

FIRING/NONFIRING DATA

For use of this form see USAIC Regulation 350-19; the proponent agency is DPTMS

TO: Chief,
Range Division,
Directorate of Plans, Training, Mobilization and Security
Fort Benning, GA 31905

Date: 6 Dec 2013
Range: Ruth
Title: BFV/Unstabilized Gunnery
Problem No: N/A

LOG# 12-5-13

THRU: DPTMS, Range Operations
Fort Benning, GA. 31905

FROM: Range Operations
Fort Benning, GA. 31905

SECTION I, TYPE OF TRAINING

a. Live Fire b. Non-live Fire CP/Controller Coordinates: 1145 0101

SECTION II, DEMOLITIONS/GRENADES/MINES/PYROTECHNICS

Coordinates	Type	Model/DODAC	Size of Charges

SECTION III, WEAPONS/AMMUNITION REQUESTED

Coordinates of Weapons Position	Type Weapon/Model Number	Type Ammunition	Left Limit	Right Limit
See Weapons and Ammo Enclosure	See Weapons and Ammo Enclosure	See Weapons and Ammo Enclosure	See Weapons and Ammo	See Weapons and Ammo

SECTION IV, LIVE FIRE EXERCISES Attach the following:

SECTION V, NON-LIVE FIRE TRAINING

<input checked="" type="checkbox"/> Scenario of training to be conducted:	<input type="checkbox"/> Training area(s) to be occupied:
<input checked="" type="checkbox"/> Sketch of area:	<input type="checkbox"/> Scenario of training to be conducted:
<input checked="" type="checkbox"/> Risk Assessment:	<input type="checkbox"/> Sketch of area(s) to be occupied:
<input type="checkbox"/> Attach FB Form 350-19-2-E-R if Mortar or artillery is being fired:	<input type="checkbox"/> Risk Assessment:

Name/rank of requesting officer: *Benjamin T. Bolding*
Benjamin T. Bolding, GS08, Survey Technician

Name/rank of Major Unit S3/Commander:
Brad S. Tesch, GS12, Chief, Range Operations

SECTION VI, FOR RANGE DIVISION USE

DATE: 13 FEB 14

TO: DPTMS, Range Operations
Fort Benning, GA. 31905

FROM: Range Division,
Directorate of Plans, Training,
Mobilization and Security
Fort Benning, GA 31905

a. Roadblocks to be closed:
b. Road(s) to be closed/road barrier locations:
c. Remarks:
d. This approval expires: *Indef*

See Road Block Enclosure
Laser Warning Signs will be posted prior to the range being opened.

Chief, Range Division
Directorate of Plans, Training, Mobilization and Security

Brad S. Tesch

Ruth Range Range Division BFV Unstabilized Gunnery (Log #12-05-13) Weapons/Ammo & Target List (Page 1 of 3)

Firing Positions	Weapons	Ammunition	Left Limit Mils, Grid Az	Right Limit Mils, Grid Az
Baseline Lane 1: GB 1151 0103 to 1149 0101	M24/M40A3/M110/M21/AR25/AR10 M4/M16, M249/MK16; M240/MK48, MK17 M2010; .338 Lapua; M2, M82A1-A3/M107 M242; MK19/MK47	7.62mm M118 LR 5.56mm Ball/Tracer; 7.62mm Ball/Tracer 300 Win Mag; .338 Lapua; .50 cal Ball/Tracer 25mm M793, M910; 40mm TP	1975 1975 1975 1975	2180 2180 2180 2180
Baseline Lane 2: GB 1149 0101 to 1148 0099	M24/M40A3/M110/M21/AR25/AR10 M4/M16, M249/MK16; M240/MK48, MK17 M2010; .338 Lapua; M2, M82A1-A3/M107 M242; MK19/MK47	7.62mm M118 LR 5.56mm Ball/Tracer; 7.62mm Ball/Tracer 300 Win Mag; .338 Lapua; .50 cal Ball/Tracer 25mm M793, M910; 40mm TP	2130 2130 2130 2130	2410 2410 2410 2410
Baseline Lane 3: GB 1148 0099 to 1146 0097	M24/M40A3/M110/M21/AR25/AR10 M4/M16, M249/MK16; M240/MK48, MK17 M2010; .338 Lapua; M2, M82A1-A3/M107 M242; MK19/MK47	7.62mm M118 LR 5.56mm Ball/Tracer; 7.62mm Ball/Tracer 300 Win Mag; .338 Lapua; .50 cal Ball/Tracer 25mm M793, M910; 40mm TP	2355 2355 2355 (25mm) 2360; (40mm) 2355	2555 2555 2555 (25mm)2555; (40mm) 2535
Baseline Lane 4: GB 1146 0097 to 1144 0095	M24/M40A3/M110/M21/AR25/AR10 M4/M16, M249/MK16; M240/MK48, MK17 M2010; .338 Lapua; M2, M82A1-A3/M107 M242; MK19/MK47	7.62mm M118 LR 5.56mm Ball/Tracer; 7.62mm Ball/Tracer 300 Win Mag; .338 Lapua; .50 cal Ball/Tracer 25mm M793, M910; 40mm TP	2545 2545 2545 (25mm) 2555; (40mm) 2545	2755 2755 2755 (25mm) 2745; (40mm) 2755
Zero: GB 1152 0102 to 1150 0100	M24/M40A3/M110/M21/AR25/AR10 M4/M16, M249/MK16; M240/MK48, MK17 M2010; .338 Lapua; M2, M82A1-A3/M107	7.62mm M118 LR 5.56mm Ball/Tracer; 7.62mm Ball/Tracer 300 Win Mag; .338 Lapua; .50 cal Ball/Tracer	(10m) 2270; (25m) 2325	(10m) 2455; (25m) 2400

