TIERRA GROUP INTERNATIONAL S.A.C.

Jesús Luis Torres Fernández, CIP

Civil Engineer

Education

BS, Civil Engineer, Universidad Nacional de Ingeniería, Lima, Perú, 2009

MS, Hydraulic and Hydrological Engineering, Universidad Nacional de Ingeniería, Lima, Perú, 2018

Registrations/Certifications

Professional Civil Engineer (CIP No. 139916)

Experience Summary

Mr. Torres is a Civil Engineer with 12 years of professional experience in hydraulic and hydrological engineering, drainage facilities, tailings management, and water balances. He is proficient in hydrological and hydraulic modeling software programs, such as CCHE2D, HEC-HMS 4.2 and HEC-RAS 5.0. Additionally, Mr. Torres is knowledgeable in deterministic and probabilistic simulation software (GoldSim 12.0, ArcGis 10.4, and AutoCAD Civil 3D 2018).

Project Experience

Water and Tailings Management

TAILINGS DISPOSAL AND WATER BALANCE, CUSI AND BOLIVAR PROJECTS | CHIHUAHUA, MEXICO

Hydrologist and Hydraulic Engineer in charge of the water balance (GoldSim) and disposal of tailings in the sulfur and cyanide tailings deposits, estimation of storage capacities and useful life, operating recommendations according to current regulations. (Tierra Group, 2019)

TAILINGS AND WATER BALANCE DISPOSAL, EL AGUILA PROJECT | OAXACA, MEXICO

Hydrologist and Hydraulic Engineer in charge of the water balance (GoldSim) and disposal of tailings in the sulfur and cyanide tailings deposits, estimation of storage capacities and useful life, operating recommendations according to current regulations. (Tierra Group, 2019)

DDC TAILING PIPE DESIGN, SAN JOSÉ PROJECT | CHINANDEGA, NICARAGUA

Hydraulic Engineer responsible for the design of the tailings pipe of the new San Pancho tailings deposit, evaluation of trace alternatives, design of hydraulic structures, geometric design of the platform, estimation of canteens, and development of plans. (Tierra Group, 2019)

WATER BALANCE OF THE 1A, 1B, AND 3B LEACHING PAD, UTUNSA PROJECT | APURIMAC, PERU

Hydrologist and Hydraulic Engineer responsible for the Utunsa Leaching Pad water balance (GoldSim), including evaluating hydrological scenarios, estimation of pool capacities required for flood control, and makeup. (Tierra Group, 2018 and 2019)

DESIGN OF HYDRAULIC STRUCTURES, PUCAPATA, PONCIANO AND TUGNSTENO CLOSURE PLAN PROJECTS | HUANCAVELICA, PERU

Hydrologist and Hydraulic Engineer responsible for designing the hydraulic structures of the components as part of the Closure Plan (Pucapata, Ponciano, and Tugnsteno projects), flow estimation, and hydraulic dimensioning. (Tierra Group, 2019)

DESIGN OF HYDRAULIC STRUCTURES, SANTO DOMINGO CLOSURE PLAN PROJECT | PUNO, PERU

Hydrologist and Hydraulic Engineer responsible for designing the components of the hydraulic structures as part of the Closure Plan, flow estimation, and hydraulic dimensioning. (Tierra Group, 2018 and 2019)

LEACHING PAD WATER BALANCE UPDATE, INDIA PROJECT | SONORA, MEXICO

Hydrologist and Hydraulic Engineer responsible for updating the India Leaching Pad water balance (GoldSim), evaluating hydrological scenarios, calibrating the model, and developing the dashboard interface. (Tierra Group, 2018)

PHASE 2 LEACHING YARD EXPANSION, INDIA PROJECT | CHIHUAHUA, MEXICO

Hydrologist and Hydraulic Engineer in charge of the La India Expansion Mine Phase 2 Leaching Pad water balance. Design of the solution collection system and design plans of the Leaching Yard. (Tierra Group, 2018)

TAILINGS DISPOSAL AND WATER BALANCE, PIRQUITAS PROJECT | SAN JUAN DE JUJUY, ARGENTINA

Hydrologist and Hydraulic Engineer in charge of developing the Pirquitas reservoir water balance and tailings disposal to estimate the tailings dam's growth capacities and useful life, water volumes in the tailings pool, and makeup requirements. (Tierra Group, 2018)

RETENTION DAM ENGINEERING REVIEW, SOUTHERN | PROJECT MOQUEGUA, PERU.

