

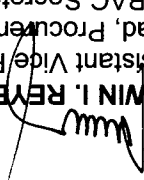
BID BULLETIN NO. 1
For LBP-HOBAC-ITB-GS-20181127-01

PROJECT	:	One (1) Lot Structural Retrofitting Works at LANDBANK Plaza Building
IMPLEMENTOR	:	Procurement Department
DATE	:	January 31, 2019

This Bid Bulletin is issued to modify, amend and/or clarify certain items in the Bid Documents. This shall form an integral part of the Bid Documents.

Modifications, amendments and/or clarifications:

- 1) The schemes for beams/girders to be retrofitted (Annex C) were added. Kindly refer to the attached Annexes C-1 to C-4.
- 2) Section VII (Specifications) and Checklist of the Bidding Documents (Item 6) have been revised. Please see attached revised Annexes A-1 to A-7 and specific sections of the Bidding Documents.


ALWIN I. REYES, CSSP
 Assistant Vice President
 Head, Procurement Department and
 HOBAC Secretariat

Technical Specifications

Statement of Compliance	Specifications
Bidders must state below either "Comply" or "Not Comply" against each of the individual parameters of each specification. Statements of "Comply" or "Not Comply" must be supported by evidence in a Bidders Bid. Evidence shall be in the form of manufacturer's un-amended sales literature, unconditional statements of specification and compliance issued by the manufacturer, samples, independent test data etc., as appropriate. A statement that is not supported by evidence or is subsequently found to be contradicted by the evidence presented will render the Bid under evaluation liable for rejection. A statement either in the Bidders statement of compliance or the supporting evidence that is found to be false either during Bid evaluation, post-qualification or the execution of the Contract may be regarded as fraudulent and render the Bidder or supplier liable for prosecution subject to the provisions of ITB Clause 3.1(a)(ii) and/or GCC Clause 2.1(a)(iii)	One (1) lot Supply of Labor, Materials, Supervision Svices, Tools and Equipment for the Structural Retrofitting Works at the LANDBANK Plaza Building Terms of Reference per attached Revised Annexes A-1 to A-7. Schemes for Beams/Girders to be retrofitted per attached Annexes C-1 to C-4. The following documents shall be submitted inside the eligibility/technical envelope: • Previous Contracts, Purchase Order, Certificate of Satisfactory Performance or equivalent documents as proof that the supplier has minimum experience of ten (10) years in the field of structural investigation and evaluation of buildings that includes design of new buildings (conventional and post-tensioned concrete) as well as construction strengthening / retrofitting of existing building. • Current PCAB license with General Engineering Classification and must not be blacklisted in the record of the Philippine Contractors Accreditation Board.
Please state here either "Comply" or "Not Comply"	• Current PCAB license with General Engineering Classification and must not be blacklisted in the record of the Philippine Contractors Accreditation Board. • Previous Contracts, Purchase Order, Certificate of Satisfactory Performance or equivalent documents as proof that the supplier has minimum experience of ten (10) years in the field of structural investigation and evaluation of buildings that includes design of new buildings (conventional and post-tensioned concrete) as well as construction strengthening / retrofitting of existing building.

	• Previous Contracts, Purchase Orders, Certificate of Satisfactory Performance or equivalent documents as proof that the supplier has an experience of having completed a minimum of five (5) similar contracts in the application of CFRP and epoxy injection (local and abroad) for the last ten (10) years with aggregate amount of Php 20M. • ICBO/ICC-ES Evaluation Report or ISO 9001 Certificate of the manufacturer of the retrofitting material (CFRP). • Curricula vitae of all key personnel. PROJECT/CONSTRUCTION MANAGER – a registered Civil Engineer with a minimum of ten (10) years experience in project management and supervision of general engineering projects. ▪ Certificate of accreditation as specialist Project and Construction Management from Philippine Institute of Civil Engineers (PICE) Specialty Division. WORKS/PROJECT ENGINEER – a registered Civil Engineer with a minimum of ten (10) years experience as Project Engineer. ▪ Certification from the employer/contractor. STRUCTURAL ENGINEER – a registered Civil Engineer with a minimum of ten (10) years experience in structural design and must be PICE Recognized/Specialist Structural Engineer and at least a regular member of the Association of Structural Engineers of the Philippines (ASEP). ▪ Certificate of accreditation issued by the following: 1. Professional Regulation Commission (PRC) as Structural Engineer or PICE Specialty Division; 2. Association of Structural Engineers of the Philippines (ASEP). QUANTITY SURVEYOR - a duly licensed Engineer with a minimum of 10 years experience in the field of quantity surveying. ▪ Certification from the employer/contractor.
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	MATERIALS ENGINEER - a registered Civil Engineer certified by the DPWH as Materials Engineer with a minimum of five (5) years experience as Materials Engineer for similar projects. ▪ Certificate of accreditation as specialist in Materials Engineering from Department of Public Works and Highways (DPWH). APPLICATORS for the CFRP must have been trained by the Manufacturer and must have documented experience of a minimum of five (5) projects of similar nature, using similar materials within the last five (5) years. ▪ Certification from the Manufacturer as accredited and trained CFRP applicator or installer and resume of personnel directly involved in the application.
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Conforme:

 Name of Bidder

 Signature Over Printed Name of
 Authorized Representative

 Position

Checklist of Bidding Documents for Procurement of Goods and Services

**Documents should be arranged as per this Checklist. Kindly
provide folders or guides, dividers and ear tags with
appropriate labels.**

The Technical Component (First Envelope) shall contain the following:

1. Duly notarized Secretary's Certificate attesting that the signatory is the duly authorized representative of the prospective bidder, and granted full power and authority to do, execute and perform any and all acts necessary and/or to represent the prospective bidder in the bidding, if the prospective bidder is a corporation, partnership, cooperative, or joint venture (sample form - Form No.7).
2. Duly notarized Omnibus sworn statement (sample form - Form No.6).
3. Eligibility requirements

• Legal Document

- 3.a PhilGEPS Certificate of Registration (Platinum Membership). All documents enumerated in its Annex A must be updated; or
- 3.b Class "A" eligibility documents as follows:
 - Registration Certificate from SEC, Department of Trade and Industry (DTI) for Sole Proprietorship, or CDA for Cooperatives, or any proof of such registration as stated in the Bidding Documents;
 - Valid and current mayor's permit issued by the city or municipality where the principal place of business of the prospective bidder is located; and
 - Tax Clearance per Executive Order 398, Series of 2005, as finally reviewed and approved by the BIR.

• Technical / Financial Documents

- 3.c Statement of the prospective bidder of all its ongoing government and private contracts, including contracts awarded but not yet started, if any, whether similar or not similar in nature and complexity to the contract to be bid, within the relevant period as provided in the Bidding Documents. The statement shall include all information required in the PBDs prescribed by the GFPB. (sample form - Form No. 3). The duly signed form shall still be submitted even if the bidder has no on-going contract.

3.d Statement of the prospective bidder identifying its single largest completed contract similar to the contract to be bid, equivalent to at least fifty percent (50%) of the ABC supported with contract/purchase order, end-user's acceptance or official receipt(s) issued for the contract, within the relevant period as provided in the Bidding Documents. The statement shall include all information required in the PBDs prescribed by the GPPB. (sample form - Form No. 4).

3.e The prospective bidder's audited financial statements, showing, among others, the prospective bidder's total and current assets and liabilities, stamped "received" by the BIR or its duly accredited and authorized institutions, for the preceding calendar year which should not be earlier than two (2) years from the date of bid submission.

3.f The prospective bidder's computation for its Net Financial Contracting Capacity (sample form - Form No. 5).

3.g Valid joint venture agreement (JVA), in case the joint venture is already in existence. In the absence of a JVA, duly notarized statements from all the potential joint venture partners stating that they will enter into and abide by the provisions of the JVA in the instance that the bid is successful shall be included in the bid. Failure to enter into a joint venture in the event of a contract award shall be ground for the forfeiture of the bid security. Each partner of the joint venture shall submit the legal eligibility documents. The submission of technical and financial eligibility documents by any of the joint venture partners constitutes compliance.

3.h Previous Contracts, Purchase Order, Certificate of Satisfactory Performance or equivalent documents as proof that the supplier has minimum experience of ten (10) years in the field of structural investigation and evaluation of buildings that includes design of new buildings (conventional and post-tensioned concrete) as well as construction strengthening / retrofitting of existing building.

3.i Current PCAB license with General Engineering Classification and must not be blacklisted in the record of the Philippine Contractors Accreditation Board.