Firing Positions	Weapons	Ammunition	Targets
Baseline Lane 1: GB 1151 0103 to 1149 0101	M24/M40A3/M110/M21/AR25/AR10 M4/M16, M249/MK16; M240/MK48, MK17 M2010; .338 Lapua; M2, M82A1-A3/M107 M242; MK19/MK47	7.62mm M118 LR 5.56mm Ball/Tracer; 7.62mm Ball/Tracer 300 Win Mag; .338 Lapua; .50 cal Ball/Tracer 25mm M793, M910; 40mm TP	<u>5.56mm & 7.62mm</u> (I: 12-19, 31-38. A: 1, 20, 40). <u>300 Win Mag/.338 Lapua</u> (I: 12-19, 31-38. A: 1, 20, 39, 40. M: 89). <u>M2, M82A1-A3/M107</u> (I: 12-19, 31-38. A: 1, 20, 39, 40, 42, 44. M: 89, 92). <u>25mm</u> (A: 1, 20, 39, 40, 42, 44. M: 89, 92). <u>40mm</u> (I: 12-19, 31-38. A: 1, 20, 39, 40, 42).
Baseline Lane 2: GB 1149 0101 to 1148 0099	M24/M40A3/M110/M21/AR25/AR10 M4/M16, M249/MK16; M240/MK48, MK17 M2010; .338 Lapua; M2, M82A1-A3/M107 M242; MK19/MK47	7.62mm M118 LR 5.56mm Ball/Tracer; 7.62mm Ball/Tracer 300 Win Mag; .338 Lapua; .50 cal Ball/Tracer 25mm M793, M910; 40mm TP	<u>5.56mm & 7.62mm</u> (I: 3-10, 21-28. A: 2, 11, 29). <u>300 Win Mag/.338 Lapua</u> (I: 3-10, 21-28. A: 2, 11, 29, 30, 41, 130. M: 90). <u>M2, M82A1-A3/M107</u> (I: 3-10, 21-28. A: 2, 11, 29, 30, 41, 43, 130. M: 90, 91). <u>25mm</u> (A: 2, 11, 29, 30, 41, 43, 130. M: 90, 91). <u>40mm</u> (I: 3-10, 21-28. A: 2, 11, 29, 30, 41, 130).
Baseline Lane 3: GB 1148 0099 to 1146 0097	M24/M40A3/M110/M21/AR25/AR10 M4/M16, M249/MK16; M240/MK48, MK17 M2010; .338 Lapua; M2, M82A1-A3/M107 M242; MK19/MK47	7.62mm M118 LR 5.56mm Ball/Tracer; 7.62mm Ball/Tracer 300 Win Mag; .338 Lapua; .50 cal Ball/Tracer 25mm M793, M910; 40mm TP	<u>5.56mm & 7.62mm</u> (I: 56-63, 75-82. A: 55, 64, 84). <u>300 Win Mag/.338 Lapua</u> (I: 56-63, 75-82. A: 55, 64, 83, 84, 86. M: 94). <u>M2, M82A1-A3/M107</u> (I: 56-63, 75-82. A: 55, 64, 83, 84, 86, 87. M: 94). <u>25mm</u> (A: 55, 64, 83, 84, 86, 87. M: 94). <u>40mm</u> (I: 56-63, 75-82. A: 55, 64, 83, 84, 86).
Baseline Lane 4: GB 1146 0097 to 1144 0095	M24/M40A3/M110/M21/AR25/AR10 M4/M16, M249/MK16; M240/MK48, MK17 M2010; .338 Lapua; M2, M82A1-A3/M107 M242; MK19/MK47	7.62mm M118 LR 5.56mm Ball/Tracer; 7.62mm Ball/Tracer 300 Win Mag; .338 Lapua; .50 cal Ball/Tracer 25mm M793, M910; 40mm TP	<u>5.56mm & 7.62mm</u> (I: 46-53, 65-72. A: 45, 54, 74). <u>300 Win Mag/.338 Lapua</u> (I: 46-53, 65-72. A: 45, 54, 73, 74, 85. M: 93). <u>M2, M82A1-A3/M107</u> (I: 46-53, 65-72. A: 45, 54, 73, 74, 85, 88. M: 93). <u>25mm</u> (A: 45, 54, 73, 74, 85, 88. M: 93). <u>40mm</u> (I: 46-53, 65-72. A: 45, 54, 73, 74, 85).
Zero: GB 1152 0102 to 1150 0100	M24/M40A3/M110/M21/AR25/AR10 M4/M16, M249/MK16; M240/MK48, MK17 M2010; .338 Lapua; M2, M82A1-A3/M107	7.62mm M118 LR 5.56mm Ball/Tracer; 7.62mm Ball/Tracer 300 Win Mag; .338 Lapua; .50 cal Ball/Tracer	Targets Located in the Zero Engagement Area (See Sketch for Location).

Ruth Range Range Division BFV Unstabilized Gunnery (Log #12-05-13) Weapons/Ammo & Target List (Page 2 of 3)

Firing Positions	Weapons	Ammunition	Left Limit Mils, Grid Az	Right Limit Mils, Grid Az
FP1 Start to Stop: GB 1153 0103 to 1161 0096	M4/M16, M249/MK16; M240/MK48, MK17 M2; M242; MK19/MK47	5.56mm Ball/Tracer; 7.62mm Ball/Tracer .50 cal Ball/Tracer; 25mm M793, M910; 40mm TP	1980 (.50 cal) 1980; (25mm) 2035; (40mm) 1985	2495 (.50 cal) 2495; (25mm) 2650; (40mm) 2570
FP2 Start to Stop: GB 1166 0093 to 1176 0089	M4/M16, M249/MK16; M240/MK48, MK17 M2; M242; MK19/MK47	5.56mm Ball/Tracer; 7.62mm Ball/Tracer .50 cal Ball/Tracer; 25mm M793, M910; 40mm TP	1925 (.50 cal) 1990; (25mm) 2075; (40mm) 1930	2480 (.50 cal) 2480; (25mm) 2755; (40mm) 2845
FP3 Start to Stop: GB 1185 0084 to 1200 0071	M4/M16, M249/MK16; M240/MK48, MK17 M2; M242; MK19/MK47	5.56mm Ball/Tracer; 7.62mm Ball/Tracer .50 cal Ball/Tracer; 25mm M793, M910; 40mm TP	1740 (.50 cal) 2200; (25mm) 2045; (40mm) 1745	2605 (.50 cal) 2605; (25mm) 2620; (40mm) 2605
FP4 Start to Stop: GB 1222 0068 to 1232 0054	M4/M16, M249/MK16; M240/MK48, MK17 M242; MK19/MK47	5.56mm Ball/Tracer; 7.62mm Ball/Tracer 25mm M793, M910; 40mm TP	2025 (25mm) 2025; (40mm) 2115	2275 (25mm) 2275; (40mm) 2265
FP1A Start to Stop: GB 1148 0098 to 1157 0091	M4/M16, M249/MK16; M240/MK48, MK17 M2; M242; MK19/MK47	5.56mm Ball/Tracer; 7.62mm Ball/Tracer .50 cal Ball/Tracer; 25mm M793, M910; 40mm TP	2095 (.50 cal) 2095; (25mm) 2095; (40mm) 2095	2420 (.50 cal) 2420; (25mm) 2720; (40mm) 2870
FP2A Start to Stop: GB 1163 0086 to 1171 0079	M4/M16, M249/MK16; M240/MK48, MK17 M2; M242; MK19/MK47	5.56mm Ball/Tracer; 7.62mm Ball/Tracer .50 cal Ball/Tracer; 25mm M793, M910; 40mm TP	2020 (.50 cal) 2020; (25mm) 2020; (40mm) 2020	2595 (.50 cal) 2595; (25mm) 2785; (40mm) 2920
FP3A Start to Stop: GB 1181 0072 to 1186 0079	M4/M16, M249/MK16; M240/MK48, MK17 M2; M242; MK19/MK47	5.56mm Ball/Tracer; 7.62mm Ball/Tracer .50 cal Ball/Tracer; 25mm M793, M910; 40mm TP	1790 (.50 cal) 2145; (25mm) 2145; (40mm) 1950	2545 (.50 cal) 2545; (25mm) 2825; (40mm) 2915

Firing Positions	Weapons	Ammunition	Targets
FP1 Start to Stop: GB 1153 0103 to 1161 0096	M4/M16, M249/MK16; M240/MK48, MK17 M2; M242; MK19/MK47	5.56mm Ball/Tracer; 7.62mm Ball/Tracer .50 cal Ball/Tracer; 25mm M793, M910; 40mm TP	<u>5.56mm & 7.62mm</u> (I: 3-10, 12-19, 21-28, 31-38. <u>A</u> : 1, 2, 20, 29, 30, 39, 40, 130). <u>M2</u> (I: 3-10, 12-19, 21-28, 31-38. <u>A</u> : 1, 2, 20, 29, 30, 39, 40, 41, 42, 86, 130. <u>M</u> : 89, 90, 91, 92). <u>25mm</u> (<u>A</u> : 1, 2, 11, 20, 29, 30, 41, 42, 43, 44, 83, 84, 86, 130. <u>M</u> : 90, 91, 92, 94). <u>40mm</u> (I: 3-10, 12-19, 21-28, 31-38. <u>A</u> : 1, 2, 11, 20, 29, 30, 39, 40, 41, 42, 84, 86, 130).
FP2 Start to Stop: GB 1166 0093 to 1176 0089	M4/M16, M249/MK16; M240/MK48, MK17 M2; M242; MK19/MK47	5.56mm Ball/Tracer; 7.62mm Ball/Tracer .50 cal Ball/Tracer; 25mm M793, M910; 40mm TP	<u>5.56mm & 7.62mm</u> (I: 12-19, 21-28, 31-38. <u>A</u> : 1, 20, 29, 30, 39, 40, 130 <u>M</u> : 89, 90). <u>M2</u> (I: 21-28, 31-38. <u>A</u> : 1, 20, 29, 30, 39, 41, 42, 43, 44, 130. <u>M</u> : 90, 91, 92). <u>25mm</u> (<u>A</u> : 1, 29, 30, 41, 42, 43, 44, 83, 84, 86, 130. <u>M</u> : 90, 91, 92, 94). <u>40mm</u> (I: 3-10, 12-19, 21-28, 31-38, 75-82. <u>A</u> : 1, 2, 20, 29, 30, 39, 40, 41, 42, 83, 84, 130).
FP3 Start to Stop: GB 1185 0084 to 1200 0071	M4/M16, M249/MK16; M240/MK48, MK17 M2; M242; MK19/MK47	5.56mm Ball/Tracer; 7.62mm Ball/Tracer .50 cal Ball/Tracer; 25mm M793, M910; 40mm TP	<u>5.56mm & 7.62mm</u> (I: 21-28, 31-38. <u>A</u> : 29, 30, 39, 40, 41, 130. <u>M</u> : 89, 90). <u>M2</u> (I: 21-28. <u>A</u> : 29, 30, 41, 43. <u>M</u> : 90, 91). <u>25mm</u> (<u>A</u> : 29, 30, 41, 42, 43, 44, 86, 130. <u>M</u> : 90, 91, 92). <u>40mm</u> (I: 21-28, 31-38. <u>A</u> : 29, 30, 39, 40, 41, 42, 130).
FP4 Start to Stop: GB 1222 0068 to 1232 0054	M4/M16, M249/MK16; M240/MK48, MK17 M242; MK19/MK47	5.56mm Ball/Tracer; 7.62mm Ball/Tracer 25mm M793, M910; 40mm TP	<u>5.56mm & 7.62mm</u> (<u>A</u> : 42. <u>M</u> : 92). <u>25mm</u> (<u>A</u> : 42, 44. <u>M</u> : 92). <u>40mm</u> (<u>A</u> : 42).

