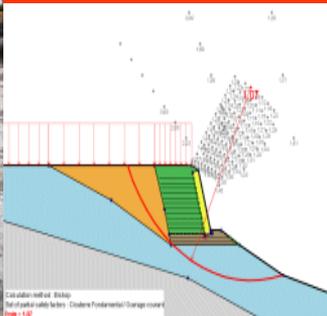




PRIORITY GEOTECHNICAL LTD.

UNEARTHING THE KEY TO **successful** AND COST **effective**
FOUNDATION AND GROUNDWORK **design.**



Professional Services

Priority Geotechnical Ltd. was established in July 2006. Our management staff has over 60 years combined experience in the field of ground investigation, geotechnical engineering and design. Management staff comprise of Chartered Engineers and Geologists, offering a unique and comprehensive perspective on ground engineering and foundations works. We offer both contracting and professional services to meet our Clients requirements both technical and economical. Our Clients include Local Authorities, Consulting Engineers, Developers, Architects, Private Industry and National Companies.

It is the aim of Priority Geotechnical to provide a professional, cost effective and friendly service to all our Clients, big and small.

Priority Geotechnical offers an extensive range of geotechnical services:

- ground investigation works
- marine investigation works
- soft ground investigation works,
- geophysical surveying,
- professional services and
- laboratory testing,

providing independent, comprehensive and practical advice and the means to develop innovative design solutions focusing on our Clients specific requirements.

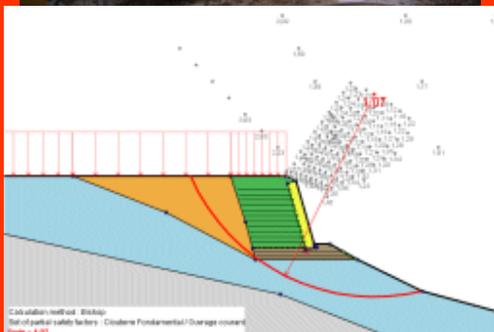
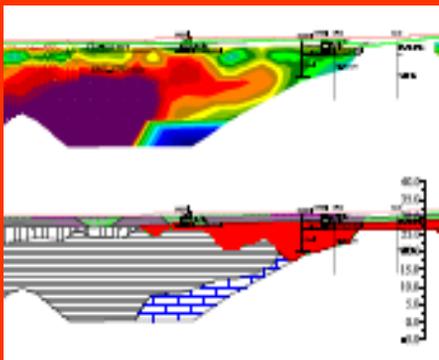
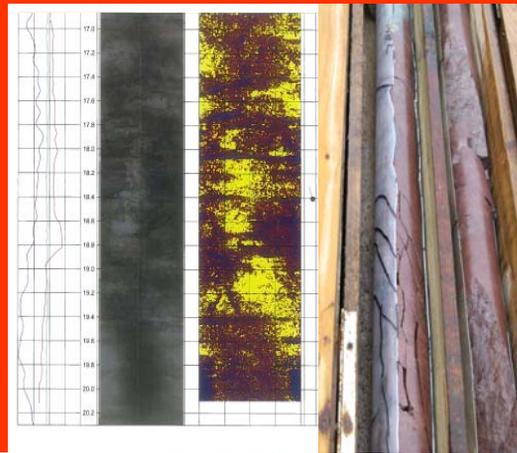
Our professional services include:

- Desk studies and walk-over surveys
- Scoping of site investigation works
- Production of contract documents
- Geotechnical interpretation of field data
- Environmental assessment of Brownfield sites
- Advisory/consultancy and expert witness services
- Bearing capacity and settlement analysis
- Earthworks assessment
- Slope stability analysis (rock and soil)
- Earthworks design and specification
- Quarry Potential and Land Appraisal

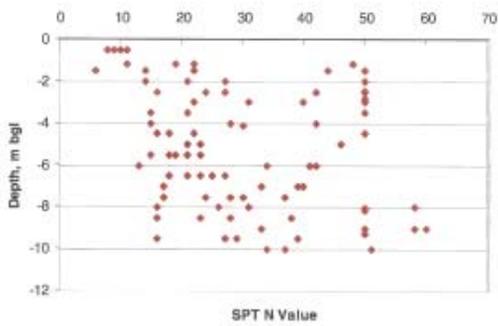
Priority Geotechnical hold professional indemnity insurances.

