° BENDS	45° BENDS	22.5° BENDS
4"	2.8	3.9	2.1	1.1
6"	5.7	8.1	4.4	2.2
8"	9.9	14.0	7.6	3.8
10"	16.1	22.8	12.4	6.3
12"	23.0	32.5	17.6	8.9
14"	32.3	45.7	24.7	12.6
16"	42.2	59.7	32.3	16.5
18"	53.4	75.6	40.9	20.9
20"	66.0	93.3	50.5	25.7
24"	95.0	134.3	72.7	37.1

CONCRETE THRUST BLOCKS
NOT TO SCALE

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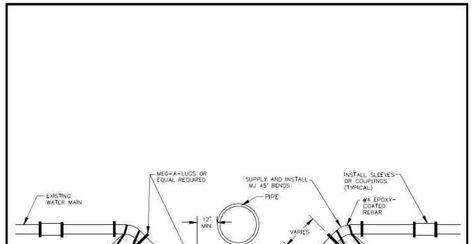
DRAWING NAME: CW-2 | DRAWN BY: ETL | SCHEDULED | APPROVED
SARATOGA SPRINGS CITY
STANDARD DETAILS | CULINARY WATER | **CW-2**

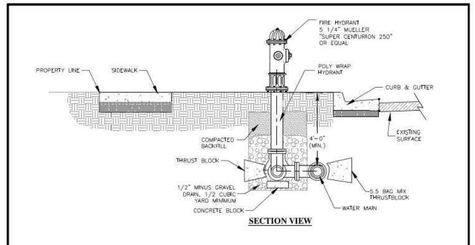


NOTES:

1. CITY TO BE GIVEN 72 HOUR NOTICE BEFORE LOOPING ANY WATERLINE WHEN SHUT OFF IS REQUIRED
2. A CASE OR SLEEVE IS REQUIRED WHEN CROSSING CULINARY WATER UNDER SANITARY AND STORM SEWER.
3. ENGINEER SHALL DETERMINE # AND LOCATION OF RESTRAINTS.

CULINARY WATERLINE LOOP
NOT TO SCALE

DATE: APRIL 2014 | REVISIONS: NO. DATE DESCRIPTION
DRAWING NAME: CW-3 | DRAWN BY: ETL | SCHEDULED | APPROVED
SARATOGA SPRINGS CITY
STANDARD DETAILS | CULINARY WATER | **CW-3**

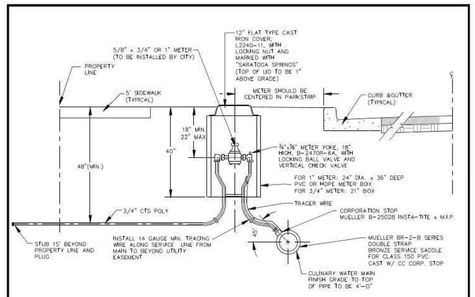


NOTES:

1. HYDRANT SHALL BE "TRAFFIC" TYPE WITH A REPLACEABLE BREAK-AWAY JUST IMMEDIATELY ABOVE GROUND.
2. HYDRANT SHALL BE CENTERED IN A CONCRETE PAD.

FIRE HYDRANT CONNECTION
NOT TO SCALE

DATE: APRIL 2014 | REVISIONS: NO. DATE DESCRIPTION
DRAWING NAME: CW-4 | DRAWN BY: ETL | SCHEDULED | APPROVED
SARATOGA SPRINGS CITY
STANDARD DETAILS | CULINARY WATER | **CW-4**

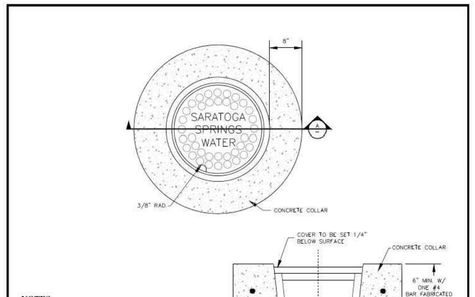


NOTES:

1. INSPECTION: METER BOX AND SERVICE LINE SHALL BE INSPECTED BY CITY PRIOR TO BACKFILLING.
2. BACKFILL: INSTALL BACKFILL IN LIFTS NOT EXCEEDING 8" AFTER COMPACTION. COMPACT EACH LIFT TO AN AVERAGE DRY DENSITY OF 95% WITH NO DENSITY TEST RESULT LESS THAN 92%.
3. CONTRACTOR TO SUPPLY ALL MATERIALS EXCLUDING METER
4. METER BOXES SHOULD BE PVC OR MOPE.
5. PIPE: INSTALL MINIMUM 3/4" CTS POLY PIPE (SDR=9) FROM MAIN TO METER AND FROM METER TO BUILDING. MINIMUM 1" POLYETHYLENE PIPE TO BE USED IN COMMERCIAL AREAS. INSTALL TRACING WIRE FROM MAIN LINE TO METER.
6. PLACEMENT: ALL METERS ARE TO BE INSTALLED IN THE PARK STRIP, MUST BE PLACED NEAR MIDPOINT OF THE LOT, AND MUST NOT BE LOCATED IN A DRIVEWAY OR IN A SIDEWALK.
7. METER YOKE TO BE MUELLER B-2470R-6A, OR ACCEPTABLE EQUAL
9. SERVICE SADDLES SHALL BE MUELLER BR-2-B SERIES, OR EQUAL
11. METER LID TO BE 1" ABOVE LINE GRADE OF WALK/CURB
12. STAINLESS STEEL LINER INSERTS WILL BE REQUIRED INSIDE OF TUBING AT COMPRESSION FITTINGS.
13. WATER SERVICES SHALL BE STUBBED TO A POINT APPROXIMATELY 1' BEYOND UTILITY EASEMENT (PUE).
14. 1" METER INSTALLATION TO BE SIMILAR USING 1" METER, PIPE, AND FITTINGS.

RESIDENTIAL METER CONNECTION 3/4" x 5/8" OR 1"
NOT TO SCALE

DATE: APRIL 2014 | REVISIONS: NO. DATE DESCRIPTION
DRAWING NAME: CW-5 | DRAWN BY: ETL | SCHEDULED | APPROVED
SARATOGA SPRINGS CITY
STANDARD DETAILS | CULINARY WATER | **CW-5**



NOTES:

1. ALL WORK SHALL CONFORM TO APWA STANDARDS UNLESS OTHERWISE APPROVED BY CITY ENGINEER

CONCRETE COLLAR

DATE: APRIL 2014 | REVISIONS: NO. DATE DESCRIPTION
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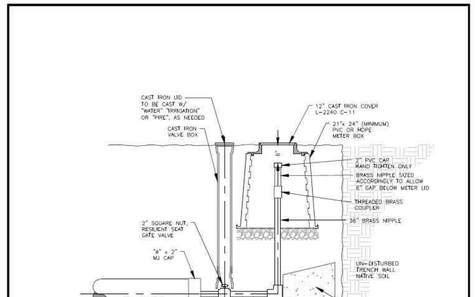
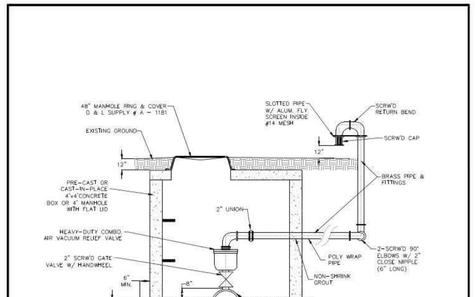
SARATOGA SPRINGS CITY
STANDARD DETAILS | STREET STANDARDS | **CW-15**



2 INCH BLOW-OFF VALVE
NOT TO SCALE

DATE: APRIL 2014 | REVISIONS: NO. DATE DESCRIPTION
DRAWING NAME: CW-13 | DRAWN BY: ETL | SCHEDULED | APPROVED
SARATOGA SPRINGS CITY
STANDARD DETAILS | CULINARY WATER | **CW-13**



NOTE:

1. SIZE OF AIR-VACUUM RELIEF VALVE & PIPING SHALL BE AS DETERMINED BY PROJECT ENGINEER; AND APPROVED BY CITY ENGINEER.
2. LOCATE RISER IN LANDSCAPED AREA BEHIND CURB & GUTTER OR APPROX 2 FT. FROM R/W LINE, AS DIRECTED BY CITY ENGINEER.
3. PROVIDE BOLLARDS OR OTHER PROTECTION FOR RISER IF AND AS DIRECTED BY CITY INSPECTOR.

AIR VACUUM RELIEF VALVE
NOT TO SCALE

DATE: APRIL 2014 | REVISIONS: NO. DATE DESCRIPTION
DRAWING NAME: CW-12 | DRAWN BY: ETL | SCHEDULED | APPROVED
SARATOGA SPRINGS CITY
STANDARD DETAILS | CULINARY WATER | **CW-12**

See Saratoga Springs specifications for further information.

NO.	DESCRIPTION	DATE	APP'D

ORIG. DATE: 07-01-12
SURVEY BY:
DRAWN BY: CPW
DESIGNED BY: CPW
CHECKED BY: CPW
SCALE: NOT TO SCALE

GATEWAY CONSULTING, inc
P.O. BOX 951005 SOUTH JORDAN, UT 84095
PH: (801) 694-5848 FAX: (801) 432-7050
paul@gatewayconsultingllc.com
CIVIL ENGINEERING • CONSULTING • LAND PLANNING
CONSTRUCTION MANAGEMENT

BEACON POINT PHASE 1

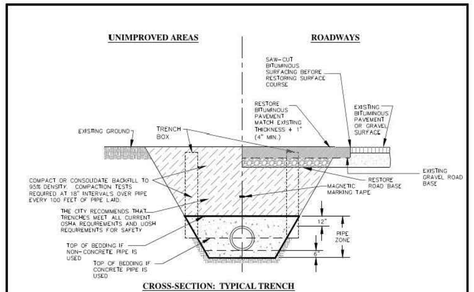
WATER DETAILS

03 WATER DETAILS 3D
DRAWING FILE
PROJECT NUMBER
9-15-14

SARATOGA CITY

PRELIMINARY NOT FOR CONSTRUCTION

SHEET NO. D3



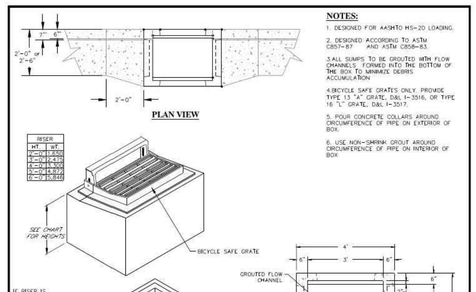
CROSS-SECTION: TYPICAL TRENCH

NOTES:

1. THE CITY RECOMMENDS CONTRACTOR MEET ALL OF THE REQUIREMENTS ESTABLISHED FOR SAFE TRENCHING. (SEE OSHA AND UDOH REQUIREMENTS, LATEST EDITIONS).
2. CONTRACTOR SHALL LOCATE ALL UNDERGROUND UTILITIES BEFORE LAYING PIPE WITHIN 50' OF SAID UTILITIES WHICH MAY BE EXPOSED, DAMAGED OR CROSSED AS SHOWN ON THE DRAWINGS OR AS "BLUE STAKED". THE CONTRACTOR WILL MAKE ARRANGEMENTS WITH THE UTILITY COMPANY TO MOVE THE UTILITY IF NECESSARY OR OBTAIN PERMISSION FROM THE CITY ENGINEER TO MODIFY GRADE OF PIPELINE IN ORDER TO GO AROUND UTILITIES.
3. TESTING: ALL STORM DRAIN LINES TO BE "ROGGED" AND NECESSARY REPAIRS MADE BEFORE ACCEPTANCE. A MANDREL OR BALL CAN BE USED TO VERIFY DEFORMATION OF A PIPE AS DETERMINED FROM THE VIDEO UNLESS SPECIFIED OTHERWISE.
4. ALL STORM DRAIN TO BE INSTALLED IN PUBLIC RIGHT-OF-WAY OR RECORDED DRAINAGE EASEMENT UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.
5. WHERE COLLAPSIBLE SOILS ARE ENCOUNTERED, FURNISH, PLACE AND COMPACT IMPORTED BACKFILL MATERIALS AS REQUIRED AND AS DIRECTED.
6. MIN. DEPTH OF COVER SHALL MEET MANUFACTURERS RECOMMENDATIONS.
7. IN ROCKY SUB-GRADES 18" OF CLEARANCE SHALL BE PROVIDED ON ALL SIDES OF PIPE.
8. INSTALL MAGNETIC DETECTOR TAPE 3" ABOVE PIPE IN TRENCH.

STORM DRAIN TRENCH
NOT TO SCALE

DATE: APRIL 2014 | DRAWING NAME: SD-1 | DRAWN BY: ETL | CHECKED: | APPROVED: | REVISIONS: NO. | DATE | COMMENTS | SARATOGA SPRINGS CITY | STANDARD DETAILS | STORM DRAIN | SD-1

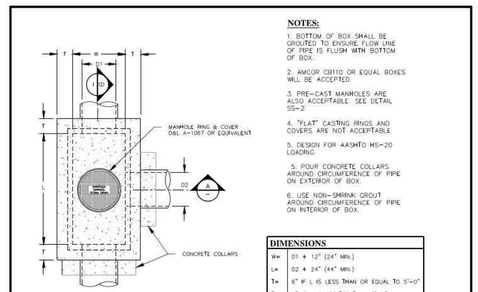


NOTES:

1. DESIGNED FOR AASHTO HS-20 LOADING.
2. DESIGNED ACCORDING TO ASTM C857-97 AND ASTM C858-83.
3. ALL SUMPS TO BE GROUTED WITH FLOW CHANNELS FORMED INTO THE BOTTOM OF THE BOX TO MINIMIZE DEBRIS ACCUMULATION.
4. BICYCLE SAFE GRATES ONLY. PROVIDE TYPE 13 "A" GRATE, D&L I-3516, OR TYPE 16 "L" GRATE, D&L I-3517.
5. POUR CONCRETE COLLARS AROUND CIRCUMFERENCE OF PIPE ON EXTERIOR OF BOX.
6. USE NON-SHRINK GROUT AROUND CIRCUMFERENCE OF PIPE ON INTERIOR OF BOX.

GUTTER INLET BOX
NOT TO SCALE

DATE: APRIL 2014 | DRAWING NAME: SD-2 | DRAWN BY: ETL | CHECKED: | APPROVED: | REVISIONS: NO. | DATE | COMMENTS | SARATOGA SPRINGS CITY | STANDARD DETAILS | STORM DRAIN | SD-2

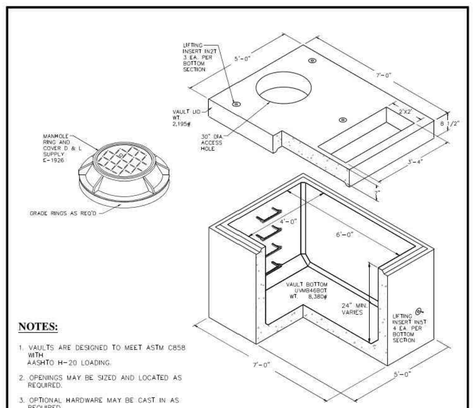


NOTES:

1. BOTTOM OF BOX SHALL BE GROUTED TO ENSURE FLOW LINE OF PIPE IS FLUSH WITH BOTTOM OF BOX.
2. AMCOR CB110 OR EQUAL BOXES WILL BE ACCEPTED.
3. PRE-CAST MANHOLES ARE ALSO ACCEPTABLE. SEE DETAIL SS-2.
4. "FLAT" CASTING RINGS AND COVERS ARE NOT ACCEPTABLE
5. DESIGN FOR AASHTO HS-20 LOADING
5. POUR CONCRETE COLLARS AROUND CIRCUMFERENCE OF PIPE ON EXTERIOR OF BOX.
6. USE NON-SHRINK GROUT AROUND CIRCUMFERENCE OF PIPE ON INTERIOR OF BOX.

CLEANOUT BOX
NOT TO SCALE

DATE: APRIL 2014 | DRAWING NAME: SD-3 | DRAWN BY: ETL | CHECKED: | APPROVED: | REVISIONS: NO. | DATE | COMMENTS | SARATOGA SPRINGS CITY | STANDARD DETAILS | STORM DRAIN | SD-3

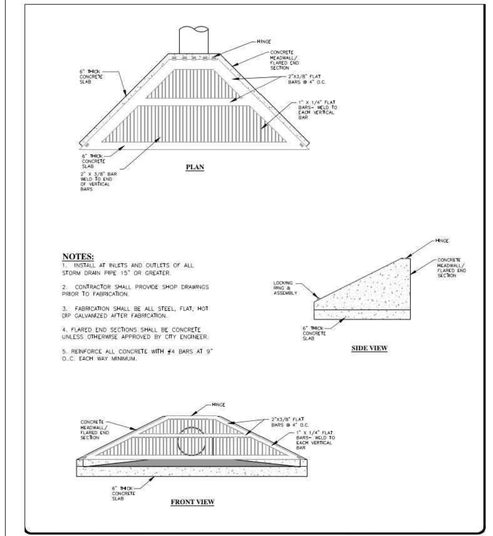


NOTES:

1. VAULTS ARE DESIGNED TO MEET ASTM C858 WITH AASHTO H-20 LOADING.
2. OPENINGS MAY BE SIZED AND LOCATED AS REQUIRED.
3. OPTIONAL HARDWARE MAY BE CAST IN AS REQUIRED.
4. CHECK HARDWARE SECTION FOR OPTIONAL HARDWARE.
5. POUR CONCRETE COLLARS AROUND CIRCUMFERENCE OF PIPE ON EXTERIOR OF BOX.
6. USE NON-SHRINK GROUT AROUND CIRCUMFERENCE OF PIPE ON INTERIOR OF BOX.
7. BICYCLE SAFE GRATES ONLY. PROVIDE TYPE 13 "A" GRATE, D&L I-3516, OR TYPE 16 "L" GRATE, D&L I-3517.

COMBINATION GUTTER INLET & CLEANOUT BOX
NOT TO SCALE

DATE: APRIL 2014 | DRAWING NAME: SD-4 | DRAWN BY: ETL | CHECKED: | APPROVED: | REVISIONS: NO. | DATE | COMMENTS | SARATOGA SPRINGS CITY | STANDARD DETAILS | STORM DRAIN | SD-4



INLET/OUTLET TRASH GRATES
NOT TO SCALE

DATE: APRIL 2014 | DRAWING NAME: SD-5 | DRAWN BY: ETL | CHECKED: | APPROVED: | REVISIONS: NO. | DATE | COMMENTS | SARATOGA SPRINGS CITY | STANDARD DETAILS | STORM DRAIN | SD-5

See Saratoga Springs specifications for further information.

NO.	DESCRIPTION	DATE	APP'D

ORIG. DATE: 07-01-12
SURVEY BY:
DRAWN BY: CPW
DESIGNED BY: CPW
CHECKED BY: CPW
SCALE: NOT TO SCALE

GATEWAY CONSULTING, inc
P.O. BOX 951005 SOUTH JORDAN, UT 84095
PH: (801) 694-5848 FAX: (801) 432-7050
paul@gatewayconsultingllc.com
CIVIL ENGINEERING • CONSULTING • LAND PLANNING
CONSTRUCTION MANAGEMENT

BEACON POINT
PHASE 1

STORM DETAILS

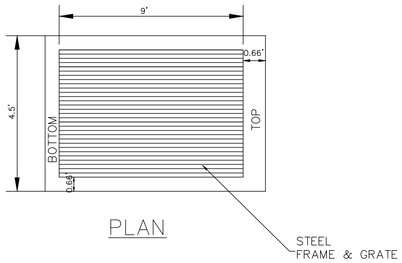
04-SEWER DETAIL 3D
DRAWING FILE

PROJECT NUMBER

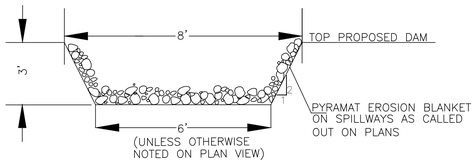
9-15-14

SARATOGA CITY

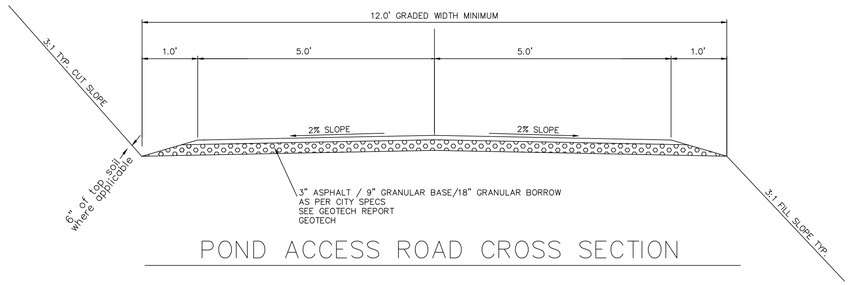
SHEET NO. D4A



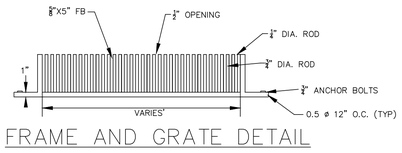
PLAN



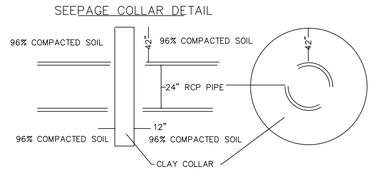
SPILLWAY CHANNEL

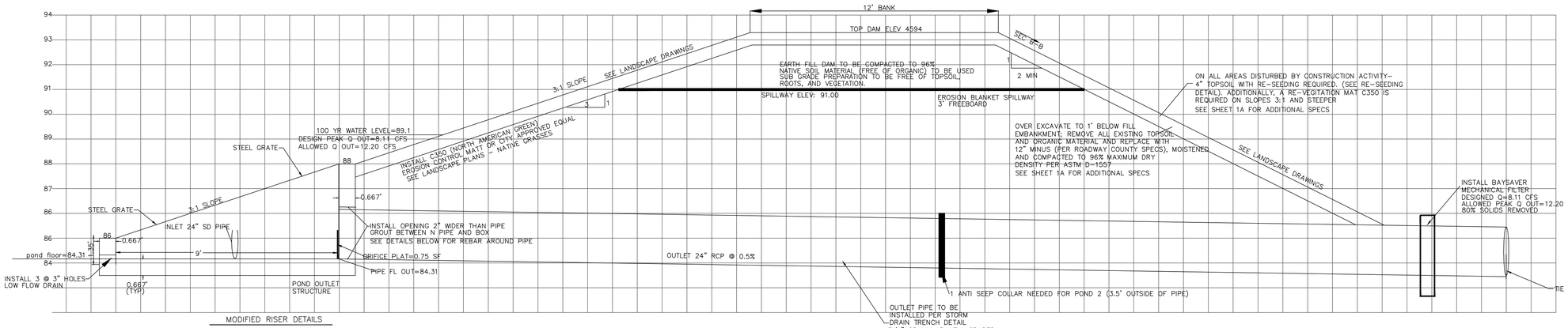


POND ACCESS ROAD CROSS SECTION



FRAME AND GRATE DETAIL



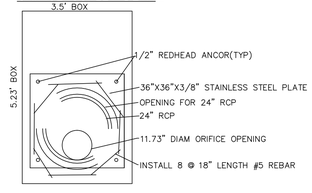


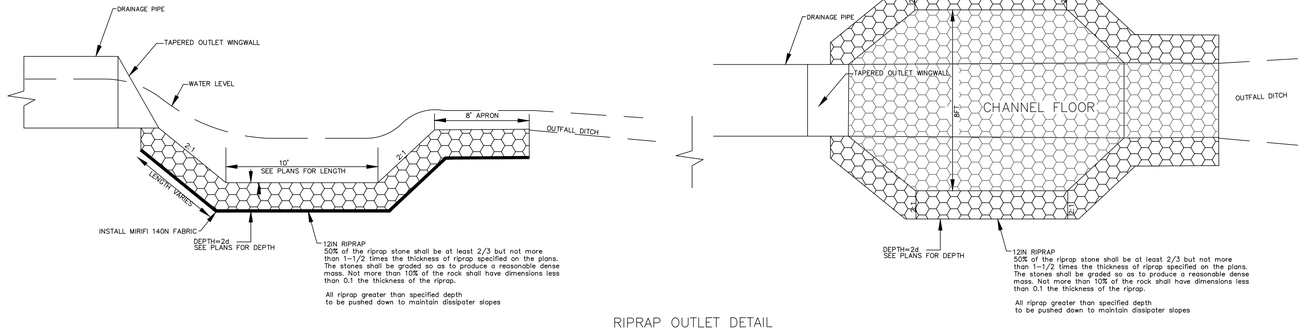
MODIFIED RISER DETAILS

DETENTION POND OUTLET
DETAIL AND CROSS SECTION

A SECTION

ORIFICE OUTLET DETAIL





RIPRAP OUTLET DETAIL

NO.	DESCRIPTION	DATE	APP'D

ORIG. DATE: 01-01-07
SURVEY BY: N/A
DRAWN BY: CPW
DESIGNED BY: CPW
CHECKED BY: CPW
SCALE: N/A

GATEWAY CONSULTING, inc.
P.O. BOX 951005 SOUTH JORDAN, UT 84095
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CONSTRUCTION MANAGEMENT

BEACON POINT
PHASE 1

STORM DETAILS

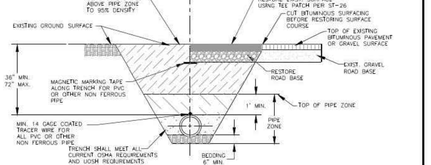
04- STORM DETAILS 3D
DRAWING FILE

PROJECT NUMBER

9-15-14
PLOT DATE:

SARATOGA CITY

SHEET NO. D4B



CROSS-SECTION: TYPICAL TRENCH

NOTES:

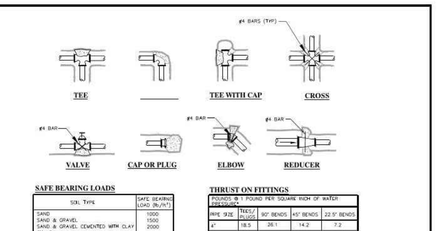
1. WATER LINES 12 INCHES AND LARGER SHALL BE DUCTILE IRON CLASS=51.
2. WATER LINES 10 INCHES AND SMALLER SHALL BE PVC AWWA C900 CLASS 200.
3. VALVES 12 INCHES AND LARGER SHALL BE BUTTERFLY VALVES.
4. WHENEVER POSSIBLE "HOT TAP" CONNECTIONS REQUIRED. HOT TAP VALVE TO BE SUPPORTED DURING CONNECTION. CONTRACTOR TO NOTIFY CITY 24 HOURS IN ADVANCE OF MAKING CONNECTION.
5. PIPE ZONE SHALL BE BACKFILLED WITH BEDDING MATERIAL, OR OTHER ACCEPTABLE MATERIAL.
6. TRACING WIRE TO BE BROUGHT OUTSIDE OF BOTTOM PORTION OF VALVE BOX AND INSIDE TOP TO SURFACE.
7. FURNISH AND INSTALL POLY-WRAP ON DUCTILE IRON PIPE. POLY-WRAP MAY BE DELETED WHERE DIRECTED BY CITY ENGINEER.
8. WHERE COLLAPSIBLE SOILS ARE ENCOUNTERED, FURNISH, PLACE AND COMPACT IMPORTED BACKFILL MATERIALS AS REQUIRED AND AS DIRECTED.