Hydrologist and Hydraulic Engineer responsible for reviewing the hydrological study, design of hydraulic structures, and water balance corresponding to the retention dam's engineering. (Tierra Group, 2018)

TAILINGS DISPOSAL AND WATER BALANCE, JAGUAR PROJECT | MINAS GERAIS, BRAZIL

Hydrologist and Hydraulic Engineer in charge of developing the water balance and tailings disposal in the Tourmaline reservoir to estimate the tailings dam's growth capacities and useful life, water volumes in the tailings pool, and makeup requirements. (Tierra Group, 2018)

DESIGN OF HYDRAULIC STRUCTURES, CRIMEA IN-PIT PROJECT | CHONTALES, NICARAGUA

Hydraulic Engineer responsible for designing the bypass channels of the In-Pit Tajo Crimea reservoir, flow estimation, and hydraulic dimensioning. (Tierra Group, 2018)

TAILINGS DISPOSAL AND WATER BALANCE, CRIMEA IN-PIT PROJECT | CHONTALES, NICARAGUA

Hydrologist and Hydraulic Engineer in charge of developing the water balance and disposal of Tailings In Pit in the Tajo Crimea to estimate the tailings dam's growth capacities and useful life, volumes of water in the tailings pool, and makeup requirements. (Tierra Group, 2018)

MINE WATER BALANCE, BURITICÁ PROJECT | ANTIOQUIA, COLOMBIA

Hydrologist and Hydraulic Engineer in charge of developing the water balance for the Buriticá Mine (GoldSim), which includes the filtered tailings tank, operation demands associated with the process plant, camp, river roads to determine the water demands required to meet the operation. (Tierra Group, 2017 and 2018)

WATER BALANCE, COLLECTION SYSTEM AND PHASE 5, PET PROJECT | SINALOA, MEXICO

Hydrologist and Hydraulic Engineer in charge of the water balance of the Phase 5 Leaching Pad at the La Mascota Mine. Designed the bypass channel, solution collection system, and design plans of the Leaching Yard. (Tierra Group, 2018)

DESIGN OF HYDRAULIC STRUCTURES, LOS GATOS PROJECT | CHIHUAHUA, MEXICO

Hydraulic Engineer responsible for designing the hydraulic structures of the Los Gatos project, including bypass channels, discharge works, stream catchments, subdrainage system, and operation and emergency landfills. (Tierra Group, 2018)

TAILINGS DISPOSAL AND WATER BALANCE, LOS GATOS PROJECT | CHIHUAHUA, MEXICO

Water and Tailings Management Engineer responsible for developing the Los Gatos water balance to estimate the tailings dam's growth capacities and useful life, water volumes in the tailings pool, makeup requirements, and growth stages. (Tierra Group, 2018)

HYDROLOGY UPDATE STUDY, LOS GATOS PROJECT | CHIHUAHUA, MEXICO

Hydrologist Engineer responsible for updating the hydrological study to estimate, design rainfall (PM24h), monthly rainfall, monthly evaporation, inflow design flood (IDF) curves, maximum probable precipitation (PMP), and design histograms. (Tierra Group, 2018)

POYECTO BERMA DIVISORIA DEL PIT, PROYECTO MCLAUGHLIN | CALIFORNIA, USA

Design Engineer in charge of designing the dividing berm of the South and North Pits, construction processes, hydraulic structures, plans, and estimation of quantities. (Tierra Group, 2017)

LEACHING PAD WATER BALANCE UPDATE - INDIA PROJECT | SONORA, MEXICO

Hydrologist and Hydraulic Engineer responsible for updating the water balance (GoldSim), evaluating hydrological scenarios, calibrating the model, and developing the dashboard interface. (Tierra Group, 2017)

CONCEPTUAL DESIGN OF THE LEACHING YARD PHASE 3, INDIA PROJECT | SONORA, MEXICO

Design Engineer in charge of designing the Leaching Yard, bypass channel, contingency pool, leveling, accesses, collection system, and stacking at the conceptual level. (Tierra Group, 2017)

