

Licence Application for East Tip, Haulbowline Island

Project Update
24/02/2012



An aerial photograph of a coastal industrial or port area. The image shows a large body of water in the foreground, with a sea breach visible. In the background, there are several large industrial buildings, a green field, and a large ship docked at a pier. The overall scene is a mix of natural and man-made elements.

Presentation Outline

1. Project Overview (Milestones)
2. Repair of Sea Breach
3. Visit of EC Delegation
4. Update on Phases I - III
5. Update on Phases IV & V
6. Project Timelines
7. Project Expenditure

1. Project Overview (Milestones)

- 28th October – Meeting of Technical Working Group, County Hall.
- 2nd November – Information dissemination seminar in Naval Dockyard.
- 9th November – Deadline for framework Pre-Qualification Questionnaires.
- 11th November – Report under Article 2(3) of EIA Directive finalised.
- 21st November – Repair works to sea breaches (2 no.) completed.
- 23rd November – EU delegation and NGOs visit site.
- 25th November – An Taoiseach visits site.
- 12th December – Deadline for submission of framework tenders.

1. Project Overview (Milestones) contd.

- 19th December – Minister Coveney interviewed by RTÉ on East Tip. Interview aired 3rd January 2012.
- 19th December – Cork County Council factual report finalised (29 no. reports reviewed).
- 20th December – Geophysical Survey Report finalised.
- 21st December – Successful and unsuccessful applicants to framework notified (10th January 2012 – end of standstill period).
- 17th January - SKM appointed as the single-operator under the framework agreement.
- 24th January - Arup, Mott MacDonald, RPS, Verdé and WYG appointed as operators under the Lot 2 framework agreement.
- 7th February – contract signed with WYG EPT to undertake dQRA.

2. Repair of Sea Breach



2. Repair of Sea Breach



08.10.2010

2. Repair of Sea Breach

Haulbowline East Tip – Sea Breach Environmental Report



Cork County Council

Haulbowline Island,
East Tip Sea Breach,
Emergency Backfilling Works.

Environmental Report

WYG Environmental and Planning (Ireland) Ltd

10/11/2011

WYG Ireland part of the WYG Group

creative minds safe hands

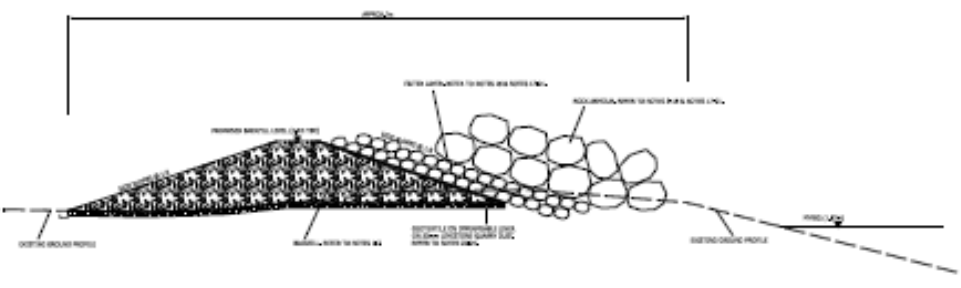
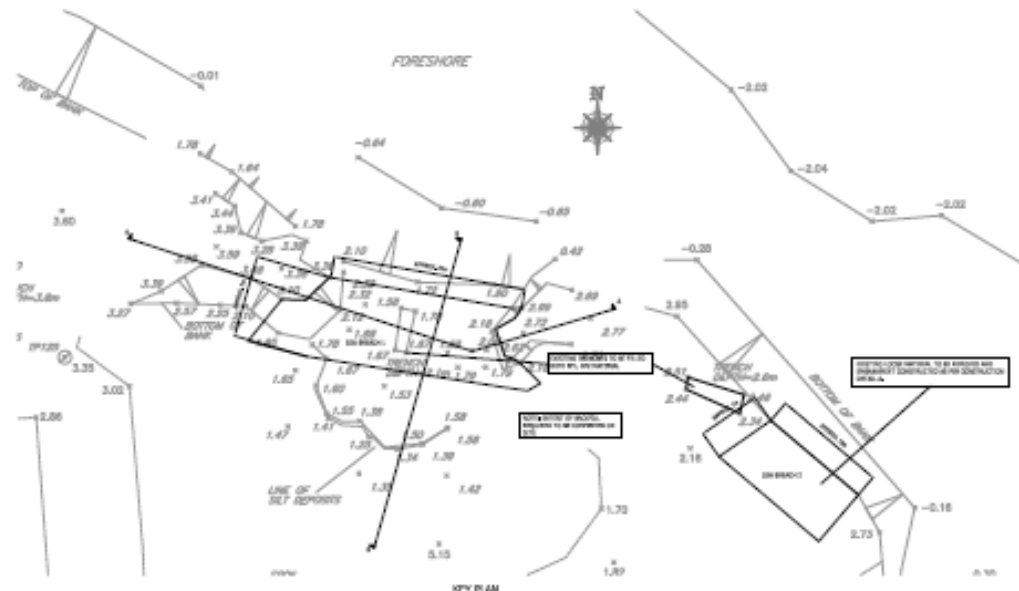
www.wyg.com/ireland

Conclusions

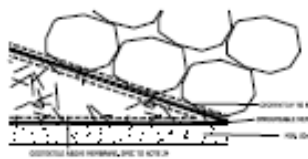
The proposed sea breach emergency works will break the linkage between the sea water and the excavations on the East tip and eliminate any potential of contamination to the local environment occurring due to this linkage.

In terms of the work being an 'exceptional case' under Article 2(3) the failure to progress these works is likely to present the risk of contamination of surface water though periodic flooding of the East Tip during high tide and/or storm events.

