



CAPABILITY · 2026

Engineering, cost and project management.

ON THE OWNER'S SIDE OF THE CONTRACT

A Japanese project management practice working for owners, ministries and funding agencies on major infrastructure, in more than thirty countries.

HITERRA CO., LTD. · 株式会社ヒテラ · TOKYO · AL KHOBAR

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HOW TO READ THIS

The first half is the record — who holds the work, what has been registered and qualified, and the programmes behind it. The second half is how the work is actually carried out, area by area, with the register extracts that come out of each one.

WHO THIS IS FOR

An owner, ministry or funding agency that has appointed designers and contractors and needs an engineering position of its own between them — at the start of a programme, or partway through one.



COORDINATION MODEL · CONVEYOR SUPPORT AGAINST THE STRUCTURAL GRID



A building outlives the people who build it.

The contractor clears the site, hands over the keys and leaves. After that the building belongs to someone else. What was done well or badly stays there for thirty, fifty, a hundred years.

つくり方で、寿命は決まる。

How it is built determines how long it lasts.

The owner carries that result, and the owner is the one party on a project with an interest in the whole of it.

Our work is to hold the technical position on the owner's side: to read what the designer has issued and what the contractor has submitted, to establish whether they agree with each other and with the specification, and to say so in writing while there is still time to act on it.

We have done this for development agencies, ministries and municipal governments on rail, airport, water and process programmes in more than thirty countries, and we have built in Japan. The second part is what makes the first part useful.

An engineer who has had to build to a drawing reviews one differently.

Hiroataka Yamasaki ・ 山崎弘貴

REPRESENTATIVE DIRECTOR

FIRST-CLASS ARCHITECT NO. 300548 ・ BUILDING QUANTITY SURVEYOR NO. 67105 ・ CONSTRUCTION COST MANAGER NO. 01238

A Japanese project management practice, and a builder behind it

The engineering, cost and project management service in this document is held by Futaba Consultants of Tokyo. Hiterra is the international company formed to carry it, together with the construction business it works alongside.

PROJECT MANAGEMENT · TOKYO

Futaba Consultants Ltd.

株式会社フタバコンサルタンツ

Founded 2015. Owner-side project management, design and construction supervision, cost management and contract administration on major infrastructure. Work has been performed for development agencies, ministries and municipal governments in more than thirty countries, on rail, airport, water, process and institutional programmes.

The practice has contributed to Japan's national standard construction cost data since 2006, and the registrations behind that work are set out on the next page.

CONSTRUCTION · TOTTORI

Rebirth Ltd.

リバース株式会社

Founded 1995. Design and construction, system building and structural steelwork, holding a Specified Construction Business licence from the Governor of Tottori across eight trade categories. 122 completed projects since 2022.

The reason it appears in a management document: the technical review is done by people who have had to fabricate, erect and hand over the thing being reviewed.

INTERNATIONAL · TOKYO AND AL KHOBAR

Hiterra Co., Ltd.

株式会社ヒテラ

Formed 2025 by both companies to hold international appointments under one counterparty. A registered Saudi contracting entity holds the client contract and runs the site in the Kingdom.

A client appoints Hiterra. The management practice and the construction business are resourced behind it.

WHAT THIS CHANGES FOR THE CLIENT

Most owner-side consultancies review drawings. Most contractors build them. The questions that decide a programme sit between the two: whether a detail can be fabricated as drawn, what a substitution does to the erection sequence, what a change is worth before it is instructed. Those are answered here from both sides.

HOW THE TEAM IS FORMED

Hiterra holds the management and technical control function. Discipline engineering is resourced against each appointment. Named personnel, curricula vitae and professional qualifications are provided with any submission.

What each qualification permits on your project

Japanese construction registrations are national, examined and held by a named individual. Each carries a defined statutory scope. The three held here cover design and supervision, measurement, and cost management across the life of a project.

REGISTRATION	REGISTER	WHAT IT PERMITS	ON A CLIENT'S PROJECT
First-Class Architect 一級建築士 ・ NO. 300548	National, Minister of Land, Infrastructure, Transport and Tourism	Design and construction supervision of buildings of any scale, structure and use. The statutory supervision role in Japan sits with this registration.	Design review and construction supervision carry a registered signature.
Building Quantity Surveyor 建築積算士 ・ NO. 67105	Japan Building Cost Management Institute	Measurement and cost documentation to the national measurement rules, and preparation of bills of quantities and tender cost documents.	Quantities are measured to a published rule set, so two estimates can be compared line by line.
Construction Cost Manager 建築コスト管理士 ・ NO. 01238	Japan Building Cost Management Institute	Cost management across the project life, from order of cost through to final account.	One party holds the cost position from feasibility through to the final account.