Ruth Range Range Division BFV Unstabilized Gunnery (Log #12-05-13) Weapons/Ammo & Target List (Page 3 of 3)

Firing Positions	Weapons	Ammunition	Targets
FP1A Start to Stop: GB 1148 0098 to 1157 0091	M4/M16, M249/MK16; M240/MK48, MK17 M2; M242; MK19/MK47	5.56mm Ball/Tracer; 7.62mm Ball/Tracer .50 cal Ball/Tracer; 25mm M793, M910; 40mm TP	<u>5.56mm & 7.62mm</u> (I: 3-10, 21-28. A: 2, 11, 29, 30, 130). <u>M2</u> (I: 3-10, 21-28. A: 2, 11, 29, 30, 41, 42, 86, 87, 130. M: 90, 91). <u>25mm</u> (A: 2, 11, 29, 30, 41, 42, 43, 44, 55, 64, 83, 84, 85, 86, 87, 88, 130. M: 90, 91, 94). <u>40mm</u> (I: 3-10, 21-28, 56-63, 65-72, 75-82. A: 2, 11, 29, 30, 41, 45, 54, 55, 64, 73, 74, 83, 84, 85, 86, 130).
FP2A Start to Stop: GB 1163 0086 to 1171 0079	M4/M16, M249/MK16; M240/MK48, MK17 M2; M242; MK19/MK47	5.56mm Ball/Tracer; 7.62mm Ball/Tracer .50 cal Ball/Tracer; 25mm M793, M910; 40mm TP	<u>5.56mm & 7.62mm</u> (I: 3-10, 21-28. A: 11, 29, 30, 83, 84, 130. M: 90). <u>M2</u> (I: 21-28. A: 11, 29, 30, 41, 42, 43, 83, 84, 86, 87, 130. M: 90, 91). <u>25mm</u> (A: 11, 29, 30, 41, 42, 43, 44, 64, 83, 84, 85, 86, 87, 88, 130. M: 90, 91, 94). <u>40mm</u> (I: 3-10, 21-28, 56-63, 65-72, 75-82. A: 11, 29, 30, 41, 42, 64, 73, 83, 84, 85, 86, 130).
FP3A Start to Stop: GB 1181 0072 to 1186 0079	M4/M16, M249/MK16; M240/MK48, MK17 M2; M242; MK19/MK47	5.56mm Ball/Tracer; 7.62mm Ball/Tracer .50 cal Ball/Tracer; 25mm M793, M910; 40mm TP	<u>5.56mm & 7.62mm</u> (I: 21-28, 31-38. A: 29, 30, 39, 130. M: 90). <u>M2</u> (A: 30, 41, 43, 86, 87, 130. M: 90, 91). <u>25mm</u> (A: 30, 41, 43, 83, 84, 86, 87, 88, 130. M: 90, 91, 94). <u>40mm</u> (I: 21-28, 75-82. A: 29, 30, 41, 42, 83, 84, 85, 86, 130).



DEPARTMENT OF THE ARMY
RANGE OPERATIONS
BUILDING 5510, 8TH DIVISION RD.
FORT BENNING, GEORGIA 31905

IMSE-BEN-PLT-R

13 February 2014

MEMORANDUM FOR CHIEF OF RANGE DIVISION

SUBJECT: **Ruth Range, BFV, STRYKER Gunnery and Un-stabilized Gunnery**

1. **Purpose:** To establish Standing Operating Procedure (SOP) to be used during training on Ruth Range.
 - a. Units conduct the following training events on Ruth Range
 - b. BFV, STRYKER and Un-stabilized Gunnery with the various weapons as listed on the 350-19-1-E-R.
2. **Applicability:** This memorandum applies to all Units/ activities using Ruth Range. All Officers in Charge (OIC), Non-Commission Officers in Charge (NCOIC) and Range Safety Officers (RSO) will be familiar with the contents of this memorandum and all other applicable references.
3. **References:**
 - a. Army Regulation 385-63
 - b. DA PAM 385-63, Range Safety
 - c. Army Regulation 350-1, Army Training
 - d. MCOE Regulation 350-19, Range and Terrain Regulation
 - e. FM 3-23.30, Grenades and Pyrotechnic Signals
 - f. TM 9-1300-206, Ammunition and Explosives Standards
 - g. FM 3-20.21, HBCT Gunnery Manual
 - h. FM 4-01.45 Multi-Service Tactics, Techniques and Procedures for Tactical Convoy Operations
 - i. FM 3-20.98 Reconnaissance Scout Platoon
 - j. FM 23-65, Browning Machine Gun Caliber .50 HB M2
 - k. Crew-served Machine Guns 7.62mm and 50 HB M2
4. **Execution of exercise:**
 - a. **DAY and NIGHT LIVE FIRE ENGAGEMENTS:** Day and Night engagements will be conducted IAW FM 3-20.21 using the approved targets, Baseline and Maneuver firing points from Range Control. (See Enclosure 2 Range Division approved Target List)
 - b. **Ammunition:** Weapon systems will not be loaded until on the baseline or the starting FP. Vehicles will not lock and load until they are told to do so by the Tower NCO or OIC/RSO.
 - c. **Baseline Firing:** Vehicle/Weapon systems will only fire targets that are approved for that lane only. (See Approved Target List).

SUBJECT: Concept of Operation for Ruth Range

d. **Course Roads: When using course roads, all weapon systems on the Base Line will be cleared prior to movement on the course roads.**

1. When one course road is used, units will only engage targets on the enclosed target list from range control.

2. When using both course roads see note 8h for targets to engage.

3. Before proceeding from FP2A to FP3A all weapons in FP2 will be cleared. Vehicle in FP3A can proceed to FP3 and FP4 and continue to engage targets IAW enclosed Range Control Target List. After clearing weapons vehicle can proceed along exit route to Moore Rd. then back to the start point, or proceed back up range to the baseline. Before proceeding beyond FP2 to FP3 all weapons in FP2A will be cleared. If FP3A is occupied its weapons will be cleared before proceeding beyond FP3A in FP3 to continue through FP3 to FP4. After clearing weapons, vehicles can proceed along exit route to Moore Rd. then back to the start point, or proceed back up range to the baseline.

