

# International Health Facility Guidelines



## Deliverables for Detailed Submission

### 0. Guidance on how to deliver your submission

#### The purpose of this document

- This document provides information on all the deliverables required for a Detailed Submission. It specifies what the deliverables are, their quantity, format, size, scale and content.
- This document also is to be used as a Checklist for the applicant, to verify the submission is complete. To ensure a complete and compliant submission is presented to Local Health Authority, the applicant is to check all the boxes in the green field. Although Local Health Authority encourages the applicant to provide as much information as possible, there may be reasons why certain deliverables may not need to be provided. Where the submission deviates from what is listed below, the applicant is to list these in a separate Non-Compliance Report (refer to item 1.6 and 1.7) and explain the reason. It should however be noted submissions deemed incomplete may be rejected by OSCH. It is therefore the applicant's responsibility to be as complete as possible and where in doubt, consult OSCH for the exact requirements. The deliverables as listed below are applicable to a large scale, complex Health Facility - small scale, basic facilities may be exempt from providing certain deliverables.
 

Examples: A vertical transportation study is obviously not required for single level facilities. For multiple storey facilities, it may only be required if over a certain size - we advise to check with OSCH  
 Details for food storage and preparation are not required if the health facility does not provide this service  
 Details of medication delivery may not be required for a small dental clinic
- The OSCH officer will use this document to verify the submission is complete and compliant by checking all the boxes in the yellow field.

#### Key to the spreadsheet below

- Part For hard copies - All items with identical numbers are to be bound together but separated by dividers/tabs  
 For soft copies - All items with identical numbers are to be filed together in a folder
- Size The document is to be submitted in the prescribed size
- Scale The document is to be submitted using the prescribed scale
- T Template - The applicant is to use a Template for this specific deliverable. All Templates are provided in Part A
- S Sample - The applicant is to refer to a Sample for this specific deliverable. All Samples are provided in Part A. The Sample will give an indication on the format/content of the deliverable
- Hard Copy An "x" in this column indicates 1 hard copy is to be provided, to scale and in colour where required. Min. size to be A1
- PDF An "x" in this column indicates 1 PDF copy is to be provided, to scale and in colour where required. File naming should allow easy identification of each document
- Soft Copy An "x" in this column indicates 1 soft copy in the prescribed format is to be provided. File naming should allow easy identification of each document

#### General

- All dimensions, levels and areas to be metric  
 All documents produced by the applicant to be in English

### 1. Documents and Approvals by Other Authorities and Service Providers

No	Item	Part	Size	T/S	Hard copy	PDF	Soft copy	Comments
1.1	Deliverables for Detailed Submission	1	A4	T	x	x		Signed hardcopy and PDF to be submitted with the submission.
1.2	Detailed Submission Registration Form	1	A4	T	x	x	x	Soft copy to be submitted online by the operator/developer. Signed hardcopy and PDF to be submitted with the submission
1.3	Approval in Principle - Schematic	1	A4		x	x		Authority/supplier name, purpose of document and approval date mentioned in the file name
1.4	Assessment Report	1	A4	S	x	x	Word	The MSWord Assessment Report as issued by OSCH when issuing the AIP-S is to be completed and updated as required
1.5	Urban Planning Council Project Approval	1	A4		x	x		Authority/supplier name, purpose of document and approval date mentioned in the file name
1.6	Civil Defence Approval	1	A4		x	x		Authority/supplier name, purpose of document and approval date mentioned in the file name
1.7	All other authority and utility suppliers approvals and NOCs received to date	1	A4		x	x		Authority/supplier name, purpose of document and approval date mentioned in the file name
1.8	Non-Compliance Report - Deliverables	1	A4	T	x	x		Where the submission is not fully compliant (not all boxes ticked in the applicant self check field), all non-compliances are to be listed in a separate report explaining the reasons for the non-compliance. The missing item is to be identified by the corresponding reference number on this sheet
1.9	Non-Compliance Report - Design	1	A4	T	x	x		Where the design is not fully compliant with the Standards and Guidelines, all non-compliances are to be listed in a separate report, explaining the reasons for the non-compliance

### 2. Architectural Reports, Schedules and Calculations

#### 2.1 Architectural Reports

No	Item	Part	Size	T/S	Hard copy	PDF	Soft copy	Comments
2.1.1	Project Synopsis	2	A4		x	x		General description of the facility, max 10 to 20 pages * Type & purpose of the facility * Overall design philosophy * Need & benefits * Indicate whether there is a need for this facility to be fully operational after national disasters such as earth quakes, whether there are any special design considerations towards dealing with pandemics or large scale contamination * Key planning figures such as number of beds - operating rooms - birthing rooms - ICU bays/rooms - etc
2.1.2	Role Delineation Level (RDL) Matrix	2	A4	T	x	x		Declare the intended level of service for every FPU within the facility. Note this should match what was declared when Registering (Step 1) the Health Facility