3.j Previous Contracts, Purchase Orders, Certificate of Satisfactory Performance or equivalent documents as proof that the supplier has an experience of having completed a minimum of five (5) similar contracts in the application of CFRP and epoxy injection (local and abroad) for the last ten (10) years with aggregate amount of Php 20M.

3.k ICBO/ICC-ES Evaluation Report or ISO 9001 Certificate of the manufacturer of the retrofitting material (CFRP).

3.1 Curricula vitae of all key personnel:

PROJECT/CONSTRUCTION MANAGER – a registered Civil Engineer with a minimum of ten (10) years experience in project management and supervision of general engineering projects.

- Certificate of accreditation as specialist Project and Construction Management from Philippine Institute of Civil Engineers (PICE)

Specialty Division.

WORKS/PROJECT ENGINEER – a registered Civil Engineer with a minimum of ten (10) years experience as Project Engineer.

- Certification from the employer/contractor.

STRUCTURAL ENGINEER – a registered Civil Engineer with a minimum of ten (10) years experience in structural design and must be PICE Recognized/Specialist Structural Engineer and at least a regular member of the Association of Structural Engineers of the Philippines (ASEP).

- Certificate of accreditation issued by the following:

1. Professional Regulation Commission (PRC) as Structural Engineer or PICC Specialty Division;
2. Association of Structural Engineers of the Philippines (ASEP).

QUANTITY SURVEYOR - a duly licensed Engineer with a minimum of 10 years experience in the field of quantity surveying.

- Certification from the employer/contractor.

MATERIALS ENGINEER - a registered Civil Engineer certified by the DPWH as Materials Engineer with a minimum of five (5) years experience as Materials Engineer for similar projects.

- Certificate of accreditation as specialist in Materials Engineering from Department of Public Works and Highways (DPWH).

APPLICATORS for the CFRP must have been trained by the Manufacturer and must have documented experience of a minimum of five (5) projects of similar nature, using similar materials within the last five (5) years.

- Certification from the Manufacturer as accredited and trained CFRP applicator or installer and resume of personnel directly involved in the application.

4. Bid security in the prescribed form, amount and validity period (ITB Clause 18.1 of the Bid Data Sheet);

5. Schedule VI - Schedule of Requirements with signature of bidder's authorized representative.

6. Revised Section VII - Specifications with response on compliance and signature of bidder's authorized representative.

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7. Post-Qualification Documents – (Non-submission of these documents during the bid opening shall not be a ground for the disqualification of the bidder):

7.a Business Tax Returns per Revenue Regulations 3-2005 (BIR No. 2550 Q) VAT or Percentage Tax Returns for the last two (2) quarters filed manually or through the BIR Electronic Filing and Payment System (EFPS);

7.b Income Tax Return for 2017 filed manually or through EFPS.

The Financial Component (Second Envelope) shall contain the following:

1. Duly filled out Bid Form signed by the bidder's authorized representative (sample form - Form No.1)

2. Duly filled out Schedule of Prices signed by the bidder's authorized representative (sample form - Form No.2)

REVISED TERMS OF REFERENCE

I. NAME AND DESCRIPTION OF THE PROJECT

ONE (1) LOT – Supply of Labor, Materials, Supervision Services, Tools and Equipment for the Retrofitting Works at the LANDBANK Plaza Building, 1598 M. H. del Pilar cor., Dr. J. Quintos, Sts., Malate, Manila

II. INTRODUCTION

The LANDBANK Plaza Building of the Land Bank of the Philippines (LBP) located at M.H. Del Pilar Cor Dr. Quintos, Malate Manila, is a 36 Storey with basement and helipad building composed of pre-stressed concrete beams and reinforced concrete columns and floor slabs.

The LBP engaged the services of VNR Villaseñor & Associates (VNRVA) in joint venture with Universal Testing Laboratory & Inspection, Inc. (UTLII) to assess, evaluate and audit the structural strength and serviceability of LANDBANK Plaza Building relative to the provisions of the National Structural Code of the Philippines (NSCP) 2010 Edition and reference documents of the American Society of Civil Engineers (ASCE 41-13).

The result of the structural audit showed that some structural members of LANDBANK Plaza Building have to be retrofitted/strengthened. In this regard the LBP intends to invite prospective contractors to undertake the preparation of detailed retrofitting drawings and implementation of retrofitting and repair works to assure the said building's safety in the event of a major earthquake.

