

PERFORMANCE CERTIFICATE

We are pleased to certify that **Rite Geosystems Trading (LLC) / Encardio Rite Geosystems (LLC)**, Dubai, U.A.E., has completed the Dilapidation Survey, Supply, Installation, Monitoring, and Reporting of Geotechnical – Geodetic Instruments scope for construction monitoring of **the following projects**:

SI No.	Executed Projects
1	PROJECT DS 413-2: Sewerage for Labour Accommodation in Al Quoz
2	PROJECT DS 419 - Upgrading and Rehabilitation / Deira Stormwater System
3	PROJECT DS 240 / Part B (House Connections and Miscellaneous Works)
4	PROJECT DS 431: Stormwater Pipeline from Emirates Road to Expo Road
5	IN101-IRRIGATION MAIN NETWORK FOR SH ZAYED BIN HAMDAN ROAD

Client: **DUBAI MUNICIPALITY**

Consultant: **KHATIB & ALAMI**

Contractor: **DETECH CONTRACTING (LLC)**

A. Activities performed during the excavation and tunneling works:

SI No.	Executed Key Activities
1	Shaft Instrumentation & Monitoring – Geotechnical & Surveying
2	RTA Structures Instrumentation & Monitoring – Bridges & MSE Walls
3	Ground Movement Monitoring during NDRC Works
4	Ground Water Monitoring
5	Existing Utilities Monitoring
6	Ground & Structures Vibration Monitoring
7	Monitoring & Reporting Works

All instruments have performed satisfactorily from the date of commissioning throughout the period 2024 to 2026. We have no hesitation in recommending them for similar tunnel and infrastructure monitoring projects.

We are highly satisfied with their execution quality, technical expertise, responsiveness, and after-sales support demonstrated throughout the project duration.

We wish them all the luck and success in all their future endeavours.

For DETECH CONTRACTING LLC

Procurement Manager





JT METRO JV
JAPAN-TURKEY
METRO JOINT VENTURE

JT METRO JV
(Obayashi-Kajima-Yapi Merkezi)
P.O. Box 182845,
Dubai, UAE
Tel.: +971-4-221-2121
Fax.: +971-4-221-2181

Ref:

Date : 18 May 2011

By Fax/By Hand

Subject : WORK COMPLETION CUM PERFORMANCE CERTIFICATE FOR
INSTRUMENTATION AND MONITORING WORKS

Project : DUBAI METRO PROJECT- RED LINE

Owner : ROADS AND TRANSPORT AUTHORITY (RTA), DUBAI

Project Engineer : PARSONS-SYSTR

TO WHOMSOEVER IT MAY CONCERN

This is to inform and certify that **Encardio-rite Electronics (P) Ltd.**, Lucknow, India, in capacity of a specialist subcontractor have executed supply, installation, monitoring, maintenance, annual calibration and factual data reporting of the instruments listed below, in our **Dubai Metro Project - Red Line**. The instrumented sections in the project's 5.7 km long (approx.) underground alignment included: 2 no. cut-and-cover tunnel sections (adjoining Khalid Bin Waleed and City Centre Station boxes); 4 no. underground stations (Khalid Bin Waleed, Union Square, Al Rigga and City Centre); 2 no. TBM bored tunnel sections (from Union Square Station to Khalid Bin Waleed Station and to City Centre Station), 3 no. annexed structures (Annex 1, 2 and 3) and 1 no. at-surface station (Jafza Limitless).

List of instruments used in the Red-Line project:

1. Surface settlement point for green field model ESMP-10C2
2. Surface settlement point for road and pavement model EPS-12
3. Water stand pipe model EPP-30SP
4. Inclinator system model EAN-25M
5. Vibrating wire strain gage model EDS-20V-SW
6. Strain gage type compression load cell model ELC-210S
7. Tape extensometer model EDS-80
8. Building settlement point model EBS-16
9. Portable tilt meter model EAN-70M
10. Crack meter model EDJ-40C
11. Magnetic extensometer model EDS-91
12. Portable readout unit cum dataloggers and accessories including cables, junction boxes etc. for the above instruments.

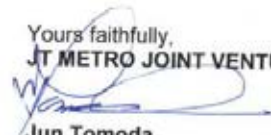


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The above instruments have performed in a satisfactory manner and we have no hesitation in recommending them for similar usage in other projects. We are also satisfied with the technical services provided by Encardio-rite on this project.

Total value of work executed by them for the project during the period May-2006 to October-2008 is approximately **AED 10.78 million**.

Yours faithfully,
JT METRO JOINT VENTURE


Jun Tomoda
Senior Project Manager – Red Line - Civil





JT METRO JV
JAPAN-TURKEY
METRO JOINT VENTURE

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Fax.: +971-4-221-2181

Ref:

Date : 18 May 2011

By Fax/By Hand

Subject : WORK COMPLETION CUM PERFORMANCE CERTIFICATE FOR
INSTRUMENTATION AND MONITORING WORKS

Project : DUBAI METRO PROJECT- GREEN LINE

Owner : ROADS AND TRANSPORT AUTHORITY (RTA), DUBAI

Project Engineer : PARSONS-SYSTR

TO WHOMSOEVER IT MAY CONCERN

This is to inform and certify that **Encardio-rite Electronics (P) Ltd.**, Lucknow, India, in capacity of a specialist subcontractor have executed supply, installation, monitoring, maintenance, annual calibration and factual data reporting of the instruments listed below, in our **Dubai Metro Project - Green Line**. The instrumented sections in the project's 7.1 km long (approx.) underground alignment included: 2 no. cut-and-cover tunnel sections (adjoining Khalid Bin Waleed and Salah Al Din Station boxes); 6 no. underground stations (Saeediya, Al Ghubaiba, Al Ras, Palm Deira, Baniyas Square, Salah Al Din); 3 no. TBM bored tunnel sections (Union Square-Salah Al Din; Union Square-Baniyas Square-Palm Deira; Palm Deira-Al Ras-Al Ghubaiba-Saeediya-Burjuman), 3 no. annexed structures (Annex 4, 6 and 7).

List of instruments used in the Green-Line project:

1. Surface settlement point for green field model ESMP-10C2
2. Surface settlement point for road and pavement model EPS-12
3. Water stand pipe model EPP-30SP
4. Inclinator system model EAN-25M
5. Vibrating wire strain gage model EDS-20V-SW
6. Strain gage type compression load cell model ELC-210S
7. Tape extensometer model EDS-80
8. Building settlement point model EBS-16
9. Portable tilt meter model EAN-70M
10. Crack meter model EDJ-40C
11. Magnetic extensometer model EDS-91
12. Portable readout unit cum dataloggers and accessories including cables, junction boxes etc. for the above instruments.



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The above instruments have performed in a satisfactory manner and we have no hesitation in recommending them for similar usage in other projects. We are also satisfied with the technical services provided by Encardio-rite on this project.

Total value of work executed by them for the project during the period May-2007 to April-2009 is approximately **AED 7.62 million**.