2. Repair of Sea Breach

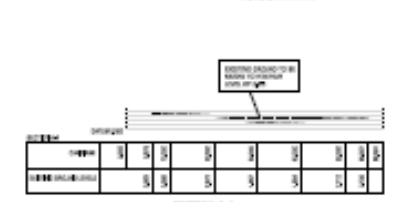


DETAIL A TYPICAL BRANCH SECTION



DETAIL B BLOW UP OF GEOTEXTILE & MEMBRANE DETAILS

- GENERAL NOTES:**
1. ALL MATERIAL FOR USE IN REPAIRING THE SEA BREACH SHALL BE APPROVED BY THE DISTRICT ENGINEER FOR ROADWORKS AND SHALL BE TO THE NEW SPECIFICATION FOR ROADWORKS UNLESS OTHERWISE STATED.
 2. THE SECTION WHICH THE FILL MATERIAL IS TO BE DEPOSITED SHALL BE PREPARED BY REMOVING ANY UNDESIRABLE MATERIAL, FORMING A LEVEL AREA, COMPACTED TO A MINIMUM DEPTH OF 100MM AND COMPACTED IN ACCORDANCE WITH THE SPECIFICATION FOR ROADWORKS. ALL MATERIAL SHALL BE DEPOSITED IN LAYERS OF COMPACTED THICKNESS NOT GREATER THAN 150MM.
 3. ALL FILL MATERIAL SHALL BE DEPOSITED IN COMPACTED LAYERS OF NOT MORE THAN 150MM THICK AND COMPACTED WITH MECHANICAL VIBRATION.
 4. ALL MATERIAL SHALL NOT BE DEPOSITED IN EXPOSURE OR BY PILING LOOSE MATERIAL OVER AN OPEN FILL OF 100MM OR MORE UNLESS IT IS PROTECTED BY A SURFACE COURSE OF 100MM THICK COMPACTED TO THE FULL SPECIFICATION FOR ROADWORKS.
 5. ALL DEPOSITED FILL MATERIAL SHALL BE SPREAD OUT IN A UNIFORM AND EVEN TO CONSTRUCTION.
 6. ALL MATERIAL SHALL BE COMPACTED IN ORDER TO BRING DOWN TO THE CORRECT LEVEL AS PRACTICABLE AFTER DEPOSITED AND IS SHOWN APPROPRIATE TO THE LOCATION AND TO THE MATERIAL TO BE COMPACTED.
 7. ALL FILLING AND ALL SORTS OF COMPACTED FILL SHALL BE INSPECTED AND APPROVED PRIOR TO DEPOSITING OF THE NEXT LIFT.
- REINFORCEMENT:**
8. REINFORCEMENT SHALL BE USED TO BRING DOWN TO THE CORRECT LEVEL AS PRACTICABLE AFTER DEPOSITED AND IS SHOWN APPROPRIATE TO THE LOCATION AND TO THE MATERIAL TO BE COMPACTED.
 9. THE REINFORCEMENT SHALL BE USED TO BRING DOWN TO THE CORRECT LEVEL AS PRACTICABLE AFTER DEPOSITED AND IS SHOWN APPROPRIATE TO THE LOCATION AND TO THE MATERIAL TO BE COMPACTED.
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 15. THE REINFORCEMENT SHALL BE USED TO BRING DOWN TO THE CORRECT LEVEL AS PRACTICABLE AFTER DEPOSITED AND IS SHOWN APPROPRIATE TO THE LOCATION AND TO THE MATERIAL TO BE COMPACTED.



NO.	DESCRIPTION	QTY	UNIT	PRICE	TOTAL
1	REPAIR OF SEA BREACH				
2	REPAIR OF SEA BREACH				
3	REPAIR OF SEA BREACH				
4	REPAIR OF SEA BREACH				
5	REPAIR OF SEA BREACH				
6	REPAIR OF SEA BREACH				
7	REPAIR OF SEA BREACH				
8	REPAIR OF SEA BREACH				
9	REPAIR OF SEA BREACH				
10	REPAIR OF SEA BREACH				

PREPARED BY: [Signature]
 CHECKED BY: [Signature]
 DATE: 11/17/2011

PROJECT: REPAIR OF SEA BREACH AREA
 SHEET: 11 OF 11

NO.	DESCRIPTION	QTY	UNIT	PRICE	TOTAL
1	REPAIR OF SEA BREACH				
2	REPAIR OF SEA BREACH				
3	REPAIR OF SEA BREACH				
4	REPAIR OF SEA BREACH				
5	REPAIR OF SEA BREACH				
6	REPAIR OF SEA BREACH				
7	REPAIR OF SEA BREACH				
8	REPAIR OF SEA BREACH				
9	REPAIR OF SEA BREACH				
10	REPAIR OF SEA BREACH				



W&J ENGINEERING & CONSTRUCTION
 1117 W. WA
 WA 98148
 TEL: 206-465-1117
 FAX: 206-465-1118
 WWW: www.wandj.com

2. Repair of Sea Breach



2. Repair of Sea Breach



2. Repair of Sea Breach



2. Repair of Sea Breach



2. Repair of Sea Breach



No subsequent flooding
Cost = €36,900

Aerial Photography courtesy
of SkyTec Ireland

3. Visit of EC Delegation

1. 23rd November 2011 progress inspection by EC Delegation (Jean-François Brakeland, Head of Unit, DG Environment and Antoinette Long)
2. Visit hosted by Cork County Council and facilitated by the
3. Also present were Mary O'Leary (CHASE) and Tony Lowes (FOIE)
4. Presentation followed by site walkover and inspection of repair works
5. DoEHLG update

4. Update on Phases I – III

as presented on 19/08/2011

Phase I: Desk Study and Conceptual Site Model

- Review all historical reports pertaining to the site and collate all relevant data
- Prepare CSM
- Initiate contact with EPA
- Formulate potential design solutions
- Scope site investigations and structure of licence application
- Project planning (i.e. Gantt Chart)
- Identify external consultancy services and contractors required
- Prepare tender documents

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4. Update on Phases I – III

as presented on 19/08/2011

Phase I: Desk Study and Conceptual Site Model

- Review all historical reports pertaining to the site and collate all relevant data
 - Factual Report – 2 Volumes
 - a consolidated report of the investigations and studies that have been carried out to date on the East Tip (29 no.).
 - a factual report and any observations or conclusions contained there-in do not represent the opinion of Cork County Council but are those of the authors of the respective primary source documents.
 - peer reviewed.
 - Geographical Information System (GIS)
 - graphical representation