4. If a unit wants to do retro-grade firing in one lane, unit must use the same targets coming back to original firing point. If a unit wants to use more than one lane for retro-grade firing the unit must have a memo signed off by The Chief of Range Operations before execution of that event.

5. Communications will be established from the tower to the vehicle and from vehicle to vehicle.

****Units are responsible to coordinate with the Heavy section Team Chief to request Targets be heated for the thermal sights, and boresight panels.****

5. **Scheduling:** Each unit / activity scheduling Ruth Range will prepare and submit the following documents to Range Operations, DPTMS:

a. DA Form 7566, Risk Management Worksheet. Which must be reviewed by MCOE Safety.

b. A scenario with target list which has been reviewed and approved by Range Control. (see enclosed target list).

c. All training will be conducted IAW this memorandum. Units are responsible for developing and submitting a new range packet if requested training deviates from approved range packets. All deviations / waivers must be submitted through MCOE Safety office for review.

d. Units will use the Range Facility Management and Scheduling System (RFMSS) when scheduling Ruth Range. The RFMSS request must contain a detailed daily firing time line.

6. **Administrative:** The training unit shall clear the range in accordance with local policies and procedures established with Range Control. Units will be required to clean all buildings occupied during the training event. This will require that the unit supply the following: brooms, mops, buckets, and appropriate cleaning supplies.

a. Using units are responsible for clearing all brass and ammunition from the range and all firing lanes. Brass and ammunition are to be policed during daylight hours only.

b. When firing vehicles enter the Range all weapons will be elevated and oriented down range.

c. A red range flag will be provided to the using unit by Range Division personnel. The range flag will be displayed prior to live-fire training and must be returned to range support personnel prior to

SUBJECT: Concept of Operation for Ruth Range

departing the range. A red light will be used in place of the Red Range flag during night operations.

- d. Using units are responsible for providing a fire detail. These personnel will be used in case of a fire downrange. All range fires will be suppressed and reported **immediatley** to Range Control IAW MCOE regulation 350-19.
- e. Using units are responsible for ordering targetry for their scheduled event and ensuring delivery of targetry to Ruth Range three weeks prior to the scheduled event.
- f. The Unit Master Gunner or representative will verify that the scenario data matches the approved Range Control packet at Range Control.
- g. Unit will proof the range before firing.
- h. The Unit Master Gunner will coordinate with the Ruth Range target personnel three weeks prior to occupying the Range to ensure target scenarios and the correct targetry have been delivered and are available and accurate for the scheduled training event.
- i. The unit leadership must assign personnel to perform special duties such as Gate guards, fire fighting details and target detail IAW this memo.
- j. Vehicle flags will be used IAW MCoE REG 350-19
- k. Vehicles that are running the course will be given weapon control status from the tower and maintain weapons systems downrange at all times until cleared by the Range Safety Officer.
- l. POV and wheeled military vehicle parking is located in the vicinity of Ruth Range Operations building. (See enclosure)
- m. Units will be required to provide a six Soldier Target detail for the duration of the training event in order to facilitate Range personnels up keep of the Range during use.
- n. No open flames will be allowed within 50 feet of the established ammo point. Two 10lb bicarbonate fire extinguishers will be available at all times at the ammunition point. Ammunition Non-Commissioned Officer will control issue of live ammunition and maintain accountability at all times. All ammunition will be issued and turned in to the Ammunition NCO and logged. Ammo NCO will be Ammo Handler certified. Ammunition will be seperated at all times by DODIC.
- o. There will be no deviations from the approved packet unless approved by Range Control in writing.

Note: there will be no de-linking or re-linking of any ammunition. Any ammunition that has been de-or re-linked is considered nonstandard and is prohibited from the range.

7. Opening of Range

a. The unit will have in it's posession the approved 144R, approved 350-19-1, approved RFMSS Request summary, Range SOP, and Unit risk assesment worksheet that has been reviewed by Post Safety and on file at Range Control before occupation of the Ruth Range. The OIC will call in to range control and request permission to occupy the range complex for which the unit is scheduled. Appropriate overlays will be posted upon arrival.

8. Safety:

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- a. In the event of an accident, injury or illness, the OIC/RSO will immediately call a cease fire then call 911 using the standard 9 Line MEDEVAC to determine what type of evacuation is the most appropriate for the injury (loss of life, limb or eyesight). MEDEVAC will be IAW MCoE Regulation 350-19 and MCoE 40-2. Landing zone for MEDEVAC aircraft will be established prior to use and will be marked appropriately. Range Control will be notified in this event. The cease fire will remain in effect until cleared by Range Control.
- b. Unit will maintain continuous contact with Range Control at all times. If communications are lost the unit will go into a self induced check fire until communications are restored.
- c. When a malfunction is experienced, the OIC/RSO will suspend all firing and immediately notify Range Control. The weapons and all components and ammunition involved will remain in place. The cease fire will remain in effect until cleared by Range Control. An investigation is required and will be conducted by the ammunition and weapons inspection personnel and DOL.
- d. The emergency cease fire signal and E-911 medical evacuation procedures will be briefed at the range safety brief.
- e. A Field Litter Ambulance with qualified medics will be present through the duration of the gunnery.
- f. All vehicles will be cleared by Range Safety Officer or Master Gunner before leaving last Firing Point.
- g. Vehicles will remain generally adjacent to one another (online) while firing. At no time will a vehicle fire while another is to its front.
- h. When firing dual lanes only approved targets that will be used are targets that are common to both firing points.
- i. In the event of a suspected round out of impact CEASE FIRE FREEZE will be given. Range Control will be notified immediately. The weapons system in question will not be touch or moved until cleared by Range Control.
- j. Gate guards will have constant communication with the Range OIC.
- k. When an incident occurs on the range, regardless of injury or not, the OIC/RSO will immediately call a cease fire and report it to Range Control and the using unit's higher headquarters. OIC/RSO will take action as directed by Range Control. The cease fire will remain in effect until the problem is resolved and cleared through Range Control. If the incident results in an injury, the OIC/RSO will use the procedures outlined in the medical paragraph. The following information will be furnished by the OIC/RSO to Range Control:
 - Designation of unit.
 - Range and location
 - Type of weapon involved.
 - Type of ammunition involved.
 - Brief summary of what happened.
 - Personnel injuries and extent.
 - Full Name, SS#, Rank and unit of injured personnel.
 - Extent of property damage.
 - Intentions regarding an AR 15-6 investigation.

SUBJECT: Concept of Operation for Ruth Range

- l. Safety briefs will be conducted in the morning before conducting boresighting and in the evening prior to boresighting by the RSO.
- m. Class III A lasers are not eye safe on dual low mode within 25 meters. PEM – 1A is not a tactical laser and must be used within 25 meters. Laser Warning Signs will be in place prior to opening the range. **Range safety briefing will include hazards using Lasers and NVD's.**

9. Closure of the Range:

- a. The OIC notifies range control that firing has terminated, debriefs unit personnel, and ensures that clearing of the range and training areas is completed to local regulation and SOP standard.
- b. The NCOIC supervises ammunition and target details and ensures that range facilities have been policed.
- c. The Ammunition NCO ensures that only authorized personnel remove munitions from the range and prepares the residue documentation required by the ammunition supply point. Any found UXO will be reported to Range Control immediately and taken care of IAW MCoE REG 350-19.

10. The point of contact for this action is Mr. Whitehead, Range Survey. COMM (706)544-6267 or kenneth.l.whitehead.civ@mail.mil.