Yours faithfully,
JT METRO JOINT VENTURE


Jun Tomoda
Senior Project Manager – Green Line - Civil



SAMSUNG C&T CORPORATION
STEP Deep Tunnel Sewer Contract T-01
P.O.Box 127533, Abu Dhabi, UAE



Our Ref.: SCE-ERE-T1-LT-02199-0022
12th October 2015

Mr. Vikas Vishwakarma
Project Manager
Encardio-rite Geosystems LLC – Abu Dhabi Branch
P.O. Box 131126
Abu Dhabi, United Arab Emirates

Project: Contract O-1557, STEP Deep Tunnel Sewer Contract T-01

Subject: Appreciation Letter

Dear Sir,

We confirm that Encardio-rite Geosystems LLC have successfully completed the Sub-contract for Pre and Post Condition Surveys on our T-01 contract for the Abi Dhabi Strategic Tunnel Enhancement Programme(STEP) Deep Tunnel Sewer tunneling project.

During the execution of their work Encardio-rite Geosystems LLC has demonstrated professional approach and enthusiastic support for the WORKS and we would certainly be happy to work with Encardio-rite Geosystems LLC in the future.

Yours faithfully,

For and on behalf of Samsung C&T Corporation.


Young Jin Yoon
Project Manager
STEP Deep Tunnel Sewer Contract T-01





Ref: IGL-OTH-T3-LT-00557/ENCARDIO
Date: 9th July 2014

To:
ENCARDIO-RITE Geosystems L.L.C.
P.O. Box 131126
Abu Dhabi – U.A.E.

Att: **Mr. Amod Gujral**
Mr. Prateek Mehrotra

Subject: **Design and Construction for Strategic Tunnel Enhancement Programme**
Deep Tunnel Sewer Contract T-03
Subcontract for Pre/Post Construction Condition Surveys
Subcontract Completion

Dear Sirs,

Pursuant to clause 6 of the subject Subcontract, we hereby certify the completion of the Subcontract Works for STEP T03 on 25th December 2013.

All the invoices issued till date have been paid.

We look forward to receiving your confirmation and concurrence on all the foregoing by signing and stamping in the space provided here below.

Mr.
Salini Impregilo S.p.A. - Abu Dhabi
Branch

Mr.
ENCARDIO-RITE Geosystems L.L.C.



Salini Impregilo S.p.A. Abu Dhabi Branch
formerly IMPREGILO S.p.A.
Al Watda City 1 Commercial Tower
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www.salini-impregilo.com

Commercial License no. CM-1145/316
Chamber of Commerce Membership
no. 341414

Ed. ZUBLIN AG

ZÜBLIN

Date: October 12, 2017

SUBJECT : WORK COMPLETION CUM PERFORMANCE CERTIFICATE FOR INSTRUMENTATION, MONITORING AND PRE & POST CONSTRUCTION CONDITION SURVEY

PROJECT : STRATEGIC TUNNEL ENHANCEMENT PROGRAMME-LINK SEWER CONTRACTS LS-01 (O-1859) & LS-02 (O-1703)

CLIENT : ABU DHABI SEWAGE SERVICES COMPANY (ADSSC)

CONSULTANT : CH2MHILL

PROJECT PERFORMANCE & COMPLETION CERTIFICATE

This is to inform and certify that Encardio-rite Geosystems LLC, Abu Dhabi branch, U.A.E, in capacity of a specialist subcontractor have executed supply, installation, monitoring, maintenance and factual data reporting of the instruments listed below, in our Step Link Sewer Project. The instrumented section in the project 42 KM long (approx).

A- Geotechnical Instrumentation and Monitoring:

1. Inclinator in soil and scant piles
2. Multilevel vibrating wire piezometer
3. Water stand pipe
4. Multipoint bore hole extensometer
5. Vibration monitoring
6. Portable readout unit cum datalogger and accessories including cables, junction boxes etc. for the above instruments.
7. Weekly Reporting of 151 weeks

B- Pre & Post Construction of Building Condition Survey (Dilapidation Survey):

Pre and post condition survey carried out in this project by photography and crack measurement for approximately 1900 total structures, included high rise buildings, villas, banks, hotels, mosques, pumping station etc.

Total project value of work executed by them is approximately AED 17.6 million during the period May, 2012 to December, 2016.

The above mentioned instruments have performed in a satisfactory manner and we have no objection in recommending them for similar usage in other projects. We are also satisfied with the preconstruction condition survey reports and technical services provided by Encardio-rite on this ADSSC project.

For Ed. Zublin AG

Mohamed El Azab
Project Manager



Ed. Zublin AG
P.O.Box 656, Abu Dhabi, UAE.
Tel.: +971 2 6344039
Fax: +971 2 6211014
E-Mail: office.abudhabi@zublin-international.com
www.zueblin.de



Company Registration CN - 1001294

Page 1 of 1

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The Civil Works Joint Venture (CWJV)
for the Route 2020 Metro Project

Members of
EXPOLINK
2020

Dubai, 22 February 2017
Ref: DMR10-AGJ-ERG-17-00001-TK

M/s ENCARDIO RITE GEOSYSTEMS LLC
P.O. Box 123850
Dubai, UAE

Project: ExpoLink Route 2020
Subject: Letter of Award – Structural Survey and Monitoring Service
Agreement Ref: R2020/CWJV/17/LOA/005

Dear Sirs,

Please find attached one original Letter of Award documents fully signed by CWJV for the Structural Survey and Monitoring Service on the ExpoLink Route 2020 Project.

We wish you a successful time on this Project and hope your experience is an enjoyable one.

Yours faithfully,

For and on behalf of Civil Works Joint Venture


Jose Luis Olivan
Project Director


DR/TK/MS

We confirm receipt of this signed Letter of Award for the Structural Survey and Monitoring Service

Signature _____ Date: _____

Print Name _____

Acciona Infraestructuras S.A & Gulermak Agir Sanayi Insaat ve Taahhut A.S. Civil Works Joint Venture Operating Address : Arenco Building No 3, DIP, Dubai, UAE PO Box : 487540	ROUTE 2020 Metro Rail Project	Page: 1/1
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Ref : EM706/SCA-1647/3437/2016
Date : 22nd December 2016

Encardio Rite Geosystems LLC
P.O. Box 123850,
Dubai, United Arab Emirates

Attention: Mr. – Vikas Vishwakarma – Sr. Project Manager
Dear Sirs,

Project: R1013/1 Improvements of Al Shindagha Corridor (Sana Junction)

Subject: Sub-Contract Agreement, EM706/1647/2016 – Instrumentation and Monitoring at the Metro Pier

We enclose two original sets of the Sub-Contract Agreement No. EM706/1647/2016 dated 15th December 2016 for the above works.

Please initial and affix your company seal to every page of the Sub-Contract Agreement and put full signature of your authorised signatory on Page no.7.

