

## ASR SUPPLEMENT

**INSTALLATION NAME:** OLD CAMP ABBOTT

**FFID:** OR9799F3070

**FUDS PROPERTY NUMBER:** F10OR0041

**TOTAL PROPERTY ACREAGE:** 9687

**MSC:** Northwestern Division - 41504  
SUNRIVER, OR

**POC for this data:**

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**DOES THE INSTALLATION HAVE ANY A/I RANGES?** NO

**DOES THE INSTALLATION HAVE ANY CTT RANGES?** YES

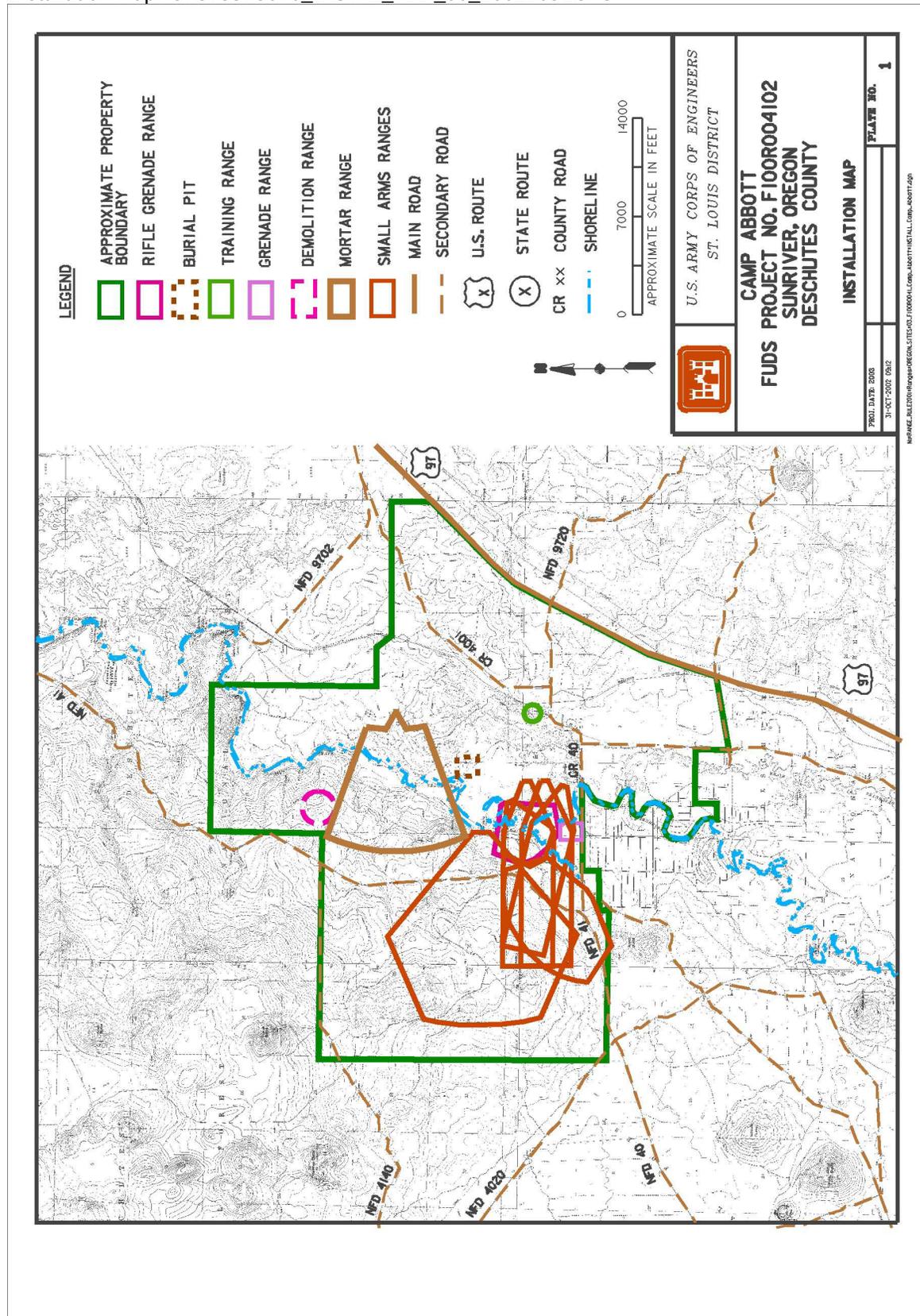
**TYPES OF MUNITIONS USED ON THIS INSTALLATION:** Conventional, Chemical

**INFORMATION IN THIS SUPPLEMENT WAS GATHERED FROM THE:** ASR

MMR AREA SUMMARY						
PROJECT No.	PLATE No.	RANGE NAME	SUB-RANGE NAME	ACREAGE	AARS AOC	RMIS RANGE ID
02	M01	Burial Pit		48	A2	F10OR004102M01
02	R01	Anti-Tank Range		354	A1	F10OR004102R01
02	R02	Chemical Training Area		27	A1	F10OR004102R02
02	R03	Demolition Area		96	A2	F10OR004102R03
02	R04	Grenade Courts		50	A1	F10OR004102R04
02	R05	Mortar Range		1421		F10OR004102R05
02	R06	Range Complex No. 1		3527	A1	F10OR004102R06

02	R06-SR01		Rifle Range	684	A1	F10OR004102R06-SR01
02	R06-SR02		Rifle/Machine Gun Range	754	A1	F10OR004102R06-SR02
02	R06-SR03		Landscape Range	19	A1	F10OR004102R06-SR03
02	R06-SR04		Transition Range	591	A1	F10OR004102R06-SR04
02	R06-SR05		Anti-Aircraft Range	1022	A1	F10OR004102R06-SR05
02	R06-SR06		Field Target &Sub Machine Gun Range	2766	A1	F10OR004102R06-SR06

Installation Map: OR9799F3070\_INSTAL\_MAP\_00\_20021031.JPG



**INSTALLATION NAME**

OLD CAMP ABBOTT  
SUNRIVER, OR

**FUDS PROJECT**

F10OR004102 - REPORTS OF ORDNANCE

**PROJECT COMMENTS:** The former Camp Abbot installation was located in Deschutes County, Oregon, west of the community of Sunriver. The site, approximately 15 miles south of Bend, Oregon, was bordered on the west by U.S. Hwy 97 and straddled the Deschutes River. The portion of the former site situated east of the Deschutes River was developed as part of the Sunriver Resort. The lands west of the Deschutes River remain under the control of the US Forest Service and were virtually undeveloped.

The Army acquired 8,672.45 acres by permit from the US Forest Service in October 1942, an additional 984.84 acres in fee, and 29.12 acres of easements. The camp was declared surplus in April 1946 and disposed of by surrender of use permits and transfer to the WAA. Current owners are the Forest Service and the Sunriver Properties Oregon, Ltd.

Camp Abbot was established as an Engineer Replacement Center in March 1943 and soldiers first arrived for training in March of 1943. Up to 10,000 men at a time trained at the camp and in the 14 months of its operation, 90,000 men trained at the camp. Camp Abbot ceased operations in June of 1944.

A letter dated 25 Sept 46, states that "a recent inspection of Camp Abbot was made by the chemical officer of the 6th Army to determine whether poisonous gases were present on the area. This inspection showed that the land was free of any such contamination". Another letter dated 30 Oct 1946 says, "Camp Abbot has been inspected for decontamination and dedudding and that said camp is hereby declared safe for return to private use". An additional letter, dated 18 Nov 47, states "The lands have been examined and have been cleared of all explosives or explosive objects reasonably possible to detect by visual inspection.

The anti-tank demonstration area, fortification obstacle course, tactical training, and night training areas as shown on the historical map, are not shown as ranges since no ordnance could be identified for use on these areas.

**MMR AREA NAME:** Burial Pit

**RMIS Range ID:** F10OR004102M01

**HISTORIC USE:**

<b>HISTORIC USE</b>	<b>START YEAR</b>	<b>END YEAR</b>	<b>COMMENTS</b>
BURIAL PITS	1943	1944	N/A

**CURRENT USE:**

<b>CURRENT USE</b>	<b>START YEAR</b>	<b>COMMENTS</b>
Recreational	1946	N/A
Residential - Single Family	1946	N/A

**ACREAGE:**

<b>Land:</b>	48
<b>Tidal Water:</b>	0
<b>Inland Water:</b>	0
<b>Total:</b>	48
<b>Tidal Water with Public Exposure Pathway:</b>	No

**MMR ACREAGE:**

<b>Identified:</b>	0
<b>Suspected:</b>	48
<b>Not Suspected:</b>	0

**RISK ASSESSMENT CODE:**

<b>Hazard Severity:</b>	I
<b>Hazard Probability:</b>	A
<b>RAC Score:</b>	1

**CLASSIFICATION(S):**

**WMM**

**RANGE / NON-RANGE:** Non-Range

**LAND USE RESTRICTIONS:** Unrestricted Public Access

**CONSTRUCTION DATE: (YYYYMMDD)** 19430301

**THE FOLLOWING TYPES OF MUNITIONS WERE USED ON THIS RANGE:**

Conventional, Chemical

**DESCRIPTION:** The Ordnance Burial Pit Area is located in the flat area immediately east of the Deschutes River.

**COMMENTS:** The Archive Search Report Site inspection team located a potential ordnance disposal pit located east of the Deschutes River. The potential disposal pit is located at the old site landfill. The disposal pit was horseshoe in shape, bermed and ringed with stone. This disposal pit was located at coordinates N42° 55' 46", W121° 26' 15". No evidence of OE waste or hazards was found on the surface of this area.

Local inhabitants indicate that both OE and CWM contamination may be buried in the old landfill.

The 48-acre total acreage was obtained by tracing the boundary of the old site landfill and determining the landfill acreage.

**HAVE THERE BEEN ANY DOCUMENTED INCIDENTS ON THIS RANGE?** No

**RANGE MUNITIONS:**

<b>MUNITIONS ID</b>	<b>MUNITIONS</b>	<b>USED START DATE</b>	<b>USED END DATE</b>
SMALL ARMS(CTT01)	Small Arms, General	194303	194406
SMALL ARMS COMPLETE ROUNDS(CTT02)	Small Arms, General - complete rounds		
HAND GRENADES, LIVE(CTT03)	Mk II, Hand Grenade, Frag	194303	194406
HAND GRENADES (INCENDIARY, SMOKE)(CTT04)	AN-M14, Incendiary Grenade		
HAND GRENADES (WP)(CTT05)	M15, Smoke Grenade, WP		
GROUND ROCKETS, LIVE(CTT11)	M6A1, Rocket, HEAT, 2.36-inch		
GROUND ROCKETS, RIFLE GRENADES, PRACTICE(CTT15)	M7A1, Practice Rocket, 2.36-inch	194303	194406
MORTARS, HE(CTT22)	60mm, HE, M49	194303	194406
MORTARS, HE(CTT22)	81mm, HE, M43	194303	194406
MORTARS, PRACTICE(CTT25)	60mm, Practice, M50A2		
RIOT CONTROL AGENTS(CTT36)	RIOT CONTROL AGENTS	194303	194406
LESS SENSITIVE EXPLOSIVES (AMMONIUM NITRATE, EXPLOSIVE D, ETC.)(CTT44)	LESS SENSITIVE EXPLOSIVES (AMMONIUM NITRATE, EXPLOSIVE D, ETC.)		
GAS ID SETS(CTT48)	Chemical ID, Toxic Gas Set M2	194303	194406
TOXIC CHEMICAL MUNITIONS(CTT49)	TOXIC CHEMICAL MUNITIONS		

**RANGE LAND ACCESS AND RESTRICTIONS:**

<b>RESTRICTION TYPE</b>	<b>RESTRICTION</b>	<b>DESCRIPTION</b>
A	NO CONTROLS	No known access controls
L	OTHER	No known land use controls.

**RANGE OWNERS:**

<b>OWNER TYPE</b>	<b>OWNER DESCRIPTION</b>	<b>LEASE</b>	<b>LEASE TERMINATION</b>	<b>REVOCATION OF LAND</b>
O	several private owners			NO
P	Sunriver Properties			NO

**RANGE DEMOGRAPHICS:**

<b>TYPE</b>	<b>NAME</b>	<b>STATE</b>	<b>COUNTRY</b>
CO	Deschutes	OR	UNITED STATES
CT	Bend	OR	UNITED STATES

**SOIL TYPE:** GRAVEL/GRAVEL-SAND

**TOPOGRAPHY:** FLAT

**VEGETATION:** LOW GRASS AND FEW SHRUBS

**GROUNDWATER**

<b>AVG DEPTH (IN FEET)</b>	NOT SPECIFIED
<b>DRINKING WATER SUPPLY</b>	UNKNOWN
<b>RANGE CONTAMINATION FROM RESIDUE OF MUNITIONS</b>	UNKNOWN

**COORDINATES:**

**DATUM:** NAD83  
**UTM X: (meters)** 624695.52  
**UTM Y: (meters)** 4860332.50  
**UTM ZONE:** 10  
**Latitude:** 43° 53' 8" N  
**Longitude:** 121° 26' 48" W



**MMR AREA NAME:** Anti-Tank Range

**RMIS Range ID:** F10OR004102R01

**HISTORIC USE:**

<b>HISTORIC USE</b>	<b>START YEAR</b>	<b>END YEAR</b>	<b>COMMENTS</b>
RIFLE GRENADE, ANTI-TANK ROCKET	1943	1944	N/A

**CURRENT USE:**

<b>CURRENT USE</b>	<b>START YEAR</b>	<b>COMMENTS</b>
Residential - Single Family	1946	N/A
Recreational	1946	N/A

**ACREAGE:**

<b>Land:</b>	325
<b>Tidal Water:</b>	0
<b>Inland Water:</b>	29
<b>Total:</b>	354
<b>Tidal Water with Public Exposure Pathway:</b>	No

**MMR ACREAGE:**

<b>Identified:</b>	0
<b>Suspected:</b>	354
<b>Not Suspected:</b>	0

**RISK ASSESSMENT CODE:**

<b>Hazard Severity:</b>	II
<b>Hazard Probability:</b>	A
<b>RAC Score:</b>	1

**CLASSIFICATION(S):**

Training

**RANGE / NON-RANGE:** Range

**LAND USE RESTRICTIONS:** Unrestricted Public Access

**CONSTRUCTION DATE: (YYYYMMDD)** 19430301

**THE FOLLOWING TYPES OF MUNITIONS WERE USED ON THIS RANGE:**

Conventional

**DESCRIPTION:** The Anti-Tank Range was located in the south central portion of the site, east of the Deschutes River. Firing was toward the west into the hill areas.