WATER BALANCE AND HYDROLOGICAL ANALYSIS OF THE LEACHING PAD PHASE 3, LA TRINIDAD PROJECT | SINALOA, MEXICO

Hydrologist and Hydraulic Engineer responsible for the water balance (GoldSim) and hydrological analysis of the Phase 3 Leaching Pad at the la Trinidad Mine. Designed the solution collection system, calibration of the water balance, and estimation of evaporators. (Tierra Group, 2017)

TAILINGS DISPOSAL AND WATER BALANCE PLAN- PROJECT REVIEW OF THE ERNESTO E PAU A PIQUE PROJECT | MATTO GROSO, BRAZIL

Hydrologist and Hydraulic Engineer in charge of the water balance and tailings deposition plan for the Ernesto e Pau a Pique reservoir, including disposal strategy, estimation of tailings storage capacities and useful life, calculation of volumes of water recovery pool, and generation of figures. (Tierra Group, 2017)

TAILINGS DISPOSAL PLAN STAGE 3B, SAN JOSÉ PROJECT | CHINANDEGA, NICARAGUA

Water and Tailings Management Engineer in charge of the Tailings Disposal Plan, disposal strategy, estimation of storage capacities, and plan development. (Tierra Group, 2017)

RETENTION DAM DETAILED ENGINEERING REVISION – CUAJONE PROJECT | MOQUEGUA, PERÚ

Hydrologist and Hydraulic Engineer responsible for revising the hydrological study, water balance, and hydraulic structures for the retention dam. (Tierra Group, 2017)

HEAP LEACH PAD (HLP) PHASE 4 DETAILED ENGINEERING – MASCOTA PROJECT | CHIHUAHUA, MEXICO

Hydrologist and Hydraulic Engineer responsible for the hydrological update, HLP water balance, design of the surface water management structures and solution collection system, and revisions to the detailed engineering drawings. (Tierra Group, 2017)

TAILINGS STORAGE FACILITY (TSF) DETAILED ENGINEERING – LOS GATOS PROJECT | CHIHUAHUA, MEXICO

Hydrologist and Hydraulic Engineer in charge of the TSF hydrological update, tailings disposal, and water balance. Designed surface water management structures and revised the detailed engineering drawings. (Tierra Group, 2017)

PIT DIVIDER BERM DESIGN – MCLAUGHLIN PROJECT | CALIFORNIA, USA

Hydrologist and Hydraulic Engineer in charge of the berm design and construction development dividing the northern pit and southern lagoons. (Tierra Group, 2017)

PHASE 2 HLP WATER BALANCE – LA INDIA PROJECT | SONORA, MEXICO

As Hydrologist and Hydraulic Engineer, completed the HLP water balance update in GoldSim, including assessing hydrological scenarios and Dashboard interface. (Tierra Group, 2017)

PHASE 3 HLP CONCEPTUAL ENGINEERING – LA INDIA PROJECT | SONORA, MEXICO

As Hydrologist and Hydraulic Engineer, designed the surface water management structures, solution collection system, and revised the conceptual engineering drawings. (Tierra Group, 2017)

DETAILED ENGINEERING FOR TSF RAISE TO ELEVATION 779 - CERRO NEGRO PROJECT | SANTA CRUZ, ARGENTINA

As Hydraulic Engineer, modeled the TSF raise for the final report figures. (Tierra Group, 2017)

PHASE 3 HLP DETAILED ENGINEERING – LA TRINIDAD PROJECT | SINALOA, MEXICO

Hydrologist and Hydraulic Engineer in charge of the HLP water balance, surface water management structures design, solution collection system, and review of the detailed engineering drawings. (Tierra Group, 2017)

TAILINGS DISPOSAL MODELING – EL LIMÓN PROJECT | MANAGUA, NICARAGUA

Hydraulic Engineer in charge of the San José TSF modeling and water balance. (Tierra Group, 2017)

PHASE 2 HLP WATER BALANCE, LA INDIA | SONORA, MEXICO

Hydrologist and Hydraulic Engineer responsible for the HLP water balance, evaluation of hydrological scenarios, and Dashboard interface. (Tierra Group, 2017)

