

Appendix V5-6U

Blasting Setbacks to Meet DFO Guidelines at Potential
Rock Quarry Sites



Table A5-6U-1. Freshwater Fish Species Presence in Waterbodies Near Phase 2 Quarries

Quarry	Freshwater Waterbodies within Overpressure Setback Contour*		Freshwater Waterbodies within Minimum Ground Vibration Setback Contour**	
	Waterbody Name	Fish Species	Waterbody Name	Fish Species
AH	-	-	Windy Lake	NSSB, SLSC, LKTR, LKWH, CISC
AI	Patch Lake	NSSB, LKTR, LKWH, CISC, LSCS	Patch Lake	NSSB, LKTR, LKWH, CISC, LSCS
H	Wolverine Lake Patch Lake	NSSB, LSCS NSSB, LKTR, LKWH, CISC, LSCS	Wolverine Lake Patch Lake	NSSB, LSCS NSSB, LKTR, LKWH, CISC, LSCS
L	Unnamed Pond	Unknown	Quarry Q04 Pond Unnamed Pond	NSSB Unknown
M	Unnamed Pond	Unknown	Unnamed Pond	Unknown
Z	Q05 Pond Unnamed Pond Connected to Boulder Creek	NSSB Unknown	Q05 Pond Unnamed Stream Connected to Q05 Pond Unnamed Pond Connected to Boulder Creek	NSSB Unknown Unknown
O	-	-	Boulder Creek	ARGR
N	Unnamed Pond	Unknown	Unnamed Pond Unnamed Stream connected to Q06 Pond	Unknown Unknown
P	Unnamed Pond connected to Q06 Pond	Unknown	Unnamed Pond connected to Q06 Pond Unnamed Stream connected to Q06 Pond Boulder Creek Tributary	Unknown Unknown ARGR, NSSB
Q	Q06 Pond	NSSB	Unnamed Pond connected to Q06 Pond Unnamed Stream connected to Q06 Pond Q06 Pond Unnamed Lake connected to Boulder Creek Trib	Unknown Unknown NSSB Unknown
R	Unnamed Lake connected to Boulder Creek Trib	Unknown	Unnamed Lake connected to Boulder Creek Trib	Unknown
S	Q08 Pond	NSSB	Q08 Pond Unnamed Ponds connected to Q08 Pond	NSSB Unknown
T	Aimaokatalok Inflow Unnamed Lakes connected to Aimaokatalok Inflow	Unknown Unknown	Aimaokatalok Inflow Unnamed Lakes connected to Aimaokatalok Inflow	Unknown Unknown
U	Aimaokatalok Lake Aimaokatalok Inflow	NSSB, LKTR, LKWH, CISC, LSCS, ARGR, SLSC Unknown	Aimaokatalok Lake Aimaokatalok Inflow	NSSB, LKTR, LKWH, CISC, LSCS, ARGR, SLSC Unknown
AB	Aimaokatalok Inflow	Unknown	Aimaokatalok Inflow	Unknown
V	Aimaokatalok Inflow (S13, S14, S15) Aimaokatalok Inflow (S16)	Unknown NSSB, ARGR	Q10 Pond Unnamed Pond connected to Q10 Pond Aimaokatalok Inflow (S13, S14, S15) Aimaokatalok Inflow (S16)	NSSB, ARGR Unknown Unknown NSSB, ARGR
W	Unnamed Pond connected to Aimaokatalok Inflow (S16) Aimaokatalok Inflows Unnamed Ponds connected to Aimaokatalok Inflows	Unknown Unknown Unknown	Unnamed Pond connected to Aimaokatalok Inflow (S16) Aimaokatalok Inflows Unnamed Ponds connected to Aimaokatalok Inflows	Unknown Unknown Unknown

*Calculated according to Wright and Hopky (1998); 100 kPa Overpressure Limit; 162 kg weight of charge; density and compressional wave velocity constants for rock substrates (2.64 g/cm^3 and $457,200 \text{ cm/s}$,