BRAD TESCH
GS12, CHIEF, RANGE OPERATION
RANGE DIVISION

SUBJECT: Concept of Operation for Ruth Range

ENC 1

WEAPONS SAFETY AND CONTROL STATUS

1 Ammunition Status	
Item	
RED	Rounds loaded / Magazine Loaded
Yellow	Magazine loaded, chamber clear
Green	Magazine out, chamber clear
2 Weapons Control Status	
Item	
HOLD	Engage only if engaged (threat) or ordered to do so. Must have positive ID
TIGHT	Can engage if target is positively identified as enemy
FREE	Can engage unless target is positively identified as friendly

*****Do not carry weapons on anything but safe - you will transition only when prepared to fire**

SUBJECT: Concept of Operation for Ruth Range

Weapon Type	Weapons Safety Posture		
	GREEN	AMBER	RED
M9	Weapon cleared and on safe; magazine out of weapon	Magazine in weapon; no round in chamber; weapon on safe	Magazine in weapon; round chambered; weapon on safe
M16	Weapon cleared and on safe; magazine out of weapon	Magazine in weapon; no round in chamber; weapon on safe	Magazine in weapon; round chambered; weapon on safe
M203	Weapon cleared and on safe; rounds carried	No round in the chamber; weapon on safe; ammo ready	Round chambered; weapon on safe
M249	Weapon cleared and on safe; ammo carried	Half cocked – bolt forward; weapon on safe, rounds in tray; no rounds in chamber	Weapon charged – open bolt position; ammo in feed tray; weapon on safe
M240/M240B	Weapon cleared and on safe; ammo carried	Bolt forward; weapon on safe, rounds in tray, no rounds in chamber	Weapon charged – open bolt position; ammo in feed tray; weapon on safe
M60	Weapon cleared and on safe; ammo carried	Bolt forward; weapon on safe, rounds in tray; no rounds in chamber	Weapon charged – open bolt position; ammo in feed tray; weapon on safe
M2	Weapon cleared and on safe; ammo carried	Bolt forward; weapon on safe, rounds in tray; no rounds in chamber	Weapon charged; round in chamber; weapon on safe
MK19	Weapon cleared and on safe; ammo carried	Weapon on safe; no round in chamber; ammo in feed tray	Round on face of bolt; weapon on safe; charged open bolt position
TOW	No missile in tube; launcher in stowed position	Missile in tube; launcher in stowed position, system on electric safe	Missile in tube; launcher raised; system on electric safe
25mm	Weapon cleared and on electrical and mechanical safe; ammo stowed	Round in feeder; no ghost rounds cycled; electrical and mechanical safe	Ghost round cycled; electrical and mechanical safe
120mm	Breech closed; no round in tube; system on electrical and mechanical safe	Breech opened; system on electrical and mechanical safe; rounds stowed	Gun tube loaded; weapon on electrical and mechanical safe