APPLICANT SELF CHECK

OFFICER CHECK

**2.1 Architectural Reports - continued**

No	Item	Part	Size	T/S	Hard copy	PDF	Soft copy	Comments
2.1.3	Functional Planning Unit (FPU) Schedule	2	A4		x	x		General description of each FPU * Complete list of all FPU's (departments) including their gross floor area & proposed RDL * Provide a short operational policy per FPU * Explain the most critical functional relations to other FPU's (explain adjacencies) * Explain the different access points for staff, patients & visitors * Explain whether there are any (semi) restricted areas & how this segregation is achieved * Explain what facilities (change rooms, showers, lounges, toilets, etc) are available for staff, patients & visitors within/outside the department * Explain all different storage rooms within the FPU & their intended use * Explain all special hazards within this particular FPU & explain how this will be addressed during the design phase (example: radiation, chemicals, etc) * Elaborate on all people and goods flows within the department if this is not fully addressed under item 1.2.4
2.1.4	People & Goods Flows	2	A4		x	x		At facility level, explain (text) & document in colour through the departmental relationship plans * Visitors flows from car parking to each FPU accessible to the public * Staff flows from car parking to each FPU &/or change room * Patient flows from car parking, ambulance bay & helpad to each FPU accessible to patients * The use & internal size of each lift cabin - staff, patients, visitors, goods, maintenance, CCSD or a mixture * The use of each entry point into the facility - staff, patients, visitors, goods - public, staff only, etc * Storage, collection, delivery, distribution of clean & soiled linen. Explain whether laundry is on/off site. * Storage, collection, recycling of waste - general, food, medical, radioactive, bio hazard * Storage, delivery of fuels, medical gases * Storage, delivery of food to the kitchen. Explain whether food preparation is on/off site. * Storage, delivery of food to the wards. * Medication delivery to wards, medication rooms, pharmacies, etc - who delivers, how is it stored, how is it secured * Cleaning methods & distribution/detailed fit out of house keeping rooms

**2.2 Architectural Schedules and Calculations**

No	Item	Part	Size	T/S	Hard copy	PDF	Soft copy	Comments
2.2.1	Schedule of Accommodation	3	A4	T	x	x	Excel	Room names in line with HFG nomenclature Room number & its metric floor area No of rooms per type, per FPU (Department) Total circulation within the department Departmental totals - net, circulation, gross Total circulation outside the departments Total engineering space & plant rooms Floor level totals - net, circulation, gross Facility totals - net, circulation, gross State which area measurement method was used, internal dimensions or no-gap method GFA should be listed per floor & per use (offices, clinical, etc.)
2.2.2	Occupant Load Calculation	3	A4		x	x		
2.2.3	Vertical Transportation Study	3	A4		x	x		This should be conducted by a reputable vertical transportation specialist Indicate the exact use of each lift - patients - visitors - staff - goods - maintenance
2.2.4	Car Parking Study	3	A4		x	x		Use the ADA calculation method based on clause ADA 4.1.2(5) Indicate the numbers of each type of car park - standard, accessible, accessible van, etc. Where the number, type, size of car parking spaces is not matching other authority's requirements, the most onerous shall be followed

**3. Architectural Drawings****3.1 Architectural and Health Planning Drawings**

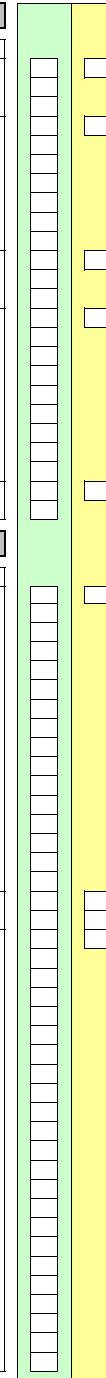
No	Item	Part	Scale	T/S	Hard copy	PDF	Soft copy	Showing
3.1.1	Departmental Relationships Plans & People & Goods Flows	4	1/100		x	x	Acad	Room names in line with HFG nomenclature FPU (Department) names in line with HFG nomenclature FPU's (Departments) shown in different colours Where support areas are shared between departments, provide hatching indicating the extent Where areas are restricted or semi restricted, provide a bold outline around the perimeter indicating the extent Indicate all people & goods flows as described under 1.2.4 Key plan indicating what portion of the facility is shown on the sheet
3.1.2	Architectural Floor Plans	5	1/100	S	x	x	Acad	Room names in line with HFG nomenclature Room number & its metric floor area FPU (Department) names in line with HFG nomenclature Total FPU (Department) area written within each FPU Dimensions (between walls) for all rooms, including corridors Dimensions for door openings (clear opening) Dimensions between grid lines All built in joinery, sanitary fittings & large furniture/equipment Where sinks & basins are shown, visually identify which are for clinical use, for disposal of body fluids, for cleaning & for hand washing All floor wastes & shower drains, including floor falls Where storage rooms/alcoves are shown, specify the exact use in line with the nomenclature as described in the HFG Key plan indicating what portion of the facility is shown on the sheet