Please return the two original sets duly signed and stamped within 3 days from the date of this letter and provide a copy of the power of attorney and passport copy of your authorised signatory. We shall return one original set of the Sub-Contract Agreement after our signature.

Please note that no work should commence prior to signing of the Sub-Contract Agreement by both parties.

Yours faithfully,
for Wade Adams Contracting (L.L.C)



Michael Tsialis
Manager

scw/gc

P.O. Box 4337, Dubai, United Arab Emirates
Tel: +971 4 4535000, Fax: +971 4 4508087
E-mail: wadeadam@emirates.net.ae, www.wadeadams.com
Share Capital Dhls. 3,000,000 Fully Paid Up

ص.ب. ٤٣٣٧، دبي، الإمارات العربية المتحدة
هاتف: +٩٧١ ٤ ٤٥٣٥٠٠٠، فاكس: +٩٧١ ٤ ٤٥٠٨٠٨٧
E-mail: wadeadam@emirates.net.ae, www.wadeadams.com
رأس المال ٣,٠٠٠,٠٠٠ درهم مدفوع بالكامل

SUB-CONTRACT AGREEMENT

MAIN CONTRACT : RI013/1 IMPROVEMENTS OF AL SHINDAGHA
CORRIDOR (SANA JUNCTION)

CONTRACTOR : WADE ADAMS CONTRACTING (L.L.C.)

SUB-CONTRACTOR : ENCARDIO RITE GEOSYSTEMS (L.L.C)

SUB-CONTRACT WORK : INSTRUMENTATION AND MONITORING AT THE
METRO PIER

SUB-CONTRACT NO. : EM706/1647/2016

SUB-CONTRACT DATE : 19 DECEMBER 2016


EM706/1647/2016

Form B

PARSONS

Site Office Phone: 04-4428694 Fax: 04-4428278
Email: r10131pol@gmail.com

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شركة بارسونز أوفرسيز ليمتد ، شارع عود ميثاء ، ص.ب. 9123 | دبي ،
الإمارات العربية المتحدة
ت: +971.4.402.9700 | ف: +971.4.336.7920

25 December 2016

Our Ref: 202/R1013/1/16R0167

The Director General
and Chairman of the Board and Executive Director
Roads & Transport Authority
P.O. Box 118899, Dubai
United Arab Emirates

Attn: Dr. Mohammed Abdullah Yousef, Construction Supervision Manager

Dear Sir,

Contract R1013/1: Improvements of Al Shindagha Corridor (Sana Junction)
Prequalification for Metro Pier Monitoring during underpass work (PQ-40)

With reference to the above mentioned subject, please find attached copy of Prequalification Document of M/s Encardio-Rite & Moniterra Group Metro Pier Monitoring during Underpass Works in the subject project.

The pre-qualification documents of the sub-contractor has been reviewed by us and found acceptable. We hereby recommend the approval of M/s Encardio-Rite & Moniterra Group Metro Pier Monitoring during Underpass Works in the contract R1013/1.

This is for your kind information and formal approvals.

With Best Regards,
PARSONS OVERSEAS LIMITED



Adel Mohammad Masadeh
Sr. Resident Engineer

Mob. 050 5546576
Adel.masadeh@parsons.com

cc: - Engr. Malek Mishmish, Liaison Engineer, RTA
- M/s. Wade Adams Contracting LLC
- Main Office File
- File 202

Attachment: As stated above



Parsons PLUS envision more



AM/HW/16R0167

wagner biro

To,
Director of Roads & Structures Maintenance Department
Government of Dubai
Roads and Transport Authority
P.O. Box 118899
Dubai, U.A.E

Attention : Mr. Hassan Ali Thair
The Manager of Roads Structures & Facilities Maintenance Section

Your reference : [your message dated] - Our reference : [our message dated]

RMB 3721-1

11.10.2016

Projects: M1009/B1- Routine Maintenance of Road Structures (Bur Dubai)

Subject: Quotations for Approval - One Week Monitoring each Bridge Bearing Uplift
R317-2 Trade Center Interchange Flyover No 2,3 & 4.

Dear Sir,

Reference to the above subject, please find attached sealed quotations from specialist contractors, submitted to install necessary monitoring meters to measure the uplift of bridge bearings at Trade Center 2, 3 & 4 bridges.

1. M/s Freyssinet LLC
2. M/s Encardio Rite Geosystems LLC

Here, we are submitting two quotations only because the bridge monitoring system works are carried out from specialized contractor. We don't have third contractor to submit the quotations.

Therefore, we would kindly request you to review/Approve and issue a letter of approval in order to further instruct approved sub-contractor. The Method Statement and Risk Assessment will be submitted accordingly.

Your Cooperation in this regard will be highly appreciated.


Gopal Krishnan
Project Manager

Attachments: Quotations

Wagner Biro Gulf LLC, P.O. Box 8542, Dubai - U.A.E., Main office [tel] 04-4403870, [Fax] 04-4403871, Site office [tel] 04-2873211, [Fax] 04-2873213,
[e] maintenance@wbogulf.com [i] www.wagner-biro-gulf.com

Topo-Aerial Surveys, Geotechnical, Structural and Groundwater Monitoring Solutions
Over 50 years of excellence through ingenuity



July 3, 2017

To Whom It May Concern

This is to inform and certify that Encardio Rite Geosystems L.L.C., Dubai, U.A.E had performed Supply and Installation of Geo-Technical Instruments for Construction Monitoring, Pre- Construction Surveys of Existing Red Line Metro and Monitoring and produced and issued all kind of required reports on a weekly basis for **Dubai Water Canal Infrastructure Package (Canal and Costal Works).**

Following activities were performed by them during the construction of the Canal.

A.) Pre-Construction Condition Survey of Metro track and Pier

Duration: approx. 1 week

Structures/Buildings Surveyed: From RPN-410 till RPN-413 and additional 25 m both sides of canal excavation (approximately 150 m) and metro piers RPN-410, 411, 412 and 413

B.) Instrumentation and Monitoring for metro track and metro piers on a turnkey basis:

Instrument Used	Quantity	Remark
Inclinometer in ground	2	Depth=10m
Extensometer	2	Depth=10m
Automatic water level monitoring system	3	Depth=10m
Tilt Meter	8	
Prism on metro track side	20	
Prism on metro piers	8	
Building settlement point	4	
Manual standpipe	2	Depth=10m
Manual vibration monitoring	87 visits	
Daily monitoring and Weekly Reporting	8 months	

شركة هندسة الجيوتقنيّة
الإمارات العربيّة المتّحدة
ص.ب. 13055

هاتف: ٣٤٧٢٧٧٧
فاكس: ٣٤٧٣٤١٩

BELHASA SIX CONSTRUCT L.L.C.
Dubai, United Arab Emirates
P.O. Box 13055

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www.besix.com



These instruments have performed in a satisfactory manner during the duration of 8months and we have no

This certificate has been issued upon **Encardio Rite Geosystems L.L.C.**, Dubai, U.A.E request without any liability to the company.

