

JEROME MARKING, PARKING, AND SIGNAGE MODIFICATIONS

NORTHERN ARIZONA UNIVERSITY

K.A.S.T. ENGINEERING

2016

K.A.S.T. ENGINEERING TEAM

- SAUD AL DANDAN
- HASHIM SABYAH
- BETHANY KIEFFER
- CRISTIAN TAFOYA



From left: Saud, Bethany, Cristian, & Hashim
[Photo taken by Ron Chilston]

PROJECT BACKGROUND

- LOCATION: JEROME, AZ
- EXISTING CONDITIONS:
 - FADED STRIPING & PAVEMENT MARKINGS
 - MINIMAL DIRECTIONAL SIGNAGE
 - DAMAGED PARKING LOT
 - UNDEFINED ON-STREET PARKING



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PROJECT BOUNDARIES



PROJECT PURPOSE

- OPTIMIZE PARKING CONDITIONS IN JEROME
 - RE-DESIGN EXISTING PARKING LOT AND ON-STREET PARKING STRIPING
 - IMPLEMENT SIGNAGE
 - IMPROVE PAVEMENT MARKINGS
- ENHANCE TRAFFIC FLOW
- ENHANCE PARKING CAPACITY



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POTENTIAL CHALLENGES

- **ACCESS**
 - **SITE VISITS, DATA COLLECTION, & MEETINGS**
- **TOPOGRAPHY**
 - **SLOPE STABILITY**
- **HISTORICAL ASPECTS OF CITY**
 - **ENSURING DESIGN DOES NOT INTERFERE WITH THE HISTORICAL LANDSCAPE**



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STAKEHOLDERS

- CLIENT: ALBERT SENGSTOCK
- TECHNICAL ADVISOR: DR. EDWARD SMAGLIK
- TOWN OF JEROME
 - GOVERNMENT
 - LOCAL RESIDENTS, BUSINESSES, AND TOURISTS
 - JEROME FIRE DEPARTMENT
 - JEROME POLICE DEPARTMENT
- ARIZONA DEPARTMENT OF TRANSPORTATION (ADOT)



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PROJECT SCOPE

- **TASKS 1.0 FIELD EVALUATION**
 - **1.1 PARKING**
 - **1.2 SIGNAGE**
 - **1.3 STRIPING & PAVEMENT MARKINGS**
- **TASK 2.0 SURVEYING**
 - **2.1 PARKING AREA**
 - **2.2 SIGNAGE**
 - **2.3 STRIPING**
 - **2.4 DATA UPLOAD & ANALYSIS**
- **TASK 3.0 PARKING USE SURVEY/STUDY**
 - **3.1 DATA UPLOAD & ANALYSIS**

PROJECT SCOPE

• TASK 4.0 DESIGN

- 4.1 EXISTING CONDITIONS
- 4.2 PARKING
- 4.3 SIGNAGE, STRIPING, & MARKING
- 4.4 STANDARDS & CODES

• TASK 5.0 PROJECT MANAGEMENT

- 5.1 50% Submittal
- 5.2 Final Design Report
- 5.3 Final Presentation
- 5.4 Website
- 5.5 Client Meetings
- 5.6 Team Meetings
- 5.7 Schedule & Staffing management
- 5.8 Client Deliverables