**COMMENTS:** This range was designed to accommodate 37mm sub-caliber weapons, rifle grenades and antitank rockets. Note: Rockets and Rifle Grenades have a limited effective range so targets would be engaged from 100 to 300 yards, and from 25 yards to 125 yards; respectively.

A 2.36" anti-tank rocket was found in this area.

Typical firing for a comparable range is as follows: Firing at a distance of up to 900 yards at targets on sleds or cars towed by motor vehicles is permitted on this range. Pulleys may be set at desired locations to accomplish changes in the direction of the target. More than one car or sled may be used at one time. Right and left limits of fire would have been established based on existing conditions. As shown in the cell, the suggested depth of the range is 1,000 yards and the firing line is 200 yards wide. A danger area would have been established based on the right and left firing limits and the width of the firing line. A 600-yard buffer is added to each side of the range and a 1,000-yard buffer is added downrange beyond the maximum range of the weapon used. An arbitrary safety fan angle of 30°, which is based on assumed right and left firing limits, the angle of fire, and ricochet zones, is used for this range cell.

For this range, the acreage was calculated using boundaries from a 1943 historical map. The 354 acres calculated from the historical boundaries are identical to the acreage if a standard anti-tank range layout were used.

**HAVE THERE BEEN ANY DOCUMENTED INCIDENTS ON THIS RANGE?** Yes - A 2.36" anti-tank rocket was found in this area.

**RANGE MUNITIONS:**

<b>MUNITIONS ID</b>	<b>MUNITIONS</b>	<b>USED START DATE</b>	<b>USED END DATE</b>
GROUND ROCKETS, LIVE(CTT11)	M6A1, Rocket, HEAT, 2.36-inch	194303	194406
GROUND ROCKETS, LIVE(CTT11)	M6A3, Rocket, HEAT, 2.36-inch	194303	194406
RIFLE GRENADES, LIVE(CTT12)	M31, Rifle Grenade, HEAT	194303	194406
RIFLE GRENADES, LIVE(CTT12)	M9A1, Rifle Grenade, Anti-Tank	194303	194406
GROUND ROCKETS, RIFLE GRENADES, PRACTICE(CTT15)	M11A2, Practice Rifle Grenade		

GROUND ROCKETS, RIFLE	M7A1, Practice
GRENADES, PRACTICE(CTT15)	Rocket, 2.36-inch
GROUND ROCKETS, RIFLE	M7A3, Practice
GRENADES, PRACTICE(CTT15)	Rocket, 2.36-inch

**RANGE LAND ACCESS AND RESTRICTIONS:**

RESTRICTION TYPE	RESTRICTION	DESCRIPTION
A	NO CONTROLS	No known access controls
L	OTHER (Must Describe)	No known land use restrictions

**RANGE OWNERS:**

OWNER TYPE	OWNER DESCRIPTION	LEASE	LEASE TERMINATION	REVOCATION OF LAND
F	U.S. Forest Service			NO
O	several private owners			NO
P	Sunriver Properties			NO

**RANGE DEMOGRAPHICS:**

TYPE	NAME	STATE	COUNTRY
CO	Deschutes	OR	UNITED STATES
CT	Bend	OR	UNITED STATES

**SOIL TYPE:** GRAVEL/GRAVEL-SAND

**TOPOGRAPHY:** HEAVILY ROLLING

**VEGETATION:** LOW GRASS AND FEW SHRUBS

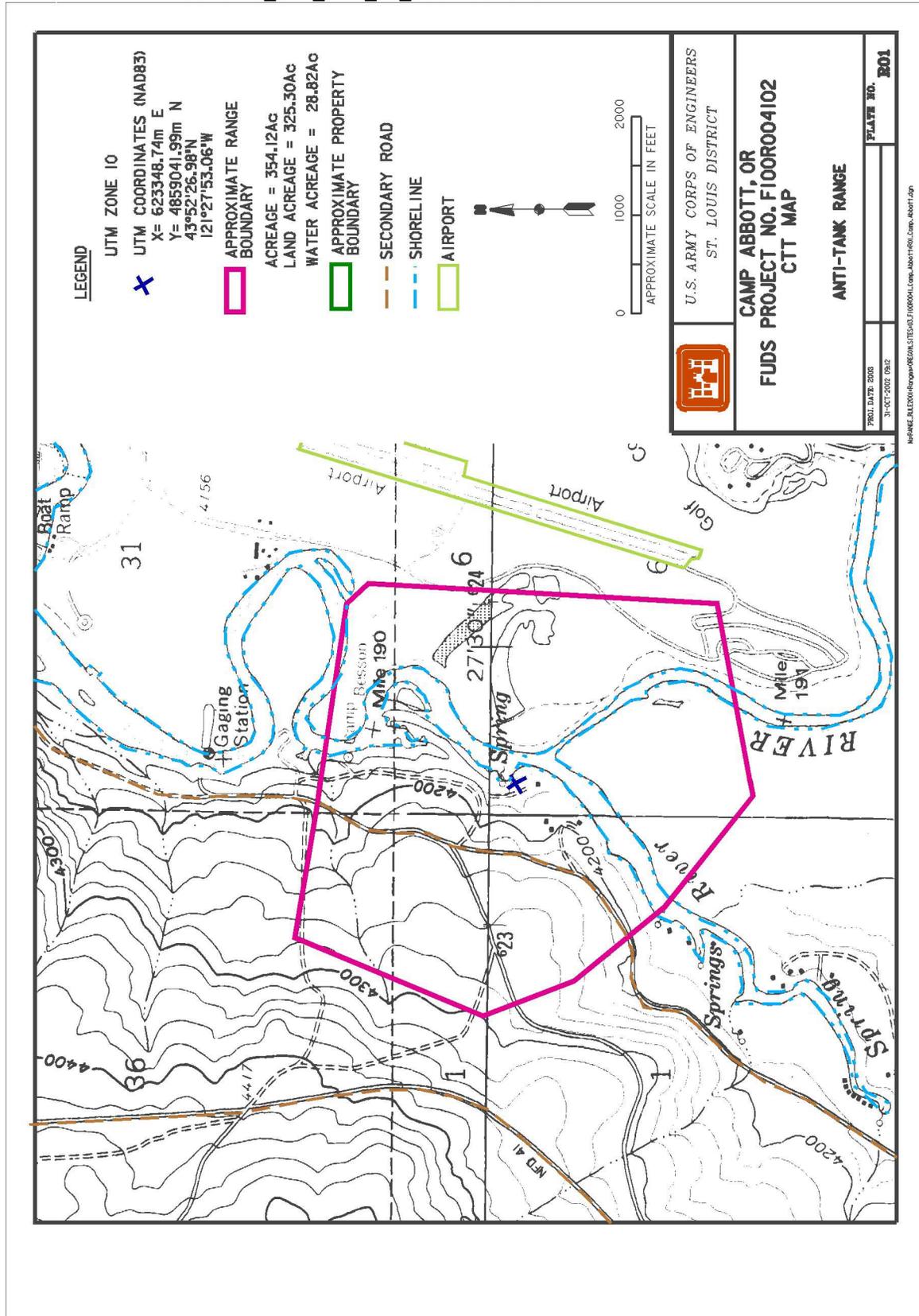
**GROUNDWATER**

<b>AVG DEPTH (IN FEET)</b>	NOT SPECIFIED
<b>DRINKING WATER SUPPLY</b>	UNKNOWN
<b>RANGE CONTAMINATION FROM RESIDUE OF MUNITIONS</b>	UNKNOWN

**COORDINATES:**

<b>DATUM:</b>	NAD83
<b>UTM X: (meters)</b>	623348.74
<b>UTM Y: (meters)</b>	4859041.99
<b>UTM ZONE:</b>	10
<b>Latitude:</b>	43° 52' 27" N
<b>Longitude:</b>	121° 27' 53" W

RANGE MAP: OR9799F3070\_CTT\_MAP\_01\_20021031.JPG



**MMR AREA NAME:** Chemical Training Area

**RMIS Range ID:** F10OR004102R02

**HISTORIC USE:**

<b>HISTORIC USE</b>	<b>START YEAR</b>	<b>END YEAR</b>	<b>COMMENTS</b>
TRAINING AREA/MANEUVER AREA	1943	1944	N/A

**CURRENT USE:**

<b>CURRENT USE</b>	<b>START YEAR</b>	<b>COMMENTS</b>
Residential - Single Family	1946	N/A

**ACREAGE:**

<b>Land:</b>	27
<b>Tidal Water:</b>	0
<b>Inland Water:</b>	0
<b>Total:</b>	27
<b>Tidal Water with Public Exposure Pathway:</b>	No

**MMR ACREAGE:**

<b>Identified:</b>	0
<b>Suspected:</b>	27
<b>Not Suspected:</b>	0

**RISK ASSESSMENT CODE:**

<b>Hazard Severity:</b>	I
<b>Hazard Probability:</b>	A
<b>RAC Score:</b>	1

**CLASSIFICATION(S):**

Training

**RANGE / NON-RANGE:** Range

**LAND USE RESTRICTIONS:** Unrestricted Public Access

**CONSTRUCTION DATE: (YYYYMMDD)** 19430301

**THE FOLLOWING TYPES OF MUNITIONS WERE USED ON THIS RANGE:**

Chemical

**DESCRIPTION:** The Gas Demonstration Range/CW Training area was located to the northeast of the built up cantonment area on the central eastern portion of the site.

**COMMENTS:** CW training was a vital component of the 17 week training cycle. Troops learned how to control a thermite bomb during a class in incendiary control. Soldiers were instructed how "to combat" the hazardous magnesium bomb along with white phosphorous.

The base newspaper in 1943 stated that a Mustard-Lewisite mixture had been added to the list of chemical agents because it was the standard Japanese blistering agent. Historical research conducted by the St. Louis District yielded no further documentation on this subject. Again, the base newspaper shows a photo of a pyrotechnic-like explosion to demonstrate the various uses of white phosphorous in modern warfare.

The training area was determined by an analysis of aerial photographs and information found during the site inspection. The acreage for the training area was calculated by a combination of historical maps and by bounding the disturbed area identified on aerial photographs.

**HAVE THERE BEEN ANY DOCUMENTED INCIDENTS ON THIS RANGE?** No

**RANGE MUNITIONS:**

<b>MUNITIONS ID</b>	<b>MUNITIONS</b>	<b>USED START DATE</b>	<b>USED END DATE</b>
HAND GRENADES (INCENDIARY, SMOKE)(CTT04)	AN-M8, Smoke Grenade, HC		
HAND GRENADES (INCENDIARY, SMOKE)(CTT04)	AN-M14, Incendiary Grenade		
HAND GRENADES (WP)(CTT05)	M15, Smoke Grenade, WP		
RIOT CONTROL AGENTS(CTT36)	Pot, Tear Gas, M1	194303	194406
GAS ID SETS(CTT48)	Chemical ID, Toxic Gas Set, M1	194303	194406
GAS ID SETS(CTT48)	Chemical ID, Toxic Gas Set M2	194303	194406
TOXIC CHEMICAL MUNITIONS(CTT49)	TOXIC CHEMICAL MUNITIONS		

**RANGE LAND ACCESS AND RESTRICTIONS:**

<b>RESTRICTION TYPE</b>	<b>RESTRICTION</b>	<b>DESCRIPTION</b>
A	NO CONTROLS	No known access controls
L	OTHER (Must Describe)	No known land use restrictions.