Priority Geotechnical undertake:

- cable percussion boreholes,
- rotary boreholes,
- groundwater wells,
- geothermal wells,
- dynamic probing,
- window sampling,
- trial excavations,
- geophysical surveying,
- pavement coring,
- *in-situ* testing (California Bearing Ratio, Plate Bearing Tests, Infiltration tests and Pumping tests),
- topographical surveying using GPS and total station equipment.
-



SPT, N Values vrs Depth



Contracts

Sewerage Schemes

- Kilmallock Sewerage Scheme, Contract Phase 1
- Bandon Sewerage Scheme, Stage 2
- Kildare Town Sewerage Scheme
- Fenit/ Kilflynn/ Ardfert/ Abbeydorney Sewerage Scheme
- Ardagh, Aughnaclyffe & Ballinalee Sewerage Scheme
- Barna Sewerage Scheme

Commercial Residential Development

- Musgrave SuperValu Centra, Tramore Rd. Cork
- Innishannon Housing Development, Cork
- Housing Development, Castletroy, Limerick
- Crescent Shopping Centre, Limerick
- Brickfield Development, Dundalk
- Docklands Development, Cork
- Barraduff Residential Development, Killarney
- Piper's Hill Development, Naas
- John Joe Sheehy Road Development, Tralee
- Bon Secours Hospital, Development

Water Supply Schemes

- Belgooly, Riverstick & Killeagh WSS
- Gorey Main Drainage Scheme Stage 2
- Enniskerry Water Supply Scheme Phase 1
- Roscommon WSS (Killeglan to Athlone)
- Mallow/Ballyvinter Regional WSS Box Cross Phase 1
- Dripsey Coachford WSS Upgrade
- Gorey Regional WSS

Roads

- N4 Carrick-on-Shannon Bypass
- M50 PPP Scheme
- N21 Castleisland Bypass
- N17 Collooney to Curry Realignment
- N28 Bloomfield to Ringaskiddy
- N7 Nenagh to Limerick
- Portlaoise Northern Orbital Route
- Limerick River Crossing

Infrastructure

- Waste Facility: Skibbereen, Derryconnell, Dumnamway
- Mitigation Works to Bagenalstown Lock
- Munster Blackwater River Flood Relief Scheme
- Cork Institute of Technology, PPP
- Waterford Institute of Technology
- University of Limerick Development

Quarry/ Resource

- Derrycoffey, Quarry Assessment
- Irish Cement Platin, Remediation of Slopes, Co. Louth
- Tara Mines Development
- Readymix/ Cemex Site, Dock Road, Limerick

Marine Works

- Victoria Docklands, Passage West
- Crookhaven, Harbour Development



Rotary Drilling

Priority Geotechnical Ltd. have 3 number track mounted rotary rigs:
2 number Delta Base S20 and
1 number Soil Mech PSM 8G.

These rigs are capable of drilling both rotary percussive, open-hole (using Symmetrix 115 or 131 systems) and core recovery with double or triple tube systems. Priority Geotechnical can drill boreholes, using open-hole drilling up to 250mm in diameter to depths of 40m and rotary drilling with core recovery from between 48mm to 120mm diameter core to depths exceeding 100m. Rotary drilling uses air-mist, polymer foam or water flush to aid coring. We can provide rotary drilling with core orientation for the detailed logging of fractures where required. Standard Penetration Test, N values may be undertaken through the overburden materials to characterise the overburden strength and relative density. In-situ, down-hole geophysics, optical and acoustic televiewers can be undertaken upon request to further characterise fracture orientation and spacing.

Our track mounted rigs can traverse most terrain and access soft ground sites with or without the aid of "bog mats". The compact size of the rigs and compressors allow for access to small sites to undertake rotary drilling, with the exception of restricted head room sites. Our rotary drillings are also suitable for mounting on floating plant and jack-up barges for over-water and marine drilling. These capabilities allow Priority Geotechnical Ltd. to provide for our Clients needs whatever their rotary requirements.