Yours faithfully,
For Belhasa Six Construct LLC



Mohamed Elaby
Project Manager

شركة بلحسا سبكن كونستراكت ل.م.م
دبي، الإمارات العربية المتحدة
ص.ب. ١٣٠٥٥

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M/s Encardio-rite Geosystems L.L.C
P.O. Box 131126,
Abu Dhabi
UAE

For the attention of : Mr. Amit Ranjan
Head Operations

Date : 16 July 2015

Ref : DCA-SIX-LTX-GE-00-00660-00

Project :
Dubai Water Canal Infrastructure
Package 3 – Canal and Coastal Works

Contact :

Felix Warny
Mob – 050-622 06 08
Email : fwarny@sixco.ae

Enclosure(s) :

As mentioned

Copy to :

Subject: Letter of Award for Metro Monitoring

Dear Sir,

Please find attached herewith one (1) Original Letter of Award duly signed and stamped in between M/s. Encardio-rite Geosystems LLC and Belhasa Six Construct LLC, for Vibration monitoring to the Sewerage System areas and metro Monitoring Canal Area for R999/3 Dubai Water Canal –Infrastructure Package-3– Canal & Coastal Works in the Emirates of Dubai.

Thanking you,

Yours faithfully,
For and on behalf of
Belhasa Six Construct LLC

Felix Warny
Project Director

شركة بلحسا سبكس كونستراكت ل.م.ع.
بي.إ.إ. الإمارات العربية المتحدة
ق.م.ب. ١٣٠٥٥

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M/s Encardio-rite Geosystems L.L.C
P.O. Box 131126,
Abu Dhabi
UAE

For the attention of : Mr. Amit Ranjan
Head Operations

Date : 10 April 2017

Ref : DCA-SIX-LTX-GE-00-02021-00

Project :
Dubai Water Canal Infrastructure
Package 3 – Canal and Coastal Works

Contact :

Cassio Llesis
Mob. : 056 115 1135
Email : qs-dca@sixco.ae

**Subject: Final Settlement –Encardio-rite Geosystems LLC,
Preconstruction Survey**

Dear Sir,

Please find attached herewith one (1) original form of final settlement for subcontract duly signed and stamped by us for your record.

This is for your necessary information / records / action.

Enclosure(s) :

As mentioned

Copy to :

Yours faithfully,
For and on behalf of
Belhasa Six Construct LLC



Mohamed Elaby
Project Manager

شركة بالخصا سكس كونستراكت ل.م.م.
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Date: 26 /10 /2016

Reference:PTA/MD/9433/2016

Mr./ Manager of Roads Structures and Facilities Maintenance. ... Respectful

Subject: Start of Base Line Monitoring for Al Garhoud Bridge Pier

Project: PTA/MAR/062/01a Al Garhoud Vessel Maintenance Facility Marine Works Package

We would like to extend our gratitude for continues cooperation though out Marine Transport Department. This is with reference to meeting held with your department and your consultant AECOM, Marine Consultant CHSS, Monitoring contractor ENCARDIO, Marine contractor DBB with our department on 26 October 2016. All the parties have exchanged the information related to Maintenance Facility and the proposed Bridge Pier Monitoring Plan. AECOM consultant from your side informed that they do not have any objection on starting base line monitoring as proposed monitoring plan for two weeks. However, they will comment if required further after reviewing of the monitoring plan proposed by ENCARDIO within three weeks time. Same Monitoring proposal to be submitted for the Bridge Designer CH2M (HALCROW) for their review and comments as well.

As per Contractor DBB requests, we would like you to inform that ENCARDIO contractor will start base line monitoring from 27 October 2016. No Objection for the installations of instrument also obtained during the meeting from your side and we will proceed accordingly. This is for your information and necessary instructions if any.

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-1-

PTA/MD/9433/2016



هيئة الطرق والمواصلات
ROADS & TRANSPORT AUTHORITY



Ali Essa Ali Abdulla Ahli
Studies and Design Manager

Copy to:

- Mr./ Roads Planning and Design Manager ... Respectful

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-2-

PTA/MD/9433/2016

دتكو بلفوربيتي (ش.ذ.م.م.)
Dutco Balfour Beatty (L.L.C.)



Ref: L/AA9027/13.2/EFG/TJ/ms/3013

19th November 2016

M/s Encardio Rite Geosystems L.L.C
P.O. Box 131126
Abu Dhabi
United Arab Emirates

For the attention of Mr. Amit Ranjan – Head Operations

Dear Sirs,

**PROJECT NAME: PTA/MAR/062/1A – CONSTRUCTION OF AL GARHOUD
MAINTENANCE FACILITY PACKAGE 1 (MARINE WORKS)
SUB: BRIDGE PIER MONITORING WORKS - LETTER OF INTENT**

We refer to your quotation ref. PI-DBB-16106R4 dated 17th Oct 2016 and our order confirmation via email dated 23rd October 2016 we hereby confirm our acceptance to your price for carrying out the Bridge Pier Monitoring for the aforementioned Project.

This letter of intent is subject to the following terms and conditions:-

1. Approval of M/s. Encardio Rite as the subcontractor for bridge monitoring works for the above mentioned project by the Engineer / Client.
2. The subcontractor shall execute the works in accordance with the Main Contract Specification and to the satisfaction of the Engineer / Client / Authorities.
3. All necessary documentation shall be in place
4. The subcontract rates shall be as per your quotation ref. PI-DBB-16106R4 dated 17th Oct 2016 (copy attached).
5. The subcontractor shall commence the work on site as per agreed schedule and the reports need to be submitted as per the requirement from authorities.
6. Payment terms shall be 60 days upon submission of report and invoice.
7. The subcontractor shall fully comply with the Main Contractor's Health & Safety and Environmental Plan and in accordance with the Client Site Safety Rules for the development. Any non-compliance and / or breach of safety and environmental rules will result in fines being issued and deducted from the subcontract account.



P.O. Box : 6944, Dubai, UAE
Telephone : +971 4 880 2288
Facsimile : +971 4 880 1457
Email : mail@dbb.ae
Website : www.dutcobalfourbeatty.com

A Dutco Balfour Beatty Company

Dutco Balfour Beatty LLC
Limited Liability Company
Share Capital: AED 300,000
Commercial Registry No. 41514

دتكو بلفوربيتي (ش.ذ.م.م.)
شركة ذات مسؤولية محدودة
رأسمال: ٣٠٠,٠٠٠ درهم
رقم السجل التجاري: ٤١٥١٤

ZERO HARM
MAKE SAFETY PERSONAL

Contd.../Page-2

ص.ب. : ٦٩٤٤، دبي، الإمارات العربية المتحدة
تليفون : +٩٧١ ٤ ٨٨٠ ٢٢٨٨
فاكس : +٩٧١ ٤ ٨٨٠ ١٤٥٧
البريد الإلكتروني: mail@dbb.ae
www.dutcobalfourbeatty.com

WI AD 006/Jan. 2015



Ref: L/AA9027/13.2/EFG/TJ/ms/3013
Date: 19th November 2016

Page: 2

8. The subcontract prices shall be inclusive of all labour, supervision, plant, equipment and other costs required for the successful completion of the subcontract works.
9. Kindly note that establishment and monitoring of the approved system is of utmost important to the authority approvals and subsequent commencement of construction activities on site, we request you to expedite the process of instrument arrangements / installation to facilitate the commencement of approved monitoring system.