**RANGE OWNERS:**

<b>OWNER TYPE</b>	<b>OWNER DESCRIPTION</b>	<b>LEASE</b>	<b>LEASE TERMINATION</b>	<b>REVOCATION OF LAND</b>
P	Sunriver Properties Oregon, LTD.			NO
O	Numerous private owners			NO

**RANGE DEMOGRAPHICS:**

<b>TYPE</b>	<b>NAME</b>	<b>STATE</b>	<b>COUNTRY</b>
CO	Deschutes	OR	UNITED STATES
CT	Bend	OR	UNITED STATES

**SOIL TYPE:** SAND/GRAVEL SAND

**TOPOGRAPHY:** FLAT

**VEGETATION:** LOW GRASS AND FEW SHRUBS

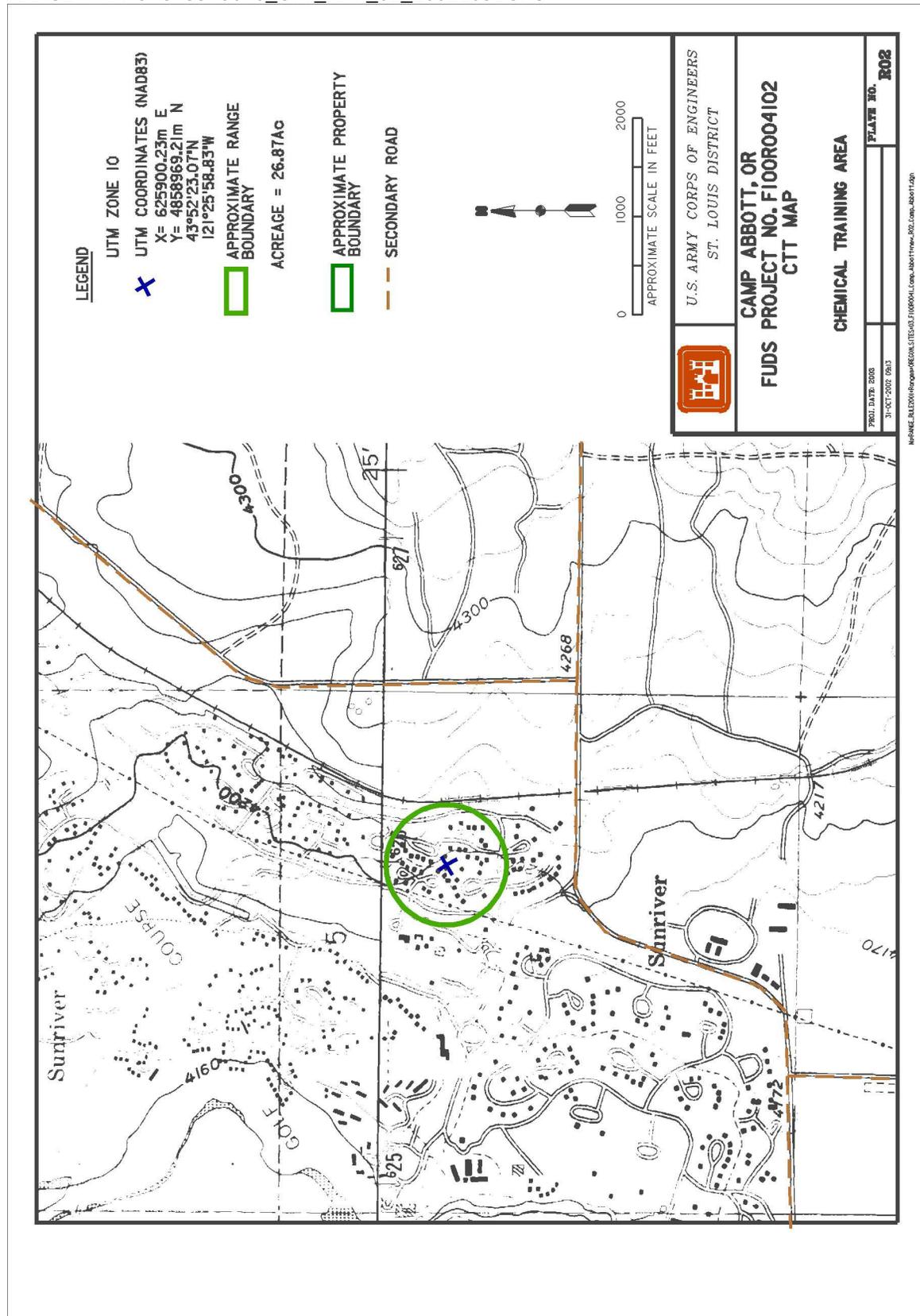
**GROUNDWATER**

<b>AVG DEPTH (IN FEET)</b>	NOT SPECIFIED
<b>DRINKING WATER SUPPLY</b>	UNKNOWN
<b>RANGE CONTAMINATION FROM RESIDUE OF MUNITIONS</b>	UNKNOWN

**COORDINATES:**

**DATUM:** NAD83  
**UTM X: (meters)** 625900.23  
**UTM Y: (meters)** 4858969.21  
**UTM ZONE:** 10  
**Latitude:** 43° 52' 23" N  
**Longitude:** 121° 25' 59" W

RANGE MAP: OR9799F3070\_CTT\_MAP\_02\_20021031.JPG



**MMR AREA NAME:** Demolition Area

**RMIS Range ID:** F10OR004102R03

**HISTORIC USE:**

<b>HISTORIC USE</b>	<b>START YEAR</b>	<b>END YEAR</b>	<b>COMMENTS</b>
OB/OD	1943	1944	N/A

**CURRENT USE:**

<b>CURRENT USE</b>	<b>START YEAR</b>	<b>COMMENTS</b>
Recreational	1946	N/A

**ACREAGE:**

<b>Land:</b>	96
<b>Tidal Water:</b>	0
<b>Inland Water:</b>	0
<b>Total:</b>	96
<b>Tidal Water with Public Exposure Pathway:</b>	No

**MMR ACREAGE:**

<b>Identified:</b>	0
<b>Suspected:</b>	96
<b>Not Suspected:</b>	0

**RISK ASSESSMENT CODE:**

<b>Hazard Severity:</b>	II
<b>Hazard Probability:</b>	A
<b>RAC Score:</b>	1

**CLASSIFICATION(S):**

Training

**RANGE / NON-RANGE:** Range

**LAND USE RESTRICTIONS:** Unrestricted Public Access

**CONSTRUCTION DATE: (YYYYMMDD)** 19430301

**THE FOLLOWING TYPES OF MUNITIONS WERE USED ON THIS RANGE:**

Conventional

**DESCRIPTION:** The Demolition Area was located in the northern section of the camp, west of the Deschutes River along the hillside.

**COMMENTS:** The Archive Search Report noted that Camp Abbott was the Engineer Replacement Training Center. Demolition training was part of training for engineers. A suspected demolition area was identified in the north central section of the site.

Several bunkers and targets were identified in the suspected demolition area. A pillbox was found along the hillside along with several large depressions that may have been used as demolitions pits. The location of the pillbox was at N 43° 54' 46.5", W 121° 27' 05.4".

The 96-acre total for the demolition area was calculated based on a center location identified in a historical map and extending an appropriate circular buffer area around the center.

**HAVE THERE BEEN ANY DOCUMENTED INCIDENTS ON THIS RANGE?** No

**RANGE MUNITIONS:**

MUNITIONS ID	MUNITIONS	USED START DATE	USED END DATE
DEMOLITION MATERIALS(CTT37)	Explosives, Detonating Cord	194303	194406
DEMOLITION MATERIALS(CTT37)	Explosives, Dynamite, Commercial	194303	194406
DEMOLITION MATERIALS(CTT37)	Explosives, TNT	194303	194406
DETONATORS(CTT38)	DETONATORS		
BLASTING CAPS(CTT39)	Blasting Caps, Electric, Commercial		
FUSES, BOOSTERS, OR BURSTERS(CTT40)	FUSES, BOOSTERS, OR BURSTERS		

**RANGE LAND ACCESS AND RESTRICTIONS:**

RESTRICTION TYPE	RESTRICTION	DESCRIPTION
A	NO CONTROLS	No known access controls
L	ZONING	Land is owned by US Forest Service. Private home construction is prohibited.

**RANGE OWNERS:**

OWNER TYPE	OWNER DESCRIPTION	LEASE	LEASE TERMINATION	REVOCATION OF LAND

F US Forest Service YES

**RANGE DEMOGRAPHICS:**

<b>TYPE</b>	<b>NAME</b>	<b>STATE</b>	<b>COUNTRY</b>
CO	Deschutes	OR	UNITED STATES
CT	Bend	OR	UNITED STATES

**SOIL TYPE:** SAND/GRAVEL SAND

**TOPOGRAPHY:** HEAVILY ROLLING

**VEGETATION:** HEAVY SHRUBS WITH TREES

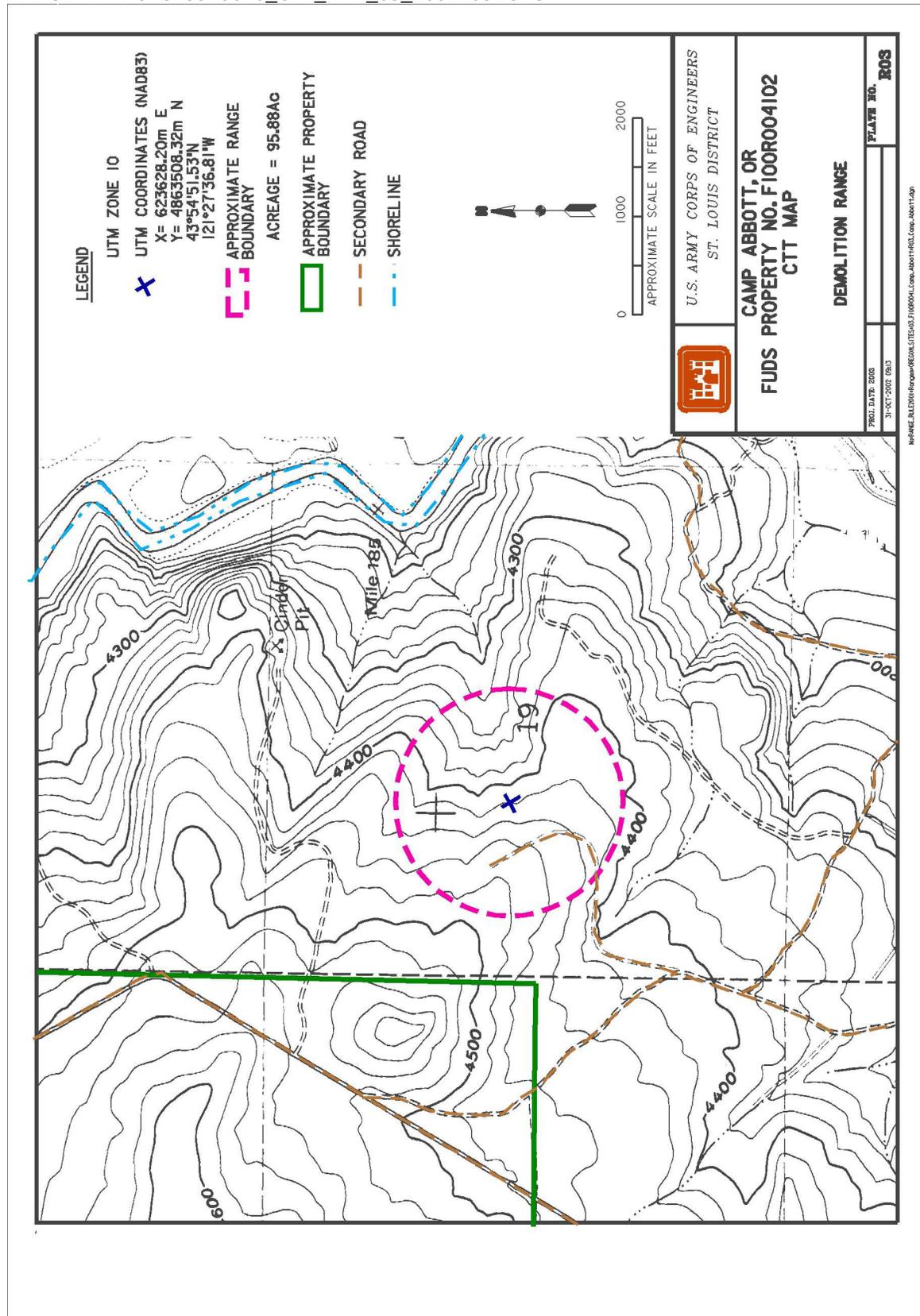
**GROUNDWATER**

<b>AVG DEPTH (IN FEET)</b>	NOT SPECIFIED
<b>DRINKING WATER SUPPLY</b>	UNKNOWN
<b>RANGE CONTAMINATION FROM RESIDUE OF MUNITIONS</b>	UNKNOWN

**COORDINATES:**

<b>DATUM:</b>	NAD83
<b>UTM X: (meters)</b>	623628.20
<b>UTM Y: (meters)</b>	4863508.32
<b>UTM ZONE:</b>	10
<b>Latitude:</b>	43° 54' 53" N
<b>Longitude:</b>	121° 27' 37" W

RANGE MAP: OR9799F3070\_CTT\_MAP\_03\_20021031.JPG



**MMR AREA NAME:** Grenade Courts

**RMIS Range ID:** F10OR004102R04

**HISTORIC USE:**

<b>HISTORIC USE</b>	<b>START YEAR</b>	<b>END YEAR</b>	<b>COMMENTS</b>
HAND GRENADE	1943	1944	N/A

**CURRENT USE:**

<b>CURRENT USE</b>	<b>START YEAR</b>	<b>COMMENTS</b>
Residential - Single Family	1946	N/A
Recreational	1946	N/A

**ACREAGE:**

<b>Land:</b>	50
<b>Tidal Water:</b>	0
<b>Inland Water:</b>	0
<b>Total:</b>	50
<b>Tidal Water with Public Exposure Pathway:</b>	No

**MMR ACREAGE:**

<b>Identified:</b>	0
<b>Suspected:</b>	50
<b>Not Suspected:</b>	0

**RISK ASSESSMENT CODE:**

<b>Hazard Severity:</b>	II
<b>Hazard Probability:</b>	A
<b>RAC Score:</b>	1

**CLASSIFICATION(S):**

Training

**RANGE / NON-RANGE:** Range

**LAND USE RESTRICTIONS:** Unrestricted Public Access

**CONSTRUCTION DATE: (YYYYMMDD)** 19430301

**THE FOLLOWING TYPES OF MUNITIONS WERE USED ON THIS RANGE:**

Conventional

**DESCRIPTION:** The Grenade Courts were located in the south central portion of the camp immediately west of the Deschutes River.

**COMMENTS:** Historical documents indicate that training with hand grenades was part of the 17-week training cycle at Camp Abbot. Training with grenades was part of the first phase of training. Historical maps show that the camp had grenade courts on which live grenades (GI Pineapples) were used.