EXCLUSIONS

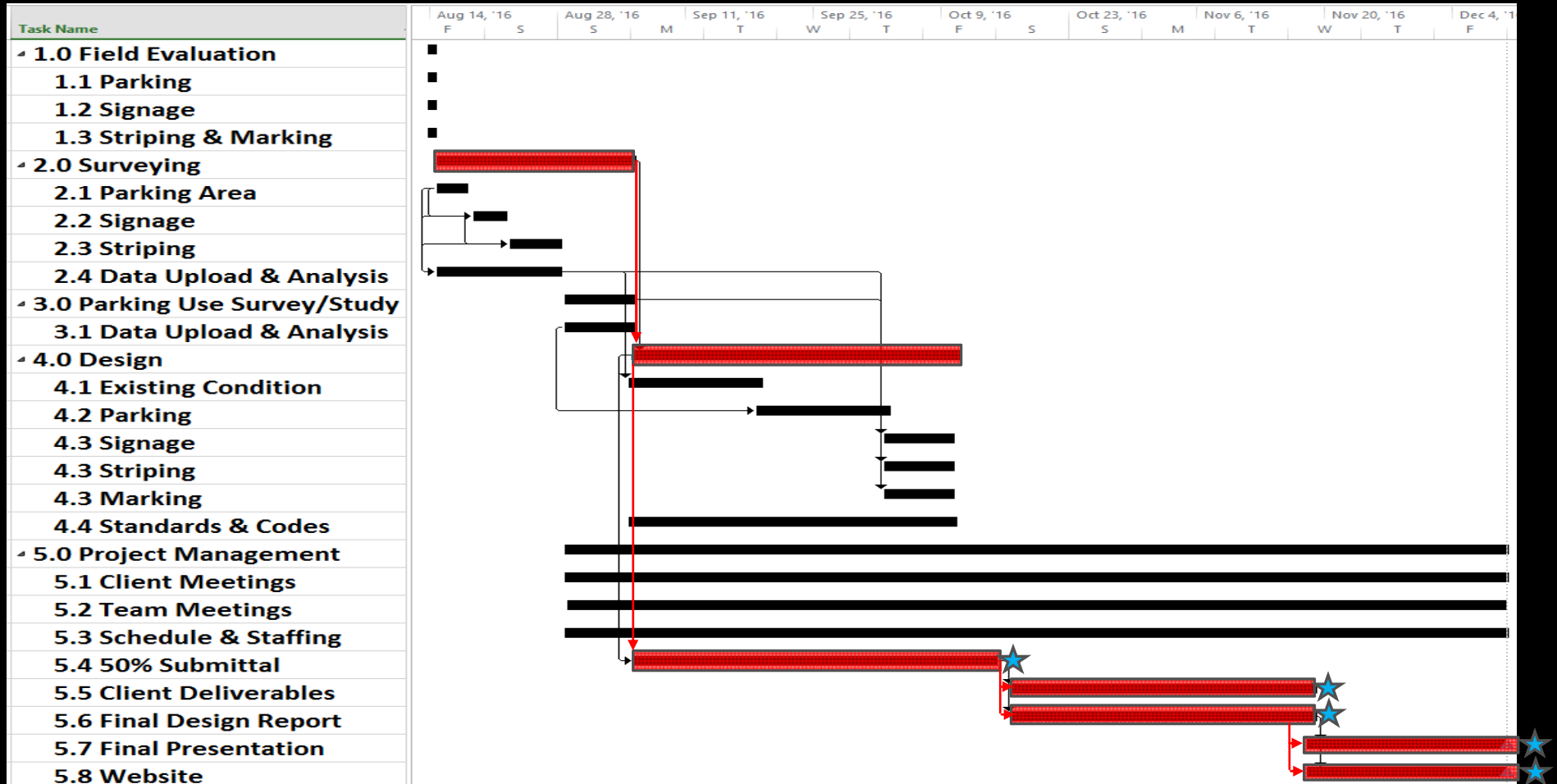
- GEOTECHNICAL TESTING
- PARKING LOT PAVEMENT DESIGN
- VERTICAL CLEARANCE FOR VEHICLES
- APPROVED PLANS & PERMITS
- STRUCTURAL SUPPORT
- RESIDENTIAL STREET PARKING/STRIPING
- ALL INCLUSIVE SURVEY



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SCHEDULE-GANTT CHART



STAFFING & COST

- **STAFFING PLAN**

- **SENIOR ENGINEER (SENG)**
- **ENGINEER (ENG)**
- **ENGINEER IN TRAINING (EIT)**
- **INTERN (INT)**
- **ADMINISTRATIVE ASSISTANT (AA)**

Table 1: Hourly Breakdown of Tasks for SENG, ENG, EIT, INT, & AA

Task	SENG Hours	ENG Hours	E.I.T. Hours	INT Hours	AA Hours
1.0 Field Evaluation	12	12	12	12	-
2.0 Surveying	-	8	44	119	-
3.0 Parking Use Survey/Study	-	8	36	42	-
4.0 Design	-	70	152	-	-
5.0 Project Management	59	47	74	5	11
Sum of Hours By Position	71	145	318	178	11
Total Hours	723				

STAFFING & COST

Table 2: Cost of Engineering Services

1.0 Personnel	Classification	Hours	Rate, \$/Hr	Cost
	SENG	71	\$200	\$14,200
	ENG	145	\$75	\$10,875
	E.I.T.	318	\$50	\$15,900
	INT	178	\$20	\$3,560
	AA	11	\$55	\$605
	Total Personnel			\$45,140
2.0 Travel	14 site visits @ 152 miles/visit	\$0.54/mile	\$82/visit	\$1,149
3.0 Total				\$46,289

REFERENCES

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QUESTIONS?



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