This letter of intent is your authority to start the subcontract work.

A standard form of Subcontract Agreement / LPO will be forwarded for your acceptance and signature in due course.

Until and unless a Subcontract Agreement is signed between M/s. Encardio-Rite and M/s. Dutco Balfour Beatty LLC, this Letter of intent shall be binding document between our companies for all relevant purposes.

Accepted and Agreed

For Dutco Balfour Beatty LLC



Ednor F. Garcia – Sr. Project Manager

Accepted and Agreed

For Encardio Rite

Authorised Signatory



Emaar Properties PJSC
P.O.Box 9440, Dubai
United Arab Emirates

T +971 4 3673333
F +971 4 3673000

enquiry@emaar.ae
emaar.com

Pre-Qualification Notification: APPROVED

Company : Encardio Rite Geosystems LLC

Category : Geotechnical Instrumentation, Monitoring and Underground Studies

Reference No: EMAAR/PQ/0756

Date : 30th June 2016

Attn : Mr. Amit Ranjan

Dear Sir,

We would like to confirm that your company has successfully prequalified for Emaar projects for the above mentioned categories. We will invite you to participate in our tender process when a suitable opportunity arises.

Yours faithfully,

**For and on behalf of
Emaar Properties PJSC**



**Alan Sinclair
Director, Contracts**

AECOM

Form 1 **DOCUMENT TRANSMITTAL**

Transmittal No.: OT-ASC02-0018
Rev. # 01
Date: 27/06/2017

CLIENT: Banyas Investment and Development Company
PROJECT: Bawabat Al Sharq- Phase 3 Buildings
CONTRACT: Main Contract
CONTRACTOR: Royal International Const. LLC

SUBJECT: Method Statement for Settlement Monitoring of Raft Foundation
TO: AECOM Middle East Limited

ATTACHMENTS: Method Statement for Settlement Monitoring of Raft Foundation
LOCATION: Phase III Villas
DISCIPLINE: Civil
PACKAGE: Structural

TRANSMITTED FOR	CODE
APPROVAL	1
INFORMATION	2
AS REQUESTED	3
FILING & DOCUMENTATION	4
OTHER (specify)	5

ACTION	CODE
APPROVED	A
APPROVED AS NOTED	B
REVISE AND RESUBMIT	C
NOT APPROVED	D
FOR INFORMATION	E

WE ARE SENDING HEREWITH: UNDER SEPARATE COVER THE DRAWINGS DOCUMENTS SAMPLES LISTED BELOW
(DELETE AS NECESSARY)

QTY	DRWS, SPEC. OR BOQ. REF	ITEM SEQ NUMBER	DESCRIPTION	TYPE	ACTION CODE
			Method Statement for Settlement Monitoring of Raft Foundation for Villa No. V69 & V70	1	B

This Submittal does/ does not deviate from Contract Documents (Circle one)

Contractor Signature: *[Signature]* **Date:** 27/06/2017 **Contractor Stamp:**

CONSULTANT REVIEW/ COMMENTS:

status (B)

** Refer to the attached comments (Safety)*

** The number of settlement plate should cover the four corner of the raft (as minimum)*

** The frequency of reading (8i weekly) is not acceptable, at the beginning it should be daily and after 2-3 weeks depends on the reading difference, and then it can be*

Corrections or comments relative to submittals during this review do not relieve the contractor from compliance with the requirements of the Contract Documents. This check is only for review of general conformance with the design concept of the project and general compliance with the provisions given in the contract documents. The contractor is responsible for confirming and correlating all quantities and dimensions selecting the proper construction techniques of construction, coordination his work with that other trades and performing his work in safe and satisfactory manner.

ROUTING

Received by	Date	Client	Date
Received by AECOM	6/7/17	not	
Forwarded to BIDC			
Received from BIDC			
Forwarded to RIC			

ROUTING

DATE	INITIAL	NAME
PROJECT MANAGER - P114		
PROJ. ENGR.		
PLANNING ENR.		
ARCHITECT		
QS		
BADC		
SAFETY		
FILE		
STORE		
OTHER		
MEP		

every alternative days, After that, it can be weekly if the difference in reading is less than 0.01m

8/7/17

Form 2-001

OT-ASC02-0018-01 Method Statement for Settlement Monitoring

AECOM

SUBMITTAL REVIEW COMMENTS

PROJECT: BAWABAT AL SHAQ – PHASE 3 – VILLAS
SUBMITTAL NUMBER: OT-ASSC02-0018 REV 01
SUBMITTAL SUBJECT: Method statement For Settlement Monitoring of Raft Foundation. (Villa no 69 &70)
COMMENTS DATE: 28/6/2017

REVIEW STATUS: (B) Approved as noted

COMMENTS.

1. RIC is fully required to comply with all the requirements as contained in the approved HSE Plan.
2. This does not also relieve the contractor from her duty of ensuring the total monitoring of the effective measures as contained in the RA.
3. RIC will be solely responsible to whatever happened at site during the Activities.

Review By: Nnamani Emmanuel.

28/06/2017



دتكو بلفوربيتي (ش.ذ.م.م.) Dutco Balfour Beatty (L.L.C.)



Ref.: L/AK8302-001/13.2/TJ/ss/3015

09th June 2015

M/s. Encardio - Rite GeoSystems LLC
P.O. Box 131126
Abu Dhabi
United Arab Emirates

Tel: 025535680
Fax 025535681

Attention: Mr. Amit Ranjan – Head Operations

Dear Sirs,

0102 – MARSA AL SEEF DEVELOPMENT LETTER OF AWARD – METRO TUNNEL EXCLUSION ZONE MONITORING & INSTRUMENTATION SYSTEM

We are pleased to award the subcontract for the metro tunnel exclusion zone monitoring and instrumentation system to M/s Encardio - Rite GeoSystems LLC under the subject Contract, based on the specification, drawings, other documents, terms and conditions as included in the attached Subcontract Agreement no. 3200.

This Award is subject to the following suspensive conditions:

- DBB obtaining the consent of the Engineer / Employer as to M/s Encardio - Rite GeoSystems supplying the subject materials; and
- The Subcontract Agreement including all attachments being returned to DBB duly stamped and signed by M/s Encardio - Rite GeoSystems LLC.

Please arrange for each page of the Subcontract Agreement and its attachments to be stamped, initialled and the signature of a duly authorized person on Page 29.