The 49.69 acre total (50 acres on maps) for the grenade court was calculated from a 1943 historical map. A 6-bay grenade range (as shown in the cell) would require an area approximately 40 yards wide by 50 yards long. It consisted of individual throwing bays (described in a 1951 regulation) or a trench (described in a 1944 regulation) with targets and an impact area approximately 25 yards to the front of the throwing line. The regulations describe the range being laid out with a ready line situated behind a barrier at least 5 feet high, and a throwing area situated a minimum of 15 yards to the front of this barrier. The throwing bays may have been constructed from sandbags or concrete. Targets consisted of a circular outline, a crater, and/or a foxhole. A danger area of approximately 600 feet would have been established around the entire range.

**HAVE THERE BEEN ANY DOCUMENTED INCIDENTS ON THIS RANGE?** No

**RANGE MUNITIONS:**

MUNITIONS ID	MUNITIONS	USED START DATE	USED END DATE
HAND GRENADES, LIVE(CTT03)	Mk II, Hand Grenade, Frag	194303	194406
HAND GRENADES (INCENDIARY, SMOKE)(CTT04)	AN-M8, Smoke Grenade, HC	194303	194406
HAND GRENADES (INCENDIARY, SMOKE)(CTT04)	AN-M14, Incendiary Grenade		
HAND GRENADES (WP)(CTT05)	M15, Smoke Grenade, WP	194303	194406
HAND GRENADES, PRACTICE(CTT06)	M21, Practice Hand Grenade		

**RANGE LAND ACCESS AND RESTRICTIONS:**

RESTRICTION TYPE	RESTRICTION	DESCRIPTION
A	NO CONTROLS	No known access controls
L	OTHER (Must Describe)	No known land use controls.

**RANGE OWNERS:**

OWNER TYPE	OWNER DESCRIPTION	LEASE	LEASE TERMINATION	REVOCATION OF LAND
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O numerous private residences NO

**RANGE DEMOGRAPHICS:**

<b>TYPE</b>	<b>NAME</b>	<b>STATE</b>	<b>COUNTRY</b>
CO	Deschutes	OR	UNITED STATES
CT	Bend	OR	UNITED STATES

**SOIL TYPE:** SAND/GRAVEL SAND

**TOPOGRAPHY:** FLAT

**VEGETATION:** LOW GRASS AND FEW SHRUBS

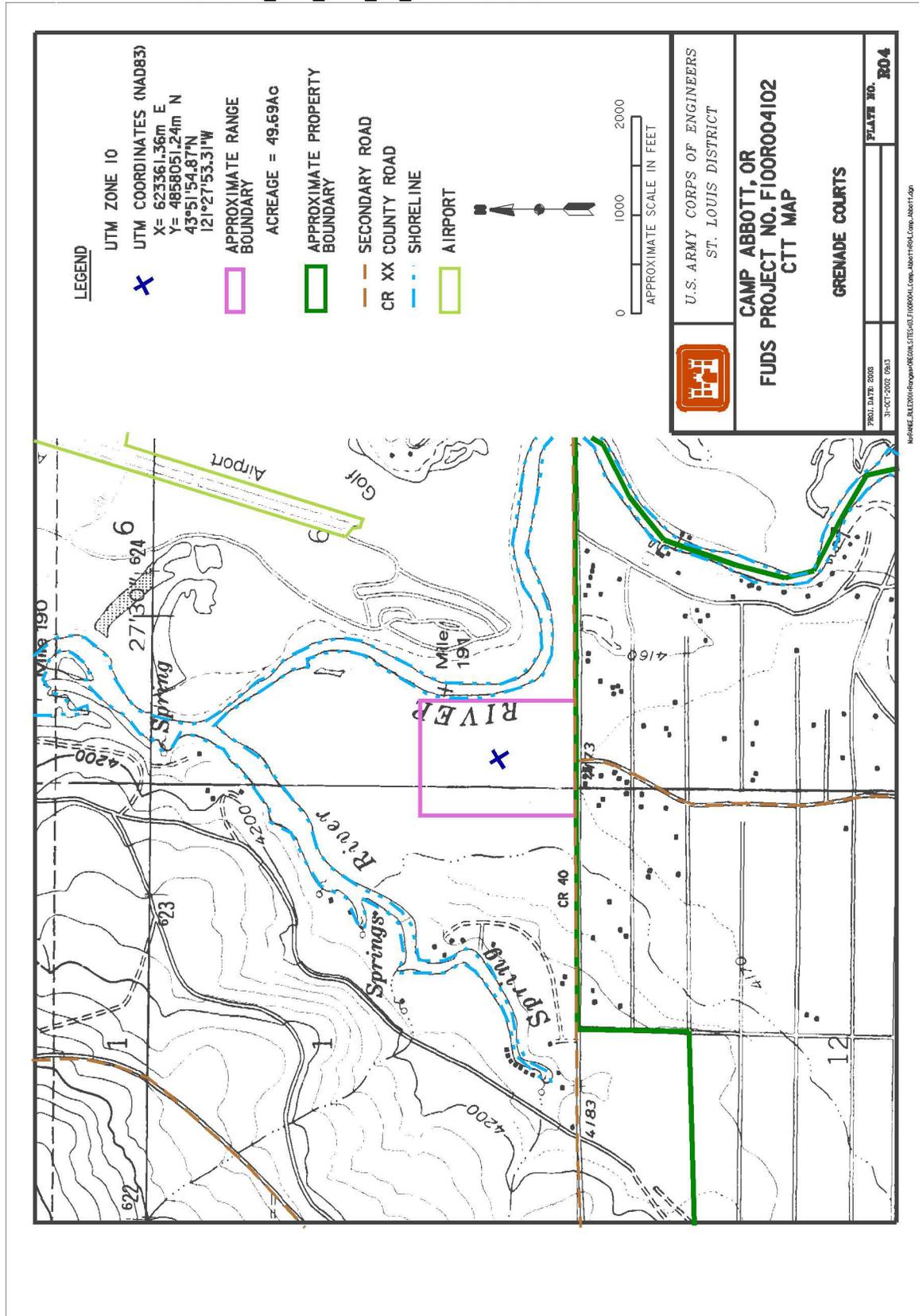
**GROUNDWATER**

<b>AVG DEPTH (IN FEET)</b>	NOT SPECIFIED
<b>DRINKING WATER SUPPLY</b>	UNKNOWN
<b>RANGE CONTAMINATION FROM RESIDUE OF MUNITIONS</b>	UNKNOWN

**COORDINATES:**

<b>DATUM:</b>	NAD83
<b>UTM X: (meters)</b>	623361.36
<b>UTM Y: (meters)</b>	4858051.24
<b>UTM ZONE:</b>	10
<b>Latitude:</b>	43° 51' 55" N
<b>Longitude:</b>	121° 27' 53" W

RANGE MAP: OR9799F3070\_CTT\_MAP\_04\_20021031.JPG



**MMR AREA NAME:** Mortar Range

**RMIS Range ID:** F10OR004102R05

**HISTORIC USE:**

<b>HISTORIC USE</b>	<b>START YEAR</b>	<b>END YEAR</b>	<b>COMMENTS</b>
MORTAR	1943	1945	N/A

**CURRENT USE:**

<b>CURRENT USE</b>	<b>START YEAR</b>	<b>COMMENTS</b>
Recreational	1946	N/A
Residential - Single Family	1946	N/A

**ACREAGE:**

<b>Land:</b>	1421
<b>Tidal Water:</b>	0
<b>Inland Water:</b>	0
<b>Total:</b>	1421
<b>Tidal Water with Public Exposure Pathway:</b>	No

**MMR ACREAGE:**

<b>Identified:</b>	0
<b>Suspected:</b>	1421
<b>Not Suspected:</b>	0

**RISK ASSESSMENT CODE:**

<b>Hazard Severity:</b>	II
<b>Hazard Probability:</b>	A
<b>RAC Score:</b>	1

**CLASSIFICATION(S):**

Training

**RANGE / NON-RANGE:** Range

**LAND USE RESTRICTIONS:** Unrestricted Public Access

**CONSTRUCTION DATE: (YYYYMMDD)** 19430301

**THE FOLLOWING TYPES OF MUNITIONS WERE USED ON THIS RANGE:**

Conventional

**DESCRIPTION:** The site is located in Deschutes County, Oregon near Sunriver. The mortar range is located near the central portion of this installation. The mortar range is place east of the Deschutes River, oriented to the west.

**COMMENTS:** Historical documents and maps do not discuss or show any mortar ranges at Camp Abbot. Several documents discuss "tactical training" conducted in the northern section of the camp. Additionally, duds of 60 and 81mm mortars were found in the area.

Accordingly, a mortar range cell was placed in the approximate vicinity where these remnants were found and oriented to the west toward the hillside. The total acreage for the mortar range, 1421.44 acres, was derived by using the standard cell for 81mm mortar range, extending to 3300 yards.

**HAVE THERE BEEN ANY DOCUMENTED INCIDENTS ON THIS RANGE?** Yes - Mortar rounds duds were found in this area.

**RANGE MUNITIONS:**

<b>MUNITIONS ID</b>	<b>MUNITIONS</b>	<b>USED START DATE</b>	<b>USED END DATE</b>
MORTARS, HE(CTT22)	60mm, HE, M49	194303	194406
MORTARS, HE(CTT22)	81mm, HE, M43	194303	194406
MORTARS, PRACTICE(CTT25)	81mm, TP. M43A1	194303	194406
MORTARS, PRACTICE(CTT25)	60mm, Practice, M50A2	194303	194406

**RANGE LAND ACCESS AND RESTRICTIONS:**

<b>RESTRICTION TYPE</b>	<b>RESTRICTION</b>	<b>DESCRIPTION</b>
A	NO CONTROLS	No known access controls
L	OTHER (Must Describe)	No know land use controls

**RANGE OWNERS:**

<b>OWNER TYPE</b>	<b>OWNER DESCRIPTION</b>	<b>LEASE</b>	<b>LEASE TERMINATION</b>	<b>REVOCATION OF LAND</b>
O	Numerous private owners			NO
F	U.S. Forest Service			YES

**RANGE DEMOGRAPHICS:**

<b>TYPE</b>	<b>NAME</b>	<b>STATE</b>	<b>COUNTRY</b>
CO	Deschutes	OR	UNITED STATES
CT	Bend	OR	UNITED STATES

**SOIL TYPE:** SAND/GRAVEL SAND

**TOPOGRAPHY:** FLAT

**VEGETATION:** LOW GRASS AND FEW SHRUBS

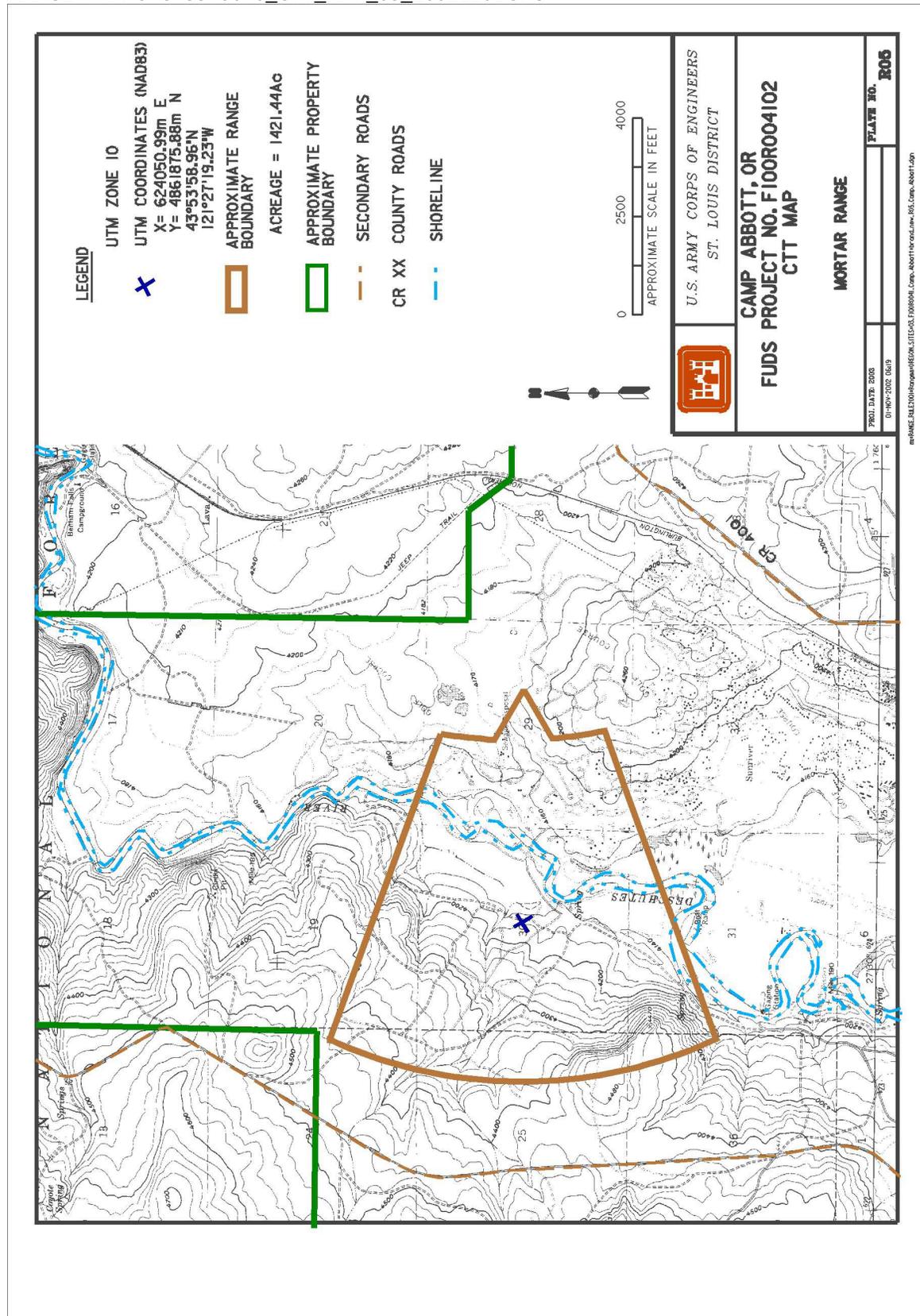
**GROUNDWATER**

<b>AVG DEPTH (IN FEET)</b>	NOT SPECIFIED
<b>DRINKING WATER SUPPLY</b>	UNKNOWN
<b>RANGE CONTAMINATION FROM RESIDUE OF MUNITIONS</b>	UNKNOWN

