


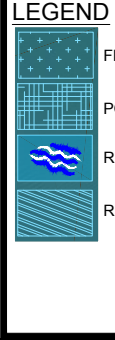
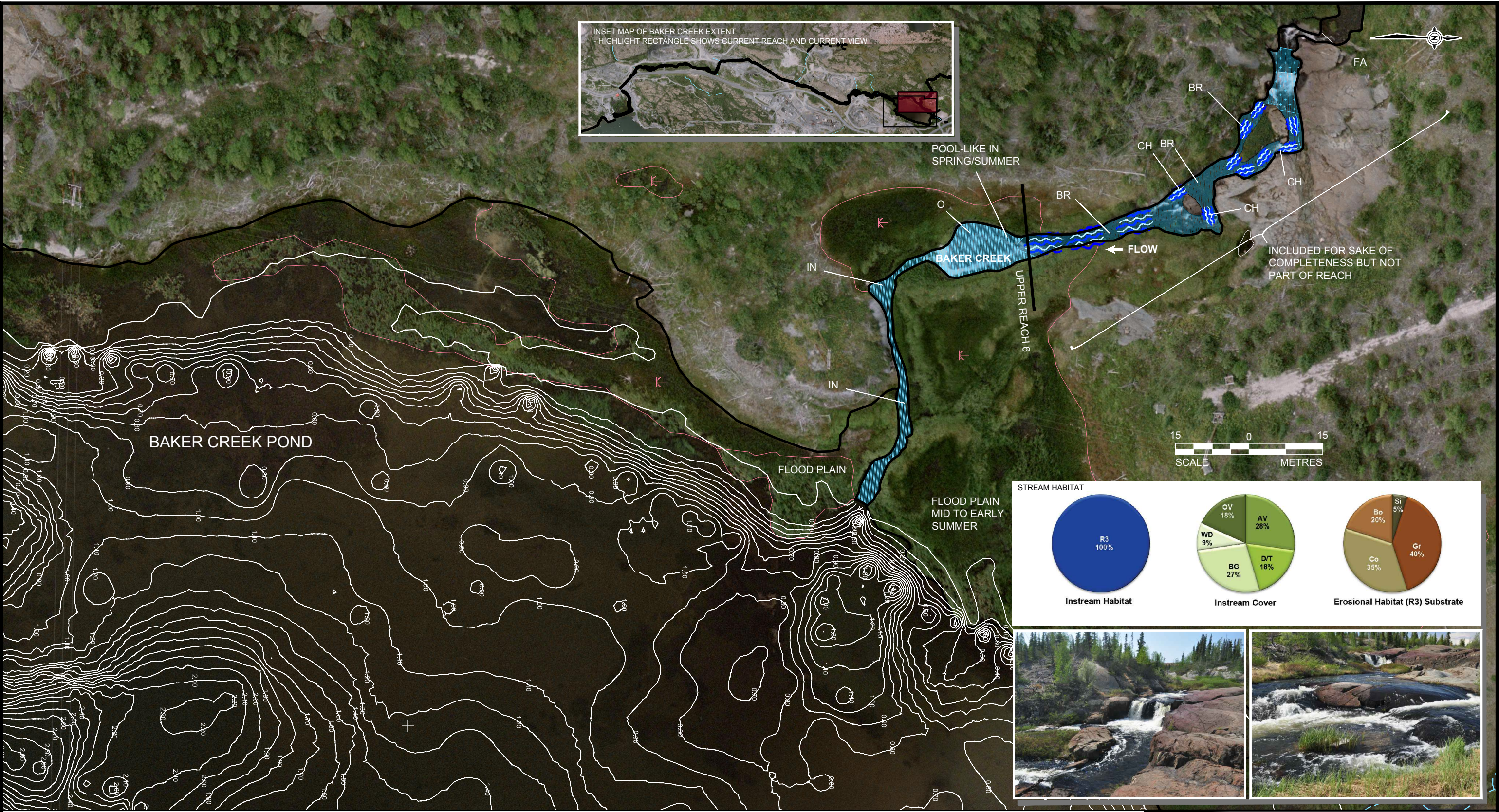
L:\2010\1328\10-1328-0024\5000\Report A\Fig 1 10132800245000A016 Reach Areas.dwg Feb 23, 2011 4:11pm

INDEX OF CORRESPONDING HABITAT MAPS	
REACH 0	FIGURE 2
REACH 1	FIGURE 3 AND FIGURE 4
REACH 2	FIGURE 5 AND FIGURE 6
REACH 3	FIGURE 7, FIGURE 8 AND FIGURE 9
REACH 4	FIGURE 10 AND FIGURE 11
REACH 5	FIGURE 12 AND FIGURE 13
REACH 6	FIGURE 14, FIGURE 15 AND FIGURE 16

**NOTES**  
1. MINE PLAN INFORMATION PROVIDED BY AECOM, GIANT MINE REMEDIATION PROJECT COORDINATES (GMRP)  
2. ORTHOPHOTO - MR. SID FILE, PROVENANCE UNKNOWN, GMRP COORDINATES, FILE DATE NOV. 24, 2009

PROJECT		INAC BAKER CREEK REMEDATION PROJECT	
TITLE		INDEX MAP OF REACHES 1 - 6	
	PROJECT	10.1328.0024.5000	FILE No. 10132800245000A016
	DESIGN	HM	29/10/10
	CADD	DLM	23/02/11
	CHECK	PV	23/02/11
	REVIEW	HM	23/02/11
SCALE		AS SHOWN	REV. 0
FIGURE: 1			

L:\2010\1328\10-1328-0024\5000\Report A\FIG X 10132800245000A001 1 to 750 Feb 15 2011.dwg Feb 24, 2011 -- 7:02pm



**Channel Unit / Habitat Type:**

FA Falls; Very Swift, Vertical Drop; Impassable to Fish  
CA Cascade; Very Swift, Turbulent; Passable to Fish  
CH Chute; Channel Restricted, Swift, Moderate Depth  
RA Rapids; Very Swift, Turbulent, Passable to Fish  
RF Riffle; Swift, Shallow, Turbulent

R1 Class 1 Run; Moderately Swift, Deep With Cover  
R2 Class 2 Run; Moderately Swift, Moderate Depth and Cover  
R3 Class 3 Run; Moderately Swift, Shallow, Limited Cover

F1 Class 1 Flat; Very Low Velocity, Deep With Moderate Cover  
F2 Class 2 Flat; Very Low Velocity, Moderate Depth and Cover  
F3 Class 3 Flat; Very Low Velocity, Shallow, Limited Cover

P1 Class 1 Scour Pool; Slow, Deep

**Channel Form:**

BR Broad Channel Form  
IN Incised Channel Form  
O Open Channel Form

Watercourse Bank  
Wetland

**Substrate Particle Size:**

Or Organic Material  
Si Silt (<0.06 mm)  
Sa Sand (0.06 to 2 mm)  
Gr Gravel (2 to 64 mm)  
Co Cobble (64 to 256 mm)  
Bo Boulder (>256 mm)  
Be Bedrock

**Instream Cover:**

AV Aquatic Vegetation  
BG Boulder Garden  
D/T Depth Turbulence  
OV Overhanging Vegetation  
UC Undercut Bank  
WD Woody Debris

UPPER REACH 6 LIFE STAGE (below falls)					
SPECIES	ADULT FEEDING	SPAWNING	EGG INCUBATION	YOY REARING AGE 0+	JUVENILE REARING AGE 1+
Arctic grayling	Present	Present	Present	Present	Absent
Northern pike	Present	Unknown but likely Present	Unknown but likely Present	Present	Present
Ninespine stickleback	Rare	Unknown but likely Present	Unknown but likely Present	Unknown but likely Present	Unknown but likely Present
Longnose sucker	Rare	Absent	Absent	Absent	Rare

FISH INFORMATION BASED ON HISTORICAL DATA AND REVIEW OF 2010 FIELD SURVEYS

UPPER REACH 6 STREAM HABITAT - FALL 2010				
HABITAT TYPE	TOTAL LENGTH (m)	AVERAGE WETTED WIDTH (m)	AVERAGE BANKFUL WIDTH (m)	AVERAGE DEPTH (m)
R3	89.0	4.5	13.5	<0.5

**NOTES**


- MINE PLAN INFORMATION PROVIDED BY AECOM, GIANT MINE REMEDIATION PROJECT COORDINATES (GMRP)
- ORTHOPHOTO - MR. SID FILE, PROVENANCE UNKNOWN, GMRP COORDINATES, FILE DATE NOV. 24, 2009
- HABITAT SURVEY CONDUCTED ON 24 SEPTEMBER 2010 DURING BASE FLOW CONDITIONS
- MAPPED HABITAT INFORMATION FROM JUNE-SEPTEMBER 2010 SURVEYS
- CONTOURS APPROXIMATE REFERENCE ONLY, ORIGINAL COORDINATES UTM NAD83 ZONE 12, SUMMER 2010
- DEPTH CONTOURS IN METRES
- POND HABITAT NOTED ON FIGURE 14

PROJECT

**INAC BAKER CREEK  
REMEDATION PROJECT**

TITLE

**FALL HABITAT OF BAKER CREEK  
UPPER REACH 6**

 **Golder Associates**  
Calgary, Alberta

PROJECT	10.1328.0024.5000	FILE	No.10132800245000A014
DESIGN	HM	28/10/10	SCALE AS SHOWN REV. 0
CADD	DLM	23/02/11	
CHECK			
REVIEW			

**FIGURE: 15**

L:\2010\1328\10-1328-0024\5000\Report A\FIG X 10132800245000A001 1 to 750 Feb 15 2011.dwg Feb 24, 2011 -- 7:02pm



LEGEND



FLAT  
POOL  
RIFFLE  
RUN

Channel Unit / Habitat Type:

- FA Falls; Very Swift, Vertical Drop; Impassable to Fish  
CA Cascade; Very Swift, Turbulent; Passable to Fish  
CH Chute; Channel Restricted, Swift, Moderate Depth  
RA Rapids; Very Swift, Turbulent, Passable to Fish  
RF Riffle; Swift, Shallow, Turbulent
- R1 Class 1 Run; Moderately Swift, Deep With Cover  
R2 Class 2 Run; Moderately Swift, Moderate Depth and Cover  
R3 Class 3 Run; Moderately Swift, Shallow, Limited Cover
- F1 Class 1 Flat; Very Low Velocity, Deep With Moderate Cover  
F2 Class 2 Flat; Very Low Velocity, Moderate Depth and Cover  
F3 Class 3 Flat; Very Low Velocity, Shallow, Limited Cover
- P1 Class 1 Scour Pool; Slow, Deep

Channel Form:

- BR Broad Channel Form  
IN Incised Channel Form  
O Open Channel Form

Substrate Particle Size:

- Or Organic Material  
Si Silt (<0.06 mm)  
Sa Sand (0.06 to 2 mm)  
Gr Gravel (2 to 64 mm)  
Co Cobble (64 to 256 mm)  
Bo Boulder (>256 mm)  
Be Bedrock
- Instream Cover:  
AV Aquatic Vegetation  
BG Boulder Garden  
D/T Depth Turbulence  
OV Overhanging Vegetation  
UC Undercut Bank  
WD Woody Debris

REACH 6 POND LIFE STAGE

SPECIES	ADULT FEEDING	SPAWNING	EGG INCUBATION	YOY REARING AGE 0+	JUVENILE REARING AGE 1+
Arctic grayling	Absent	Absent	Absent	Present	Absent
Northern pike	Present	Unknown	Unknown	Present	Present
Ninespine stickleback	Rare	Unknown	Unknown	Unknown	Unknown

FISH INFORMATION BASED ON HISTORICAL DATA AND REVIEW OF 2010 FIELD SURVEYS

LOWER REACH 6 POND HABITAT - FALL 2010

HABITAT TYPE	POND LENGTH: 372 m, POND WIDTH: 145 m, POND AREA: 43 526 m <sup>2</sup>
POND	POND HABITAT WITH FINE SUBSTRATE

NOTES

- MINE PLAN INFORMATION PROVIDED BY AECOM, GIANT MINE REMEDIATION PROJECT COORDINATES (GMRP)
- ORTHOGRAPHIC - MR. SID FILE, PROVENANCE UNKNOWN, GMRP COORDINATES, FILE DATE NOV. 24, 2009
- HABITAT SURVEY CONDUCTED ON 24 SEPTEMBER 2010 DURING BASE FLOW CONDITIONS
- MAPPED HABITAT INFORMATION FROM JUNE-SEPTEMBER 2010 SURVEYS
- CONTOURS APPROXIMATE REFERENCE ONLY, ORIGINAL COORDINATES UTM NAD83 ZONE 12, SUMMER 2010
- DEPTH CONTOURS IN METRES
- DETAILED HABITAT MAPPING NOT COMPLETED

PROJECT

INAC BAKER CREEK  
REMEDATION PROJECT

TITLE

FALL HABITAT OF BAKER CREEK  
LOWER REACH 6



PROJECT	10.1328.0024.5000	FILE No.	10132800245000A015
DESIGN	HM	28/10/10	SCALE AS SHOWN REV. 0
CADD	DLM	23/02/11	
CHECK			
REVIEW			