NATIONAL STANDARD COST DATA, SINCE 2006

Japan publishes standard construction cost data used to price and audit public works. We have contributed to it since 2006, under the Ministry of Land, Infrastructure, Transport and Tourism — the same basis a Japanese public auditor applies to a contractor's price.

INSTITUTIONAL CLIENTS

JICA ・ NEDO ・ METI ・ Ministry of Land, Infrastructure, Transport and Tourism ・ foreign ministries of transport and tourism ・ municipal governments ・ international engineering consultancies and EPC contractors.

WHERE IT IS APPLIED

Development-agency programmes follow procurement and documentation rules that an auditor tests afterwards. Our documents are produced to that standard as a matter of course.

Where we have already done it

Owner-side engineering, cost and project management on major infrastructure internationally, with a construction business in Japan behind it.

30+

COUNTRIES WORKED IN
ON THE OWNER'S SIDE

2015

PROJECT MANAGEMENT
PRACTICE FOUNDED

2006

CONTRIBUTING TO JAPAN'S
NATIONAL COST STANDARD SINCE

19

STATION BUILDINGS DOCUMENTED
ON ONE COMMUTER LINE

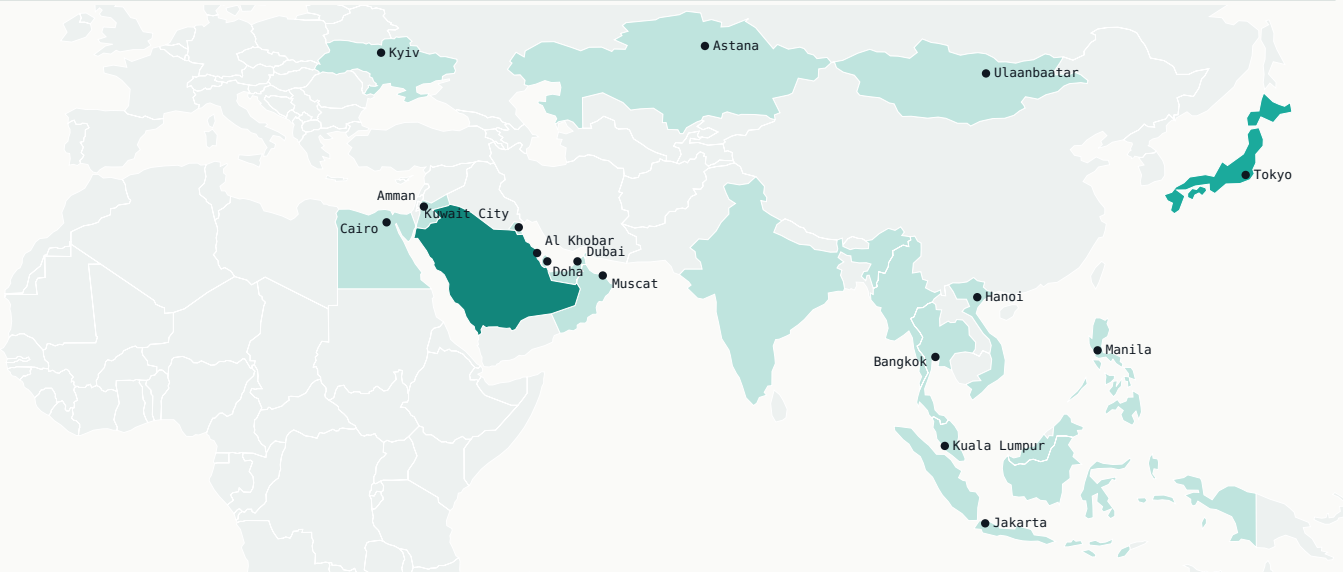
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CONSTRUCTION PROJECTS
COMPLETED SINCE 2022