Both copies of the document are to be returned to this office within seven (7) days from the date of this Letter of Award, whereupon receipt, we will complete the documents and return one full copy to you for your record.

We would like to welcome M/s Encardio - Rite GeoSystems LLC in to this prestigious project and look forward to a mutually rewarding outcome for both our companies.

Yours faithfully
For DUTCO BALFOUR BEATTY LLC

**MARTIN HARPER
COMMERCIAL MANAGER**

Encl: Subcontract Agreement no. 3200– 2 sets

P.O. Box : 8944, Dubai, UAE
Telephone : +971 4 880 2288
Facsimile : +971 4 880 1457
Email : mail@dbb.ae
Website : www.dutcobalfourbeatty.com
A Dutco Balfour Beatty Company

Dutco Balfour Beatty LLC
Limited Liability Company
Share Capital : AED 300,000
Commercial Registry No. 41314

دتكو بلفوربيتي (ش.ذ.م.م.)
الركعة ذات مسؤولية محدودة
رأسمال الشركة ٣٠٠,٠٠٠ درهم
رقم السجل التجاري ٤١٣١٤

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صن خبء: ٨٩٤٤، دبي، ا.ع.م.
تليفون : +٩٧١ ٤ ٨٨٠ ٢٢٨٨
فاكس : +٩٧١ ٤ ٨٨٠ ١٤٥٧
البريد الإلكتروني: mail@dbb.ae
www.dutcobalfourbeatty.com

WI AD 006/Jan. 2015



SAMSUNG-SAIF BIN DARWISH JV

P.O. Box 53581, Abu Dhabi, UAE

Tel : (02) 4949 600

Fax : (02) 4949 800

Ref No. : SSBD/SUB/INF/4842/11

Date : 21 Sep 2011

Encardio-Rite Geosystems L.L.C

Abu Dhabi Branch

P.O Box 131126

Abu Dhabi, United Arab Emirates

Attention : Mr. Amit Ranjan/Project Manager

**Project : Upgrading Al Salam Street and Abu Dhabi City Ring Road
Contract No.1 (Al Salam Street Tunnel)**

**Subject : Work Completion cum Performance Certificate for Instrumentation,
Monitoring and Pre-Construction Condition Survey**

Owner : Department of Municipal Affairs, Municipality of Abu Dhabi, U.A.E

Consultant : Parsons International

Dear Sir,

This is to inform and certify that **Encardio-rite Geosystems L.L.C**, Abu Dhabi Branch, U.A.E, in capacity of a specialist subcontractor have executed supply, installation, monitoring and factual data reporting of the instruments listed below, in our **Al Salam Street Tunnel Project, Contract 1**. The project comprises of 3.1km tunnel from Al Mina Road intersection to Al Falah Street intersection constructed using cut and cover method. The tunnel will be the longest in the Middle East once complete.

A). Geotechnical instrumentation and monitoring:

Instrument Used	Quantity	Remarks
Inclinometer (D-wall)	57 no.	Probe type, Depth=17m 2m below D-wall toe
Inclinometer (D-wall)	10 no.	Probe type, Depth=20 2m below D-wall toe
Tiltmeter (Building)	78 no.	Tilt plate type
Prism (Building)	45 no.	
Settlement pin (Building)	78 no.	

1

HG/jovie

Crack meter	100 no.	
Ground Settlement Marker	257 no.	Asphalt Concrete type
	100 no.	Soil type
Anchor Load Cell -I	50 no.	Strain gage type, design load=60 ton
Anchor Load Cell -II	6 no.	Strain gage type, design load=120 ton
Dip meter (within excavation)	67 no.	Casagrande type, GL to 20m
Piezometer (outside excavation)	67 no.	VW type, GL to 5m & 10m
Borehole Extensometer	13 no.	Electrical type, 3m, 6m, 9m
Portable readout unit cum dataloggers and accessories including cables, junction boxes etc. for the above instruments.	1 lot	
Weekly Reporting	60 weeks	Daily Monitoring Basis
	40 weeks	Weekly Monitoring Basis

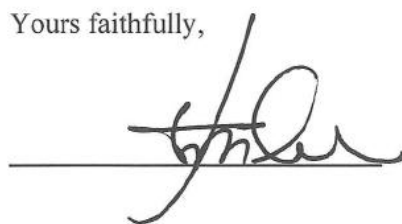
B. Pre- Construction Building Condition Survey

Duration	6 months approximately
No. of Structures/Building surveyed and documented in reports	179 (structures surveyed included high rise office, bank, residential and hotel towers, villas, mosques filling station etc.)

The above-mentioned instruments have performed in a satisfactory manner and we have no hesitation in recommending them for similar usage in other projects. We also satisfied with the preconstruction condition survey reports technical services provided by Encardio-rite on this project.

Total value of work executed by them for the project during the period December -2008 to July-2011 is approximately **AED 8 million.**

Yours faithfully,




H.J. Lee

Project Director

For and on behalf of Samsung-Saif Bin Darwish JV

شركة اميكو للمقاولات ذ.م.م.

Ammico Contracting Co. W.L.L.

Ammico

P.O.Box : 14330, Doha - State of Qatar. Tel. : +974 - 44886531/44886581, Fax : 44886507, E-mail : qatar@ammico.biz

Our Ref. No. ACC/AHCC/196

Dated: September 11, 2012

Subject: Performance Certificate for Instrumentation and Monitoring Works

Project: Supply, Calibration, Maintenance & Monitoring of Instrumentation at Heart of Doha Project, Phase 2& 3 Enabling Works, Doha - Qatar

Owner: Msheireb Properties

This is to inform and certify that M/s. Encardio-rite Electronics (P) Ltd., Lucknow, India executed supply, calibration, maintenance and monitoring of instrumentation at Heart of Doha Project, Phase 2&3 enabling works, Doha - Qatar during 2010-11.

Below said instruments were supplied and monitored for our Project:

Surface Settlement Point	10 Nos.
ESPM-10, (Rod Type- 1m Deep)	
Heavy Duty Cover	10 Nos.
Suitable for Settlement Point	
PVC Perforated Pipe	27 Nos.
OD : 48mm, ID : 38mm, 3m Length with 1m Perforation	
Rigid PVC Standpipe	63 Nos.
OD : 50mm, ID : 44mm, 3m Length for 25m Depth	
Rigid PVC Standpipe	36 Nos.
OD : 50mm, ID : 44mm, 3m Length for 15m Depth	
Rigid PVC Standpipe	27 Nos.
OD : 50mm, ID : 44mm, 3m Length for 9.5m Depth	
Bottom Stopper	27 Nos.
Top Cap	27 Nos.
Water level Sounder	1 Nos.
EPP-10/6, 30m Long, 1mm Resolution	
ABS Self Aligning Access Tube	35 Nos.
EAN-25/1.1, 3m Length	
ABS Telescopic Coupling	42 Nos.
EAN-25/1.1	
End Cap	10 Nos.
EAN-25/1.4 End Cap (Top Or Bottom)	



شركة اميكو للمقاولات ذ.م.م.