FIGURE: 16

L:\2010\1328\10-1328-0024\5000\Report A\FIG X 10132800245000A001 1 to 750 Feb 15 2011.dwg Feb 24, 2011 -- 7:01pm



**LEGEND**

FLAT

POOL

RIFFLE

RUN

**Channel Unit / Habitat Type:**

FA Falls; Very Swift, Vertical Drop; Impassable to Fish  
CA Cascade; Very Swift, Turbulent; Passable to Fish  
CH Chute; Channel Restricted, Swift, Moderate Depth  
RA Rapids; Very Swift, Turbulent, Passable to Fish  
RF Riffle; Swift, Shallow, Turbulent

R1 Class 1 Run; Moderately Swift, Deep With Cover  
R2 Class 2 Run; Moderately Swift, Moderate Depth and Cover  
R3 Class 3 Run; Moderately Swift, Shallow, Limited Cover

F1 Class 1 Flat; Very Low Velocity, Deep With Moderate Cover  
F2 Class 2 Flat; Very Low Velocity, Moderate Depth and Cover  
F3 Class 3 Flat; Very Low Velocity, Shallow, Limited Cover

P1 Class 1 Scour Pool; Slow, Deep

**Channel Form:**  
BR Broad Channel Form  
IN Incised Channel Form  
O Open Channel Form

**Substrate Particle Size:**

Or Organic Material  
Si Silt (<0.06 mm)  
Sa Sand (0.06 to 2 mm)  
Gr Gravel (2 to 64 mm)  
Co Cobble (64 to 256 mm)  
Bo Boulder (>256 mm)  
Be Bedrock

**Instream Cover:**

AV Aquatic Vegetation  
BG Boulder Garden  
DT Depth Turbulence  
OV Overhanging Vegetation  
UC Undercut Bank  
WD Woody Debris

REACH 6 POND LIFE STAGE					
SPECIES	ADULT FEEDING	SPAWNING	EGG INCUBATION	YOY REARING AGE 0+	JUVENILE REARING AGE 1+
Arctic grayling	Absent	Absent	Absent	Abundant	Absent
Northern pike	Present	Unknown	Unknown	Present	Present
Ninespine stickleback	Rare	Unknown	Unknown	Unknown	Unknown

FISH INFORMATION BASED ON HISTORICAL DATA AND REVIEW OF 2010 FIELD SURVEYS

**MIDDLE REACH 6 POND HABITAT - FALL 2010**

HABITAT TYPE	POND LENGTH: 372 m, POND WIDTH: 145 m, POND AREA: 43 526 m <sup>2</sup>
POND	POND HABITAT WITH FINE SUBSTRATE

**NOTES**

- MINE PLAN INFORMATION PROVIDED BY AECOM, GIANT MINE REMEDIATION PROJECT COORDINATES (GMRP)
- ORTHOPHOTO - MR. SID FILE, PROVENANCE UNKNOWN, GMRP COORDINATES, FILE DATE NOV. 24, 2009
- HABITAT SURVEY CONDUCTED ON 24 SEPTEMBER 2010 DURING BASE FLOW CONDITIONS
- MAPPED HABITAT INFORMATION FROM JUNE-SEPTEMBER 2010 SURVEYS
- CONTOURS APPROXIMATE REFERENCE ONLY, ORIGINAL COORDINATES UTM NAD83 ZONE 12, SUMMER 2010
- DEPTH CONTOURS IN METRES
- DETAILED HABITAT MAPPING NOT COMPLETED

PROJECT

**INAC BAKER CREEK  
REMEDATION PROJECT**

TITLE

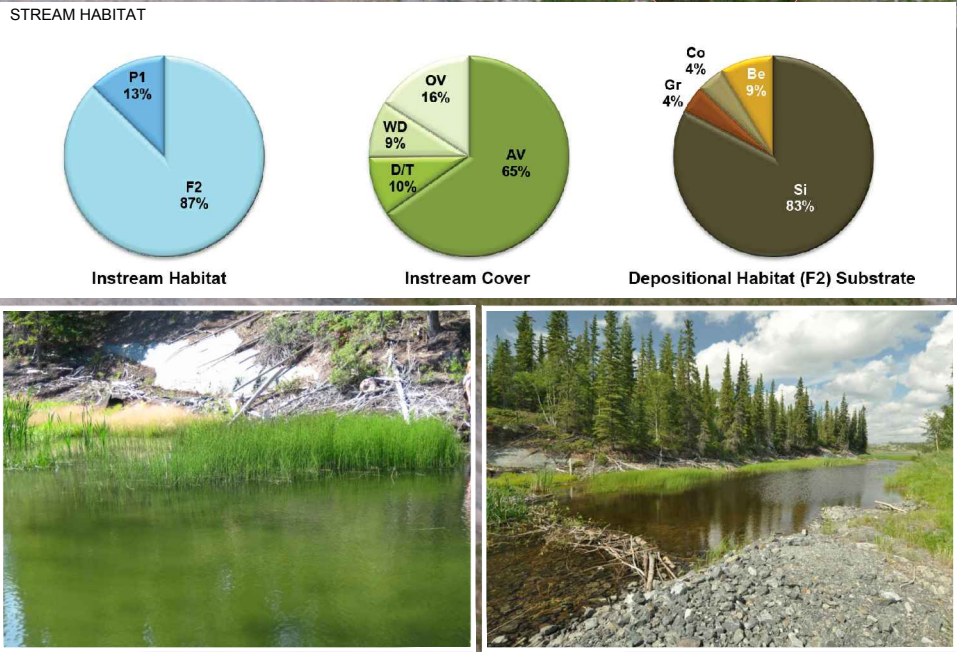
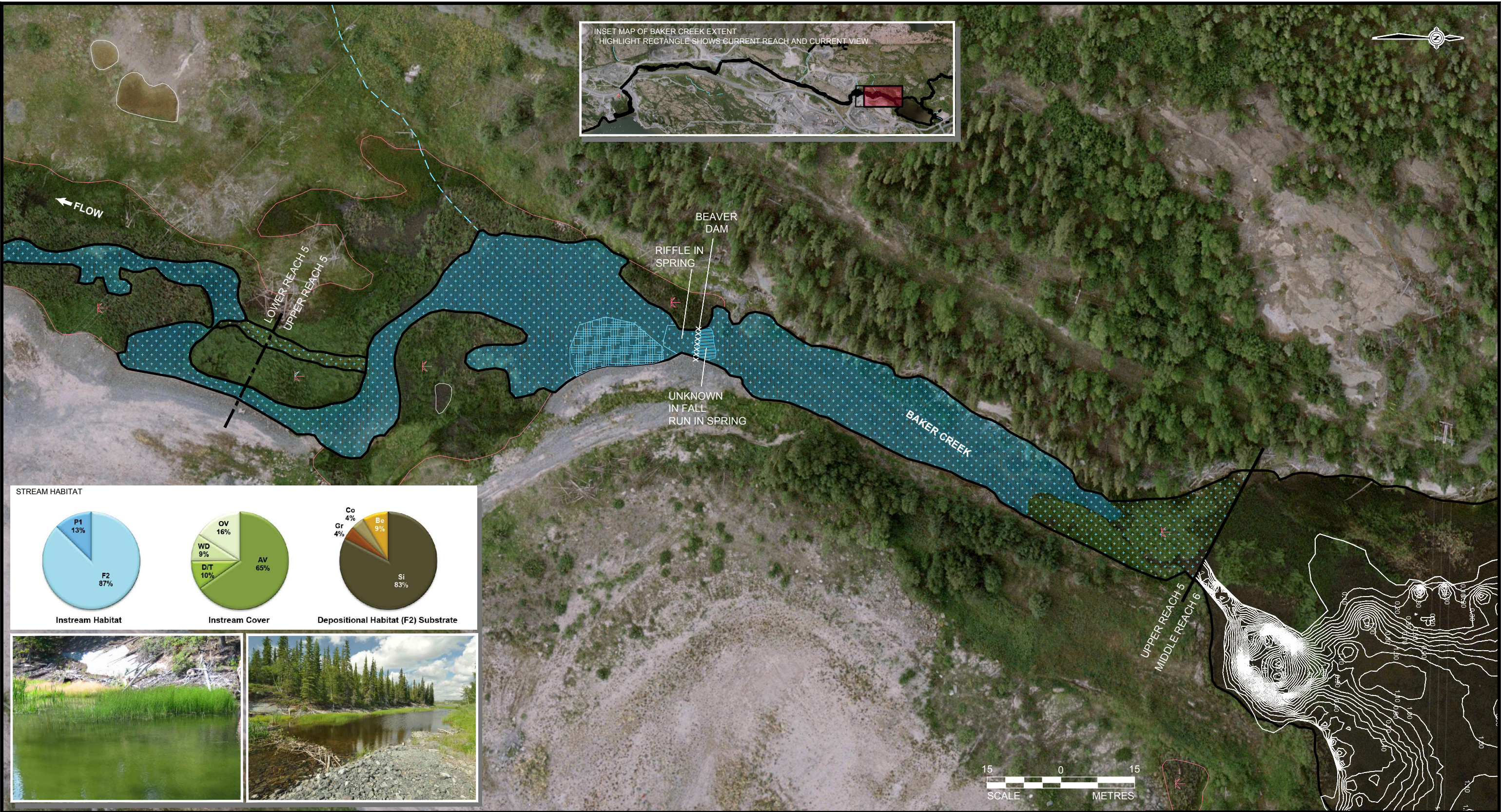
**FALL HABITAT OF BAKER CREEK  
MIDDLE REACH 6**

**Golder Associates**  
Calgary, Alberta

PROJECT	10.1328.0024.5000	FILE	No.10132800245000A013
DESIGN	HM	28/10/10	SCALE AS SHOWN
CADD	DLM	23/02/11	REV. 0
CHECK			
REVIEW			

**FIGURE: 14**

L:\2010\1328\10-1328-0024\5000\Report A\FIG X 10132800245000A001 1 to 750 Feb 15 2011.dwg Feb 24, 2011 -- 7:01pm



LEGEND	
	FLAT
	POOL
	RIFFLE
	RUN
	P1
	Watercourse Bank
	Watercourse, Small
	Wetland

Channel Unit / Habitat Type:	
FA	Falls; Very Swift, Vertical Drop; Impassable to Fish
CA	Cascade; Very Swift, Turbulent; Passable to Fish
CH	Chute; Channel Restricted, Swift, Moderate Depth
RA	Rapids; Very Swift, Turbulent, Passable to Fish
RF	Riffle; Swift, Shallow, Turbulent
R1	Class 1 Run; Moderately Swift, Deep With Cover
R2	Class 2 Run; Moderately Swift, Moderate Depth and Cover
R3	Class 3 Run; Moderately Swift, Shallow, Limited Cover
F1	Class 1 Flat; Very Low Velocity, Deep With Moderate Cover
F2	Class 2 Flat; Very Low Velocity, Moderate Depth and Cover
F3	Class 3 Flat; Very Low Velocity, Shallow, Limited Cover
P1	Class 1 Scour Pool; Slow, Deep
Channel Form:	
BR	Broad Channel Form
IN	Incised Channel Form
O	Open Channel Form

UPPER REACH 5 LIFE STAGE					
SPECIES	ADULT FEEDING	SPAWNING	EGG INCUBATION	YOY REARING AGE 0+	JUVENILE REARING AGE 1+
Arctic grayling	Present	Present	Present	Present	Absent
Northern pike	Present	Unknown	Unknown	Present	Present
Ninespine Stickleback	Rare	Unknown	Unknown	Unknown	Unknown

FISH INFORMATION BASED ON HISTORICAL DATA AND REVIEW OF 2010 FIELD SURVEYS

UPPER REACH 5 HABITAT - FALL 2010				
HABITAT TYPE	TOTAL LENGTH (m)	AVERAGE WETTED WIDTH (m)	AVERAGE BANKFUL WIDTH (m)	AVERAGE DEPTH (m)
F2	113.0	9.1	17.5	0.5 - 1.0
P1	15.0	10.0	13.0	>1.0

NOTES

- MINE PLAN INFORMATION PROVIDED BY AECOM, GIANT MINE REMEDIATION PROJECT COORDINATES (GMRP)
- ORTHOGRAPHIC - MR. SID FILE, PROVENANCE UNKNOWN, GMRP COORDINATES, FILE DATE NOV. 24, 2009
- HABITAT SURVEY CONDUCTED ON 24 SEPTEMBER 2010 DURING BASE FLOW CONDITIONS
- MAPPED HABITAT INFORMATION FROM JUNE-SEPTEMBER 2010 SURVEYS
- BEAVER DAM PRESENT AT RIFFLE IN 2010. HABITAT ABOVE DAM NOT ABLE TO BE DOCUMENTED.