1897

1897



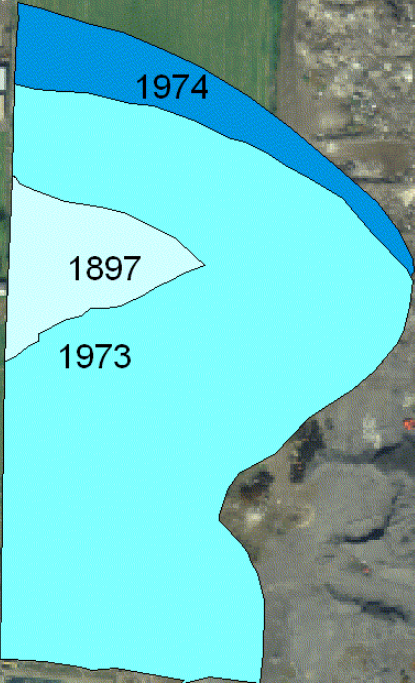
1973

1897

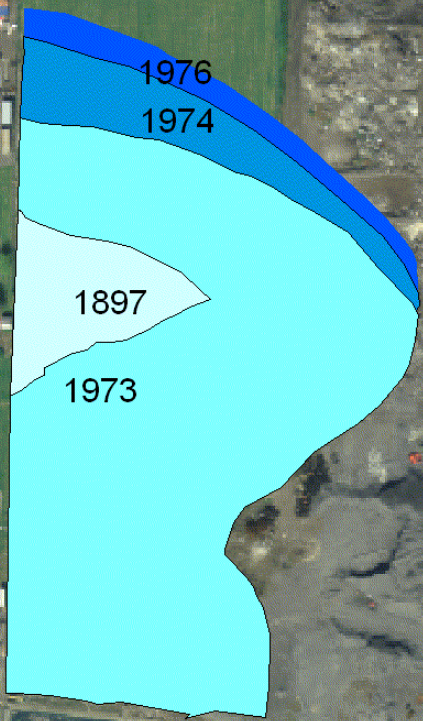
1973



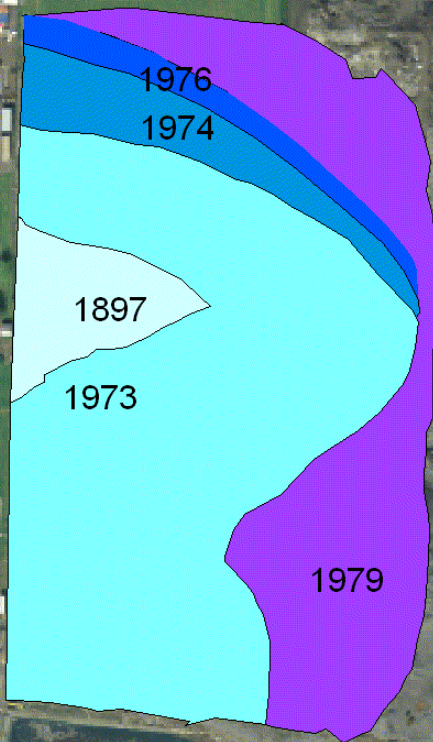
1974



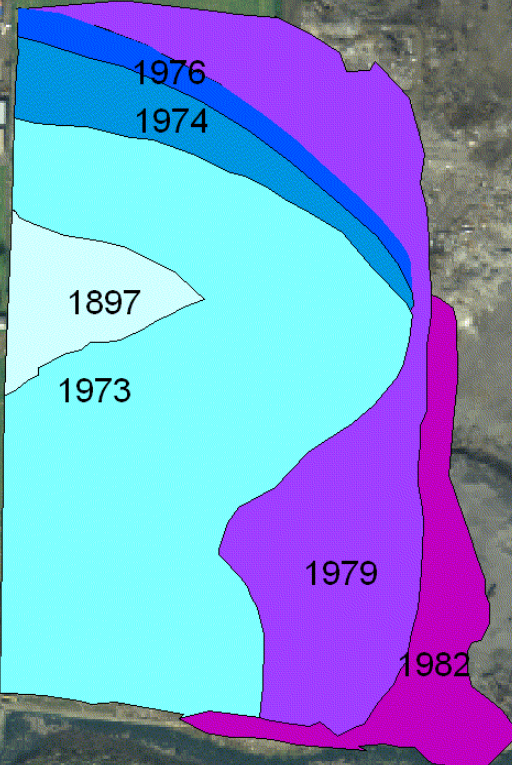
1976



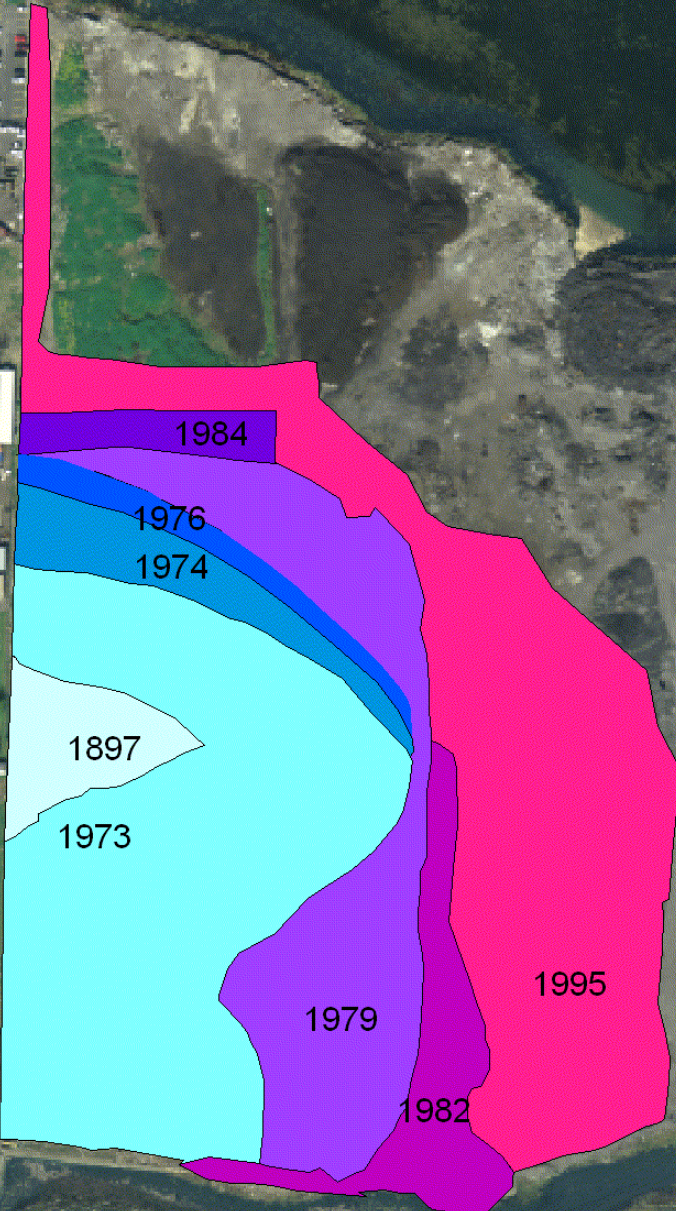
1979



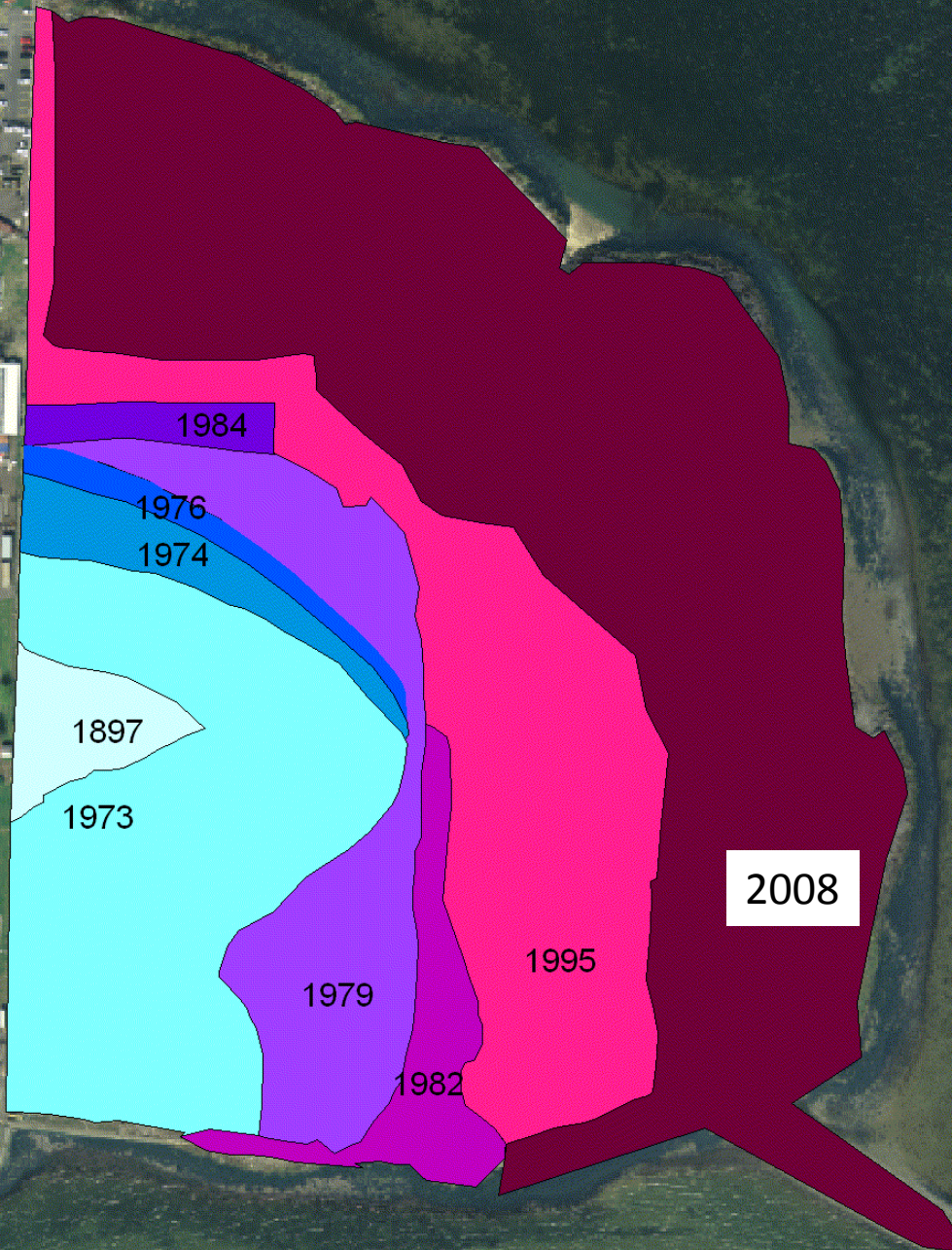
1982



1995



2008



1984

1976

1974

1897

1973

1979

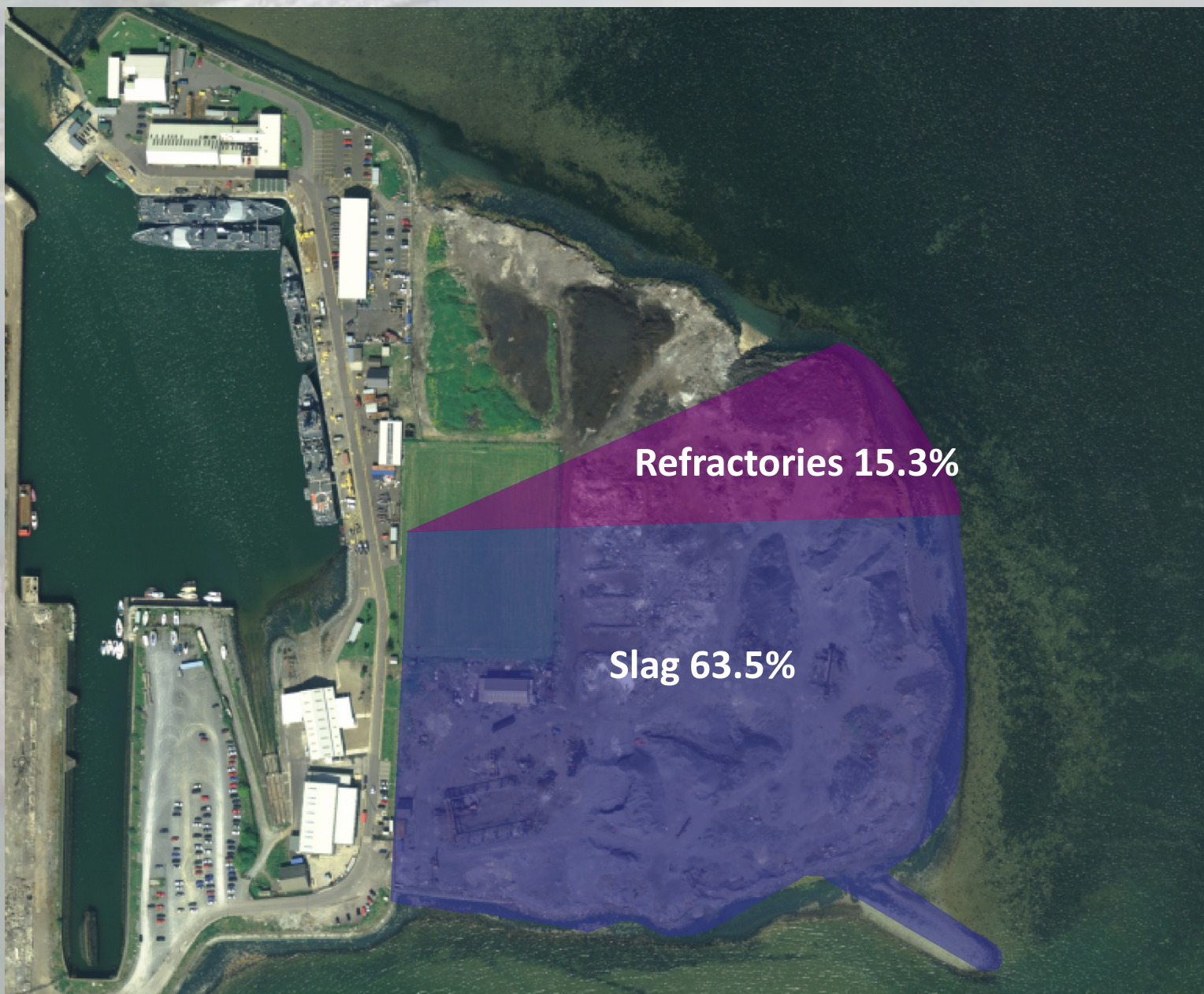
1982

1995

2008

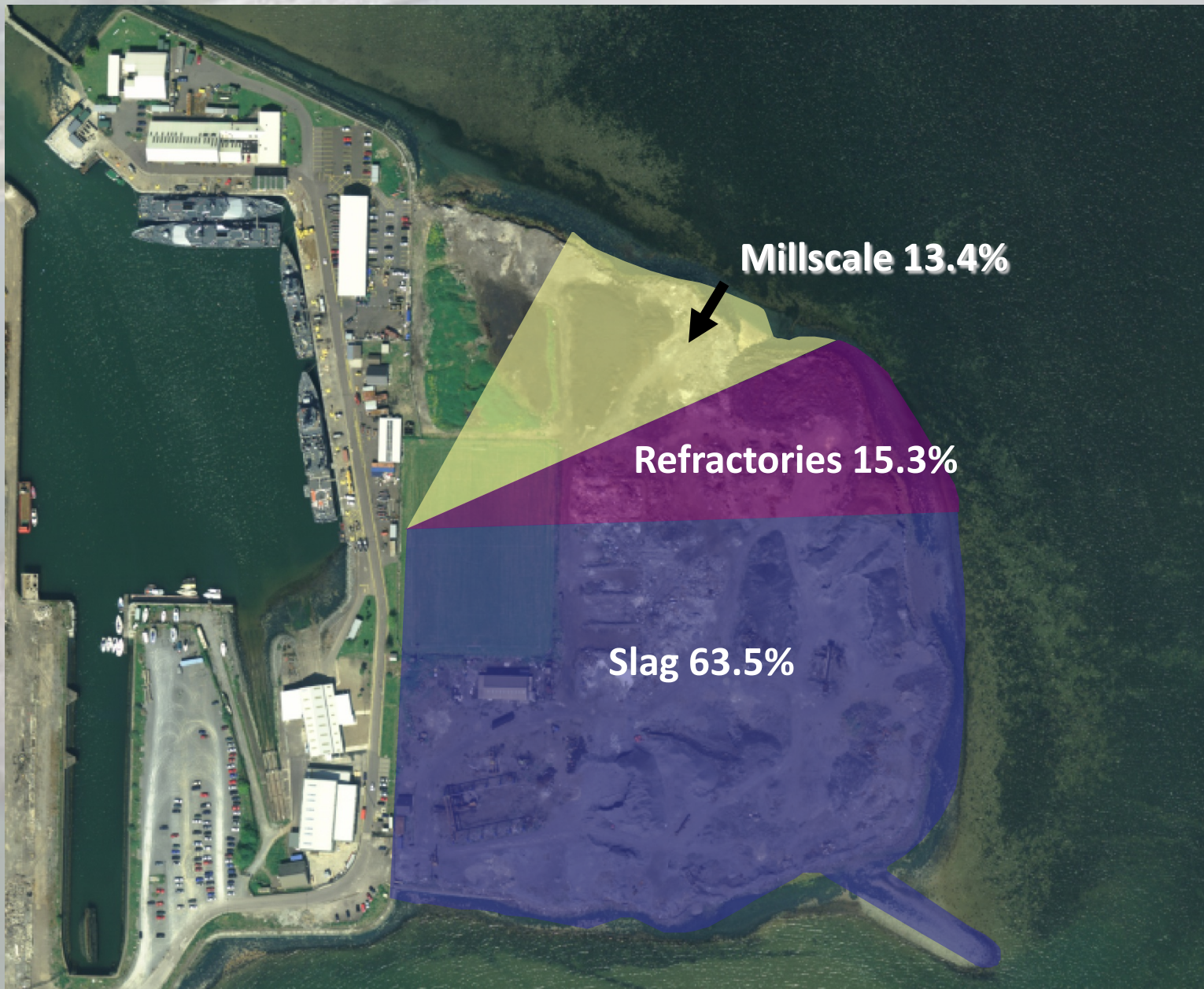


Slag 63.5%



Refractories 15.3%

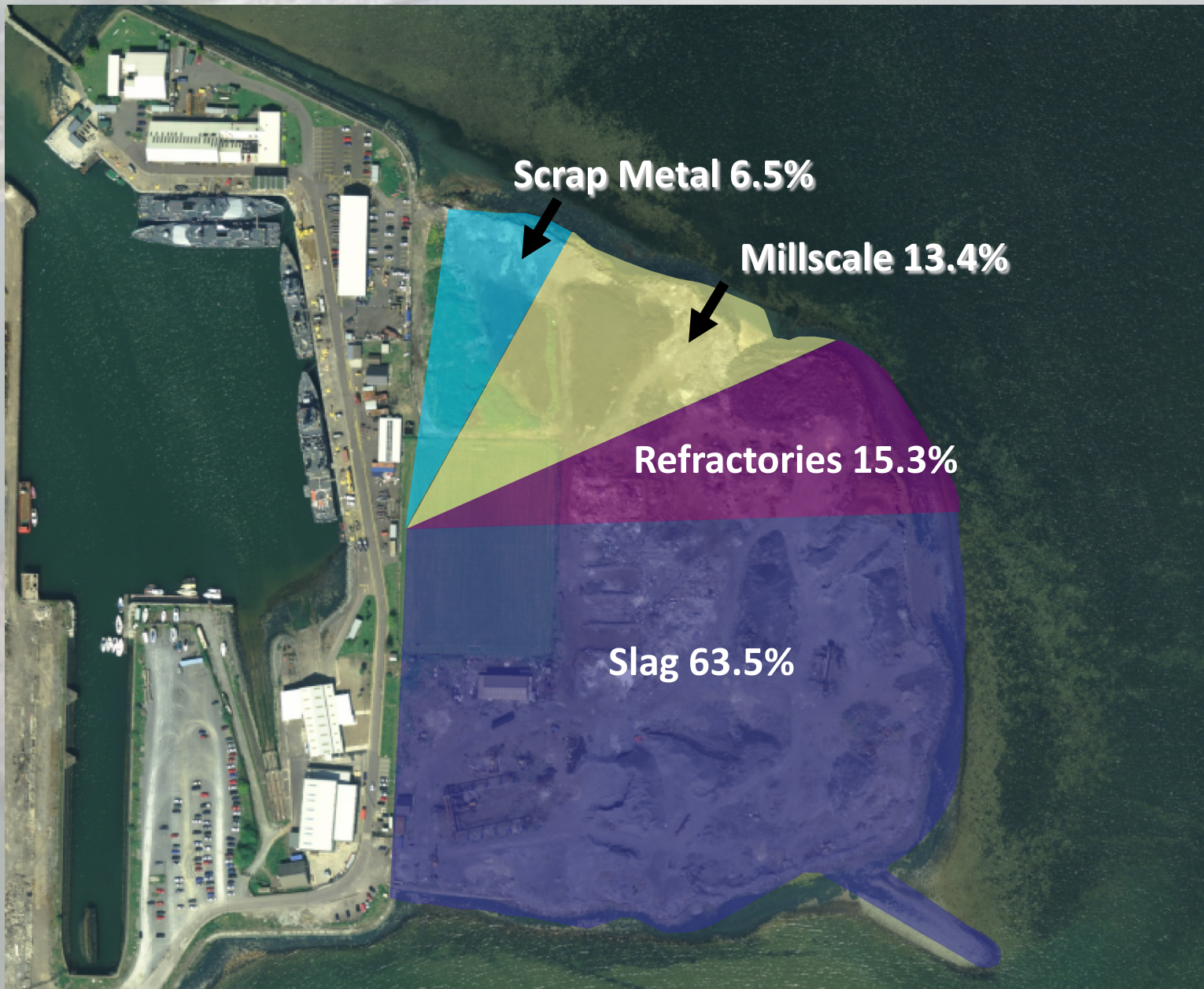
Slag 63.5%



Millscale 13.4%

Refractories 15.3%

Slag 63.5%