**COORDINATES:**

<b>DATUM:</b>	NAD83
<b>UTM X: (meters)</b>	624050.99
<b>UTM Y: (meters)</b>	4861875.88
<b>UTM ZONE:</b>	10
<b>Latitude:</b>	43° 53' 59" N
<b>Longitude:</b>	121° 27' 19" W

RANGE MAP: OR9799F3070\_CTT\_MAP\_05\_20021101.JPG



**MMR AREA NAME:** Range Complex No. 1

**RMIS Range ID:** F10OR004102R06

**HISTORIC USE:**

<b>HISTORIC USE</b>	<b>START YEAR</b>	<b>END YEAR</b>	<b>COMMENTS</b>
SMALL ARMS	1943	1944	Miniature AA Range
SMALL ARMS	1943	1944	N/A

**CURRENT USE:**

<b>CURRENT USE</b>	<b>START YEAR</b>	<b>COMMENTS</b>
Recreational	1946	N/A
Residential - Single Family	1946	N/A

**ACREAGE:**

<b>Land:</b>	3527
<b>Tidal Water:</b>	0
<b>Inland Water:</b>	0
<b>Total:</b>	3527
<b>Tidal Water with Public Exposure Pathway:</b>	No

**MMR ACREAGE:**

<b>Identified:</b>	0
<b>Suspected:</b>	3527
<b>Not Suspected:</b>	0

**RISK ASSESSMENT CODE:**

<b>Hazard Severity:</b>	V
<b>Hazard Probability:</b>	A
<b>RAC Score:</b>	5 <i>(RAC OVERRIDE: Small Arms Only Range)</i>

**CLASSIFICATION(S):**

Training  
Small Arms Range

**RANGE / NON-RANGE:** Range

**LAND USE RESTRICTIONS:** Unrestricted Public Access

**CONSTRUCTION DATE: (YYYYMMDD)** 19430301

**THE FOLLOWING TYPES OF MUNITIONS WERE USED ON THIS RANGE:**

Conventional

**DESCRIPTION:** The Small Arms Range Complex was located in the western part of the old Camp Abbott, with the impact areas located primarily west of the Deschutes river. The small arms complex contains six ranges which overlap.

**COMMENTS:** This Small Arms Range Complex contained a Field Target Range, Machine gun ranges, Rifle ranges, Anti-Aircraft range, and Transition Range. The acreage for this complex equals the sum of the individual range cells. All of the range cells locations and boundaries used are taken from a 1943 historical map. The acreages of each range was derived from the historical boundaries.

A letter dated 30 Oct 1946 states, "Camp Abbot has been inspected for decontamination and dedudding and that said camp is hereby declared safe for return to private use". An additional letter, dated 18 Nov 47, states "The lands have been examined and have been cleared of all explosives or explosive objects reasonably possible to detect by visual inspection.

**HAVE THERE BEEN ANY DOCUMENTED INCIDENTS ON THIS RANGE?** No

**RANGE MUNITIONS:**

MUNITIONS ID	MUNITIONS	USED START DATE	USED END DATE
SMALL ARMS(CTT01)	Small Arms, General	194303	194406

**RANGE LAND ACCESS AND RESTRICTIONS:**

RESTRICTION TYPE	RESTRICTION	DESCRIPTION
A	NO CONTROLS	No known access controls
L	OTHER (Must Describe)	No known land use restrictions.

**RANGE OWNERS:**

OWNER TYPE	OWNER DESCRIPTION	LEASE	LEASE TERMINATION	REVOCATION OF LAND
F	U.S. Forest Service			YES
O	several private owners			NO

**RANGE DEMOGRAPHICS:**

TYPE	NAME	STATE	COUNTRY
CO	Deschutes	OR	UNITED STATES
CT	Bend	OR	UNITED STATES

**SOIL TYPE:** SAND/GRAVEL SAND

**TOPOGRAPHY:** MOUNTAINOUS

**VEGETATION:** HEAVY SHRUBS WITH TREES

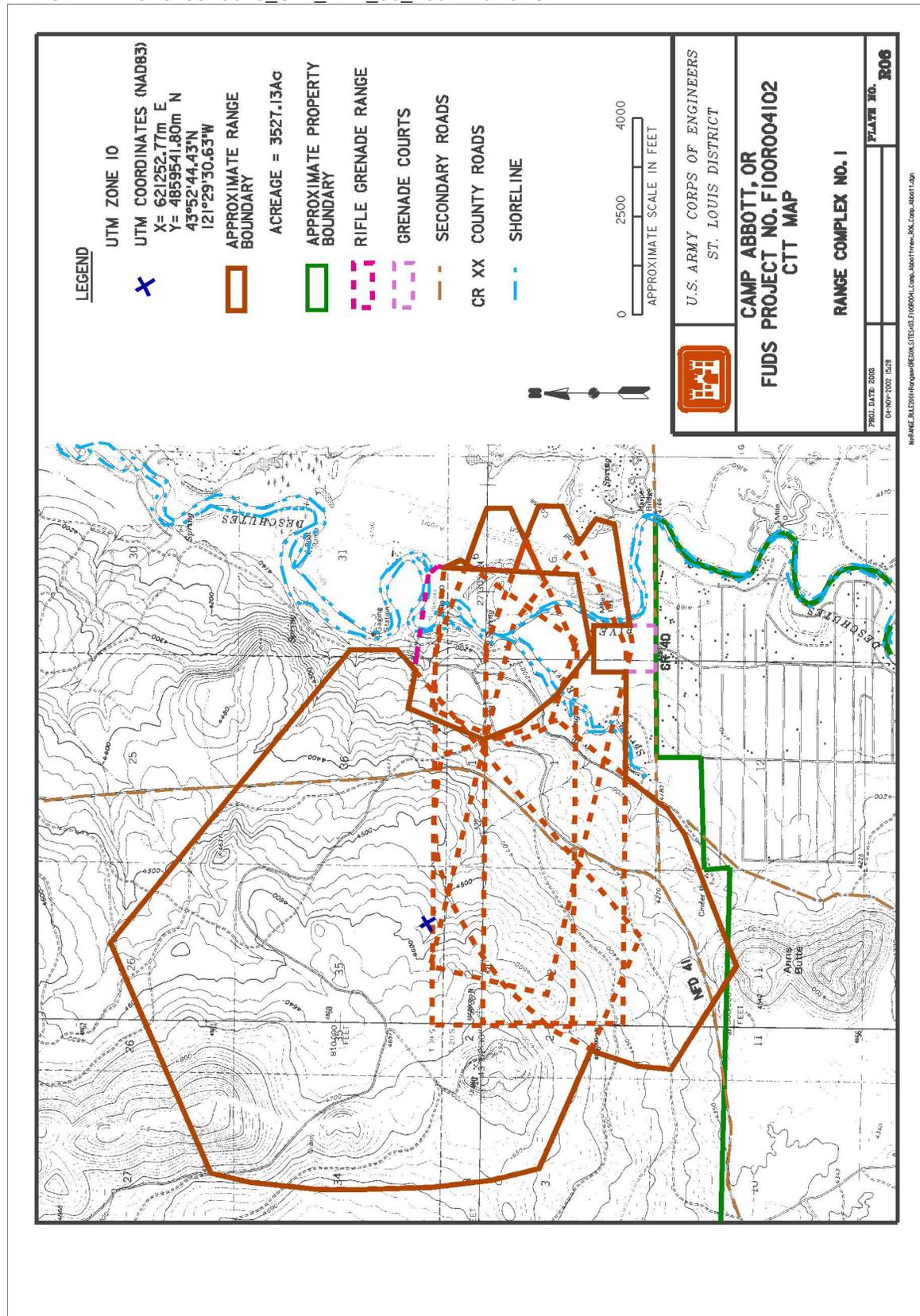
**GROUNDWATER**

<b>AVG DEPTH (IN FEET)</b>	NOT SPECIFIED
<b>DRINKING WATER SUPPLY</b>	UNKNOWN
<b>RANGE CONTAMINATION FROM RESIDUE OF MUNITIONS</b>	UNKNOWN

**COORDINATES:**

<b>DATUM:</b>	NAD83
<b>UTM X: (meters)</b>	621252.77
<b>UTM Y: (meters)</b>	4859541.80
<b>UTM ZONE:</b>	10
<b>Latitude:</b>	43° 52' 44" N
<b>Longitude:</b>	121° 29' 31" W

RANGE MAP: OR9799F3070\_CTT\_MAP\_06\_20021104.JPG



**SUB-RANGE NAME:** Rifle Range  
**Complex Name:** Range Complex No. 1

**RMIS Range ID:** F10OR004102R06-SR01

**HISTORIC USE:**

<b>HISTORIC USE</b>	<b>START YEAR</b>	<b>END YEAR</b>	<b>COMMENTS</b>
SMALL ARMS	1943	1944	N/A

**CURRENT USE:**

<b>CURRENT USE</b>	<b>START YEAR</b>	<b>COMMENTS</b>
Recreational	1946	N/A
Residential - Single Family	1946	N/A

**ACREAGE:**

<b>Land:</b>	684
<b>Tidal Water:</b>	0
<b>Inland Water:</b>	0
<b>Total:</b>	684
<b>Tidal Water with Public Exposure Pathway:</b>	No

**MMR ACREAGE:**

<b>Identified:</b>	0
<b>Suspected:</b>	684
<b>Not Suspected:</b>	0

**RISK ASSESSMENT CODE:**

<b>Hazard Severity:</b>	V
<b>Hazard Probability:</b>	A
<b>RAC Score:</b>	5 <i>(RAC OVERRIDE: Small Arms Only Range)</i>

**CLASSIFICATION(S):**

Training  
Small Arms Range

**RANGE / NON-RANGE:** Range

**LAND USE RESTRICTIONS:** Unrestricted Public Access

**CONSTRUCTION DATE: (YYYYMMDD)** 19430301

**THE FOLLOWING TYPES OF MUNITIONS WERE USED ON THIS RANGE:**

Conventional

**DESCRIPTION:** Rifle Range is located in the southeast portion of the complex. The range firing points is on the east bank of the Deschutes River and is oriented to the west. The range cell is taken from a 1943 historical map.

**COMMENTS:** A known distance (KD) rifle range was utilized for weapons familiarization and qualifications. KD ranges may be designated 200-yard, 300-yard, or 500-yard. Based on the designation, firing lines were positioned at 100 yd and 200 yd, 100 yd, 200 yd, and 300 yd, and 100 yd, 200 yd, 300 yd, and 500 yd, respectively. An additional 1,000-yard firing line may have been present; although, these firing lines typically consisted of a small number of firing points. The width of the range would have been determined based on terrain and installation requirements. A range constructed to accommodate 50 men was approximately 400 yards wide. A range is comprised of a salvage wall (earthen berm) constructed directly behind the targets, the targets, the firing line(s), an area behind the firing lines, which typically included the ready line, ammunition issue point, and administrative area.

The range acreage was derived from the boundaries displayed on a 1943 historical map.

**HAVE THERE BEEN ANY DOCUMENTED INCIDENTS ON THIS RANGE?** No

**RANGE MUNITIONS:**

MUNITIONS ID	MUNITIONS	USED START DATE	USED END DATE
SMALL ARMS(CTT01)	Small Arms, General	194303	194406

**RANGE LAND ACCESS AND RESTRICTIONS:**

RESTRICTION TYPE	RESTRICTION	DESCRIPTION
A	NO CONTROLS	No known access controls
L	OTHER (Must Describe)	No known land use controls.