PROJECT

INAC BAKER CREEK  
REMEDATION PROJECT

TITLE

FALL HABITAT OF BAKER CREEK  
UPPER REACH 5

Calgary, Alberta

PROJECT	10.1328.0024.5000	FILE No.	10132800245000A012
DESIGN	HM	28/10/10	SCALE AS SHOWN REV. 0
CADD	DLM	23/02/11	
CHECK			
REVIEW			

FIGURE: 13

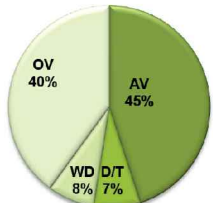
L:\2010\1328\10-1328-0024\5000\Report A\FIG X 10132800245000A001 1 to 750 Feb 15 2011.dwg Feb 24, 2011 -- 7:00pm



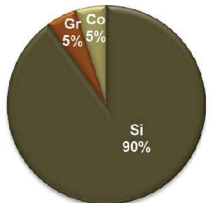
STREAM HABITAT



Instream Habitat



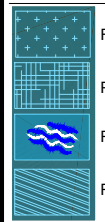
Instream Cover



Depositional Habitat (F2) Substrate



LEGEND



Channel Unit / Habitat Type:

- FA Falls; Very Swift, Vertical Drop; Impassable to Fish  
CA Cascade; Very Swift, Turbulent; Passable to Fish  
CH Chute; Channel Restricted, Swift, Moderate Depth  
RA Rapids; Very Swift, Turbulent, Passable to Fish  
RF Riffle; Swift, Shallow, Turbulent  
R1 Class 1 Run; Moderately Swift, Deep With Cover  
R2 Class 2 Run; Moderately Swift, Moderate Depth and Cover  
R3 Class 3 Run; Moderately Swift, Shallow, Limited Cover  
F1 Class 1 Flat; Very Low Velocity, Deep With Moderate Cover  
F2 Class 2 Flat; Very Low Velocity, Moderate Depth and Cover  
F3 Class 3 Flat; Very Low Velocity, Shallow, Limited Cover  
P1 Class 1 Scour Pool; Slow, Deep  
Watercourse Bank  
Watercourse, Small  
Wetland
- Channel Form:  
BR Broad Channel Form  
IN Incised Channel Form  
O Open Channel Form

Substrate Particle Size:

- Or Organic Material  
Si Silt (<0.06 mm)  
Sa Sand (0.06 to 2 mm)  
Gr Gravel (2 to 64 mm)  
Co Cobble (64 to 256 mm)  
Bo Boulder (>256 mm)  
Be Bedrock  
AV Aquatic Vegetation  
BG Boulder Garden  
D/T Depth Turbulence  
OV Overhanging Vegetation  
UC Undercut Bank  
WD Woody Debris

LOWER REACH 5 LIFE STAGE

SPECIES	ADULT FEEDING	SPAWNING	EGG INCUBATION	YOY REARING AGE 0+	JUVENILE REARING AGE 1+
Arctic grayling	Present	Absent	Absent	Present	Absent
Northern pike	Present	Unknown	Unknown	Present	Present
Ninespine stickleback	Rare	Unknown	Unknown	Unknown	Unknown

FISH INFORMATION BASED ON HISTORICAL DATA AND REVIEW OF 2010 FIELD SURVEYS

LOWER REACH 5 HABITAT - FALL 2010

HABITAT TYPE	TOTAL LENGTH (m)	AVERAGE WETTED WIDTH (m)	AVERAGE BANKFUL WIDTH (m)	AVERAGE DEPTH (m)
F2	262.0	29.0	40.0	0.5 - 1.0

FLAT HABITAT IN SPRING; SLOWER POND-LIKE HABITAT IN SUMMER AND FALL

NOTES

- MINE PLAN INFORMATION PROVIDED BY AECOM, GIANT MINE REMEDIATION PROJECT COORDINATES (GMRP)
- ORTHO PHOTO - MR. SID FILE, PROVENANCE UNKNOWN, GMRP COORDINATES, FILE DATE NOV. 24, 2009
- HABITAT SURVEY CONDUCTED ON 24 SEPTEMBER 2010 DURING BASE FLOW CONDITIONS
- MAPPED HABITAT INFORMATION FROM JUNE-SEPTEMBER 2010 SURVEYS

PROJECT

INAC BAKER CREEK  
REMEDATION PROJECT

TITLE

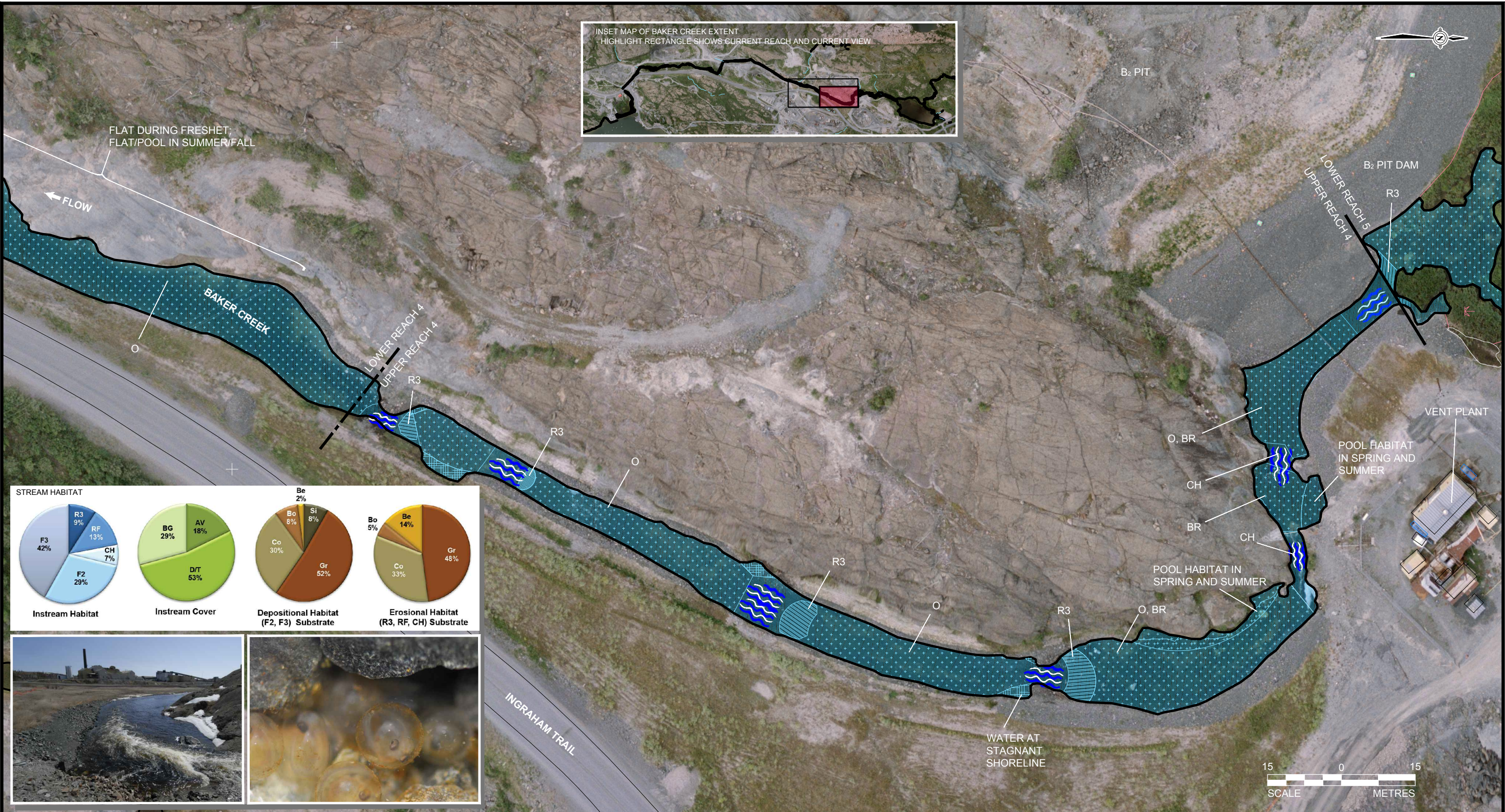
FALL HABITAT OF BAKER CREEK  
LOWER REACH 5



PROJECT	10.1328.0024.5000	FILE No.	10132800245000A011
DESIGN	HM	28/10/10	SCALE AS SHOWN REV. 0
CADD	DLM	23/02/11	
CHECK			
REVIEW			

FIGURE: 12

L:\2010\1328\10-1328-0024\5000\Report A\FIG X 10132800245000A001 1 to 750 Feb 15 2011.dwg Feb 24, 2011 -- 7:00pm



UPPER REACH 4 LIFE STAGE					
SPECIES	ADULT FEEDING	SPAWNING	EGG INCUBATION	YOY REARING AGE 0+	JUVENILE REARING AGE 1+
Arctic grayling	Abundant	Abundant	Abundant	Abundant	Absent
Northern pike	Present	Absent	Absent	Absent to Rare	Present
Lake whitefish	Rare	Absent	Absent	Absent	Absent
Longnose sucker	Present	Present	Present	Present	Rare
Slimy sculpin	Rare	Unknown	Unknown	Unknown	Unknown

FISH INFORMATION BASED ON HISTORICAL DATA AND REVIEW OF 2010 FIELD SURVEYS

UPPER REACH 4 HABITAT - FALL 2010				
HABITAT TYPE	TOTAL LENGTH (m)	AVERAGE WETTED WIDTH (m)	AVERAGE BANKFUL WIDTH (m)	AVERAGE DEPTH (m)
R3	34.0	5.8	12.8	<0.5
RF	61.0	7.1	12.0	<0.3
CH	25.0	6.0	10.7	0.5 - 1.5
F2	56.0	11.5	13.7	0.5 - 1.0
F3	126.0	7.1	13.4	<0.5

NOTES

- MINE PLAN INFORMATION PROVIDED BY AECOM, GIANT MINE REMEDIATION PROJECT COORDINATES (GMRP)
- ORTHOPHOTO - MR. SID FILE, PROVENANCE UNKNOWN, GMRP COORDINATES, FILE DATE NOV. 24, 2009
- HABITAT SURVEY CONDUCTED ON 24 SEPTEMBER 2010 DURING BASE FLOW CONDITIONS
- MAPPED HABITAT INFORMATION FROM JUNE-SEPTEMBER 2010 SURVEYS

PROJECT

INAC BAKER CREEK  
REMEDATION PROJECT

TITLE

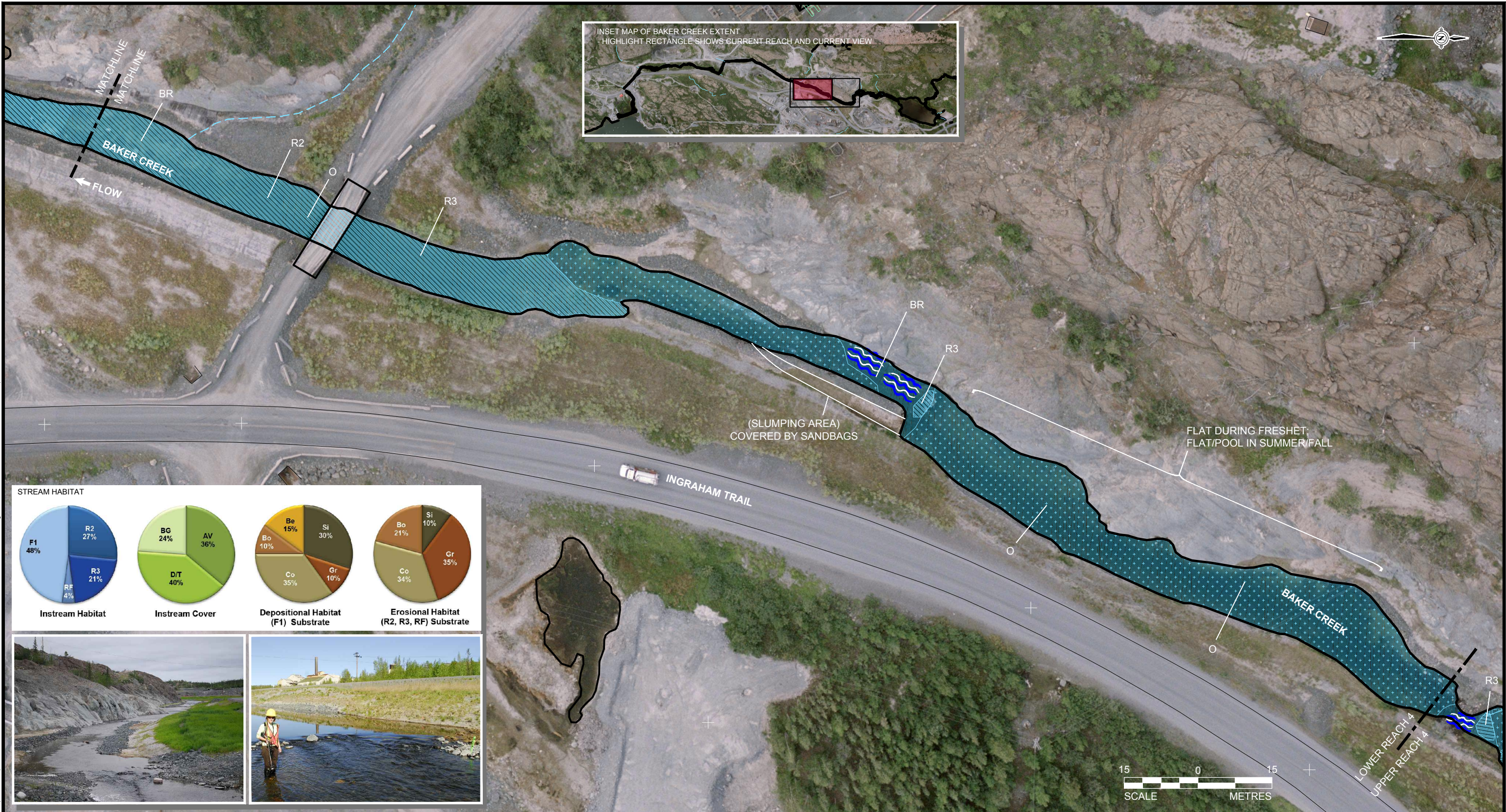
FALL HABITAT OF BAKER CREEK  
UPPER REACH 4