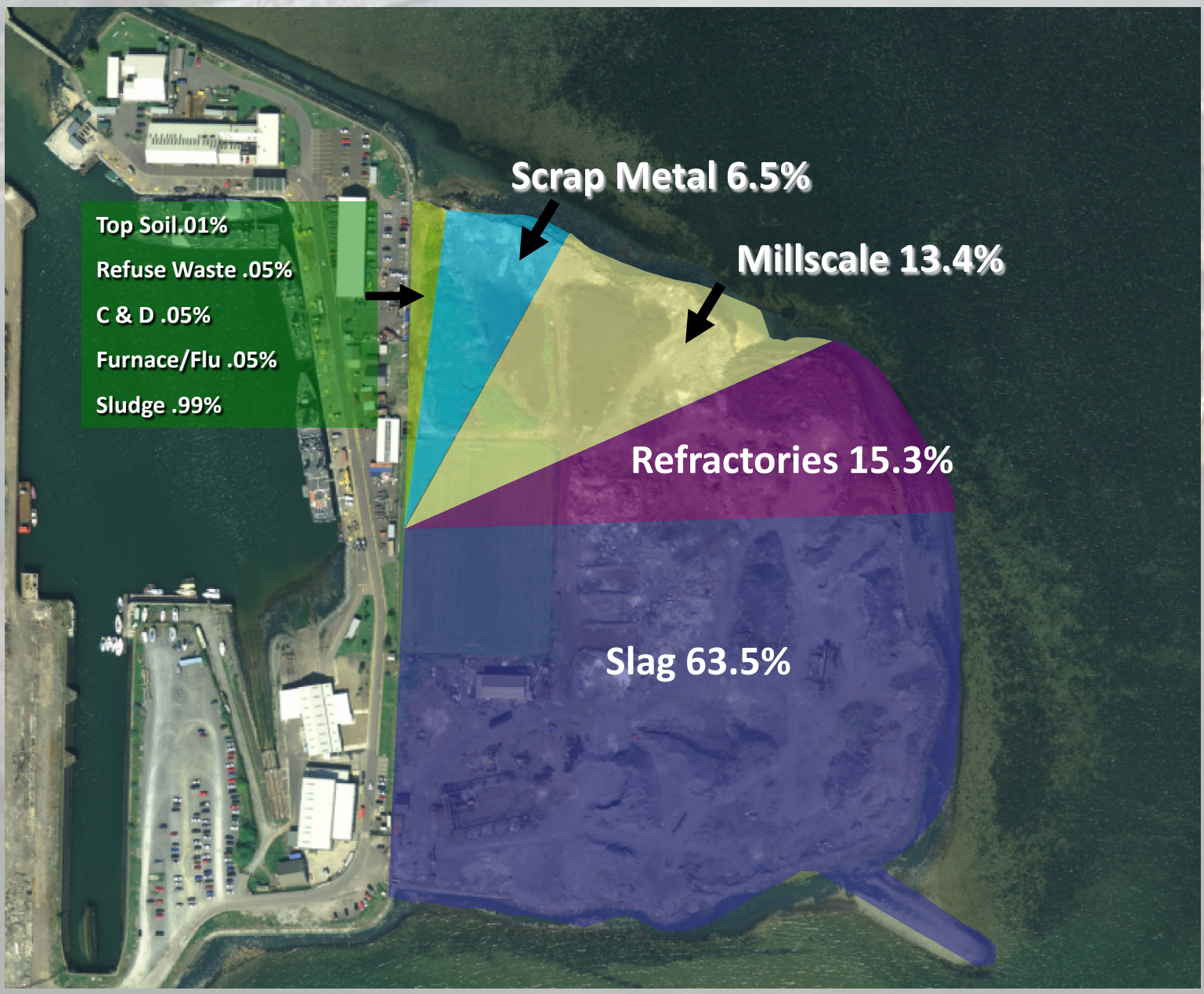


Scrap Metal 6.5%

Millscale 13.4%

Refractories 15.3%

Slag 63.5%



Top Soil .01%
Refuse Waste .05%
C & D .05%
Furnace/Flu .05%
Sludge .99%

Scrap Metal 6.5%

Millscale 13.4%

Refractories 15.3%

Slag 63.5%

4. Update on Phases I – III

as presented on 19/08/2011

Phase I: Desk Study and Conceptual Site Model

- Review all historical reports pertaining to the site and collate all relevant data
- Prepare CSM
- Initiate contact with EPA
- Formulate potential design solutions **On-going**
- Scope site investigations and structure of licence application
- Project planning (i.e. Gantt Chart)