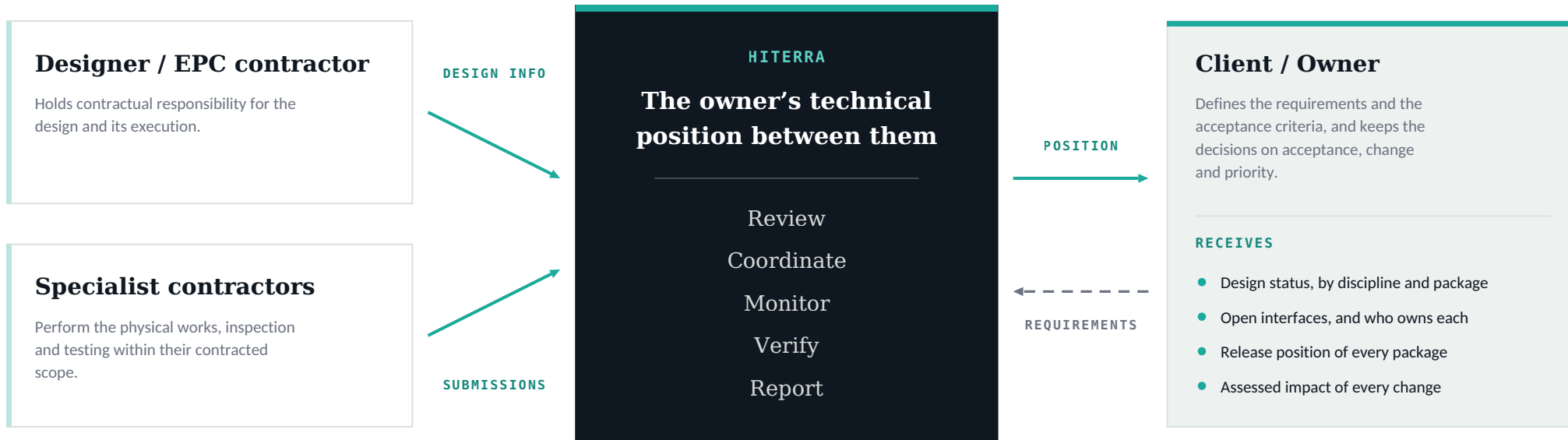
WHERE THE WORK HAS BEEN

Owner-side engineering, cost and contract management on rail, airport, water and process programmes across Asia, the Middle East and Eastern Europe. Construction in Japan. A registered contracting entity in the Eastern Province of Saudi Arabia.

-  CONSTRUCTION
-  CONTRACTING ENTITY
-  OWNER-SIDE PROGRAMMES



The designer designs it. The contractor builds it. Hiterra controls the engineering that connects the two.



INDEPENDENT, AND APPOINTED

Each party keeps its own contractual responsibility. Hiterra acts as Engineer of Record only where it is specifically appointed to do so.

WHY THE OWNER NEEDS IT

Every other party on the project is accountable for one scope. The owner is the only one accountable for the whole, and the only one without a technical team of its own on site.

WHAT IT IS WORTH

An issue found in a submission is a comment. The same issue found in the finished work is a non-conformance, a rework and a delay.

International infrastructure, on the owner’s side

We act for owners, ministries and funding agencies as engineering, cost and contract consultants. The rail and logistics programmes are set out in detail in the pages that follow.

SECTOR	REPRESENTATIVE PROGRAMMES
Rail and metro	Jakarta MRT East–West Line, Indonesia · Philippines North–South Commuter Railway, approximately 100 km and 20 stations · Hanoi Urban Railway, Vietnam · Yangon–Mandalay Railway improvement, Myanmar · Kiev Metro Line 1, Ukraine
Airports	Kuala Lumpur International, Malaysia · Second Bangkok International, Thailand · Astana New International, Kazakhstan · New Ulaanbaatar International, Mongolia · Doha International royal terminal, Qatar · New Bacolod, Philippines
Process and utilities	Energy-from-waste incineration plant, 400 t/day, Ukraine · Municipal sewerage, 270,000 m³/day, Hanoi · Rural power distribution, Mongolia · Ice plant and integrated fish processing, Egypt
Middle East	Dubai Municipality Building, UAE · Ain Begasu housing programme, Kuwait · Petra Museum and tourism sector development, Jordan · Fish Quality Control Centre, Oman
Pharmaceutical and industrial	Pharmaceutical manufacturing facility — quantity surveying for contractor evaluation · Solid dosage manufacturing building — cost estimation · Pharmaceutical research institute — cost audit. Client names held under confidentiality agreement.
Institutional	General hospital, Vietnam · university campus, Malaysia · embassy complexes · allied military facility projects

Functions performed

Design supervision and construction supervision · tender documentation, bid evaluation and contract administration · cost estimation, quantity surveying and independent cost audit · third-party contractor evaluation · value engineering · technical due diligence

Where the detail is

The two rail and logistics programmes that follow are set out project by project. The airport, process and institutional programmes are listed with their scale and governing technical condition on page 12, and the cost and contract work on page 13.

Nineteen station buildings on one commuter line

PROJECT MANAGEMENT



SUCAT · NICHOLS · ESPAÑA — STATION PERSPECTIVES, SOUTH COMMUTER SECTION, MARCH 2019

The North–South Commuter Railway is the largest infrastructure programme in the Philippines — 147 km from New Clark City to Calamba, 36 stations, financed by JICA and the Asian Development Bank.

We were stationed in Manila from 2018 to 2019 on the South Commuter section, working within the Japanese general consultant appointed for the programme. The work covered station building design, cost estimation and bid documentation from Blumentritt to Calamba.

Nineteen stations on one alignment is a repetition problem before it is a design problem. Each has a different site, footprint and interface with the road below, but they share a structural system, a platform module and a materials palette. Holding that consistency while every station adapts is what the documentation has to do. Structural steel was adopted across the programme, faster to erect and cheaper to maintain at that repetition.

