

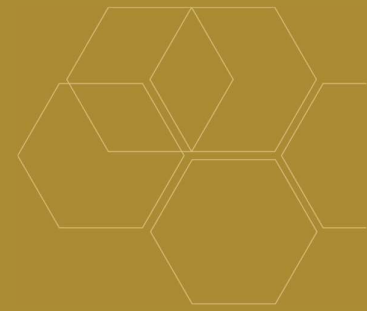


# FELIPE RAMIREZ

DIGITAL ENGINEERING LEAD

 felipe.ramirez@archservices.com.au

 linkedin.com/in/feliperamirezau



## EXPERIENCE

**15 years' experience**

## FORMAL EDUCATION

### Bachelor of Architecture

University Finis Terrae, Chile  
2004-2006

Certificate IV in Training and Assessment (2021)

Certified Autodesk Revit user (2019)

Certified Primavera P6 15.2 Professional Advanced (Sydney) (2018)

Certified Bentley Synchro 4D user (2017)

Diploma of Management, Australian Pacific College (2015)

Certified Autodesk AutoCAD Professional 429486 (2015)

Advanced Diploma of Marketing, Australian Pacific College (2013)

Diploma in Innovation Management, University Alberto Hurtado (2011)

Diploma in Conservation and Restoration of Heritage, University Católica Chile (2007)

## TECHNICAL SKILLS

- Constructability – Feasibility, methodology and staging
- Constructability modelling and analysis
- CAD/BIM modelling and analysis
- Project Planning and Control

## Introduction

Felipe is a qualified architect with over 15 years' experience in design, construction and build information management (BIM) on projects in Australia, South America, and Europe.

Felipe specialises rail infrastructure projects and has extensive experience in constructability within the live rail environment. He has in depth knowledge of the NSW rail networks, particularly the Sydney Trains and Sydney Metro networks, having been heavily involved in the preparation of constructability reports, construction staging diagrams and construction programs over the last nine years.

Felipe has developed construction staging methodologies including definition of base logic, construction methodology reports, staging diagrams, construction programs (Primavera P6), 3D-4D-5D modelling and analysis for numerous rail projects. He has a demonstrated ability to rationalise complex problems, contributing to improved constructability, and time and cost savings, on large infrastructure projects.

## Professional Experience

### ARCH Artifex – 2022-

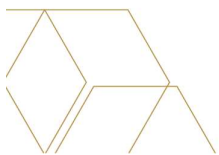
Digital Engineering Lead; Technical SME (Constructability)

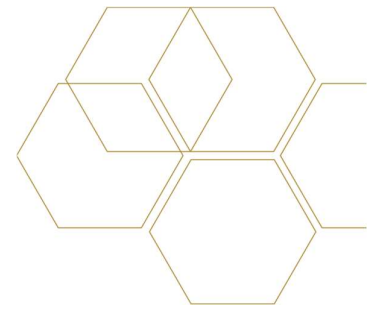
### Rail Planning Services – 2013-2022

Technical SME (Constructability); Construction Staging Manager

### Intesa Ingeniera / Oxe Engineering – 2005–2013

Project Manager





## Project Summary

**MOTT MACDONALD | 2021-2022**

**Role/Position:** Constructability Subject Matter Expert

**Project Name:** Sydney Metro West Engineering Design Services (EDS)

**Position/Project Description:** Responsibilities:

- Develop detailed construction methodologies for safe and efficient delivery of both Greenfield and Brownfield stations, tunnel construction, Over Station Developments (OSDs)
- Prepare construction delivery programs to construct major works inside the live rail corridor whilst minimising impact to rail operations and reducing dependencies on rail possessions
- Provide constructability design review and optioneering to assist in the development of scope definition and cost estimates.

**FUTURE RAIL JOINT VENTURE | 2019-2021**

**Role/Position:** Constructability Advisor and Base Logic Developer

**Project Name:** More Trains More Services (MTMS), Stage 3 & 4

**Position/Project Description:** Responsibilities:

- Working for the team charged with developing designs and business cases for the \$7b program of works
- Develop construction methodologies including construction base logic, staging, constructability reports and construction programs (Primavera P6) for various projects, detecting potential clashes and optimising resource utilisation
- Participating in construction and risk workshops between stakeholders to develop construction methodology and reduce associated impacts/costs/requirements assisting with the tender and contract evaluation panel

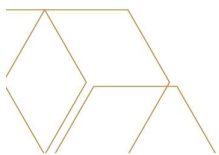
**WSP | 2018-2020**

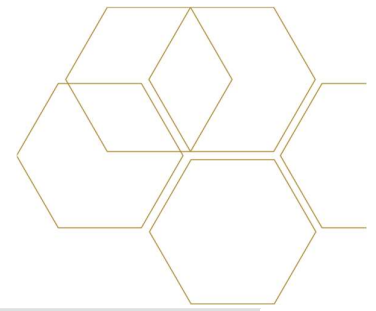
**Role/Position:** Constructability Advisor

**Project Name:** Fast Rail (Sydney-Newcastle, Sydney-Bomaderry, Sydney-Central West)

**Position/Project Description:** Responsibilities:

- Assessing constructability risks, project durations and work methodologies to support business case development for alignment option assessments





#### CROSS RIVER RAIL DEVELOPMENT AUTHORITY | 2018-2019

**Role/Position:** Constructability Advisor and Base Logic Developer

**Project Name:** Cross River Rail (North & South Portals, Mayne Yard)

**Position/Project Description:** Responsibilities:

- Prepared, in conjunction with SMEs, construction base logic, and construction methodologies to integrate the Cross River Rail tunnel at the interface of the existing Brisbane rail network at the north and south portals of the tunnel
- Prepared 3D and 4D models, in conjunction with a P6 program, to validate assumptions defined for the construction methodology

#### CROSS RIVER RAIL DEVELOPMENT AUTHORITY | 2018

**Role/Position:** Constructability Advisor

**Project Name:** Cross River Rail (Brisbane Live – Northern and Southern Portals)

**Position/Project Description:** Responsibilities:

- Developed construction methodologies for several design options for a proposed Arena over Roma Street Railway Station and Northern/Southern Portals
- The substructure was modelled using CAD tools and 3D printed to clarify structural requirements and enhance the discussion between the Development Authority and designers
- Evaluated several scenarios to reduce the construction sequence from an initial estimation of 2+ years (using conventional possession planning) to 90 days (utilising 3 types of closedowns, minimising customer experience impacts and optimising the resource usage).

#### INSESA INGENIERIA / OXER ENGINEERING (INC. HATCH AUSTRALIA, FLUOR CANADA) | 2005-2013

**Role/Position:** Project Manager

**Project Name:** Various

**Position/Project Description:** Responsibilities:

- Part of a team delivering 800Tn of steel works a month with an estimated value of 20mill USD/year and working on projects including the Pueblo Viejo República Dominicana (3.8 billion) - Fluor Canada, Koniambo New Caledonia (6.3 billion) - Hatch Australia, Los Bronces (2.8 billion) - Kupfer/Bechtel, Codelco Gaby (18 billion) – FMC and Los Pelambres (1 billion) – Bechtel.
- Prepared schedules
- Prepare and review estimates, transport, delivery, assembling and staging plans including liaison with internal and external stakeholder