**3.1 Architectural and Health Planning Drawings - continued**

No	Item	Part	Scale	T/S	Hard copy	PDF	Soft copy	Showing
3.1.3	Architectural Sections	6	1/100		x	x	Acad	Dimensions of floor to floor heights Dimensions of clear ceiling heights Key plan indicating where the section is taken
3.1.4	Reflected ceiling plans	7	1/100		x	x	Acad	Room names in line with HFG nomenclature Room number Ceiling height All built in joinery going up to the ceiling All ceiling mounted equipment & fixtures Type/material of ceiling Key plan indicating what portion of the facility is shown on the sheet
3.1.5	Architectural Elevations Exterior	8	1/100		x	x	Acad	Dimensions of floor to floor heights Key plan indicating where the elevation is taken Operable windows & external vents/intakes clearly labelled
3.1.6	Room Layouts & Elevations of all Typical Rooms	9	1/20 1/50		x	x	Acad	Room names in line with HFG nomenclature Room number & its metric floor area Dimensions (between walls) Dimensions for door openings (clear opening) All fixtures, fittings, joinery, sanitary fittings & equipment Where sinks & basins are shown, visually identify which are for clinical use, for disposal of body fluids, for cleaning & for hand washing All floor wastes & shower drains, including floor falls All MEP outlets (electrical, data, gas) Reference indicating where this room is located on the 1:100 drawings
3.1.7	Room Layouts & Elevations of all Non-Typical Critical Rooms	9	1/20 1/50		x	x	Acad	As above

**3.2 Drawings Documenting Compliance with ADA 1994**

No	Item	Part	Scale	T/S	Hard copy	PDF	Soft copy	Showing
3.2.1	Site Plan	10	1/500 1/1000		x	x	Acad	Ground floor layout of the facility with overhanging roofs & canopies dashed On grade car parking, including traffic directions & markings. Indicate the numbers of each type of car park - standard, accessible, accessible van, etc On grade accessible car parking & their accessible routes to entrances identified Pedestrian crossings & walkways Loading bays with clean/dirty separation shown Landscaped areas Access points to public transport Vehicle & pedestrian ramps External steps & stairs Ambulance access & parking Drop off zones Helipads North arrow Site boundary Surrounding streets & access points Total land area, ground floor footprint area & total building area
3.2.2	Accessibility Floor Plans	11	1/100		x	x	Acad	Visualise (hatch, colour) all accessible routes and facilities & joinery items along these routes, including & not limited to the list under 2.2.3 Provide call outs for each item & document at an appropriate scale as mentioned under item 2.2.3
3.2.3	Document all Accessible Items: * Car parks for cars for the disabled  * Car parks for vans for the disabled  * Passenger loading zones * Kerb ramps * Ramps * Stairs * Lifts  * Toilets, Ensuites, Bathrooms, Changing rooms  * Accessible patient rooms & ensuites * Counters, Kiosks, etc.	11			x	x	Acad	Ensure compliance with all applicable ADA clauses is documented, including but not limited to the items below Plan of car park + aisle & its connection to the accessible route Clear height from car park entrance to car park Plan of car park + aisle & its connection to the accessible route Clear height from car park entrance to car park Slope, levels, clear width, length Slope, levels, clear width, length Slope, levels, clear width, length, handrail details Slope, levels, clear width, length, handrail details Internal size of all lift cages deemed to be accessible Internal size of all lift cages deemed to be for bed transport Internal size of all lift cages deemed to be for maintenance/goods Clear door opening (width/height) Height, details of call buttons (inside & outside lift cabin) & handrails Door swings & clear openings Internal dimensions & accessible circle Location & size of fittings and fixtures Wheelchair square showing door approach Toilet & grab bar positioning Floor falls Shower seats Plans, elevations, sections, etc, as required Plans, elevations, sections, etc, as required



**3.2 Drawings Documenting Compliance with ADA 1994 - continued**

No	Item	Part	Scale	T/S	Hard copy	PDF	Soft copy	Showing
	* Public Phones, Drinking Fountains, etc. * Water Coolers, ATMs , Vending Machines, etc. * Wall Protection & Handrail Strategy * Approach with regards to the Hearing Impaired * Approach with regards to the Visibly Impaired	11			x	x	Acad	Plans, elevations, sections, etc, as required Plans, elevations, sections, etc, as required Typical section of corridor approach in all public corridors Details as required Details as required
3.2.4	Number of Accessible Facilities	11			x	x		Diagram documenting the number of accessible facilities, as per ADA 6.1

**4. Engineering Reports, Schedules and Calculations**

**4.1 Engineering Reports and Specifications**

No	Item	Part	Size	T/S	Hard copy	PDF	Soft copy	Comments
4.1.1	MEP Design Report	12	A4		x	x		Explain design Intent Parameters & consideration Design criteria
4.1.2	Fire Strategy Report	13	A4		x	x		Fire strategy & recommendation by Fire Consultant, Licensed house of Expertise by ADCD
4.1.3	MEP Technical Specifications	14	A4		x	x		
4.1.4	Acoustic Report	15	A4		x	x		Signed report by independent Acoustic Engineer to confirm compliance with the HFG