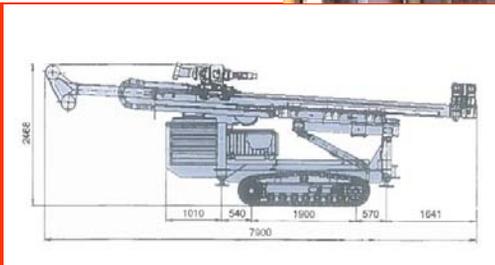
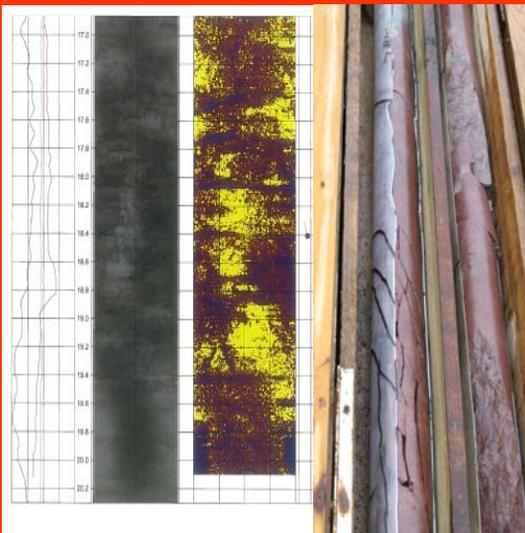
Priority Geotechnical can also drill and line well from x diameter up to for water supply schemes and landfill monitoring wells.

Upon completion of rotary drilling experienced Engineering Geologists log the recovered core, measuring total core recovery, TCR, solid core recovery, SCR, Fracture spacing, Fracture Index, FI and Rock Quality Designation, RQD. These parameters along with the rock type enable the engineering characteristics of the rock to be determined for design purposes. Priority Geotechnical can undertake rock testing, Point Load Index and Unconfined Compressive Strength Test, to determine the rock strength further assessing the rock mass. Detailed geotechnical logs are prepared using AGS compatible software.

Priority Geotechnical Ltd. can provide interpretive reporting on the rock mass characteristics, where required allowing for determination of suitable methods of excavation, stable angle for cutting and the suitability of re-use as an engineering material.

Priority Geotechnical Ltd. have undertaken rotary drilling for our Clients throughout the country encountering a wide variety of rock types from soft to strong sedimentary rock and very strong igneous rock. Priority Geotechnical have also undertaken rotary drilling with core recovery through stiff to very stiff boulder CLAY (slightly sandy slightly gravelly CLAY, with cobbles and boulders) with a very good percentage recovery allowing for a detailed profiling of the soil where cable percussive boring was unable to progress due to large obstructions.

All fieldworks are carried out in accordance with the relevant British Standards: BS 5930



Cable Percussion Drilling

Priority Geotechnical Ltd. have a total of 7 number Cable Percussive Drilling Rigs:

4 number Dando 2000 Cable Percussion Rigs and
3 number Dando 3000 Cable Percussion Rigs.

These rigs are capable of drilling using casing from 150mm up to 250mm diameter, to depths of between 20m to 70m depending on ground conditions and the diameter of casing used. Cable percussion drilling is capable of progressing through overburden soils, dense granular deposits and stiff cohesive deposits. Where rock is encountered chiselling may be used to prove obstruction. Rotary drilling is required to prove bedrock level or the nature of the obstruction. Bulk disturbed samples are recovered to allow for a detailed geotechnical logging of the soil strata encountered. Undisturbed U100 samples may also be taken where ground conditions permit.

Environmental sampling may be undertaken using cable percussion rigs allowing for environmental and chemical analysis of soils or fill material from Brownfield sites. Such analysis will allow for a determination of the site as Green, Yellow or Red and for Source, Pathway, and Receptor analysis to determine potential environmental hazards and remediation strategies where necessary.

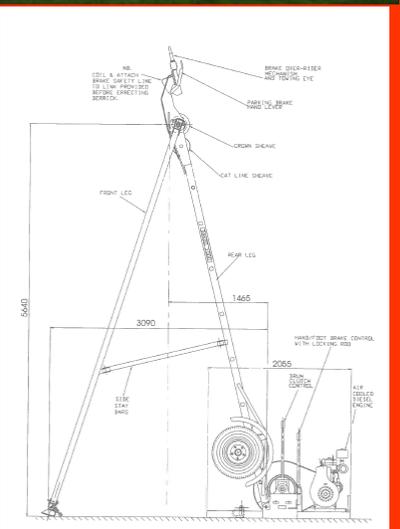
Our cable tool rigs are also suitable for mounting on floating plant and jack-up barges for over-water and marine drilling. These capabilities allow for Priority Geotechnical to provide for our Clients needs whatever their borehole requirements on land or over water.

Standard Penetration Test, N values may be undertaken through the overburden materials. In-situ shear vane testing, permeability testing and piston sampling can be undertaken upon request in soft ground. Groundwater installations or piezometers can be constructed allowing for the monitoring of groundwater levels and pore water pressures.