CONSTRUCTION NOTES:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MEETING ALL OF THE REQUIREMENTS ESTABLISHED FOR SAFE TRENCHING. (SEE OSHA AND UOSM REQUIREMENTS, LATEST EDITIONS)
2. MINIMUM COVER OVER TOP OF PIPE SHALL BE 36-INCHES BELOW THE FINISHED GRADE. THIS DEPTH MAY BE INCREASED AS REQUIRED TO MISS UNDERGROUND UTILITIES, STORM DRAINS, OR OTHER OBSTRUCTIONS, OR WHERE INDICATED ON THE DRAWINGS.
3. CONTRACTOR SHALL LOCATE ALL UNDERGROUND UTILITIES BEFORE LAYING PIPE WITHIN 200 FEET OF UTILITY CROSSINGS SHOWN ON THE DRAWINGS, OR AS "BLUE-STAKED."
4. SEWER MAINS, WATER MAINS, GAS MAINS AND OTHER UTILITIES ARE SHOWN ON THE PLANS IN A GENERAL SCHEMATIC WAY ACCORDING TO INFORMATION RECEIVED FROM OTHERS AND SOMETIMES FROM FIELD MEASUREMENTS. THE ACCURACY OR COMPLETENESS OF THE LOCATIONS SHOWN IS NOT GUARANTEED. THE CONTRACTOR SHALL DETERMINE THE ACTUAL LOCATION OF EXISTING SERVICE CONNECTIONS AND UTILITIES AND TAKE THE NECESSARY STEPS TO AVOID THEM.
5. ANY DAMAGE TO EXISTING UTILITIES SHALL BE REPAIRED AT THE CONTRACTOR'S SOLE EXPENSE.
6. THE CONTRACTOR MAY, AT HIS DISCRETION, USE SLOPING WALLS IN UNIMPROVED TERRAIN.

TRENCH DETAIL
NOT TO SCALE

APRIL 2014 | DRAWING NAME: PI-1 | DRAWN BY: | CHECKED BY: ETL | APPROVED BY: | APPROVED DATE:
REVISIONS: NO. | DATE | BY | COMMENTS
SARATOGA SPRINGS CITY
STANDARD DETAILS | PRESSURIZED IRR | **PI-1**



SAFE BEARING LOADS

SOIL TYPE	SAFE BEARING LOAD (lb/ft²)
SAND	1000
SAND & GRAVEL	1500
SAND & GRAVEL, CEMENTED WITH CLAY	2000
SHALE	5000

SAFE BEARING LOAD FORMULA

WHERE: BLOCK AREA = THRUST ON / SAFE BEARING
SHOWN: ALL = FITTING / LOAD OF SOIL
(SQUARE FEET)

NOTES:

1. REINFORCING BARS SHALL BE EPOXY COATED
2. RESIDENT PROJECT ENGINEER WILL CALCULATE QUANTITIES OF CONCRETE REQ'D AND SPECIFY PLACEMENT METHODS & REQUIREMENTS, WHICH SHALL BE APPROVED BY CITY ENGINEER
3. CONCRETE SHALL BE 4000 PSI MIN.
4. POUR CONCRETE AGAINST UNDISTURBED SOIL

THRUST ON FITTINGS

POUNDS @ 1 POUND PER SQUARE INCH OF WATER PRESSURE

PIPE SIZE	TEES/ PLUGS	90° BENDS	45° BENDS	22.5° BENDS
4"	18.5	26.1	14.2	7.2
6"	38	53.7	29.1	14.7
8"	65.8	93	50.4	25.5
10"	107.5	152	82.4	41.7
12"	153.1	216.4	117.2	59.4
14"	215.5	304.7	164.9	84
16"	281.5	398.1	215.4	109.8
18"	356.3	503.8	272.8	139
20"	439.8	622	336.6	171.8
24"	633.3	895.6	484.7	247.1

NAILS/RELY THRUST BY MAXIMUM WATER PRESSURE

MARK SIZES LARGER THAN 24" SHALL BE THRUST BLOCKED AS PER ENGINEER RECOMMENDATION

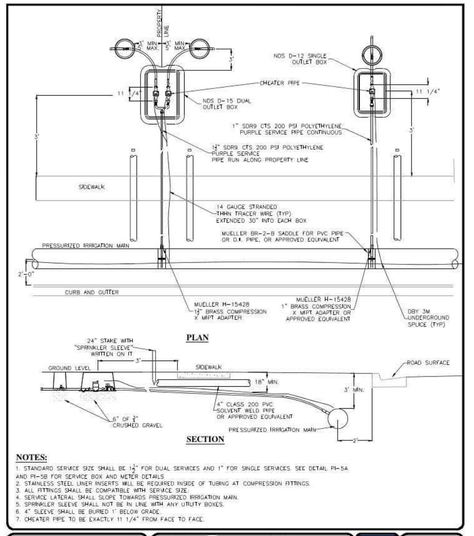
THRUST BLOCK AREA AGAINST TRENCH WALL (SQUARE FEET)

ASSUMING SAND AND MAX PRESSURE OF 150 PSI SIZE MAY BE REDUCED WITH AN ENGINEERED SUBMITTAL AND AS APPROVED BY THE CITY ENGINEER

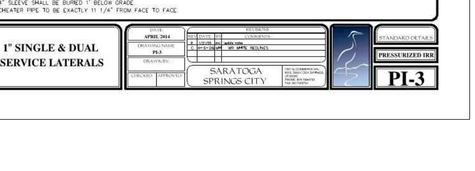
PIPE SIZE	TEES/ PLUGS	90° BENDS	45° BENDS	22.5° BENDS
4"	2.8	3.9	2.1	1.1
6"	5.7	8.1	4.4	2.2
8"	9.9	14.0	7.6	3.8
10"	16.1	22.8	12.4	6.3
12"	23.0	32.5	17.6	8.9
14"	32.3	45.7	24.7	12.6
16"	42.2	59.7	32.3	16.5
18"	53.4	75.6	40.9	20.9
20"	66.0	93.3	50.5	25.7
24"	95.0	134.3	72.7	37.1

CONCRETE THRUST BLOCKS

APRIL 2014 | DRAWING NAME: PI-2 | DRAWN BY: | CHECKED BY: ETL | APPROVED BY: | APPROVED DATE:
REVISIONS: NO. | DATE | BY | COMMENTS
SARATOGA SPRINGS CITY
STANDARD DETAILS | PRESSURIZED IRR | **PI-2**



PLAN



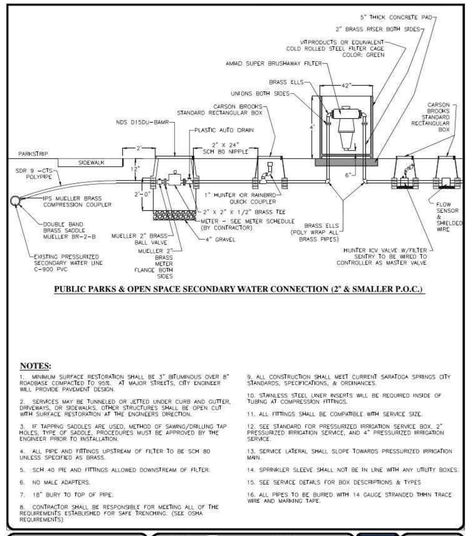
SECTION

NOTES:

1. STANDARD SERVICE SIZE SHALL BE 1½" FOR DUAL SERVICES AND 1" FOR SINGLE SERVICES. SEE DETAIL PI-5A AND PI-5B FOR SERVICE BOX AND METER DETAILS.
2. STAINLESS STEEL LINER INSERTS WILL BE REQUIRED INSIDE OF TUBING AT COMPRESSION FITTINGS.
3. ALL FITTINGS SHALL BE COMPATIBLE WITH SERVICE SIZE.
4. SERVICE LATERAL SHALL SLOPE TOWARDS PRESSURIZED IRRIGATION MAIN.
5. SPRINKLER SLEEVE SHALL NOT BE IN LINE WITH ANY UTILITY BOXES.
6. 4" SLEEVE SHALL BE BURIED 1' BELOW GRADE.
7. CHEATER PIPE TO BE EXACTLY 11 1/4" FROM FACE TO FACE.

1" SINGLE & DUAL SERVICE LATERALS

APRIL 2014 | DRAWING NAME: PI-3 | DRAWN BY: | CHECKED BY: | APPROVED BY: SARATOGA SPRINGS CITY | APPROVED DATE:
REVISIONS: NO. | DATE | BY | COMMENTS; A | 10-21-14 | MG | MINOR COMM.; B | 01-07-15 | MG | ADD APPR. SIGNATURE
STANDARD DETAILS | PRESSURIZED IRR | **PI-3**



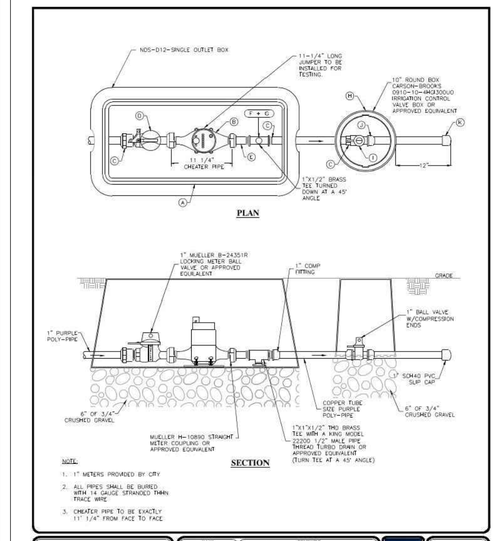
PUBLIC PARKS & OPEN SPACE SECONDARY WATER CONNECTION (2" & SMALLER P.O.C.)

NOTES:

1. MINIMUM SURFACE RESTORATION SHALL BE 3" BITUMINOUS OVER 8" ROADBASE COMPACTED TO 95%. AT MAJOR STREETS, CITY ENGINEER WILL PROVIDE PAVEMENT DESIGN.
2. SERVICES MAY BE TUNNELED OR JETTED UNDER CURB AND GUTTER, DRIVEWAYS, OR SIDEWALKS. OTHER STRUCTURES SHALL BE OPEN CUT WITH SURFACE RESTORATION AT THE ENGINEERS DIRECTION.
3. IF TAPPING SADDLES ARE USED, METHOD OF SAWING/DRILLING TAP HOLES, TYPE OF SADDLE, PROCEDURES MUST BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.
4. ALL PIPE AND FITTINGS UPSTREAM OF FILTER TO BE SCH 80 UNLESS SPECIFIED AS BRASS.
5. SCH 40 PE AND FITTINGS ALLOWED DOWNSTREAM OF FILTER.
6. NO MALE ADAPTERS.
7. 18" BURY TO TOP OF PIPE.
8. CONTRACTOR SHALL BE RESPONSIBLE FOR MEETING ALL OF THE REQUIREMENTS ESTABLISHED FOR SAFE TRENCHING. (SEE OSHA REQUIREMENTS)
9. ALL CONSTRUCTION SHALL MEET CURRENT SARATOGA SPRINGS CITY STANDARDS, SPECIFICATIONS, & ORDINANCES.
10. STAINLESS STEEL LINER INSERTS WILL BE REQUIRED INSIDE OF TUBING AT COMPRESSION FITTINGS.
11. ALL FITTINGS SHALL BE COMPATIBLE WITH SERVICE SIZE.
12. SEE STANDARD FOR PRESSURIZED IRRIGATION SERVICE BOX, 2", PRESSURIZED IRRIGATION SERVICE, AND 4" PRESSURIZED IRRIGATION SERVICE.
13. SERVICE LATERAL SHALL SLOPE TOWARDS PRESSURIZED IRRIGATION MAIN.
14. SPRINKLER SLEEVE SHALL NOT BE IN LINE WITH ANY UTILITY BOXES.
15. SEE SERVICE DETAILS FOR BOX DESCRIPTIONS & TYPES
16. ALL PIPES TO BE BURIED WITH 14 GAUGE STRANDED THWN TRACE WIRE AND MARKING TAPE.

CONNECTION FOR PUBLIC PARKS & OPEN SPACE

APRIL 2014 | DRAWING NAME: PI-4 | DRAWN BY: | CHECKED BY: ETL | APPROVED BY: | APPROVED DATE:
REVISIONS: NO. | DATE | BY | COMMENTS
SARATOGA SPRINGS CITY
STANDARD DETAILS | PRESSURIZED IRR | **PI-4**

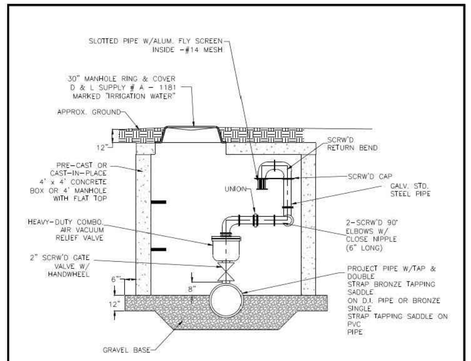


SECTION

NOTE:
1. 1" METERS PROVIDED BY CITY
2. ALL PIPES SHALL BE BURIED WITH 14 GAUGE STRANDED THWN TRACE WIRE
3. CHEATER PIPE TO BE EXACTLY 11" 1/4" FROM FACE TO FACE

1" SINGLE SERVICE LATERAL BOX

APRIL 2014 | DRAWING NAME: PI-5A | DRAWN BY: | CHECKED BY: ETL | APPROVED BY: | APPROVED DATE:
REVISIONS: NO. | DATE | BY | COMMENTS
SARATOGA SPRINGS CITY
STANDARD DETAILS | PRESSURIZED IRR | **PI-5A**

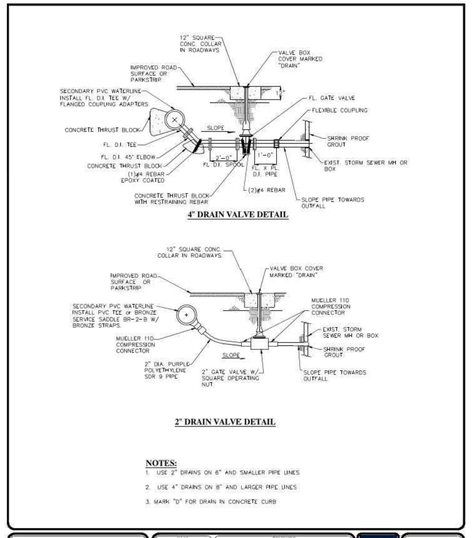


NOTE:

1. SIZE OF AIR-VACUUM RELIEF VALVE & PIPING SHALL BE AS DETERMINED BY PROJECT ENGINEER; AND APPROVED BY CITY ENGINEER.
2. LOCATE RISER IN LANDSCAPED AREA BEHIND CURB & GUTTER OR APPROX. 2 FT. FROM R/W LINE, AS DIRECTED BY CITY ENGINEER.
3. PROVIDE BOLLARDS OR OTHER PROTECTION FOR RISER IF AND AS DIRECTED BY CITY INSPECTOR.

AIR VACUUM RELIEF VALVE

APRIL 2014 | DRAWING NAME: PI-8 | DRAWN BY: | CHECKED BY: ETL | APPROVED BY: | APPROVED DATE:
REVISIONS: NO. | DATE | BY | COMMENTS
SARATOGA SPRINGS CITY
STANDARD DETAILS | PRESSURIZED IRR | **PI-8**



4" DRAIN VALVE DETAIL

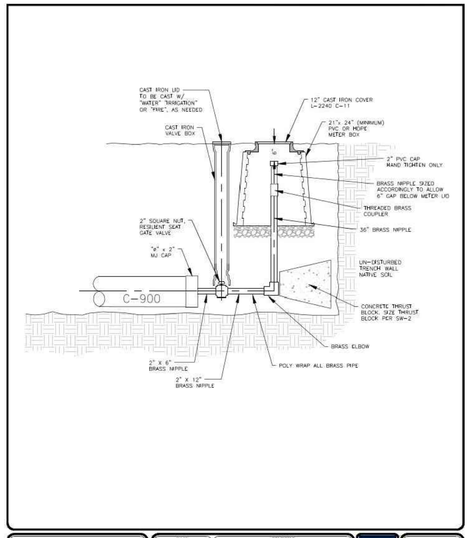
2" DRAIN VALVE DETAIL

NOTES:

1. USE 2" DRAINS ON 6" AND SMALLER PIPE LINES
2. USE 4" DRAINS ON 8" AND LARGER PIPE LINES
3. MARK "D" FOR DRAIN IN CONCRETE CURB

2" & 4" DRAIN VALVES

APRIL 2014 | DRAWING NAME: PI-9 | DRAWN BY: | CHECKED BY: ETL | APPROVED BY: | APPROVED DATE:
REVISIONS: NO. | DATE | BY | COMMENTS
SARATOGA SPRINGS CITY
STANDARD DETAILS | PRESSURIZED IRR | **PI-9**



2 INCH BLOW-OFF VALVE
NOT TO SCALE

APRIL 2014 | DRAWING NAME: PI-12 | DRAWN BY: | CHECKED BY: ETL | APPROVED BY: | APPROVED DATE:
REVISIONS: NO. | DATE | BY | COMMENTS
SARATOGA SPRINGS CITY
STANDARD DETAILS | PRESSURIZED IRR | **PI-12**

See Saratoga Springs specifications for further information.

NO.	DESCRIPTION	DATE	APP'D

ORIG. DATE: 07-01-12
SURVEY BY:
DRAWN BY: CPW
DESIGNED BY: CPW
CHECKED BY: CPW
SCALE: NOT TO SCALE

GATEWAY CONSULTING, inc
P.O. BOX 951005 SOUTH JORDAN, UT 84095
PH: (801) 694-5848 FAX: (801) 432-7050
paul@gatewayconsultingllc.com
CIVIL ENGINEERING • CONSULTING • LAND PLANNING
CONSTRUCTION MANAGEMENT

BEACON POINT
PHASE 1
IRRIGATION DETAILS

05-IRRIGATION DETAIL 3D
DRAWING FILE
PROJECT NUMBER
9-15-14

SARATOGA CITY

PROFESSIONAL ENGINEER — JORDAN P. MAYOR — 09-10-14 — STATE OF UTAH

SHEET NO. D5

SCALE & NORTH ARROW | A

NORTH

0 40' 80' 160'

SCALE: 1" = 80'-0"

Arc Sitio Design, Inc
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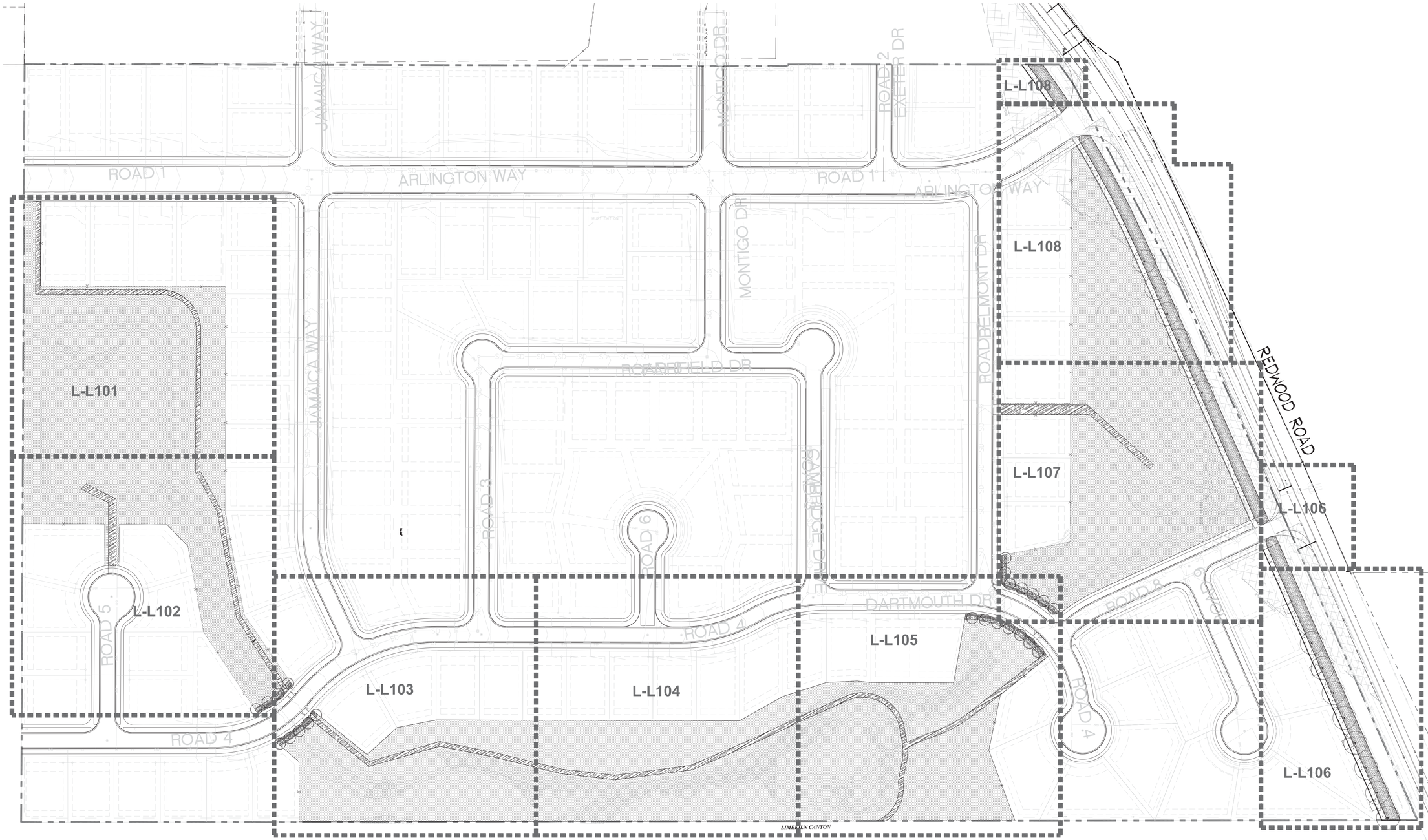

project

Beacon Point

Saratoga Springs, UT

date

SEPTEMBER 12, 2014

revisions

data

asd project no: 14060

title

OVERALL PLANTING PLAN

sheet

L-L100

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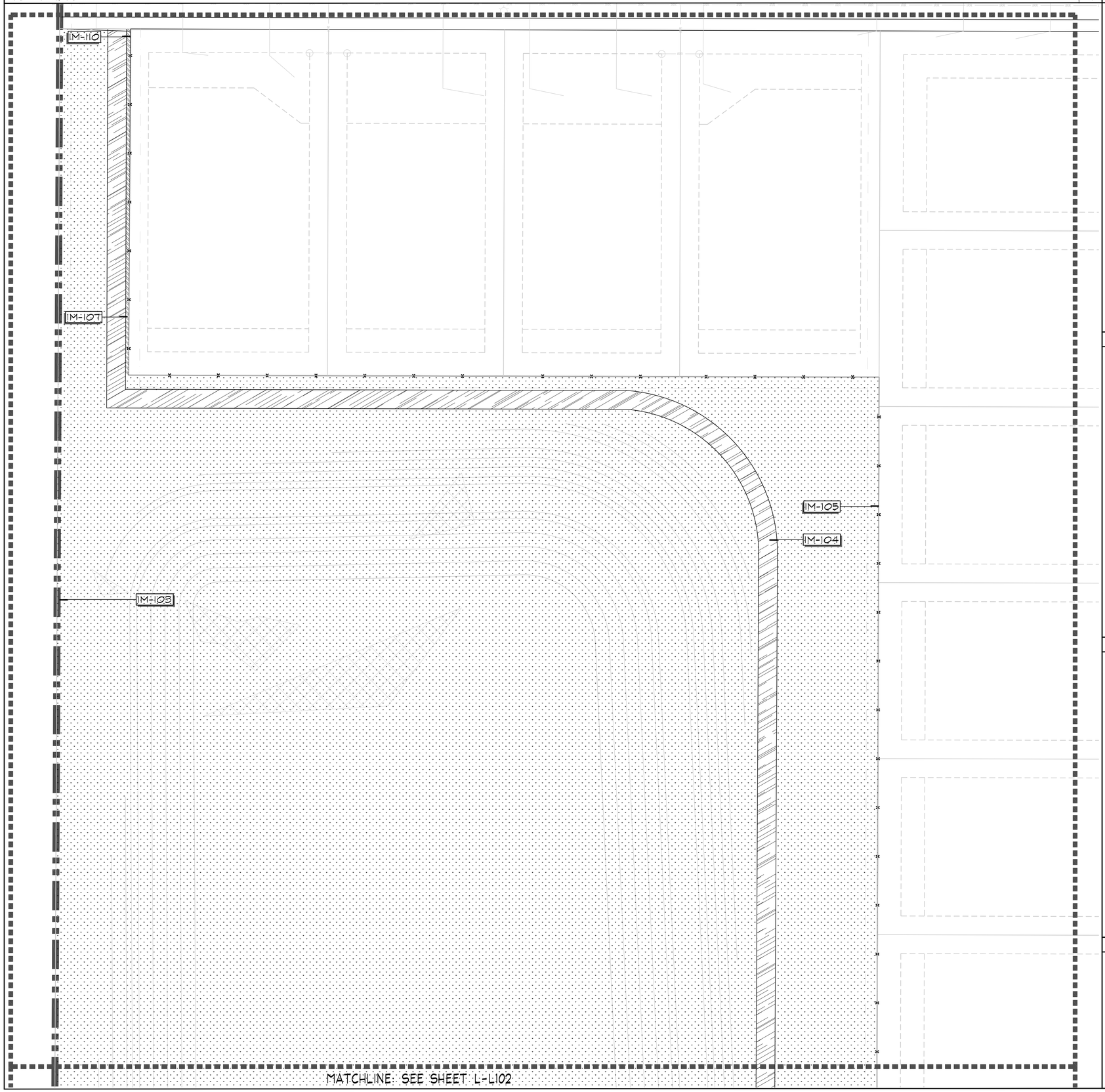
PLANTING PLAN