- Identify external consultancy services and contractors required
- Prepare tender documents

4. Update on Phases I – III

as presented on 19/08/2011

Phase II: Pre-Application Consultation with the EPA

- Determine, based on historical data, what licence is envisaged i.e. hazardous or non-hazardous **On-going**
- ~~Obtain approval, in principle, to proposed site investigation programme~~ **N/A**
- Seek input/guidance from Agency regarding any shortcomings/anomalies/weaknesses identified in proposed methodology **On-going**
- ~~Refine methodology~~ **Complete**
- ~~Schedule site works~~ **Provisional**
- ~~Tender advertisement(s)~~ **Complete**

4. Update on Phases I – III

as presented on 19/08/2011

Phase III: Non-Intrusive Site Investigations

- Comprehensive site survey (contour map)
- Geophysical site survey
- Refine intrusive investigation programme

4. Update on Phases I – III

as presented on 19/08/2011

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- Comprehensive site survey (contour map)
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Geophysical site survey

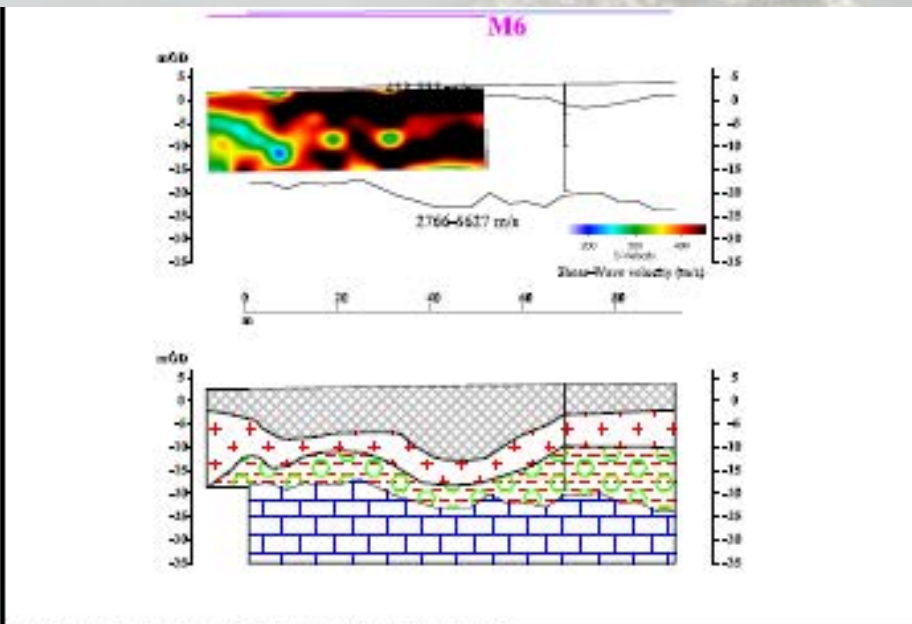
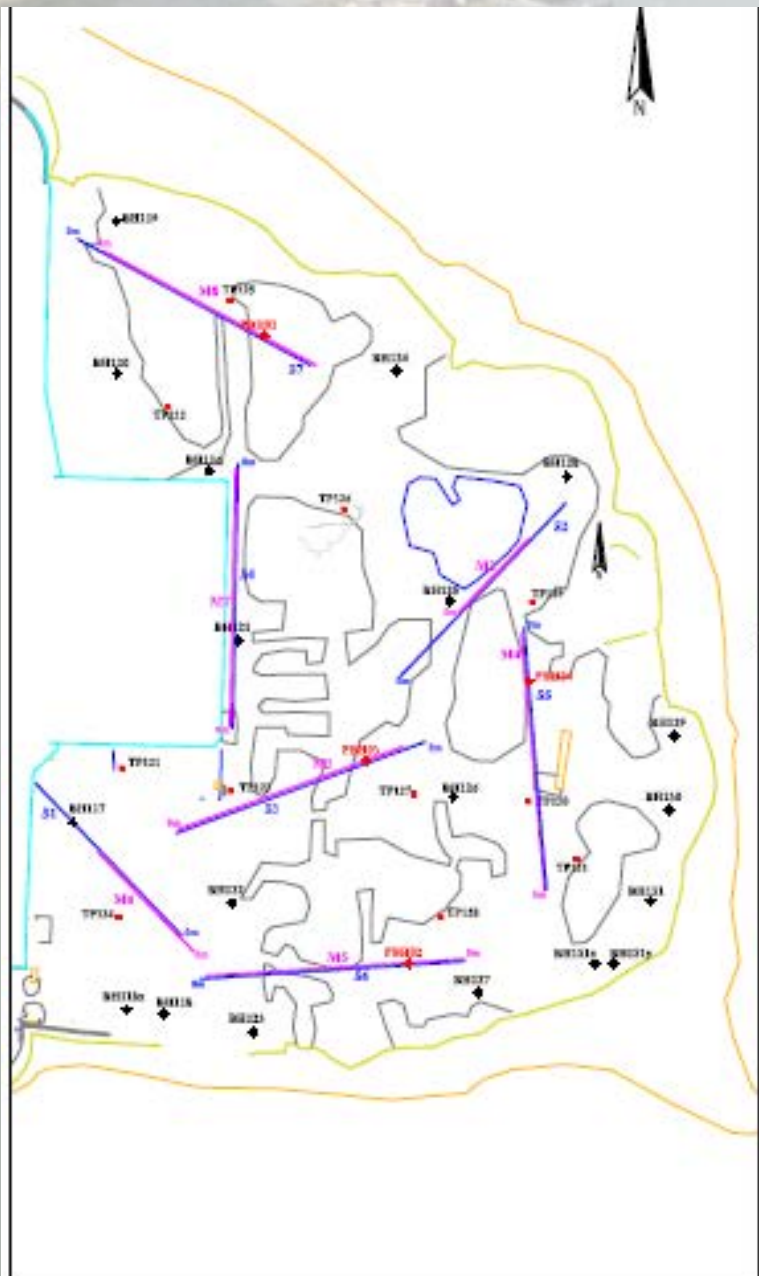
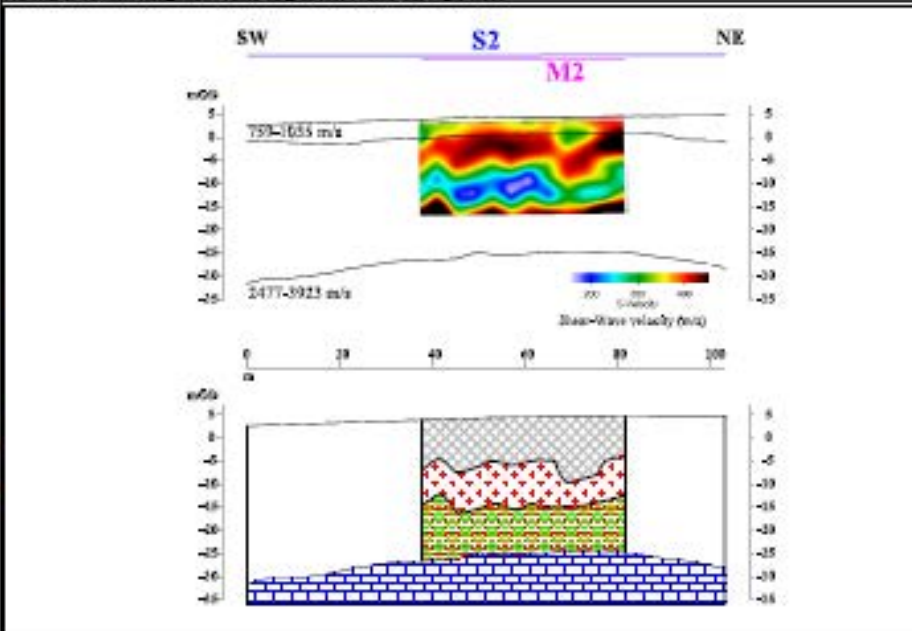