HLP WATER BALANCE AND HYDROLOGICAL ANALYSIS – LA TRINIDAD PROJECT | SINALOA, MEXICO

Hydrologist and Hydraulic Engineer in charge of the water balance and hydrological analyses of the La Trinidad Mine HLP. Diversion channel design, solution collection system, and water balance, including the assessment of several scenarios with different numbers of evaporators. (Tierra Group, 2017)

COLQUICOCHA DISCHARGE CHANNEL DETAILED ENGINEERING, UCHUCCHACUA PROJECT | LIMA, PERÚ

Project Coordinator and Hydrologist/Hydraulic Engineer in charge of the hydrological update, maximum discharge hydrological modeling, and discharge channel design, including the development of detailed engineering drawings. (Golder Associates, 2017)

THICKENED AND FILTERED TAILINGS DEPOSITION ALTERNATIVES IN R3 TSF OF UCHUCCHACUA ADMINISTRATIVE ECONOMIC UNIT (UEA) | LIMA, PERÚ

Project Coordinator and Hydrologist/Hydraulic Engineer in charge of the tailings disposal and water balance for the different tailings production technologies and location of the drainage plant. Economic evaluation at a conceptual level, CAPEX and OPEX. (Golder Associates, 2017)

EIA SUPPORTING TECHNICAL INSTRUMENT (ITS#2), QUELLAVECO PROJECT | MOQUEGUA, PERÚ

Hydrologist and Hydraulic Engineer responsible for the water management facilities design for the components associated with the Quellaveco Project EIA ITS#2. Developed the design of hydraulic structures and water balance at a feasibility level. (Golder Associates, 2017)

TECHNICAL SUPPORT PLAN FOR LAS BAMBAS TSF OPERATION | APURÍMAC, PERÚ

Hydrologist and Hydraulic Engineer, responsible for the modeling and assessment of the current TSF operations (tailings disposal plan and water balance). Developed tailings disposal improvement alternatives. (Golder Associates, 2016)

POLISHING POND RAISE DETAILED ENGINEERING, STAGE 4135 | ANCASH, PERÚ

Hydrologist and Hydraulic Engineer responsible for designing and modeling the polishing pond hydraulic facility, including spillway, diversion channels, and temporary diversion structures. (Golder Associates, 2016)

WATER MANAGEMENT, EROSION AND SEDIMENT CONTROL, ANTAMINA TAILINGS DAM | ANCASH, PERÚ

Hydrologist and Hydraulic Engineer responsible for designing water management structures and erosion and sediment control at the Antamina tailings dam area. (Golder Associates, 2016)

FILTERED TSF DETAILED ENGINEERING STUDY, TAMBOMAYO | AREQUIPA, PERÚ

Hydrologist and Hydraulic Engineer in charge of the hydrological update, water balance, and tailings disposal plan. Designed water management hydraulic structures (channels, sewers, discharge facilities, etc.) and detailed engineering drawings. (Golder Associates, 2016)

WATER MANAGEMENT, EROSION AND SEDIMENT CONTROL AT TAILINGS DAM TOE, ANTAMINA | LIMA, PERÚ

As Hydrologist and Hydraulic Engineer, developed alternatives for tailings disposal and conducted water balance studies for each alternative. Work included water management and hydraulic structures design. (Golder Associates, 2015)

EAST WASTE ROCK DUMP DETAILED ENGINEERING, BARRICK MINE | TRUJILLO, PERÚ

As Hydrologist and Hydraulic Engineer, designed hydraulic structures for the management of contact and non-contact water at the East Waste Rock Dump. Developed the project water balance in GoldSim. (Golder Associates, 2015)

TECHNICAL STUDY FOR TAILINGS STORAGE CAPACITY INCREASE ABOVE THE 4165 MASL ELEVATION | ANCASH, PERÚ

Hydrologist and Hydraulic Engineer in charge of the TSF management and integrated water balance. Designed the TSF hydraulic works for the management of contact and non-contact water. Used GoldSim to develop the model and estimate the capacity of the treatment plant and pond. (Golder Associates, 2015)

DETAILED ENGINEERING FOR TSF RAISE, STAGE IV, ANTAMINA | ANCASH, PERÚ

Hydrologist and Hydraulic Engineer responsible for the drainage study and erosion and sediment control in the Tucush Creek. Designed and modeled hydraulic facilities in the downstream dam slope and in the Tucush access. Design of channels and rapids in AutoCAD Civil 3D. (Golder Associates, 2015)

