Notes

1. Do not scale from this drawing. Work to stated dimensions only.
2. This drawing is to be read in conjunction with all other relevant drawings, specifications, schedules and other information, including all Network Rail, Engineer's and product / material supplier's information.
3. All details relating to existing structures, ground and site conditions are indicative and subject to verification on site before the works proceed.
4. Details relating to existing structure shown on this drawing are generally taken from record drawings (primarily Corus Railway Infrastructure Services drawing B60372-DRG-CIV6562 revision C17 dated 05.10.11) and supplemented by Studio One walkover survey with approximate measured survey of certain aspects only.
5. Platform furniture and fittings shown on this drawing are informed by Studio One walkover survey with approximate measured survey of certain aspects only.
6. The locations and arrangements of services as shown on (or as may be inferred from) this drawing are to be taken as indicative only, and must be verified on site by the Contractor. All information relating to services is to be read in conjunction with service records and Mechanical and Electrical Engineers details.
7. Where sleepers to tracks are shown these are shown indicatively only (graphical representation). Sleeper positions have not been surveyed.
8. All levels relating to the new structure shown on Studio One drawings are relative to 0.000m local datum = platform 1 typical finished level (m AOD level not known at time of preparing this drawing).
9. All works are subject to all necessary approvals, including all necessary approvals from Network Rail and other stakeholders e.g. the local planning authority and/or English Heritage as appropriate. All works are to meet the requirements of Network Rail.