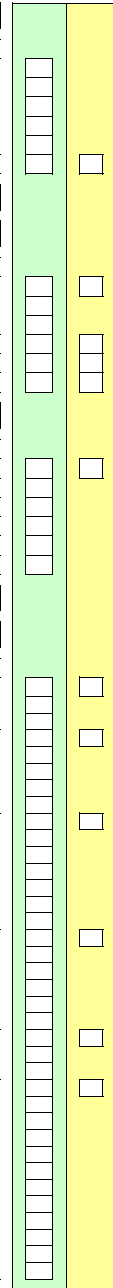
**4.2 Engineering Calculations**

No	Item	Part	Size	T/S	Hard copy	PDF	Soft copy	Comments
4.2.1	HVAC Heat Load	16	A4		x	x		Compliance to Approved/Recommended Code & Guidelines
4.2.2	Water Demand, Boiler & Calorifier Sizing	16	A4		x	x		Compliance to Approved/Recommended Code & Guidelines
4.2.3	Major HVAC & Public Health Pump/Equipment Sizing (Hydraulics)	16	A4		x	x		Compliance to Approved/Recommended Code & Guidelines
4.2.4	LP Gas Load	16	A4		x	x		Compliance to Approved/Recommended Code & Guidelines
4.2.5	Fire Services	16	A4		x	x		Compliance to Approved/Recommended Code & Guidelines - Fire Water Reserve, Fire Pump Capacity, Gas Fire Suppression Capacity etc
4.2.6	Electrical Power & Lighting	16	A4		x	x		Compliance to Approved/Recommended Code & Guidelines

**5. Engineering Drawings**

**5.1 HVAC Design Drawings**

No	Item	Part	Size	T/S	Hard copy	PDF	Soft copy	Comments
5.1.1	HVAC Equipment Schedules	17	NTS		x	x	Acad	Equipment Description & Tags (Abbreviation) Equipment Locations Detailed Equipment Capacity (Flow rate, Power, Voltage, Frequency, Head, etc)
5.1.2	HVAC System Riser Diagrams	17	NTS		x	x	Acad	Equipment and Duct/Pipe Description & Tags (Abbreviation) Detailed Duct Routing & Sizes Piping Routes & Sizes Major Valves, Dampers, Controls, Meters, etc Exact Equipment Quantities (FCU, AHU, FAHU) as per Design
5.1.3	HVAC System Design Plan Drawings	17	1/100		x	x	Acad	Key Plan Metric Dimensions of Duct & Pipes Sizes Equipment Description, Tags (Abbreviation), Capacity Optimized Duct & Pipes Routing Major Valves, Dampers, Controls, Meters, etc Coordinated Equipment Location Legends, Symbol & Abbreviations
5.1.4	HVAC Machine Rooms Plans & Sections	17	1/20 1/50		x	x	Acad	Room/Shaft Description & Levels Metric Dimensions of Clear Ceiling Heights Double Line Plan & Section Equipment Description, Tags (Abbreviation), Capacity Metric Dimensions of Duct & Pipes Sizes Area/Room Identification
5.1.5	HVAC Main Shaft Sections, Major Crossovers	17	1/20 1/50		x	x	Acad	Metric Dimensions of Clear Ceiling Heights Double Line Plan & Section Area/Room Identification
5.1.6	HVAC Standard Details, Symbols, Legends & Abbreviations	17	1/20 1/50 NTS		x	x	Acad	Equipment Standard Control Assembly Standard Valve Assembly Standard FCU, AHU, FAHU, FANS Assembly Standard Sleeve & Lagging Details Standard Inertia Bases Standard Support, Hangers & Brackets details Standard HEX Installation Detail Standard Connection Details to Major Equipments Standard Pipe & Duct Penetration Details Standard Louvre & Damper Mounting Details HVAC Symbol & Abbreviations



**5.1 HVAC Design Drawings - continued**

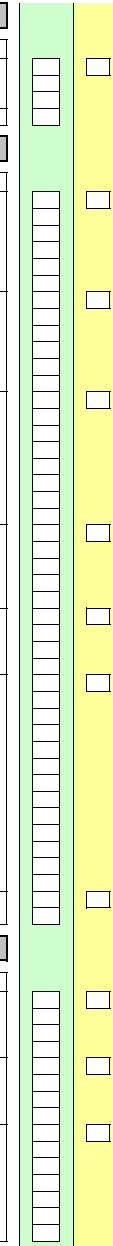
No	Item	Part	Size	T/S	Hard copy	PDF	Soft copy	Comments
5.1.7	Building Management System Diagrams	17	NTS		x	x	Acad	BMS Interface to Mechanical Equipment Signal/Alarm Monitor & Control Philosophy
5.1.8	Major HVAC Sequence of Operations	17			x	x	Acad	Major Equipment, Valves & Control Sequence of Operation