Calgary, Alberta

PROJECT	10.1328.0024.5000	FILE No.	10132800245000A010
DESIGN	HM	28/10/10	SCALE AS SHOWN REV. 0
CADD	DLM	23/02/11	
CHECK			
REVIEW			

FIGURE: 11

L:\2010\1328\10-1328-0024\5000\Report A\FIG X 10132800245000A001 1 to 750 Feb 15 2011.dwg Feb 24, 2011 - 6:59pm



LEGEND	
	FLAT
	POOL
	RIFFLE
	RUN

Channel Unit / Habitat Type:	
FA	Falls; Very Swift, Vertical Drop; Impassable to Fish
CA	Cascade; Very Swift, Turbulent; Passable to Fish
CH	Chute; Channel Restricted, Swift, Moderate Depth
RA	Rapids; Very Swift, Turbulent, Passable to Fish
RF	Riffle; Swift, Shallow, Turbulent
R1	Class 1 Run; Moderately Swift, Deep With Cover
R2	Class 2 Run; Moderately Swift, Moderate Depth and Cover
R3	Class 3 Run; Moderately Swift, Shallow, Limited Cover
F1	Class 1 Flat; Very Low Velocity, Deep With Moderate Cover
F2	Class 2 Flat; Very Low Velocity, Moderate Depth and Cover
F3	Class 3 Flat; Very Low Velocity, Shallow, Limited Cover
P1	Class 1 Scour Pool; Slow, Deep
WB	Watercourse Bank
WS	Watercourse, Small
W	Wetland

Channel Form:	
BR	Broad Channel Form
IN	Incised Channel Form
O	Open Channel Form

Substrate Particle Size:	
Or	Organic Material
Si	Silt (<0.06 mm)
Sa	Sand (0.06 to 2 mm)
Gr	Gravel (2 to 64 mm)
Co	Cobble (64 to 256 mm)
Bo	Boulder (>256 mm)
Be	Bedrock
Instream Cover:	
AV	Aquatic Vegetation
BG	Boulder Garden
D/T	Depth Turbulence
OV	Overhanging Vegetation
UC	Undercut Bank
WD	Woody Debris

LOWER REACH 4 LIFE STAGE					
SPECIES	ADULT FEEDING	SPAWNING	EGG INCUBATION	YOY REARING AGE 0+	JUVENILE REARING AGE 1+
Arctic grayling	Present	Present	Present	Abundant	Absent
Northern pike	Present	Absent	Absent	Absent to Rare	Absent
Lake whitefish	Rare	Absent	Absent	Absent to Rare	Absent to Rare
Longnose sucker	Abundant	Abundant	Present	Abundant	Rare
Slimy sculpin	Rare	Unknown	Unknown	Unknown	Unknown

LOWER REACH 4 HABITAT - FALL 2010				
HABITAT TYPE	TOTAL LENGTH (m)	AVERAGE WETTED WIDTH (m)	AVERAGE BANKFUL WIDTH (m)	AVERAGE DEPTH (m)
R2	86.0	8.5	11.3	0.5 - 1.0
R3	56.0	4.5	14.0	<0.5
RF	18.0	6.5	13.7	<0.3
F1	132.0	10.0	13.7	>1.0

NOTES

1. MINE PLAN INFORMATION PROVIDED BY AECOM, GIANT MINE REMEDIATION PROJECT COORDINATES (GMRP)

2. ORTHOPHOTO - MR. SID FILE, PROVENANCE UNKNOWN, GMRP COORDINATES, FILE DATE NOV. 24, 2009

3. HABITAT SURVEY CONDUCTED ON 24 SEPTEMBER 2010 DURING BASE FLOW CONDITIONS

4. MAPPED HABITAT INFORMATION FROM JUNE-SEPTEMBER 2010 SURVEYS

PROJECT

INAC BAKER CREEK  
REMEDATION PROJECT

TITLE

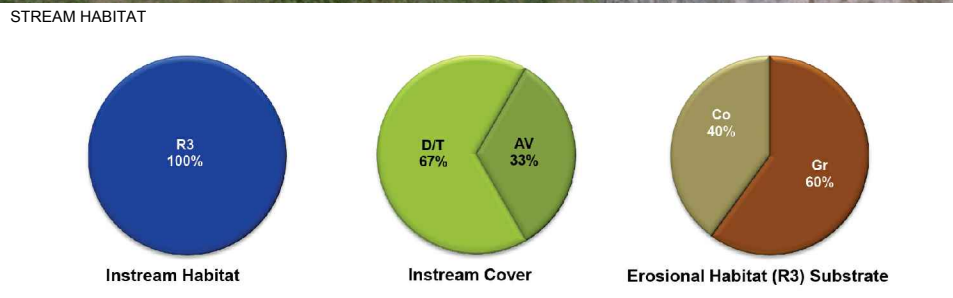
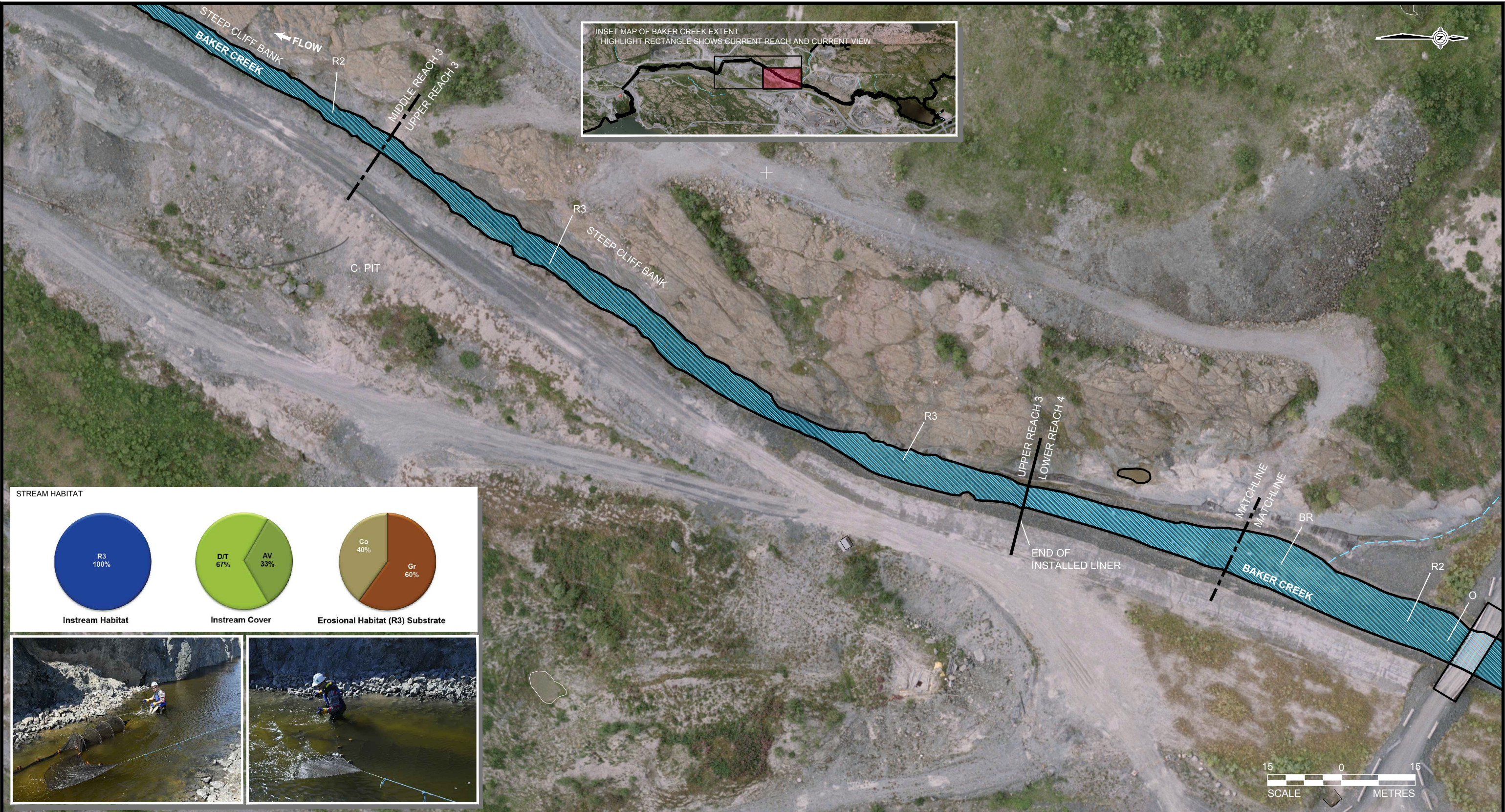
FALL HABITAT OF BAKER CREEK  
LOWER REACH 4

Calgary, Alberta

PROJECT	10.1328.0024.5000	FILE No.	10132800245000A009
DESIGN	HM	28/10/10	SCALE AS SHOWN REV. 0
CADD	DLM	23/02/11	
CHECK			
REVIEW			

FIGURE: 10

L:\2010\1328\10-1328-0024\5000\Report A\FIG X 10132800245000A001 1 to 750 Feb 15 2011.dwg Feb 24, 2011 - 6:59pm



#### LEGEND

	FLAT
	POOL
	RIFFLE
	RUN
	Watercourse Bank
	Watercourse, Small
	Wetland
<b>Channel Unit / Habitat Type:</b>	
FA	Falls; Very Swift, Vertical Drop; Impassable to Fish
CA	Cascade; Very Swift, Turbulent; Passable to Fish
CH	Chute; Channel Restricted, Swift, Moderate Depth
RA	Rapids; Very Swift, Turbulent, Passable to Fish
RF	Riffle; Swift, Shallow, Turbulent
R1	Class 1 Run; Moderately Swift, Deep With Cover
R2	Class 2 Run; Moderately Swift, Moderate Depth and Cover
R3	Class 3 Run; Moderately Swift, Shallow, Limited Cover
F1	Class 1 Flat; Very Low Velocity, Deep With Moderate Cover
F2	Class 2 Flat; Very Low Velocity, Moderate Depth and Cover
F3	Class 3 Flat; Very Low Velocity, Shallow, Limited Cover
P1	Class 1 Scour Pool; Slow, Deep
<b>Channel Form:</b>	
BR	Broad Channel Form
IN	Incised Channel Form
O	Open Channel Form

<b>Substrate Particle Size:</b>	
Or	Organic Material
Si	Silt (<0.06 mm)
Sa	Sand (0.06 to 2 mm)
Gr	Gravel (2 to 64 mm)
Co	Cobble (64 to 256 mm)
Bo	Boulder (>256 mm)
Be	Bedrock
<b>Instream Cover:</b>	
AV	Aquatic Vegetation
BG	Boulder Garden
D/T	Depth Turbulence
OV	Overhanging Vegetation
UC	Undercut Bank
WD	Woody Debris

UPPER REACH 3 LIFE STAGE					
SPECIES	ADULT FEEDING	SPAWNING	EGG INCUBATION	YOY REARING AGE 0+	JUVENILE REARING AGE 1+
Arctic grayling	Present	Present	Present	Abundant	Absent
Northern pike	Present	Absent	Absent	Present	Absent
Longnose sucker	Abundant	Abundant	Present to Abundant	Present	Rare

FISH INFORMATION BASED ON HISTORICAL DATA AND REVIEW OF 2010 FIELD SURVEYS

UPPER REACH 3 HABITAT - FALL 2010				
HABITAT TYPE	TOTAL LENGTH (m)	AVERAGE WETTED WIDTH (m)	AVERAGE BANKFUL WIDTH (m)	AVERAGE DEPTH (m)
R3	127.0	3.2	8.3	<0.5

#### NOTES

1. MINE PLAN INFORMATION PROVIDED BY AECOM, GIANT MINE REMEDIATION PROJECT COORDINATES (GMRP)
2. ORTHOPHOTO - MR. SID FILE, PROVENANCE UNKNOWN, GMRP COORDINATES, FILE DATE NOV. 24, 2009
3. HABITAT SURVEY CONDUCTED ON 24 SEPTEMBER 2010 DURING BASE FLOW CONDITIONS
4. MAPPED HABITAT INFORMATION FROM JUNE-SEPTEMBER 2010 SURVEYS