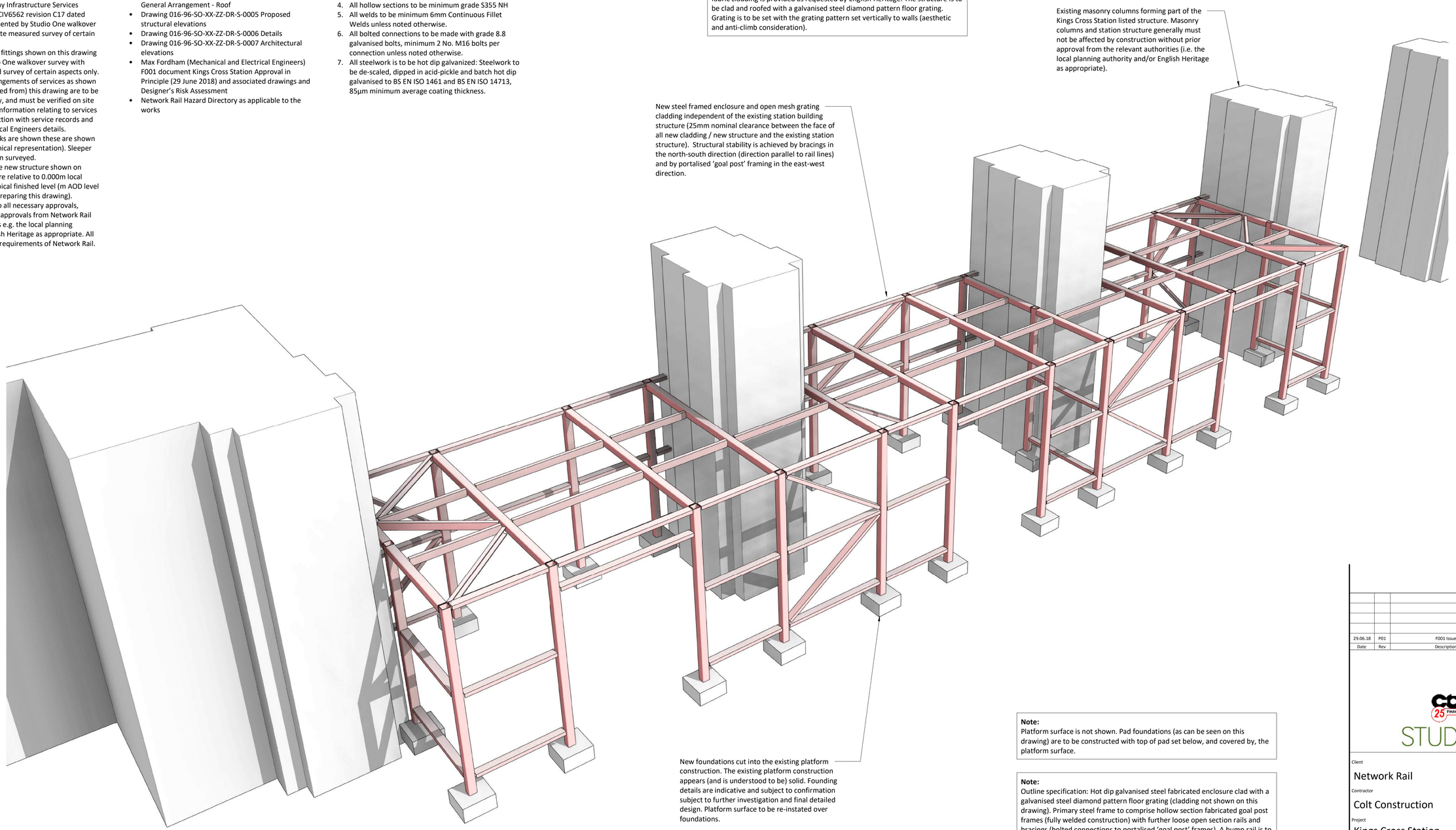
Reference documentation

- Studio One F001 document Kings Cross Station Platform 1 New Cleaners Compound F001 – Approval in Principle (016/96 F001)
- Studio One Designers Risk Assessment (016/96 F001-DRA)
- Drawing 016-96-SO-XX-ZZ-DR-S-0001 Existing General Arrangement
- Drawing 016-96-SO-XX-ZZ-DR-S-0002 Structural Principles
- Drawing 016-96-SO-XX-ZZ-DR-S-0003 Proposed General Arrangement - Platform Level
- Drawing 016-96-SO-XX-ZZ-DR-S-0004 Proposed General Arrangement - Roof
- Drawing 016-96-SO-XX-ZZ-DR-S-0005 Proposed structural elevations
- Drawing 016-96-SO-XX-ZZ-DR-S-0006 Details
- Drawing 016-96-SO-XX-ZZ-DR-S-0007 Architectural elevations
- Max Fordham (Mechanical and Electrical Engineers) F001 document Kings Cross Station Approval in Principle (29 June 2018) and associated drawings and Designer's Risk Assessment
- Network Rail Hazard Directory as applicable to the works

Structural Steelwork

1. All structural steelwork is to comply with the current edition of the National Structural Steelwork Specification, fabricated and erected by a suitably competent fabricator.
2. All Steelwork to be fabricated to Execution Class 2 in accordance BS EN 1090-1 Execution of steel structures and aluminium structures: Requirements for conformity assessment of structural components, and in accordance with the requirements of BS 5950: Part 2, ensuring compliance with design and performance requirements.
3. All open sections to be minimum grade S275
4. All hollow sections to be minimum grade S355 NH
5. All welds to be minimum 6mm Continuous Fillet Welds unless noted otherwise.
6. All bolted connections to be made with grade 8.8 galvanised bolts, minimum 2 No. M16 bolts per connection unless noted otherwise.
7. All steelwork is to be hot dip galvanized: Steelwork to be de-scaled, dipped in acid-pickle and batch hot dip galvanised to BS EN ISO 1461 and BS EN ISO 14713, 85µm minimum average coating thickness.

Note:
The design philosophy for the new compound is to provide a modern functional structure of the minimum size required for operational requirements. The intent is to provide a carefully detailed and functional enclosure, and to purposefully avoid a pastiche of the original station architecture. The enclosure is detailed to be independent of the existing listed station building structure, with 25mm nominal clearance between the face of all new cladding / structure and the existing station structure. A modern metal fabric cladding is provided as requested by English Heritage: The structure is to be clad and roofed with a galvanised steel diamond pattern floor grating. Grating is to be set with the grating pattern set vertically to walls (aesthetic and anti-climb consideration).



Note:
Platform surface is not shown. Pad foundations (as can be seen on this drawing) are to be constructed with top of pad set below, and covered by, the platform surface.

Note:
Outline specification: Hot dip galvanised steel fabricated enclosure clad with a galvanised steel diamond pattern floor grating (cladding not shown on this drawing). Primary steel frame to comprise hollow section fabricated goal post frames (fully welded construction) with further loose open section rails and bracings (bolted connections to portalised 'goal post' frames). A bump rail is to be provided at low level around the full perimeter of the enclosure (bump rail not shown).

Note:
For details of electrical services works refer to separate Max Fordham (Mechanical and Electrical Engineers) F001, associated drawings and Designer's Risk Assessment. The enclosure is to be earth bonded as necessary. The proposed enclosure will form a 'Farday cage', use of certain devices (such as mobile phones) may be restricted with the enclosure.

Date	Rev	Description	By	Chkd
29.06.18	P01	F001 Issue	ARH	JP

Client
Network Rail

Contractor
Colt Construction

Project
Kings Cross Station
Platform 1
New Cleaners Compound

Title
Structural Principles

Status
FOR APPROVAL

Studio One Project Number	Revision	Scale @ A1
016-96	P01	NTS

Drawing Number
016-96-SO-XX-ZZ-DR-S-0002