



ENGINEERING  
AND TECHNICAL  
SERVICES







## INTRODUCTION

### ETS (Engineering and Technical Services)

is a local, Bahamas-based and multi-disciplined, company with years of practical experience in providing structural and civil design, geo-technical and inspection services.

The ETS goal is to identify, understand and interpret the constraints on a project and to design a constructive efficient result.

From the beginning, ETS made complete client satisfaction its top objective. To meet this objective, ETS undertakes a limited number of key projects each year.

The ETS team applies extensive engineering and technical skills to find clever and practical solutions for our clients while also helping with the continued development of our community.

Our team members have knowledge and experience of local conditions gained from many years of training and on-site work.

With over a decade of serving a diverse group of clients, the ETS team, led by principal **Lambert Knowles, M.Eng.**, has carved out a niche and reputation as a hands-on team which is not afraid to roll up its sleeves and get in the trenches to find the best solutions for its clients.



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## STRUCTURAL DESIGN

ETS structural design goals are to be efficient, functional and cost effective.

To ensure the best possible solutions, ETS uses finite element analysis method (FEM) as well as STAAD Pro Software programme for complicated structures and a variety of custom programmes as required.

From the first meeting to the last handshake, the ETS structural design group analyzes the project, and takes the time to evaluate potential solutions with the aim of achieving the most efficient design.

Using current Computer Aided Design (CAD) and modeling, ETS is able to analyze each possible design choice and evaluates the solution that best meets the client's requirements.

The ETS structural design group is capable of providing comprehensive structural design solutions for steel, concrete and timber structures for the following types of projects:

- > Residential
- > Commercial
- > Schools
- > Docks
- > Bulkheads
- > Bridges
- > Towers

## CIVIL DESIGN

ETS works closely with land developers, helping them through the various stages of getting approvals from the various government agencies.

The ETS inspection team provides monitoring surveys and materials testing to ensure compliance with the approved drawings.

The Civil Design team's objective is to achieve an efficient design and to minimise the developer's approval periods.

**ETS provides practical solutions to civil design problems such as:**

- > Road works
- > Site earth works
- > Sewer collection
- > Water supply
- > Storm drainage
- > Construction monitoring







## GEO-TECHNICAL SERVICES

As part of its commitment to delivering complete client solutions, ETS has developed an experienced in-house team of Geo-technical Engineers and Technicians.

The ETS Geo-technical Services Group works closely with owners, architects and engineers to carry out necessary soil investigations.

ETS operates its own boring and testing equipment, with a full in-house testing lab.

ETS not only works closely with several international drilling firms to carry out offshore explorations and deep borings, but also has developed a partnership with Ardaman and Associates, Inc., Tampa, Florida.

Ardaman & Associates Inc. is an internationally renowned Geo-technical and Materials Testing firm. The ETS and Ardaman partnership allows ETS to carry out the most sophisticated explorations.

### ETS Geo-technical Services include:

- > Standard penetration testing
- > Hollow stem auguring
- > Rock coring
- > Laboratory soil testing
- > On-site field testing
- > Monitoring well installation
- > Pile installation monitoring
- > Ground penetrating radar

## TESTING AND INSPECTION SERVICES

As part of its commitment to providing real-time solutions for its clients, ETS has a field materials testing and inspection team.

Our in-house laboratory allows ETS to provide its clients with real-time quality assurance monitoring and testing for civil and structural projects.

On-site quality control and threshold inspection services can be provided for projects ranging from small homes to large multi-story buildings.

### Services include:

- > Soils and compaction testing
- > Concrete and grout testing
- > Structural steel and reinforcement steel
- > Pile installation monitoring
- > Structural inspection
- > Reinforced concrete
- > Post tension inspections
- > Structural steel
- > Fire proofing materials





## COMPLETED PROJECTS

- 1 **Baha Mar Development:**  
Geo-technical & Load Test
- 2 **Albany Development:**  
Geo-technical & Load Test
- 3 **Ocean Club Estates, Lot 78:**  
Geo-tech & Structural Design
- 4 **Ocean Club Estates, Lot 77:**  
Geo-tech & Structural Design
- 5 **Bristol Cellars Warehouse:**  
Structural Design
- 6 **Three Sisters Hotel Development:**  
Exuma, The Bahamas
- 7 **Fortune Hills Condo Development:**  
Nassau, The Bahamas
- 8 **Oakridge Estates Subdivision:**  
Nassau, The Bahamas
- 9 **Ocean Club Estates, Lot 41:**  
Geo-tech & Structural Design
- 10 **Cape Eleuthera Development**
- 11 **Inter-American Bank & Ministry of Works:** Eleuthera and Cat Island Seawalls
- 12 **Ocean Club Estates, Lot 66:**  
Geo-tech & Structural Design
- 13 **Unicorn Cay Subdivision:**  
Eleuthera, The Bahamas
- 14 **College of The Bahamas Library:**  
Structural Design
- 15 **Ocean Club Estates, Lot 37:**  
Geo-tech & Structural Design
- 16 **Ocean Club Estates, Lot 15:**  
Geo-tech & Structural Design
- 17 **Ocean Club Estates, Lot 16:**  
Geo-tech & Structural Design
- 18 **Ocean Club Estates, Lot 84:**  
Structural Design
- 19 **Ocean Club Estates, Lot 92:**  
Structural Design
- 20 **Ocean Club Estates, Lot 84:**  
Geo-tech & Structural Design
- 21 **Ocean Club Estates, Lot 119:**  
Geo-tech & Structural Design
- 22 **Ocean Club Estates, Lot 94:**  
Geo-tech & Structural Design
- 23 **Ocean Club Estates, Lot 51:**  
Geo-tech & Structural Design
- 24 **Old Fort Bay, Lot 1, Montagu Island:** Structural Design
- 25 **Ocean Club Estates, Lot 10:**  
Structural Design
- 26 **Ocean Club Estates, Lot 12:**  
Structural Design
- 27 **Ocean Club Estates, Lot 58:**  
Geo-technical Investigation
- 28 **Ocean Club Estates, Lot 23:**  
Geo-tech & Structural Design
- 29 **Old Fort Bay, Lot 1A:**  
Structural Design