**Calculated according to Wright and Hopky (1998); 13 mm/s Ground Vibration Limit; 162 kg weight of charge; density and compressional wave velocity constants for rock substrates (2.64 g/cm^3 and $457,200 \text{ cm/s}$, respectively)

Figure V5-6U-1
Phase 2 Quarry Blasting Setbacks

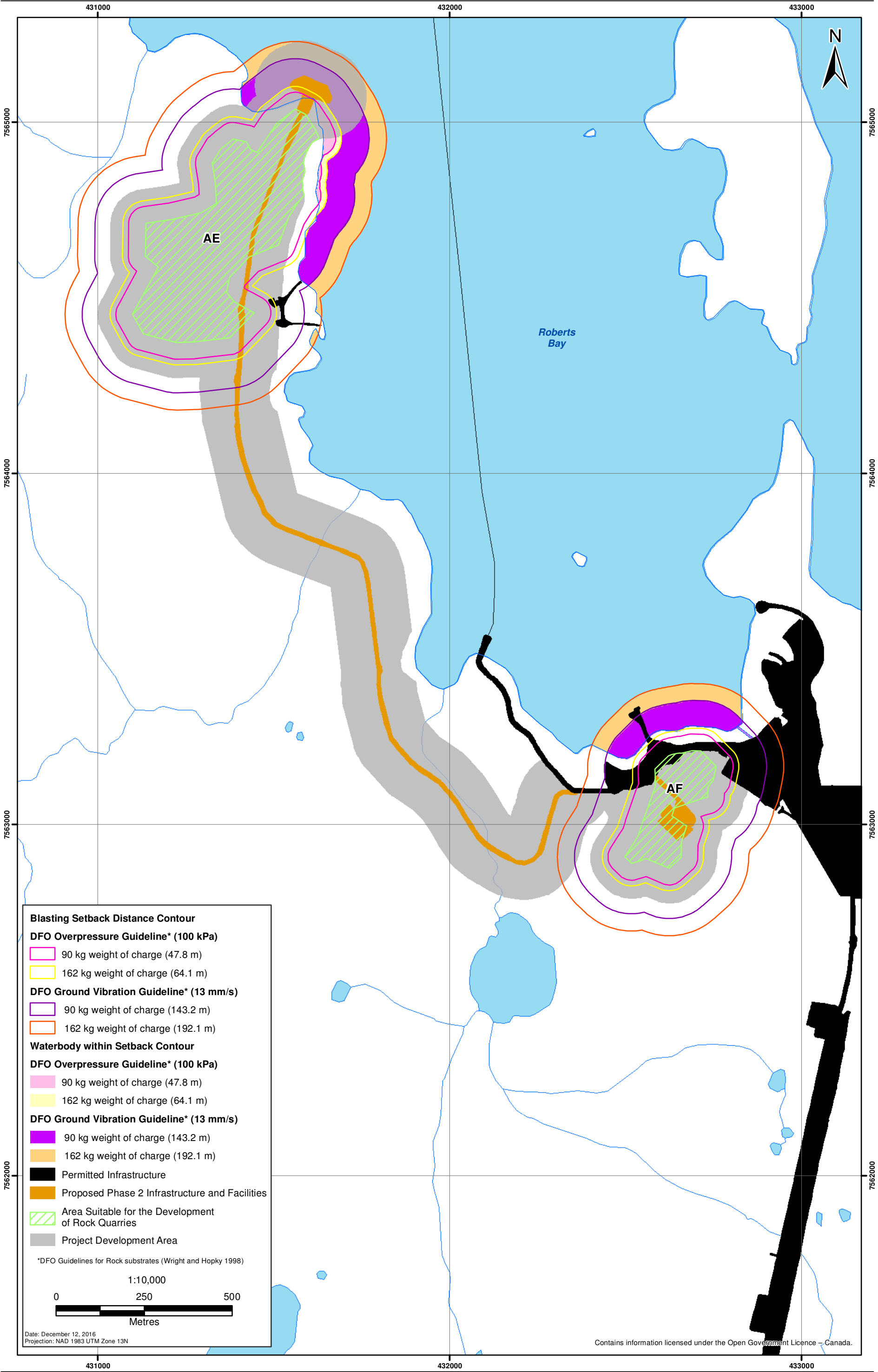


Figure V5-6U-2
Phase 2 Quarry Blasting Setbacks

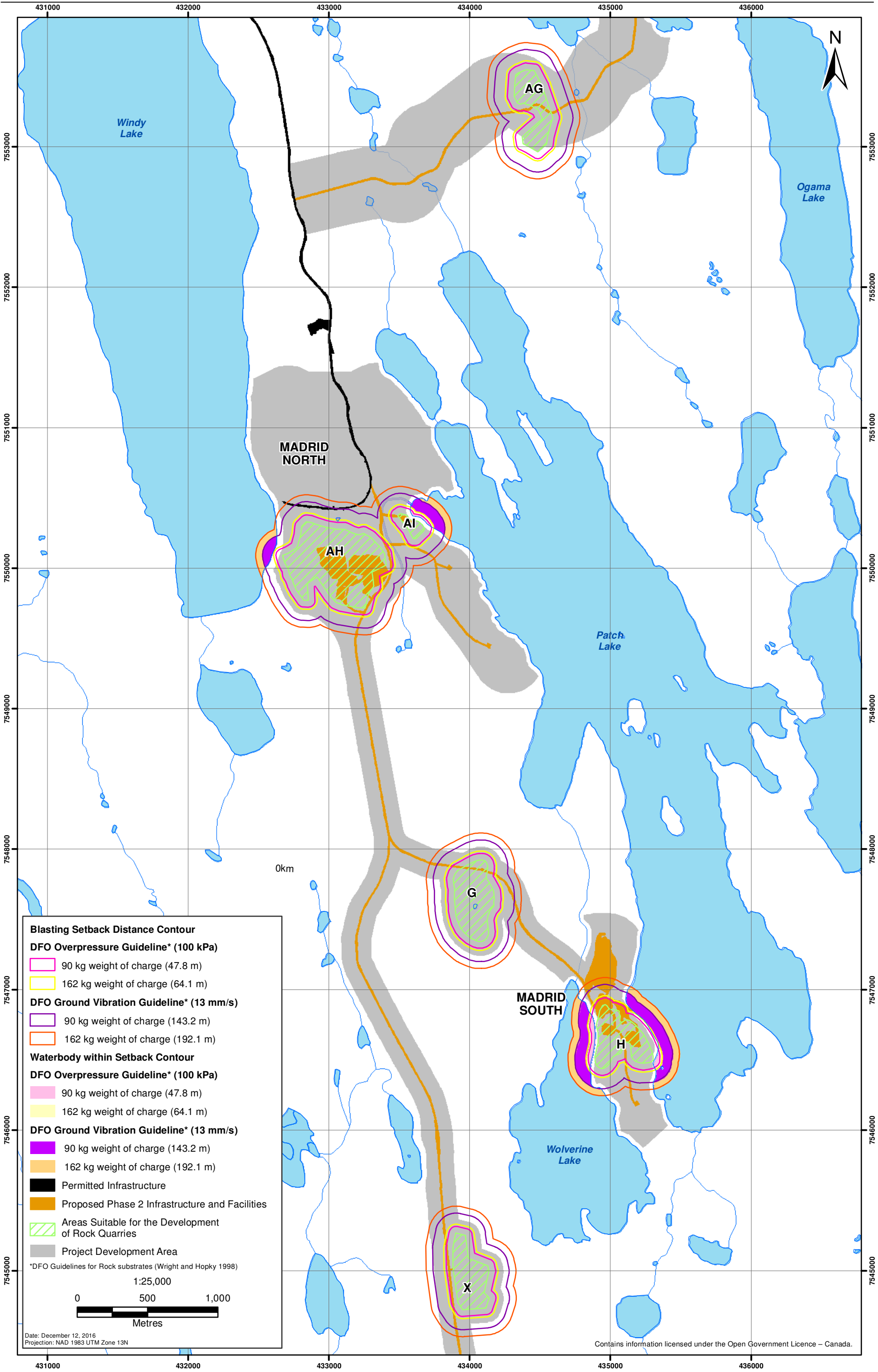


