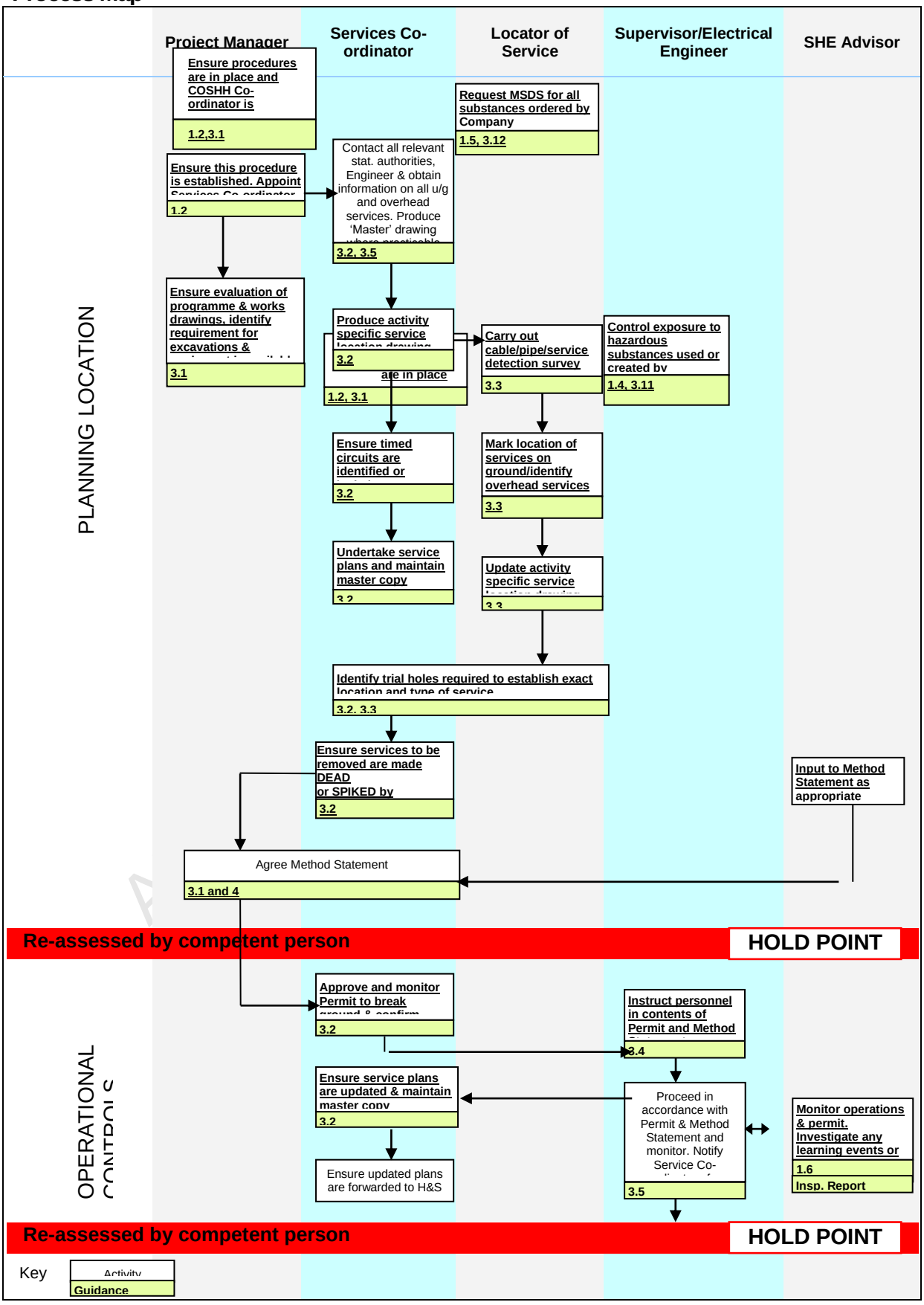
Process Map


Project Manager
Services Co-ordinator
Locator of Service
Supervisor/Electrical Engineer
SHE Advisor
PLANNING LOCATION
OPERATIONAL CONTROLS
Ensure procedures are in place and COSHH Co-ordinator is
1.2,3.1
Request MSDS for all substances ordered by Company
1.5, 3.12
Ensure this procedure is established. Appoint
1.2
Contact all relevant stat. authorities, Engineer & obtain information on all u/g and overhead services. Produce 'Master' drawing
3.2, 3.5
Ensure evaluation of programme & works drawings, identify requirement for excavations &
3.1
Produce activity specific service
3.2
are in place
1.2, 3.1
Carry out cable/pipe/service detection survey
3.3
Control exposure to hazardous substances used or created by
1.4, 3.11
Ensure timed circuits are identified or
3.2
Mark location of services on ground/identify overhead services
3.3
Undertake service plans and maintain master copy
3.2
Update activity specific service
3.3
Identify trial holes required to establish exact location and type of service
3.2. 3.3
Ensure services to be removed are made DEAD or SPIKED by
3.2
Input to Method Statement as appropriate
Agree Method Statement
3.1 and 4
Re-assessed by competent person
HOLD POINT
Approve and monitor Permit to break
3.2
Instruct personnel in contents of Permit and Method
3.4
Ensure service plans are updated & maintain master copy
3.2
Proceed in accordance with Permit & Method Statement and monitor. Notify Service Co-
3.5
Monitor operations & permit. Investigate any learning events or
1.6
Insp. Report
Ensure updated plans are forwarded to H&S
Re-assessed by competent person
HOLD POINT
Key
Activity
Guidance

PURPOSE

1 The purpose of this procedure is to assign responsibilities and establish a safe system of work for activities carried out where buried services may exist or overhead services are present.

SCOPE

1 This procedure covers all **COMPANY Projects** and locations under the control of **COMPANY**. A **COMPANY** is defined as the organization with responsibility for management of safety at a construction site.

Note: Qatar General Electrical and Water Corporation (KAHRAMMA) is the responsible for the distribution network cables and wire, not the Qatar General Electricity and Water Company

2.3.3.1 Responsibilities