**5.2 Public Health Design Drawings (Plumbing, LPG and Drainage)**

No	Item	Part	Size	T/S	Hard copy	PDF	Soft copy	Comments
5.2.1	Public Health Equipment, Manhole Schedules & Pipe Schedules	18	NTS		x	x	Acad	Equipment & Tanks Description & Tags (Abbreviation) Equipment & Tanks Locations Water Tank & Boiler/Calorifier Capacity Detailed Equipment Capacity (Flow Rate, Power, Voltage, Frequency, Head, etc) Manhole Schedule showing Cover Levels & Invert Levels Nominal Size to be used for Water Supply Pipes. Equivalent Commercial Pipe Schedule to be Shown
5.2.2	Public Health System Riser Diagrams including Treatment/Filtration & Solar Heating (If any)	18	NTS		x	x	Acad	Equipment & Pipe Description & Tags (Abbreviation) Optimized Pipe Routing & Sizes Major Valves, Controls, Meters, WHA, etc Detailed Equipment Quantities (Pumps, Tanks, Boilers, Heaters, Interceptors, Treatment System) as per Design Drawings Bathroom Group Water Supply & Drainage Connection Detailed Schematic Showing Fixture Connections Riser Numbers (Description)
5.2.3	Public Health System Design Plan Drawings	18	1/100		x	x	Acad	Key Plan Metric Dimensions of Pipes Sizes Equipment Description, Tags (Abbreviation), Capacity Pipe Routing & Sizes Detailed Valves, Controls, Meters, Flexible Connectors, Drains, Manholes, SGT, Interceptor, etc Coordinated Equipment/Plant Room Location Legends, Symbol & Abbreviations Pipe Slopes & Invert Levels
5.2.4	Public Health Major Pump Room Plans & Sections	18	1/20 1/50		x	x	Acad	Metric Dimensions of Clear Ceiling Heights Double Line Plan & Section Equipment Description, Tags (Abbreviation), Capacity Metric Dimensions of Pipes Sizes Area/Room Identification
5.2.5	Public Health Major Shaft Sections & Wet Area Blow up Plans	18	1/20 1/50		x	x	Acad	Metric Dimensions of Clear Ceiling Heights Area/Room Identification Blow up for Typical Wet Areas (Toilet, Wash Room, Kitchen, etc) Detailed Pipe Sizes, Valves, Slopes, etc
5.2.6	Public Health Standard Details, Symbols, Legends & Abbreviations	18	1/20 1/50 NTS		x	x	Acad	With Dimension Standard Control Assembly Standard Valve Assembly Standard Pump, Heater, Tanks Connections Assembly Standard Sleeve & Lagging Details Standard Inertia Bases Standard Support, Hangers & Brackets details Standard HEX Installation Detail Standard Connection Details to Major Equipments & Sanitarywares Standard Pipe Penetration Details Standard Pump Pit (Submersible) Details Standard Drains & Manhole Installation details Public Health Symbol & Abbreviations
5.2.7	Major Public Health Sequence of Operations	18			x	x	Acad	Major Equipment, Valves & Control Sequence of Operation for Water Cooling Major Equipment, Valves & Control Sequence of Operation for Solar Water Heating (If any)

**5.3 Fire Fighting Design Drawings**

No	Item	Part	Size	T/S	Hard copy	PDF	Soft copy	Comments
5.3.1	Fire Fighting Equipment Schedules	19	NTS		x	x	Acad	Equipment & Tanks Description & Tags (Abbreviation) Equipment & Tanks Locations Fire Water Tank Capacity Detailed Equipment Capacity (Flow Rate, Power, Voltage, Frequency, Head, etc)
5.3.2	Fire Fighting System Riser Diagrams	19	NTS		x	x	Acad	Equipment & Pipe Description & Tags (Abbreviation) Detailed Pipe Routing & Sizes Major Valves, Controls, FHC, FHR, Hydrants, etc Detailed Equipment Quantities (Pumps, tanks, FHC, Hydrants) following Design Drawings
5.3.3	Fire Fighting System Design Drawings	19	1/100		x	x	Acad	Key Plan Sprinkler Zoning Key Plan (applicable for building exceeding 4831m3 floor area) Metric Dimensions of Pipes Sizes Equipment Description, Tags (Abbreviation), Capacity Major Valves, Controls, Fire Extinguishers, FHC, Sprinklers, Gas Spray Nozzles, etc Coordinated Equipment/Pump, Breaching Inlet & Gas Suppression Cylinder (for Electrical & Communication Rooms) Location Legends, Symbol & Abbreviations



**5.3 Fire Fighting Design Drawings - continued**

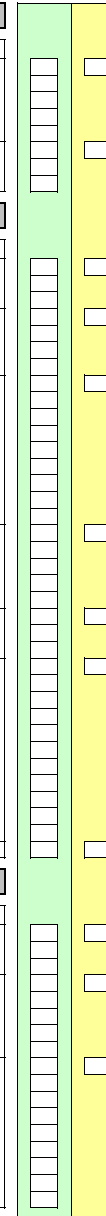
No	Item	Part	Size	T/S	Hard copy	PDF	Soft copy	Comments
5.3.4	Fire Fighting Major Pump Room Plans & Sections	19	1/20 1/50		x	x	Acad	Metric Dimensions of Clear Ceiling Heights Double Line Plan & Section Equipment Description, Tags (Abbreviation), Capacity Metric Dimensions of Pipes Sizes Area/Room Identification
5.3.5	Fire Fighting Major Shaft Sections & Blow Up Plans	19	1/20 1/50		x	x	Acad	Metric Dimensions of Clear Ceiling Heights Area/Room Identification Detailed Pipe Sizes, Valves-etc