PROJECT

INAC BAKER CREEK  
REMEDATION PROJECT

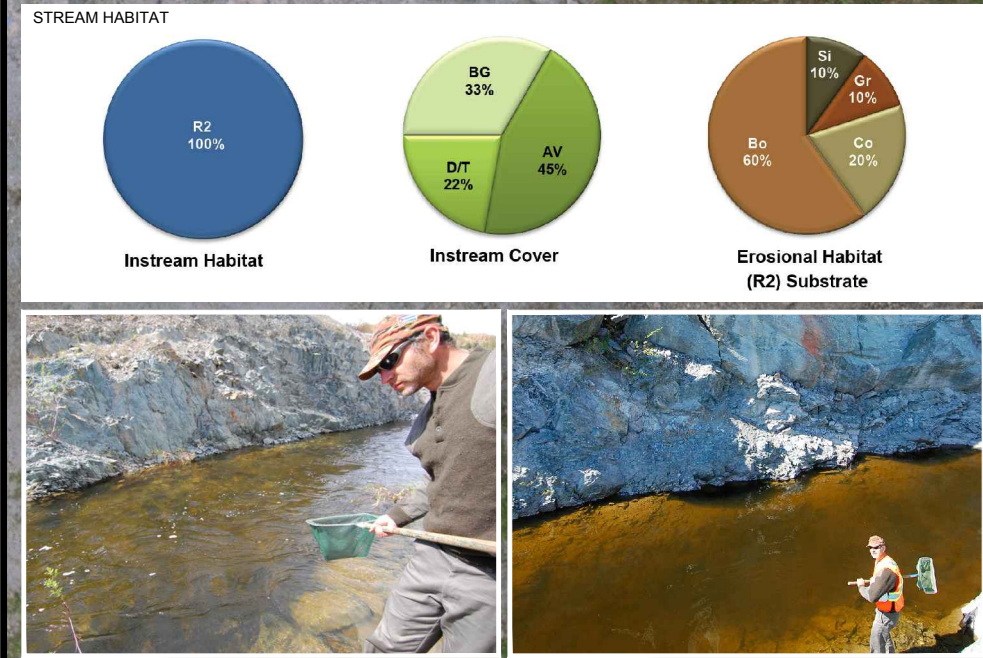
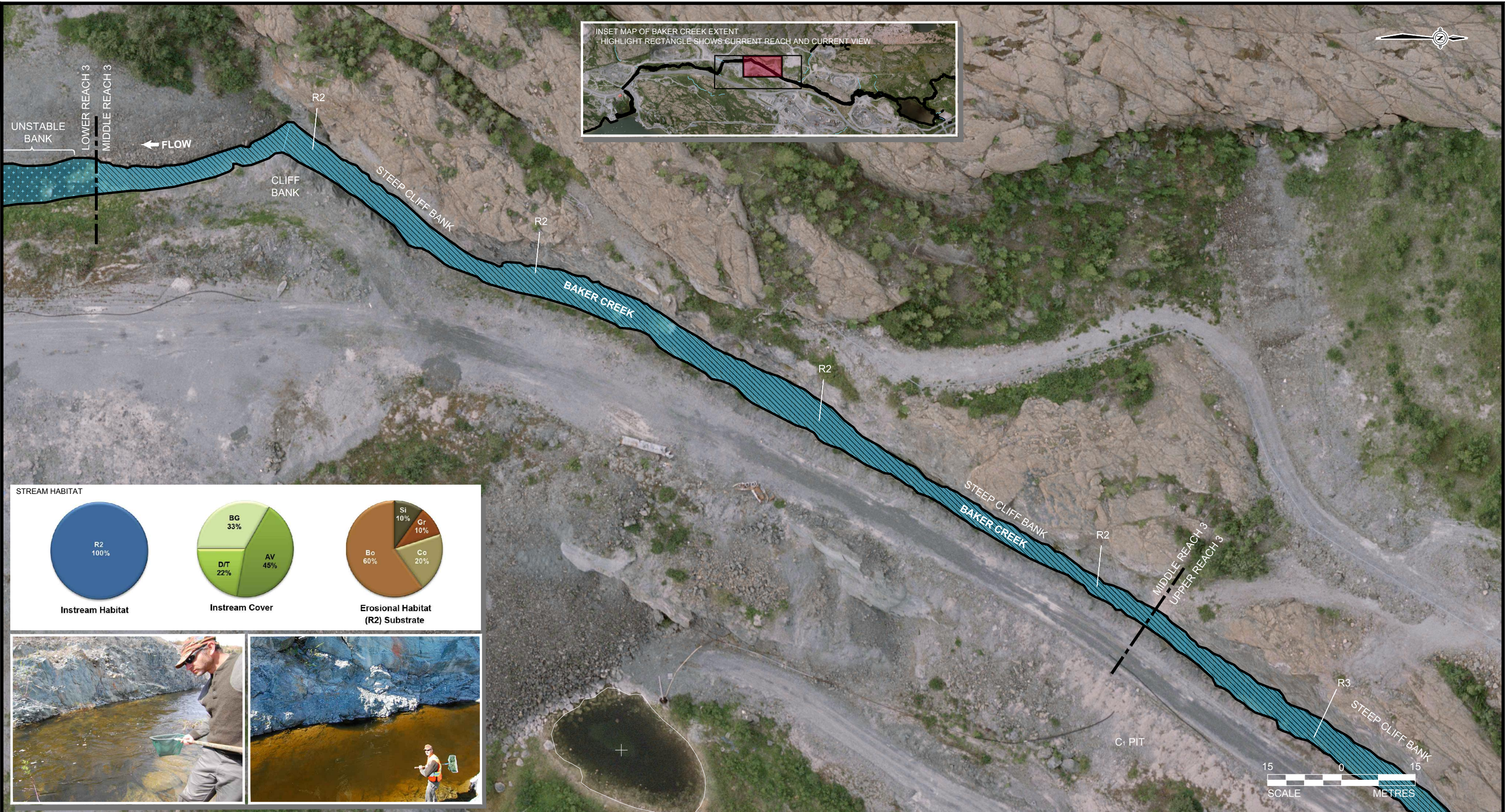
TITLE

FALL HABITAT OF BAKER CREEK  
UPPER REACH 3

PROJECT	10.1328.0024.5000	FILE No.	10132800245000A008
DESIGN	HM	28/10/10	SCALE AS SHOWN REV. 0
CADD	DLM	23/02/11	
CHECK			
REVIEW			

FIGURE: 9

L:\2010\1328\10-1328-0024\5000\Report A\FIG X 10132800245000A001 1 to 750 Feb 15 2011.dwg Feb 24, 2011 -- 6:58pm



LEGEND	
	FLAT
	POOL
	RIFFLE
	RUN

Channel Unit / Habitat Type:	
FA	Falls; Very Swift, Vertical Drop; Impassable to Fish
CA	Cascade; Very Swift, Turbulent; Passable to Fish
CH	Chute; Channel Restricted, Swift, Moderate Depth
RA	Rapids; Very Swift, Turbulent, Passable to Fish
RF	Riffle; Swift, Shallow, Turbulent
R1	Class 1 Run; Moderately Swift, Deep With Cover
R2	Class 2 Run; Moderately Swift, Moderate Depth and Cover
R3	Class 3 Run; Moderately Swift, Shallow, Limited Cover
F1	Class 1 Flat; Very Low Velocity, Deep With Moderate Cover
F2	Class 2 Flat; Very Low Velocity, Moderate Depth and Cover
F3	Class 3 Flat; Very Low Velocity, Shallow, Limited Cover
P1	Class 1 Scour Pool; Slow, Deep
WB	Watercourse Bank
WS	Watercourse, Small
W	Wetland

Channel Form:	
BR	Broad Channel Form
IN	Inised Channel Form
O	Open Channel Form

Substrate Particle Size:	
Or	Organic Material
Si	Silt (<0.06 mm)
Sa	Sand (0.06 to 2 mm)
Gr	Gravel (2 to 64 mm)
Co	Cobble (64 to 256 mm)
Bo	Boulder (>256 mm)
Be	Bedrock
Instream Cover:	
AV	Aquatic Vegetation
BG	Boulder Garden
D/T	Depth Turbulence
OV	Overhanging Vegetation
UC	Undercut Bank
WD	Woody Debris

MIDDLE REACH 3 LIFE STAGE					
SPECIES	ADULT FEEDING	SPAWNING	EGG INCUBATION	YOY REARING AGE 0+	JUVENILE REARING AGE 1+
Arctic grayling	Present	Present	Present	Abundant	Absent
Northern pike	Present	Absent	Absent	Present <sup>1</sup>	Absent
Longnose sucker	Abundant	Abundant	Present to Abundant	Present <sup>1</sup>	Rare

FISH INFORMATION BASED ON HISTORICAL DATA AND REVIEW OF 2010 FIELD SURVEYS

MIDDLE REACH 3 HABITAT - FALL 2010				
HABITAT TYPE	TOTAL LENGTH (m)	AVERAGE WETTED WIDTH (m)	AVERAGE BANKFUL WIDTH (m)	AVERAGE DEPTH (m)
R2	306.0	4.8	7.4	0.5 - 1.0

NOTES

- MINE PLAN INFORMATION PROVIDED BY AECOM, GIANT MINE REMEDIATION PROJECT COORDINATES (GMRP)
- ORTHOPHOTO - MR. SID FILE, PROVENANCE UNKNOWN, GMRP COORDINATES, FILE DATE NOV. 24, 2009
- HABITAT SURVEY CONDUCTED ON 24 SEPTEMBER 2010 DURING BASE FLOW CONDITIONS
- MAPPED HABITAT INFORMATION FROM JUNE-SEPTEMBER 2010 SURVEYS

PROJECT

INAC BAKER CREEK  
REMEDATION PROJECT

TITLE

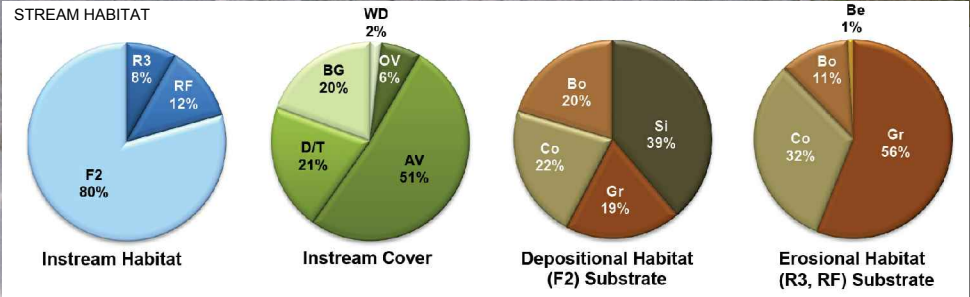
FALL HABITAT OF BAKER CREEK  
MIDDLE REACH 3

PROJECT 10.1328.0024.5000 FILE No. 10132800245000A007

DESIGN	HM	28/10/10	SCALE	AS SHOWN	REV.	0
CADD	DLM	23/02/11				
CHECK						
REVIEW						

FIGURE: 8

L:\2010\1328\10-1328-0024\5000\Report A\FIG X 10132800245000A001 1 to 750 Feb 15 2011.dwg Feb 24, 2011 - 6:58pm



**LEGEND**

	FLAT
	POOL
	RIFFLE
	RUN

**Channel Unit / Habitat Type:**

FA	Falls; Very Swift, Vertical Drop; Impassable to Fish
CA	Cascade; Very Swift, Turbulent; Passable to Fish
CH	Chute; Channel Restricted, Swift, Moderate Depth
RA	Rapids; Very Swift, Turbulent, Passable to Fish
RF	Riffle; Swift, Shallow, Turbulent
R1	Class 1 Run; Moderately Swift, Deep With Cover
R2	Class 2 Run; Moderately Swift, Moderate Depth and Cover
R3	Class 3 Run; Moderately Swift, Shallow, Limited Cover
F1	Class 1 Flat; Very Low Velocity, Deep With Moderate Cover
F2	Class 2 Flat; Very Low Velocity, Moderate Depth and Cover
F3	Class 3 Flat; Very Low Velocity, Shallow, Limited Cover
P1	Class 1 Scour Pool; Slow, Deep

**Channel Form:**

BR	Broad Channel Form
IN	Incised Channel Form
O	Open Channel Form

**Wetland**

**Substrate Particle Size:**

Or	Organic Material
Si	Silt (<0.06 mm)
Sa	Sand (0.06 to 2 mm)
Gr	Gravel (2 to 64 mm)
Co	Cobble (64 to 256 mm)
Bo	Boulder (>256 mm)
Be	Bedrock

**Instream Cover:**

AV	Aquatic Vegetation
BG	Boulder Garden
D/T	Depth Turbulence
OV	Overhanging Vegetation
UC	Undercut Bank
WD	Woody Debris

LOWER REACH 3 LIFE STAGE					
SPECIES	ADULT FEEDING	SPAWNING	EGG INCUBATION	YOY REARING AGE 0+	JUVENILE REARING AGE 1+
Arctic grayling	Abundant	Present	Present	Abundant	Absent
Northern pike	Present	Absent	Absent	Present	Present
Longnose sucker	Abundant	Absent	Absent	Present	Present