Upon completion of cable percussive an experienced Engineering Geologist or Geotechnical Engineer will prepare detailed geotechnical logs using AGS compatible software.

Priority Geotechnical can prepare soil test schedules on our Clients behalf and will undertake soil testing to determine the soil engineering characteristics required for engineering design to our Clients exact needs.

All fieldworks are carried out in accordance with the relevant British Standards: BS 5930.



Trial Pit Excavation

Priority Geotechnical Ltd. undertake trial pit excavations to determine the soil profile and allow for the bulk sampling of soils for testing. Both track mounted excavators and JCB are used to access a variety of ground conditions allowing for trial pit excavations. Priority Geotechnical will assess the terrain and our Client requirements and use the appropriate plant for the works.

A suitably experienced Engineering Geologist or Geotechnical Engineer is at all time present to log the soil encountered in accordance with BS5930: 1999 and take a photographic record of the excavation and excavated material. Groundwater will be monitored when encountered. Trial pits can be excavated using double lift technique to allow for excavations up to 7.0m deep to be undertaken, if required. All sampling requirements are such to meet our Client requirements. Detailed geotechnical logs are prepared using AGS compatible software. Priority Geotechnical can prepare soil test schedules and will undertake soil testing to determine the soil engineering characteristics required for engineering design to our Clients needs.

Priority Geotechnical can undertake in-situ infiltration tests, California Bearing Ratio Test and Plate Bearing Tests during trial pit excavation to further assess the ground and obtain engineering design parameters.

Priority Geotechnical Ltd. can provide interpretive reporting on the ground conditions encountered, the soil characteristics and engineering properties where required by our Clients.

All fieldworks are carried out in accordance with the relevant British Standards: BS 5930.

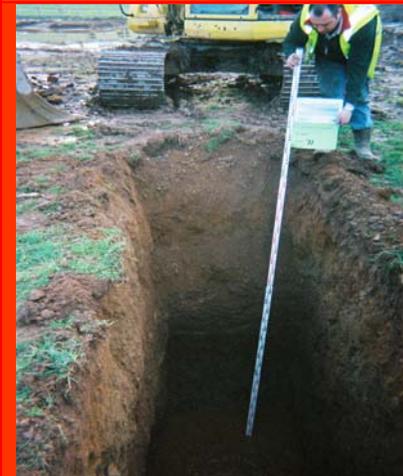
Trial Rock Excavation

Priority Geotechnical Ltd. undertake trial rock excavations to determine the potential rate of excavation through rock where encountered. Track mounted excavators and hydraulic breaking equipment are used to excavate the rock mass. A suitably experienced Engineering Geologist or Geotechnical Engineer will measure the rate of excavation and subsequently log and record the rock mass structure. Priority Geotechnical will prepare rock test schedules and can undertake rock testing to determine the engineering characteristics of the rock mass and excavated rock required for engineering design to our Clients needs.

Priority Geotechnical can provide interpretive reporting on the rock mass characteristics and engineering properties of the excavated rock material for potential re-use as an engineering material or quarried material where required. Additional non-intrusive investigation and rotary drilling may be recommended depending on the nature of our Clients requirements.



PROJECT INFORMATION		CLIENT INFORMATION		LOGGING INFORMATION	
Project Name	Site Investigation - Co. Mayo	Client Name	Mayo County Council	Log No.	TPW025
Location	Co. Mayo	Project No.	PC001	Sheet 1 of 1	Date
Dimensions	Length: 2.00m	Depth	2.00m	Scale	1:50
Log No.	TPW025	Log Date	11/05/2017	Logger	PT
Depth (m)	Soil Type	Soil Description	Notes	Moisture Content (%)	Void Ratio
0.00 - 0.10	Gravelly sand	Gravelly sand, 10% fines, 10% gravel, 10% silt			
0.10 - 0.20	Gravelly sand	Gravelly sand, 10% fines, 10% gravel, 10% silt			
0.20 - 0.30	Gravelly sand	Gravelly sand, 10% fines, 10% gravel, 10% silt			
0.30 - 0.40	Gravelly sand	Gravelly sand, 10% fines, 10% gravel, 10% silt			
0.40 - 0.50	Gravelly sand	Gravelly sand, 10% fines, 10% gravel, 10% silt			
0.50 - 0.60	Gravelly sand	Gravelly sand, 10% fines, 10% gravel, 10% silt			
0.60 - 0.70	Gravelly sand	Gravelly sand, 10% fines, 10% gravel, 10% silt			
0.70 - 0.80	Gravelly sand	Gravelly sand, 10% fines, 10% gravel, 10% silt			
0.80 - 0.90	Gravelly sand	Gravelly sand, 10% fines, 10% gravel, 10% silt			
0.90 - 1.00	Gravelly sand	Gravelly sand, 10% fines, 10% gravel, 10% silt			



Slit Trench Excavation

Priority Geotechnical Ltd. undertake slit trench excavations to determine the soil profile and presence of underground services to a depth of typically 1.2m and allow for the bulk sampling of soils for testing.