Ruth Range

Office



Ammo Pad



POV Parking

Storage
Storage
Storage
Storage



Bleachers
Ruth Range



Tower



Baseline

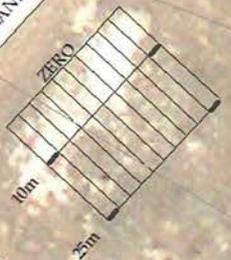
Start

LANE 1

LANE 2

LANE 3

LANE 4



FP1A

FP1

Start

Start

Stop

Clearing Pit



Ruth Range

01

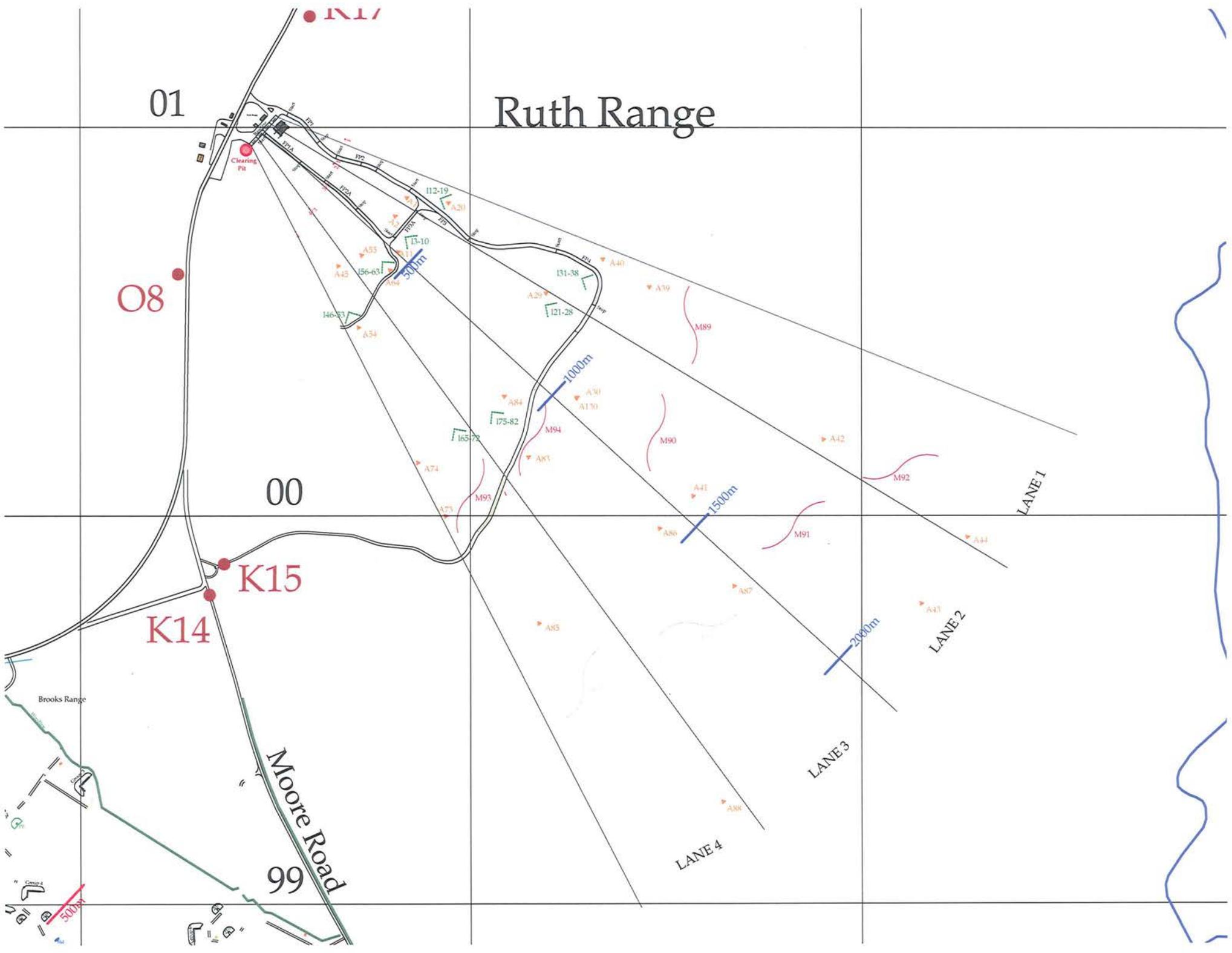
O8

00

K15

K14

99



01

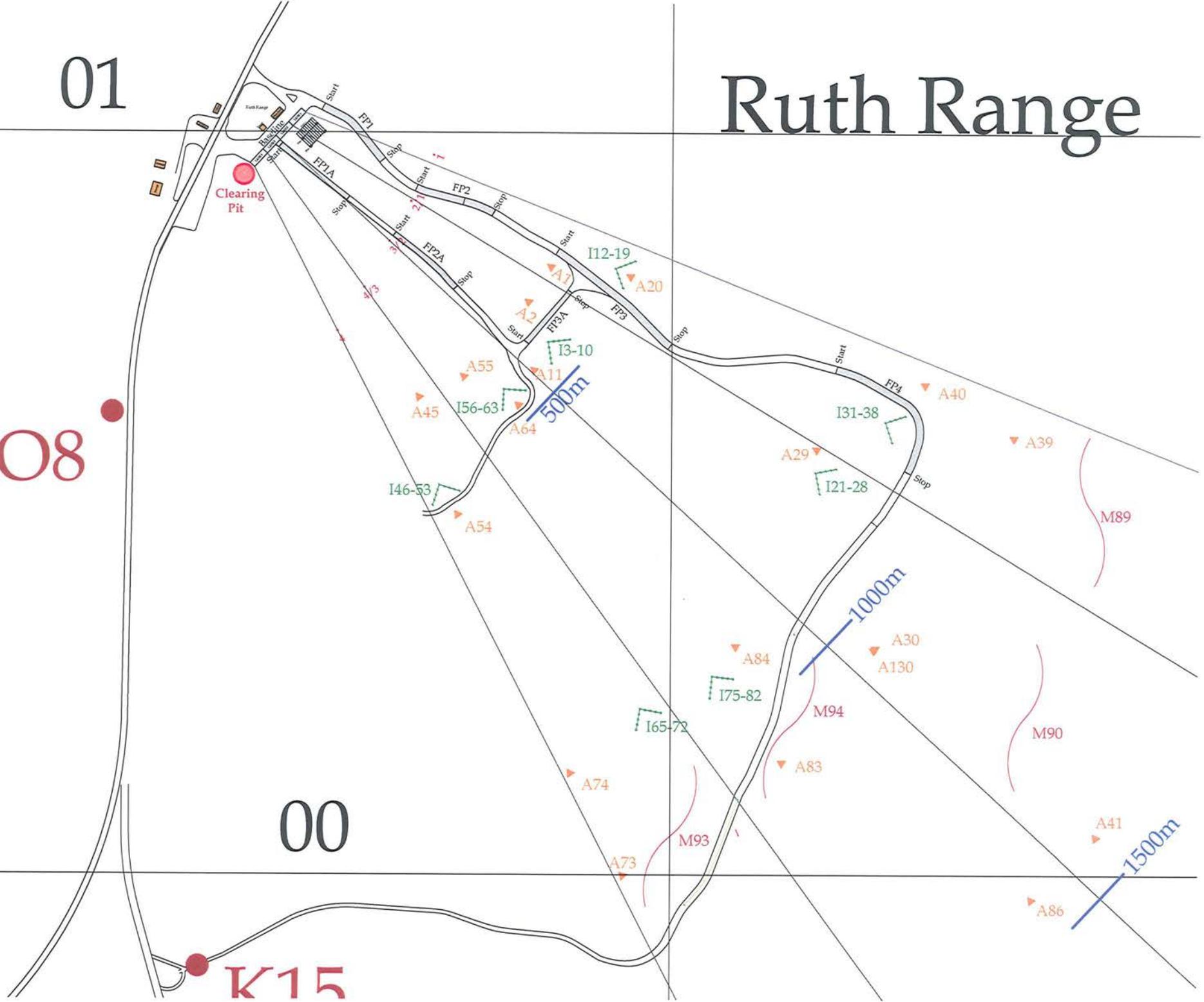
Ruth Range

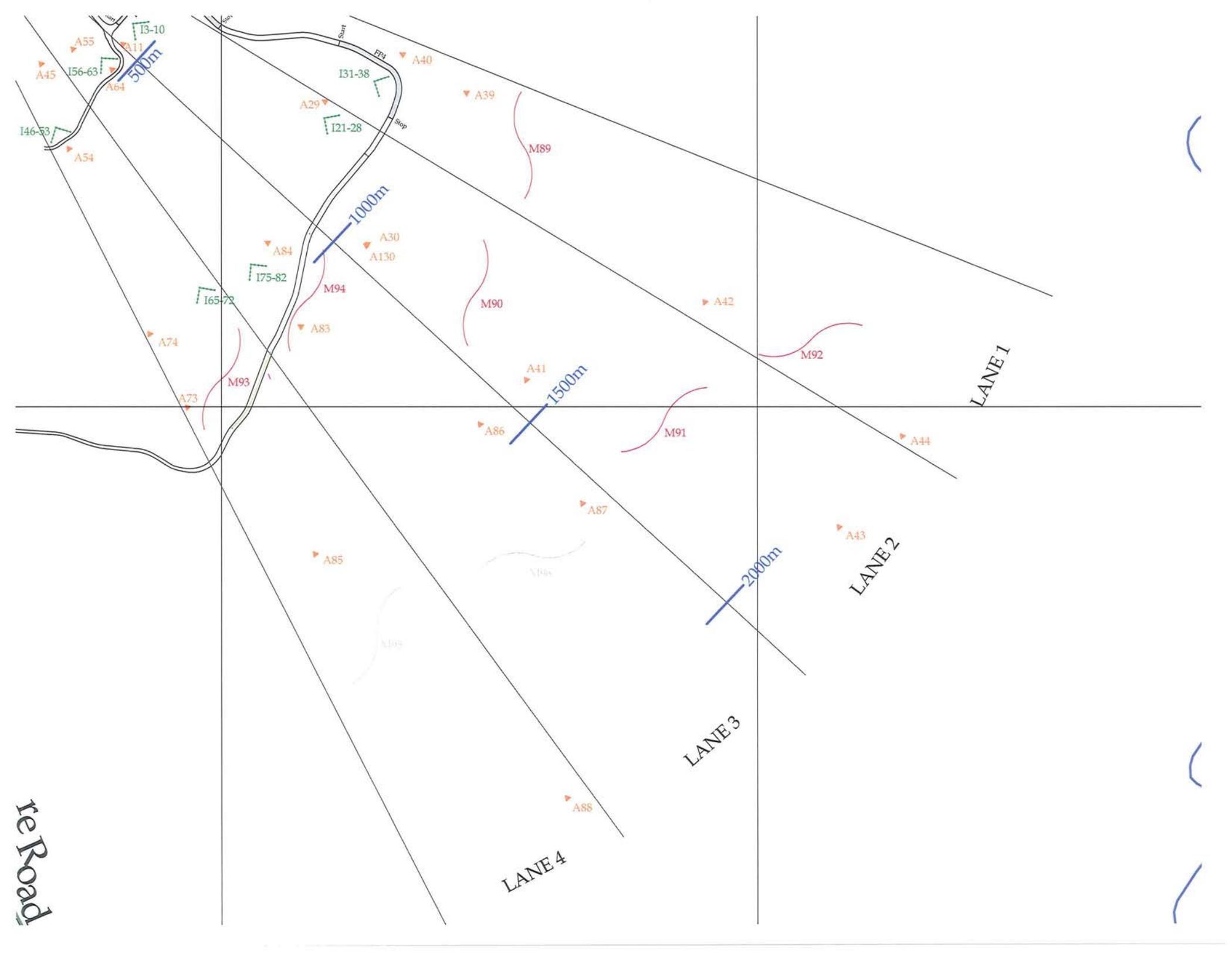
O8

Clearing Pit

00

K15





re Road

LANE 1

LANE 2

LANE 3

LANE 4

500m

1000m

1500m

2000m

I13-10
I156-63
I146-53

I31-38
I21-28

I175-82
I165-72

A45
A55
A11
A64
A54

A29
A40
A39

A84
A130
A74
A83

A41
A86

A87

A85

A43

A88

M89

M90

M93

M94

M91

M92

M95

M96

Start

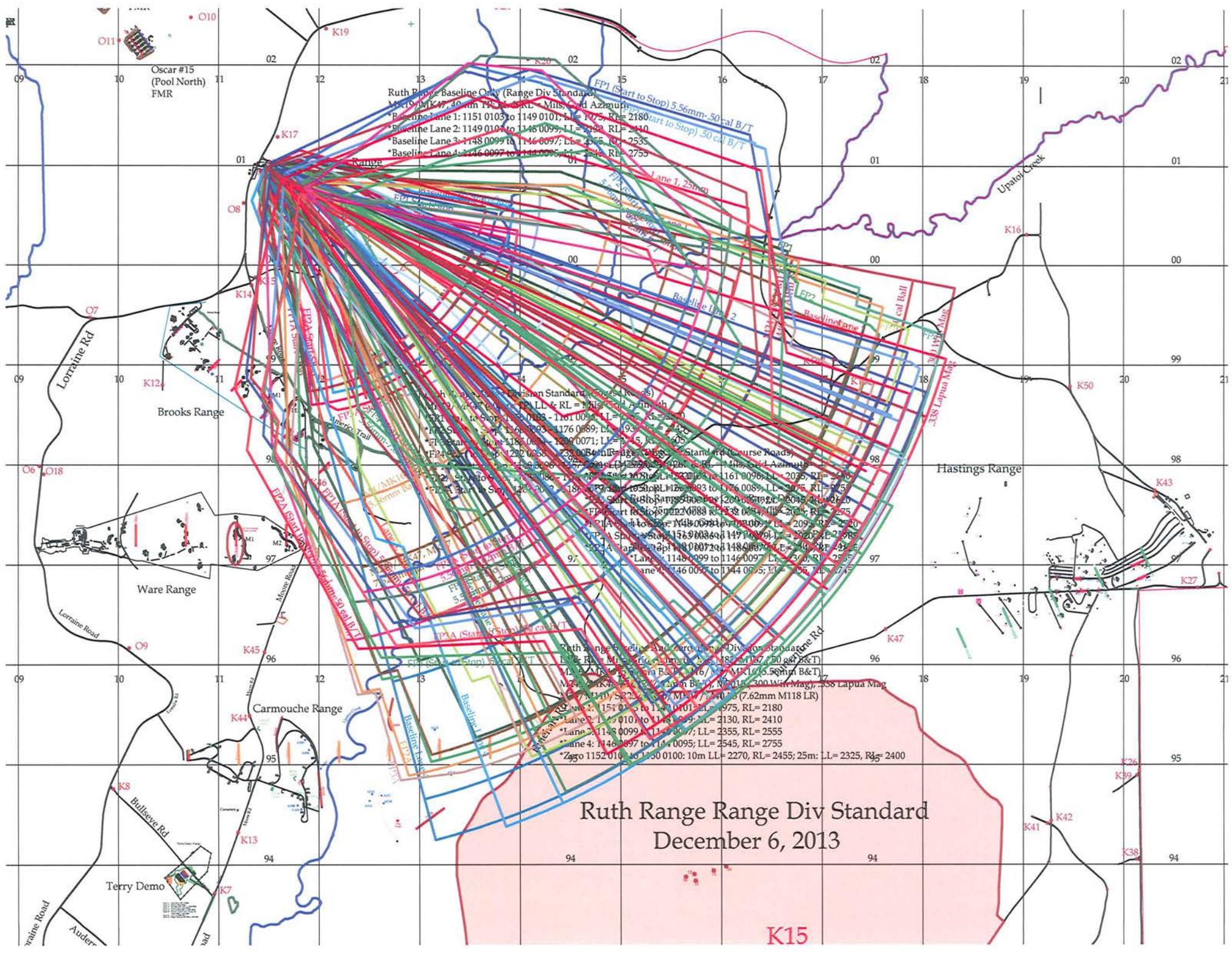
Stop

FP4



Ruth Range Range Division BFV Unstabilized Gunnery (Log #12-05-13) Roadblocks 15 Dec 2013

#	GRID	LOCATION	TYPE	#	GRID	LOCATION	TYPE
K-2	GA 163 883	Across Box Springs Rd 125m N. of its intersection with Buena Vista Rd.	Gate	K-26	GA 201 949	Across Boundry Road 1800m S of its intersection with Turrentine Road	Gate
K-3	GA 153 894	Across entrance road leading to Concord OP 250m N. of its intersection with Buena Vista Rd.	Gate	K-27	GA 207 968	Across Turrentine Rd 600m E. of its intersection with Boundary Rd.	Gate
				K-28	GA 191 885	Across Whitson Rd 15m W. of its intersection with Cactus Rd.	Gate
K-5	GA 117 920	Across Shamanski Rd 25m N. of its intersection with Buena Vista Rd.	Gate	K-29	GA 189 888	Across un-named trail on left side of Cactus Range 300m W of Cactus Road	Gate
K-7	GA 109 937	Across Moore Rd 15m N. of its intersection with Bullseye Rd.	Cable	K-30	GA 190 890	Across un-named trail on right side of Cactus Range 250m W of Cactus Road.	Gate
K-8	GA 099 947	Across Bulls Eye Rd 50m E of its intersection with Lorraine Road.	Gate	K-32	GA 192 915	Across Shamanski Road 35m W of its intersection with Cactus Rd.	Gate
K-9	GA 103 921	Across Buena Vista Rd 40m E of the intersection with Moore Rd (Road Guard Location)	Gate	K-36	GA 163 883	Across Buena Vista Rd 50m W. of its intersection with Box Springs Rd. (Road guard location).	Gate
K-9A	GA 106 919	Across tank trail 200m W of the Upatoi Creek ford site.	Gate	K-36A	GA 163 882	Across Tank Trail 50m W. of its intersection with Box Springs Rd.	Gate
K-10	GA 118 920	Across Buena Vista Rd at K-5 road block.	Gate	K-38	GA 201 941	Across unnamed trail 35m W. of its intersection with the east boundary road. Permanently closed.	Gate