PROGRAMME	North–South Commuter Railway
SECTION	South Commuter — Solis to Calamba
LENGTH	56 km
STATIONS DOCUMENTED	19
ROLE	Station design, cost estimation, bid documentation
PERIOD	2018 – 2019

One structural system, nineteen sites



BLUMENTRITT · FTI · SAN PEDRO · ALABANG · CALAMBA

STATIONS DOCUMENTED ON THE SECTION

BLUMENTRITT · ESPAÑA · STA MESA · PACO · BUENDIA · EDSA · NICHOLS · FTI · BICUTAN · SUCAT · ALABANG · MUNTINLUPA · SAN PEDRO · PACITA · BIÑAN · STA ROSA · CABUYAO · BANLIC · CALAMBA

Elevated, at-grade and depressed

The section runs over existing rail corridor through dense city, so no two stations meet the ground the same way.

Repetition with variation

A shared platform module and structural system, adapted station by station to site and road interface.

Documented for tender

Design, quantities and bid documentation to the standard an internationally financed programme requires.

Working in country

Team stationed in Manila for the duration, inside the appointed general consultant.

FedEx EJP Gateway Expansion

FUTABA · PROJECT MANAGEMENT



COORDINATION MODEL – SORTER, CONVEYOR LINES AND CHUTES SET OUT AGAINST THE STRUCTURAL GRID OF THE EXISTING CARGO BUILDING

An airport gateway is not a warehouse with a runway next to it. The building exists to serve a sorting system, and the sorting system is designed before the building around it.

Conveyor lines, chutes and scanning positions fix the column grid, the floor levels and every penetration. Once the equipment layout is set the structure has very little freedom left, and the interface that decides the programme is between the building contractor and the materials handling vendor: setting-out, floor tolerance and structural support for conveyor runs.

FACILITY	Airport logistics gateway expansion
LOCATION	Narita International Airport
ROLE	Project management
STATUS	Current
HELD BY	Futaba Consultants

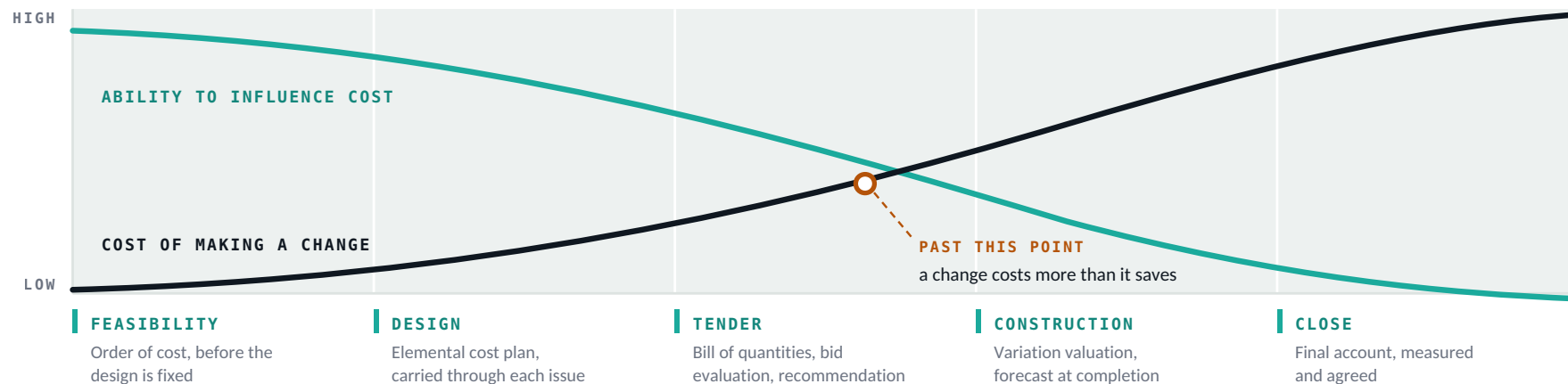
Airports, process plant and institutional buildings

Each entry below is a programme the senior team has engineered, estimated, supervised or managed on the owner's side. The technical characteristic that governed the work is stated with it.