Ammico Contracting Co. W.L.L.

Ammico

P.O.Box : 14330, Doha - State of Qatar. Tel. : +974 - 44886531/44886581, Fax : 44886507, E-mail : qatar@ammico.biz

Accessories	46 Nos.
BOPP Tape	
Accessories	1 Nos.
Self Taping, Screws with Nylon Washers	
Software for Inclinator	1 Nos.

The above instruments have performed in a satisfactory manner and we have no hesitation in recommending them for similar usage in other projects. During the work, it is observed that Encardio-rite personnel have good experience in their field.

We wish to thank you for your cooperation and successful execution of the contract.

The issuance of this certificate shall not relieve contractor from any of its obligations under the contract or operate as a waiver by company of any of its rights there under, except in each case as may be expressly provided in the contract.

For and on behalf of
Ammico Contracting Co. W.L.L.

for
Muzaffar Iqbal Anjum
Deputy General Manager





Leighton India Contractors Pvt. Ltd.
Chenani Nashri Tunnel Project

Lower Mada, Village Gujard, Tehsil Chenani,
District Udhampur, Jammu and Kashmir – 182141
India

t: +91 1992 285202
f: +91 124 44958201

www.leighton.co.in

Date: 19-02-2015

Service Certificate.

To Whom It May Concern.

This is to certify that Encardio-rite Electronics Pvt Ltd.- Lucknow has supplied, installed and monitored the below mentioned geo-instruments for the Chenani – Nashri Highway Tunnel Project in accordance with the Works Order No. I1007-COM-ECR-SC-0116 dated 22nd June 2011.

Following geo-instruments were supplied, installed and monitored by Encardio rite:

- Vibrating Wire Type Strain Gauges for shotcrete.
- Vibrating Wire Type Pressure Cells for shotcrete.
- Multipoint Borehole Extensometers.
- Bore Hole Inclinoimeters.
- Digital Read Out Units.
- Optical Bi – reflex Targets.

The above geo instruments which were installed in the project area – underground and on ground, have performed in a satisfactory manner during the construction period from September 2011 to December 2014. We have no hesitation in recommending the said instruments for usage of any other similar project.

Finally, we wish to state that Leighton Contractor was satisfied with the technical response of Encardio rite Electronics as well as it's after sales services provided to this project.



Chief Engineering Geologist.



For Leighton India Contractors Pvt. Ltd.



Arab Center
For Engineering Studies

المركز العربي
للدراسات الهندسية

Performance Cum Completion Certificate

TO WHOM SO EVER IT MAY CONCERN

This is to inform that Encardio-Rite Electronics Pvt. Ltd., Lucknow (INDIA) have participated with ACES in supplied, installed & commissioned following geotechnical instruments for one of our client for **DEEP EXCAVATION PROJECT** at Doha in Qatar during April-May 2010.

- In-place inclinometer system (EAN-51M) with bi-axial sensors for an average depth of 34.5m. Total 09 boreholes /locations.
- ABS casing pipes each having 3m length & accessories for In-place inclinometer system – 80 nos.
- Accessories like switch cum junction boxes, cables, multilogger software, etc.
- Automatic data acquisition system (EDAS-10) – 1no. inside control room.

These instruments have performed in a satisfactory manner and we have no hesitation in recommending them for similar usage in other projects.

We are also satisfied with the technical response as well as their after sales services on this project.

FOR ARAB CENTER FOR ENGINEERING STUDIES (ACES)

MR. RASHAD KILANI
GEOTECHNICAL MANAGER

ACES
Arab Center العربي
For Engineering Studies الدراسات الهندسية

Date: Feb. 26, 2011

Geo. Dept. letters/2011
Page 1 of 1



م.ب. ١٩٥٧٩، الدوحة، قطر هاتف : +٩٧٤ ٤٤ ٨٧٠ ١٤١ فاكس : +٩٧٤ ٤٤ ٨٧٠ ١٤٦
P.O.Box : 19579, Doha, Qatar Tel: +974 44 870 141 Fax: +974 44 870 146
E-mail: acesdaoha@aces-int.com www.aces-int.com



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F: +971 (0)4 885 4004
E: dubai.lab@exova.com
W: www.exova.com



Testing. Advising. Assuring.

Performance Certificate

TO WHOM SO EVER IT MAY CONCERN

This is to inform that Encardio rite Geosystems LLC, U.A.E. have participated with Al Futtaim Exova LLC, Dubai for supplying of the following geotechnical instrument for one of our client for Static Pile Load Test jobs in Dubai and Abu Dhabi. The detail of instrument is listed below:

- ❖ *Encardio rite model EDS-20V-E: Embedment Type Water Proof Vibrating Wire Strain Gages with 1 m cable length - 52 no. at various levels of pile depth.*
- ❖ *Range: 3000 microstrain*
- ❖ *Standard Operating Temperature: -20°C to +60°C*

These strain gages have performed in a satisfactory manner and we have no hesitation in recommending them for similar usage in other projects.

We are also satisfied with the technical response as well as their after sales services on this project.

For Al Futtaim Exova LLC



Mahesh Hingorani
Civils – Site Manager

Dated: Feb 27, 2011



(08)
المصنع إكسوغا المحدودة
Al Futtaim Exova LLC
P.O. Box 34924, Dubai, United Arab Emirates
Tel: +971 (0)4 885 1001 Fax: +971 (0)4 885 4004

الفطيم كاريليون (ش.ذ.م.م)



Ref: AFC/ERG/AC528/L/00001

27th July 2013

ENCARDIO-RITE GEOSYSTEMS LLC
P. O. Box: 131126,
Abu Dhabi, U.A.E.

Fax: 02 5535681

ATTN. : MR. PRATEEK MEHORTA – GENERAL MANAGER

PROJECT : BURJ DUBAI DEVELOPMENT - ROADS & INFRASTRUCTURE WORKS

SUBJECT : PRE-CONSTRUCTION CONDITION SURVEY AT THE DUBAI MALL EXPANSION PROJECT.

REF : UAE 13060 dated 25th July 2013

Dear Sir,

We hereby confirm our intention to engage M/s ENCARDIO-RITE GEOSYSTEMS LLC to carry out and complete the pre construction condition/dilapidation survey in connection with the Dubai Mall expansion work at our Burj Dubai infrastructure Development project, as more detailed in your offer.

You are required to proceed with the work immediately, in close coordination with Mr. Vijayaram, our Project Manager designated for the work.

You are also required to liaise with AFC safety manager Mr. Sandeep (mobile no: 050-4526021) for appropriate safety induction procedure.

A formal subcontract order is being processed and will be issued in due course.