COLLPARACRA TSF FEASIBILITY STUDY | ANCASH, PERÚ

As Hydrologist and Hydraulic Engineer, completed a comprehensive water balance. Estimating treatment plant capacity (supply and demand) and tailings pond operation volumes for construction and operation stages. (Golder Associates, 2014)

COLLPARACRA TSF ENVIRONMENTAL STUDY | ANCASH, PERÚ

Hydrologist and Hydraulic Engineer in charge of the hydrological modeling of maximum floods at monitoring points SW-01, SW-02, SW-03, and SW-04, and at Challhuacocha, Magistral, and Collparacra streams. (Golder Associates, 2014)

CHUMPE TSF DETAILED ENGINEERING | ANCASH, PERÚ

Project Coordinator and Hydrologist/Hydraulic Engineer responsible for designing and modeling hydraulic facilities, including channels, rapids, stream catchments, diversion works, and water recovery systems. Designed dams, channels, quarries, dumps, and roads in AutoCAD Civil 3D. (Golder Associates, 2014).

DETAILED ENGINEERING OF WASTE DUMP AND WETLAND | CAJAMARCA, PERÚ

Hydrologist and Hydraulic Engineer responsible for designing and modeling hydraulic facilities, including channels, rapids, stream catchments, and diversion works. Designed channels and discharge facilities in AutoCAD Civil 3D. (Golder Associates, 2014)

MINA OESTE WASTE DUMP DETAILED ENGINEERING | AREQUIPA, PERÚ

Hydrologist and Hydraulic Engineer responsible for reviewing hydrological studies and designing the waste dump hydraulic facilities. (Golder Associates, 2014)

DETAILED ENGINEERING STUDIES OF THE 4195 PROTECTION PLATFORMS | ANCASH, PERÚ

As Hydrologist and Hydraulic Engineer, designed and modeled the hydraulic works, including channels, sewers, and the drainage system. (Golder Associates, 2014)

CONCEPTUAL STUDY OF THICKENED TAILINGS DISPOSAL AT THE RUMICHACA TSF | CERRO DE PASCO, PERÚ

Project Coordinator and Hydrologist/Hydraulic Engineer responsible for the Rumichaca TSF disposal plan and water balance. Geometric design of dams, hydraulic facilities, and roads. (Golder Associates, 2014)

ALTERNATIVE DESIGN OF CREST CHANNEL DISCHARGES - HUACHUACAJA TSF CQA | CERRO DE PASCO, PERÚ

As Hydrologist and Hydraulic Engineer, designed and modeled channels and discharge and conveyance facilities. Geometric design of channels, ponds, and discharge and conveyance facilities. (Golder Associates, 2013)

THICKENED TAILINGS SURFACE DISPOSAL AT THE ANIMÓN TSF | CERRO DE PASCO, PERÚ

Hydrologist and Hydraulic Engineer responsible for designing and modeling the TSF hydraulic works. Geometric design of dams and spillways. (Golder Associates, 2013)

WATER REGULATION POND, MAGISTRAL PROJECT | ANCASH, PERÚ

As Hydrologist and Hydraulic Engineer, designed and modeled the hydraulic structures for the water regulation pond. Geometric design of the dam, liner system, channels, and roads. (Golder Associates, 2013)

TSF SITE SELECTION STUDY – TAILINGS TECHNOLOGY | ANCASH, PERÚ

As Hydrologist and Hydraulic Engineer, prepared a disposal plan and water balance for the thickened and cycloned TSF. (Golder Associates, 2013)

LOWER WATER RESERVOIR CAPACITY EXPANSION – CONGA PROJECT - STAGE 4 | CAJAMARCA, PERÚ

Hydrologist and Hydraulic Engineer responsible for designing and modeling the hydraulic structures at the Lower Water Reservoir, including the emergency spillway and dissipation pond. Designed the dam, spillway, and roads in AutoCAD Civil 3D. (Golder Associates, 2013)

