



## **STATEMENT OF QUALIFICATIONS**

GSP Consulting  
Gary Poland - President  
2050 Longley Lane #1603  
Reno, NV 89502  
Phone: (775) 857-1362 – Cell: (775) 240-5880

Synergy Mapping  
Laddie Kent – Vice President  
6551 S. Revere Parkway Ste. 235  
Centennial, CO 80111  
Phone: (303) 663-4483 – Cell: (303) 570-5252

# **Table of Contents**

<b>SECTION A</b>	<b>INTRODUCTION</b>
<b>SECTION B</b>	<b>PROFESSIONAL SERVICES</b>
<b>SECTION C</b>	<b>ADVANCED TECHNOLOGY</b>
<b>SECTION D</b>	<b>PROJECT EXPERIENCE</b>
<b>SECTION E</b>	<b>CLIENT REFERENCE</b>
<b>SECTION F</b>	<b>KEY PERSONNEL</b>

# INTRODUCTION

**GSP Consulting and Synergy Mapping** are privately owned professional consulting and geospatial firms which offer comprehensive aerial mapping services throughout the United States. Our team members collectively have over 75 years of experience in the surveying and mapping industry and have been involved with numerous mapping projects from small land development projects to large county wide GIS projects. The closely controlled structure of GSP Consulting and Synergy Mapping ensure the superior quality of its products and services, each of which is tailored to meet the individual client's specific requirements.

Through our core values of professionalism, innovation, and integrity, GSP Consulting and Synergy Mapping provide superior mapping services utilizing the most advanced technology in a cost-effective manner while providing superior customer service. Customer service and satisfaction is our #1 goal. We measure our success by the success of our clients!

## B. PROFESSIONAL SERVICES

**GSP Consulting and Synergy Mapping** provide a wide range of photogrammetric services for a diverse clientele including: Surveying, Engineering, Land Planning, Land Development, Federal, State, County and Municipal Governments and Mining. Our extensive network of aerial photographers, compilers, editors, computer programming specialists and AutoCAD technicians allows us to deliver solutions through the most accurate, timely and cost-efficient methods. Some of our services include:

- Consulting
- Aerial Photography
- LiDAR
- Precision Film Scanning
- Digital Aerotriangulation
- Digital Mapping
- DTM's and DEM's
- Orthophotography
- GIS Data Integration

## **C. ADVANCED TECHNOLOGY**

**GSP Consulting and Synergy Mapping** have invested in state-of-the-art photogrammetric equipment that allows the production process to perform in a totally digital environment. Our dedication to staying at the forefront of technology allows us to offer cost effective mapping solutions and prompt production schedules. Some of our advanced mapping hardware and software include:

- DAT/EM Summit Evolution Soft Copy Systems
- DAT/EM Ortho Rectification Software
- INPHO Match-AT
  - ▶ Automatic Aerotriangulation
- INPHO Match -T
  - ▶ Automatic DTM Extraction
- (3) Digital Photogrammetric Workstations
- OrthoVista - Advanced Image Processing
- MicroStation
- AutoCAD

Aerial Photography Equipment: (Subcontract)

**3 Cessna 310's – 1 Aero Commander**

**1 Wehrli RM6 Film Scanner**

**Zeiss Top 15 with FMC (Forward Motion Compensation) & Gyro Stabilized Mount**

**Versamat Film Processor**

## **D. PROJECT EXPERIENCE**

GSP Consulting and Synergy Mapping have a broad range of experience on a variety of mapping projects. Over the years Synergy Mapping has successfully delivered thousands of square miles of planimetric and topographic mapping, digital orthophotos, and GIS data to a variety of clients. Since joining forces with Synergy Mapping, GSP Consulting and Synergy Mapping have successfully completed over 300 projects in Nevada and California. The following is an overview of recent projects that we have completed.

### **Foresthill Strip Topo (Douglas Blvd.) Foresthill, CA (2015)**

GSP Consulting and Synergy Mapping were contracted to acquire aerial photography and produce design scale topographic mapping and digital orthophotography for the Douglas Blvd. Mapping Project. The project encompassed a 20 wide corridor roughly 4 miles in length (with alignment off shoots located in Foresthill, CA. We provided color aerial photography flown at a scale of 1"=300' (1:3600), scanned imagery at 14 microns, digital aerial triangulation, planimetric mapping and Digital Terrain Modeling (DTM) supporting 1"=40' map with 1' contours, and color aerial digital orthophotos at a 0.25' pixel resolution. Mapping data was delivered ahead of schedule in AutoCAD format and conformed to National Map Accuracy Standards. (NMAS)