**RANGE OWNERS:**

OWNER TYPE	OWNER DESCRIPTION	LEASE	LEASE TERMINATION	REVOCATION OF LAND
F	U.S. Forest Service			YES
O	several private owners			NO

**RANGE DEMOGRAPHICS:**

TYPE	NAME	STATE	COUNTRY
CO	Deschutes	OR	UNITED STATES
CT	Bend	OR	UNITED STATES

**SOIL TYPE:** SAND/GRAVEL SAND

**TOPOGRAPHY:** FLAT

**VEGETATION:** LOW GRASS AND FEW SHRUBS

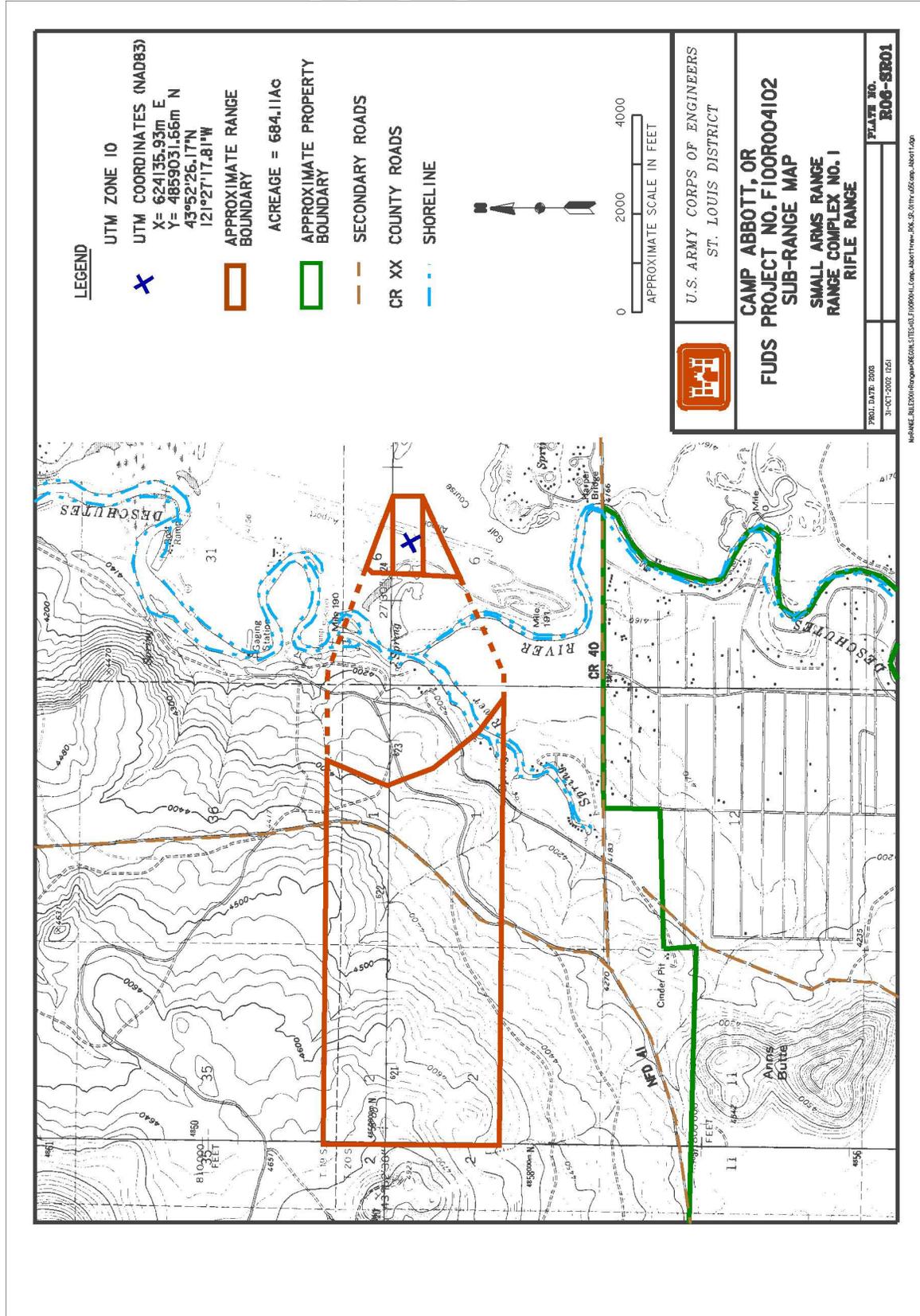
**GROUNDWATER**

<b>AVG DEPTH (IN FEET)</b>	NOT SPECIFIED
<b>DRINKING WATER SUPPLY</b>	UNKNOWN
<b>RANGE CONTAMINATION FROM RESIDUE OF MUNITIONS</b>	UNKNOWN

**COORDINATES:**

<b>DATUM:</b>	NAD83
<b>UTM X: (meters)</b>	624135.93
<b>UTM Y: (meters)</b>	4859031.66
<b>UTM ZONE:</b>	10
<b>Latitude:</b>	43° 52' 26" N
<b>Longitude:</b>	121° 27' 18" W

SUB-RANGE MAP: OR9799F3070\_SR\_MAP\_0601\_20021031.JPG



**SUB-RANGE NAME:** Rifle/Machine Gun Range  
**Complex Name:** Range Complex No. 1

**RMIS Range ID:** F10OR004102R06-SR02

**HISTORIC USE:**

<b>HISTORIC USE</b>	<b>START YEAR</b>	<b>END YEAR</b>	<b>COMMENTS</b>
SMALL ARMS	1943	1944	N/A

**CURRENT USE:**

<b>CURRENT USE</b>	<b>START YEAR</b>	<b>COMMENTS</b>
Recreational	1946	N/A
Residential - Single Family	1946	N/A

**ACREAGE:**

<b>Land:</b>	754
<b>Tidal Water:</b>	0
<b>Inland Water:</b>	0
<b>Total:</b>	754
<b>Tidal Water with Public Exposure Pathway:</b>	No

**MMR ACREAGE:**

<b>Identified:</b>	0
<b>Suspected:</b>	754
<b>Not Suspected:</b>	0

**RISK ASSESSMENT CODE:**

<b>Hazard Severity:</b>	V
<b>Hazard Probability:</b>	A
<b>RAC Score:</b>	5 <i>(RAC OVERRIDE: Small Arms Only Range)</i>

**CLASSIFICATION(S):**

Training  
Small Arms Range

**RANGE / NON-RANGE:** Range

**LAND USE RESTRICTIONS:** Unrestricted Public Access

**CONSTRUCTION DATE: (YYYYMMDD)** 19430301

**THE FOLLOWING TYPES OF MUNITIONS WERE USED ON THIS RANGE:**

Conventional

**DESCRIPTION:** The rifle/machine gun range was located just to the north of the rifle range on the eastern edge of the complex. The range cell is oriented to the west and it is from a 1943 historic map.

**COMMENTS:** The KD rifle range was located on the east bank of the Deschutes River and was oriented to the west into the hillside. The 754.18 acreage for this range was derived from the boundaries identified on a historical map.

A standard known distance (KD) rifle/machine gun range was utilized for weapons familiarization and qualifications. KD ranges may be designated 200-yard, 300-yard, or 500-yard. Based on the designation, firing lines were positioned at 100 yd and 200 yd, 100 yd, 200 yd, and 300 yd, and 100 yd, 200 yd, 300 yd, and 500 yd, respectively. An additional 1,000-yard firing line may have been present; although, these firing lines typically consisted of a small number of firing points. The width of the range would have been determined based on terrain and installation requirements. A range constructed to accommodate 50 men was approximately 400 yards wide. A range is comprised of a salvage wall (earthen berm) constructed directly behind the targets, the targets, the firing line(s), an area behind the firing lines, which typically included the ready line, ammunition issue point, and administrative area.

**HAVE THERE BEEN ANY DOCUMENTED INCIDENTS ON THIS RANGE?** No

**RANGE MUNITIONS:**

MUNITIONS ID	MUNITIONS	USED START DATE	USED END DATE
SMALL ARMS(CTT01)	Small Arms, General	194303	194406

**RANGE LAND ACCESS AND RESTRICTIONS:**

RESTRICTION TYPE	RESTRICTION	DESCRIPTION
A	NO CONTROLS	No known access controls
L	OTHER (Must Describe)	No known land use controls.

**RANGE OWNERS:**

OWNER TYPE	OWNER DESCRIPTION	LEASE	LEASE TERMINATION	REVOCATION OF LAND
F	U.S. Forest Service			YES
O	several private owners			NO

**RANGE DEMOGRAPHICS:**

TYPE	NAME	STATE	COUNTRY
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CO Deschutes OR UNITED STATES  
CT Bend OR UNITED STATES

**SOIL TYPE:** SAND/GRAVEL SAND

**TOPOGRAPHY:** FLAT

**VEGETATION:** LOW GRASS AND FEW SHRUBS

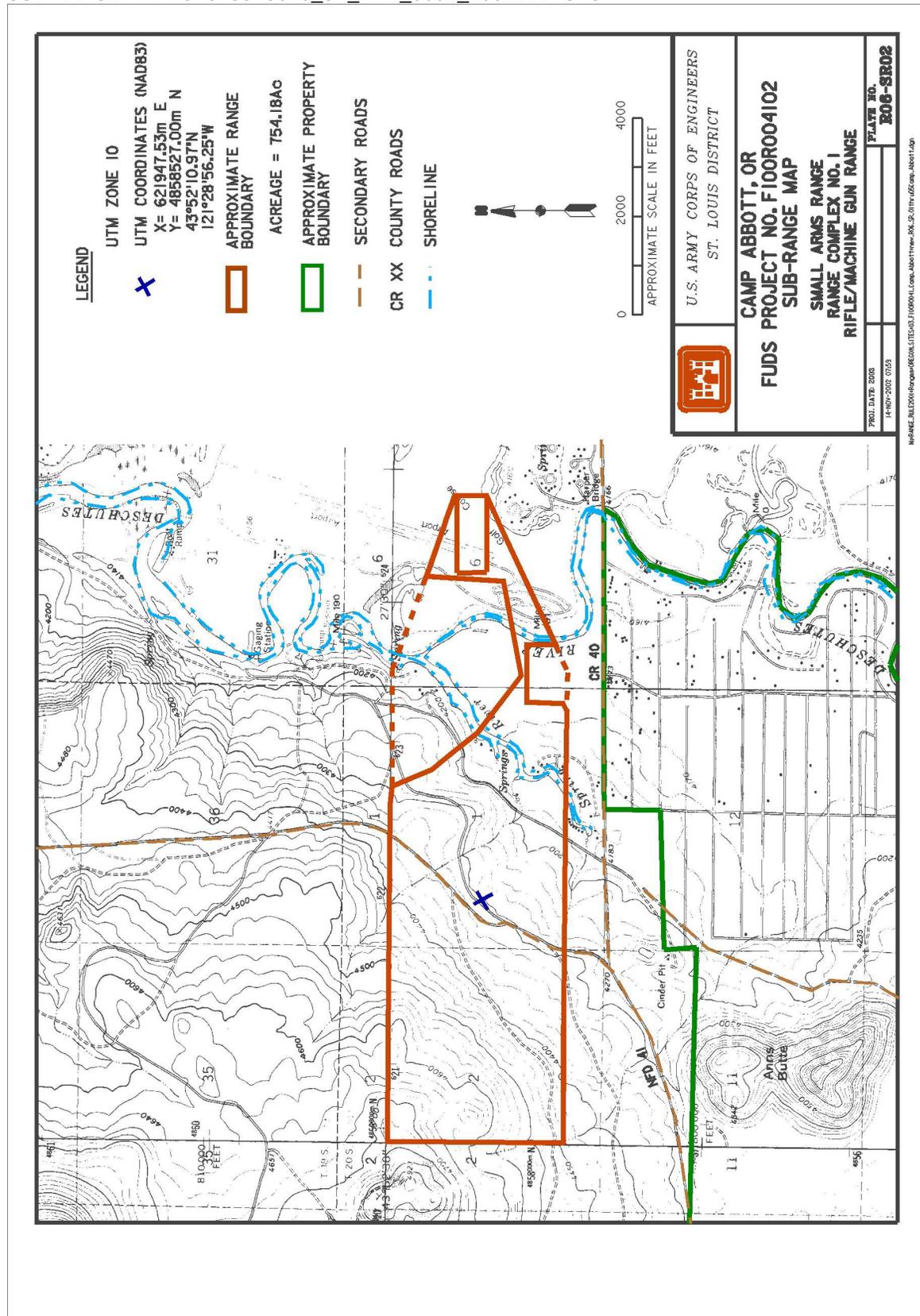
**GROUNDWATER**

<b>AVG DEPTH (IN FEET)</b>	NOT SPECIFIED
<b>DRINKING WATER SUPPLY</b>	UNKNOWN
<b>RANGE CONTAMINATION FROM RESIDUE OF MUNITIONS</b>	UNKNOWN

**COORDINATES:**

**DATUM:** NAD83  
**UTM X: (meters)** 621947.53  
**UTM Y: (meters)** 4858527.00  
**UTM ZONE:** 10  
**Latitude:** 43° 52' 11" N  
**Longitude:** 121° 28' 56" W

SUB-RANGE MAP: OR9799F3070\_SR\_MAP\_0602\_20021114.JPG



**SUB-RANGE NAME:** Landscape Range  
**Complex Name:** Range Complex No. 1

**RMIS Range ID:** F10OR004102R06-SR03

**HISTORIC USE:**

<b>HISTORIC USE</b>	<b>START YEAR</b>	<b>END YEAR</b>	<b>COMMENTS</b>
SMALL ARMS	1943	1944	N/A

**CURRENT USE:**

<b>CURRENT USE</b>	<b>START YEAR</b>	<b>COMMENTS</b>
Recreational	1946	N/A
Residential - Single Family	1946	N/A

**ACREAGE:**

<b>Land:</b>	19
<b>Tidal Water:</b>	0
<b>Inland Water:</b>	0
<b>Total:</b>	19
<b>Tidal Water with Public Exposure Pathway:</b>	No

**MMR ACREAGE:**

<b>Identified:</b>	0
<b>Suspected:</b>	19
<b>Not Suspected:</b>	0

**RISK ASSESSMENT CODE:**

<b>Hazard Severity:</b>	V
<b>Hazard Probability:</b>	A
<b>RAC Score:</b>	5 <i>(RAC OVERRIDE: Small Arms Only Range)</i>

**CLASSIFICATION(S):**

Training  
Small Arms Range

**RANGE / NON-RANGE:** Range

**LAND USE RESTRICTIONS:** Unrestricted Public Access

**CONSTRUCTION DATE: (YYYYMMDD)** 19430301

**THE FOLLOWING TYPES OF MUNITIONS WERE USED ON THIS RANGE:**

Conventional

**DESCRIPTION:** The Landscape Machine Gun Range was located on the eastern bank of the Deschutes River. It is oriented to the southwest. The cell which is used is from a 1943 historic map.

**COMMENTS:** The range acreage was derived using boundaries from a 1943 historical map. The acreage of this range has been reduced to not include acreage contained in an anti-tank range.

Landscape targets are used for rifle practice on this 1,000-inch range. The complete target set consists of five black and white paper landscape targets mounted on individual target frames and held in place on six vertical posts. The complete set of five landscape paper targets makes a panoramic picture of a landscape. The size of this panoramic picture is such that all (or nearly all) of the salient features are recognizable at a distance of 1,000-inches. Based on the size requirements for each target unit (a complete set of landscape paper targets), it is assumed that no more than 6 units were constructed on a single range. In order to provide a safety space between adjacent targets and to allow independent operations, a distance of 50 feet separated each 25-foot wide target unit. Approximate dimensions for this range are 450-feet wide by 100-feet long. A single firing line stretched across the width of the range. Personnel fired .22-caliber weapons (preferably) at a panoramic picture of a landscape, which was positioned 1,000-inches down-range. An additional area behind the firing lines included the ready line, ammunition issue point, and administrative area.