PROGRAMME	LOCATION	SCALE	WHAT GOVERNED IT
Kuala Lumpur International Airport	Malaysia	International hub terminal	Terminal building engineering within an international design and supervision team
Second Bangkok International Airport	Thailand	New international airport	Programme-scale cost documentation and tender preparation
Astana New International Airport	Kazakhstan	New terminal	Terminal construction in a severe cold climate: envelope, movement and snow loading
New Ulaanbaatar International Airport	Mongolia	New airport, JICA financed	Supervision and cost control on a development-agency financed programme
Doha International Airport — royal terminal	Qatar	Dedicated terminal	Finish standard and security provision above the general terminal specification
Energy-from-waste incineration plant	Ukraine	400 t / day	Building engineered around a process line: equipment loads, thermal movement, penetrations
Municipal sewerage programme	Hanoi, Vietnam	270,000 m ³ / day	Buried and water-retaining structures, staged to keep the existing system in service
University campus	Malaysia	300,000 m ²	Repetition across many buildings held to one cost and specification standard
General hospital	Vietnam	1,000 beds	Clinical services, medical gas and separation of clean and dirty routes
Dubai Municipality Building	UAE	50,000 m ²	Civic building to a municipal client's own standards and approval route
Ain Begasu housing programme	Kuwait	400 ha	Infrastructure and housing planned and costed as one programme
Pharmaceutical manufacturing and research facilities	Confidential	Manufacturing, solid dosage and research	Quantity surveying, cost estimation and independent cost audit. Client names held under confidentiality agreement.

Estimating, measurement, audit and cost control

A price is only as good as the quantities under it and the rule used to measure them. We prepare, test and control cost on the owner's side, to the measurement standard used for public works in Japan.



PERFORMED

- Cost estimation to the national measurement standard
- Quantity surveying and bill of quantities preparation
- Independent cost audit of a tendered price
- Tender documentation and bid evaluation
- Value engineering, variation valuation, final account

ISSUED TO THE CLIENT

- Order of cost estimate and elemental cost plan
- Bill of quantities and tender cost documents
- Bid evaluation report with a recommendation
- Cost audit report, line by line against the rule
- Monthly cost report and forecast at completion

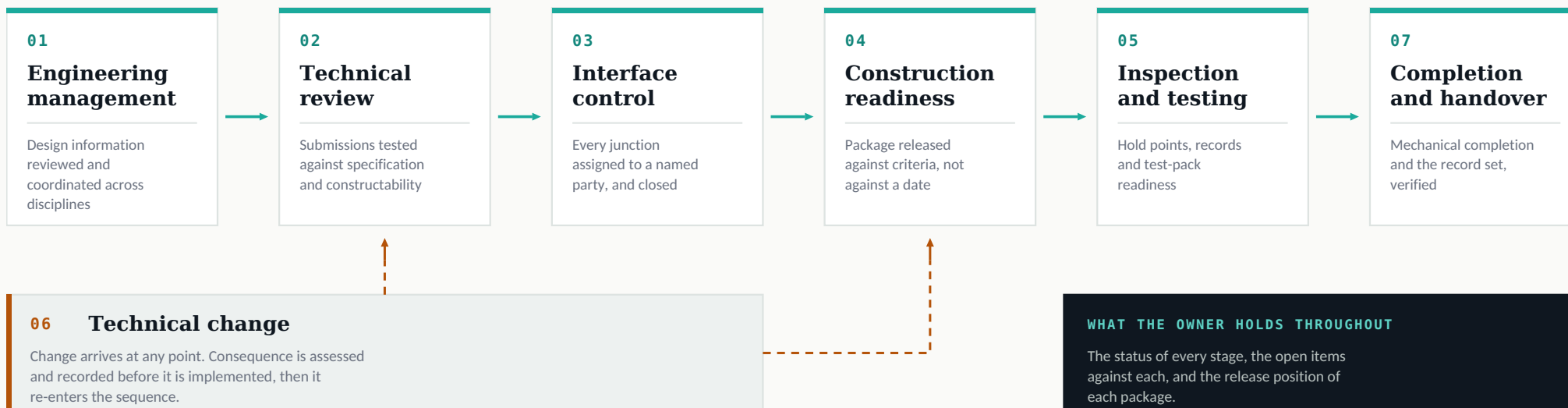
WHAT A COST AUDIT TESTS

- Measurement, against the stated rule and the drawings issued
- Scope, so the price covers the specification and only that
- Rates, against the published standard data
- Preliminaries, against the programme submitted
- Provisional sums, and what governs their release

Seven areas of technical control

Each area is set out in the following pages as scope, control activity and the documents issued to the client. Services may be appointed in full or individually.

EACH STAGE RELEASES THE NEXT



WHERE AN APPOINTMENT COVERS PART OF IT

The boundary is defined at mobilisation, together with what is handed across it and who holds the register either side.

AGREED BEFORE THE FIRST SUBMISSION

Register formats, review periods, release criteria and the distribution matrix for every document issued.

Design information is reviewed and coordinated before it is used

Engineering information arrives from the designer, the EPC contractor, specialist subcontractors and equipment suppliers, each on its own issue schedule.