Figure V5-6U-3
Phase 2 Quarry Blasting Setbacks

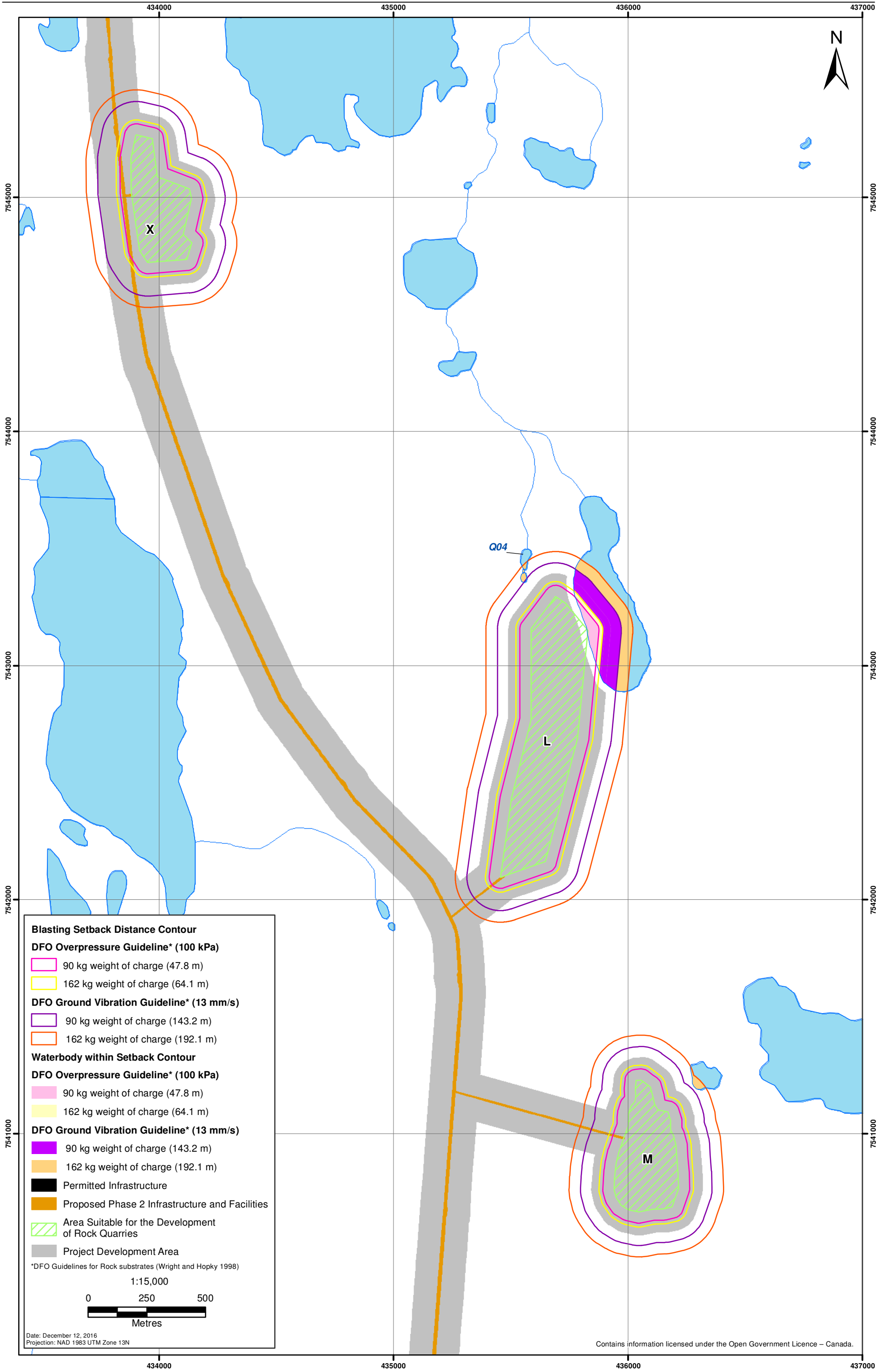


Figure V5-6U-4
