# **LASWIN JACOB**

## Sr. Design Engineer

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#### **Summary**

I am a civil engineer with post graduate degree in Rock Mechanics. Being flexible and dynamic team player, I am accustomed to round the clock work dedication and is looking for an environment which provides sustainable and efficient solutions. I hope to foster my knowledge to provide sustainable engineering solutions while aligning my goals with that of the organization and nurturing managerial skill.

#### Work Experience

Senior Design Engineer, Civil (July 2017-August 2019)
 Larsen & Toubro, Water Effluent And Treatment IC, Chennai HQ, India

The list of few associated projects with relevant experience gained is as follows:

- 1. Implementation of Surya Regional Bulk Water Supply Scheme for Western Sub Region of Mumbai Metropolitan Region (MMR) on Design, Build, Maintain, Operate and Transfer (DBMOT) basis:
  - Client: Mumbai Metropolitan Region Development Authority (MMRDA)
  - Work Experience:
    - i. Preparation of preliminary Geotechnical Investigation Scheme for hard-rock tunnel.
    - ii. Site grading plan and quantity estimation for Intake Well.
  - iii. Inlet Shaft stability check using Phase2.
  - iv. Detailed validation and rectification of geotechnical investigation report.
- 2. Improvement Of Water Supply Scheme To Greater Berhampur For WTP At Berhampur:
  - Client: RWSS Odisha
  - Work Experience:
    - i. Pile design for Elevated Storage Reservoir (ESRs).
    - ii. Design of temporary timber shoring system for Shallow foundation (upto 2.5m).

#### 3. Various packages of Multi-Village Rural Water Supply Schemes in Madhya Pradesh:

- Client: Madhya Pradesh Jal Nigam
- Work Experience:
  - Geotechnical Investigation Scheme recommendation for tendering purpose.
  - ii. Foundation recommendations for various structures in the water supply scheme.
- iii. Ground improvement recommendations.
- iv. Excavation quantity estimation and excavation profile recommendation for off-shore Intake Wells and approach channels.
- v. Cofferdam design for intake well excavation.
- vi. Intake well construction methodology suggestions.
- vii. Use of BIM models for easier updates/rectifications.
- viii. WTP approach road (flexible pavement) and embankment design.
- ix. Raw water reservoir excavation quantity estimation.
- x. Slope stability analysis using PLAXIS 2D.
- xi. Used Data Base Management Systems to track project progress and resource allocation.

#### 4. Miscellaneous:

- Work Experience:
  - i. Design of In-plant Rigid Pavement Roads.
  - ii. Feasibility study of integrated secant pile Intake Well system.
- iii. Quantity estimation validation using Civil 3D.

### **Education Qualifications**

#### **❖** M.Tech Excavation Engineering (Rock Mechanics)

- Institute: Visvesvaraya National Institute of Technology, India
- CGPA 9.04 (out of 10).

#### **&** B.Tech Civil Engineering

- Institute: Marian Engineering College, University of Kerala, India
- CGPA 7.15 (out of 10).

#### **Research Works**

- ❖ Analysis of Tunnel Support Stability Using Phase 2D. (M.tech)
- An Experimental Study Of Concrete By Partial Replacement Of Fine Aggregates With Copper Slag.
   (B.Tech)

## **Key Skills**

- **\*** Excellent communication skills
- **❖** Active listener
- Team player
- Confident

- Quick leaner.
- Professional approach to challenging situations.
- Design and Analysis.

#### **Technical skills**

- $RS^2$
- ❖ Plaxis 2D
- Staad Pro

- InfraWorks
- \* Revit
- AutoCAD

#### **General Software Skills**

- Microsoft Word
- Microsoft Excel

- Microsoft PowerPoint
- ❖ Basic C++

#### **Internships**

#### **❖** L&T-Ramboll, India

**Duration:** 4 days

**Project on:** Pre-Feasibility Study on Developing Multi-Modal Transport Hubs at Thiruvanathapuram.

#### **Project Work**

- Conducted feedback survey regarding existing transport facilities.
- Recorded and arranged the results of the study.
- Data collected from almost 200 people.

#### **Milestones**

- ❖ Developed Dynamo program for linking design excel sheet with Revit for a parameteric model of Elevated Storage Reservoir.
- Participated in Basic BIM training.
- Undergone Excel VB training.
- ❖ Attended Revit Architecture and Scheduling basic crash course.
- ❖ Attended COBie awareness lecture.
- Certified Advanced Excel User.

#### **Personal Details**

**Gender:** Male

- **Date of birth:** 4<sup>th</sup> January, 1992
- **A** Languages known:
  - English (Fluent)
  - Hindi (Intermediate)

- Malayalam (Native)
- Tamil (Beginner)

**❖ Nationality:** Indian

#### **Professional References**

## 1. Kondapalli Bairagi

Chief Engineering Manager (Geotechnical)
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## 2. Suriyanarayan NS

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