COLLPARACRA TSF FEASIBILITY STUDY | ANCASH, PERÚ

Hydrologist and Hydraulic Engineer responsible for designing and modeling the TSF hydraulic structures. Geometric design of dams, channels, dumps, quarries, and roads. (Golder Associates, 2013)

POLISHING POND RAISE DETAILED ENGINEERING | ANCASH, PERÚ

As Hydrologist and Hydraulic Engineer, prepared the design and model of the polishing pond hydraulic facilities, including the spillway and diversion works. (Golder Associates, 2013)

CONCENTRATOR PLANT FRESH WATER SUPPLY FEASIBILITY STUDY, MAGISTRAL PROJECT | ANCASH, PERÚ

Project Coordinator and Hydrologist/Hydraulic Engineer responsible for designing the freshwater reservoir main and auxiliary dams. Design and modeling of hydraulic structures. Development of projections in AutoCAD Civil 3D. (Golder Associates, 2013)

TSF PRE-FEASIBILITY STUDY AT LA QUEBRADA MAGISTRAL | ANCASH, PERÚ

As Hydrologist and Hydraulic Engineer, designed the hydraulic structures for the management of contact and non-contact water. (Golder Associates, 2012)

TSF FEASIBILITY STUDY AT THE FRAYLONES SITE OF LA ARENA PROJECT | CAJAMARCA, PERÚ

As Hydrologist and Hydraulic Engineer, conducted a TSF hydrological assessment (climatic parameters) and developed component projections. (Golder Associates, 2012)

DESIGN REPORT FOR WASTE AND TOPSOIL STORAGE FACILITY, TOROMACHO | CAJAMARCA, PER PERÚ U

As Hydrologist and Hydraulic Engineer, designed the drainage and underdrain system of the topsoil and waste dumps. (Golder Associates, 2012)

TAILINGS DISPOSAL PLAN AND WATER BALANCE, PITINGA MINE TSF | BRAZIL

Hydrologist and Hydraulic Engineer responsible for developing alternatives for tailings disposal and water balance studies in the short-, mid-, and long-term. (Golder Associates, 2012)

SAFETY PROGRAM STUDY FOR 41 DAMS - PHASE I | BRAZIL

As Hydrologist and Hydraulic Engineer, performed a hydrological and hydraulic assessment of 41 dams. The study focused on operability and potential risk. (Golder Associates, 2012)

DETAILED ENGINEERING STUDY, GROTA B DAM TEMPORARY RAISE | BRAZIL

Hydrologist and Hydraulic Engineer responsible for the hydraulic works design, including the operation and emergency spillways and dissipation pond. (Golder Associates, 2012)

QUENHUA RAGRA TSF FEASIBILITY STUDY, HILARIÓN PROJECT | ANCASH, PERÚ

Hydrologist and Hydraulic Engineer in charge of information review and hydrological characterization works. Prepared the hydrological study and water balance, designed the hydraulic structures, and participated in developing a profile-level report. (Golder Associates, 2011)

SITE SELECTION STUDY AND DISPOSAL TECHNOLOGY SAN RAFAEL MINE | PUNO, PERÚ

As Hydrologist and Hydraulic Engineer, developed a disposal plan, water balance, and water management plan for the evaluated alternatives. The project included hydraulic facilities design. (Golder Associates, 2011)

TSF Pre-Feasibility Study, La Arena Project | Cajamarca, Perú

As Hydrologist and Hydraulic Engineer, developed a disposal plan, water balance, and water management plan for the evaluated alternatives. The project included a hydraulic work design. (Golder Associates, 2011)

Detailed Engineering Study for Ocroyoc TSF | Perú

As Hydrologist and Hydraulic Engineer, designed the hydraulic facilities for the Ocroyoc TSF. The design included the Ragro river diversion facility, crest channels and catchment works, and operation and emergency spillways. (Golder Associates, 2011)

Hydrology, Hydraulics, and Drainage

Evaluation and Study of Critical Areas of the Cuzco Highway | Perú

Assistant Hydraulic Engineer responsible for developing engineering facilities for critical areas of the Cusco-Quillabamba highway, Alfamayo-Chaullay-Quillabamba section. (Mansen + Kuroiwa S.A., 2010)

Hydraulic and Hydrological Study for the Final Design and Improvement of Néstor Gambetta Ave. | Perú