SHE DIRECTOR

1 Authorises this procedure

PROJECT/SITE MANAGER

2 Ensures that works are carried out in accordance with this procedure and appoints the Services Co-ordinator.

SERVICES CO-ORDINATOR

3 Ensures that necessary information regarding services is available and undertakes the duties specified in this procedure.

SUPERVISOR/ELECTRICAL ENGINEER

4 Either supervises the work activities or the sub/work package contractor undertaking those work activities and ensures preparation of the necessary control documents required by this procedure.

LOCATOR OF SERVICES

5 Undertakes the physical check and survey, in line with their training, to determine the location of both identified/unrecorded services.

SHE ADVISER

6 Provides advice and support in the application of this procedure and monitors others' effectiveness to manage the activities.

2.3.3.2 Definitions

SERVICES

1 Any cable or pipe, either buried in the ground or supported overhead, providing telecommunications, electricity, gas, water, drainage or other service.

ANY CABLE RISK ASSESSMENT

2 The process of hazard identification, assessment of the risk, and identification of the controls required to manage the risk to an acceptable level to ensure the health and safety of those affected by the activity.

3 Refer to **SHE-PRO-001**.

METHOD STATEMENT

4 A statement describing the proposed working method that addresses the output from the risk assessment process and provides instruction and guidance for those individuals carrying out the activity.

5 Refer to (SHE-PRO-001).

PERMIT TO BREAK GROUND

6 Control document – (SHE-FRM-3-02) Permit to Break Ground, to ensure that potential hazards from services during excavation or penetration of the ground are identified and risks are controlled and maintained.

2.3.3.3 Action Required To Implement This Procedure

PROJECT/SITE MANAGER

1 Ensure the evaluation of tender information, Project Programme and the works drawings to identify the requirements for breaking ground or location of overhead services.

2 Appoint a **Services Co-ordinator** or retain the **Services Co-ordinator's** duties in 3.2.

3 Ensure the availability of suitable service location equipment and a competent operator who is appropriately trained in the use of detection equipment.