**5.4 Medical Gas Design Drawings**

No	Item	Part	Size	T/S	Hard copy	PDF	Soft copy	Comments
5.4.1	Medical Gas Equipment Schedules	20	NTS		x	x	Acad	Medical Equipment & Cylinder Description & Tags (Abbreviation) Medical Equipment & Cylinder Locations <del>Final</del> Optimized Medical Equipment Capacity (Flow Rate, Power, Voltage, Frequency, Head, etc)
5.4.2	Medical Gas System Riser Diagrams	20	NTS		x	x	Acad	Equipment & Pipe Description & Tags (Abbreviation) Pipe Routing & Sizes Major Valves, Controls, Alarms, Terminal Units, Remote Switch, Alarm Switch, etc Exact Equipment Quantities (Gas Cylinders, Vacuum, etc) as per Design Drawings
5.4.3	Medical Gas System Design Plan Drawings	20	1/100		x	x	Acad	Key Plan Gas Zoning Key Plan Number & Description of Outlets Metric Dimensions of Pipes Sizes Equipment Description, Tags (Abbreviation), Capacity Combined Medical Gas Pipe Routing Major Valves, Controls, Alarms, Terminal Units, Remote Switch, Alarm Switch, etc Coordinated Medical Equipment/Pump Room Location Legends, Symbol & Abbreviations
5.4.4	Medical Gas Major Pump Room Plans & Sections	20	1/20 1/50		x	x	Acad	Metric Dimensions of Clear Ceiling heights Double Line Plan & Section Equipment Description, Tags (Abbreviation), Capacity Metric Dimensions of Pipes sizes Area/Room Identification
5.4.5	Medical Gas Major Shaft Sections & Blow Up Plans	20	1/20 1/50		x	x	Acad	Metric Dimensions of Clear Ceiling Heights Area/Room Identification Blow up for Typical Rooms
5.4.6	Medical Gas Standard Details, Symbols, Legends & Abbreviations	20	1/20 1/50 NTS		x	x	Acad	With Dimension Standard Control Assembly Standard Valve Service Installation Detail Standard Terminal Unit Installation Detail Standard Sleeve Details Standard Inertia Bases Standard Support, Hangers & Brackets details Standard Remote & Alarm Switch Installation Detail Standard Connection Details to Major Medical Equipments Standard Pipe Penetration Details Medical Gas Symbol, Legends & Abbreviations
5.4.7	Major Medical Gas Sequence of Operations	20	N/A		x	x	Acad	Sequence of Operation for Medical Gas Supply Change-Over

**5.5 Electrical Power Design Drawings**

No	Item	Part	Size	T/S	Hard copy	PDF	Soft copy	Comments
5.5.1	Electrical Load Schedules	21	NTS		x	x	Acad	MDB, SMDB & DB Schedules Cable Sizing Calculations Voltage Drop Calculations
5.5.2	Power Riser Diagrams	21	NTS		x	x	Acad	MDB's, SMDB's, DB's & Cables/Busbars Description & Tags (Abbreviation) All Cables, Busbar & Breaker Sizes MCC's & Control Panel Descriptions Earthing Details Generator Power Details
5.5.3	Power System Design Drawings	21	1/100		x	x	Acad	Key Plan Locations of all MDB's, SMDB's, DB's, MCC's, etc Equipment Description, Tags (Abbreviation), Capacity Detailed Cables & Busbar Routing Details of Transformer Room, Generator Room, LV Room, etc Coordinated Equipment Location Locations of all Small Power Outlets & its Circuiting Legends, Symbol & Abbreviations Earth Pit Locations



**5.5 Electrical Power Design Drawings - continued**

No	Item	Part	Size	T/S	Hard copy	PDF	Soft copy	Comments
5.5.4	Major Electrical Plant Rooms Plans & Sections	21	1/20 1/50		x	x	Acad	Room/Shaft Description & Levels Metric Dimensions of Clear Ceiling Heights Equipment Description, Tags (Abbreviation), Capacity Metric Dimensions of Cables & Busbar Sizes Area/Room Identification
5.5.5	Power Major Shaft Sections, Major Crossovers & Major Blow Up Plans	21	1/20 1/50		x	x	Acad	Metric Dimensions of Clear Ceiling Heights Double Line Plan & Section Area/Room Identification
5.5.6	Power Standard Details, Symbols, Legends & Abbreviations	21	1/20 1/50 NTS		x	x	Acad	With Dimension Power Symbol & Abbreviations Typical Earth Pit Details Cable Tray Details Standard Mounting Height for Electrical Accessories

**5.6 Electrical Lighting Design Drawings**

No	Item	Part	Size	T/S	Hard copy	PDF	Soft copy	Comments
5.6.1	Lighting Schedules	22	NTS		x	x	Acad	Light Fixture Schedules Lux Level Calculations Lighting Control Philosophy
5.6.2	Emergency Lighting Schematic Diagrams	22	NTS		x	x	Acad	Central Battery Description, Panel Schedule, Locations, Tags (Abbreviation) Central Battery System Load Calculation All Cable Sizes
5.6.3	Emergency Lighting Design Drawings	22	NTS		x	x	Acad	Key Plan Emergency Light Fixture Description, Tags (Abbreviation) Coordinated Equipment Location Legends, Symbol & Abbreviations
5.6.4	Lighting Standard Details, Symbols, Legends & Abbreviations	22	1/20 1/50 NTS		x	x	Acad	With Dimension Lighting Symbol & Abbreviations Light Fixture Circuiting & its Control System Lighting Fixture Installations

**5.7 Electrical - ELV Design Drawings**

No	Item	Part	Size	T/S	Hard copy	PDF	Soft copy	Comments
5.7.1	ELV Riser Diagrams	23	NTS		x	x	Acad	CCTV System Drawings Access Control System Drawings Master Clock System Drawings SMATV/CATV System Drawings
5.7.2	ELV System Design Drawings	23	1/100		x	x	Acad	Key Plan Locations of all CCTV Cameras, Door Locks, Call Points, etc Equipment Description, Tags (Abbreviation), Capacity Coordinated Equipment Location Legends, Symbol & Abbreviations
5.7.3	ELV Standard Details, Symbols, Legends & Abbreviations	23	1/20 1/50 NTS		x	x	Acad	With Dimension ELV Symbol & Abbreviations CCTV Camera Details