Client requirement Confidence that design information is complete and coordinated before it is used.	Hiterra responsibility Review and coordination of engineering information across every discipline and package.	Control activity Design review, deliverable tracking, technical query management, drawing review.	Deliverable Design status report, comments register, outstanding information list, release status.
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HITERRA ACTIVITIES — Design review against project specification and applicable codes — Deliverable tracking against the issue schedule, by discipline — Technical query and RFI management, multidiscipline coordination, drawing review	CLIENT OUTPUTS — Design status report by discipline and package — Technical review comments register — Outstanding information list, and package release status	WHAT IS ESTABLISHED Whether the information is technically complete, and whether the disciplines agree with each other, before anyone orders from it or builds to it.
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SUBMISSION	REFERENCE	DISCIPLINE	REQUIRED ACTION	RELEASE STATUS
Support structure design	SUB-0412	Structural	Connection detail to be reissued with calculation	COMMENT
Coating specification	SUB-0418	Materials	Certification route to be confirmed	UNDER REVIEW
Construction drawings, Section 3	SUB-0421	Civil	—	RELEASED
Method statement, tie-in works	SUB-0427	Mechanical	Sequence to be coordinated with adjacent package	COMMENT

Contractor and specialist submissions are reviewed before release for construction

Review addresses three questions in sequence: whether the submission complies with the specification and applicable codes, whether it can be constructed as submitted, and whether it stays consistent with adjacent packages and previously released information. A submission is released once the required action is closed and recorded.

WHAT IS REVIEWED

- Shop and fabrication drawings
- Engineering calculations
- Material and equipment submissions
- Method statements and temporary works
- Specialist system submissions
- Proposed technical substitutions
- Welding, coating and testing procedures

ISSUED TO THE CLIENT

- Review comments by submission
- Approval and release status
- Outstanding technical issues
- Recommended action and responsible party

REVIEW STATUS DEFINITIONS

STATUS	EFFECT
RELEASED	May proceed to construction or fabrication
COMMENT	May proceed, subject to the recorded comments being incorporated
RESUBMIT	Revised submission required before it proceeds
UNDER REVIEW	Within the agreed review period

CONSTRUCTABILITY

The second question is the one that is usually skipped. A detail can comply with every clause of the specification and still be impossible to fabricate, lift or weld in the position it occupies. It is answered here by people who have built to drawings of the same kind.

REVIEW PERIODS

A review period is agreed for each submission class at mobilisation and applied from the date of receipt. Where a submission arrives incomplete, the position is recorded and reported in the same cycle rather than held.

RESPONSIBILITY

The contractor keeps its contractual responsibility for the design and execution of the works. Our review gives the owner an independent position on what has been submitted and what remains open.

Interfaces between separately contracted scopes are identified, assigned and closed

Each contractor may be performing correctly inside its own scope while the junction between two scopes belongs to nobody. Interfaces are identified at package definition, assigned to a named party with a date, and closed against documented evidence.

Client requirement	Hiterra responsibility	Control activity	Deliverable
Certainty that every junction between contracted scopes has an owner.	Identification, assignment and closure tracking of interfaces.	Identification at package definition, action tracking, closure verification.	Interface register with responsible party, action, due date and closure evidence.

INTERFACE	RESPONSIBLE PARTY	REQUIRED ACTION	DUE	CLOSURE EVIDENCE	STATUS
Support structure / primary frame	Structural contractor	Load and fixing calculation for review	W12	Calculation reviewed, released	CLOSED
Coating / welded joints	Coating contractor	Joint treatment procedure to be agreed	W14	—	OPEN
Temporary works / permanent works	Main contractor	Temporary works design submission	W15	—	OPEN
Civil / mechanical tie-in	Mechanical contractor	Coordinated setting-out to be issued	W11	Setting-out issued and accepted	CLOSED

INTERFACE REGISTER · EXTRACT. FORMAT AGREED WITH THE CLIENT AT MOBILISATION.

THE CONDITION

Timber structure, steel stair, balustrade and wall lining arriving at one junction. Four contracted scopes, four compliant submissions, one detail that belongs to none of them. Resolved at shop drawing stage, rather than on site.

IDENTIFIED

At package definition, before the scopes are let, so the junction appears inside somebody's contract rather than between two of them.

CLOSED

Against a document rather than an assurance: a reviewed calculation, an issued setting-out, an accepted procedure.

A package is released for construction against criteria, not against a date

Before release we review the approved design information, outstanding technical queries, interfaces and supporting documentation for the package, and issue a position on each criterion.

VERIFIED BEFORE RELEASE

✓ Design approved and current revision issued	CONFIRMED
✓ Engineering calculations available and reviewed	CONFIRMED
✓ Construction and shop drawings released	CONFIRMED
❗ Materials approved and certification available	OUTSTANDING
✓ Interfaces closed, or actioned within programme	CONFIRMED
✓ Technical queries closed	CONFIRMED
❗ Temporary works design submitted and reviewed	OUTSTANDING
✓ Installation requirements defined	CONFIRMED
✓ Inspection and test plan accepted	CONFIRMED

RELEASE GATE



POSITION ISSUED

Released with recorded exceptions

Each exception carries the item, the party and the date it closes by, so a package can move while everybody knows which item is open.

