

“UAS Aerial Observation to Support Oil & Gas Pipeline Post Construction Restoration Efforts”

Submitted by:
ISight RPV Services

- Request for - \$19,700; Total Project Costs - \$39,400**
Project Duration: 3 months

PROJECT DESCRIPTION

- ISight RPV Services and the Unmanned Application Institute – in collaboration with ONEOK, Barr Engineering and the Public Service Commission – will provide high fidelity/clarity images for use in developing signature images of potential problem areas in the creation of an image library for ONEOK’s use in restoration activities (focused on the Bear Creek Pipeline, McKenzie County), reducing costs and increasing pipeline construction environmental restoration. Initial flights will capitalize on ground-based surveys and manned flights (conducted by ONEOK) as a baseline, with ongoing unmanned flights (to be conducted over a three-month period) to provide “change detection” of potential problem areas and establish a framework for post reclamation/restoration monitoring and planning. Isight and UAI will compile and translate data, and provide ONEOK with an informative report outlining findings and quantitative data.
- ISight RPV Services will conduct aerial surveillance utilizing Altavian Nova 6500 and DJI Inspire aircraft and enhanced (4k) optical imaging, near infrared, thermal and NDVI imaging systems to develop an image library of the Bear Creek construction site.
- This process will help in planning and documenting the restoration efforts during construction phase and provide on-site evaluation of ecosystems functions that need to be maintained or restored. This data will be compiled and utilized in this post construction restoration efforts and a best practices document will be developed for future efforts focused on remediation and restoration efforts associated with oil and gas projects including pipeline construction and other oil field activities.

TECHNICAL REVIEWERS' RATING SUMMARY

		Technical Reviewer			
Statement	Weighting Factor	<u>G-40-03A</u>	<u>G-40-03B</u>	<u>G-40-03C</u>	<u>Average Weighted Score</u>
Objectives	9	3	5	4	36
Achievability	7	3	5	4	28
Methodology	8	3	5	4	32
Contribution	8	3	4	4	29
Awareness / Background	5	4	2	5	18
Project Management	3	4	4	4	12
Equipment / Facilities	2	3	5	5	8
Value / Industry-Budget	4	4	5	5	18
Financial Match – Budget	4	3	3	4	13
<i>Average Weighted Score</i>		162	216	211	196
<i>Maximum Weighted Score</i>				250 possible points	

TECHNICAL REVIEWER TOTALS

- G-40-03A

Average Weighted Score: 162 out of 250

FUNDING TO BE CONSIDERED

- G-40-03B

Average Weighted Score: 216 out of 250

FUND

- G-40-03C

Average Weighted Score: 211 out of 250

FUND

DIRECTOR'S RECOMMENDATIONS

To Fund in the amount of \$19,700