**5.8 Telecommunication Design Drawings**

No	Item	Part	Size	T/S	Hard copy	PDF	Soft copy	Comments
5.8.1	Telecom Riser Diagrams	24	NTS		x	x	Acad	Structured Cabling Details with Telecom Room Details( sizes & locations) All Cables Sizes Equipment Description & Tags (Abbreviation)
5.8.2	Telecom System Design Drawings	24	1/100		x	x	Acad	Key Plan Locations of all Telephone Outlets, Data Outlets, etc Equipment Description, Tags (Abbreviation), Capacity Coordinated Equipment Location Legends, Symbol & Abbreviations

**5.9 Fire Alarm (FA) and Voice Evacuation (VE) Design Drawings**

No	Item	Part	Size	T/S	Hard copy	PDF	Soft copy	Comments
5.9.1	FA & VE Riser Diagrams	25	NTS		x	x	Acad	Detectors, Sounders & Speakers Description & Tags (Abbreviation) All Cables Sizes Control Panel Details & Locations
5.9.2	FA & VE System Design Drawings	25	1/100		x	x	Acad	Key Plan Locations of all Detectors, Sounders, Speakers, Control Panels, etc Equipment Description, Tags (Abbreviation), Capacity Coordinated Equipment Location Legends, Symbol & Abbreviations

**5.9 Fire Alarm (FA) and Voice Evacuation (VE) Design Drawings - continued**

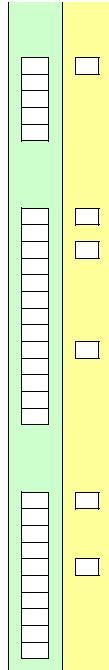
No	Item	Part	Size	T/S	Hard copy	PDF	Soft copy	Comments
5.9.3	FA & VE Standard Details, Symbols, Legends & Abbreviations	25	1/20 1/50 NTS		x	x	Acad	With Dimension FA & VE Symbol & Abbreviations Typical Mounting Detail for Detectors Typical Mounting Detail for Manual Pull Station Typical Mounting Detail Sounder/Flashers

**5.10 Lightning Protection Design Drawings**

No	Item	Part	Size	T/S	Hard copy	PDF	Soft copy	Comments
5.10.1	Lightning Protection Riser Diagrams	26	NTS		x	x	Acad	Down Conductor Details Conductor Sizing & Routing
5.10.2	Lightning Protection System Design Drawings	26	1/100		x	x	Acad	Key Plan Locations of all Strike Pads, Copper Tape, Lightning Rods, etc Equipment Description, Tags (Abbreviation), Capacity Coordinated Equipment Location Legends, Symbol & Abbreviations Earth Pit Locations
5.10.3	Lightning Protection Standard Details, Symbols, Legends & Abbreviations	26	1/20 1/50 NTS		x	x	Acad	With Dimension Lightning Protection Symbol & Abbreviations Down Conductor Detail for Curtain Wall Building Typical Earth Pit Detail Typical Earth Bar Detail

**5.11 Nurse Call**

No	Item	Part	Size	T/S	Hard copy	PDF	Soft copy	Comments
5.11.1	Nurse Call Systems Schematic Diagram	27	NTS		x	x	Acad	System's Components with Descriptions & Locations Power Requirement Details Interfacing with other Systems - Details Specific Requirements, if any
5.11.2	Nurse Call System Design Drawings	27	1/100		x	x	Acad	Key Plan Locations of Switching/ Coordinated Equipment Locations Power Requirements/ Interfacing Details Equipment Description, Tags (Abbreviation), Capacity Coordinated Equipment Location Legends, Symbol & Abbreviations





**6. Compliance Declaration**

We, the undersigned, have compiled the Detailed Submission and we confirm the submission is complete and matches QSCH's requirements as set out above. We also confirm the design is in compliance with the Standards and Guidelines. Where compliance with the submission requirements and/or with the Standards and Guidelines was not achieved, these non-compliances were listed in the Non-Compliance Reports (Item 1.8 and 1.9)