Assistant Hydraulic Engineer responsible for report development, field files, and detailed drawings for the channel relocation. (Mansen + Kuroiwa S.A., 2010)

Pajaritos and El Salado Reservoirs Feasibility Level Hydraulic Design | Colombia

Assistant Hydraulic Engineer responsible for the conceptual design of the Pajaritos dam hydraulic works, including an emergency spillway and the dam regulation pipeline. Conceptual design of El Salado dam hydraulic works, including an operation and emergency spillway, regulation system, and energy dissipation structures. (Mansen + Kuroiwa S.A., 2010)

Profile-Level Hydraulic Design of Naranjos Water Intake | Perú

Assistant Hydraulic Engineer responsible for designing the Naranjos water intake and ancillary facilities, including diversion channel, stream crossings, and desilter. Profile-level hydraulic design of Naranjos water intake. (Mansen + Kuroiwa S.A., 2010)

Puerto Rosario de Laberinto Coastal Defense Technical Dossier, Special Project Madre de Dios | Perú

Assistant Hydraulic Engineer responsible for designing the Puerto Rosario de Laberinto coastal defense, budget preparation, and work schedule. (Mansen + Kuroiwa S.A., 2010)

Feasibility-Level Study for Three Waste Dumps, Toromocho Project | Perú

Assistant Hydraulic Engineer responsible for drainage design for the Toromocho project waste dumps. (Mansen + Kuroiwa S.A., 2010)

Survey of Project Observations, Final-Level Drainage Study | Perú

Assistant Hydraulic Engineer responsible for designing the longitudinal and transverse drainage system of the Nuevo Mocupe-Zaña-Cayalti-Oyotún highway. The project included hydrological modeling of road-crossing inflow basins and the hydraulic modeling of sewer lines and road dips. (Mansen + Kuroiwa S.A., 2010)

Cuzco-Carhuaz Highway Construction Project, Section II | Perú

As Assistant Hydraulic Engineer, developed the geometric design of the Cuzco-Carhuaz highway, Section II. The project included preparing earthwork reports, calculation logs for hydraulic works, and detailed design drawings. (Mansen + Kuroiwa S.A., 2009)

Engineering and Architecture

Sanitary Improvement Project for the Marginal Areas of Lima | Perú

As Assistant Project Engineer, developed a topographic study of the marginal areas of Lima for the completion of reclamation works. (Consultores de Ingeniería y Arquitectura, 2009)

Progress Evaluation of PERC's Hydraulic Works | Callao, Perú

As Assistant Project Engineer, reviewed hydraulic works, including siphons, sand traps, irrigation channel intakes, sewers, and tunnels. (Consultores de Ingeniería y Arquitectura, 2009)

PROJECT FOR CADASTRAL INFORMATION MANAGEMENT WITH GIS | LIMA, PERÚ

As Assistant Project Engineer, managed the district cadastral information and developed a link with GIS for cadastral information management within the system. (Municipalidad Distrital de los Olivos, 2008)

PROJECT FOR DISTRICT ZONING AND CADASTRAL INFORMATION UPDATE | LIMA, PERÚ

As Assistant Project Engineer, managed and updated the district cadastral information, including the development of district zoning. (Municipalidad Distrital de los Olivos, 2007)

Employment History

CURRENT EMPLOYER	**TIERRA GROUP INTERNATIONAL S.A.C.**
POSITION	Hydrologist/Hydraulic Engineer, Drainage and Tailings and Water Management
YEARS	2017 to Present
EMPLOYER	**GOLDER ASSOCIATES PERU S.A.**
POSITION	Hydrologist/Hydraulic Engineer, Drainage and Tailings and Water Management
YEARS	2011 to 2017
EMPLOYER	**MANSEN + KUROIWA S.A.**
POSITION	Hydrologist/Hydraulic Engineer and Drainage
YEARS	2009 to 2011
EMPLOYER	**CONSULTORES DE INGENIERÍA Y ARQUITECTURA S.A.**
POSITION	Junior Project Engineer
YEARS	2008 to 2009
EMPLOYER	**MUNICIPALIDAD DISTRITAL DE LOS OLIVOS**
POSITION	Assistant Project Engineer
YEARS	2007 to 2008

Language Proficiency

Spanish:	Native
English:	Intermediate