THE DECISION TO RELEASE STAYS WITH THE CLIENT

CLIENT OUTPUTS

Readiness status, outstanding items with the responsible party, and a release recommendation.

WHY IT IS WRITTEN DOWN

A package released on a verbal assurance leaves only the assurance behind it. The written record is what an auditor asks for.

CRITERIA

Illustrative. The criteria applied to each package class are agreed at mobilisation.

The technical requirements, readiness and records are managed on the client’s behalf

The appointed specialist contractor performs the physical inspection and testing inside its contractual scope. We manage the requirements, the readiness, the hold points, the documentation and the acceptance process.

MATERIAL RECEIPT	FABRICATION	WELDING	NDT	COATING	INSTALLATION	TEST
H	W	H	H	W	W	H
Mill certificates, heat numbers	Dimensional and fit-up records	Welder qualification, weld maps	UT, MT and RT reports	Surface preparation and DFT	Setting-out and survey records	Pressure and performance records

Hold point — the work stops until it is released in writing

Witness point — notice is given and the activity may proceed

TEST-PACK READINESS · EXTRACT

TEST PACK	REQUIRED RECORDS	OUTSTANDING	STATUS
TP-021	ITP signed off · welding records · NDT reports · material certificates	—	READY
TP-022	ITP signed off · welding records · NDT reports · material certificates	2 NDT reports	OUTSTANDING
TP-023	ITP signed off · welding records · NDT reports · material certificates	1 NCR open	OUTSTANDING

VERIFICATION IS DOCUMENTARY

We confirm that the records required by the Inspection and Test Plan exist, are traceable to the work they describe, and are complete before the activity is presented for acceptance. To an auditor, the record is the test.

TRACEABILITY

Material certificates are tied to heat or batch number, and to the member they were used in, so the record set reads backwards from any part of the finished works.

CLIENT OUTPUTS

Inspection status by package, hold point register, NCR register, test-pack readiness.

Technical consequence is established before a change is implemented

For each proposed change we record what has changed, the technical reason, the party responsible, the deliverables and disciplines affected, and the assessed cost and programme impact. The record is issued to the client before implementation. Where the change later forms part of a commercial assessment, the same record provides the technical substantiation.

REF	CHANGE	ORIGIN	STATUS
CH-014	Support spacing revised following ground survey	Site condition	ASSESSED
CH-015	Coating specification substitution proposed	Contractor proposal	UNDER ASSESSMENT
CH-016	Tie-in sequence revised	Interface	ASSESSED
CH-017	Additional penetration requested	Client requirement	UNDER ASSESSMENT

CHANGE REGISTER • EXTRACT.

Assessed for	Then	Then	Then
Original requirement → what changed → technical reason	Deliverables and disciplines affected	Cost impact, measured against the contract documents	Programme impact, against the accepted sequence

HITERRA ACTIVITIES

- Technical assessment of each proposed change
- Identification of affected deliverables and disciplines
- Cost and programme impact assessment
- Engineering substantiation for commercial assessment

CLIENT OUTPUTS

- Change register with status
- Technical assessment per change
- Assessed cost and programme impact
- Supporting technical record

WHERE THE POSITION SITS

We provide the engineering substantiation and the assessed impact. The contractual and commercial position stays with the client, and the record is written so that it carries straight into that assessment.

Technical records are verified as the work proceeds

Mechanical completion is tracked by system. The documentation required to support acceptance is reviewed for completeness during construction rather than compiled at the end of the project, so the handover set is assembled from records that have already been checked.

HANDOVER DOCUMENTATION REVIEWED	STATUS
Inspection and test records	COMPLETE
Welding and NDT documentation	COMPLETE
Material certificates and traceability	2 OUTSTANDING
Pressure and performance test records	COMPLETE
Non-conformance closure records	COMPLETE
As-built drawings	UNDER REVIEW
Operation and maintenance manuals	UNDER REVIEW
Spares and special tools schedule	OUTSTANDING
Quality dossier compilation	IN PROGRESS

ILLUSTRATIVE. DOCUMENT SET DEFINED BY THE PROJECT SPECIFICATION.