G



PLANT SCHEDULE

A

TREES	BOTANICAL NAME	COMMON NAME	CONT	CAL	QTY*
+	Malus x 'Prairie Rose'	Prairie Rose Crab Apple	B & B	2.5"	23
•	Ulmus parvifolia	Lacebark Elm	B & B	2.5"	14

SHRUBS	BOTANICAL NAME	COMMON NAME	SIZE	FIELD2	QTY*
B	Buddleia x 'Tutti Frutti'	Tutti Frutti Butterfly Bush	5 gal		87
CS	Cornus sericea 'Arctic Fire'	Arctic Fire Dwarf Dogwood	5 gal		48
J	Juniperus chinensis 'Sea Green'	Sea Green Juniper	5 gal		38
P	Physocarpus opulifolius 'Lemon Candy'	Lemon Candy Dwarf Ninebark	5 gal		69

GROUND COVERS	BOTANICAL NAME	COMMON NAME	CONT	QTY*
	Detention Seed Mix See Sht. L-L501 Dtl. H	Detention Seed Mix	seed	533,229 sf
	Poa pratensis	Turf-Grass	sod	28,627 sf

* QUANTITY INFORMATION PROVIDED FOR REFERENCE ONLY. CONTRACTOR RESPONSIBLE TO VERIFY ALL QUANTITIES.

PLANTING NOTES

B

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6. FINAL LOCATIONS OF ALL PLANT MATERIALS SHALL BE SUBJECT TO APPROVAL OF THE OWNER'S REPRESENTATIVE. TREES SHALL NOT BE PLANTED LESS THAN 5'-0" FROM CURBS OR HARD SURFACE AREAS UNLESS A ROOT BARRIER IS INSTALLED.
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REFERENCE SCHEDULE NOTES

C

SYMBOL	SITE IMPROVEMENTS DESCRIPTION
IM-101	8 FOOT WIDE CONCRETE TRAIL, SEE SHEET L-L501 DETAIL J
IM-103	LIMIT OF WORK LINE, TYP.
IM-104	ASPHALT TRAIL OR ACCESS DEIVE, SEE SHEET L-L501 DETAIL I
IM-105	6' TALL SEMI PRIVATE VINYL FENCE, BEIGE, SEE SHEET L-L501 DETAILS G AND H. FENCE TO BE INSTALLED BY DEVELOPER, TYP.
IM-106	CONCRETE MOW CURB 6" WIDE, TYP. SEE SHEET L-L501 DETAIL D
IM-107	INSTALL 1" TO 3" ROUND TAN ROCK MULCH TO A DEPTH OF 4" IN 1' WIDE STRIP, TYP.
IM-108	6' TALL WROUGHT IRON STYLE FENCE WITH MASONRY PILLARS EVERY 50 FEET TO MATCH CITY OF SARATOGA SPRINGS REDWOOD ROAD TRAIL CORRIDOR SEMI-PRIVATE FENCE. FENCE TO BE INSTALLED BY DEVELOPER. CONTRACTOR TO FIELD VERIFY AND SUBMIT SHOP DRAWINGS. SEE SHEET L-L501 DETAIL K
IM-110	REDUCE HEIGHT OF VINYL FENCE TO 3 FEET TALL FROM SIDEWALK TO 25 FEET BACK INTO PROPERTY, TYP.

SCALE & NORTH ARROW

D

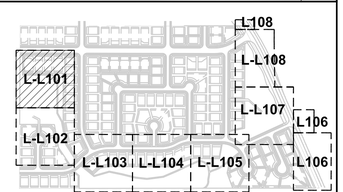
NORTH

SCALE: 1" = 20'-0"

0 10 20 40

KEYPLAN

E



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consultant:

project

Beacon Point

Saratoga Springs, UT

date

SEPTEMBER 12, 2014

revisions

data

asd project no: 14060

title

PLANTING PLAN

sheet

L-L101

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PLANTING PLAN

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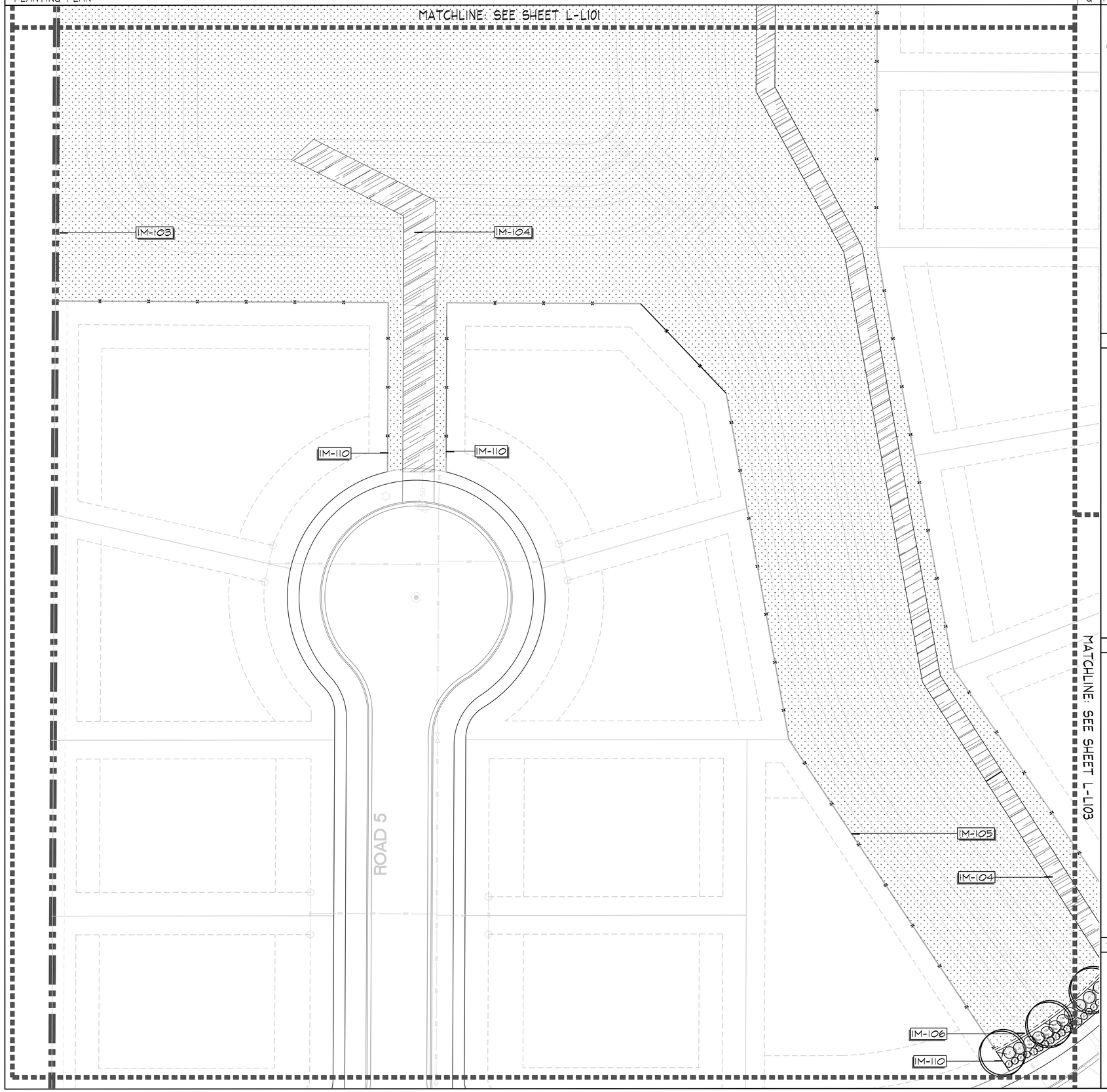

PLANT SCHEDULE

A

TREES	BOTANICAL NAME	COMMON NAME	CONT	CAL	QTY*
+	Malus x 'Prairie Rose'	Prairie Rose Crab Apple	B & B	2.5"	23
•	Ulmus parvifolia	Lacebark Elm	B & B	2.5"	14

SHRUBS	BOTANICAL NAME	COMMON NAME	SIZE	FIELD2	QTY*
BD	Buddleia x 'Tutti Frutti'	Tutti Frutti Butterfly Bush	5 gal		87
CSI	Cornus sericea 'Arctic Fire'	Arctic Fire Dwarf Dogwood	5 gal		48
JC	Juniperus chinensis 'Sea Green'	Sea Green Juniper	5 gal		38
PO	Physocarpus opulifolius 'Lemon Candy'	Lemon Candy Dwarf Ninebark	5 gal		69

GROUND COVERS	BOTANICAL NAME	COMMON NAME	CONT	QTY*
	Detention Seed Mix See Sht. L-L501 Dtl. H	Detention Seed Mix	seed	533,229 sf
	Poa pratensis	Turf-Grass	sod	28,627 sf

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REFERENCE SCHEDULE NOTES

C

SITE IMPROVEMENTS

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IM-110	REDUCE HEIGHT OF VINYL FENCE TO 3 FEET TALL FROM SIDEWALK TO 25 FEET BACK INTO PROPERTY, TYP.

SCALE & NORTH ARROW

D

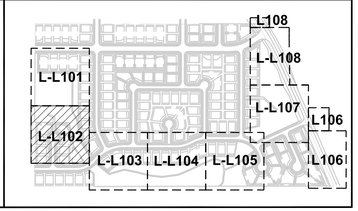
NORTH

SCALE: 1" = 20'-0"

0 10 20 40

KEYPLAN

E



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consultant:

project

Beacon Point

Saratoga Springs, UT

date

SEPTEMBER 12, 2014

revisions

data

asd project no: 14060

title

PLANTING PLAN

sheet

L-L102

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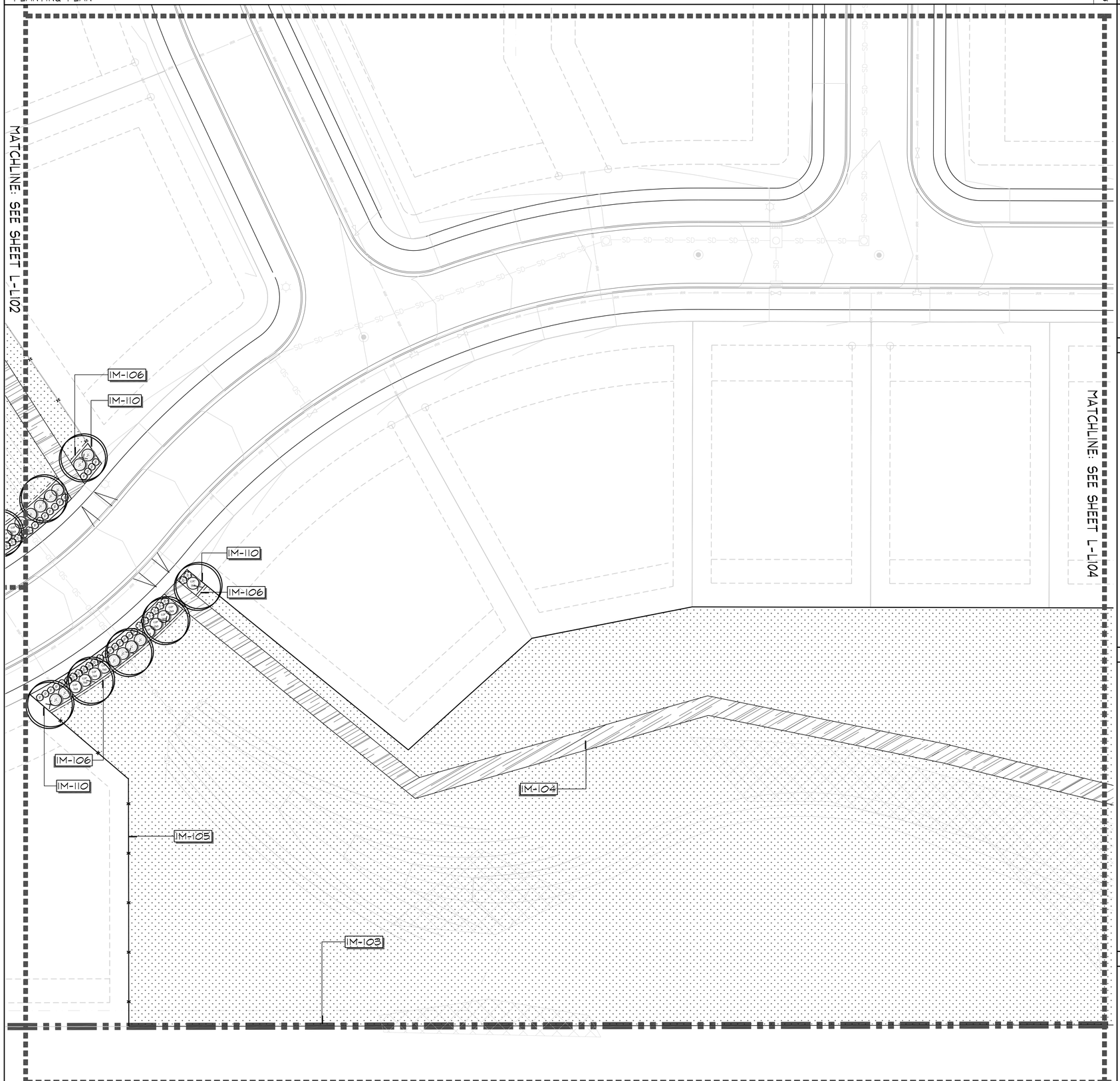
PLANTING PLAN

G



PLANT SCHEDULE

A

TREES	BOTANICAL NAME	COMMON NAME	CONT	CAL	QTY*
+	Malus x 'Prairie Rose'	Prairie Rose Crab Apple	B & B	2.5"	23
*	Ulmus parvifolia	Lacebark Elm	B & B	2.5"	14

SHRUBS	BOTANICAL NAME	COMMON NAME	SIZE	FIELD2	QTY*
B	Buddleia x 'Tutti Frutti'	Tutti Frutti Butterfly Bush	5 gal		87
CSA	Cornus sericea 'Arctic Fire'	Arctic Fire Dwarf Dogwood	5 gal		48
J	Juniperus chinensis 'Sea Green'	Sea Green Juniper	5 gal		38
P	Physocarpus opulifolius 'Lemon Candy'	Lemon Candy Dwarf Ninebark	5 gal		69

GROUND COVERS	BOTANICAL NAME	COMMON NAME	CONT	QTY*
	Detention Seed Mix See Sht. L-L501 Dtl. H	Detention Seed Mix	seed	533,229 sf
	Poa pratensis	Turf-Grass	sod	28,627 sf

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REFERENCE SCHEDULE NOTES

C

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NORTH

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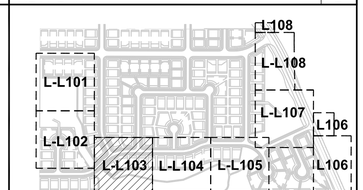
KEYPLAN

E



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SEPTEMBER 12, 2014

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data

asd project no: 14060

title

PLANTING PLAN

sheet

L-L103

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PLANTING PLAN

PLANT SCHEDULE

TREES	BOTANICAL NAME	COMMON NAME	CONT	CAL	QTY*
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REFERENCE SCHEDULE NOTES

SITE IMPROVEMENTS

SYMBOL	DESCRIPTION
IM-101	8 FOOT WIDE CONCRETE TRAIL, SEE SHEET L-L501 DETAIL J
IM-103	LIMIT OF WORK LINE, TYP.
IM-104	ASPHALT TRAIL OR ACCESS DEIVE, SEE SHEET L-L501 DETAIL I
IM-105	6' TALL SEMI PRIVATE VINYL FENCE, BEIGE, SEE SHEET L-L501 DETAILS G AND H. FENCE TO BE INSTALLED BY DEVELOPER, TYP.
IM-106	CONCRETE MOW CURB 6" WIDE, TYP. SEE SHEET L-L501 DETAIL D
IM-107	INSTALL 1" TO 3" ROUND TAN ROCK MULCH TO A DEPTH OF 4" IN 1' WIDE STRIP, TYP.
IM-109	6' TALL WROUGHT IRON STYLE FENCE WITH MASONRY PILLARS EVERY 50 FEET TO MATCH CITY OF SARATOGA SPRINGS REDWOOD ROAD TRAIL CORRIDOR SEMI-PRIVATE FENCE. FENCE TO BE INSTALLED BY DEVELOPER. CONTRACTOR TO FIELD VERIFY AND SUBMIT SHOP DRAWINGS. SEE SHEET L-L501 DETAIL K
IM-110	REDUCE HEIGHT OF VINYL FENCE TO 3 FEET TALL FROM SIDEWALK TO 25 FEET BACK INTO PROPERTY, TYP.

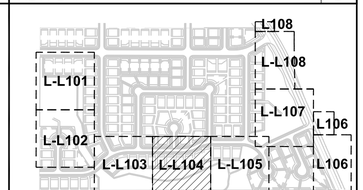
SCALE & NORTH ARROW

NORTH

0 10 20 40

SCALE: 1" = 20'-0"

KEYPLAN



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consultant:

project

Beacon Point

Saratoga Springs, UT

date

SEPTEMBER 12, 2014

revisions

data

asd project no: 14060

title

PLANTING PLAN

sheet

L-L104

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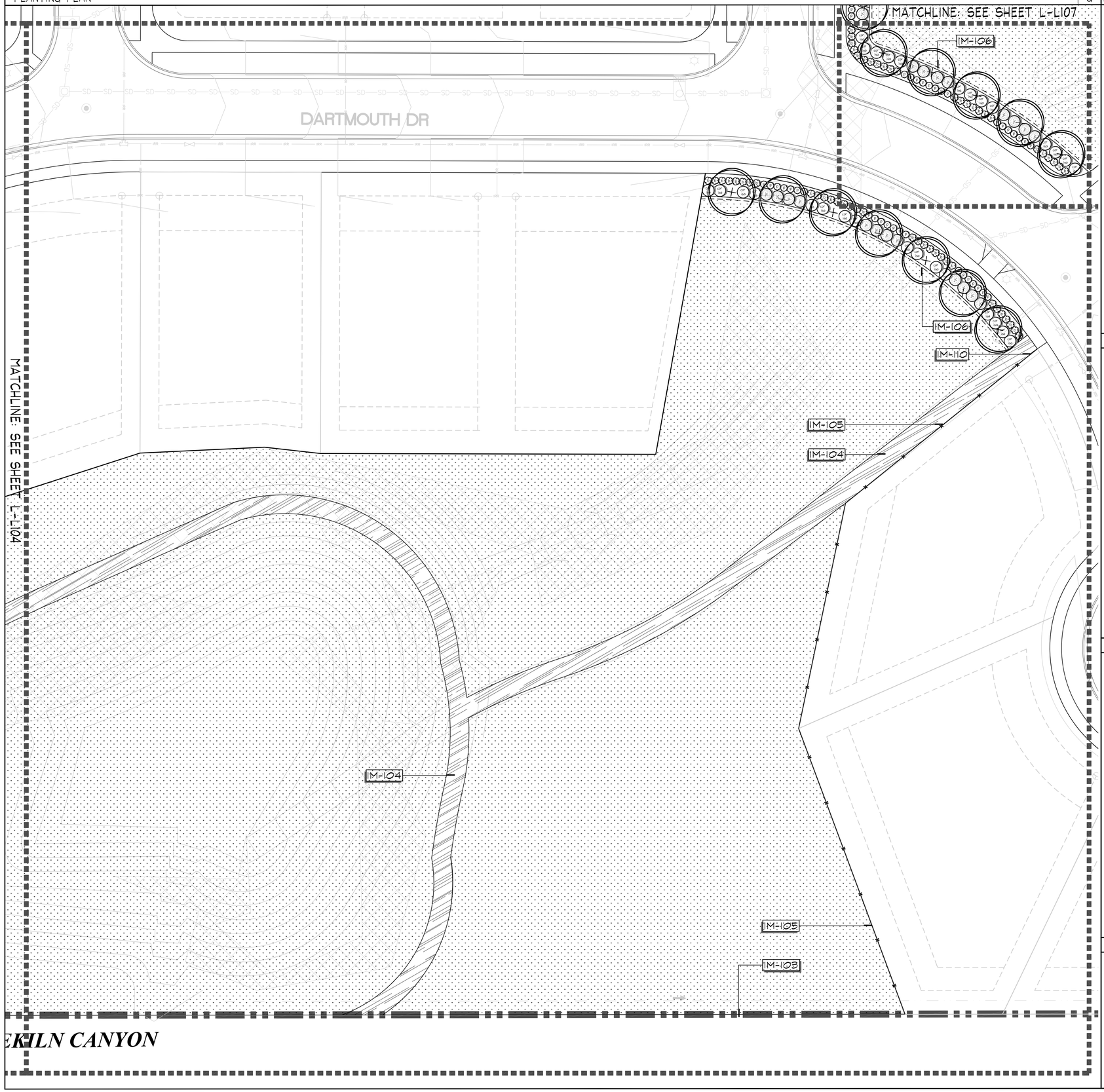
PLANTING PLAN



PLANT SCHEDULE

TREES	BOTANICAL NAME	COMMON NAME	CONT	CAL	QTY*
+	Malus x 'Prairie Rose'	Prairie Rose Crab Apple	B & B	2.5"	23
•	Ulmus parvifolia	Lacebark Elm	B & B	2.5"	14