III. PURPOSE/OBJECTIVES OF THE PROJECT

To strengthen and enhance the structural stability of LANDBANK Plaza building and ensure safety of its occupants thru implementation of the recommended retrofitting works.

IV. SCOPE OF WORK

The winning Contractor shall:

1. Conduct a thorough site inspection with the structural audit consultant of the building in order to familiarize themselves with the extent, condition, and nature of the work involved.
2. Examine the conceptual drawings and the structural audit report and shall notify the principal structural engineer of any discrepancy they may find before proceeding with the preparation of the construction documents.
3. Prepare all the necessary construction documents that include final construction drawings, work methodology, detailed quantity take-off, detailed cost estimate and program of work and construction schedule, necessary supplemental drawings, specifications, construction schedule, manpower schedule, and organizational chart based on the conceptual retrofitting scheme.

4. Submit and have the construction documents approved by the local regulatory agencies/bodies prior to proceeding with the implementation of the retrofitting/strengthening and/or repair works. "No approved permit from local regulatory agencies/bodies and from LBP Authority, No work" policy shall be implemented.
5. Submit specifications of the materials to be used which should be equal or better than the specified materials indicated in the preliminary retrofitting plan. Samples of all materials needed for repair and implementation of retrofitting works shall be subject to examination and testing by an accredited Testing of Materials firm

A. PHASE 1 Structural Retrofitting Works

Undertake all activities that are required in the implementation of the approved detailed structural retrofitting/strengthening works. This shall include the following:

- a. **Carbon Fiber Reinforced Polymer (CFRP) retrofitting at identified locations including a portion of 5th Floor parking area.**
- b. Other retrofitting and repair activities as needed such as:

- Layout
- Scaffolding and Falsework
- Removal of Architectural elements
- Grinding works / cleaning on surfaces of Concrete
- Supply and Application of Carbon Fiber (in accordance with the plan and product specifications.)
- Conduct site meetings and prepare progress reports

B. PHASE 2 Structural and Non Structural Repair Works Based on the Comprehensive Site Inspection of the Contractor

Undertake all activities that are identified required in the implementation of the approved detailed structural and non-structural plans/drawings. This shall include the following:

- a. Identification of points, approved by the engineer for initial exploratory ocular inspection, likely damaged during the life of the structure
- b. Repair of concrete cracks by epoxy injection or other approved methodology. All reported cracks shall be epoxy injected, and a post crack monitoring program shall be implemented (as per approval by the owner).
- Non – structural element like concrete masonry unit (CMU) walls shall be filled with mortar.
- c. Repair of damaged concrete surfaces
- d. Repair work for the following:
 - Leak at Ramp, and
 - Cracks at Cistern
- e. Installation of Architectural elements

V. OTHER DELIVERABLES

The Winning Contractor shall submit to LBP the following:

- a. Two (2) sets of prints of as-built plans/shop drawings, specifications, bill of

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- quantities, and detailed cost estimates to be reviewed and approved for construction and implementation.
- Cost and manning requirements for the construction management and supervision of the project which shall include details of the professional fees.
 - Project implementation schedule for the construction management and supervision of the project.
- All plans and documents related to this construction retrofitting services shall become the property of LBP.

Samples and brochures of the following materials (as applicable) shall be submitted for approval prior to implementation:

- Carbon Fiber to be installed
- Floor Finishes
- Ties
- Painting Materials

VI. QUALIFICATIONS AND DOCUMENTARY REQUIREMENTS

Qualification Requirements	Documentary Requirements
1. Must have a minimum of ten (10) years of experience in the field of structural investigation and evaluation of buildings that includes design of new buildings (conventional and post-tensioned concrete) as well as construction strengthening /retrofitting of existing buildings;	List of completed projects supported with their related documents (e.g. previous contracts, Purchase Orders, Certificate of Satisfactory Performance, etc.)
2. Must have a valid PCAB license with a General Engineering Classification and must not be blacklisted in the record of the Philippine Contractors Accreditation Board;	Current PCAB license with government registration
3. Must have an experience of having completed a minimum of five (5) similar contracts in the application of CFRP and epoxy injection (local and abroad) for the last ten (10) years with an aggregate amount of Php 20 M.	List of completed projects supported with their related documents (e.g. previous contracts, Purchase Orders, Certificate of Satisfactory Performance, etc.)
4. The Manufacturer of the retrofitting material (CFRP) must have a valid ICBO/ICC-ES evaluation report or ISO certificate.	ICBO/ICC-ES Evaluation Report or ISO 9001 Certificate
5. Must have minimum key personnel for the entire duration of the project as follows: • PROJECT/CONSTRUCTION	The Curricula vitae of all key personnel Certificate of accreditation as specialist in