HITERRA ACTIVITIES

- Mechanical completion tracking by system
- Punch list categorisation and closure tracking
- Verification of NCR closure
- Review of as-built documentation
- Review of quality dossier completeness
- Technical handover readiness assessment

CLIENT OUTPUTS

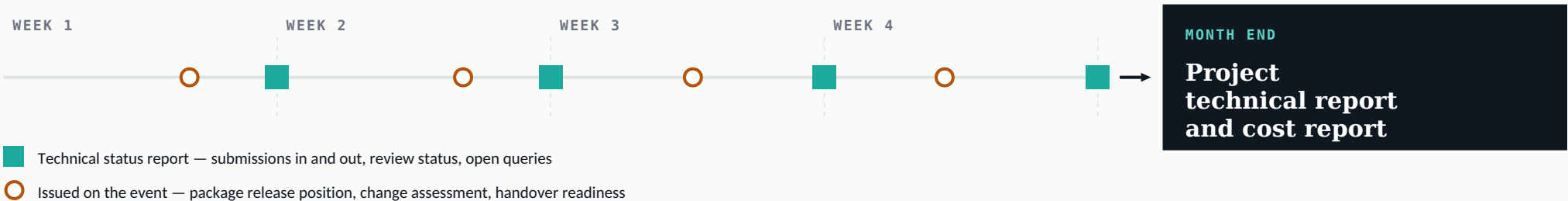
- Mechanical completion status by system
- Punch list register with categorisation
- Outstanding records list
- Quality dossier status
- Handover readiness position

PUNCH LIST CATEGORIES

A — prevents the system being accepted. **B** — accepted, with the item to close before taking over. **C** — cosmetic, closed within an agreed period after handover. Categorising at the point of recording is what keeps the list from becoming one long column of equal items at the end.

What the client receives, and when

Every control described in the preceding pages produces a document. The cycle below is the default; frequency, format and distribution are agreed with the client at mobilisation.



ISSUE	CONTENTS	CYCLE
Technical status report	Submissions received and returned, review status by package, open technical queries, interfaces due	WEEKLY
Project technical report	Design status, package release position, interface, change and NCR registers, forecast of the coming period	MONTHLY
Cost report	Committed, valued and forecast cost at completion, with the movement since the last issue explained	MONTHLY
Package release position	Readiness against the agreed criteria, with outstanding items and responsible parties	PER PACKAGE

REGISTERS MAINTAINED

Design deliverable and review comments · technical query and RFI · interface, with responsible party and closure evidence · change, with technical assessment · hold point and inspection · non-conformance, with disposition · test pack and outstanding records · punch list, by category.

DOCUMENT CONTROL

Each document carries a project reference, revision and date, and is issued under transmittal against an agreed distribution matrix. Where the client operates an electronic document management system we work inside it; where none is in place we provide the register structure and hand it over as a complete set at the end of the appointment.

Five positions, depending on what is already in place

The table below sets out where each position fits and what we carry in it.

POSITION	APPOINTED WHEN	WHAT HITERRA HOLDS
Full engineering PMC	The owner has appointed a designer and contractors and needs the technical function in between	All seven areas, from design review through completion and handover, for the whole project
Owner's engineer	The works are placed with an EPC contractor under a single contract	Technical representation of the owner against the EPC contractor, through to acceptance
Technical review	A live project where a defined scope needs independent review	Review of submissions against specification, constructability and adjacent packages, with a recorded release status
Inspection and testing management	The works are under way and the record set has to hold up to audit	ITP review, hold point control, test-pack readiness and acceptance documentation
Cost and contract management	Any stage, from feasibility to final account	Estimating, measurement, bid evaluation, independent cost audit, variation valuation and the final account

Whichever position is taken, the deliverables are the same ones described in the preceding pages: registers that are maintained rather than compiled, and a written position on each package that the owner can act on or be audited against.

AGREED AT MOBILISATION

Scope of services, reporting cycle, register formats, review periods, distribution matrix and the release criteria applied to each package.

What this means for a project in the Kingdom

An owner building in Saudi Arabia has two requirements that are usually met by two different organisations. We hold both.

The first is technical: the works have to be engineered, reviewed, procured and accepted to the standard the owner expects, with documentation the owner’s own engineers can read. The second is local: the contract has to be held by a registered Saudi company that can run a site, employ under Saudization, clear the authorities and hand over.

Japanese engineering, construction and project management on one side. A fully registered Saudi contracting entity on the other — commercial registration, tax and VAT registration, municipal licence and social insurance registration, employing under Saudization and carrying local content obligations.

The programmes in this document — rail, airport, water, process plant, institutional and airport logistics — are the classes of project the Kingdom is currently building.

Our Saudi company works in the Eastern Province in partnership with Tamimi Holding, and has delivered work on their projects.

WHERE WE CAN BE BROUGHT IN

FEASIBILITY	A structural approach and an order of cost, before the design is fixed
COST AUDIT	Independent test of a tendered price, measured against the published standard data
DESIGN AND BUILD	Structure, envelope and the trades that complete the building
PACKAGE DELIVERY	Structure and envelope inside a main contractor's programme
OWNER-SIDE CONTROL	Engineering management, procurement, interfaces, inspection and handover



CONTACT

Registers that are maintained, and a position on every package in writing.

Scope of services, team composition, curricula vitae and fee basis are issued against a defined brief. We are able to review a project already under way and set out where the technical position sits, and where it could be strengthened, before any appointment is made.

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