Yours faithfully,
For AL FUTTAIM CARILLION



SIMON BELTON
CONSTRUCTION DIRECTOR

PP

Cc:

Al Futtaim Carillion L.L.C.
P.O.Box 1811
Dubai
United Arab Emirates

Phone: 04 3331200
Fax: 04 3331018
E-mail: afc@alcarillion.ae
www.alcarillion.ae
www.carillionplc.com

ISO 9001, 14001 &
OHSAS 18001 registered



بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

المنار الدولية Al Manar INTERNATIONAL

Ref.No. ALM/RCA/J61/83/10

July 15, 2010

Performance Certificate

This is to inform that **Encardio-Rite Electronics Pvt.Ltd.**, Lucknow have supplied, installed & commissioned following geotechnical instruments to us towards **Rock Slope Stability of MIRANI FORT project at MUSCAT in OMAN**, controlled by Sultanate of Oman.

- In-place inclinometer system (EAN-51M) with bi-axial sensors for an average depth of 25m and gage length of 2m – 14 locations.
- Vibrating wire type bore hole extensometer (EDS-71V) suitable for an average depth of 26m along with accessories - 28 locations.
- EI-Beam sensors (EAN-31 EL-B) – 20 locations.
- Tilt meter (EAN-90M) – 1 location.
- Temperature meters (ETT-10TH) – 6 locations.
- Accessories like switch cum junction boxes, cables, multi-logger software, portable readout unit, etc.
- Automatic data acquisition system (EDAS-10) – 3nos. inside control room.
- Web based data monitoring system (WDMS) with modem & necessary software to acquire data remotely – 1no.

Presently the said system is being monitored & maintained by Encardio-rite Electronics (P) Ltd., India. These instruments have performed in a satisfactory manner and we have no hesitation in recommending them for similar usage in other projects.

We are also very satisfied with the technical response as well as their after sales services on this project.

AL MANAR INTERNATIONAL LLC

Engr. Waleed Youssef Agha
General Manager



من بـت: ١/١٩٦٦٤/٥، عـرب: ٢٤٥٥، روي، الرمز البريدي: ١١٢، سلطنة عمان، هاتف المكتب: ٢٤٥٩٤٥٥، ٢٤١٩٣٠٣٥، فاكس: ٢٤٥٩٣٧٠٢، ٢٤١٩٣٠٣٢، بـرقيا: عمان ديكو، مسقط
C.R. : 1/69664/5, P.O.Box : 2455 Ruwi, Postal Code : 112, Sultanate of Oman, Tel. Off: 24594550, 24493035, Fax : 24593702, 24493032, E-mail : manarint@omantel.net.om



Performance cum Completion Certificate

Commitment, Reliability & Quality TO WHOM SO EVER IT MAY CONCERN

This is to inform and certify that Encardio-Rite Electronics Pvt. Ltd., Lucknow have supplied & monitored following geotechnical instruments through us for Water Resources Division, Goa - Cabo Hills at Raj Bhavan - Governor's Bunglow, Goa for the Rock Slope Stability Work - Phase-I and phase-II carried out by us:

- Supply of Inclinator bore hole casing having an average depth between 20m to 29m
- 18 nos.
- Supply of Digital Inclinator system model EAN-26M having bi-axial type inclinometer torpedo (probe) along with battery operated hand held data logger and cable reel - 1 set.
- Supply of Crack meter (vibrating wire type) model EDJ-50 for embedded application having measuring range of 0-50mm - 8 nos.
- Supply of In-place inclinometer model EAN-51M system with EAN-51M-B IPI biaxial sensor with suitable accessories - 99 nos.
- Supply of Vibrating wire battery operated portable readout unit model EDI-51v along with its accessories - 1 no.
- Supply of Pore Pressure meter (Piezometer) with integral data logger for measurement of underground water level / pressure and temperature - 6 nos.
- Supply of Automatic Data Acquisition system model EDAS-10 data acquisition system suitable for above instruments (99 sensors + 6 piezometers + 2 crack meters) - 1 set.
- Supply of Remote Data Monitoring Service - Web based

Phase - 1 instruments have been performing in satisfactorily since 2007 and Phase - 2 instruments have been performing in satisfactorily since 2013.

In addition, they supplied technical expertise during installation of instruments in the field.

We are satisfied with the technical response as well as their after sales services on this project.

For ITD Cementation India Ltd.

Manish Kumar
Vice President



June 18, 2014

ITD CEMENTATION INDIA LIMITED

Registered & Corporate Office : National Plastic Building, A - Subhash Road, Paranjape B Scheme, Vile Parle (East), Mumbai - 400 057. Tel: 91-22-66931620 Fax : 91-22-66931628 www.itdcem.co.in



THE FREYSSINET PRESTRESSED CONCRETE CO. LTD.

6/B, 6th Floor, Sterling Centre, Dr. Annie Besant Road, Worli, Mumbai - 400 018.
Phone : (B) 4322 9500 • Fax: 2493 8461 • E-mail : freyssinet@fpccindia.com

Performance cum Completion Certificate

TO WHOM SO EVER IT MAY CONCERN

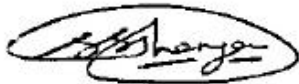
This is to inform and certify that Encardio-Rite Electronics Pvt. Ltd., Lucknow have supplied & installed following geotechnical instruments to us through Gammon India Ltd. for Nuclear Power Corporation India Ltd. (NPCIL) for their Kaiga 3 & 4 reactor building towards pre-stressing cable anchors:

- 08 nos. Vibrating wire type 6 element centre hole load cell model ELC-32V-350/202 having ID of 202mm and OD of 275mm along with its bearing & distribution plates.
- 02 nos. Vibrating wire battery operated portable readout unit model EDI-51v along with its accessories.

These instruments have performed in a very satisfactory manner and we have no hesitation in recommending them for similar usage in other projects.

We are very satisfied with the technical response as well as their after sales services on this project.

for The Freyssinet Prestressed Concrete Co. Ltd.



Sunil Dhangar
General Manager

September 19, 2010



**LARSEN & TOUBRO LIMITED**

ECC DIVISION (ENGINEERING CONSTRUCTION & CONTRACT)

20th September 2010**Performance cum Completion Certificate****TO WHOM SO EVER IT MAY CONCERN**

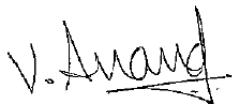
This is to inform and certify that Encardio-Rite Electronics Pvt. Ltd., Lucknow have supplied & installed following geotechnical instruments to us for Nuclear Power Corporation India Ltd. (NPCIL) for their Tarapur 3 & 4 reactor building towards pre-stressing cable anchors during 2004:

- 08 nos. strain gage based centre hole load cell model ELC-30S-450/195 having capacity of 4500 kN, ID of 195mm and OD of 260mm along with its bearing & distribution plates.
- 08 nos. battery operated portable readout unit model SS-901 along with its accessories.

These instruments have performed in a satisfactory manner and we have no hesitation in recommending them for similar usage in other projects.

We are very satisfied with the technical response as well as their after sales services on this project.

for Larsen & Toubro Ltd., ECC Division.



V. Anand
Technical Manager

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