4 Agree with **Services Co-ordinator** the site colour-coding scheme for surface marking of services.

5 Check that the controls in this procedure are implemented.

6 Agree method statements and associated risk assessments.

7 In case of a service strike, a specific site investigation must be undertaken in conjunction with the SHE Team (SHE-FRM-8-06).

SERVICES CO-ORDINATOR

8 Seek out and retain copies of all statutory authority and service drawings (including client's where applicable) relevant to the project's scope of work.

9 Have transposed onto a master drawing(s), the details of all relevant services.

10 Have recorded on the master drawing(s) the location and depths of services installed during site establishment.

11 Confirm with the Supervisor/Electrical Engineer in control of an activity requiring a Permit to Break Ground the full extent of the intended activity. Check the activity drawings against the master drawing(s).

12 Produce an activity specific location drawing for reference by the locator of services that includes current landmarks, (SHE-FRM-3-02).

13 Request the appointed Locator of Services to undertake a thorough survey of the area where the activity is to take place with an appropriate service locator (and 'Genny' where circuits on timers

are likely), and none energised services, e.g. gas and water, even if it has been established from drawings that there are no recorded services present.

14 In conjunction with the Locator of Services, specify where and when trial holes are dug to establish the exact location and type of service identified. Provide an activity specific, location drawing (including any updates identified in the survey) for reference by the Supervisor/Electrical Engineer in control of the activity.

15 Update master drawing(s) following receipt of survey information.

16 Ensure information on master drawing(s) is transferred to 'as-built' drawings for inclusion in the projects Health and Safety File.

17 Ensure secure isolation of any service or purging of any pipe-work before it is worked upon or removed and be aware of any presence and effect of timed circuits.

18 Before any activities start on a site where overhead services are present or adjacent, contact the SHE Adviser for advice. Where overhead electrical supply cables are present, Qatar General Electricity & Water Company shall also be contacted for advice on re-routing or clearance and insulation. Review Method Statement/Risk Assessment before final approval by **Project Manager**.

LOCATOR OF SERVICES

19 Physically and clearly mark the position of services on the ground in accordance with the services marking scheme.

20 Assist in establishing the exact location and type of service identified when trial holes are being dug.

21 Update the activity specific location drawing provided for reference to you by the **Services Co-ordinator**.

22 Advise the **Services Co-ordinator** of any deviations from records

23 Seek advice from the **Services Co-ordinator** where doubt about a signal or lack of one exists.

24 Continue to use the service locator and genny, whilst the work proceeds, to establish the presence of any services missed/not located during the initial sweep, frequency as determined by the **Service Co-ordinator**.

SUPERVISORS/ELECTRICAL ENGINEER

25 Prepare or arrange for the Sub/Work Package Contractor to prepare for agreement by the **Project/Site Manager** a specific method statement, **SHE-PRO-001**, for activities involving: -

(a) excavation or penetration of the ground;

(b) any activity beneath or in the vicinity of overhead electrical supply cables or pipework containing a hazardous substance where there is any possibility, however remote, of plant, equipment, materials or people encroaching into a safety zone;

(c) any activity beneath or in the vicinity of any other overhead service where there is a possibility of damage.

26 Ensure persons under their control fully understand they do not commence excavation or penetration of the ground in an area unless the whereabouts of services has been established and a Permit to Break Ground has been prepared and approved by the **Service Co-ordinator** and obtained (SHE-FRM-3-02).

27 Ensure all personnel involved in the activities are instructed in the method statement and Permit to Break Ground and sign to confirm their understanding, including the requirement to stop work immediately in cases where a service is damaged so that the situation can be re-assessed by a competent person.

28 Ensure persons under their control fully understand they may not in any way interfere with a service or remove any service cover, warning tile or other protection unless specifically authorised by their Supervisor.

29 In the event of a service being damaged, work must be stopped immediately and cordoned off so that a re-assessment can be undertaken by a competent person before work re-commences.

30 Establish in conjunction with the Services Co-ordinator the need for additional surveys as the activity progresses where the location of services may have been missed.