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B. STRUCTURAL EPOXY SPECIFICATIONS	
- Elastic Modulus, $E_f = 231 \text{KN/mm}^2$ - Ultimate tensile strain, $\epsilon_u = 0.17$ - Effective ultimate strain $\epsilon_e = 0.0153$ - Thickness $= > 0.12 \text{mm}$	
A. CFRP SPECIFICATIONS	

VII. MINIMUM MATERIALS SPECIFICATIONS AND STANDARD REFERENCES

ICBO – International Conference of Building Officials
 ICC-ES – International Code Council- Evaluation Service

MANAGER - a registered Civil Engineer with a minimum of ten (10) years experience in project management and supervision of general engineering projects WORKS/PROJECT ENGINEER - a registered Civil Engineer with a minimum of ten (10) years experience as Project Engineer STRUCTURAL ENGINEER - a registered Civil Engineer with a minimum of ten (10) years experience in structural design, and must be a PRC or PICE Recognized/Specialist Structural Engineer and at least a regular member of the Association of Structural Engineers of the Philippines (ASEP) QUANTITY SURVEYOR must be a duly licensed Engineer with a minimum of 10 years experience in the field of quantity surveying MATERIALS ENGINEER must be a registered civil engineer certified by the DPWH as Materials Engineer with a minimum of five (5) years experience as Materials Engineer for similar projects	APPLICATORS for the CFRP must have been trained by the Manufacturer and must have documented experience of a minimum of five (5) projects of similar nature, using similar materials within the last five (5) years
Project and Construction Management from Philippine Institute of Civil Engineers (PICE) Specialty Division. Certification from employer/contractor Certificate of accreditation issued by the following: 1. Professional Regulation Commission (PRC) as Structural Engineer or PICE Specialty Division; and 2. Association of Structural Engineers of the Philippines (ASEP) Certification from the employer/contractor Certificate of accreditation as specialist in Materials Engineering from Department of Public Works and Highways (DPWH)	Certification from the Manufacturer as accredited and trained CFRP applicator or installer and resume of personnel directly involved in the application

Laminate adhesive: • Adhesive strength (Mpa) >3.5 • Compressive strength (Mpa) >60 Fabric Impregnation Resin: • Adhesive strength (Mpa) >1.5 • Compressive strength (Mpa) >60 Fabric Primer: • Adhesive strength (Mpa) >1.5 • Compressive strength (Mpa) >60	
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C. CFRP and Structural Epoxy Standard Reference			
ASTM - D3039	Ultimate Tensile Strength, ultimate elongation, tensile modulus	ASTM - D3171	Fiber Content of Resin Matrix Composites by Matrix Digestion
		ASTM - D3801	Flammability (minimum of 1 hour)
		ASTM - D638	Tensile Properties of Plastics for Adhesion samples only

VIII. CONTRACT DURATION AND SCHEDULE OF WORK

- The contract duration is for a period **ONE HUNDRED FIFTY (150)** calendar days with schedule of work to be provided in the Project Timeline.
- Commencement of work shall be three (3) calendar days from receipt of Notice to Proceed (NTP).
- Schedule of work shall be as shown below:
 - Weekdays : 7:00 PM to 4:00 AM
 - Weekends/Holidays : 8:00 AM to 5:00 PM
- Schedule of work may be change subject to mutual agreement between the Contractor and Facilities Management Department provided there will be no disruption in the operations of LBP.
- All works, schedules and other concerns shall be coordinated with the following FMD contact persons:
 - o Engr. Edgardo V. Calderon local 8442
 - o Engr. Ramil P. Remillano local 7360

IX. PAYMENT PROCEDURE

Progress payment shall be implemented subject to LBP Accounting and Auditing Procedures.

X. OTHER TERMS AND CONDITIONS

- The winning Contractor shall:

- Inspect, verify and assess the condition, location and details of the project. LBP FMD will issue **CERTIFICATION OF INSPECTION (CI)**. **No CI is**

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an outright disqualification of the bid proposal. This shall form part of the technical documents to be submitted to Procurement Department (ProcD) during the bidding.

