Artifact ID:	Artifact Title:
REQ-003	Requirements Matrix
Revision:	Revision Date:
06	2025-03-07

Prepared by:	Checked by:
Israel Zenteno	Jacob Wilkins

Purpose:
Outline the project requirements set by the sponsor.

Revision History			
Revision	Revised by	Checked by	Date
01	Blake Folsom	Jacob Wilkins	2024-09-6
02	Jonah Lowther	Jacob Wilkins	2024-09-20
03	Israel Zenteno	Joshua Crookston	2024-09-23
04	Jonah Lowther	Israel Zenteno	2024-09-27
05	Joshua Crookston	Jonah Lowther	2025-02-20
06	Joshua Crookston	Jonah Lowther	2025-03-07

			Key Success Measures							Basic Measures						Constraints				
	Market Requirements (A Matrix)	Importance (optional)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
	Performance Measures (B Matrix)		Area to survey within 10 minutes	Radio Communication Distance (Visual Line of Sight)	Consistently going to GPS marked location and dropping supressant mechanism (% of time it goes within a 10ft radius)	Wi-Fi Communication Distance (Visual Line of Sight)	Diameter of Detected Target Fire									Plane total weight (Plane + Modifications + Suppressant)				
	Units		meters^2	km	%	km	m									kg				
1	Develop two semi-autonomous drones			x	x	x														
2	Create a high altitude drone that is capable of detecting fires		x		x		x													
3	Deployable low altitude drone that is capable of accurately dropping an object on an identified location.		x		x															
4	Meets federal and common sense safety requirements			x	x	x										x				
5																				
6																				
7																				
8																				
9																				
10																				
	Importance (optional)		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

(C matrix)

Target Values																				
Lower Accepted Limit	8361 m^2	.5km	75%	0.1 km	0.15 m															
Target	83612 m^2	1km	88%	0.3 km	0.6 m											4.54 kg				
Upper Accepted Limit			100%		0.91 m											24.95 kg				