### **SSWD Sacramento, CA (2014-2015)**

GSP Consulting and Synergy Mapping were contracted to acquire aerial photography and produce design scale topographic mapping and digital orthophotography for the Suburban Sacramento Water District. (5 Sites) The project encompassed 1430 acres located in Sacramento, CA. We provided BW aerial photography flown at a scale of 1"=300' (1:3600), scanned imagery at 14 microns, digital aerial triangulation, planimetric mapping supporting 1"=40' map and BW digital orthophotos at a 0.25' pixel resolution. Mapping data was delivered ahead of schedule in AutoCAD format and conformed to National Map Accuracy Standards. (NMAS)

## **PROJECT EXPERIENCE CONTINUED**

### **Pebble Creek Project Spanish Springs, NV (2013)**

GSP Consulting and Synergy Mapping were contracted to acquire aerial photography and produce design scale topographic mapping and digital orthophotography for the Pebble Creek Mapping Project. The project encompassed 220 acres located in Spanish Springs, NV. Synergy Mapping provided color aerial photography flown at a scale of 1"=300' (1:3600), scanned imagery at 14 microns, digital aerial triangulation, planimetric mapping supporting 1"=40' map scale with 1' contours and color digital orthophotos at a 0.25' pixel resolution. Mapping data was delivered ahead of schedule in AutoCAD format and conformed to National Map Accuracy Standards. (NMAS)

### **Sunridge Project Carson City, NV (2015)**

GSP Consulting and Synergy Mapping was contracted to acquire aerial photography and produce design scale topographic mapping and digital orthophotography for the Sunridge Mapping Project. The project encompassed 400 acres located in Carson City, NV.. We provided color aerial photography flown at a scale of 1"=300' (1:3600), scanned imagery at 14 microns, digital aerial triangulation, planimetric mapping and Digital Terrain Modeling (DTM) supporting 1"=40' map scale with 1' contours, and color digital orthophotos at a 0.25' pixel resolution. Mapping data was delivered ahead of schedule in AutoCAD format and conformed to National Map Accuracy Standards. (NMAS)

### **Switch Project (8 Phases) Tahoe Reno Industrial Center (TRIC), NV (2015 – Ongoing)**

GSP Consulting and Synergy Mapping was contracted to acquire aerial photography and produce design scale topographic mapping and digital orthophotography for the Switch Mapping Project located in the TRIC Complex. The project encompassed 600 acres of base mapping and an area of 100 acres that we updated every month during construction for 8 consecutive months. We provided color aerial photography flown at a scale of 1"=300' (1:3600), scanned imagery at 14 microns, digital aerial triangulation, planimetric mapping supporting 1"=40' map scale with 1' contours and color digital orthophotos at a 0.25' pixel resolution. Mapping data was delivered ahead of schedule for all 8 phases in AutoCAD format and conformed to National Map Accuracy Standards. (NMAS)

## **PROJECT EXPERIENCE**

### **CONTINUED**

#### **4<sup>th</sup> Street Project Reno, NV – Sparks, NV (2013)**

GSP Consulting and Synergy Mapping were contracted to acquire aerial photography and produce design scale topographic mapping and digital orthophotography for the 4<sup>th</sup> Street Corridor Improvement Project. The mapping limits covered a 300' corridor for 4 linear miles beginning 500 west of Evans Ave. and ending 500' west of Pyramid Way. (Downtown Reno and Sparks, NV) We provided color photography flown at a scale of 1"=300' (1:3600), scanned imagery at 14 microns, digital aerial triangulation, planimetric mapping and Digital Terrain Modeling (DTM) supporting 1"=40' map scale with 1' contours and color digital orthophotos at a 0.25' pixel resolution. Mapping data was delivered ahead of schedule in AutoCAD format and conformed to National Map Accuracy Standards. (NMAS)

#### **Marigold Mine Valmy, NV (May 2015)**

GSP Consulting and Synergy Mapping were contracted to acquire aerial photography and produce planimetric mapping and digital orthophotography for the Marigold Mine. The project encompassed 5120 acres and is located 2 miles south of Valmy, NV. We updated the 2012 mapping and provided color aerial photography flown at a scale of 1"=1500' (1:18000), scanned imagery at 14 microns, digital aerotriangulation, planimetric mapping, Digital Terrain Modeling (DTM) supporting 1"=200' map scale with 5' contours and color digital orthophotos at a 1.0' pixel resolution. Mapping data was delivered ahead of schedule in AutoCAD format and conformed to National Map Accuracy Standards. (NMAS)