- Secure all permits and other documents needed to implement the Project.
- Prepare a detailed plan proposal for the temporary transfer of affected area of repair for the purpose of the undisturbed and continuous operation of LBP.
- Ensure that the service provider's staff/personnel are equipped with the appropriate Personnel Protective Equipment (PPE) (i.e., helmets, dust masks, uniform outfit with the name of the contractor's company, safety shoes, etc.) during the implementation of the project.

- Observe SAFETY at all times and shall be liable for any harm, damage or injury that may be sustained or suffered by its own crew/workers while in the performance of their duty.

- Secure a Comprehensive General Liability Insurance (CGLI) and Contractor's All Risk Insurance (CARI) from the Landbank Insurance Brokerage Inc. (LBI) to be submitted to FMD prior to the start of the project or issuance of NTP.

- Be directly responsible for any injury to person and/or damage to LBP's property arising from the act, whether partial, contributory, or due entirely to the fault, negligence and/or dishonesty of the Contractor's personnel, in the course of their duty.

- Maintain cleanliness at all times. It shall clean the affected area immediately after each work day.

- Be subject to the security, building and LBP's policies, rules, and regulations.

- Control the generation of dust and flying particles from its operations to prevent creation of nuisance to the public. All materials to be used must be submitted with Material Safety Data Sheet (MSDS) specifications for reference. Non-toxic materials are preferred with low emissions of volatile organic compounds and must comply with applicable national Volatile Organic Compound (VOC) control regulations such as the Hong Kong Air Pollution Control (VOC) Regulation or the Canadian VOC Concentration Limits for Architectural Coatings

- Implement a post monitoring program within the warranty period with a frequency of inspection on a quarterly basis, or as requested by FMD for the following:

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- All slabs for any serviceability issues (cracks, deflection and vibration).
 - All beams for any serviceability issues (shear /flexural cracks and deflection).
2. FMD shall validate and assess the output of the winning contractor.
 3. Whenever an item or class of material is specified exclusively by trade name, by manufacturer's name or by catalog references, only such item shall be used, unless the LBP's approval for substitution is secured.

Prepared by:

ELMER M. ABUZO, m.asep
Assistant Department Manager
Secretariat, TWG for Structural
Retrofitting of LBP Plaza

Recommended for Approval by:

THE TECHNICAL WORKING GROUP

MR. ALEXANDER S. LAZARO, Member/Head, PMED

MR. RAMIL P. REMILLANO, Member/Head, FMD

AVP ALWIN I. REYES, Member/Head, ProCD

VP DINA MELANIE R. MADRID, Chairman/Head, FPSCG

Attached are the following:

- a. Bill of quantities (BOQ) – Annex "A"
- b. Building Committee Resolution – Annex "B"
- c. Proposed Structural Retrofitting plans/drawings - Annex "C"
- d. Material specifications for CFRP and concrete epoxy – included in the TOR
- e. Procurement Revolving Fund (PRF) – Annex "E"