**HAVE THERE BEEN ANY DOCUMENTED INCIDENTS ON THIS RANGE?** No

**RANGE MUNITIONS:**

MUNITIONS ID	MUNITIONS	USED START DATE	USED END DATE
SMALL ARMS(CTT01)	Small Arms, General	194303	194406

**RANGE LAND ACCESS AND RESTRICTIONS:**

RESTRICTION TYPE	RESTRICTION	DESCRIPTION
A	NO CONTROLS	No known access controls
L	OTHER (Must Describe)	No known land use restrictions.

**RANGE OWNERS:**

OWNER TYPE	OWNER DESCRIPTION	LEASE	LEASE TERMINATION	REVOCATION OF LAND
O	several private owners			NO
F	U.S. Forest Service			YES

**RANGE DEMOGRAPHICS:**

<b>TYPE</b>	<b>NAME</b>	<b>STATE</b>	<b>COUNTRY</b>
CO	Deschutes	OR	UNITED STATES
CT	Bend	OR	UNITED STATES

**SOIL TYPE:** SAND/GRAVEL SAND

**TOPOGRAPHY:** FLAT

**VEGETATION:** LOW GRASS AND FEW SHRUBS

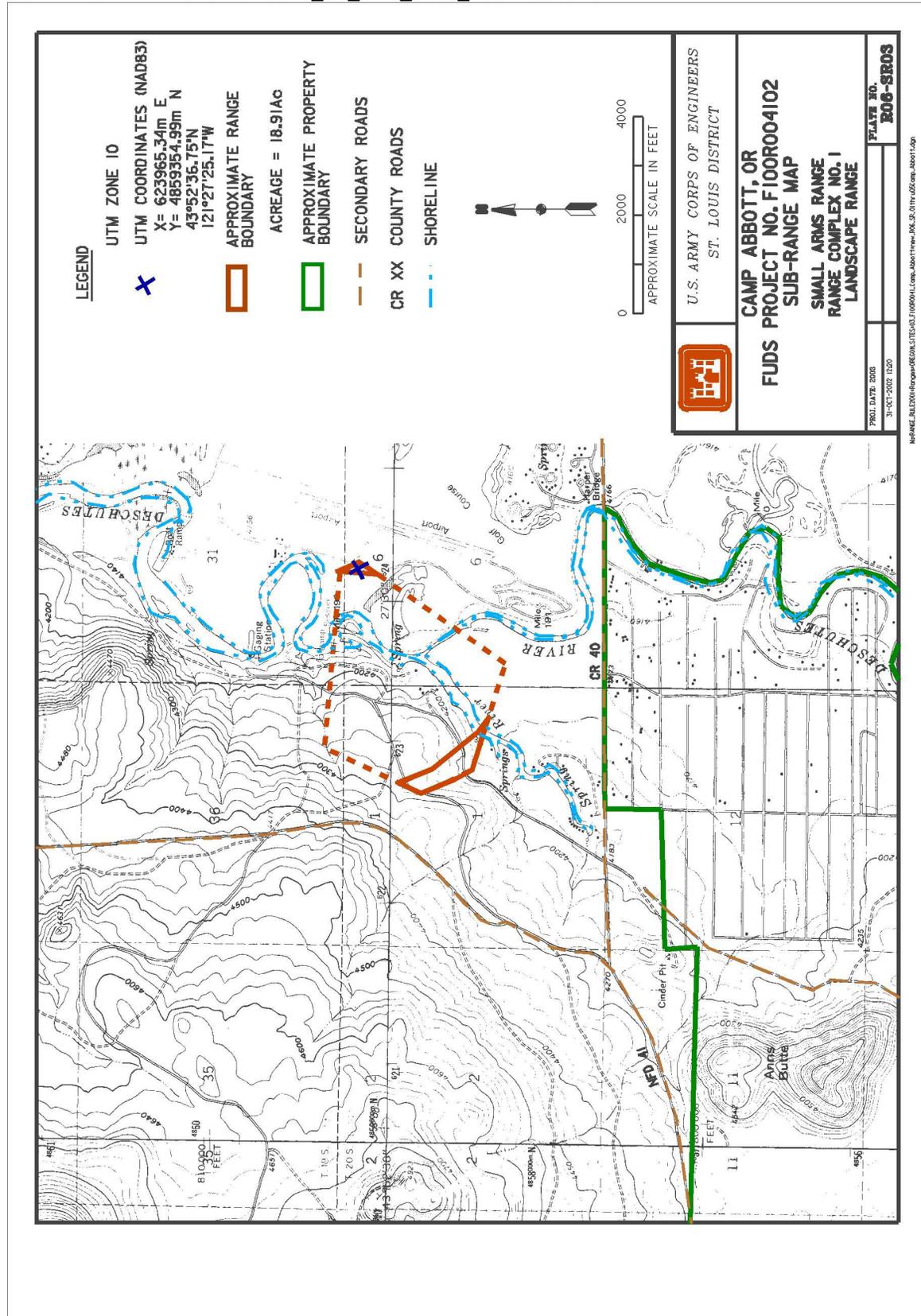
**GROUNDWATER**

<b>AVG DEPTH (IN FEET)</b>	NOT SPECIFIED
<b>DRINKING WATER SUPPLY</b>	UNKNOWN
<b>RANGE CONTAMINATION FROM RESIDUE OF MUNITIONS</b>	UNKNOWN

**COORDINATES:**

<b>DATUM:</b>	NAD83
<b>UTM X: (meters)</b>	623965.34
<b>UTM Y: (meters)</b>	4859354.99
<b>UTM ZONE:</b>	10
<b>Latitude:</b>	43° 52' 37" N
<b>Longitude:</b>	121° 27' 25" W

SUB-RANGE MAP: OR9799F3070\_SR\_MAP\_0603\_20021031.JPG



**SUB-RANGE NAME:** Transition Range  
**Complex Name:** Range Complex No. 1

**RMIS Range ID:** F10OR004102R06-SR04

**HISTORIC USE:**

<b>HISTORIC USE</b>	<b>START YEAR</b>	<b>END YEAR</b>	<b>COMMENTS</b>
SMALL ARMS	1943	1944	N/A

**CURRENT USE:**

<b>CURRENT USE</b>	<b>START YEAR</b>	<b>COMMENTS</b>
Recreational	1946	N/A
Residential - Single Family	1946	N/A

**ACREAGE:**

<b>Land:</b>	591
<b>Tidal Water:</b>	0
<b>Inland Water:</b>	0
<b>Total:</b>	591
<b>Tidal Water with Public Exposure Pathway:</b>	No

**MMR ACREAGE:**

<b>Identified:</b>	0
<b>Suspected:</b>	591
<b>Not Suspected:</b>	0

**RISK ASSESSMENT CODE:**

<b>Hazard Severity:</b>	V
<b>Hazard Probability:</b>	A
<b>RAC Score:</b>	5 <i>(RAC OVERRIDE: Small Arms Only Range)</i>

**CLASSIFICATION(S):**

Training  
Small Arms Range

**RANGE / NON-RANGE:** Range

**LAND USE RESTRICTIONS:** Unrestricted Public Access

**CONSTRUCTION DATE: (YYYYMMDD)** 19430301

**THE FOLLOWING TYPES OF MUNITIONS WERE USED ON THIS RANGE:**

Conventional

**DESCRIPTION:** The Transition Range was located on the south side of the property boundry.

**COMMENTS:** The range acreage for this range was derived using boundaries from a 1943 historical map. The acreage was reduced by the amount this range shared with an anti-tank range.

Transition, Rifle (Types I And II) A 1944 range regulation describes transitions ranges as Type I and Type II. Type I has an undetermined number of firing lanes, which have a single firing point and pop-up targets set at 200, 300, and 500 yards. Each firing lane is approximately 60 yards wide. The regulation states that a number of these firing lanes together constitute a Transition Firing Course Range, Type I. Type II has an undetermined number of firing lanes, which have a single firing point and 6 stationary targets placed at random distances ranging from 200 to 500 yards. Each firing lane is approximately 50 yards wide. The regulation states that a number of these firing points together constitute a Transition Firing Course Range, Type II.

An additional area to the front of the firing line included the ready line, ammunition issue point, and administrative area. The estimated width of both ranges is 400 yards. Each would utilize a typical danger area for small arms ammunition. The Automatic Rifle Transition Range is similar to the rifle transition range. This type of range consists of individual firing lanes approximately 150 yards wide by 500 yards long. Each lane uses unique firing positions (fox hole, window, and prone). Each soldier transitions along the firing line engaging targets from each position. Targets were positioned at various distances ranging from 150 to 500 yards. The danger area includes an angle of fire and a prescribed safety fan.

**HAVE THERE BEEN ANY DOCUMENTED INCIDENTS ON THIS RANGE?** No

**RANGE MUNITIONS:**

<b>MUNITIONS ID</b>	<b>MUNITIONS</b>	<b>USED START DATE</b>	<b>USED END DATE</b>
SMALL ARMS(CTT01)	Small Arms, General	194303	194406

**RANGE LAND ACCESS AND RESTRICTIONS:**

<b>RESTRICTION TYPE</b>	<b>RESTRICTION</b>	<b>DESCRIPTION</b>
A	NO CONTROLS	No known access controls
L	OTHER (Must Describe)	No known land use controls.

**RANGE OWNERS:**

<b>OWNER TYPE</b>	<b>OWNER DESCRIPTION</b>	<b>LEASE</b>	<b>LEASE TERMINATION</b>	<b>REVOCATION OF LAND</b>
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F	U.S. Forest Service	YES
O	several private owners	NO

**RANGE DEMOGRAPHICS:**

TYPE	NAME	STATE	COUNTRY
CO	Deschutes	OR	UNITED STATES
CT	Bend	OR	UNITED STATES

**SOIL TYPE:** SAND/GRAVEL SAND

**TOPOGRAPHY:** FLAT

**VEGETATION:** LOW GRASS AND FEW SHRUBS

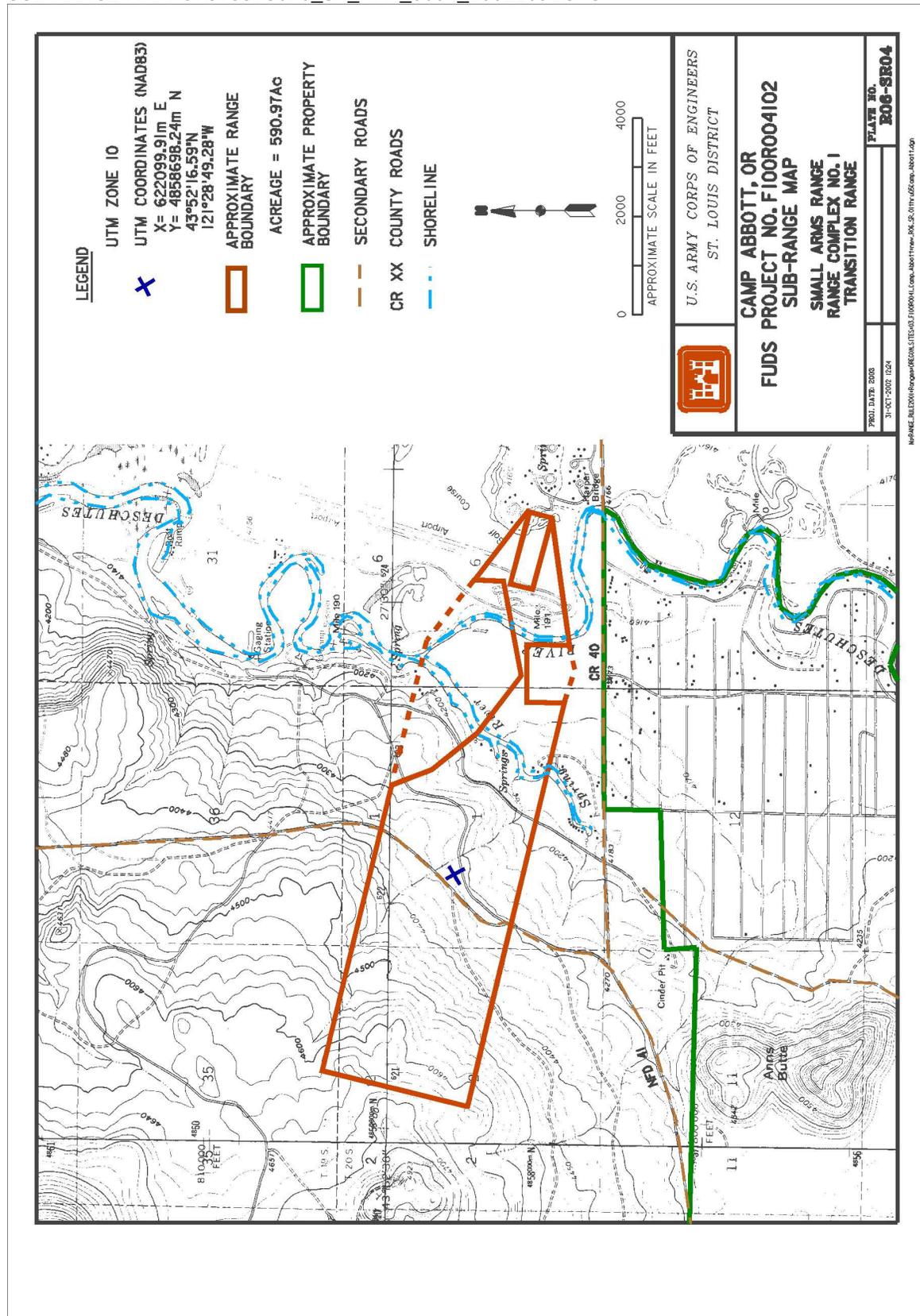
**GROUNDWATER**

<b>AVG DEPTH (IN FEET)</b>	NOT SPECIFIED
<b>DRINKING WATER SUPPLY</b>	UNKNOWN
<b>RANGE CONTAMINATION FROM RESIDUE OF MUNITIONS</b>	UNKNOWN