SHRUBS	BOTANICAL NAME	COMMON NAME	SIZE	FIELD2	QTY*
BD	Buddleia x 'Tutti Frutti'	Tutti Frutti Butterfly Bush	5 gal		87
CSI	Cornus sericea 'Arctic Fire'	Arctic Fire Dwarf Dogwood	5 gal		48
JC	Juniperus chinensis 'Sea Green'	Sea Green Juniper	5 gal		38
PO	Physocarpus opulifolius 'Lemon Candy'	Lemon Candy Dwarf Ninebark	5 gal		69

GROUND COVERS	BOTANICAL NAME	COMMON NAME	CONT	QTY*
	Detention Seed Mix See Sht. L-L501 Dtl. H	Detention Seed Mix	seed	533,229 sf
	Poa pratensis	Turf-Grass	sod	28,627 sf

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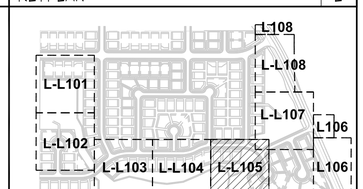
SCALE & NORTH ARROW

NORTH

0 10 20 40

SCALE: 1" = 20'-0"

KEYPLAN



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consultant:

project

Beacon Point

Saratoga Springs, UT

date

SEPTEMBER 12, 2014

revisions

data

asd project no: 14060

title

PLANTING PLAN

sheet

L-L105

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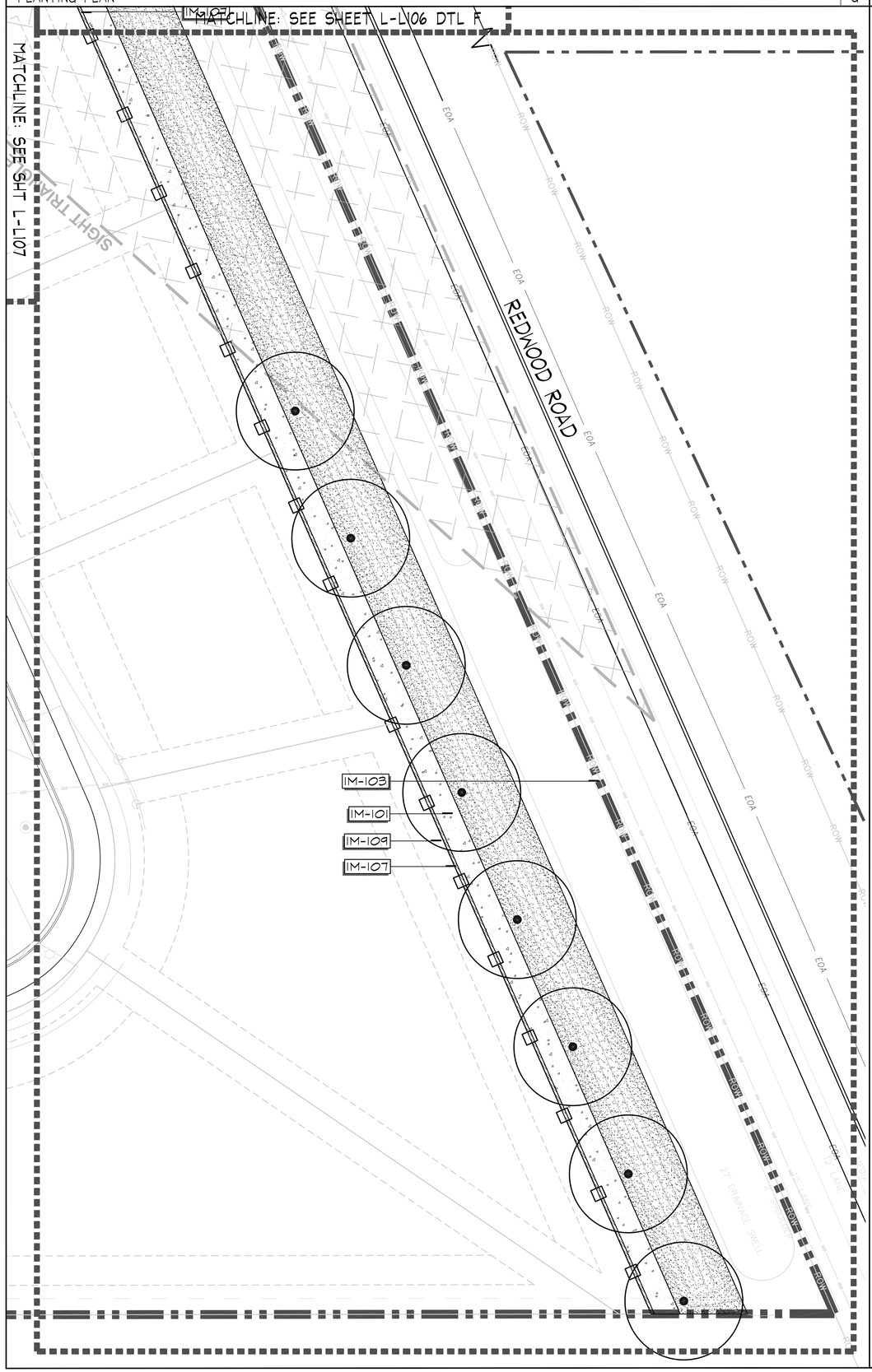
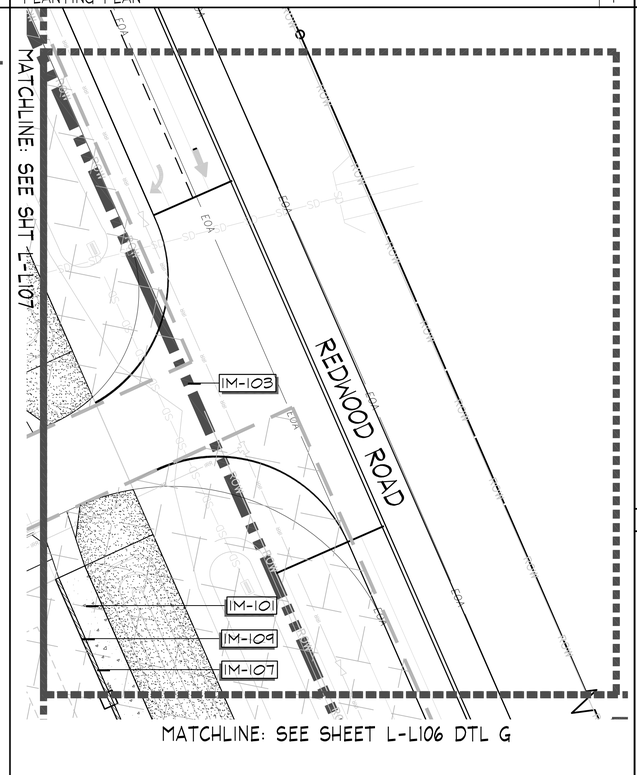
PLANTING PLAN — G



PLANTING PLAN — F



PLANT SCHEDULE — A

TREES	BOTANICAL NAME	COMMON NAME	CONT	CAL	QTY*
+	Malus x 'Prairie Rose'	Prairie Rose Crab Apple	B & B	2.5"	23
•	Ulmus parvifolia	Lacebark Elm	B & B	2.5"	14

SHRUBS	BOTANICAL NAME	COMMON NAME	SIZE	FIELD2	QTY*
B	Buddleia x 'Tutti Frutti'	Tutti Frutti Butterfly Bush	5 gal		87
CS	Cornus sericea 'Arctic Fire'	Arctic Fire Dwarf Dogwood	5 gal		48
J	Juniperus chinensis 'Sea Green'	Sea Green Juniper	5 gal		38
P	Physocarpus opulifolius 'Lemon Candy'	Lemon Candy Dwarf Ninebark	5 gal		69

GROUND COVERS	BOTANICAL NAME	COMMON NAME	CONT	QTY*
	Detention Seed Mix See Sht. L-L501 Dtl. H	Detention Seed Mix	seed	533,229 sf
	Poa pratensis	Turf-Grass	sod	28,627 sf

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REFERENCE SCHEDULE NOTES — C

SITE IMPROVEMENTS

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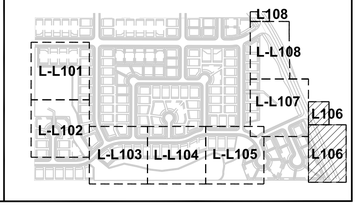
SCALE & NORTH ARROW — D

NORTH

0 10 20 40

SCALE: 1" = 20'-0"

KEYPLAN — E



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consultant:

project

Beacon Point

Saratoga Springs, UT

date

SEPTEMBER 12, 2014

revisions

data

asd project no: 14060

title

PLANTING PLAN

sheet

L-L106

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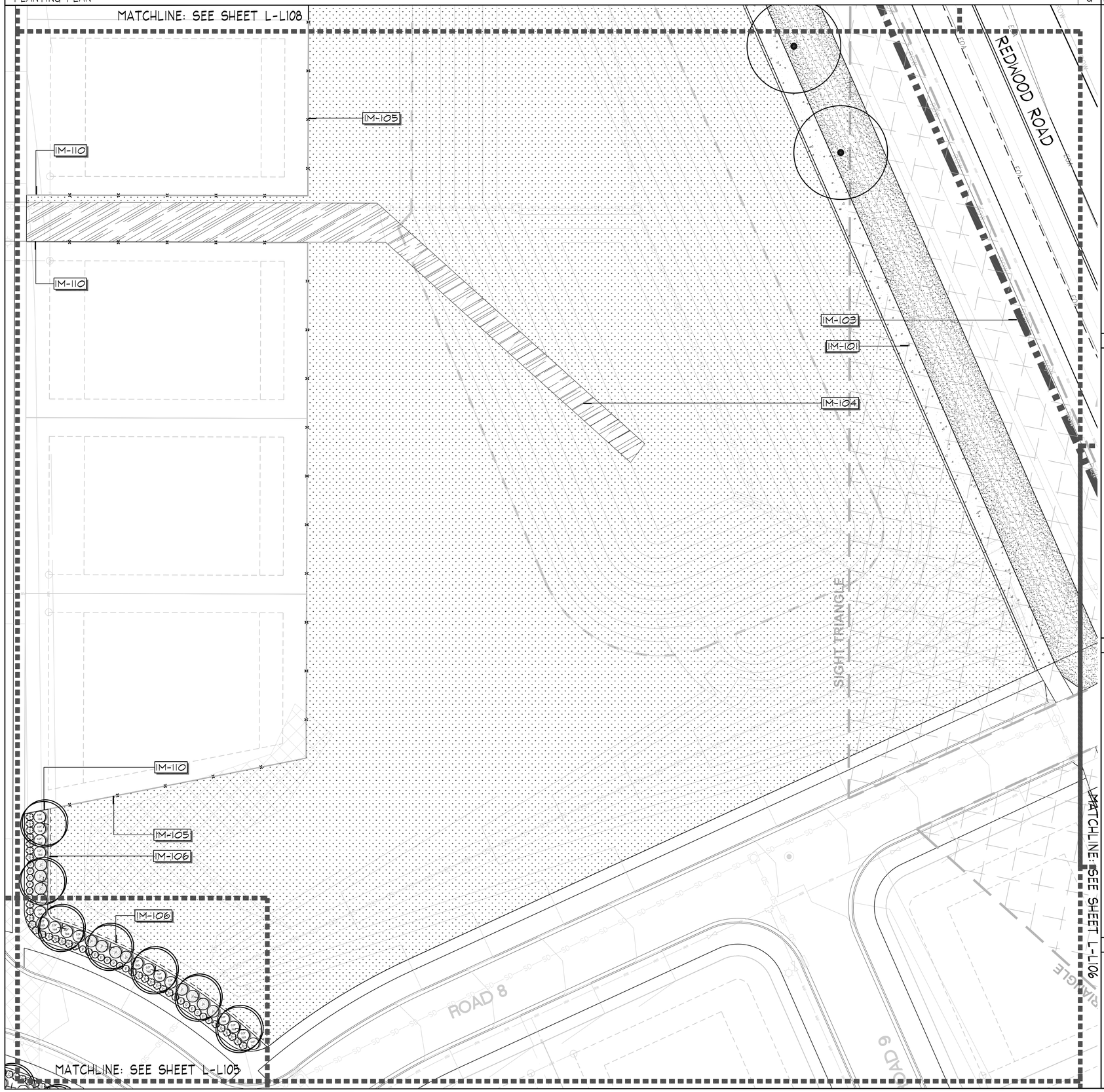
PLANTING PLAN



PLANT SCHEDULE

TREES	BOTANICAL NAME	COMMON NAME	CONT	CAL	QTY*
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•	Ulmus parvifolia	Lacebark Elm	B & B	2.5"	14

SHRUBS	BOTANICAL NAME	COMMON NAME	SIZE	FIELD2	QTY*
BD	Buddleia x 'Tutti Frutti'	Tutti Frutti Butterfly Bush	5 gal		87
CS	Cornus sericea 'Arctic Fire'	Arctic Fire Dwarf Dogwood	5 gal		48
JC	Juniperus chinensis 'Sea Green'	Sea Green Juniper	5 gal		38
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GROUND COVERS	BOTANICAL NAME	COMMON NAME	CONT	QTY*
	Detention Seed Mix See Sht. L-L501 Dtl. H	Detention Seed Mix	seed	533,229 sf
	Poa pratensis	Turf-Grass	sod	28,627 sf

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SCALE & NORTH ARROW

NORTH

0 10 20 40

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KEYPLAN

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revisions

data

asd project no: 14060

title

PLANTING PLAN

sheet

L-L107

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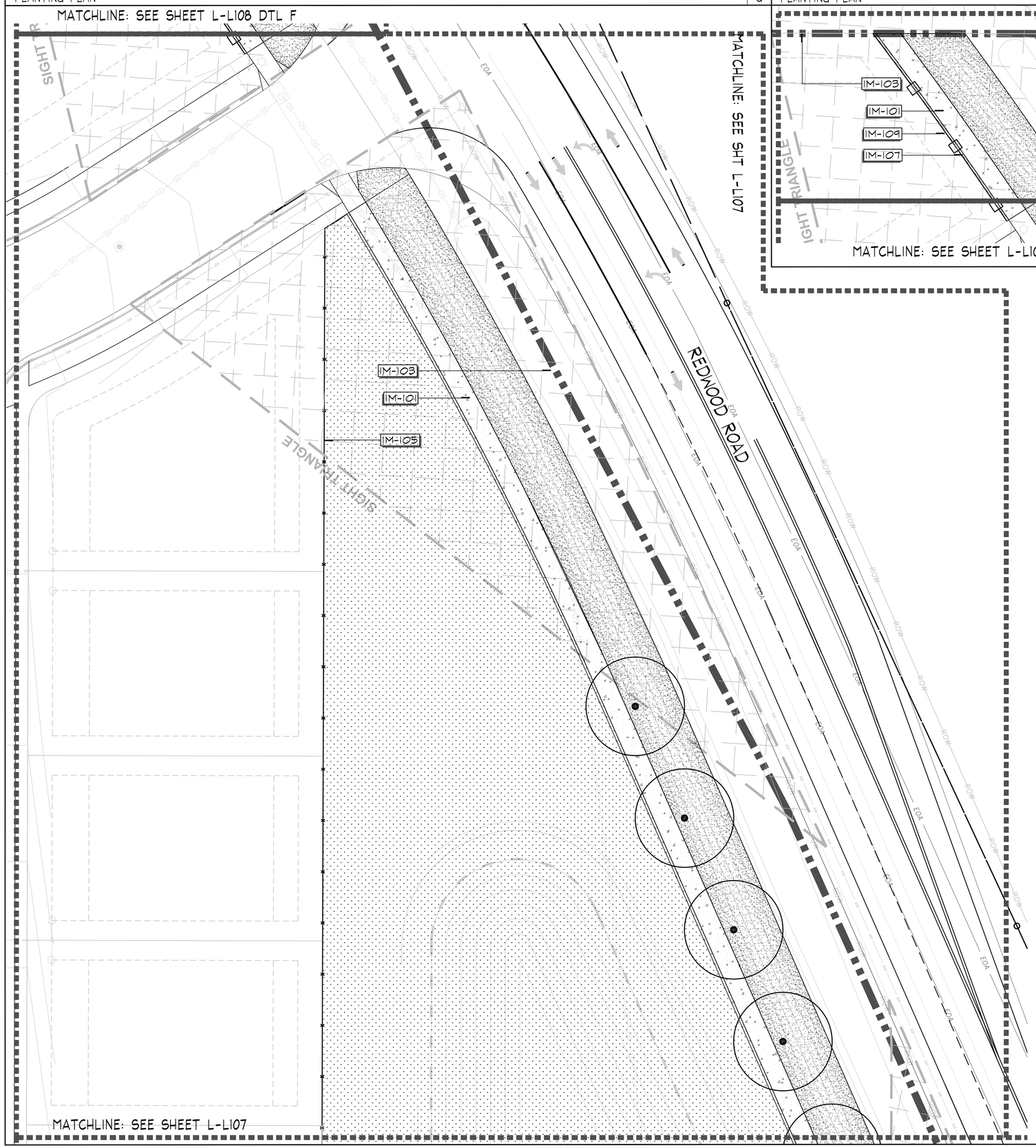
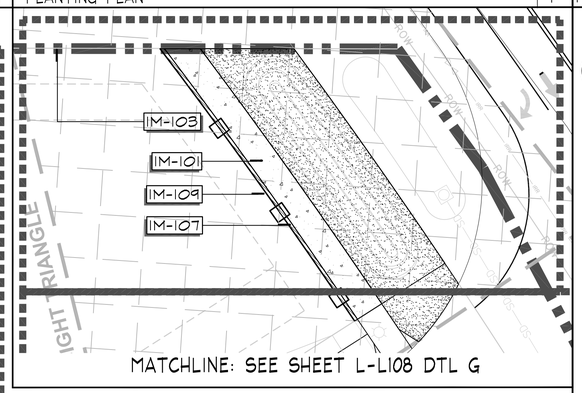
PLANTING PLAN G

MATCHLINE: SEE SHEET L-L108 DTL F



MATCHLINE: SEE SHEET L-L107

PLANTING PLAN F



MATCHLINE: SEE SHEET L-L108 DTL G

PLANT SCHEDULE A

TREES	BOTANICAL NAME	COMMON NAME	CONT	CAL	QTY*
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SHRUBS	BOTANICAL NAME	COMMON NAME	SIZE	FIELD2	QTY*
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GROUND COVERS	BOTANICAL NAME	COMMON NAME	CONT	QTY*
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3. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY COORDINATION WITH SUBCONTRACTORS AS REQUIRED TO ACCOMPLISH THE LANDSCAPE CONSTRUCTION FOR THIS PROJECT.
4. ALL PLANT MATERIAL SHALL BE APPROVED BY THE OWNER'S REPRESENTATIVE UPON DELIVERY TO THE SITE, AND PRIOR TO INSTALLATION. ANY PROPOSED SUBSTITUTIONS OF PLANT SPECIES SHALL BE MADE WITH PLANTS OF EQUIVALENT OVERALL FORM, HEIGHT, BRANCHING HABIT, FLOWER, LEAF, COLOR, FRUIT AND CULTURE ONLY AS APPROVED BY THE OWNER'S REPRESENTATIVE.
5. THE CONTRACTOR SHALL SUPPLY ALL PLANT MATERIAL IN QUANTITIES SUFFICIENT TO COMPLETE THE PLANTING SHOWN ON THE DRAWINGS. IF DISCREPANCIES ARISE BETWEEN ACTUAL PLANTING AREA SIZES IN THE FIELD AND THOSE SHOWN ON THE PLANS, CONTRACTOR SHALL CONTACT THE OWNER'S REPRESENTATIVE FOR RESOLUTION. FAILURE TO MAKE SUCH CONFLICTS KNOWN WILL RESULT IN CONTRACTOR'S LIABILITY FOR MATERIALS RELOCATION.
6. FINAL LOCATIONS OF ALL PLANT MATERIALS SHALL BE SUBJECT TO APPROVAL OF THE OWNER'S REPRESENTATIVE. TREES SHALL NOT BE PLANTED LESS THAN 5'-0" FROM CURBS OR HARD SURFACE AREAS UNLESS A ROOT BARRIER IS INSTALLED.
7. CONTRACTOR SHALL PROVIDE SOIL ANALYSIS AND AMMEND SOIL AS RECOMMENDED. LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR THE LAST 7 INCHES OF GRADE IN TURF SOD AREAS (6 INCHES OF TOPSOIL AND 1 INCH FOR SOD) AND 15 INCHES IN SHRUB BED AREAS (3 INCHES OF BARK MULCH AND 12" OF AMENDED TOPSOIL). IF NECESSARY DIG SUBGRADE IN SHRUB BEDS AND TURF AREAS DOWN AS SPECIFIED BEFORE PLACING AMENDED TOPSOIL. THE PLANTING ISLANDS IN THE PARKING LOTS SHALL HAVE ALL ROAD BASE REMOVED PRIOR TO PLACEMENT OF TOPSOIL. REFER TO GRADING PLAN FOR FINISH GRADE AND DRAINAGE.

REFERENCE SCHEDULE NOTES C

SYMBOL	SITE IMPROVEMENTS DESCRIPTION
IM-101	8 FOOT WIDE CONCRETE TRAIL, SEE SHEET L-L501 DETAIL J
IM-103	LIMIT OF WORK LINE, TYP.
IM-104	ASPHALT TRAIL OR ACCESS DEIVE, SEE SHEET L-L501 DETAIL I
IM-105	6' TALL SEMI PRIVATE VINYL FENCE, BEIGE, SEE SHEET L-L501 DETAILS G AND H. FENCE TO BE INSTALLED BY DEVELOPER, TYP.
IM-106	CONCRETE MOW CURB 6" WIDE, TYP. SEE SHEET L-L501 DETAIL D
IM-107	INSTALL 1" TO 3" ROUND TAN ROCK MULCH TO A DEPTH OF 4" IN 1' WIDE STRIP, TYP.
IM-109	6' TALL WROUGHT IRON STYLE FENCE WITH MASONRY PILLARS EVERY 50 FEET TO MATCH CITY OF SARATOGA SPRINGS REDWOOD ROAD TRAIL CORRIDOR SEMI-PRIVATE FENCE. FENCE TO BE INSTALLED BY DEVELOPER. CONTRACTOR TO FIELD VERIFY AND SUBMIT SHOP DRAWINGS. SEE SHEET L-L501 DETAIL K
IM-110	REDUCE HEIGHT OF VINYL FENCE TO 3 FEET TALL FROM SIDEWALK TO 25 FEET BACK INTO PROPERTY, TYP.

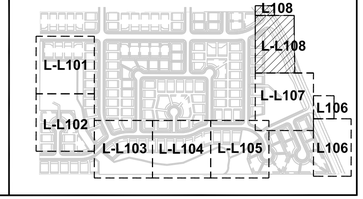
SCALE & NORTH ARROW D

NORTH

0 10 20 40

SCALE: 1" = 20'-0"

KEYPLAN E



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consultant:

project

Beacon Point

Saratoga Springs, UT

date

SEPTEMBER 12, 2014

revisions

data

asd project no: 14060

title

PLANTING PLAN

sheet

L-L108

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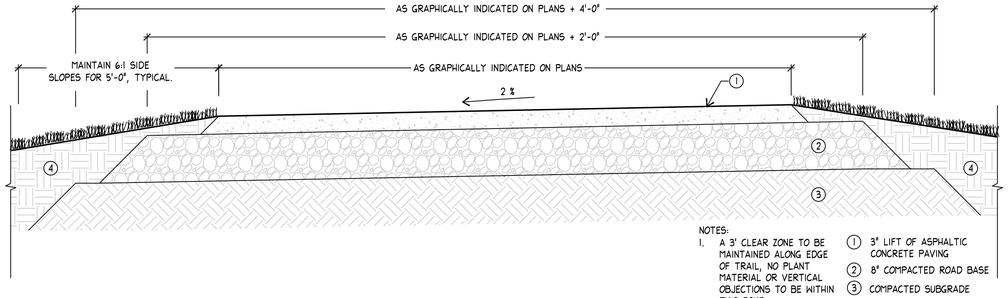
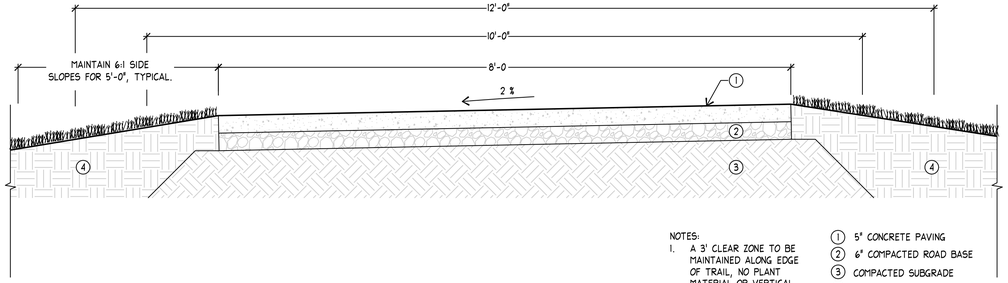


NOTES:
1. A 3' CLEAR ZONE TO BE MAINTAINED ALONG EDGE OF TRAIL, NO PLANT MATERIAL OR VERTICAL OBJECTIONS TO BE WITHIN THIS ZONE.