A suitably experienced Engineering Geologist or Geotechnical Engineer is at all time present to log the soil present in accordance with BS5930: 1999 and record the location and depth of services encountered.

Due to the nature of slit trench excavation Priority Geotechnical take the up-most care in setting out traffic management and liaising with the service providers to ensure both minimum disruption to traffic and services. Temporary and Permanent Immediate Reinstatements are undertaken in accordance with the Clients and Local Authority requirements.

Details geotechnical logs are prepared and plans are provided in AutoCAD format identifying the location of services in plan and section at the location of the slit trench excavation.

Priority Geotechnical Ltd. will prepare soil test schedules and can undertake soil testing to determine the soil engineering characteristics required for engineering design to our Clients needs.

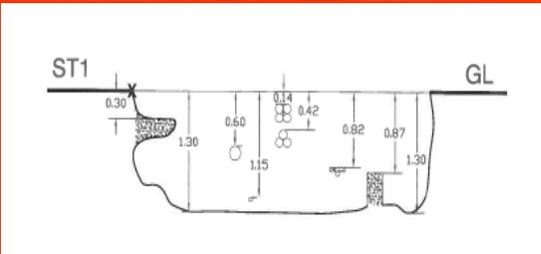
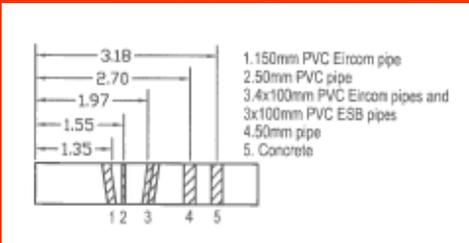
Pavement Coring

Priority Geotechnical Ltd. undertake pavement coring (100mm to 150mm) to determine the pavement profile and allow for sampling of pavement layers, surface, binder and base for specialist testing.

Pavement coring is required to determine the pavement profile for: overlay design, Falling Weight Deflectometer analysis and analytical pavement design.

A suitably experienced Engineer will log the pavement core determining the binder, aggregate type and size and various pavement layers present. Detailed pavement core logs and photographic records are produced to allow for scheduling of specialist tests.

Due to the nature of pavement coring Priority Geotechnical take the up-most care in setting out traffic management and liaising with the service providers to ensure both minimum disruption to traffic and services. Permanent Immediate Reinstatements are undertaken in accordance with the Clients and Local Authority requirements once pavement cores have been extracted.



Laboratory Testing

Priority Geotechnical Ltd. has its own in-house laboratory facility. This allows continuity from sampling in the field to testing, resulting in a streamlined approach to reporting. Our Geotechnical Engineers are available to schedule laboratory testing and liaise directly with our laboratory manager to expedite testing and allow for a quick assessment of ground conditions.

Priority Geotechnical providing the following range of tests:

- Classification Tests
 - Moisture Content
 - Liquid and Plastic Limits
 - Particle Size Analysis (by wet and dry sieve methods)
 - Particle Size Analysis (by sedimentation)
 - Relative Density
- Chemical Analysis
 - pH
 - Sulphate
 - Chloride
 - Organic Content
 - Environmental Testing
- Compaction Related Tests
 - Dry Density/ Moisture Content Relationship (2.5kg, 4.5kg rammer and vibrating hammer)
 - California Bearing Ratio, CBR
 - Moisture Condition Value, MCV
- Rock Testing
 - Unconfined Compressive Strength Tests
 - Point Load Index
 - Aggregate Crushing Value
 - Ten Percent Fine Value
- Bituminous Testing
 - Repeated Load Axial Test
 - Density
 - Air Voids

We also have developed strategic alliances with specialist laboratories in Ireland and the UK to undertake comprehensive and specialist testing to our Clients exact requirements.

All laboratory testing are carried out in accordance with the relevant British Standards: BS 1377 and BS 812.