Phase 2 Quarry Blasting Setbacks

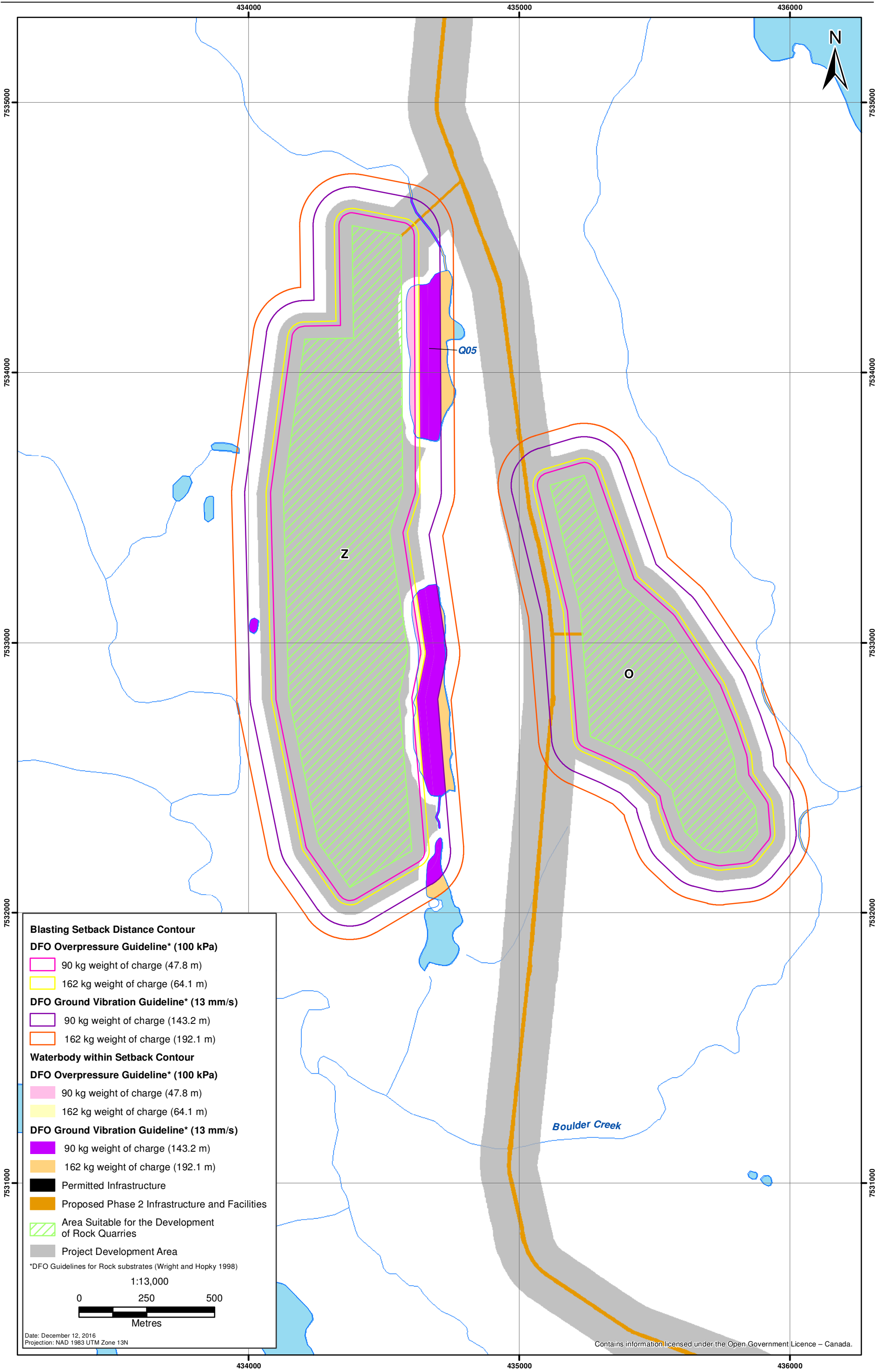


Figure V5-6U-5
Phase 2 Quarry Blasting Setbacks