1. 3" LIFT OF ASPHALTIC CONCRETE PAVING
2. 8" COMPACTED ROAD BASE
3. COMPACTED SUBGRADE
4. TOPSOIL BORROW

1 ASPHALT TRAIL OR ACCESS DRIVE

SCALE: NTS SECTION

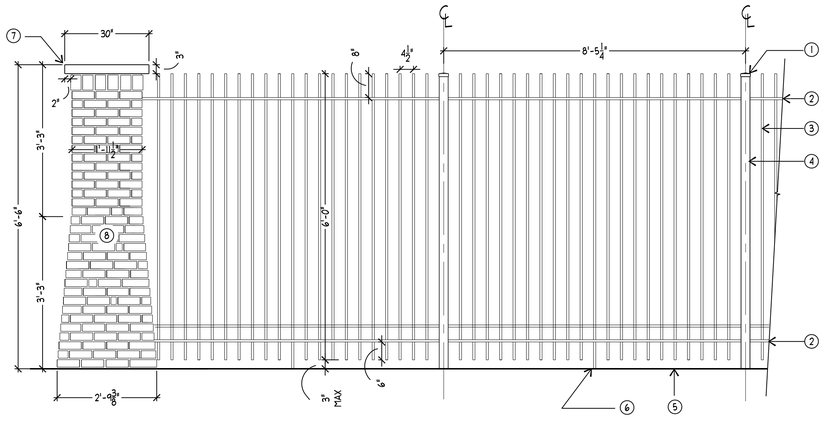


NOTES:
1. A 3' CLEAR ZONE TO BE MAINTAINED ALONG EDGE OF TRAIL, NO PLANT MATERIAL OR VERTICAL OBJECTIONS TO BE WITHIN THIS ZONE.

1. 5" CONCRETE PAVING
2. 6" COMPACTED ROAD BASE
3. COMPACTED SUBGRADE
4. TOPSOIL BORROW

J 8' CONCRETE TRAIL

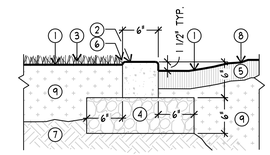
SCALE: NTS SECTION



1. POST CAP, TYP.
2. HEADER OR STRINGER, TYP.- 1" X 1-1/2"
3. 3/4" SQUARE PICKETS (OVA), TYP.
4. 3"x3" POST, TYP.
5. TOP OF FINISH GRADE (NOT MULCH)
6. 3/4" SQUARE PICKETS ANCHOR, TYP.
7. PRECAST CONCRETE CAP, TYP.
8. BRICK, CONTRACTOR TO PROVIDE SAMPLE FOR OWNER AND ARCHITECT TO APPROVE TYP.

K BRICK COLUMN AND IRON FENCE

SCALE: NTS ELEVATION

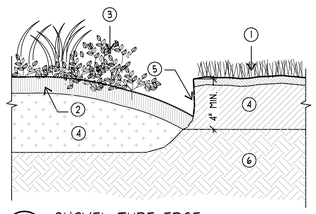


NOTE:
1. WHEN MOW CURB IS ADJACENT TO BUILDING OR WALL, USE EXPANSION JOINT AND SLOPE 2% AWAY FROM BUILDING.
2. EXPANSION JOINTS AT 20' O.C. AND A TOOLED JOINT AT 10' O.C.

1. FINISH GRADE
2. CONCRETE MOW CURB. FINISH W/ MED. BROOM PERPENDICULAR TO HEADER RUN.
3. TURF
4. 4"-THICK COMPACTED ROADBASE
5. MULCH - SEE SPECS
6. 1/4" RADIUS, TYPICAL
7. COMPACTED SUBGRADE
8. SHRUB BED
9. AMENDED TOPSOIL - SEE SPECS

D CONCRETE MOW CURB - 6" WIDE

SCALE: NTS SECTION



1. GRASS OR TURF
2. MULCH AS SPECIFIED
3. SHURB BED
4. TOPSOIL LAYER
5. SHOVEL EDGE
6. SUBGRADE

E SHOVEL TURF EDGE

SCALE: NTS SECTION

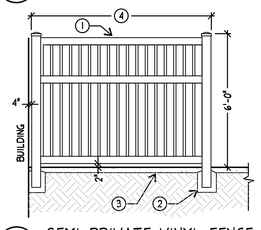
10 lbs per acre Western Wheatgrass	(Pascopyrum smithii)
6 lbs per acre Streambank Wheatgrass	(Elymus lanceolatus ssp. psammophilus)
.25 lbs per acre Lewis Flax	(Linum lewisii)
.01 lbs per acre Western Yarrow	(Achillea millefolium var. occidentalis)

NOTES:
1. THE DRILL SEEDING RATE IS 16.26 POUNDS PER ACRE
2. REFER TO CIVIL DRAWINGS FOR INSTALLATION METHOD
3. THE PERCENTAGES ARE BY WEIGHT, THE MIX IS BASED UPON SEED COUNT FOR EACH SPECIES.

CONTACT: GRANITE SEED COMPANY 1697 WEST 2100 NORTH LEHI, UT 84043
(801) 768-4422
GRANITE@GRANITESEED.COM

F DETENTION SEED MIX

SCALE: NTS SECTION

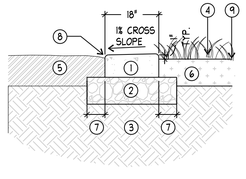


1. SEMI-PRIVATE VINYL FENCE, BEIGE
2. CONCRETE FOOTING PER MANUFACTURER'S SPECS., TYP.
3. CONCRETE MOW CURB
4. LENGTH VARIES - INSTALL PER MANUFACTURER'S RECOMMENDATIONS

NOTE:
1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
2. TO BE USED WITHIN ALL SIGHT TRIANGLES

G SEMI-PRIVATE VINYL FENCE

SCALE: NTS SECTION

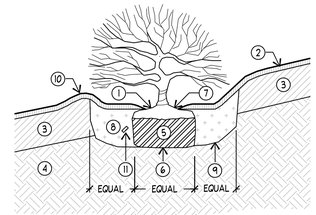


1. 5'-THICK CONCRETE MOW CURB
2. 4"-THICK COMPACTED ROADBASE
3. COMPACTED SUBGRADE
4. TURF OR SEED MIX, SEE PLANTING PLAN
5. PLANTING BED WITH MULCH, SEE PLANTING PLAN
6. AMENDED TOPSOIL - SEE SPECS.
7. EXTEND COMPACTED ROADBASE MIN. 4" BEYOND MOW CURB
8. EDGES 1/2" RADIUS , TYP.
9. FINISHED GRADE, SEE GRADING PLAN

H CONCRETE MOW CURB FENCE SECTION DETAIL

SCALE: NTS SECTION

NOTES:
1. PLANT SHRUB PLUMB.
2. PRUNE DEAD, DISEASED, DAMAGED, OR RUBBING BRANCHES AT PLANTING TIME. DO NOT PRUNE LEADER.
3. REMOVE ALL LABELS, WIRES, ETC. FROM SHRUB.

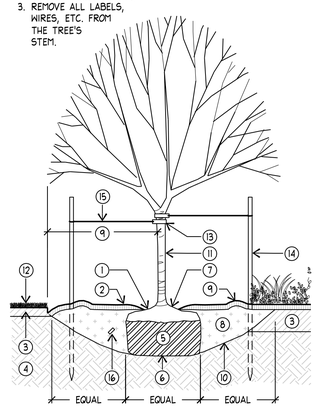


1. MULCH 1" TO 2" BACK FROM TRUNK
2. MULCH - SEE SPECS.
3. AMENDED TOPSOIL - SEE SPECS
4. UNDISTURBED SUBGRADE
5. IF THE SHRUB IS BALLED AND BURLAPPED (OR CONTAINED IN A WIRE BASKET), CUT AND REMOVE THE ROPE, STRING, WIRE, AND/OR WIRE BASKET FROM AROUND THE TRUNK AND TOP 1/3 OF THE ROOT BALL
6. SET ROOTBALL ON UNDISTURBED SUBGRADE
7. TRUNK FLAIR- SET 1" TO 2" ABOVE FINISH GRADE
8. MAKE THE HOLE WIDE, AS MUCH AS THREE TIMES THE DIAMETER OF THE ROOT BALL, BUT ONLY AS DEEP AS THE ROOT BALL. BACKFILL WITH 1/2 TOPSOIL BORROW FROM PIT AND 1/2 AMENDED TOPSOIL - SEE NOTES SHT. L-L101 DTL. G
9. ROUGHEN SIDES PRIOR TO BACKFILLING. SETTLE W/ WATER IN 12" LIFTS
10. FORM WELL AT EACH PLANT USING TOPSOIL
11. FERTILIZER TABLET - SEE SPECS.

A SHRUB/GRASS

SCALE: NTS SECTION

NOTES:
1. PLANT TREE PLUMB.
2. PRUNE DEAD, DISEASED, DAMAGED, OR RUBBING BRANCHES AT PLANTING TIME. DO NOT PRUNE LEADER.
3. REMOVE ALL LABELS, WIRES, ETC. FROM THE TREE'S STEM.



TREE STAKING ALONG ROADS OR WALK (ALL TREES LESS THAN 2" CALIPER)

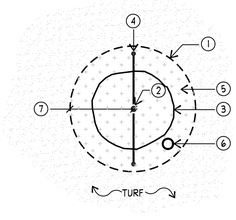
TREE STAKING IN OPEN SPACES (TRESS UP TO 2" CALIPER). ALIGN STAKES PERPENDICULAR W/ DIRECTION OF PREVAILING WINDS. ALL STAKES TO BE CONSISTENT.

TREE STAKING ALIGN 2 STAKES PARALLEL W/ ROAD OR WALK (USE THREE STAKES FOR ALL DECIDUOUS TREES GREATER THAN 2" CAL.)

1. MULCH 1" TO 2" BACK FROM TRUNK
2. MULCH - SEE SPECS.
3. AMENDED TOPSOIL- SEE SPECS
4. UNDISTURBED SUBGRADE
5. IF THE TREE IS BALLED AND BURLAPPED (OR CONTAINED IN A WIRE BASKET), CUT AND REMOVE THE ROPE, STRING, WIRE, AND/OR WIRE BASKET FROM AROUND THE TRUNK AND TOP 1/3 OF THE ROOT BALL
6. SET ROOTBALL ON UNDISTURBED SUBGRADE
7. TRUNK FLAIR- SET 1" TO 2" ABOVE FINISH GRADE
8. MAKE THE HOLE WIDE, AS MUCH AS THREE TIMES THE DIAMETER OF THE ROOT BALL, BUT ONLY AS DEEP AS THE ROOT BALL. BACKFILL WITH 1/2 TOPSOIL BORROW FROM PIT AND 1/2 AMENDED TOPSOIL
9. REMOVE SOD AT DRIPLINE OF TREE TO FORM TREE WELL OR A MIN. WIDTH OF 3'-0" DIA.
10. ROUGHEN SIDES PRIOR TO BACKFILLING. SETTLE W/ WATER IN 12" LIFTS
11. IF PLANTED IN LATE FALL, WRAP TRUNK, STARTING AT THE BOTTOM TO THE FIRST SET OF BRANCHES. REMOVE THE WRAP SPRING, AFTER THE LAST FROST. ONLY WRAP IF SUN HITS ITS TRUNK IN WINTER.
12. DO NOT PLANT LAWN IN TREE PIT
13. 3" OR WIDER NYLON WEBBING W/ METAL GROMMETS
14. 6'-0" X 2" DIA. ROUND WOOD STAKES, TWO PER TREE (THE STAKES SHALL BE PLUMB AND SET AT THE SAME HIEGHT)
15. DOUBLE STRAND PLIABLE NO. 10-GAGE GALVANIZED STEEL WIRE OR VINYL-COATED STEEL WIRE, DO NOT PULL TAUT
16. FERTILIZER TABLET - SEE SPECS.
17. EDGE OF WALK OR CURB

B DECIDUOUS TREE WITH STAKING

SCALE: NTS SECTION



1. TURF EDGE
2. TREE TRUNK
3. ROOTBALL
4. STAKING SYSTEM- LOCATE STAKES WITHIN THE TURF EDGE
5. MULCH AS SPECIFIED
6. ACCENT LIGHTING- IF USED, LOCATE ACCENT LIGHTS WITHIN THE TURF EDGE
7. REMOVE SOD AT DRIPLINE OF TREE- MIN. WIDTH OF 3'-0" DIA.

C TREE IN TURF

SCALE: NTS PLAN

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consultant:

project
Beacon Point
Saratoga Springs, UT

date
SEPTEMBER 12, 2014

revisions

data
asd project no: 14060

title
PLANTING DETAILS

sheet
L-L501

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SCALE & NORTH ARROW | A

NORTH

0 40' 80' 160'

SCALE: 1" = 80'-0"

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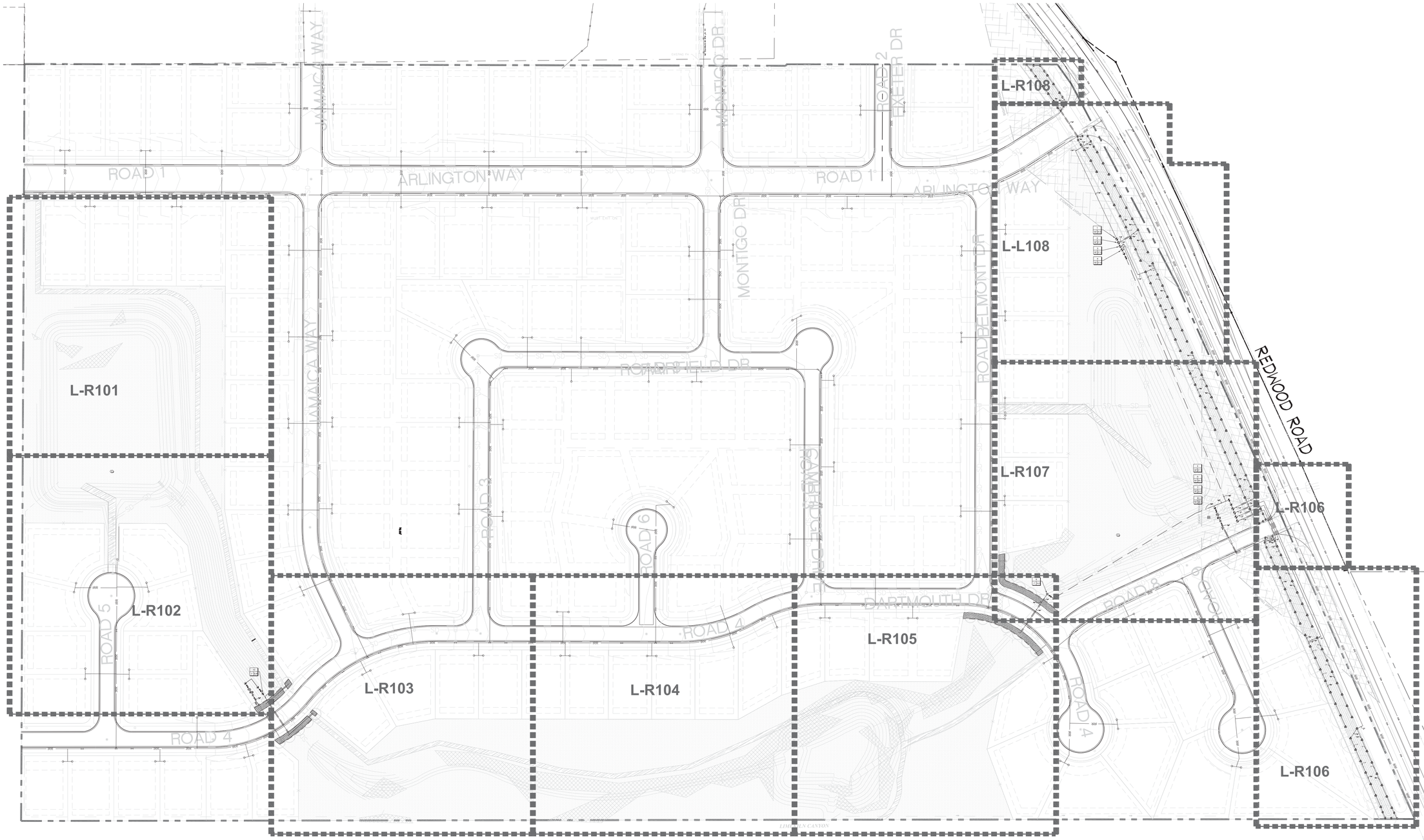

project

Beacon Point

Saratoga Springs, UT

date

SEPTEMBER 12, 2014

revisions

data

asd project no: 14060

title

OVERALL IRRIGATION PLAN

sheet

L-R100

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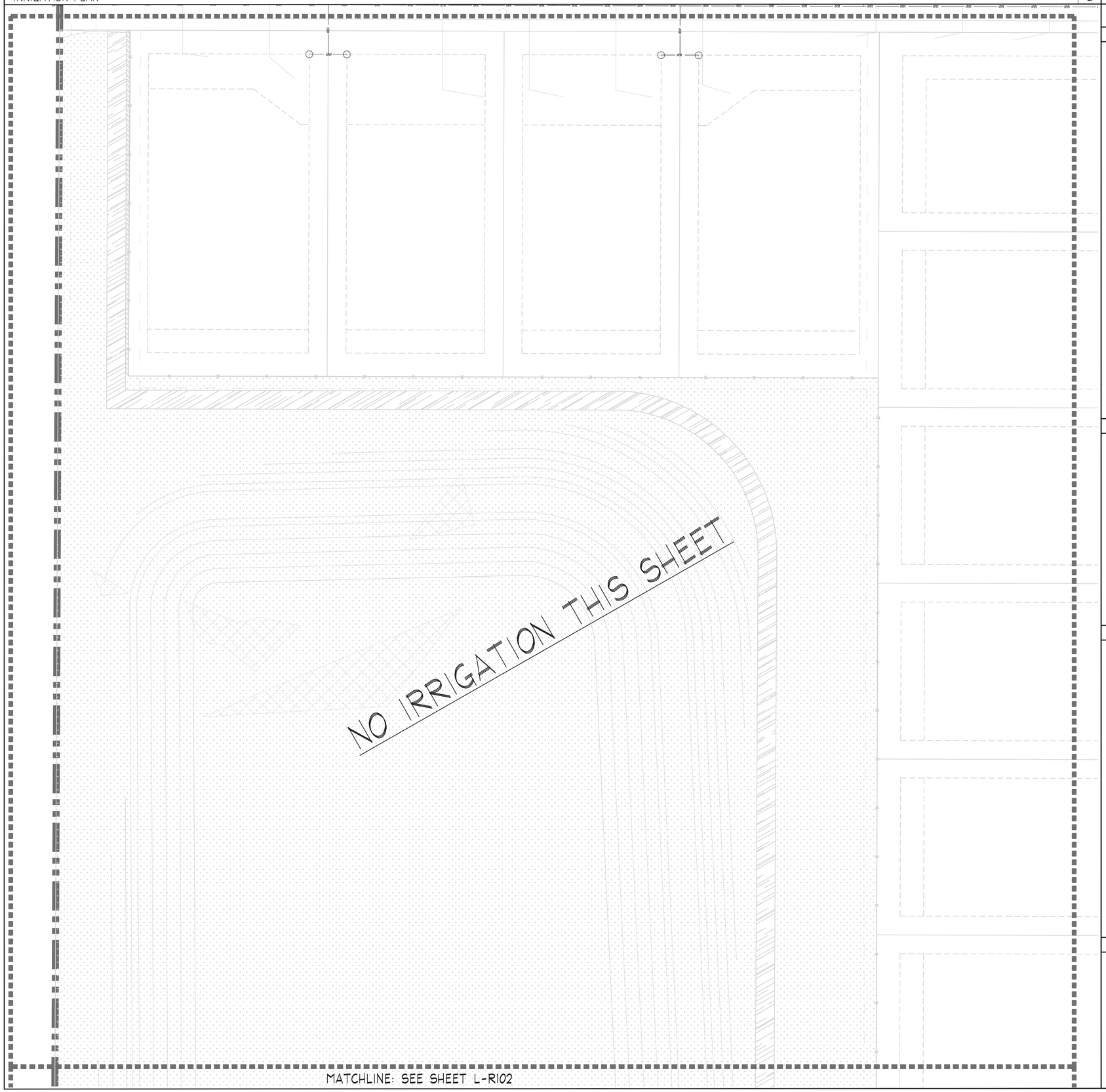
IRRIGATION PLAN — G



IRRIGATION SCHEDULE — A

* SEE SHEET L-R501 DETAIL 'A' FOR IRRIGATION SCHEDULE *

IRRIGATION NOTES — B

1. IT IS THE INTENT OF THESE IRRIGATION PLANS TO PROVIDE THE CONTRACTOR WITH CONSTRUCTION INFORMATION THAT WILL ENABLE HIM TO INSTALL A COMPLETE AND OPERATIONAL IRRIGATION SYSTEM.
2. THE CONTRACTOR SHALL VERIFY THE AVAILABLE WATER PRESSURE ON THE SITE PRIOR TO CONSTRUCTION. REPORT ANY DIFFERENCES BETWEEN THE WATER PRESSURE SHOWN ON THE DRAWINGS AND THE ACTUAL PRESSURE READINGS AT THE POINT OF CONNECTION. IN THE EVENT THE PRESSURE DIFFERENCES ARE NOT REPORTED PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY REVISIONS NECESSARY. CONTRACTOR TO MAINTAIN OPERATING PRESSURE FOR EACH ZONE TO THE LAST HEAD.
3. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FAMILIARIZE HIMSELF WITH ALL GRADE DIFFERENCES, LOCATION OF WALLS, STRUCTURES, WALKS, AND UTILITIES. THE IRRIGATION CONTRACTOR SHALL REPAIR OR REPLACE ALL ITEMS DAMAGED BY HIS WORK, HE SHALL COORDINATE HIS WORK WITH OTHER CONTRACTORS FOR THE LOCATION AND INSTALLATION OF PIPE SLEEVES AND LATERALS THROUGH WALLS AND UNDER PAVING.
4. DO NOT WILLFULLY INSTALL THE IRRIGATION SYSTEM AS SHOWN ON THE PLANS WHEN IT IS OBVIOUS IN THE FIELD THAT UNKNOWN OBSTRUCTIONS OR GRADING DIFFERENCES MAY NOT HAVE BEEN CONSIDERED IN THE ENGINEERING. SUCH OBSTRUCTIONS OR DIFFERENCES SHOULD BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT. IN THE EVENT THAT THIS NOTIFICATION IS NOT PERFORMED, THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY REVISIONS NECESSARY.
5. THIS DESIGN IS DIAGRAMMATIC, ALL IRRIGATION EQUIPMENT SHOWN WITHIN PAVED AREAS ARE FOR DESIGN CLARIFICATION ONLY AND SHALL BE INSTALLED IN PLANTING AREAS WHEREVER POSSIBLE.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING AND/OR REPLACING ANY SITE ITEM DAMAGED DURING THE COURSE OF CONSTRUCTION.
7. THE CONTRACTOR SHALL FLUSH AND ADJUST ALL SPRINKLER HEADS AND VALVES FOR OPTIMUM COVERAGE. INSTALL ALL SPRINKLER HEADS WITH NOZZLES OF THE APPROPRIATE DEGREE AND RADIUS FOR THE AREA TO BE COVERED. ADJUST ALL NOZZLES TO ELIMINATE SPRAYING ONTO WALKS, BUILDINGS, ETC.
8. ALL PIPE INSTALLED IN PAVING SHALL BE SLEEVED PER THE LEGEND.
9. INSTALL CHECK VALVE PER LEGEND AS NEEDED TO PREVENT HEAD DRAINAGE FROM BUBBLING, SPRAY HEADS AND DRIP EMITTERS. DIAMETER.
10. MINIMUM SIZE PIPE ON ANY CIRCUIT IS 3/4"
11. CONTRACTOR TO INSTALL MANUAL DRAIN VALVES AT ALL LOW POINTS ON MAINLINE - SEE SHEET L.R502 DETAIL H.
12. PROVIDE AND INSTALL ALL THE MANUFACTURER'S RECOMMENDED SURGE AND LIGHTNING PROTECTION EQUIPMENT ON CONTROLLERS.
13. ALIGN VALVE BOXES WITHIN PLANTING BEDS AND EDGE OF PAVEMENT, TYP.