FISH INFORMATION BASED ON HISTORICAL DATA AND REVIEW OF 2010 FIELD SURVEYS

LOWER REACH 3 HABITAT - FALL 2010 - FALL 2010				
HABITAT TYPE	TOTAL LENGTH (m)	AVERAGE WETTED WIDTH (m)	AVERAGE BANKFUL WIDTH (m)	AVERAGE DEPTH (m)
R3	45.0	3.0	7.2	<0.5
RF	67.0	2.8	7.0	<0.3
F2	221.0	6.2	9.8	0.5 - 1.0

**NOTES**

- MINE PLAN INFORMATION PROVIDED BY AECOM, GIANT MINE REMEDIATION PROJECT COORDINATES (GMRP)
- ORTHOPHOTO - MR. SID FILE, PROVENANCE UNKNOWN, GMRP COORDINATES, FILE DATE NOV. 24, 2009
- HABITAT SURVEY CONDUCTED ON 24 SEPTEMBER 2010 DURING BASE FLOW CONDITIONS
- MAPPED HABITAT INFORMATION FROM JUNE-SEPTEMBER 2010 SURVEYS

PROJECT

INAC BAKER CREEK  
REMEDATION PROJECT

TITLE

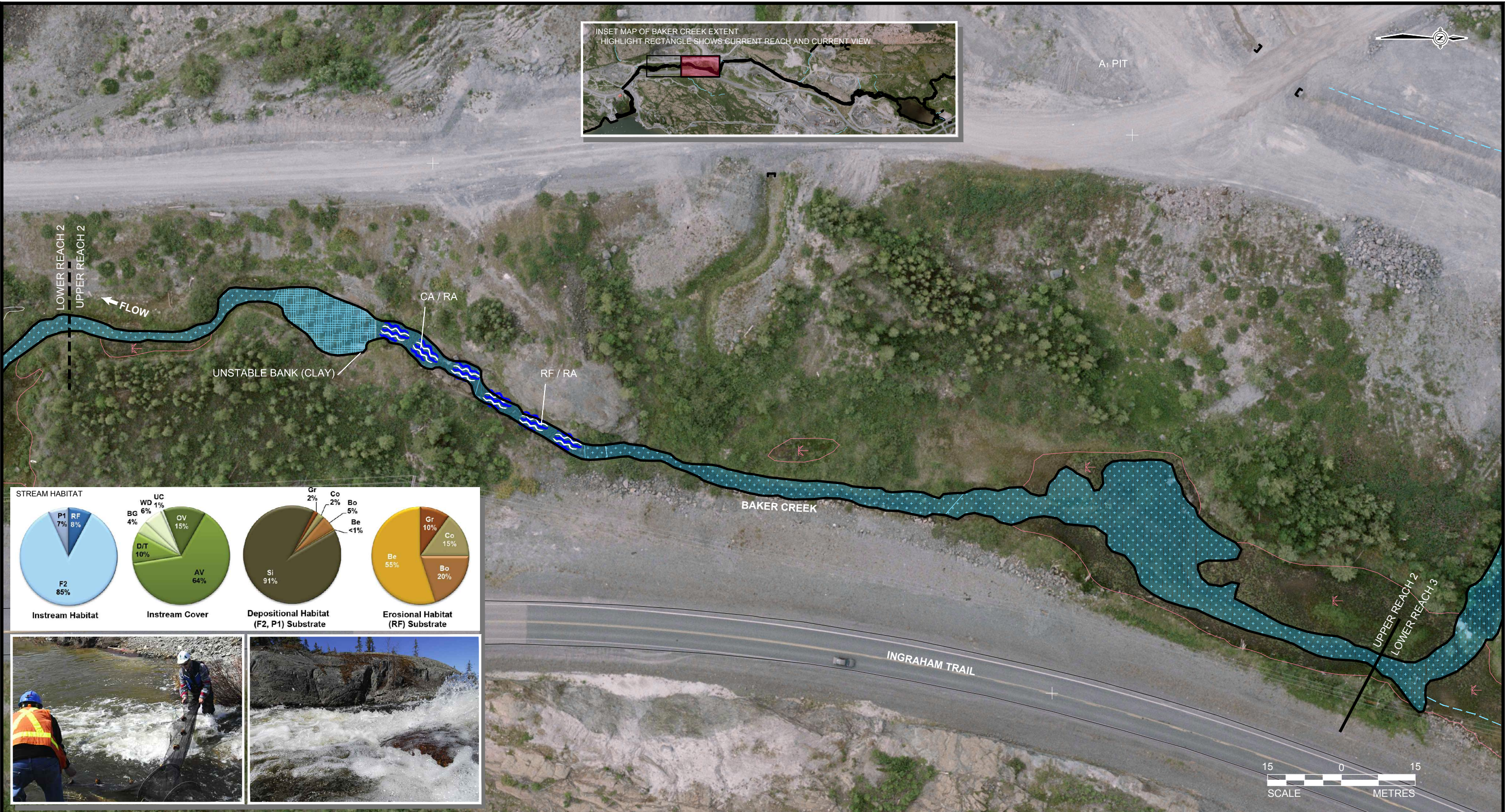
**FALL HABITAT OF BAKER CREEK  
LOWER REACH 3**

**Golder Associates**  
Calgary, Alberta

DESIGN	HM	28/10/10	SCALE	AS SHOWN	REV.	0
CADD	DLM	23/02/11				
CHECK						
REVIEW						

**FIGURE: 7**

L:\2010\1328\10-1328-0024\5000\Report A\FIG X 10132800245000A001 1 to 750 Feb 15 2011.dwg Feb 24, 2011 6:57pm



**LEGEND**

	FLAT
	POOL
	RIFFLE
	RUN

Watercourse Bank  
 Watercourse, Small  
 Wetland

**Channel Unit / Habitat Type:**

FA	Falls; Very Swift, Vertical Drop; Impassable to Fish
CA	Cascade; Very Swift, Turbulent; Passable to Fish
CH	Chute; Channel Restricted, Swift, Moderate Depth
RA	Rapids; Very Swift, Turbulent, Passable to Fish
RF	Riffle; Swift, Shallow, Turbulent
R1	Class 1 Run; Moderately Swift, Deep With Cover
R2	Class 2 Run; Moderately Swift, Moderate Depth and Cover
R3	Class 3 Run; Moderately Swift, Shallow, Limited Cover
F1	Class 1 Flat; Very Low Velocity, Deep With Moderate Cover
F2	Class 2 Flat; Very Low Velocity, Moderate Depth and Cover
F3	Class 3 Flat; Very Low Velocity, Shallow, Limited Cover
P1	Class 1 Scour Pool; Slow, Deep

**Channel Form:**

BR	Broad Channel Form
IN	Incised Channel Form
O	Open Channel Form

**Substrate Particle Size:**

Or	Organic Material
Si	Silt (<0.06 mm)
Sa	Sand (0.06 to 2 mm)
Gr	Gravel (2 to 64 mm)
Co	Cobble (64 to 256 mm)
Bo	Boulder (>256 mm)
Be	Bedrock

**Instream Cover:**

AV	Aquatic Vegetation
BG	Boulder Garden
D/T	Depth Turbulence
OV	Overhanging Vegetation
UC	Undercut Bank
WD	Woody Debris

UPPER REACH 2 LIFE STAGE					
SPECIES	ADULT FEEDING	SPAWNING	EGG INCUBATION	YOY REARING AGE 0+	JUVENILE REARING AGE 1+
Arctic grayling	Present	Present	Present	Present	Absent
Northern pike	Present	Absent	Absent	Present	Present
Longnose sucker	Present	Absent	Absent	Present	Absent

FISH INFORMATION BASED ON HISTORICAL DATA AND REVIEW OF 2010 FIELD SURVEYS

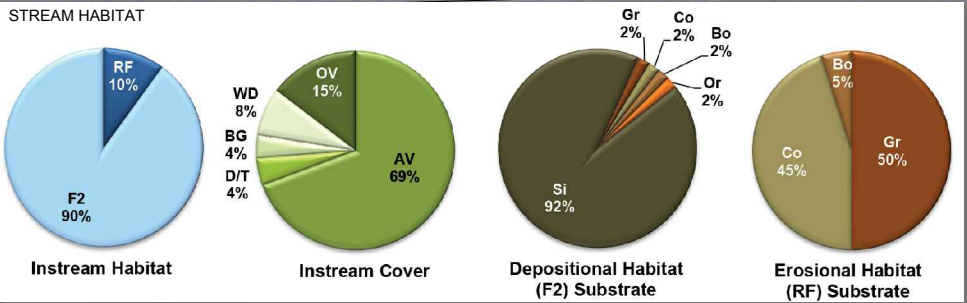
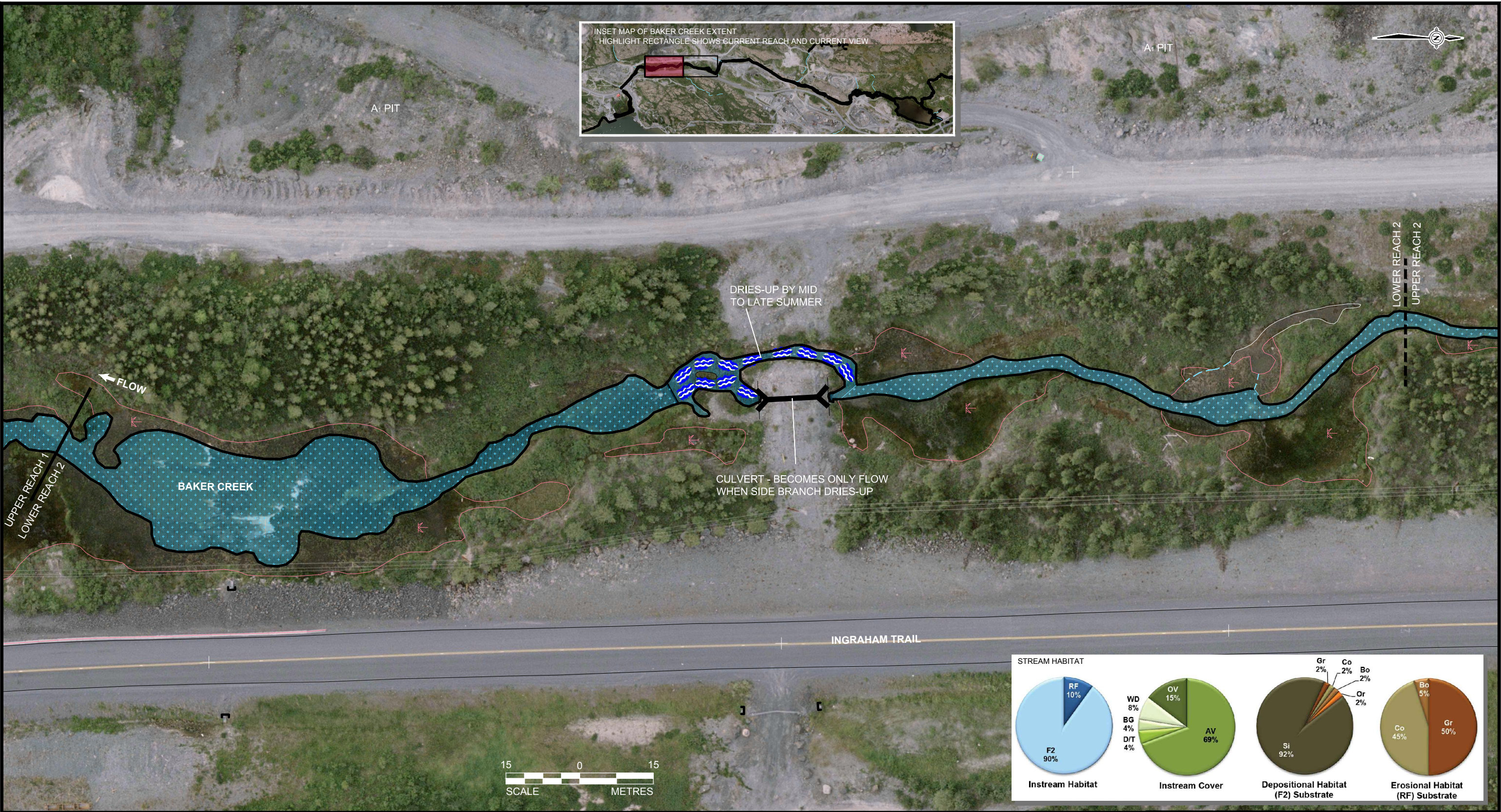
UPPER REACH 2 HABITAT - FALL 2010				
HABITAT TYPE	TOTAL LENGTH (m)	AVERAGE WETTED WIDTH (m)	AVERAGE BANKFUL WIDTH (m)	AVERAGE DEPTH (m)
RF	49.0	3.1	6.3	< 0.3
F2	221.0	7.2	13.3	0.5 - 1.0
P1	20.0	6.6	9.2	> 1.0

**NOTES**

- MINE PLAN INFORMATION PROVIDED BY AECOM, GIANT MINE REMEDIATION PROJECT COORDINATES (GMRP)
- ORTHO PHOTO - MR. SID FILE, PROVENANCE UNKNOWN, GMRP COORDINATES, FILE DATE NOV. 24, 2009
- HABITAT SURVEY CONDUCTED ON 24 SEPTEMBER 2010 DURING BASE FLOW CONDITIONS
- MAPPED HABITAT INFORMATION FROM JUNE-SEPTEMBER 2010 SURVEYS