FIGURE 2: Seismic Refraction Profile M7 & S4-CW Profile M2, angle 1.80°



LEGEND

- unconsolidated fill
- silty sand and SILTY CLAY
- medium dense to dense SAND GRAVEL
- soft to medium soft SILT / MEDIUM CLAY
- medium dense to dense SAND GRAVEL
- LIMESTONE

1:200000 scale. Shows Ordnance Survey Grid with 10m accuracy

PROJECT	GEOPHYSICAL SURVEY
CLIENT	UNIVERSITY
LOCATION	UNIVERSITY COLLEGE
PROJECT NO.	PROJECT 21.001.01 & 02
DRAWN BY	APEX LTD
CHECKED BY	APEX LTD
DATE	2024
SCALE	1:2000
PROJECT NO.	21.001.01 & 02
DATE	2024
SCALE	1:2000
PROJECT NO.	21.001.01 & 02
DATE	2024
SCALE	1:2000

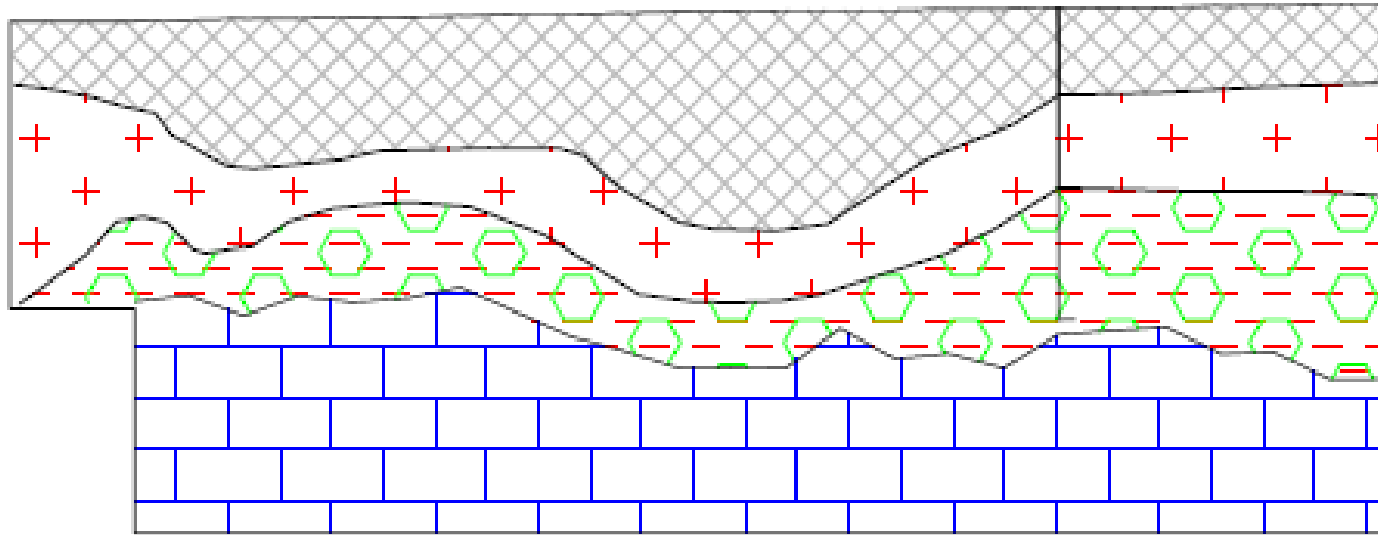
apex
geophysics

Apex Geophysics
100, The Quadrant
Bristol, BS1 1QD
UK
Tel: 0117 924 1111
Fax: 0117 924 1112
Email: sales@apexgeophysics.com
Website: www.apexgeophysics.com

Geophysical site survey

mOD

5
0
-5
-10
-15
-20
-25
-30
-35



5
0
-5
-10
-15
-20
-25
-30
-35

4. Update on Phases I – III

as presented on 19/08/2011

Phase III: Non-Intrusive Site Investigations

- Comprehensive site survey (contour map)
- Geophysical site survey
- Refined intrusive investigation programme