REFERENCE SCHEDULE NOTES — C

SYMBOL	IRRIGATION DESCRIPTION
IR-101	IRRIGATION EQUIPMENT SHOWN OUTSIDE PLANTING AREAS FOR GRAPHIC CLARITY ONLY. EQUIPMENT SHALL BE LOCATED INSIDE PLANTING AREAS AND VALVE BOXES SHALL BE ALIGNED WITH PLANTING BEDS AND EDGE OF PAVEMENT, TYP.
IR-102	VERIFY P.O.C IN THE FIELD, SEE CIVIL PLANS FOR WATER METER LOCATION.
IR-103	PEDESTAL MOUNT CONTROLLER, COORDINATE WITH ELECTRICAL CONNECTIONS FOR 120V POWER.
IR-104	RAIN SENSOR, SEE SHEET L.R502 DETAIL B
IR-105	EXISTING SECONDARY IRRIGATION WATER SUPPLY, SEE CIVIL PLANS FOR DETAILS.

CRITICAL ANALYSIS — D

Generated:	2014-08-20	Generated:	2014-08-20
P.O.C. NUMBER:01		P.O.C. NUMBER:02	
Water Source Information:		Water Source Information:	
FLOW AVAILABLE		FLOW AVAILABLE	
Point of Connection Size:	1-1/2"	Point of Connection Size:	1-1/2"
Flow Available:	47.70 gpm	Flow Available:	47.70 gpm
PRESSURE AVAILABLE		PRESSURE AVAILABLE	
Static Pressure at POC:	119.00 psi	Static Pressure at POC:	114.00 psi
Pressure Available:	119.00 psi	Pressure Available:	114.00 psi
DESIGN ANALYSIS		DESIGN ANALYSIS	
Maximum Station Flow:	31.03 gpm	Maximum Station Flow:	6.86 gpm
Flow Available at POC:	47.70 gpm	Flow Available at POC:	47.70 gpm
Residual Flow Available:	16.67 gpm	Residual Flow Available:	40.84 gpm
Critical Station:	1	Critical Station:	10
Design Pressure:	40.00 psi	Design Pressure:	30.00 psi
Elevation Loss:	0.00 psi	Elevation Loss:	0.00 psi
Friction Loss:	7.94 psi	Friction Loss:	1.47 psi
Fittings Loss:	0.79 psi	Fittings Loss:	0.15 psi
Loss through Valve:	3.59 psi	Loss through Valve:	13.96 psi
Pressure Req. at Critical Station:	52.31 psi	Pressure Req. at Critical Station:	45.58 psi
Loss for Fittings:	1.34 psi	Loss for Fittings:	0.01 psi
Loss for Main Line:	13.36 psi	Loss for Main Line:	0.13 psi
Loss for POC to Valve Elevation:	0.00 psi	Loss for POC to Valve Elevation:	0.00 psi
Loss for Backflow:	0.00 psi	Loss for Backflow:	0.00 psi
Loss for Master Valve:	3.59 psi	Loss for Master Valve:	3.90 psi
Critical Station Pressure at POC:	70.60 psi	Critical Station Pressure at POC:	49.62 psi
Pressure Available:	119.00 psi	Pressure Available:	114.00 psi
Residual Pressure Available:	48.40 psi	Residual Pressure Available:	64.38 psi

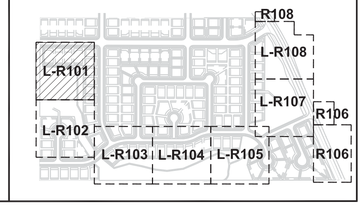
SCALE & NORTH ARROW — F

NORTH

0 10 20 40

SCALE: 1" = 20'-0"

KEYPLAN — E



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revisions

data
asd project no: 14060

title
IRRIGATION PLAN

sheet
L-R101

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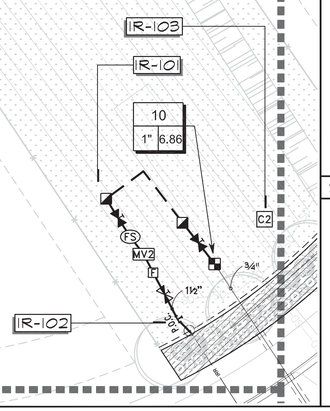
IRRIGATION PLAN

MATCHLINE: SEE SHEET L-R101

R — IR-104

ROAD 5

MATCHLINE: SEE SHEET L-R103



IRRIGATION SCHEDULE

* SEE SHEET L-R501 DETAIL 'A' FOR IRRIGATION SCHEDULE *

IRRIGATION NOTES

1. IT IS THE INTENT OF THESE IRRIGATION PLANS TO PROVIDE THE CONTRACTOR WITH CONSTRUCTION INFORMATION THAT WILL ENABLE HIM TO INSTALL A COMPLETE AND OPERATIONAL IRRIGATION SYSTEM.
2. THE CONTRACTOR SHALL VERIFY THE AVAILABLE WATER PRESSURE ON THE SITE PRIOR TO CONSTRUCTION. REPORT ANY DIFFERENCES BETWEEN THE WATER PRESSURE SHOWN ON THE DRAWINGS AND THE ACTUAL PRESSURE READINGS AT THE POINT OF CONNECTION. IN THE EVENT THE PRESSURE DIFFERENCES ARE NOT REPORTED PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY REVISIONS NECESSARY. CONTRACTOR TO MAINTAIN OPERATING PRESSURE FOR EACH ZONE TO THE LAST HEAD.
3. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FAMILIARIZE HIMSELF WITH ALL GRADE DIFFERENCES, LOCATION OF WALLS, STRUCTURES, WALKS, AND UTILITIES. THE IRRIGATION CONTRACTOR SHALL REPAIR OR REPLACE ALL ITEMS DAMAGED BY HIS WORK, HE SHALL COORDINATE HIS WORK WITH OTHER CONTRACTORS FOR THE LOCATION AND INSTALLATION OF PIPE SLEEVES AND LATERALS THROUGH WALLS AND UNDER PAVING.
4. DO NOT WILLFULLY INSTALL THE IRRIGATION SYSTEM AS SHOWN ON THE PLANS WHEN IT IS OBVIOUS IN THE FIELD THAT UNKNOWN OBSTRUCTIONS OR GRADING DIFFERENCES MAY NOT HAVE BEEN CONSIDERED IN THE ENGINEERING. SUCH OBSTRUCTIONS OR DIFFERENCES SHOULD BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT. IN THE EVENT THAT THIS NOTIFICATION IS NOT PERFORMED, THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY REVISIONS NECESSARY.
5. THIS DESIGN IS DIAGRAMMATIC, ALL IRRIGATION EQUIPMENT SHOWN WITHIN PAVED AREAS ARE FOR DESIGN CLARIFICATION ONLY AND SHALL BE INSTALLED IN PLANTING AREAS WHEREVER POSSIBLE.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING AND/OR REPLACING ANY SITE ITEM DAMAGED DURING THE COURSE OF CONSTRUCTION.
7. THE CONTRACTOR SHALL FLUSH AND ADJUST ALL SPRINKLER HEADS AND VALVES FOR OPTIMUM COVERAGE. INSTALL ALL SPRINKLER HEADS WITH NOZZLES OF THE APPROPRIATE DEGREE AND RADIUS FOR THE AREA TO BE COVERED. ADJUST ALL NOZZLES TO ELIMINATE SPRAYING ONTO WALKS, BUILDINGS, ETC.
8. ALL PIPE INSTALLED IN PAVING SHALL BE SLEEVED PER THE LEGEND.
9. INSTALL CHECK VALVE PER LEGEND AS NEEDED TO PREVENT HEAD DRAINAGE FROM BUBBLING, SPRAY HEADS AND DRIP EMITTERS. DIAMETER.
10. MINIMUM SIZE PIPE ON ANY CIRCUIT IS 3/4"
11. CONTRACTOR TO INSTALL MANUAL DRAIN VALVES AT ALL LOW POINTS ON MAINLINE - SEE SHEET L.R502 DETAIL H.
12. PROVIDE AND INSTALL ALL THE MANUFACTURER'S RECOMMENDED SURGE AND LIGHTNING PROTECTION EQUIPMENT ON CONTROLLERS.
13. ALIGN VALVE BOXES WITHIN PLANTING BEDS AND EDGE OF PAVEMENT, TYP.

REFERENCE SCHEDULE NOTES

SYMBOL	IRRIGATION DESCRIPTION
IR-101	IRRIGATION EQUIPMENT SHOWN OUTSIDE PLANTING AREAS FOR GRAPHIC CLARITY ONLY. EQUIPMENT SHALL BE LOCATED INSIDE PLANTING AREAS AND VALVE BOXES SHALL BE ALIGNED WITH PLANTING BEDS AND EDGE OF PAVEMENT, TYP.
IR-102	VERIFY P.O.C IN THE FIELD, SEE CIVIL PLANS FOR WATER METER LOCATION.
IR-103	PEDESTAL MOUNT CONTROLLER, COORDINATE WITH ELECTRICAL CONNECTIONS FOR 120V POWER.
IR-104	RAIN SENSOR, SEE SHEET L.R502 DETAIL B
IR-105	EXISTING SECONDARY IRRIGATION WATER SUPPLY, SEE CIVIL PLANS FOR DETAILS.

CRITICAL ANALYSIS

Generated:	2014-08-20	Generated:	2014-08-20
P.O.C. NUMBER:01		P.O.C. NUMBER:02	
Water Source Information:		Water Source Information:	
FLOW AVAILABLE		FLOW AVAILABLE	
Point of Connection Size:	1-1/2"	Point of Connection Size:	1-1/2"
Flow Available:	47.70 gpm	Flow Available:	47.70 gpm
PRESSURE AVAILABLE		PRESSURE AVAILABLE	
Static Pressure at POC:	119.00 psi	Static Pressure at POC:	114.00 psi
Pressure Available:	119.00 psi	Pressure Available:	114.00 psi
DESIGN ANALYSIS		DESIGN ANALYSIS	
Maximum Station Flow:	31.03 gpm	Maximum Station Flow:	6.86 gpm
Flow Available at POC:	47.70 gpm	Flow Available at POC:	47.70 gpm
Residual Flow Available:	16.67 gpm	Residual Flow Available:	40.84 gpm
Critical Station:	1	Critical Station:	10
Design Pressure:	40.00 psi	Design Pressure:	30.00 psi
Elevation Loss:	0.00 psi	Elevation Loss:	0.00 psi
Friction Loss:	7.94 psi	Friction Loss:	1.47 psi
Fittings Loss:	0.74 psi	Fittings Loss:	0.15 psi
Loss through Valve:	3.54 psi	Loss through Valve:	13.96 psi
Pressure Req. at Critical Station:	52.31 psi	Pressure Req. at Critical Station:	45.58 psi
Loss for Fittings:	1.34 psi	Loss for Fittings:	0.01 psi
Loss for Main Line:	13.36 psi	Loss for Main Line:	0.13 psi
Loss for POC to Valve Elevation:	0.00 psi	Loss for POC to Valve Elevation:	0.00 psi
Loss for Backflow:	0.00 psi	Loss for Backflow:	0.00 psi
Loss for Master Valve:	3.54 psi	Loss for Master Valve:	3.90 psi
Critical Station Pressure at POC:	70.60 psi	Critical Station Pressure at POC:	48.62 psi
Pressure Available:	119.00 psi	Pressure Available:	114.00 psi
Residual Pressure Available:	48.40 psi	Residual Pressure Available:	64.38 psi

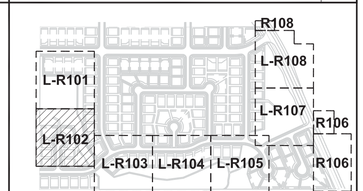
SCALE & NORTH ARROW

NORTH

0 10 20 40

SCALE: 1" = 20'-0"

KEYPLAN



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consultant:

project

Beacon Point

Saratoga Springs, UT

date

SEPTEMBER 12, 2014

revisions

data

asd project no: 14060

title

IRRIGATION PLAN

sheet

L-R102

File : E:\14060_Beacon Point II\Cadd\IRRIGATION.dwg Sep 12, 2014 - 8:31am

IRRIGATION PLAN

G

MATCHLINE: SEE SHEET L-R102

MATCHLINE: SEE SHEET L-R104

IR-105

IR-101

IR-102

IR-103

IR-104

IR-105

IRRIGATION SCHEDULE

A

* SEE SHEET L-R501 DETAIL 'A' FOR IRRIGATION SCHEDULE *

IRRIGATION NOTES

B

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REFERENCE SCHEDULE NOTES

C

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IR-104	RAIN SENSOR, SEE SHEET L.R502 DETAIL B
IR-105	EXISTING SECONDARY IRRIGATION WATER SUPPLY, SEE CIVIL PLANS FOR DETAILS.

CRITICAL ANALYSIS

D

Generated:	2014-08-20	Generated:	2014-08-20
P.O.C. NUMBER.01		P.O.C. NUMBER.02	
Water Source Information:		Water Source Information:	
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Point of Connection Size:	1-1/2"	Point of Connection Size:	1-1/2"
Flow Available:	47.70 gpm	Flow Available:	47.70 gpm
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Static Pressure at POC:	119.00 psi	Static Pressure at POC:	114.00 psi
Pressure Available:	119.00 psi	Pressure Available:	114.00 psi
DESIGN ANALYSIS		DESIGN ANALYSIS	
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Flow Available at POC:	47.70 gpm	Flow Available at POC:	47.70 gpm
Residual Flow Available:	16.67 gpm	Residual Flow Available:	40.84 gpm
Critical Station:	1	Critical Station:	10
Design Pressure:	40.00 psi	Design Pressure:	30.00 psi
Elevation Loss:	0.00 psi	Elevation Loss:	0.00 psi
Friction Loss:	7.94 psi	Friction Loss:	1.47 psi
Fittings Loss:	0.79 psi	Fittings Loss:	0.15 psi
Loss through Valve:	3.54 psi	Loss through Valve:	13.96 psi
Pressure Req. at Critical Station:	52.31 psi	Pressure Req. at Critical Station:	45.58 psi
Loss for Fittings:	1.34 psi	Loss for Fittings:	0.01 psi
Loss for Main Line:	13.36 psi	Loss for Main Line:	0.13 psi
Loss for POC to Valve Elevation:	0.00 psi	Loss for POC to Valve Elevation:	0.00 psi
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SCALE & NORTH ARROW

F

NORTH

SCALE: 1" = 20'-0"

0 10 20 40

KEYPLAN

E

R108

L-R108

L-R107

R106

L-R101

L-R102

L-R103

L-R104

L-R105

R106

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consultant:

project

Beacon Point

Saratoga Springs, UT

date

SEPTEMBER 12, 2014

revisions

data

asd project no: 14060

title

IRRIGATION PLAN

sheet

L-R103

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IRRIGATION PLAN

IRRIGATION SCHEDULE

* SEE SHEET L-R501 DETAIL 'A' FOR IRRIGATION SCHEDULE *

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REFERENCE SCHEDULE NOTES

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IR-104	RAIN SENSOR, SEE SHEET L.R502 DETAIL B
IR-105	EXISTING SECONDARY IRRIGATION WATER SUPPLY, SEE CIVIL PLANS FOR DETAILS.

CRITICAL ANALYSIS

Generated:	2014-08-20	Generated:	2014-08-20
P.O.C. NUMBER:01		P.O.C. NUMBER:02	
Water Source Information:		Water Source Information:	
FLOW AVAILABLE		FLOW AVAILABLE	
Point of Connection Size:	1-1/2"	Point of Connection Size:	1-1/2"
Flow Available:	47.70 gpm	Flow Available:	47.70 gpm
PRESSURE AVAILABLE		PRESSURE AVAILABLE	
Static Pressure at POC:	119.00 psi	Static Pressure at POC:	114.00 psi
Pressure Available:	119.00 psi	Pressure Available:	114.00 psi
DESIGN ANALYSIS		DESIGN ANALYSIS	
Maximum Station Flow:	31.03 gpm	Maximum Station Flow:	6.86 gpm
Flow Available at POC:	47.70 gpm	Flow Available at POC:	47.70 gpm
Residual Flow Available:	16.67 gpm	Residual Flow Available:	40.84 gpm
Critical Station:	1	Critical Station:	10
Design Pressure:	40.00 psi	Design Pressure:	30.00 psi
Elevation Loss:	0.00 psi	Elevation Loss:	0.00 psi
Friction Loss:	7.94 psi	Friction Loss:	1.47 psi
Fittings Loss:	0.79 psi	Fittings Loss:	0.15 psi
Loss through Valve:	3.54 psi	Loss through Valve:	13.96 psi
Pressure Req. at Critical Station:	52.31 psi	Pressure Req. at Critical Station:	45.58 psi
Loss for Fittings:	1.34 psi	Loss for Fittings:	0.01 psi
Loss for Main Line:	13.36 psi	Loss for Main Line:	0.13 psi
Loss for POC to Valve Elevation:	0.00 psi	Loss for POC to Valve Elevation:	0.00 psi
Loss for Backflow:	0.00 psi	Loss for Backflow:	0.00 psi
Loss for Master Valve:	3.54 psi	Loss for Master Valve:	3.90 psi
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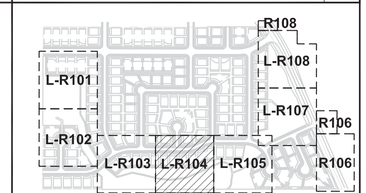
Residual Pressure Available:	48.40 psi	Residual Pressure Available:	64.38 psi

SCALE & NORTH ARROW

NORTH SCALE: 1" = 20'-0"

0 10 20 40

KEYPLAN



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consultant:

project

Beacon Point

Saratoga Springs, UT

date

SEPTEMBER 12, 2014

revisions

data

asd project no: 14060

title

IRRIGATION PLAN

sheet

L-R104

File : E:\14060_Beacon Point II\Cadd\IRRIGATION.dwg Sep 12, 2014 - 8:35am

IRRIGATION PLAN

MATCHLINE: SEE SHEET L-R107

MATCHLINE: SEE SHEET L-R104

DARTMOUTH DR

9
1" 14.5

IR-101

1 1/4"

3/4"

3/4"

IRRIGATION SCHEDULE

* SEE SHEET L-R501 DETAIL 'A' FOR IRRIGATION SCHEDULE *

IRRIGATION NOTES

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Loss for Master Valve:	3.54 psi	Loss for Master Valve:	3.90 psi
Critical Station Pressure at POC:	70.60 psi	Critical Station Pressure at POC:	49.62 psi
Pressure Available:	119.00 psi	Pressure Available:	114.00 psi
Residual Pressure Available:	48.40 psi	Residual Pressure Available:	64.38 psi

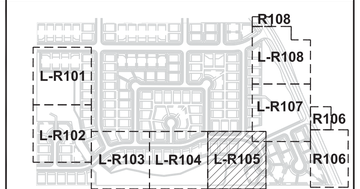
SCALE & NORTH ARROW

NORTH

0 10 20 40

SCALE: 1" = 20'-0"

KEYPLAN



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consultant:

project

Beacon Point

Saratoga Springs, UT

date

SEPTEMBER 12, 2014

revisions

data

asd project no: 14060

title

IRRIGATION PLAN

sheet

L-R105

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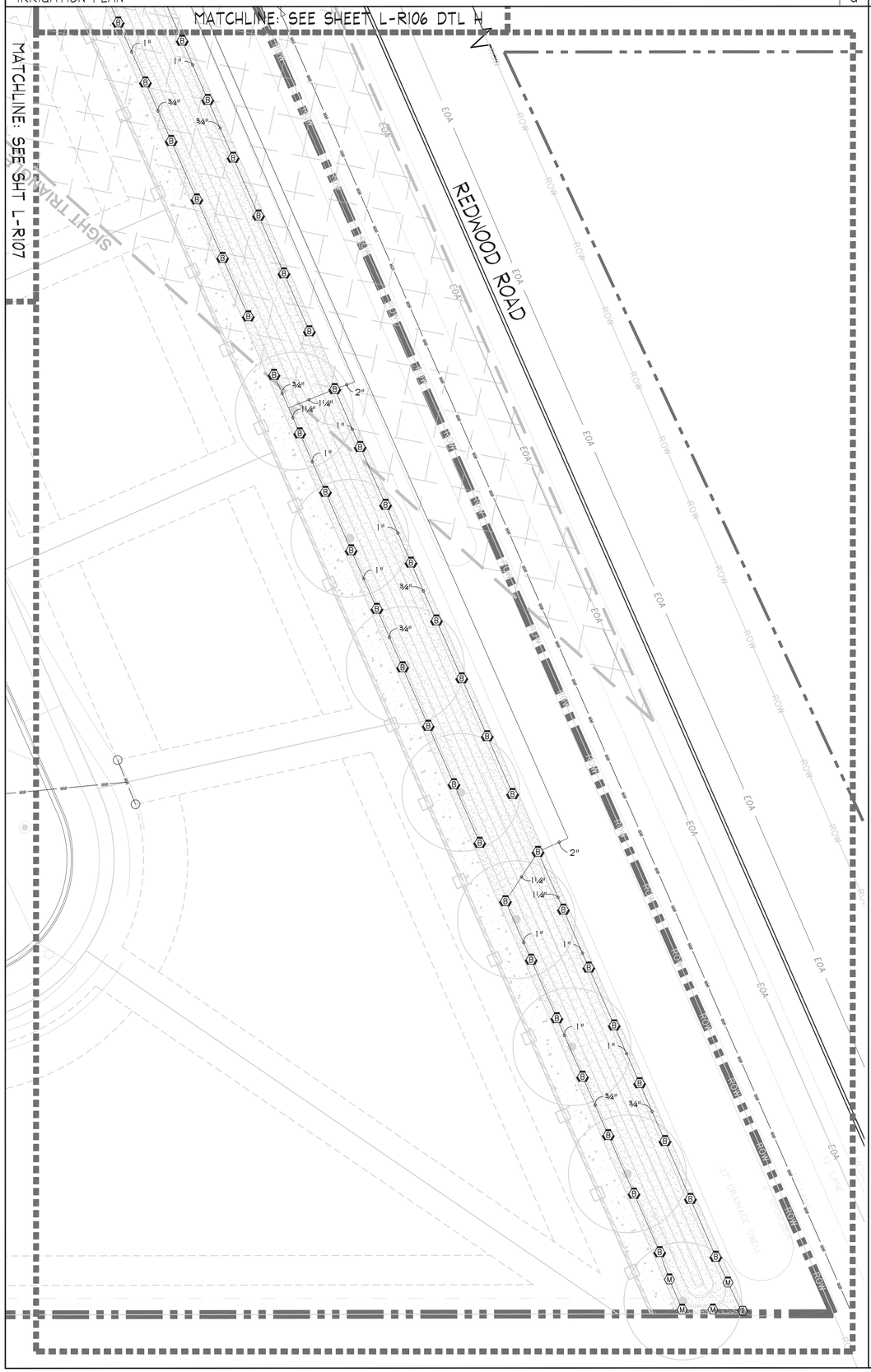
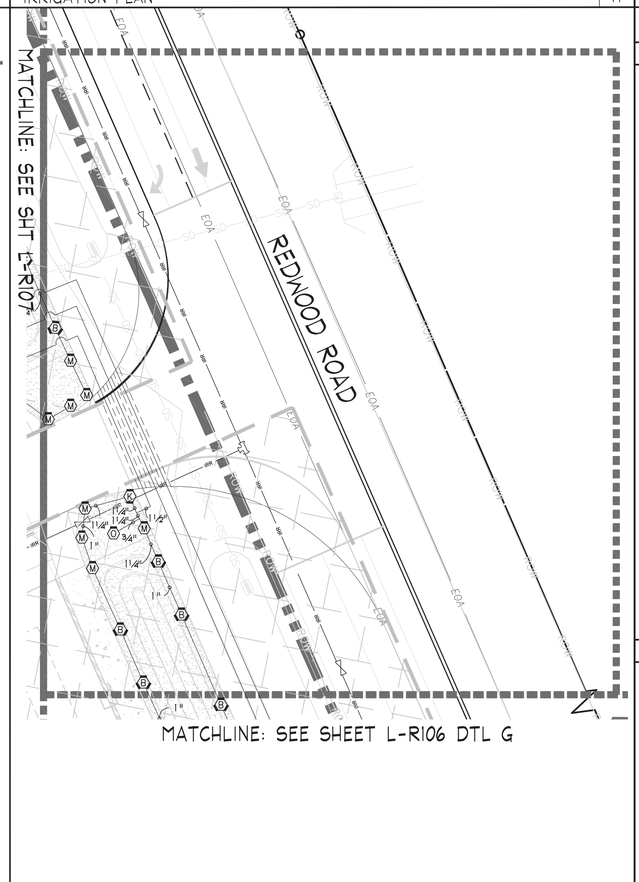
IRRIGATION PLAN G



IRRIGATION PLAN H



IRRIGATION SCHEDULE A

* SEE SHEET L-R501 DETAIL 'A' FOR IRRIGATION SCHEDULE *

IRRIGATION NOTES B

1. IT IS THE INTENT OF THESE IRRIGATION PLANS TO PROVIDE THE CONTRACTOR WITH CONSTRUCTION INFORMATION THAT WILL ENABLE HIM TO INSTALL A COMPLETE AND OPERATIONAL IRRIGATION SYSTEM.
2. THE CONTRACTOR SHALL VERIFY THE AVAILABLE WATER PRESSURE ON THE SITE PRIOR TO CONSTRUCTION. REPORT ANY DIFFERENCES BETWEEN THE WATER PRESSURE SHOWN ON THE DRAWINGS AND THE ACTUAL PRESSURE READINGS AT THE POINT OF CONNECTION. IN THE EVENT THE PRESSURE DIFFERENCES ARE NOT REPORTED PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY REVISIONS NECESSARY. CONTRACTOR TO MAINTAIN OPERATING PRESSURE FOR EACH ZONE TO THE LAST HEAD.
3. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FAMILIARIZE HIMSELF WITH ALL GRADE DIFFERENCES, LOCATION OF WALLS, STRUCTURES, WALKS, AND UTILITIES. THE IRRIGATION CONTRACTOR SHALL REPAIR OR REPLACE ALL ITEMS DAMAGED BY HIS WORK, HE SHALL COORDINATE HIS WORK WITH OTHER CONTRACTORS FOR THE LOCATION AND INSTALLATION OF PIPE SLEEVES AND LATERALS THROUGH WALLS AND UNDER PAVING.
4. DO NOT WILLFULLY INSTALL THE IRRIGATION SYSTEM AS SHOWN ON THE PLANS WHEN IT IS OBVIOUS IN THE FIELD THAT UNKNOWN OBSTRUCTIONS OR GRADING DIFFERENCES MAY NOT HAVE BEEN CONSIDERED IN THE ENGINEERING. SUCH OBSTRUCTIONS OR DIFFERENCES SHOULD BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT. IN THE EVENT THAT THIS NOTIFICATION IS NOT PERFORMED, THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY REVISIONS NECESSARY.
5. THIS DESIGN IS DIAGRAMMATIC, ALL IRRIGATION EQUIPMENT SHOWN WITHIN PAVED AREAS ARE FOR DESIGN CLARIFICATION ONLY AND SHALL BE INSTALLED IN PLANTING AREAS WHEREVER POSSIBLE.
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8. ALL PIPE INSTALLED IN PAVING SHALL BE SLEEVED PER THE LEGEND.
9. INSTALL CHECK VALVE PER LEGEND AS NEEDED TO PREVENT HEAD DRAINAGE FROM BUBBLING, SPRAY HEADS AND DRIP EMITTERS. DIAMETER.
10. MINIMUM SIZE PIPE ON ANY CIRCUIT IS 3/4"
11. CONTRACTOR TO INSTALL MANUAL DRAIN VALVES AT ALL LOW POINTS ON MAINLINE - SEE SHEET L.R502 DETAIL H.
12. PROVIDE AND INSTALL ALL THE MANUFACTURER'S RECOMMENDED SURGE AND LIGHTNING PROTECTION EQUIPMENT ON CONTROLLERS.
13. ALIGN VALVE BOXES WITHIN PLANTING BEDS AND EDGE OF PAVEMENT, TYP.