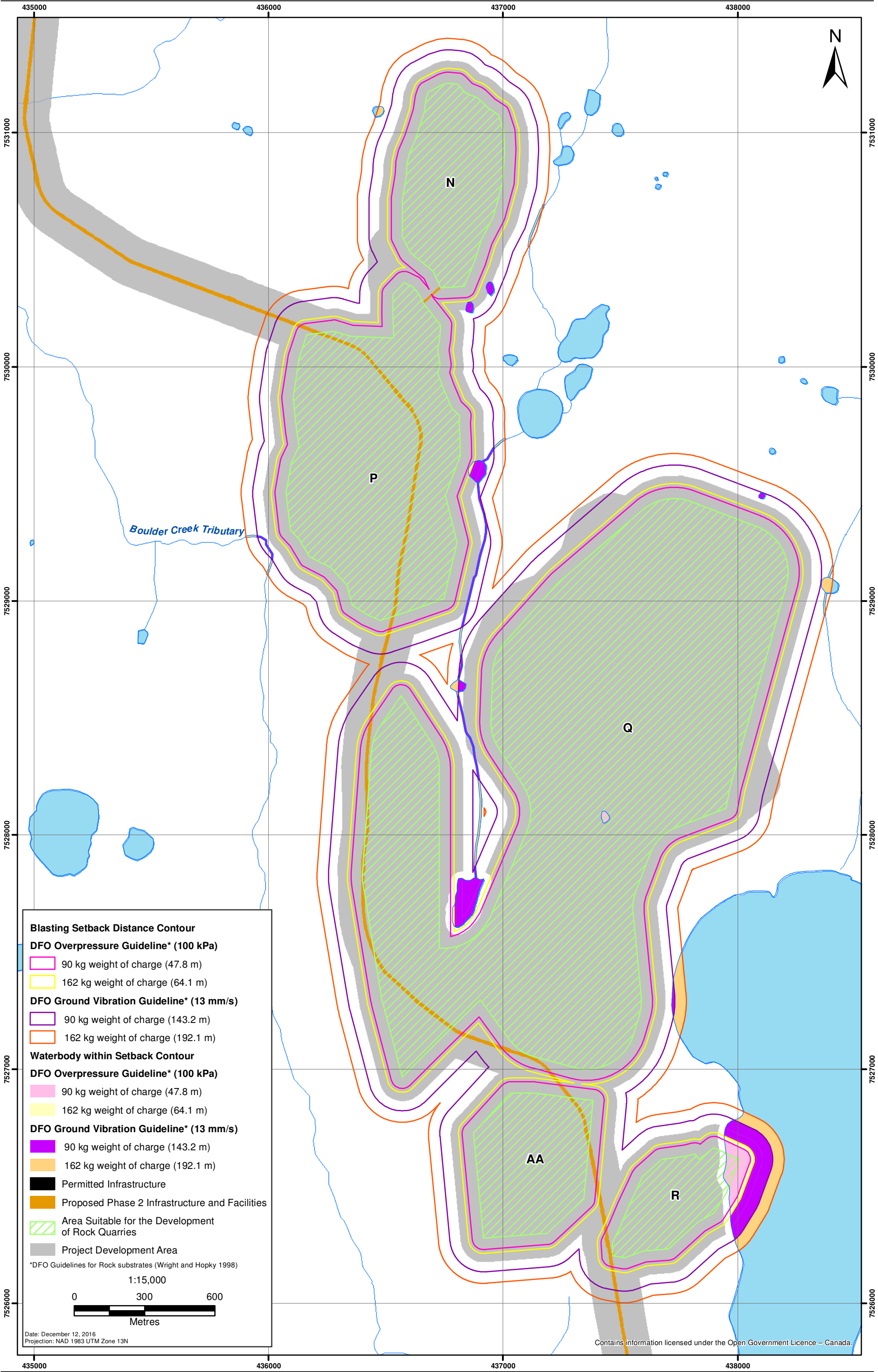


Figure V5-6U-6
Phase 2 Quarry Blasting Setbacks

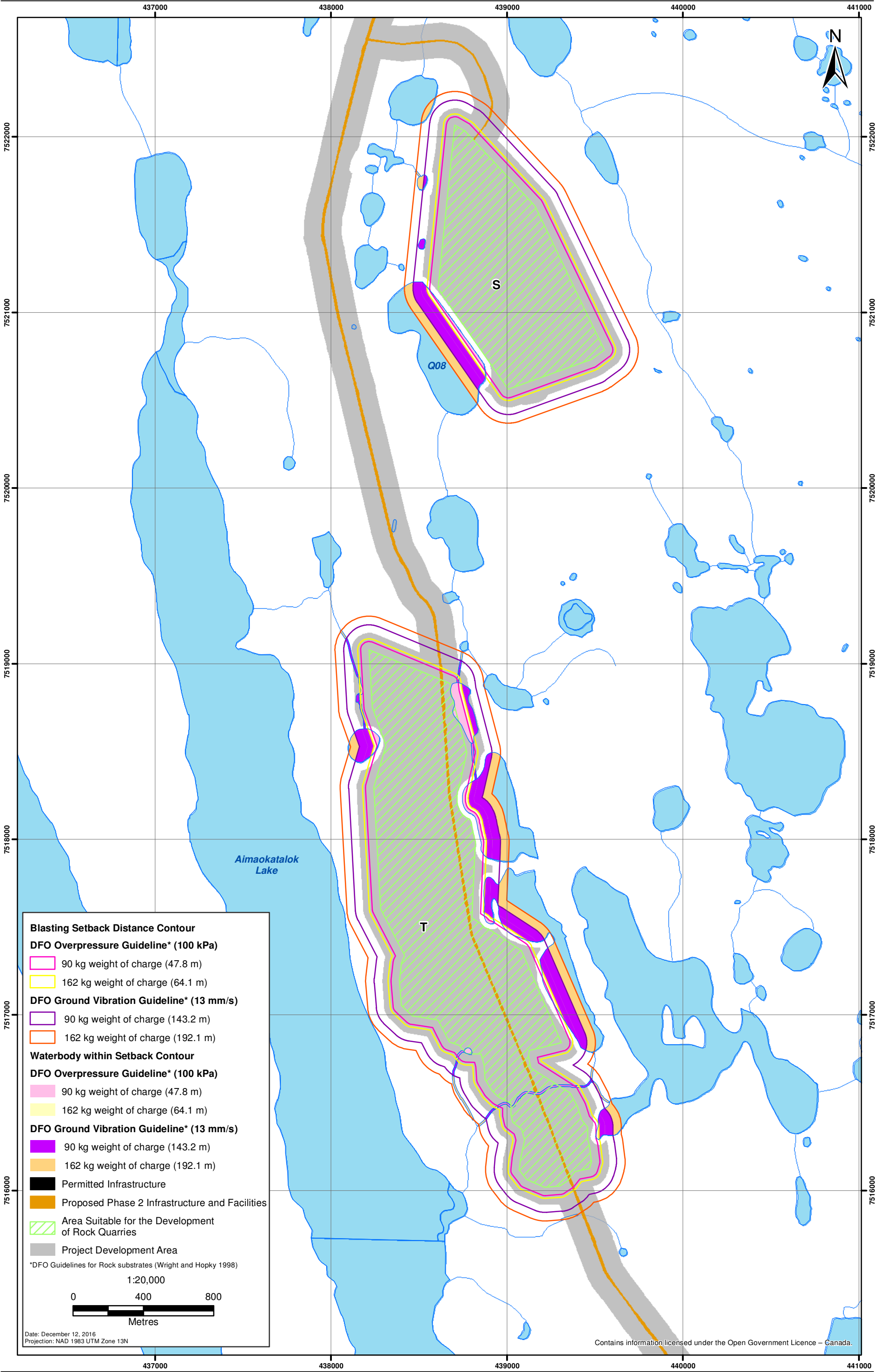


Figure V5-6U-7