**Standards and Guidelines for the Detailed Submission**

- Health Facility Guidelines - Part A to E
- Americans with Disabilities Act 1994
- National Fire Protection Association 99
- ASHRAE (American Society of Heating, refrigerating and Air-conditioning Engineers) - Inc. HVAC Design Handbook
- SMACNA (Sheet Metal and Air Conditioning Contractors' National Association) - Design Handbook
- DW 144 - Specification for Sheet Metal Ductwork
- DW 171 - Standard for Kitchen Ventilation Systems
- ARI (Air-Conditioning and Refrigeration Institute)
- CIBSE (Chartered Institution of Building Services Engineers)
- IOP (Institute of Plumbing) - Plumbing Engineering Services Design Guide
- ASPE (American Society of Plumbing Engineers) Design handbook
- IPC (International Plumbing Code)
- AWWA (American Water Works Association)
- ASTM (American Society for Testing and Materials)
- NFPA (National Fire Protection Association)
- UL (Underwriters' Laboratories, Inc.)
- HTM 02 (Health Technical Memorandum 02) Medical Gas Design Guide - Part 1 and 2
- RSB (Regulation and Supervision Bureau)
- Wiring Regulations for Electrical Installations (IEE 17th Edition), published by the Institution of Engineering and Technology (BS 7671)
- CIBSE Design Guides A, D, E, F, H, K and L
- BS 5266 and NFPA 70 - Emergency Lighting
- BS 5839(p8)- Voice Alarm System in Buildings
- BSEN 60849 - Sound Systems For emergency purposes
- BS EN62305:2006 - Protection of structures Against Lightning
- BS 7430 and BS7671 – Earthing
- NFPA 72 – National fire alarm code
- NFPA 101 – Life safety code

We, the undersigned, further confirm the following design aspects were specifically verified against compliance with the Health Facility Guidelines. We confirm they are in compliance:

- Infection Control
- Specifications of Finishes

**Architect of Record**

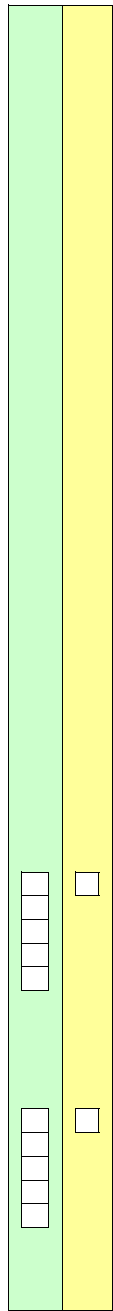
Signed:

Organisation	<input style="width: 100%; height: 15px;" type="text"/>
Prequalification number	<input style="width: 100%; height: 15px;" type="text"/>
Name	<input style="width: 100%; height: 15px;" type="text"/>
Position	<input style="width: 100%; height: 15px;" type="text"/>
Date	<input style="width: 100%; height: 15px;" type="text"/>

**Specialist Health Facility Planner**

Signed:

Organisation	<input style="width: 100%; height: 15px;" type="text"/>
Prequalification number	<input style="width: 100%; height: 15px;" type="text"/>
Name	<input style="width: 100%; height: 15px;" type="text"/>
Position	<input style="width: 100%; height: 15px;" type="text"/>
Date	<input style="width: 100%; height: 15px;" type="text"/>



**6. Compliance Declaration - continued**

<b>Engineer of Record</b>	
Signed: <div style="border: 1px solid black; height: 80px; width: 100%;"></div>	Organisation Prequalification number Name Position Date <div style="border: 1px solid black; width: 100%; height: 60px; margin-top: 5px;"></div>


<b>For OSCH office use only:</b>		
Signed: <div style="border: 1px solid black; height: 80px; width: 100%;"></div>	OSCH confirms the Detailed Submission was received and verified. In terms of completeness and formatting, the submission was found to be:  <input type="checkbox"/> Accepted (1)  <input type="checkbox"/> Accepted with comments (2)  <input type="checkbox"/> Rejected with comments	Comments: <div style="border: 1px solid black; height: 60px; width: 100%;"></div>
Stamp: <div style="border: 1px solid black; height: 60px; width: 100%;"></div>	Name OSCH Officer: <div style="border: 1px solid black; width: 100%; height: 15px;"></div> Date: <div style="border: 1px solid black; width: 100%; height: 15px;"></div>	
Notes (1) Although OSCH may accept the submission, while testing the submission against the HFG, additional information may be requested to allow the process to continue. The applicant is to provide this within a set time frame, as determined by OSCH. (2) If minor discrepancies are picked up when submitting, at the OSCH officers discretion, OSCH may accept the submission but will list a request for additional information. The applicant is to provide this within a set time frame, as determined by OSCH.		



The International Health Facility Guidelines recommends the use of HFBS “Health Facility Briefing System” to edit all room data sheet information for your project.

HFBS provides edit access to all iHFG standard rooms, and departments, and more than 100 custom report templates.

## HFBS Health Facility Briefing System



### Briefing Module

The Health Facility Briefing System (HFBS) has numerous modules available via annual subscription. It suits healthcare Architects, Medical Planners, Equipment Planners Project Managers and Health Authorities.

Use the HFBS Briefing Module to quickly drag in health facility departments or pre-configured room templates from the iHFG standard, edit the room features such as finishes, furniture, fittings, fixtures, medical equipment, engineering services. The system can print or download as PDF more than 100 custom reports including room data sheets, schedules, and more...

To learn more about the HFBS web-based Healthcare Briefing and Design Software and to obtain editable versions of the “Standard Components” including Room Data Sheets (RDS) and Room Layout Sheets (RLS) offered on the iHFG website, signup for HFBS using the link below.

**Get Started Now:**  
[hfbs.healthdesign.com.au](http://hfbs.healthdesign.com.au)

- ✓ iHFG Room Data Sheets and Departments are instantly editable in the HFBS software available online.
- ✓ You can access hundreds of report templates to print your iHFG room data in HFBS.
- ✓ HFBS has a onetime free 3 day trial available to all new users.

**Get Started Now:**  
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## HFBS

Health Facility Briefing System

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