#### **Cove / McCoy Mine Battle Mountain, NV (2014)**

GSP Consulting and Synergy Mapping were contracted to acquire aerial photography and produce digital orthophotography for the Cove / McCoy Mine. The project encompassed 28,800 acres and is located 25 miles SW of Battle Mountain, NV. We provided color aerial photography flown at a scale of 1"=1500' (1:18000), scanned imagery at 14 microns, digital aerial triangulation, automatic feature extraction (auto correlation) and color digital orthophotos at a 1.0' pixel resolution. The data was delivered ahead of schedule in AutoCAD format and conformed to National Map Accuracy Standards. (NMAS)

## **PROJECT EXPERIENCE CONTINUED**

### **Boomtown NV Project Boomtown, NV (2015)**

GSP Consulting and Synergy Mapping were contracted to acquire aerial photography and produce design scale topographic mapping and digital orthophotography for the Boomtown Mapping Project. The project encompassed 600 acres located in Boomtown, NV. We provided color aerial photography flown at a scale of 1"=300' (1:3600), scanned imagery at 14 microns, digital aerial triangulation, planimetric mapping, Digital Terrain Modeling (DTM) supporting 1"=40' map scale with 1' contours and color digital orthophotos at a 0.25' pixel size resolution. Mapping data was delivered ahead of schedule in AutoCAD format and conformed to National Map Accuracy Standards. (NMAS)

### **Esplanade at Lincoln Project Lincoln, CA (2014)**

GSP Consulting and Synergy Mapping were contracted to acquire aerial photography and produce topographic mapping and digital orthophotography for the Esplanade at Lincoln Mapping Project.. The project encompassed 250 acres located 2 miles east of Lincoln, CA. We provided color aerial photography flown at a scale of 1"=300' (1:3600), scanned imagery at 14 microns, digital aerial triangulation, planimetric mapping, Digital Terrain Modeling (DTM) supporting 1"=40' map scale with 1' contours and color digital orthophotos at a resolution of 0.25' pixel size. Mapping data was delivered ahead of schedule in AutoCAD format and conformed to National Map Accuracy Standards. (NMAS)

### **Highway 49 Project Sierraville, CA (2015)**

GSP Consulting and Synergy Mapping were contracted to acquire aerial photography and produce design scale topographic mapping and digital orthophotography for the Sierraville Mapping Project. The project encompassed 150' wide corridor totaling 29 miles in length located between Sierraville, CA and Sierra City CA. We provided color aerial photography flown at a scale of 1"=600' (1:7200), scanned at 14 microns, digital aerotriangulation, planimetric mapping, supporting 1"=100' map scale and color digital orthophotos at a resolution of 0.50' pixel size. Mapping data ahead of schedule was delivered in AutoCAD format and conformed to National Map Accuracy Standards. (NMAS)



## **PROJECT EXPERIENCE CONTINUED**

### **Tripple Aught Foundation Pioche, NV (2014)**

GSP Consulting and Synergy Mapping were contracted to acquire aerial photography and produce design scale topographic mapping and digital orthophotography for the Tripple Aught Foundation Mapping Project. The project encompassed 412 acres located 55 miles west of Pioche, NV. We provided color aerial photography flown at a scale of 1"=300' (1:3600), scanned at 14 microns, digital aerotriangulation, planimetric mapping, Digital Terrain Modeling (DTM) supporting 1"=40' map scale with 1' contours and color digital orthophotos at a resolution of 0.25' pixel size. Mapping data was delivered ahead of schedule in AutoCAD format and conformed to National Map Accuracy Standards. (NMAPS)

### **Greenbriar Project Sacramento, CA (2014)**

GSP Consulting and Synergy Mapping were contracted to acquire aerial photography and produce design scale topographic mapping and digital orthophotography for the Greenbriar Mapping Project. The project encompassed 768 acres located in North Sacramento, CA. We provided color aerial photography flown at a scale of 1"=300' (1:3600), scanned at 14 microns, digital aerotriangulation, planimetric mapping, Digital Terrain Modeling (DTM) supporting 1"=40' map scale with 1' contours and color digital orthophotos at a resolution of 0.25' pixel size. Mapping data was delivered ahead of schedule in AutoCAD format and conformed to National Map Accuracy Standards. (NMAPS)

### **Kiewit Mine Project Wendover, UT (2014)**

GSP Consulting and Synergy Mapping were contracted to acquire aerial photography and produce design scale topographic mapping and digital orthophotography for the Kiewit Mine Mapping Project. The project encompassed 260 acres located 45 SE of Wendover, UT. We provided color aerial photography flown at a scale of 1"=600' (1:7200), scanned at 14 microns, digital aerotriangulation, planimetric mapping, Digital Terrain Modeling (DTM) supporting 1"=100' map scale with 2' contours and color digital orthophotos at a resolution of 0.50' pixel size. Mapping data was delivered ahead of schedule in AutoCAD format and conformed to National Map Accuracy Standards. (NMAPS)