REFERENCE SCHEDULE NOTES C

SYMBOL	IRRIGATION DESCRIPTION
IR-101	IRRIGATION EQUIPMENT SHOWN OUTSIDE PLANTING AREAS FOR GRAPHIC CLARITY ONLY. EQUIPMENT SHALL BE LOCATED INSIDE PLANTING AREAS AND VALVE BOXES SHALL BE ALIGNED WITH PLANTING BEDS AND EDGE OF PAVEMENT, TYP.
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IR-103	PEDESTAL MOUNT CONTROLLER, COORDINATE WITH ELECTRICAL CONNECTIONS FOR 120V POWER.
IR-104	RAIN SENSOR, SEE SHEET L.R502 DETAIL B
IR-105	EXISTING SECONDARY IRRIGATION WATER SUPPLY, SEE CIVIL PLANS FOR DETAILS.

CRITICAL ANALYSIS D

Generated:	2014-08-20	Generated:	2014-08-20
P.O.C. NUMBER:01		P.O.C. NUMBER:02	
Water Source Information:		Water Source Information:	
FLOW AVAILABLE		FLOW AVAILABLE	
Point of Connection Size:	1-1/2"	Point of Connection Size:	1-1/2"
Flow Available:	47.70 gpm	Flow Available:	47.70 gpm
PRESSURE AVAILABLE		PRESSURE AVAILABLE	
Static Pressure at POC:	119.00 psi	Static Pressure at POC:	114.00 psi
Pressure Available:	119.00 psi	Pressure Available:	114.00 psi
DESIGN ANALYSIS		DESIGN ANALYSIS	
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Flow Available at POC:	47.70 gpm	Flow Available at POC:	47.70 gpm
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Critical Station:	1	Critical Station:	10
Design Pressure:	40.00 psi	Design Pressure:	30.00 psi
Elevation Loss:	0.00 psi	Elevation Loss:	0.00 psi
Friction Loss:	7.94 psi	Friction Loss:	1.47 psi
Fittings Loss:	0.79 psi	Fittings Loss:	0.15 psi
Loss through Valve:	3.54 psi	Loss through Valve:	13.96 psi
Pressure Req. at Critical Station:	52.31 psi	Pressure Req. at Critical Station:	45.58 psi
Loss for Fittings:	1.34 psi	Loss for Fittings:	0.01 psi
Loss for Main Line:	13.36 psi	Loss for Main Line:	0.13 psi
Loss for POC to Valve Elevation:	0.00 psi	Loss for POC to Valve Elevation:	0.00 psi
Loss for Backflow:	0.00 psi	Loss for Backflow:	0.00 psi
Loss for Master Valve:	3.54 psi	Loss for Master Valve:	3.90 psi
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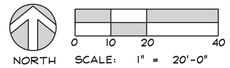
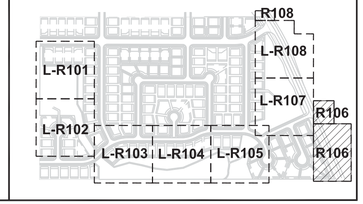
SCALE & NORTH ARROW F



KEYPLAN E



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date

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revisions

data

asd project no: 14060

title

IRRIGATION PLAN

sheet

L-R106

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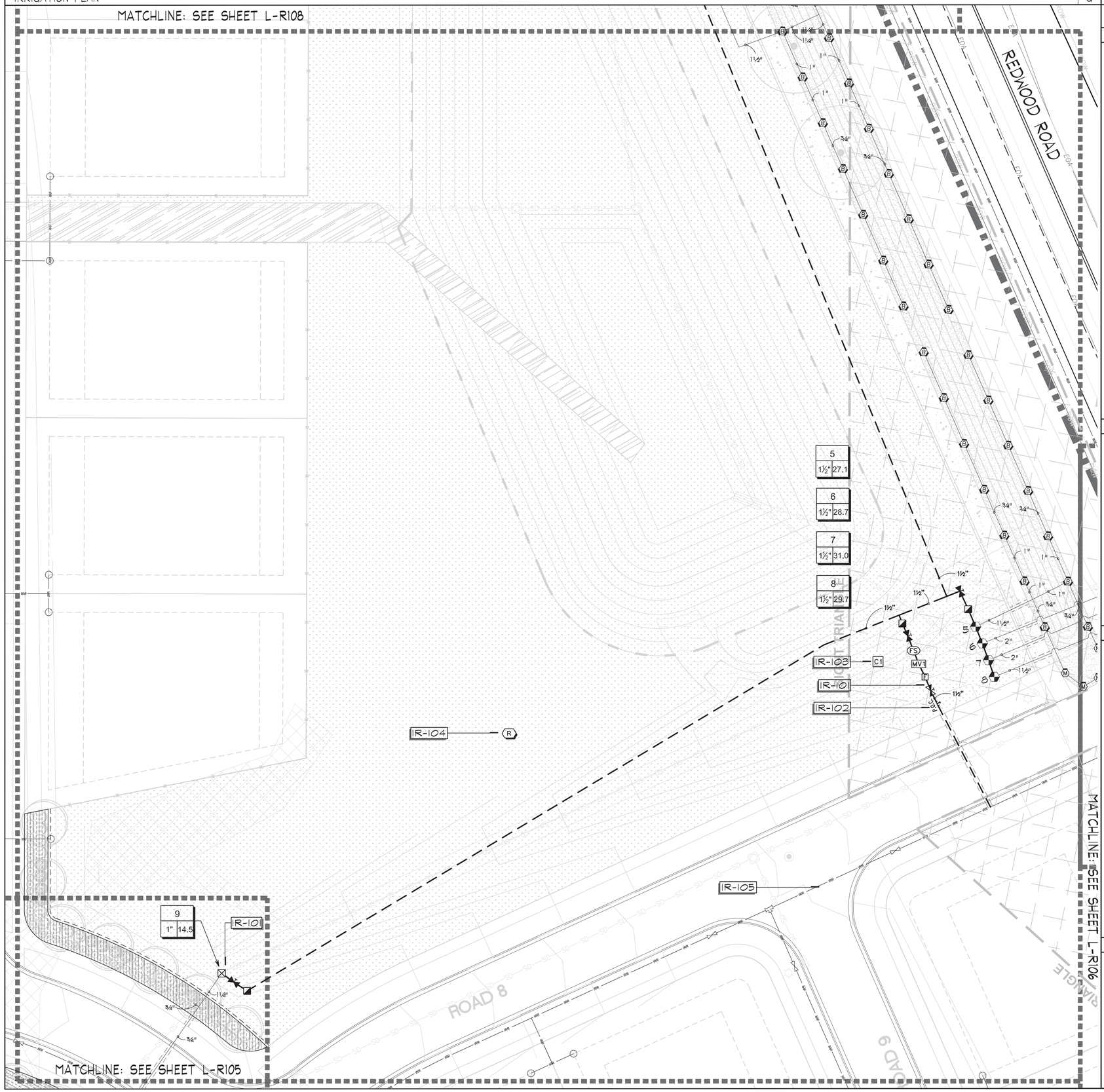
IRRIGATION PLAN



IRRIGATION SCHEDULE — A

* SEE SHEET L-R501 DETAIL 'A' FOR IRRIGATION SCHEDULE *

IRRIGATION NOTES — B

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IR-104	RAIN SENSOR, SEE SHEET L.R502 DETAIL B
IR-105	EXISTING SECONDARY IRRIGATION WATER SUPPLY, SEE CIVIL PLANS FOR DETAILS.

CRITICAL ANALYSIS — D

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P.O.C. NUMBER.01		P.O.C. NUMBER.02	
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Pressure Available:	119.00 psi	Pressure Available:	114.00 psi
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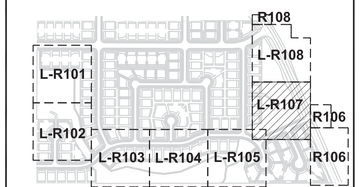
SCALE & NORTH ARROW — F

NORTH SCALE: 1" = 20'-0"

0 10 20 40

KEYPLAN — E



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revisions

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asd project no: 14060

title

IRRIGATION PLAN

sheet

L-R107

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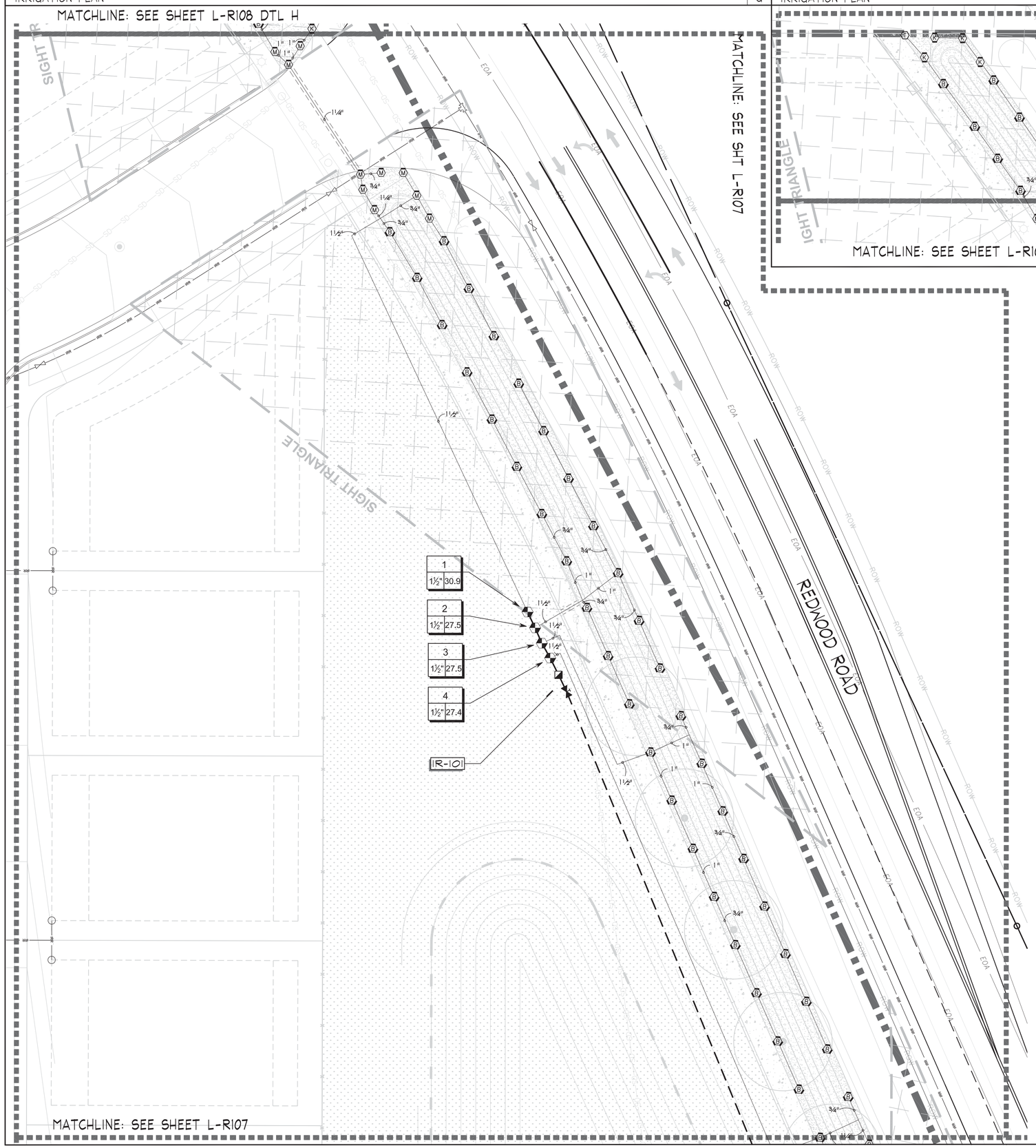
IRRIGATION PLAN — G



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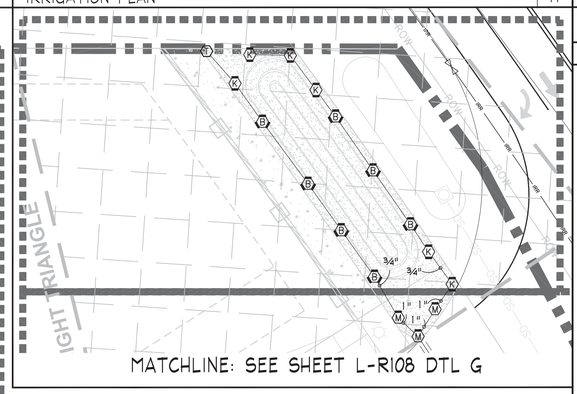

IRRIGATION SCHEDULE — A

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REFERENCE SCHEDULE NOTES — C

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P.O.C. NUMBER:01		P.O.C. NUMBER:02	
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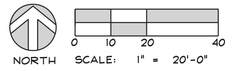
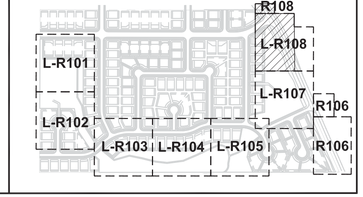


KEYPLAN — E



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title

IRRIGATION PLAN

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L-R108

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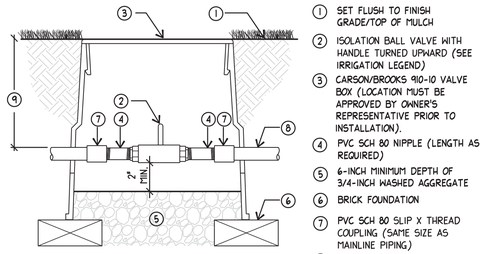
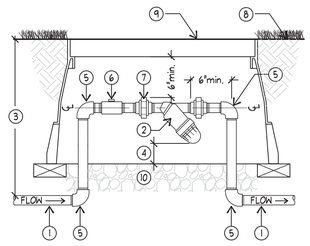


1. SET FLUSH TO FINISH GRADE/TOP OF MULCH
2. ISOLATION BALL VALVE WITH HANDLE TURNED UPWARD (SEE IRRIGATION LEGEND)
3. CARSON/BROOKS 910-10 VALVE BOX (LOCATION MUST BE APPROVED BY OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION).
4. PVC SCH 80 NIPPLE (LENGTH AS REQUIRED)
5. 6-INCH MINIMUM DEPTH OF 3/4-INCH WASHED AGGREGATE
6. BRICK FOUNDATION
7. PVC SCH 80 SLIP X THREAD COUPLING (SAME SIZE AS MAINLINE PIPING)
8. MAINLINE PIPING (SIZE AS PER PLAN)
9. FOR TRENCH DEPTHS (SEE TRENCHING AND SLEEVING DETAIL)

G ISOLATION BALL VALVE ASSEMBLY

SCALE: NTS SECTION

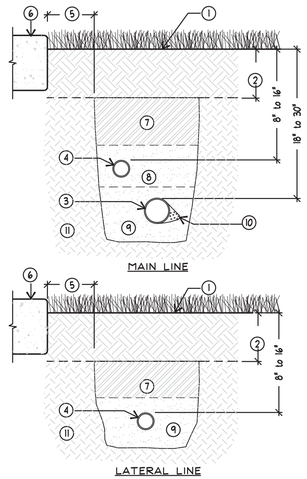
NOTES:
1. IF POSSIBLE, LOCATE FILTER ASSEMBLY IN PLANTER BED. LOCATION TO BE APPROVED BY THE OWNER'S REPRESENTATIVE
2. INSTALL FILTER PER MANUFACTURER'S SPECIFICATIONS.
3. ALL BURIED BOLTS SHALL BE STAINLESS STEEL.
4. USE SCHEDULE 80 PIPE AND FITTINGS ABOVE GROUND



1. MAINLINE PIPING (SIZE AS PER PLAN)
2. IN-LINE FILTER (SEE IRRIGATION LEGEND).
3. FOR TRENCH DEPTHS (SEE TRENCHING AND SLEEVING DETAIL)
4. ENSURE THAT MINIMUM CLEARANCE IS MAINTAINED FOR PROPER MAINTENANCE OF FILTER
5. PVC SCH. 80 T X T ELBOW
6. ISOLATION BALL VALVE (SEE IRRIGATION SCHEDULE)
7. PVC SCH. 80 UNION (BOTH SIDES OF FILTER)
8. SET FLUSH TO FINISH GRADE/TOP OF MULCH
9. CARSON BROOKS VALVE BOX (SIZE APPROPRIATELY) WITH EXTENSIONS, IF NEEDED (LOCATION MUST BE APPROVED BY OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION).
10. 12-INCH MINIMUM DEPTH OF 3/4-INCH WASHED AGGREGATE

E FILTER ASSEMBLY

SCALE: 3/4"=1'-0" SECTION

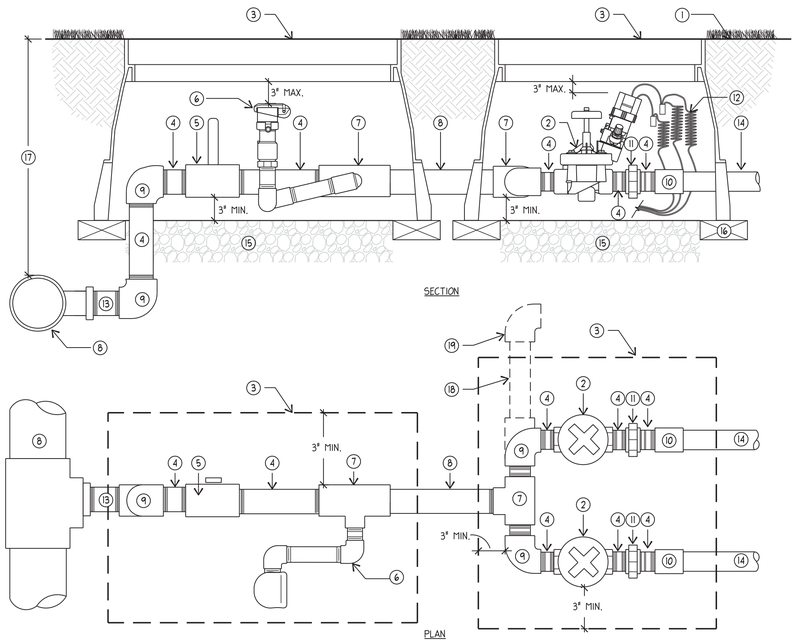


1. FINISH GRADE/TOP OF MULCH
2. TOPSOIL LAYER - SEE SPECS
3. MAINLINE PIPING (SIZE AS PER PLAN)
4. LATERAL PIPING (SIZE AS PER PLAN)
5. LOCATE ALL TRENCHES 12" AWAY FROM ALL BUILDINGS, SIDEWALKS OR ANY HARD SURFACES
6. TOP OF HARDSCAPE
7. CLEAN BACKFILL- SEE SPECS.
8. SAND- IN CASES WHERE LATERAL PIPING IS INSTALLED IN MAINLINE TRENCH, USE SAND TO BACKFILL TRENCH
9. SAND- USE SAND TO A DEPTH OF 2" BELOW AND TO THE EITHER SIDE OF PIPING TO BED ALL PVC PIPING AND ELECTRICAL WIRES
10. ELECTRICAL WIRES- ATTACH CONTROL WIRES TO EITHER SIDE OF MAIN LINE WITH DUCT TAPE AT 15 FEET O.C.
11. COMPACTED SUBGRADE

NOTE:
1. SETTLE ALL TRENCHES WITH WATER PRIOR TO INSTALLATION OF TOPSOIL.

B TRENCHING

SCALE: NTS SECTION

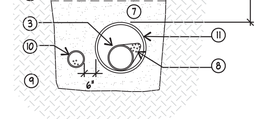


1. SET FLUSH TO FINISH GRADE/TOP OF MULCH
2. ELECTRIC REMOTE-CONTROL VALVE (SEE IRRIGATION LEGEND)
3. VALVE BOX (SEE SPECS). LOCATION MUST BE APPROVED BY OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION.
4. PVC SCH 80 NIPPLE (LENGTH AS REQUIRED)
5. ISOLATION BALL VALVE WITH HANDLE TURNED UPWARDS (SEE IRRIGATION LEGEND)
6. QUICK COUPLER VALVE (SEE IRRIGATION LEGEND AND DETAIL)
7. PVC SCH 80 TEE T X T X S (SAME SIZE AS MAINLINE PIPING)
8. MAINLINE PIPING (SIZE AS PER PLAN)
9. PVC SCH. 80 T X T ELBOW
10. PVC SCH. 80 T X S COUPLING
11. PVC SCH. 80 UNION
12. CONTROL WIRES- 30-INCH LINEAR LENGTH OF WIRE, COILED
13. PVC SCH 80 NIPPLE WITH BUSHING (LENGTH AS REQUIRED)
14. LATERAL PIPING (SIZE AS PER PLAN)
15. 6-INCH MINIMUM DEPTH OF 3/4-INCH WASHED AGGREGATE
16. BRICK FOUNDATION, TYP.
17. FOR TRENCH DEPTHS (SEE TRENCHING AND SLEEVING DETAIL)
18. PVC SCH 80 PIPE (LENGTH AS REQUIRED)
19. EXTEND FOR NUMBER OF VALVES REQUIRED

NOTES:
1. LOCATE ALL VALVE BOXES IN PLANTER BEDS UNLESS OTHERWISE INDICATED.
2. ALL FITTINGS AND NIPPLES IN MANIFOLD SHALL BE SCH. 80 THREADED PVC USING TEFLON TAPE.
3. VALVE MANIFOLD TO BE INSTALLED GOING AWAY FROM MAIN SUPPLY LINE. MINIMUM OF 1 FOOT BEFORE CHANGE IN DIRECTION.
4. CUT ALL VALVE BOXES AS REQUIRED SO BOXES DO NOT SIT ON PIPING.