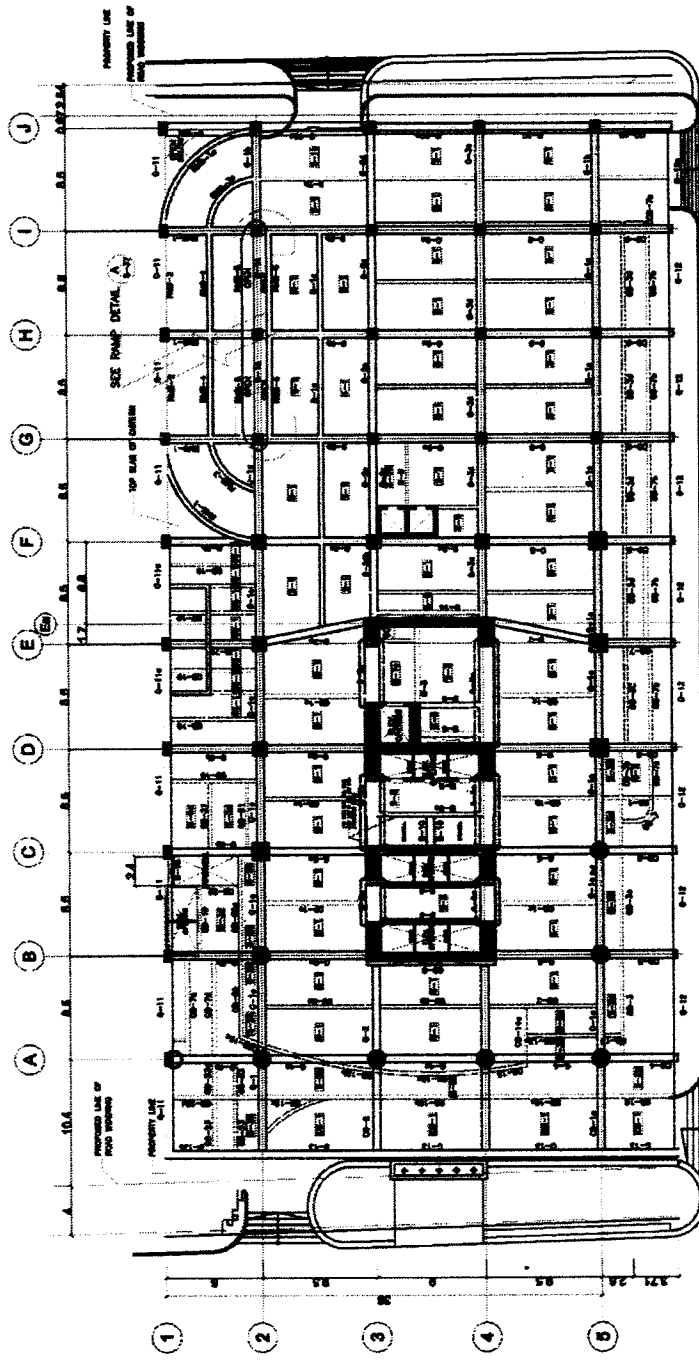
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SCHEME FOR BEAMS/GIRDERS TO BE RETROFITTED BY CFRP



