Sewage Pumping Stations Detail Design Checklist (Civil & Mechanical)

What?

SPS Detail Design Checklist (Civil & Mechanical) is based on Sydney Water’s Edition of Sewage Pumping Station Code of Australia WSA 04. It also includes requirements of other Sydney Water’s technical specifications, deemed-to-comply drawings and standards, as well as some new, not yet documented requirements identified during recent design reviews, construction, commissioning and operation of new or renewed SPSs.

The Checklist mainly applies to new wet well submersible sewage pumping stations but may be modified as required and used for other types of SPSs, both new and renewals.

The Checklist currently covers civil and mechanical items and some general requirements for electrical equipment and is published as a standalone document. It will be expanded in the future to cover other items, including structural and electrical, and will eventually be incorporated in the future revision of the Sydney Water’s Edition of WSA 04.

The Checklist is not exhaustive. It should be considered as a guide only and full responsibility for complying with relevant codes, specifications and standards lies with the designer.

Why?

The Checklist aims to:
- improve the quality of designs for sewage pumping stations,
- ensure greater consistency in designs,
- serve to feedback lessons learnt for improvements,
- reduce rework and delays,
- increase efficiency in review time and effort,
- improve confidence in designs solutions, and
- expedite construction, commissioning and hand over.

Who?

The Checklist should be used by all designers preparing designs for Sydney Water’s sewage pumping stations. Design verification must be undertaken as part of the design process before submitting design documents to Sydney Water. The Checklist shall be completed by the design verifiers and submitted with design drawings as a proof of verification. It may need to be updated during the design process as the design progresses.

The Checklist should be included or referenced in Sydney Water’s contract documents for design only and design and construct of SPSs. It may also be used as a quick guide by the designers, Sydney Water reviewers, project managers, project engineers and commissioning engineers.