F ELECTRIC REMOTE-CONTROL VALVE ASSEMBLY

SCALE: NTS SECTION/PLAN

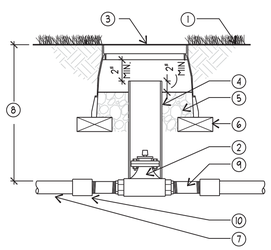


1. HARDSCAPE PAVING
2. COMPACTED AGGREGATE SUB-BASE
3. MAINLINE PIPING
4. LATERAL PIPING
5. CLEAN BACKFILL- SEE SPECS.
6. SAND- IN CASES WHERE LATERAL PIPING IS INSTALLED IN MAINLINE TRENCH, USE SAND TO BACKFILL TRENCH
7. SAND- USE SAND TO A DEPTH OF 2" BELOW AND TO THE EITHER SIDE OF SLEEVING
8. ELECTRICAL WIRES- ATTACH CONTROL WIRES TO EITHER SIDE OF MAIN LINE WITH DUCT TAPE AT 15 FEET O.C.
9. COMPACTED SUBGRADE
10. ELECTRICAL CONDUIT
11. SLEEVING:
-SLEEVES SHALL BE TWICE THE NOMINAL SIZE OF THE PIPE WITHIN
-SLEEVES 4" AND SMALLER SHALL BE CLASS 315 PVC
-SLEEVES 4" AND GREATER SHALL BE PVC SEWER PIPE

NOTE:
1. SETTLE ALL TRENCHES WITH WATER PRIOR TO INSTALLATION OF TOPSOIL.
2. WHEN MULTIPLE PIPES OCCUR IN ONE TRENCH, ADD REQUIRED SLEEVE SIZES TOGETHER FOR 1 SLEEVE SIZE.
3. EXTEND ALL SLEEVING 12" MIN. BEYOND EDGE OF PAVING.

C SLEEVING

SCALE: NTS SECTION



1. SET FLUSH TO FINISH GRADE/TOP OF MULCH
2. STOP AND WASTE VALVE (SEE IRRIGATION LEGEND)
3. CARSON/BROOKS 910-10 VALVE BOX (LOCATION MUST BE APPROVED BY OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION).
4. 6" SCH 40 PVC SLEEVE (LENGTH AS REQUIRED). NOTCH OVER VALVE FOR STABILITY.
5. 6-INCH MINIMUM DEPTH OF 3/4-INCH WASHED AGGREGATE
6. BRICK FOUNDATION
7. MAINLINE PIPING (SIZE AS PER PLAN)
8. FOR TRENCH DEPTHS (SEE TRENCHING AND SLEEVING DETAIL)
9. PVC SCH 80 NIPPLE (LENGTH AS REQUIRED)
10. PVC SCH 80 SLIP X THREAD COUPLING (SAME SIZE AS MAINLINE PIPING)

D STOP AND WASTE ASSEMBLY

SCALE: NTS SECTION

SYMBOL	MANUFACTURER/MODEL	ARC	PSI	GPM	RADIUS
M	Hunter MP1000 w/ MPR40-04-CV-R	45-210	40		12'
O	Hunter MP1000 w/ MPR40-04-CV-R	360	40	0.75	12'
W	Hunter MP2000 w/ MPR40-04-CV-R	45-210	40		16'
B	Hunter MP3000 w/ MPR40-04-CV-R	45-210	40		25'
T	Hunter MP Corner w/ MPR40-04-CV-R	Adj	40		13'

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION
	Rain Bird XCZ LF-100-PRF Low Flow Drip Control Kit, 1" Low Flow Valve, 3/4" Pressure Regulating RBY Filter, and 30psi Pressure Regulator. 0.2gpm-5gpm.
	Netafim LVCZS8010075-HF Pre-Assembled Control Zone Kit, with 1" Series 80 Control Valve, 3/4" Disc Filter, and High Flow Pressure Regulator 4.5GPM to 17.6GPM.
	Area to Receive Dripline Netafim TLCV6-18(18) Landscape Dripperline with 0.6gph emitters at 18"o.c. (2.2 lph @ 0.45 m) with check valve, pressure compensation, 14.7psi min. to 50psi max. (1 to 3.5 bar). Dripperline laterals spaced at 18" (0.46 m) apart, with emitters offset for triangular pattern.

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION
	Rain Bird PEB-PRS-D-NP-HAN 1", 1-1/2", 2" Plastic Industrial Valves. Low Flow Operating Capability, Globe Configuration. With Pressure Regulator Module, and Purple Flow Handle for Non-Potable Water Use.
	Rain Bird 5-NP 1" Brass Quick-Coupling Valve, with Corrosion-Resistant Stainless Steel Spring, Locking Non-Potable Purple Rubber Cover, and 1-Piece Body.
	NIBCO T-FP-600 Isolation valve. Sized equal to pipe size. Isolation valves shall be used at all vavle manifolds and isolation points.
	1 1/2" Waterous 2500 Series Resilient Wedge Gate Valve with Square Nut
MV1	Rain Bird PEB-PRS-D-NP-HAN 1-1/2" 1", 1-1/2", 2" Plastic Industrial Valves. Low Flow Operating Capability, Globe Configuration. With Pressure Regulator Module, and Purple Flow Handle for Non-Potable Water Use.
MV2	Rain Bird PEB-PRS-D-NP-HAN 1-1/2" 1", 1-1/2", 2" Plastic Industrial Valves. Low Flow Operating Capability, Globe Configuration. With Pressure Regulator Module, and Purple Flow Handle for Non-Potable Water Use.
FS	Rain Bird FS-150-B 1-1/2" Flow Sensor for use with Rain Bird Maxicom, SiteControl, and ESP-LXD Central Control Systems. Brass Model. Suggested Operating Range of 2.0 GPM to 82.6 GPM. Sensors should be sized for flow rather than pipe size.
F	Amiad Filter: 1-1601-1151-1130 Amiad 'Super' 1-1/2" Plastic Filter with 130 micron Stainless Steel weave-wire screen filter element.
P.O.C. P.O.C.	Point of Connection 1-1/2" Point of Connection 1-1/2"
	Irrigation Lateral Line: PVC Schedule 40 PVC Schedule 40 irrigation pipe.
	Irrigation Mainline: PVC Schedule 40 PVC Schedule 40 irrigation pipe.
	Pipe Sleeve: PVC Class 200 SDR 21

Valve Callout
Valve Number
#" Valve GPM
Valve Size

A IRRIGATION SCHEDULE

SCALE: NTS

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project
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Saratoga Springs, UT

date
SEPTEMBER 12, 2014

revisions

data
asd project no: 14060

title
IRRIGATION DETAILS

sheet
L-R501

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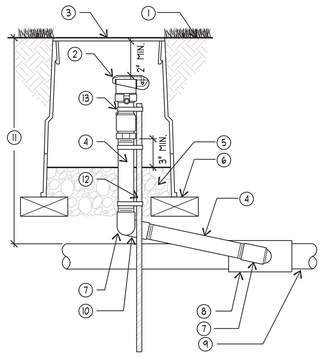
NUMBER	MODEL	SIZE	TYPE	PSI	PSI @ POC	GPM	PRECIP
1	Rain Bird PEB-PRS-D-NP-HAN	1-1/2"	Turf Rotary	52.32	70.60	30.87	0.70 in/h
2	Rain Bird PEB-PRS-D-NP-HAN	1-1/2"	Turf Rotary	46.95	62.31	27.47	0.64 in/h
3	Rain Bird PEB-PRS-D-NP-HAN	1-1/2"	Turf Rotary	49.90	65.11	27.47	0.62 in/h
4	Rain Bird PEB-PRS-D-NP-HAN	1-1/2"	Turf Rotary	52.27	67.31	27.43	0.66 in/h
5	Rain Bird PEB-PRS-D-NP-HAN	1-1/2"	Turf Rotary	47.47	52.93	27.15	0.68 in/h
6	Rain Bird PEB-PRS-D-NP-HAN	1-1/2"	Turf Rotary	50.26	56.06	28.73	0.68 in/h
7	Rain Bird PEB-PRS-D-NP-HAN	1-1/2"	Turf Rotary	50.57	56.85	31.03	0.65 in/h
8	Rain Bird PEB-PRS-D-NP-HAN	1-1/2"	Turf Rotary	51.16	57.44	29.70	0.64 in/h
9	Netafim LVCZ50010075-HF	1"	Area for Dripline	37.19	43.53	14.47	0.45 in/h
10	Rain Bird XCZ LF-100-PRF	1"	Area for Dripline	45.58	49.62	6.86	0.45 in/h

K VALVE-SCHEDULE

SCALE: NTS — SCHEDULE

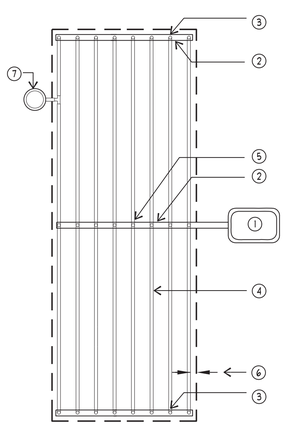


1. SET FLUSH TO FINISH GRADE/TOP OF MULCH
2. QUICK-COUPLING VALVE (SEE IRRIGATION SCEDULE)
3. 10" ROUND VALVE BOX. (LOCATION MUST BE APPROVED BY OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION).
4. PVC SCH 80 NIPPLE (LENGTH AS REQUIRED)
5. 6-INCH MINIMUM DEPTH OF 3/4-INCH WASHED AGGREGATE
6. BRICK FOUNDATION
7. PVC SCH 80 STREET ELL
8. PVC SCH 80 TEE OR ELL (SAME SIZE AS MAINLINE PIPING)
9. MAINLINE PIPING (SIZE AS PER PLAN)
10. PVC SCH 80 ELL
11. FOR TRENCH DEPTHS (SEE TRENCHING AND SLEEVING DETAIL)
12. #4 REBAR - 24" MIN. LENGTH
13. STAINLESS STEEL SCREW CLAMP

NOTE:
1. FURNISH FITTINGS AND PIPING NOMINALLY SIZED IDENTICAL TO NOMINAL QUICK COUPLING VALVE INLET SIZE.

J QUICK COUPLER VALVE ASSEMBLY

SCALE: NTS — SECTION

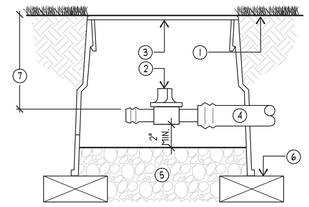


1. ELECTRIC REMOTE CONTROL VALVE WITH DISC FILTER AND PRV - REFER TO IRRIGATION SCHEDULE
2. DRIPLINE START CONNECTION MALE ADAPTER - SEE DETAIL
3. 1" PVC EXHAUST HEADER OR FOOTER, NO SMALLER THAN 1"
4. DRIPLINE TUBING - REFER TO IRRIGATION SCHEDULE TYPE AND SPACING
5. 1" PVC SUPPLY EXHAUST PIPE, NO SMALLER THAN 1"
6. PERIMETER LATERALS 2" TO 4" FROM EDGE
7. MANUAL LINE FLUSHING VALVE - SEE SHT. L-R504 DTL. C. PLACE MANUAL LINE FLUSHING VALVES AT EACH DEAD END, AND LOW POINT IN THE SYSTEM.

NOTES:
1. SOIL STAPLES: ANCHOR THE DRIP TUBING WITH STAINLESS STEEL SOIL STAPLES EVERY 4 FEET. USE TWO SOIL STAPLES AT EACH TEE, ELBOW OR CROSS.

G DRIPLINE TYPICAL PLANTER LAYOUT

SCALE: NTS — PLAN

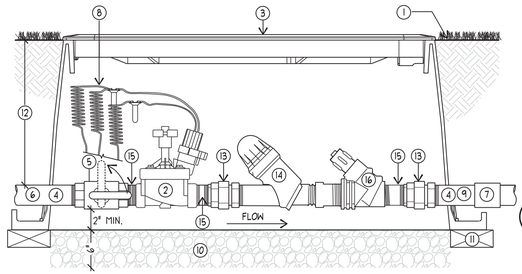


1. SET FLUSH TO FINISH GRADE/TOP OF MULCH
2. LINE FLUSHING VALVE - NETAFIM TLSOV
3. 10 INCH ROUND VALVE BOX
4. DRIPLINE TUBING
5. 12-INCH MINIMUM DEPTH OF 1-INCH WASHED AGGREGATE
6. BRICK FOUNDATION
7. FOR TRENCH DEPTHS SEE TRENCHING DETAIL

NOTES:
1. PLACE MANUAL LINE FLUSHING VALVES AT EACH DEAD END, AND LOW POINT IN THE SYSTEM.

D MANUAL LINE FLUSHING VALVE ASSEMBLY

SCALE: NTS — SECTION

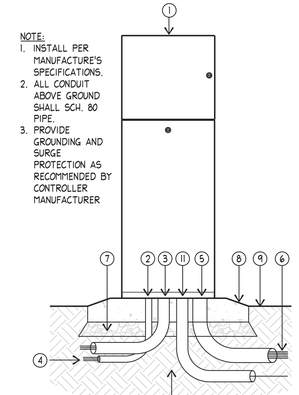


1. SET FLUSH TO FINISH GRADE/TOP OF MULCH
2. ELECTRIC REMOTE-CONTROL VALVE (SEE IRRIGATION SCHEDULE)
3. VALVE BOX (SEE SPECS.)
4. PVC SCH 80 TOE NIPPLE WITH SXS FITTING (LENGTH AS REQUIRED)
5. ISOLATION BALL VALVE (SEE IRRIGATION SCHEDULE) ASSOCIATE WITH VALVE MANIFOLDS AS INDICATED ON THE PLANS
6. MAINLINE PIPING (SIZE AS PER PLAN)
7. PVC SCH 80 SLIP X SLIP COUPLING OR BELL END OF PIPE
8. CONTROL WIRES- 30-INCH LINEAR LENGTH OF WIRE, COILED
9. LATERAL PIPING (SIZE AS PER PLAN)
10. 6-INCH MINIMUM DEPTH OF 1-INCH WASHED AGGREGATE
11. BRICK FOUNDATION, TYP.
12. FOR TRENCH DEPTHS (SEE TRENCHING AND SLEEVING DETAIL)
13. PVC SCH. 80 UNION
14. DISK FILTER (SEE IRRIGATION SCHEDULE)
15. PVC SCH. 80 NIPPLE; LENGTH AS REQUIRED (TYP.)
16. INLINE PRESSURE REGULATOR VALVE (SEE IRRIGATION LEGEND)

NOTES:
1. LOCATE ALL VALVE BOXES IN PLANTER BEDS UNLESS OTHERWISE INDICATED. MAINTAIN 3 FEET AWAY FROM THE HARDSCAPE.
2. ALL FITTINGS AND NIPPLES IN MANIFOLD SHALL BE SCH. 80 THREADED PVC USING TEFLON TAPE.
3. VALVE MANIFOLD TO BE INSTALLED GOING AWAY FROM MAIN SUPPLY LINE. MINIMUM OF 1 FOOT BEFORE CHANGE IN DIRECTION.
4. CUT ALL VALVE BOXES AS REQUIRED SO BOXES DO NOT SIT ON PIPING.

E ELECTRIC REMOTE CONTROL VALVE W/ DISC FILTER & PRV

SCALE: NTS — SECTION

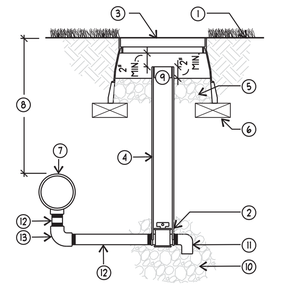


NOTE:
1. INSTALL PER MANUFACTURE'S SPECIFICATIONS.
2. ALL CONDUIT ABOVE GROUND SHALL SCH. 80 PIPE.
3. PROVIDE GROUNDING AND SURGE PROTECTION AS RECOMMENDED BY CONTROLLER MANUFACTURER

1. IRRIGATION CONTROLLER ON PEDESTAL (SEE IRRIGATION SCHEDULE)
2. POWER CONDUIT (NOT SUPPLIED) FOR LINE FEED INTO METER
3. GROUND WIRE SCH. 80 CONDUIT, MIN. 1 1/2". GROUND PER MANUFACTURER & ASIC GUIDELINES
4. 120V POWER SUPPLY BY OTHERS. CONTRACTOR SHALL COORDINATE 120 VAC ELECTRICAL SUPPLY AND MAKE FINAL CONNECTIONS TO THE CONTROLLER
5. 1-1/4", 1-1/2" OR 2" PVC SCH 80 CONDUIT AND LONG SWEEP ELL FOR 2-WIRE CABLE. INSTALL ONE EXTRA ELL FOR FUTURE USE.
6. 2-WIRE PATH TO DECODERS. USE A DIFFERENT CABLE JACKET COLOR FOR EACH PATH. INSTALL WIRING IN 1" CONDUIT BETWEEN VALVE BOXES.
7. 6" MIN. ROAD BASE
8. POURED CONCRETE BASE, 6" MIN. THICKNESS, EXTEND 6" BEYOND OUTSIDE DIMENSIONS OF ENCLOSURE WITH 0.5% MIN. SLOPE FOR DRAINAGE
9. FINISH GRADE
10. SUBGRADE COMPACTED TO 95%
11. 3/4" SCH. 80 CONDUIT FOR COMMUNICATIONS WIRE

A IRRIGATION CONTROLLER - PEDESTAL MOUNT

SCALE: NTS — SECTION/ELEVATION

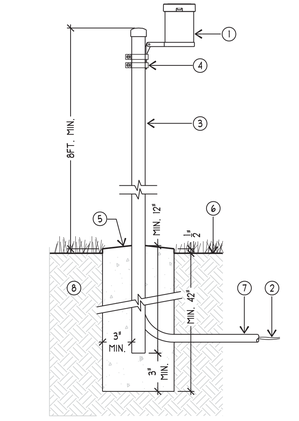


1. SET FLUSH TO FINISH GRADE/TOP OF MULCH
2. MANUAL DRAIN VALVE (SEE IRRIGATION LEGEND)
3. CARSON/BROOKS 910-10 VALVE BOX (LOCATION MUST BE APPROVED BY OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION).
4. 4" SCH 40 PVC SLEEVE (LENGTH AS REQUIRED). NOTCH OVER VALVE FOR STABILITY.
5. 6-INCH MINIMUM DEPTH OF 3/4-INCH WASHED AGGREGATE
6. BRICK FOUNDATION
7. MAINLINE PIPING (SIZE AS PER PLAN)
8. FOR TRENCH DEPTHS (SEE TRENCHING AND SLEEVING DETAIL)
9. WEATHERMATIC 906L LOCKING VALVE CAP WITH A RLK-1 KEY
10. GRAVEL SUMP- 18" DIA. X 12" DEEP
11. SCH. 80 PVC STREET ELL TURNED DOWNWARDS
12. PVC SCH 80 NIPPLE (LENGTH AS REQUIRED)
13. PVC SCH 80 ELL

NOTES:
1. ALL LINES SHALL SLOPE TO MANUAL DRAIN. IF FIELD CONDITIONS NECESSITATE ADDITIONAL DRAINS, THESE DRAINS SHALL BE INSTALLED FOR COMPLETE DRAINAGE OF THE ENTIRE SYSTEM.

H MAINLINE DRAIN ASSEMBLY

SCALE: NTS — SECTION

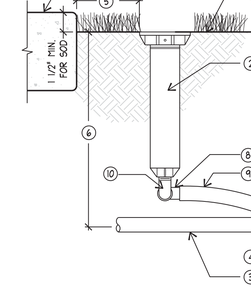


1. RAIN GAUGE - SEE IRRIGATION LEGEND. MOUNT GAUGE A MIN. OF 8ft. ABOVE FINISH GRADE, # IN LOCATION APPROVED BY THE LANDSCAPE ARCHITECT THAT OPTOMIZES RAIN WATER COLLECTION
2. CONTRACTOR SHALL SUPPLY WIRE AS RECOMMENDED BY THE MANUFACTURER AND CONNECT TO ET-MANAGER (ETM) LOCATED IN MAINTENANCE OFFICE (LOWER-LEVEL OF PARKING STRUCTURE). COORDINATE INSTALLATION WITH PARKING STRUCTURE CONTRACTOR
3. 1 1/2" GALV. POST, SET IN CONCRETE AND PLUMBED
4. CONDUIT "U" CLAMP
5. CONCRETE FOOTING SLOPED AROUND POST
6. TOP OF FINISH GRADE
7. 1" CONDUIT TO SOLAR SYNC, FLOW SENSOR AND/OR WIND SENSOR FROM CONTROLLER
8. COMPACTED SUB-GRADE

NOTE:
1. INSTALL PER MANUFACTURE'S SPECIFICATIONS.

B RAIN SENSOR

SCALE: NTS — ELEVATION

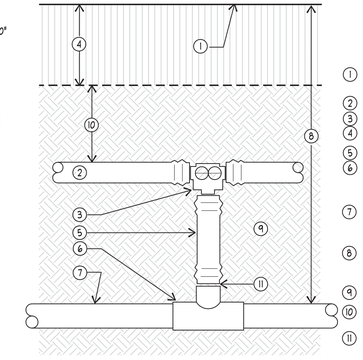


1. SET HEAD FLUSH WITH FINISH GRADE/TOP OF MULCH
2. POP-UP SPRAY HEAD (SEE IRRIGATION SCHEDULE)
3. LATERAL PIPING (SIZE AS PER PLAN)
4. PVC SCH 40 TEE OR ELL
5. ALL SPRAY HEADS TO BE PLACED 2" CLEAR OF ALL HARDSCAPE SURFACES AND 2'-0" FROM BUILDINGS
6. FOR TRENCH DEPTHS (SEE TRENCHING AND SLEEVING DETAIL)
7. TOP OF HARDSCAPE
8. 1/2-INCH SWING PIPE ELL (RAIN BIRD OR TORO)
9. 1/2-INCH POLYETHYLENE SWING PIPE, MIN. 12" OR AS LENGTH NEEDED (RAIN BIRD OR TORO)
10. 1/2-INCH MARLEX STREET ELL (RAIN BIRD OR TORO)

NOTE:
1. SWING PIPE SHALL SLOPE TOWARDS LATERAL PIPE FOR COMPLETE DRAINAGE.

I POP-UP SPRAY HEAD

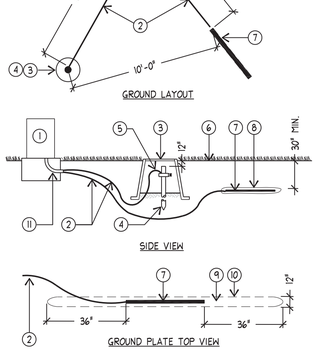
SCALE: NTS — SECTION



1. TOP FINISH GRADE/ TOP OF MULCH
2. DRIPLINE TUBING
3. DRIPLINE 180 2-WAY TEE
4. MULCH AS SPEDIFIED
5. BLANK DRIPLINE PIPE
6. USE COMPRESSION TEE OR ELL FOR POLY PIPE OR PVC TEE (SxSxT) FOR PVC PIPE
7. LATERAL PIPING- POLY PIPE OR PVC PIPE, SEE THE PLANS (SIZE AS PER PLAN)
8. FOR TRENCH DEPTHS (SEE TRENCHING AND SLEEVING DETAIL)
9. TOPSOIL AS SPECIFIED
10. BURY DRIPPERLINE 2 TO 3 BELOW MULCH.
11. BARBED ADAPTER

F DRIPLINE START CONNECTION

SCALE: NTS — SECTION



1. IRRIGATION CONTROLLER, SEE IRRIGATION SCHEDULE
2. SOLID BARE COPPER WIRE (#6 AWG) FROM GROUNDING ROD OR GROUNDING PLATE TO CONTROLLER ASSEMBLY. MAKE WIRE AS SHORT AND STRAIGHT AS POSSIBLE
3. COVER GROUNDING ROD WITH #10 ROUND VALVE BOX AS SHOWN
4. 5/8-INCH X 10 FT COPPER CLAD GROUNDING ROD.
5. CADWELD CONNECTION
6. FINISH GRADE
7. COPPER GROUND PLATE (4" X 96" X .0625") ATTACHED TO #6 AWG BARE COPPER WIRE W/ CADWELD CONNECTION OR APPROVED EQUAL
8. EARTH CONTACT MATERIAL
9. DO NOT INSTALL ANY OTHER WIRES OR CABLE WITHIN THE SPHERE OF INFLUENCE
10. ELECTRODE SPHERE OF INFLUENCE BOUNDARIES
11. PLASTIC SWEEP ELL (1 1/2" OR LARGER)

NOTE:
1. INSTALL PER MANUFACTURE'S SPECIFICATIONS.
2. TEST GROUNDING 1 MONTH AFTER INSTALLATION. GROUNDING MUST ACHIEVE RESISTANCE OF TEN (10) OHMS OR LESS.

C GROUNDING GRID Y DESIGN LAYOUT

SCALE: NTS — PLAN/SECTION

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project

Beacon Point

Saratoga Springs, UT

date

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revisions

data

asd project no: 14060

title

IRRIGATION DETAILS

sheet

L-R502

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