K-11	GA 105 927	Across Moore Rd 20m N. of its intersection with Audernarde Trail. Entrance to Terry Demo Rng. (Road guard location)	Gate	K-39	GA 202 949	Across unnamed trail 15m W. of its intersection with the east boundary road. Permanently closed.	Gate
K-12	GA 104 988	Across Old Lorraine Road 600m S of the tower on Brooks Range.	Gate	K-40	GA 174 908	Across Box Springs Rd 30m S. of Pine Knot Creek.	Gate
K-13	GA 112 943	Across Moore Rd 680m N. of its intersection with Bullseye Rd.	Gate	K-41	GA 192 944	Across Kennesaw Trail 30m W. of its intersection with Box Springs Rd.	Gate
K-14	GA 113 998	Across Moore Rd 10m S. of its intersection with Lorraine Rd.	Gate	K-42	GA 193 944	Across Box Springs Rd 10m N. of its intersection with Cactus Rd.	Gate
K-15	GA 114 999	Across course road leading out of Ruth Range 50m E. of its intersection with Moore Rd.	Gate	K-43	GA 203 978	Across the northern boundary range road approx 20m N-W. of the old Hastings Range upper baseline.	Gate
K-16	GB 190 003	Across Rinehart Rd 130m W. of its intersection with Box Springs Rd.	Gate	K-44	GA 113 955	Across Moore Rd on the N. side of Carmouche Range maneuver box.	Gate
K-16A	GA 172 989	Across Rinehart Rd 20m S. of its intersection with the northern boundary range road.	Gate	K-45	GA 115 961	Across Moore Rd 300m S. of its intersection with the old Ware Range course road.	Gate
K-16B	GA 171 990	Across un-named trail 20m S. of its intersection with the northern boundary range road.	Gate	K-46	GA 119 979	Across Moore Rd 725m S. of its intersection with Americo Trail	Gate
K-17	GB 116 013	Across unnamed trail 15m E. of Moore Rd and 300m N. of Ruth Range tower.	Gate	K-47	GA 176 963	Across Turrentine Rd 1000m W. of mover 4 on Hastings Range	Gate
K-19	GB 121 023	Across unnamed trail 220m N-E. of Oscar Range Complex Road and 30m S of the northern boundary range road.	Gate	K-50	GA 195 988	Across Box Springs Rd 60m N. of its intersection with the northern boundary range road.	Cable
K-20	GB 141 021	Across unnamed trail 550m S of the northern boundary range road.	Cable	O-9	GA 101 962	600m N of Carmouche Rng on right side of Lorraine Rd	Gate
K-21	GB 139 027	Across the northern boundary range road Aprox 250m East of Cox Creek bridge.	Gate	O-18	GA 093 979	800m N of Ware Rng Entrance on right side of Lorraine Rd	Gate