**COORDINATES:**

<b>DATUM:</b>	NAD83
<b>UTM X: (meters)</b>	622099.91
<b>UTM Y: (meters)</b>	4858698.24
<b>UTM ZONE:</b>	10
<b>Latitude:</b>	43° 52' 17" N
<b>Longitude:</b>	121° 28' 49" W

SUB-RANGE MAP: OR9799F3070\_SR\_MAP\_0604\_20021031.JPG



**SUB-RANGE NAME:** Anti-Aircraft Range  
**Complex Name:** Range Complex No. 1

**RMIS Range ID:** F10OR004102R06-SR05

**HISTORIC USE:**

<b>HISTORIC USE</b>	<b>START YEAR</b>	<b>END YEAR</b>	<b>COMMENTS</b>
SMALL ARMS	1943	1944	Miniature AA Range

**CURRENT USE:**

<b>CURRENT USE</b>	<b>START YEAR</b>	<b>COMMENTS</b>
Recreational	1946	N/A
Residential - Single Family	1946	N/A

**ACREAGE:**

<b>Land:</b>	1022
<b>Tidal Water:</b>	0
<b>Inland Water:</b>	0
<b>Total:</b>	1022
<b>Tidal Water with Public Exposure Pathway:</b>	No

**MMR ACREAGE:**

<b>Identified:</b>	0
<b>Suspected:</b>	1022
<b>Not Suspected:</b>	0

**RISK ASSESSMENT CODE:**

<b>Hazard Severity:</b>	V
<b>Hazard Probability:</b>	A
<b>RAC Score:</b>	5 <i>(RAC OVERRIDE: Small Arms Only Range)</i>

**CLASSIFICATION(S):**

Training  
Small Arms Range

**RANGE / NON-RANGE:** Range

**LAND USE RESTRICTIONS:** Unrestricted Public Access

**CONSTRUCTION DATE: (YYYYMMDD)** 19430301

**THE FOLLOWING TYPES OF MUNITIONS WERE USED ON THIS RANGE:**

Conventional

**DESCRIPTION:** The Anti-Aircraft Range was located on the south side of the complex, on the western bank of Spring River and is oriented to the northwest. The cell used was from a 1943 historic map.

**COMMENTS:** The range acreage was derived from boundaries on a 1943 historical map. Only small arms was used on this range.

Regardless of the elevation at which the firing is conducted, the maximum ground impact range of the piece will always be considered when determining the safe field of fire of antiaircraft cannon of any caliber. In addition to the limits of fire, the danger area includes areas 1,000 yards wide, which flank both the right and left limits of fire and extends 1,000 yards beyond the maximum ground impact range. The field of fire would have been locally determined. However, arbitrary right and left limits of 20° have been used for the range cell.

**HAVE THERE BEEN ANY DOCUMENTED INCIDENTS ON THIS RANGE?** No

**RANGE MUNITIONS:**

MUNITIONS ID	MUNITIONS	USED START DATE	USED END DATE
SMALL ARMS(CTT01)	Small Arms, General	194303	194406

**RANGE LAND ACCESS AND RESTRICTIONS:**

RESTRICTION TYPE	RESTRICTION	DESCRIPTION
A	NO CONTROLS	No known access controls
L	OTHER (Must Describe)	No known land use controls.

**RANGE OWNERS:**

OWNER TYPE	OWNER DESCRIPTION	LEASE	LEASE TERMINATION	REVOCATION OF LAND
F	U.S. Forest Service			YES
O	several private owners			NO

**RANGE DEMOGRAPHICS:**

TYPE	NAME	STATE	COUNTRY
CO	Deschutes	OR	UNITED STATES
CT	Bend	OR	UNITED STATES

**SOIL TYPE:** ROCK

**TOPOGRAPHY:** MOUNTAINOUS

**VEGETATION:** HEAVY SHRUBS WITH TREES

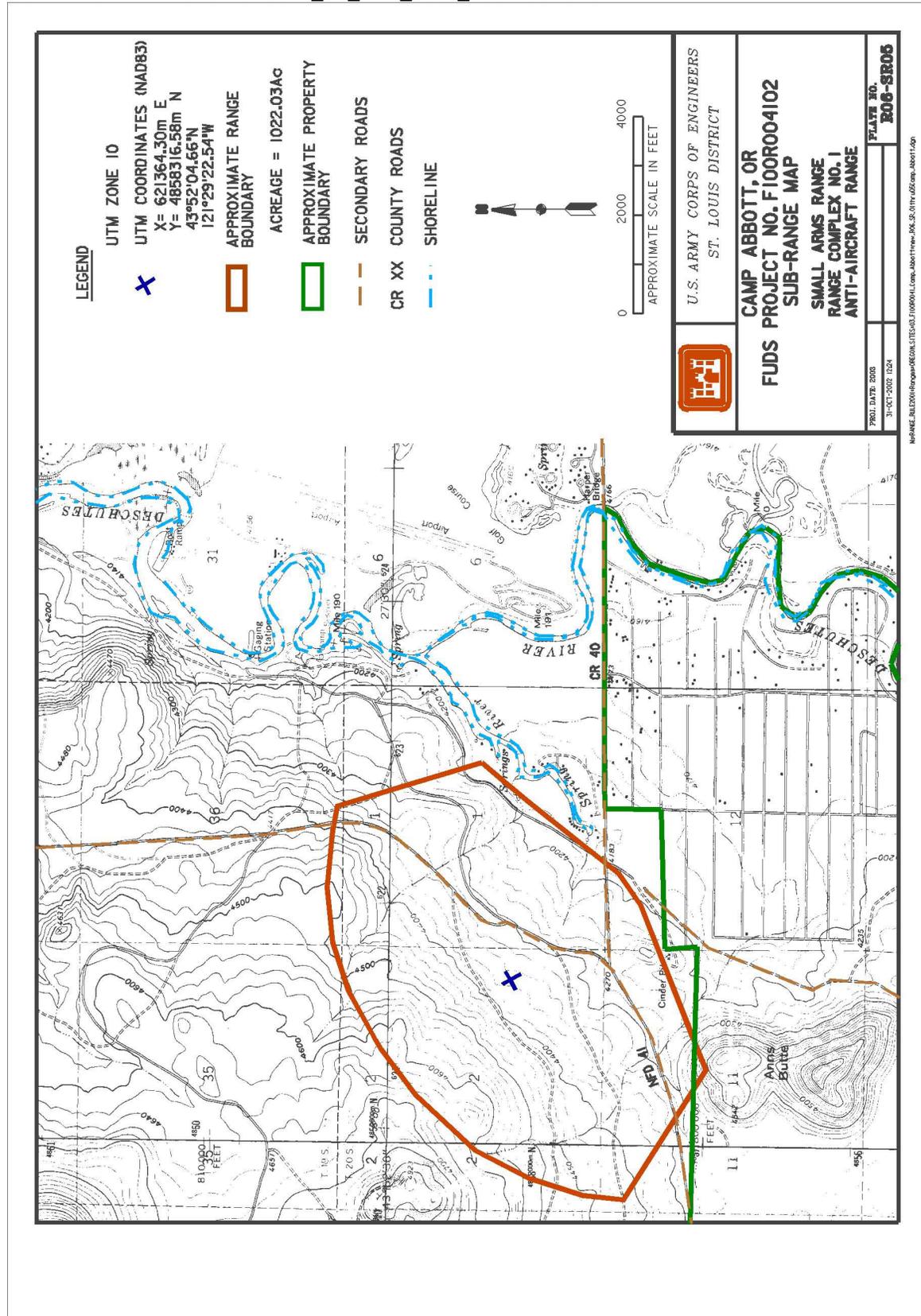
**GROUNDWATER**

<b>AVG DEPTH (IN FEET)</b>	NOT SPECIFIED
<b>DRINKING WATER SUPPLY</b>	UNKNOWN
<b>RANGE CONTAMINATION FROM RESIDUE OF MUNITIONS</b>	UNKNOWN

**COORDINATES:**

<b>DATUM:</b>	NAD83
<b>UTM X: (meters)</b>	621364.30
<b>UTM Y: (meters)</b>	4858316.58
<b>UTM ZONE:</b>	10
<b>Latitude:</b>	43° 52' 5" N
<b>Longitude:</b>	121° 29' 23" W

SUB-RANGE MAP: OR9799F3070\_SR\_MAP\_0605\_20021031.JPG



**SUB-RANGE NAME:** Field Target & Sub Machine Gun Range  
**Complex Name:** Range Complex No. 1

**RMIS Range ID:** F10OR004102R06-SR06

**HISTORIC USE:**

<b>HISTORIC USE</b>	<b>START YEAR</b>	<b>END YEAR</b>	<b>COMMENTS</b>
SMALL ARMS	1943	1944	N/A

**CURRENT USE:**

<b>CURRENT USE</b>	<b>START YEAR</b>	<b>COMMENTS</b>
Recreational	1946	N/A

**ACREAGE:**

<b>Land:</b>	2766
<b>Tidal Water:</b>	0
<b>Inland Water:</b>	0
<b>Total:</b>	2766
<b>Tidal Water with Public Exposure Pathway:</b>	No

**MMR ACREAGE:**

<b>Identified:</b>	0
<b>Suspected:</b>	2766
<b>Not Suspected:</b>	0

**RISK ASSESSMENT CODE:**

<b>Hazard Severity:</b>	V
<b>Hazard Probability:</b>	A
<b>RAC Score:</b>	5 <i>(RAC OVERRIDE: Small Arms Only Range)</i>

**CLASSIFICATION(S):**

Training  
Small Arms Range

**RANGE / NON-RANGE:** Range

**LAND USE RESTRICTIONS:** Unrestricted Public Access

**CONSTRUCTION DATE: (YYYYMMDD)** 19430301

**THE FOLLOWING TYPES OF MUNITIONS WERE USED ON THIS RANGE:**

Conventional

**DESCRIPTION:** The Sub Machine Gun Range was located in the central portion of the complex, on the western bank of the Deschutes River. The cell is oriented to the west. The range cell was used from a 1943 historic map.

**COMMENTS:** The range acreage was derived from boundaries identified on a 1943 historical map. The total acreage of this range was reduced by the portion that was common to the anti-tank range.

The Field Target & Sub-machine Gun Range (.45 caliber), which was approximately 300 yards wide by 60 yards long, was laid out with 10 targets per firing position. Six firing points (allocation for one Infantry Div) may be laid out to allow for independent or non-independent operation. The difference between independent and non-independent is the minimum separation between firing positions. Non-independent firing requires a 160-foot separation, whereas independent firing requires a 350-foot separation. Therefore, 6 firing positions would require 800 feet and 1,750 feet of separation, respectively. Because of the lateral distance involved, it is assumed unlikely that a single range accommodated 6 firing positions with independent operations. Therefore, the range is estimated to be no more than 300 yards (900 feet) wide. The danger area consists of a 50° fan, which extends 1,600 yards downrange from each end of the range, and a 25° fan, originating from the same point, which extends 1,200 yards downrange. The typical Combat Range is comprised of various components. Once the training officer determined the locations of these components, the danger areas could be established. Typical dimensions of a range were 400 yards wide by 800 yards long. A limit of advance would have generally been established 600 yards downrange.

**HAVE THERE BEEN ANY DOCUMENTED INCIDENTS ON THIS RANGE?** No

**RANGE MUNITIONS:**

<b>MUNITIONS ID</b>	<b>MUNITIONS</b>	<b>USED START DATE</b>	<b>USED END DATE</b>
SMALL ARMS(CTT01)	Small Arms, General	194303	194406

**RANGE LAND ACCESS AND RESTRICTIONS:**

<b>RESTRICTION TYPE</b>	<b>RESTRICTION</b>	<b>DESCRIPTION</b>
A	NO CONTROLS	No known access controls
L	OTHER (Must Describe)	No know land use controls.

**RANGE OWNERS:**

<b>OWNER TYPE</b>	<b>OWNER DESCRIPTION</b>	<b>LEASE</b>	<b>LEASE TERMINATION</b>	<b>REVOCATION OF LAND</b>
F	U.S. Forest Service			YES

**RANGE DEMOGRAPHICS:**

<b>TYPE</b>	<b>NAME</b>	<b>STATE</b>	<b>COUNTRY</b>
CO	Deschutes	OR	UNITED STATES
CT	Bend	OR	UNITED STATES

**SOIL TYPE:** ROCK

**TOPOGRAPHY:** MOUNTAINOUS

**VEGETATION:** HEAVY SHRUBS WITH TREES

**GROUNDWATER**

<b>AVG DEPTH (IN FEET)</b>	NOT SPECIFIED
<b>DRINKING WATER SUPPLY</b>	UNKNOWN
<b>RANGE CONTAMINATION FROM RESIDUE OF MUNITIONS</b>	UNKNOWN

**COORDINATES:**

<b>DATUM:</b>	NAD83
<b>UTM X: (meters)</b>	620986.42
<b>UTM Y: (meters)</b>	4859936.70
<b>UTM ZONE:</b>	10
<b>Latitude:</b>	43° 52' 57" N
<b>Longitude:</b>	121° 29' 38" W

SUB-RANGE MAP: OR9799F3070\_SR\_MAP\_0606\_20021114.JPG