GROUND FLOOR PLAN

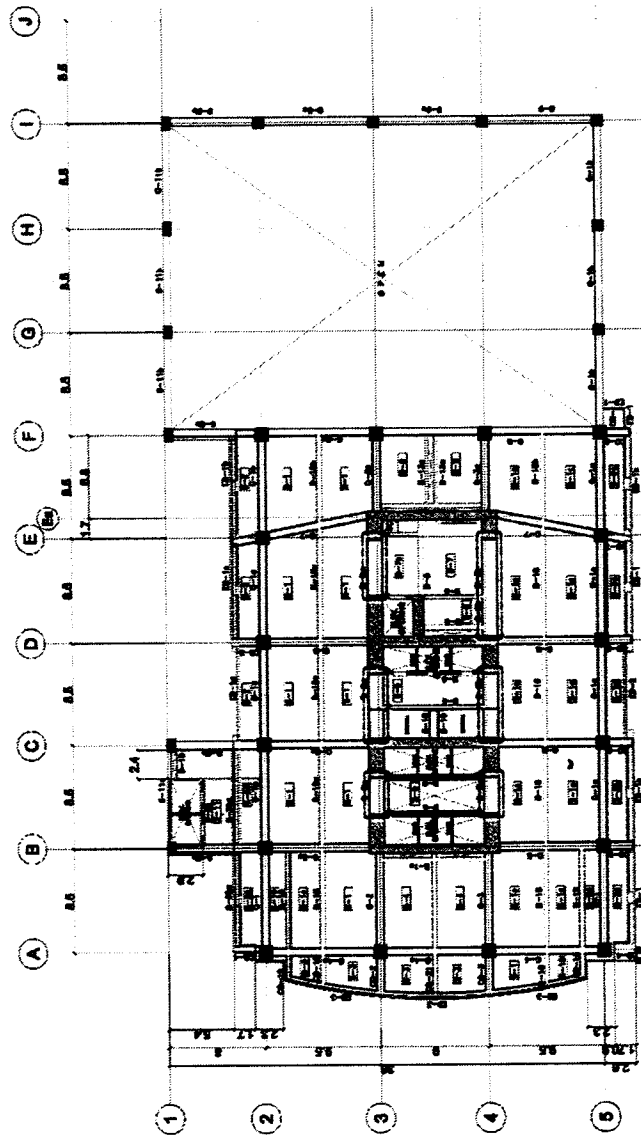
AS-BUILT

LBP HEADQUARTERS BUILDING

1500 S.W. 10TH AVENUE, SUITE 100, MIAMI, FL 33135

TYPICAL FROM GROUND TO 10TH FLOOR LEVEL

SCHEME FOR BEAMS/GIRDERS TO BE RETROFITTED BY CFRP



11TH FLOOR STRUCTURAL PLAN

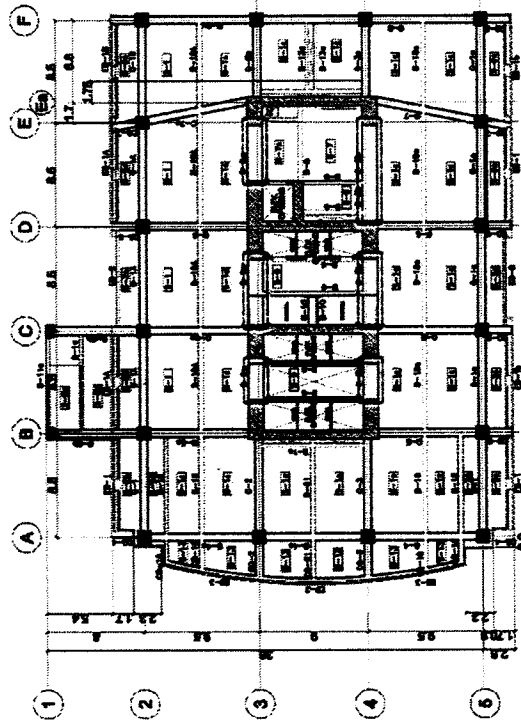
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LRP HEADQUARTERS BUILDING

1000 S.W. 2ND AVENUE, SUITE 1100, MIAMI, FL 33135 (as of 06 November 2013)

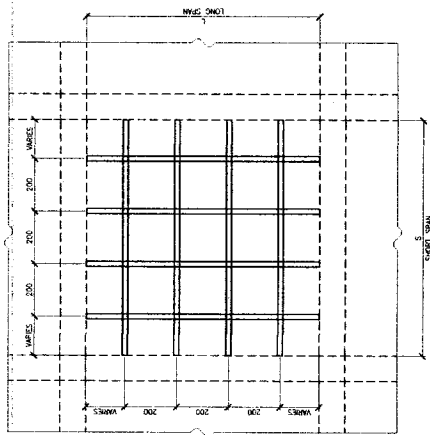
11TH FLOOR LEVEL

SCHEME FOR BEAMS/GIRDERS TO BE RETROFITTED BY CFRP

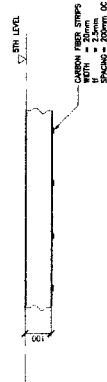


LBP HEADQUARTERS BUILDING AS-BUILT 12TH FLOOR STRUCTURAL PLAN
1800 S.W. 10TH AVENUE CORNER OF J. QUINN STREET MIAMI, FLORIDA (as of 08 November 2013)

TYPICAL FROM 12TH TO 34TH FLOOR LEVEL



A SLAB CFRP LAYOUT
SCALE: 1/8" = 1'-0"



B SLAB CFRP SECTION
SCALE: 1/8" = 1'-0"

vnr villaseñor & associates
ENGINEERS ARCHITECTS & CONSTRUCTION MANAGERS
221 VAN RESIDENCES, VANANANG SORA WENUE, OULON CITY
TEL/FAX NO.: 832-04-88
WWW.VNR-ARCHITECTS.COM

PROJECT TITLE
RETOFITTING DETAILS LANDBANK PLAZA BUILDING
LOCATION: 1000 Van Der Poy St, Van Der Poy, Oulon, Oulon

PROJECT TITLE
RETOFITTING DETAILS LANDBANK PLAZA BUILDING
LOCATION: 1000 Van Der Poy St, Van Der Poy, Oulon, Oulon

PROJECT TITLE
RETOFITTING DETAILS LANDBANK PLAZA BUILDING
LOCATION: 1000 Van Der Poy St, Van Der Poy, Oulon, Oulon

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LOCATION: 1000 Van Der Poy St, Van Der Poy, Oulon, Oulon

PROJECT TITLE
RETOFITTING DETAILS LANDBANK PLAZA BUILDING
LOCATION: 1000 Van Der Poy St, Van Der Poy, Oulon, Oulon