31 Where overhead electrical supply cables are present, that persons under their control fully understand these are not insulated, therefore if contact or near contact is made with them by a conducting object, there is a risk of death or serious injury to any person in the immediate vicinity.

2.3.3.4 Guidance to This Procedure

RISK ASSESSMENT/METHOD STATEMENT

1 The Risk Assessment/Method Statement (SHE-PRO-001) shall reference the activity specific location drawing provided by the Services Co-ordinator.

PERMIT TO BREAK GROUND

2 Any delay between the services survey and the activities to be performed shall be minimised and a limit specified on the Permit to Break Ground, SHE-FRM-3-02. This limit for the Permit(s) must be agreed with the **Service Co-ordinator.**

REFERENCING

3 The Risk Assessment/Method Statement shall be referenced on the Permit to Break Ground.

4 If a sub or work package contractor is undertaking the works, the contractor's supervisor shall confirm that the items on the Permit have been undertaken before any ground is broken (see also 3.4 stop work requirements).

2.3.3.5 Reference Documents

PROCEDURES

1 Safety, Health and Environmental Risk Management and Written Safe Systems of Work – (SHE-PRO-001)

2 Permit to Work Systems – (SHE-PRO-011)

FORMS

3 Permit to Break Ground – (SHE-FRM-3-02)

4 Site Investigations of Underground Strikes (SHE-FRM-8-06)

FURTHER REFERENCE

5 Qatar Regulatory Document (Construction) , Section 1.5

6 Statutory Authorities/Client's Plans & Drawings

7 Works Programme & Drawings

8 Site Service Plan

9 Risk Assessment/Method Statement or Task Statement

10 Site Investigation

2.3.3.6 Author

SECTION	NAME	POSITION IN COMPANY	CONTACT DETAILS
		SHE Manager	

2.3.3.7 Approvals

	NAME	POSITION IN COMPANY	SIGNATURE & DATE
Approved by:		SHEQ Director	

Section							
1	**Permit Number** (To be noted on the RA+MS)			**Date**			
2	**Prepared By**			**Requested By**			
3	**Start – Date/Time**						
	Duration						
	Specific Location						
	Activity						
	Plant To Be Used (As Part Of The Safe Systems Of Work)						
	Quick Hitch Fitted Yes No						
	Safety Pin Required Yes No						
4	**The services itemised below exist at the above location & on the attached sheets**						
	Service	**Drawing Number**	**Exist Yes/N**	**Service**	**Drawing Number**	**Exist Yes/N**	
	Electricity			Drainage			
	Underground			Ducts			
	Overhead			CCTV			
	Street Lighting			Temporary Services			
	Gas			Others (i.e. ordinance)			
	Telecom			Approval To Remove Redundant Services			
	Fibre Optics						
	Water Mains						
	Sewers						
5	**Restrictions**						
	1	Permit valid from .....to					
	2	Excavate trial holes by hand every ..... metres					
	3	Expose services along full length in works areas Yes No					
	4	Confirm a risk assessment and method statement have been prepared Yes Risk assessment/s and method statement/s ID Number.....					
	5	Service locator/survey carried out Yes by whom ..... Is the equipment calibration up to date Yes Date of Calibration					
	6	Has ground radar survey been carried out Yes (If Yes attach appropriate drawings) No					
	Any other comments/ restrictions identified						
6	**Approved By: (COMPANY Authorised Person/Service Co-ordinator)** Print Name ..... Signature ..... Position ..... Date						
7	**Acknowledgement of COMPANY/*Contractors Supervisor** I understand the hazards involved in this work and that in the event of a service strike the area will be cordoned off and only re-entered following advice from the utility provider. All personnel involved will have this fully explained to them by me and sign section 9 of this permit to confirm this is the case. Print Name .....Signature .....Position ..... Print Name .....Signature .....Position ..... Date.....						
8	**Confirmation of Completion of Works** Print Name .....Signature ..... Position .....Date						
9	**Confirmation that personnel have been advised of Section 7 (*Sign and Print Name*)** Date.....						

***If relevant**

Distribution: White copy – Workplace recipient
Pink copy – Distribute as required Blue copy – Retain in book (file copy)