PROJECT		INAC BAKER CREEK REMEDIATION PROJECT			
TITLE		FALL HABITAT OF BAKER CREEK UPPER REACH 2			
		PROJECT	10.1328.0024.5000	FILE No.	10132800245000A005
		DESIGN	HM	28/10/10	SCALE AS SHOWN
		CADD	DLM	23/02/11	REV. 0
		CHECK			
		REVIEW			
FIGURE: 6					

L:\2010\1328\10-1328-0024\5000\Report A\FIG X 10132800245000A001 1 to 750 Feb 15 2011.dwg Feb 24, 2011 - 6:57pm



**LEGEND**

**Channel Unit / Habitat Type:**

- FA Falls; Very Swift, Vertical Drop; Impassable to Fish
- CA Cascade; Very Swift, Turbulent; Passable to Fish
- CH Chute; Channel Restricted, Swift, Moderate Depth
- RA Rapids; Very Swift, Turbulent, Passable to Fish
- RF Riffle; Swift, Shallow, Turbulent
- R1 Class 1 Run; Moderately Swift, Deep With Cover
- R2 Class 2 Run; Moderately Swift, Moderate Depth and Cover
- R3 Class 3 Run; Moderately Swift, Shallow, Limited Cover
- F1 Class 1 Flat; Very Low Velocity, Deep With Moderate Cover
- F2 Class 2 Flat; Very Low Velocity, Moderate Depth and Cover
- F3 Class 3 Flat; Very Low Velocity, Shallow, Limited Cover
- P1 Class 1 Scour Pool; Slow, Deep
- Watercourse Bank
- Watercourse, Small
- Wetland

**Channel Form:**

- BR Broad Channel Form
- IN Incised Channel Form
- O Open Channel Form

**Substrate Particle Size:**

- Or Organic Material
- Si Silt (<0.06 mm)
- Sa Sand (0.06 to 2 mm)
- Gr Gravel (2 to 64 mm)
- Co Cobble (64 to 256 mm)
- Bo Boulder (>256 mm)
- Be Bedrock
- AV Aquatic Vegetation
- BG Boulder Garden
- D/T Depth Turbulence
- OV Overhanging Vegetation
- UC Undercut Bank
- WD Woody Debris

LOWER REACH 2 LIFE STAGE					
SPECIES	ADULT FEEDING	SPAWNING	EGG INCUBATION	YOY REARING AGE 0+	JUVENILE REARING AGE 1+
Arctic grayling	Present	Present	Present	Present	Absent
Northern pike	Present	Absent	Absent	Present	Present
Longnose sucker	Present	Present?	Unknown	Present	Absent

FISH INFORMATION BASED ON HISTORICAL DATA AND REVIEW OF 2010 FIELD SURVEYS

LOWER REACH 2 HABITAT - FALL 2010				
HABITAT TYPE	TOTAL LENGTH (m)	AVERAGE WETTED WIDTH (m)	AVERAGE BANKFUL WIDTH (m)	AVERAGE DEPTH (m)
RF	39.0	2.9	12.8	< 0.3
F2	336.0	3.2	21.5	0.5 - 1.0

**NOTES**


- MINE PLAN INFORMATION PROVIDED BY AECOM, GIANT MINE REMEDIATION PROJECT COORDINATES (GMRP)
- ORTHOPHOTO - MR. SID FILE, PROVENANCE UNKNOWN, GMRP COORDINATES, FILE DATE NOV. 24, 2009
- HABITAT SURVEY CONDUCTED ON 24 SEPTEMBER 2010 DURING BASE FLOW CONDITIONS
- MAPPED HABITAT INFORMATION FROM JUNE-SEPTEMBER 2010 SURVEYS

PROJECT

INAC BAKER CREEK  
REMEDATION PROJECT

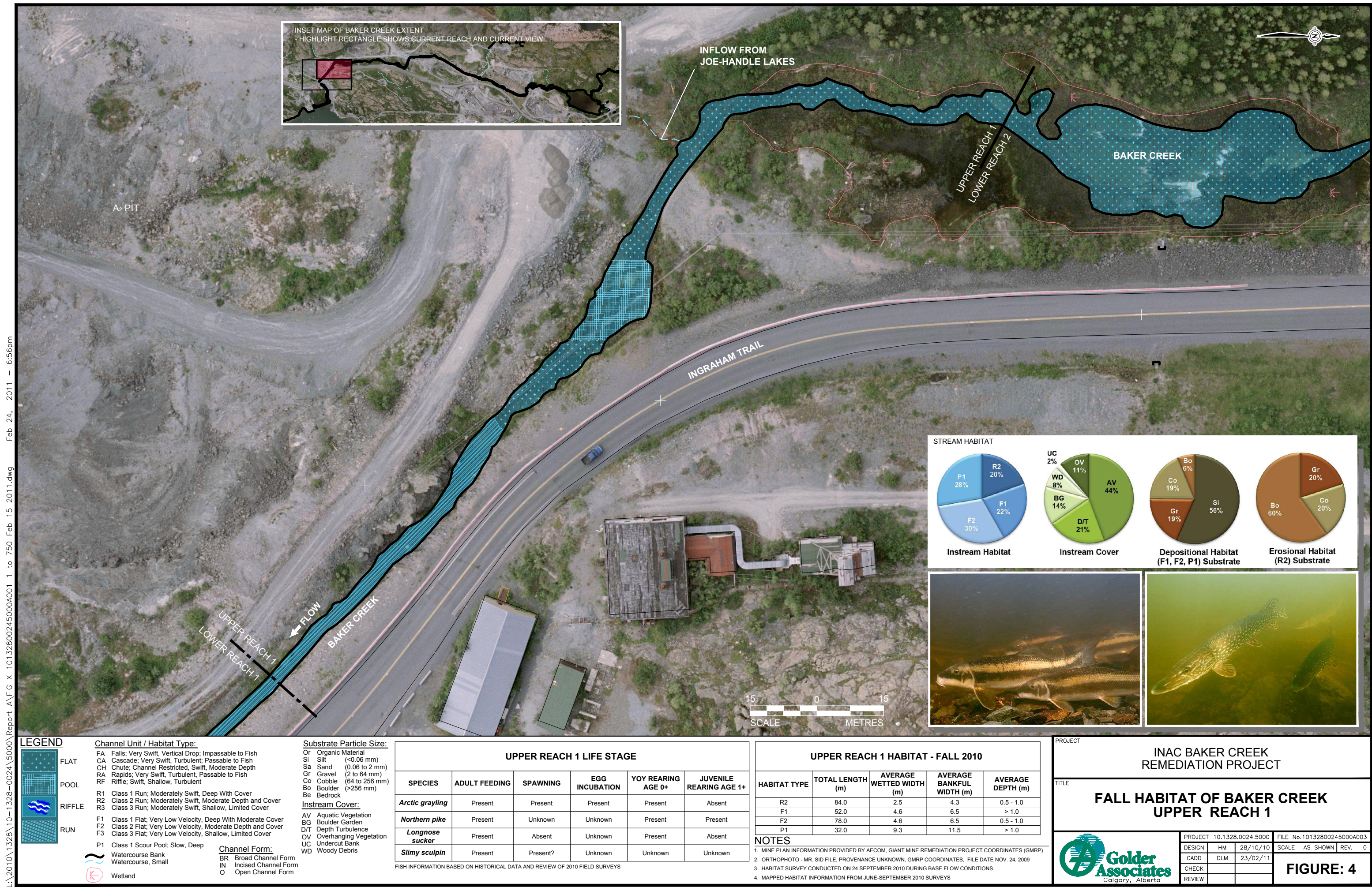
TITLE

**FALL HABITAT OF BAKER CREEK  
LOWER REACH 2**

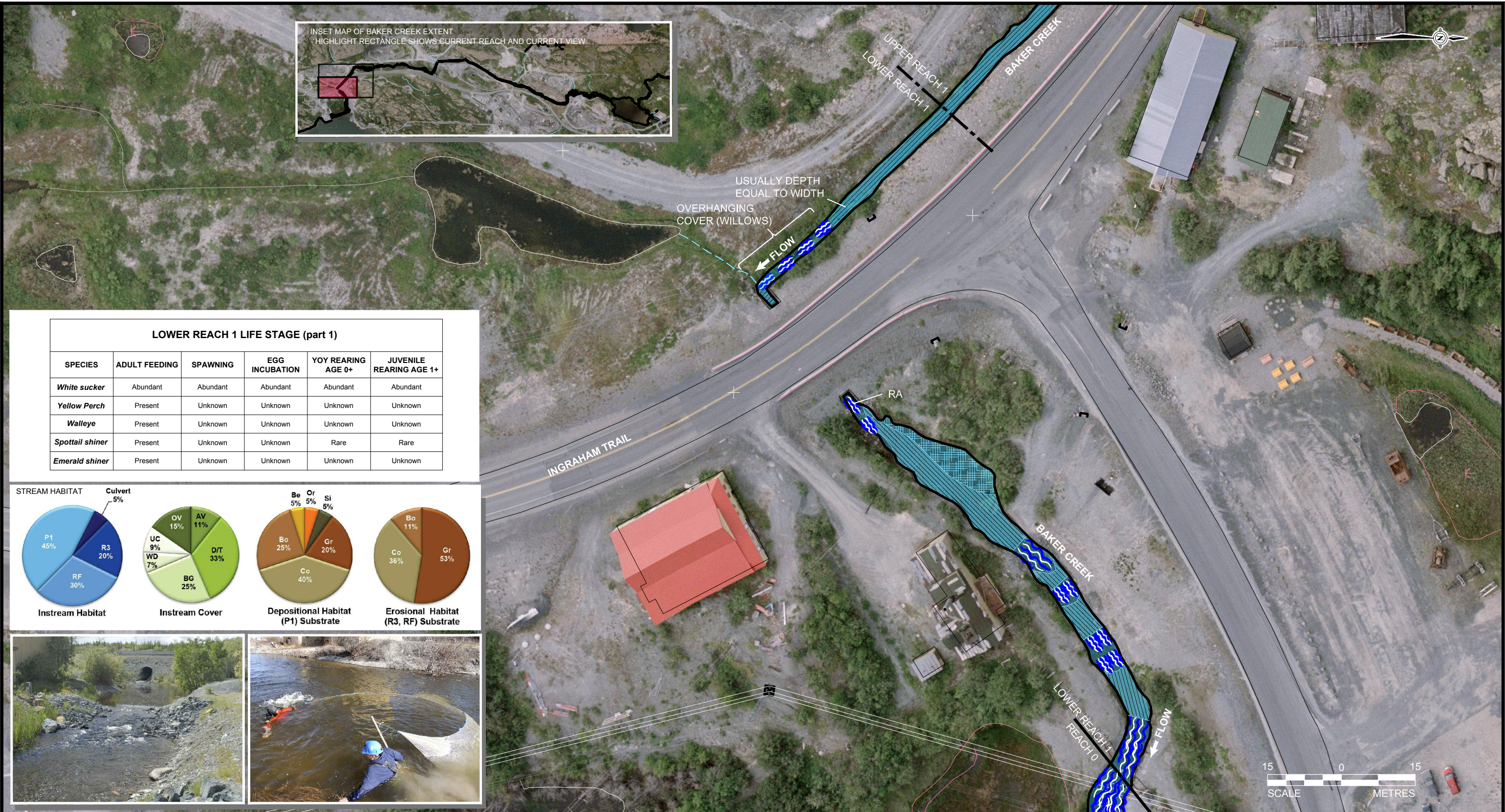
 **Golder Associates**  
Calgary, Alberta

PROJECT	10.1328.0024.5000	FILE	No.10132800245000A004
DESIGN	HM	28/10/10	SCALE AS SHOWN
CADD	DLM	23/02/11	REV. 0
CHECK			
REVIEW			

**FIGURE: 5**



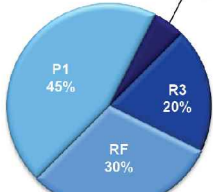
L:\2010\1328\10-1328-0024\5000\Report A\FIG X 10132800245000A001 1 to 750 Feb 15 2011.dwg Feb 24, 2011 - 6:56pm



LOWER REACH 1 LIFE STAGE (part 1)

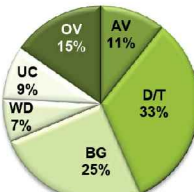
SPECIES	ADULT FEEDING	SPAWNING	EGG INCUBATION	YOY REARING AGE 0+	JUVENILE REARING AGE 1+
White sucker	Abundant	Abundant	Abundant	Abundant	Abundant
Yellow Perch	Present	Unknown	Unknown	Unknown	Unknown
Walleye	Present	Unknown	Unknown	Unknown	Unknown
Spottail shiner	Present	Unknown	Unknown	Rare	Rare
Emerald shiner	Present	Unknown	Unknown	Unknown	Unknown