## **PROJECT EXPERIENCE CONTINUED**

### **Argonaut Mine Project Jackson, CA (2014)**

GSP Consulting and Synergy Mapping were contracted to acquire aerial photography and produce design scale topographic mapping and digital orthophotography for the Argonaut Mine Mapping Project. The project encompassed 127 acres located in Jackson, CA. We provided color aerial photography flown at a scale of 1"=300' (1:3600), scanned at 14 microns, digital aerotriangulation, planimetric mapping, Digital Terrain Modeling (DTM) supporting 1"=40' map scale with 1' contours and color digital orthophotos at a resolution of 0.25' pixel size. Mapping data was delivered ahead of schedule in AutoCAD format and conformed to National Map Accuracy Standards. (NMAS)

### **South Lake Tahoe South Lake Tahoe, NV. (2013)**

GSP Consulting and Synergy Mapping were contracted to acquire aerial photography and produce design scale topographic mapping and digital orthophotography for the South Lake Tahoe Mapping Project. The project encompassed 250 acres located in South lake Tahoe, NV.. We provided color aerial photography flown at a scale of 1"=30' (1:3600), scanned at 14 microns, digital aerotriangulation, planimetric mapping, Digital Terrain Modeling (DTM) supporting 1"=40' map scale with 1' contours and color digital orthophotos at a resolution of 0.25' pixel size. Mapping data was delivered ahead of schedule in AutoCAD format and conformed to National Map Accuracy Standards. (NMAS)

### **Schubin Ranch Project Placerville, CA (2015)**

GSP Consulting and Synergy Mapping were contracted to acquire aerial photography and produce design scale topographic mapping and digital orthophotography for the Schubin Ranch Mapping Project. The project encompassed 275 acres located 10 miles east of Folsom Lake, CA. We provided color aerial photography flown at a scale of 1"=600' (1:7200), scanned at 14 microns, digital aerotriangulation, planimetric mapping, Digital Terrain Modeling (DTM) supporting 1"=100' map scale with 2' contours and color digital orthophotos at a resolution of 0.50' pixel size. Mapping data was delivered ahead of schedule in AutoCAD format and conformed to National Map Accuracy Standards. (NMAS)

## **F. KEY PERSONNEL**

### **Ladyn S. Kent “Laddie”**

Vice President  
Synergy Mapping

#### Experience and Qualifications

Ladyn Kent, co-founder and Vice President, has been with Synergy Mapping since its inception in March of 2008. Previously he was instrumental in the growth and success of two large mapping companies in the Western US.

Mr. Kent has spent twenty-seven years in the field of photogrammetry working in every aspect of the industry and is a Certified Photogrammetrist with The American Society for Photogrammetry and Remote Sensing (ASPRS). He has extensive experience in planning and implementing mapping operations from the small several acre sites, to countywide GIS mapping projects. Responsibilities encompass project proposals, contract negotiations, accuracy specifications, project initialization and management, flight and survey planning, aerotriangulation, compilation, digital editing, client computer compatibility requirements, quality control, and customer satisfaction. He is constantly keeping abreast of the rapidly changing field of photogrammetry and has undergone extensive training in the latest technologies in implementing and support of Geographical Information Systems.

## **Gary S. Poland**

President  
GSP Consulting

### Experience and Qualifications

Gary Poland formed GSP Consulting in February of 2013. He has resided in the Reno/Sparks area since 1990 and he has been active in the photogrammetry industry since 1984. Previously he was instrumental in the growth and success of several large mapping companies in the area serving as general manager, project manager, complier and editor.

Mr. Poland studied Geological Engineering and Geology at South Dakota School of Mines and Technology in Rapid City, SD before receiving a Bachelor of Science Degree in Geography with a Minor in Computer Science from South Dakota State University in Brookings, SD. He is a member of the American Society for Photogrammetry and Remote Sensing (ASPRS), The Nevada Association of Land Surveyors (NALS), the California Land Surveyors Association (CLSA), and the Geological Society of Nevada. (GSN) His duties include business development and marketing, proposals, flight layouts, client communication, surveyor communication, orthophoto production, AutoCAD translations and quality control accuracy processing. He has a vast knowledge of multiple mapping and hardware systems. Having spent over 25 years in the industry including compilation, editing, camera operation, aerotriangulation, project initialization and management, flight and survey planning, quality control and customer satisfaction, his expertise brings much to the table. His ability to keep lines of communication open at all times coupled with his knowledge of the industry and details of each project allow him to stay in tune with all of the client's specifications and needs.

(Client References Available Upon Request)