5. Update on Phases IV & V

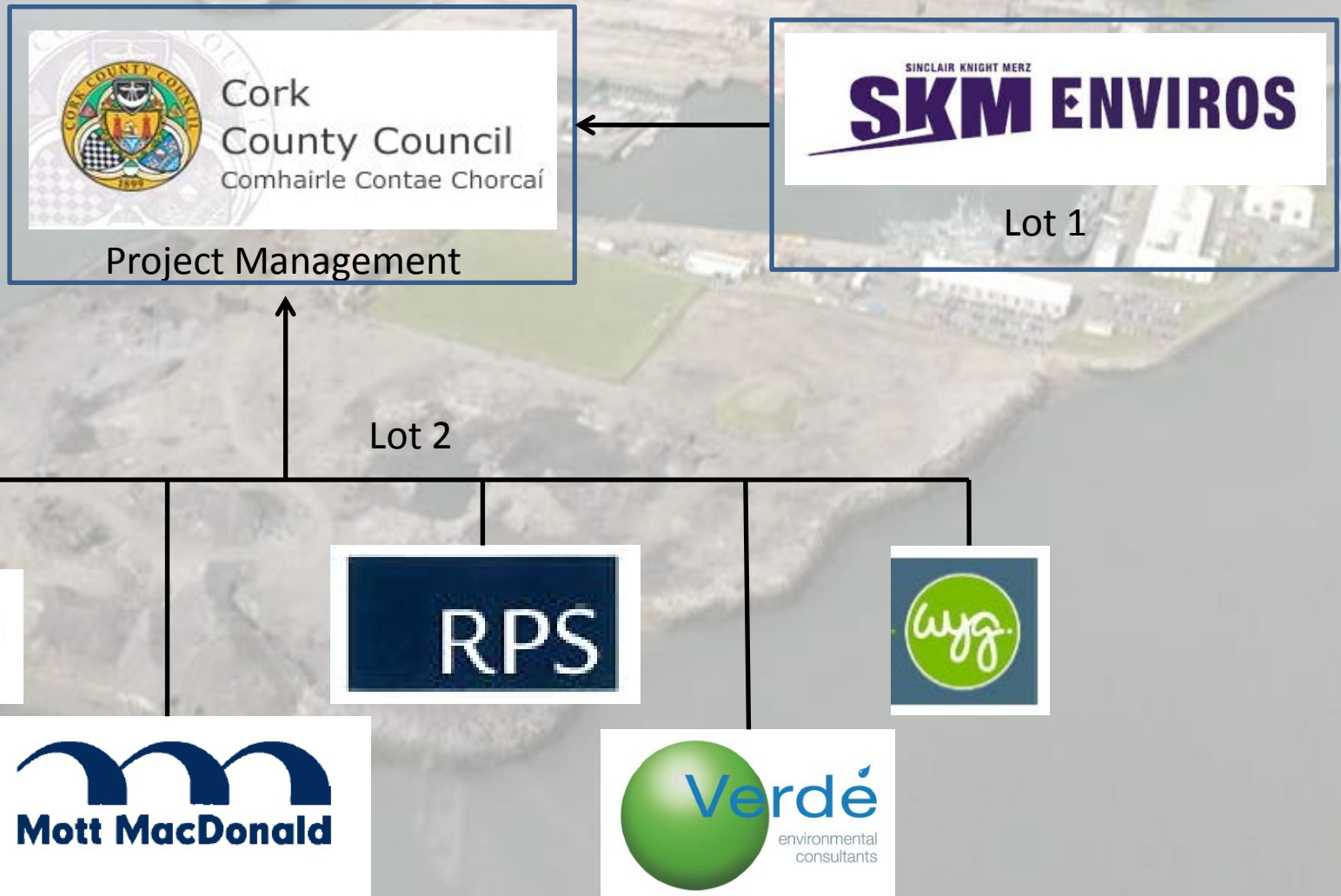
Phase IV: Intrusive Site Investigations

- Drilling, permeability assessment and geotechnical assessment i.e. to inform both EIS and design solution.
- Waste sampling
- Second phase of site survey

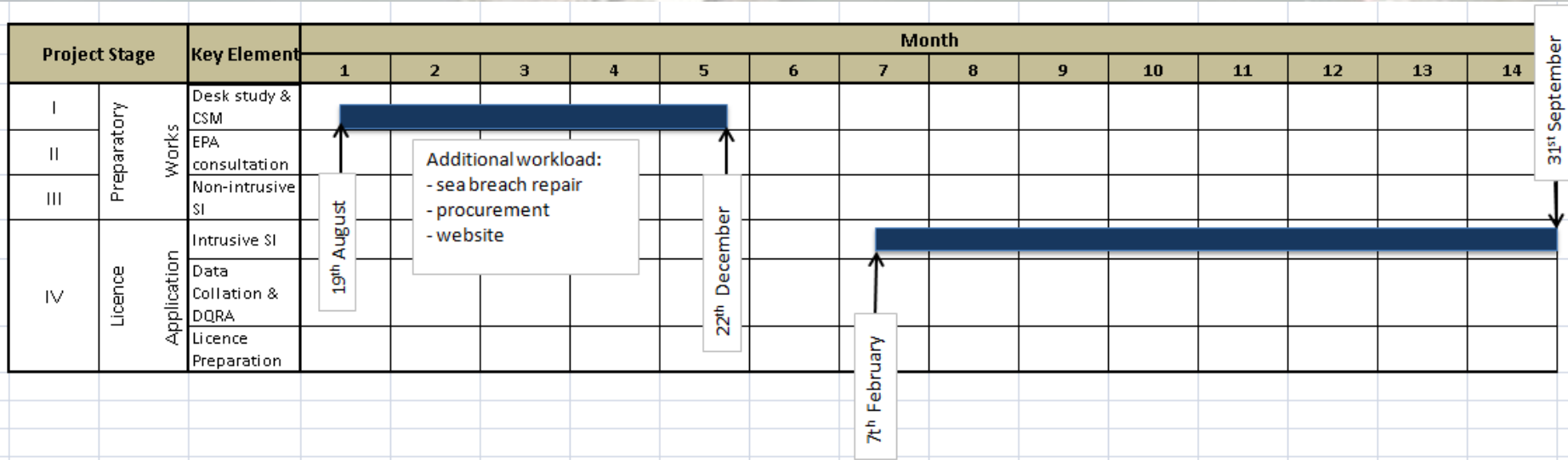
Phase V: Data Collation, QRA and EIS

- Collate data from site investigations
- Identify/select and develop proposed design solution and formulate
- Develop computer model(s) and prepare QRA
- ~~Prepare EIS~~ **N/A**

5. Update on Phases IV & V



6. Project Timelines



7. Project Expenditure

Project Stage		Key Element							
			1	2	3	4	5	6	
I	Preparatory Works	Desk study & CSM							
II		EPA consultation							
III		Non-intrusive SI							
IV	Licence Application	Intrusive SI	<div style="border: 1px solid black; padding: 2px; text-align: center;">19th August</div>						
		Data Collation & DQRA							
		Licence Preparation							<div style="border: 1px solid black; padding: 2px; text-align: center;">22th December</div>

Estimate (19/08/2011)

€138,000

Actual

c.€175,000 (incl. €36,900 for repair works)

An aerial photograph of a coastal area, likely a harbor or bay. In the foreground, there is a large, irregularly shaped landmass with a mix of greyish-brown terrain and some green patches. A prominent green rectangular field is visible. To the right, there are several white buildings and structures. In the background, a large body of water is visible, with a bridge spanning across it. Further back, there are more buildings and structures, including what appears to be a large industrial or commercial complex. The overall scene is a mix of natural and man-made elements.

Aon Cheist?