Phase 2 Quarry Blasting Setbacks

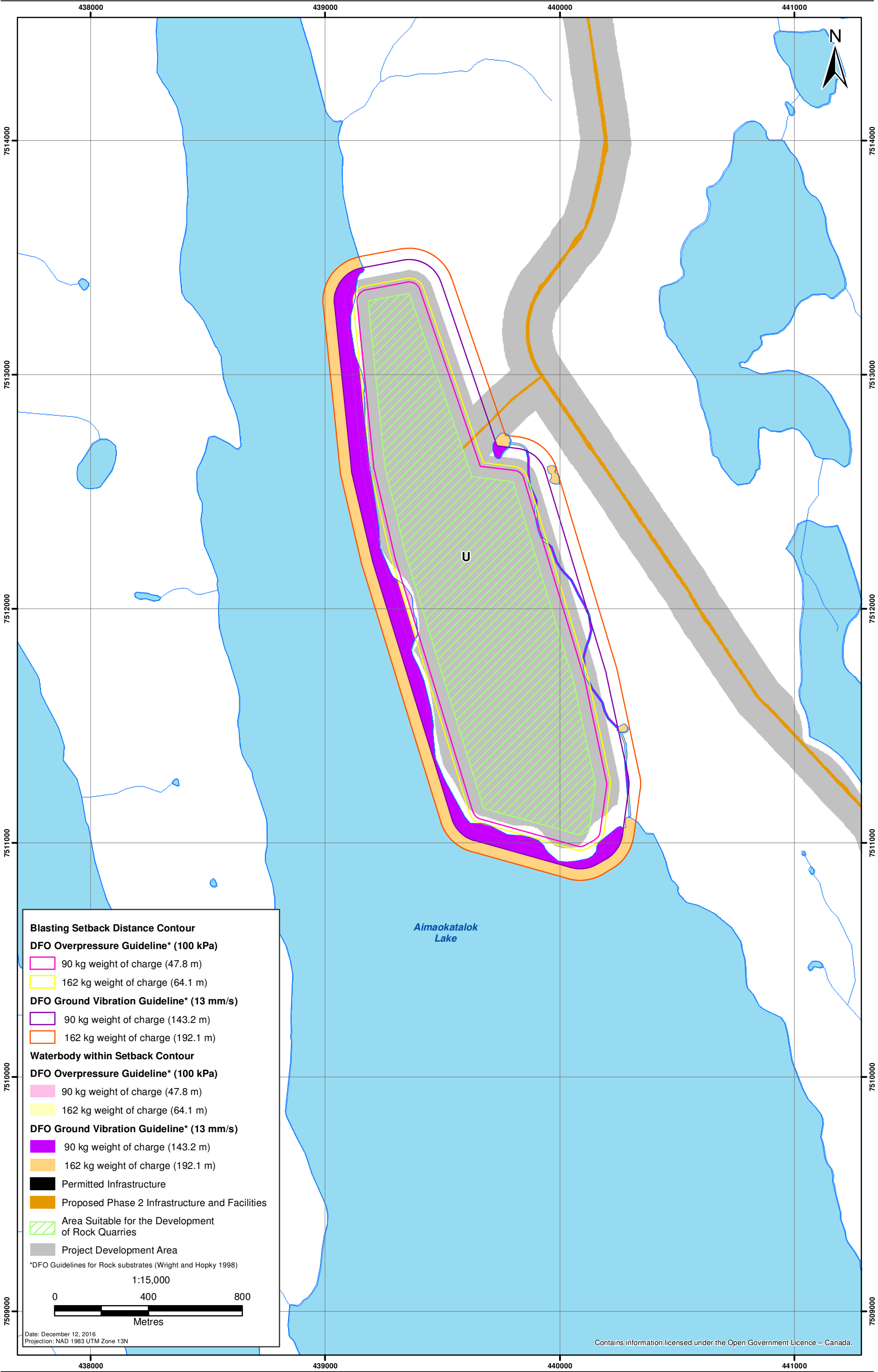


Figure V5-6U-8
Phase 2 Quarry Blasting Setbacks