STREAM HABITAT

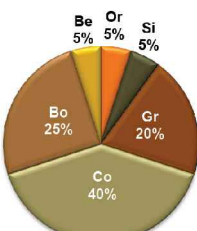


Instream Habitat

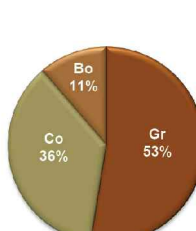
Culvert



Instream Cover



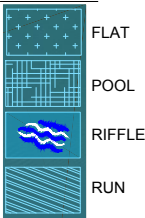
Depositional Habitat (P1) Substrate



Erosional Habitat (R3, RF) Substrate



LEGEND



Channel Unit / Habitat Type:

FA	Falls; Very Swift, Vertical Drop; Impassable to Fish
CA	Cascade; Very Swift, Turbulent; Passable to Fish
CH	Chute; Channel Restricted, Swift, Moderate Depth
RA	Rapids; Very Swift, Turbulent, Passable to Fish
RF	Riffle; Swift, Shallow, Turbulent
R1	Class 1 Run; Moderately Swift, Deep With Cover
R2	Class 2 Run; Moderately Swift, Moderate Depth and Cover
R3	Class 3 Run; Moderately Swift, Shallow, Limited Cover
F1	Class 1 Flat; Very Low Velocity, Deep With Moderate Cover
F2	Class 2 Flat; Very Low Velocity, Moderate Depth and Cover
F3	Class 3 Flat; Very Low Velocity, Shallow, Limited Cover
P1	Class 1 Scour Pool; Slow, Deep
WB	Watercourse Bank
WS	Watercourse, Small
W	Wetland

Channel Form:

BR	Broad Channel Form
IN	Incised Channel Form
O	Open Channel Form

Substrate Particle Size:

Or	Organic Material
Si	Silt (<0.06 mm)
Sa	Sand (0.06 to 2 mm)
Gr	Gravel (2 to 64 mm)
Co	Cobble (64 to 256 mm)
Bo	Boulder (>256 mm)
Be	Bedrock
AV	Aquatic Vegetation
BG	Boulder Garden
D/T	Depth Turbulence
OV	Overhanging Vegetation
UC	Undercut Bank
WD	Woody Debris

LOWER REACH 1 LIFE STAGE (part 2)

SPECIES	ADULT FEEDING	SPAWNING	EGG INCUBATION	YOY REARING AGE 0+	JUVENILE REARING AGE 1+
Arctic grayling	Abundant	Present	Present	Abundant	Absent
Northern pike	Abundant	Abundant	Absent	Abundant	Present
Lake whitefish	Present	Absent	Absent	Absent	Absent
Longnose sucker	Abundant	Abundant	Abundant	Abundant	Abundant
Slimy sculpin	Present	Unknown	Unknown	Unknown	Unknown

FISH INFORMATION BASED ON HISTORICAL DATA AND REVIEW OF 2010 FIELD SURVEYS

LOWER REACH 1 HABITAT - FALL 2010

HABITAT TYPE	TOTAL LENGTH (m)	AVERAGE WETTED WIDTH (m)	AVERAGE BANKFUL WIDTH (m)	AVERAGE DEPTH (m)
R3	29.0	4.2	6.0	< 0.5
RF	59.4	3.2	6.2	< 0.3
P1	39.0	7.1	8.8	> 1.0
Culvert	31.0	1.0	2.0	< 0.3

NOTES

1. MINE PLAN INFORMATION PROVIDED BY AECOM, GIANT MINE REMEDIATION PROJECT COORDINATES (GMRP)
2. ORTHOPHOTO - MR. SID FILE, PROVENANCE UNKNOWN, GMRP COORDINATES, FILE DATE NOV. 24, 2009
3. HABITAT SURVEY CONDUCTED ON 24 SEPTEMBER 2010 DURING BASE FLOW CONDITIONS
4. MAPPED HABITAT INFORMATION FROM JUNE-SEPTEMBER 2010 SURVEYS

PROJECT

INAC BAKER CREEK  
REMEDATION PROJECT

TITLE

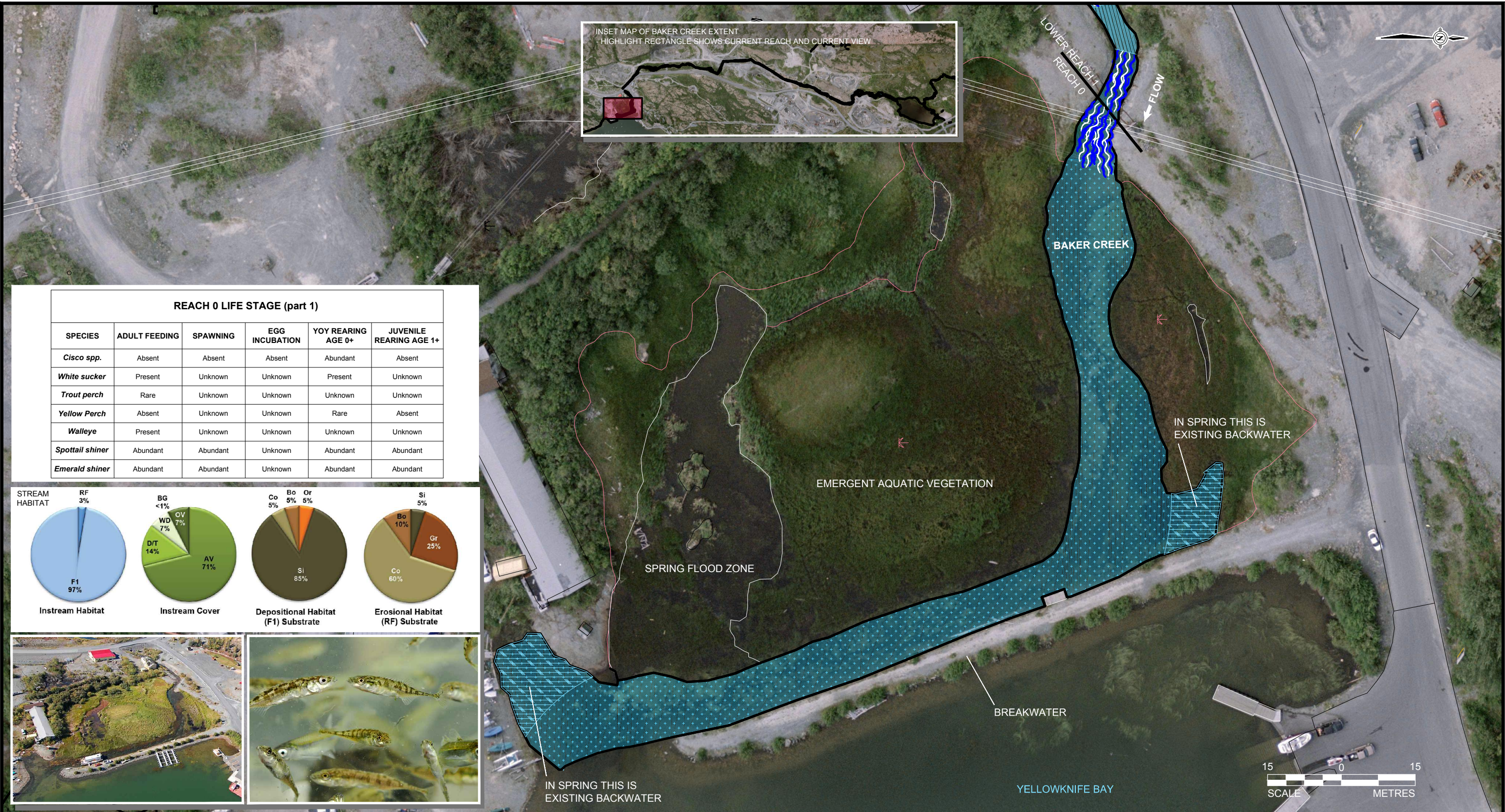
FALL HABITAT OF BAKER CREEK  
LOWER REACH 1



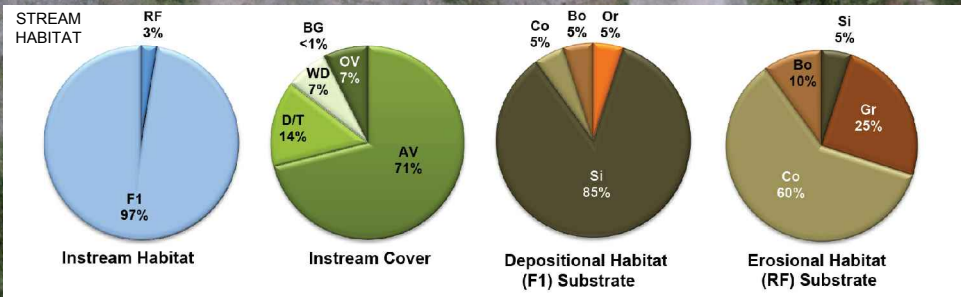
PROJECT	10.1328.0024.5000	FILE No.	10132800245000A002
DESIGN	HM	28/10/10	SCALE AS SHOWN REV. 0
CADD	DLM	23/02/11	
CHECK			
REVIEW			

FIGURE: 3

L:\2010\1328\10-1328-0024\5000\Report A\FIG X 10132800245000A001 1 to 750 Feb 15 2011.dwg Feb 24, 2011 6:55pm



REACH 0 LIFE STAGE (part 1)					
SPECIES	ADULT FEEDING	SPAWNING	EGG INCUBATION	YOY REARING AGE 0+	JUVENILE REARING AGE 1+
Cisco spp.	Absent	Absent	Absent	Abundant	Absent
White sucker	Present	Unknown	Unknown	Present	Unknown
Trout perch	Rare	Unknown	Unknown	Unknown	Unknown
Yellow Perch	Absent	Unknown	Unknown	Rare	Absent
Walleye	Present	Unknown	Unknown	Unknown	Unknown
Spottail shiner	Abundant	Abundant	Unknown	Abundant	Abundant
Emerald shiner	Abundant	Abundant	Unknown	Abundant	Abundant



LEGEND	
	FLAT
	POOL
	RIFFLE
	RUN

Channel Unit / Habitat Type:	
FA	Falls; Very Swift, Vertical Drop; Impassable to Fish
CA	Cascade; Very Swift, Turbulent; Passable to Fish
CH	Chute; Channel Restricted, Swift, Moderate Depth
RA	Rapids; Very Swift, Turbulent, Passable to Fish
RF	Riffle; Swift, Shallow, Turbulent
R1	Class 1 Run; Moderately Swift, Deep With Cover
R2	Class 2 Run; Moderately Swift, Moderate Depth and Cover
R3	Class 3 Run; Moderately Swift, Shallow, Limited Cover
F1	Class 1 Flat; Very Low Velocity, Deep With Moderate Cover
F2	Class 2 Flat; Very Low Velocity, Moderate Depth and Cover
F3	Class 3 Flat; Very Low Velocity, Shallow, Limited Cover
P1	Class 1 Scour Pool; Slow, Deep
Channel Form:	
BR	Broad Channel Form
IN	Incised Channel Form
O	Open Channel Form
Substrate Particle Size:	
Or	Organic Material
Si	Silt (<0.06 mm)
Sa	Sand (0.06 to 2 mm)
Gr	Gravel (2 to 64 mm)
Co	Cobble (64 to 256 mm)
Bo	Boulder (>256 mm)
Be	Bedrock
Instream Cover:	
AV	Aquatic Vegetation
BG	Boulder Garden
D/T	Depth Turbulence
OV	Overhanging Vegetation
UC	Undercut Bank
WD	Woody Debris

REACH 0 LIFE STAGE (part 2)					
SPECIES	ADULT FEEDING	SPAWNING	EGG INCUBATION	YOY REARING AGE 0+	JUVENILE REARING AGE 1+
Arctic grayling	Present	Present	Present	Abundant	Absent
Northern pike	Abundant	Abundant	Abundant	Abundant	Abundant
Lake whitefish	Present	Absent	Absent	Abundant	Absent
Longnose sucker	Abundant	Abundant	Present	Abundant	Present
Slimy sculpin	Present	Present	Present	Unknown	Unknown

REACH 0 HABITAT				
HABITAT TYPE	TOTAL LENGTH (m)	AVERAGE WETTED WIDTH (m)	AVERAGE BANKFUL WIDTH (m)	AVERAGE DEPTH (m)
RF	17.0	3.9	6.8	<0.3
F1	195.0	12.5	40.0	>1.0

NOTES

- MINE PLAN INFORMATION PROVIDED BY AECOM, GIANT MINE REMEDIATION PROJECT COORDINATES (GMRP)
- ORTHOPHOTO - MR. SID FILE, PROVENANCE UNKNOWN, GMRP COORDINATES, FILE DATE NOV. 24, 2009
- HABITAT SURVEY CONDUCTED ON 24 SEPTEMBER 2010 DURING BASE FLOW CONDITIONS
- MAPPED HABITAT INFORMATION FROM JUNE-SEPTEMBER 2010 SURVEYS

PROJECT

INAC BAKER CREEK  
REMEDATION PROJECT

TITLE

**FALL HABITAT OF BAKER CREEK  
REACH 0**

Calgary, Alberta

PROJECT	10.1328.0024.5000	FILE No.	10132800245000A001
DESIGN	HM	28/10/10	SCALE AS SHOWN REV. 0
CADD	DLM	23/02/11	
CHECK			
REVIEW			

**FIGURE: 2**