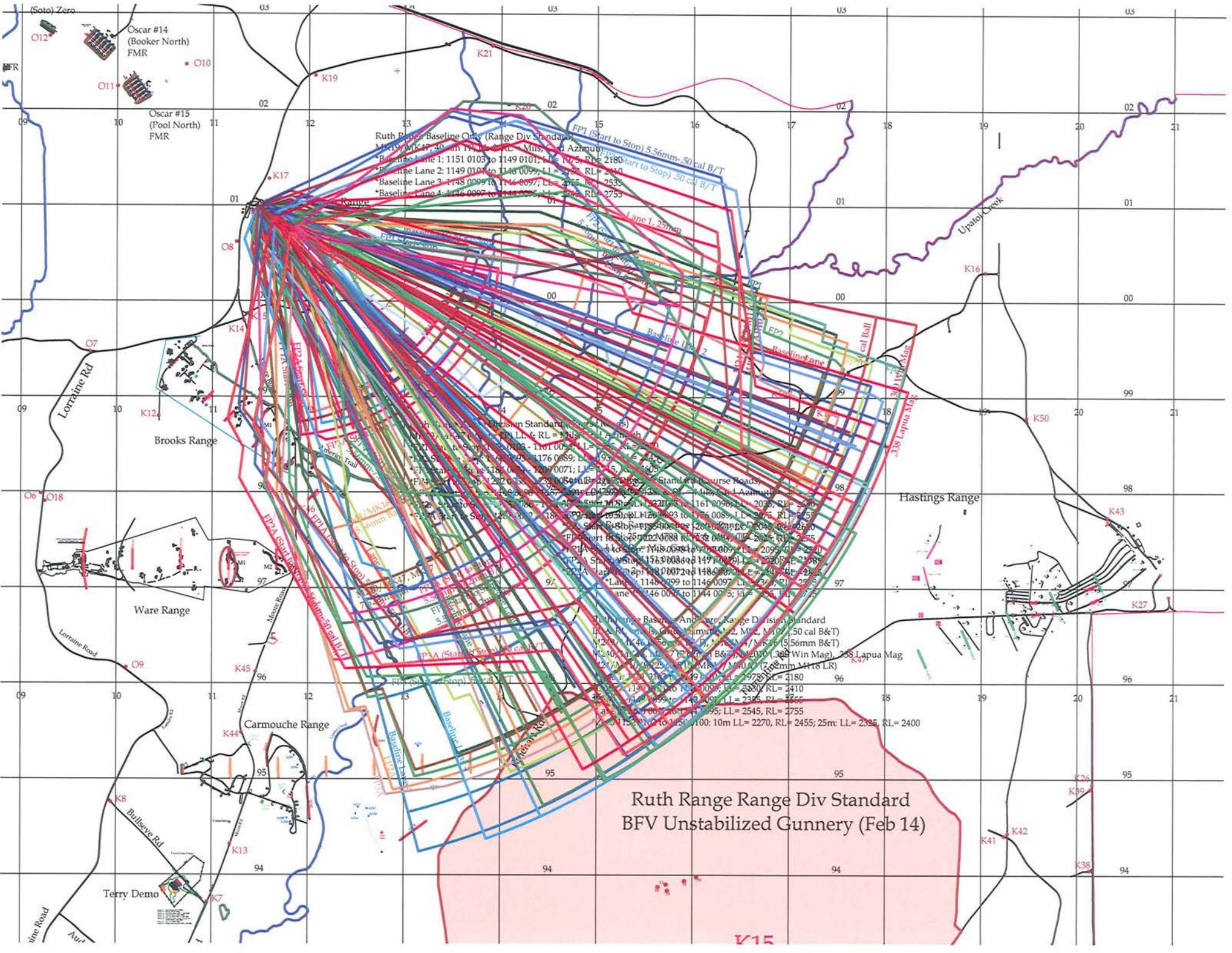
Ruth Range Baseline Only (Range Div Standard)
 M119 (K47, 46m 19.0000, 0.0000, 118.5000, 210.0000)
 *Baseline Lane 1: 1151 0103 to 1149 0101; LL = 2175, RL = 2180
 *Baseline Lane 2: 1149 0101 to 1146 0099; LL = 2130, RL = 2410
 *Baseline Lane 3: 1148 0099 to 1146 0097; LL = 2355, RL = 2535
 *Baseline Lane 4: 1146 0097 to 1144 0095; LL = 2545, RL = 2755

Division Standard (Range Div Standard)
 M119 (K47, 46m 19.0000, 0.0000, 118.5000, 210.0000)
 *Baseline Lane 1: 1151 0103 to 1149 0101; LL = 2175, RL = 2180
 *Baseline Lane 2: 1149 0101 to 1146 0099; LL = 2130, RL = 2410
 *Baseline Lane 3: 1148 0099 to 1146 0097; LL = 2355, RL = 2535
 *Baseline Lane 4: 1146 0097 to 1144 0095; LL = 2545, RL = 2755

Ruth Range Range Div Standard
 December 6, 2013

Ruth Range Baseline and zero line (Division Standard)
 M119 (K47, 46m 19.0000, 0.0000, 118.5000, 210.0000)
 *Baseline Lane 1: 1151 0103 to 1149 0101; LL = 2175, RL = 2180
 *Baseline Lane 2: 1149 0101 to 1146 0099; LL = 2130, RL = 2410
 *Baseline Lane 3: 1148 0099 to 1146 0097; LL = 2355, RL = 2535
 *Baseline Lane 4: 1146 0097 to 1144 0095; LL = 2545, RL = 2755
 *Zero 1152 0103 to 1150 0100: 10m LL = 2270, RL = 2455; 25m: LL = 2325, RL = 2400

K15



Ruth Range Baseline Only (Range Div Standard)
 M209, M147, 40 mm FPM, 50 cal B&T, M107, M105, M102, M101, M100, M99, M98, M97, M96, M95, M94, M93, M92, M91, M90, M89, M88, M87, M86, M85, M84, M83, M82, M81, M80, M79, M78, M77, M76, M75, M74, M73, M72, M71, M70, M69, M68, M67, M66, M65, M64, M63, M62, M61, M60, M59, M58, M57, M56, M55, M54, M53, M52, M51, M50, M49, M48, M47, M46, M45, M44, M43, M42, M41, M40, M39, M38, M37, M36, M35, M34, M33, M32, M31, M30, M29, M28, M27, M26, M25, M24, M23, M22, M21, M20, M19, M18, M17, M16, M15, M14, M13, M12, M11, M10, M9, M8, M7, M6, M5, M4, M3, M2, M1, M0

Baseline Lane 1: 1151 0103 to 1149 0101; LL = 2180, RL = 2180
 Baseline Lane 2: 1149 0103 to 1146 0097; LL = 2410, RL = 2410
 Baseline Lane 3: 1148 0099 to 1146 0097; LL = 2355, RL = 2355
 Baseline Lane 4: 1146 0097 to 1144 0095; LL = 2755, RL = 2755

Ruth Range Baseline Azimuth Gun Range Division Standard
 M209, M147, 40 mm FPM, 50 cal B&T, M107, M105, M102, M101, M100, M99, M98, M97, M96, M95, M94, M93, M92, M91, M90, M89, M88, M87, M86, M85, M84, M83, M82, M81, M80, M79, M78, M77, M76, M75, M74, M73, M72, M71, M70, M69, M68, M67, M66, M65, M64, M63, M62, M61, M60, M59, M58, M57, M56, M55, M54, M53, M52, M51, M50, M49, M48, M47, M46, M45, M44, M43, M42, M41, M40, M39, M38, M37, M36, M35, M34, M33, M32, M31, M30, M29, M28, M27, M26, M25, M24, M23, M22, M21, M20, M19, M18, M17, M16, M15, M14, M13, M12, M11, M10, M9, M8, M7, M6, M5, M4, M3, M2, M1, M0

Ruth Range Azimuth Gun Range Division Standard
 BFV Unstabilized Gunnery (Feb 14)

K15