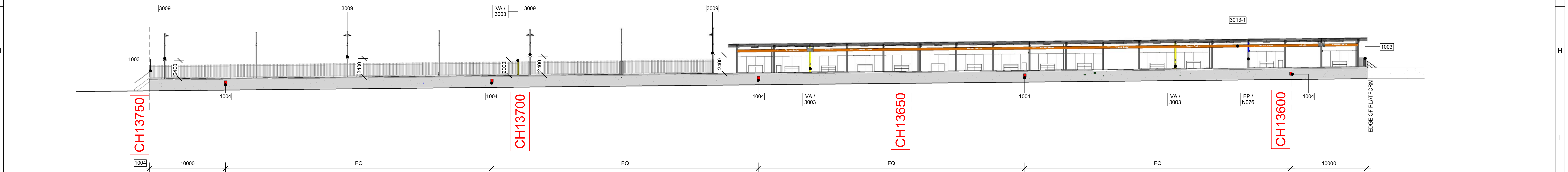


1 FLINDERS STATION SIGNAGE PLAN
SCALE 1:250



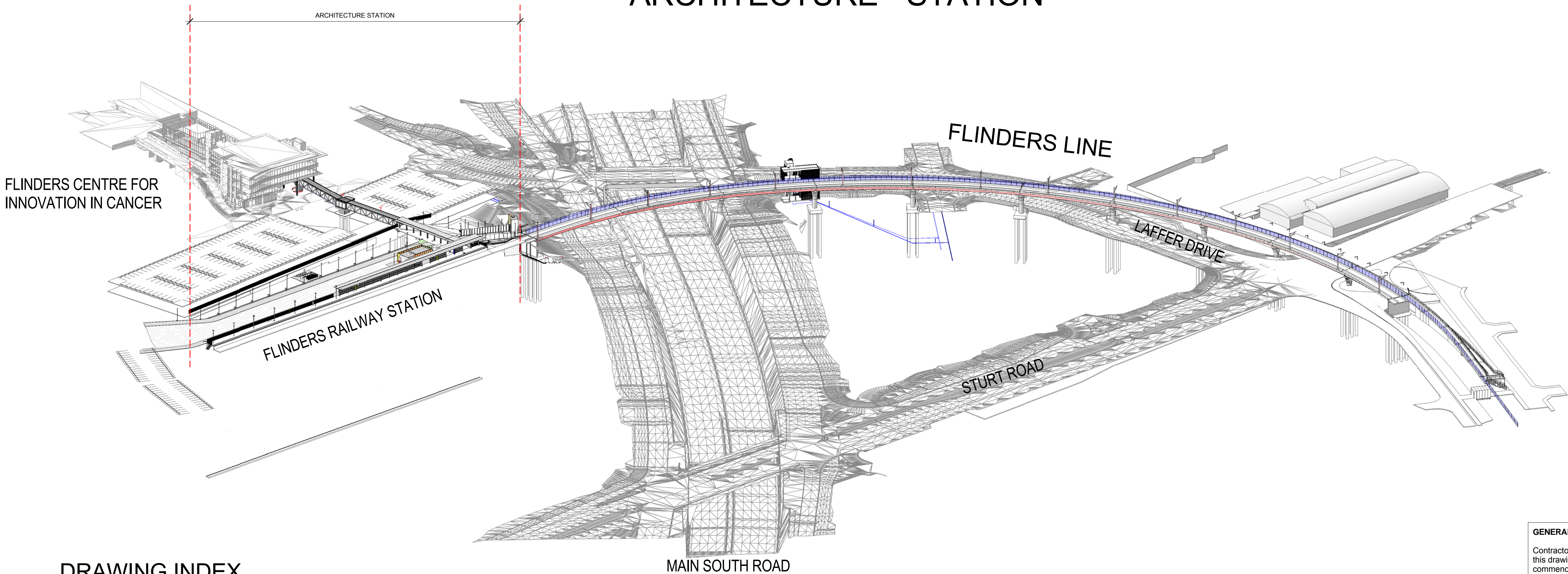
2 FLINDERS STATION SIGNAGE ELEVATION
SCALE 1:250

CODE	TYPE
EP	INTEGRATED EMERGENCY HELP PHONE
N076	EMERGENCY HELP PHONE SIGN
VA	INTEGRATED VOICE ANNUNCIATOR
3003	VOICE ANNUNCIATOR SIGN
1003	NO TRESPASSING
1004	DO NOT CROSS THE TRACKS
3009	STATION IDENTIFICATION
3013-1	ALPOLIC SIGNAGE (AL-01)
5005	CYCLIST DISMOUNT

NOTE:
REFER DPTI PROJECT NO 16374, FILE NO 10/19450,
DRAWING S-7071 SHEET 6, 11 FOR SIGN
REFERENCES

FLINDERS LINK PROJECT

ARCHITECTURE - STATION



DRAWING INDEX

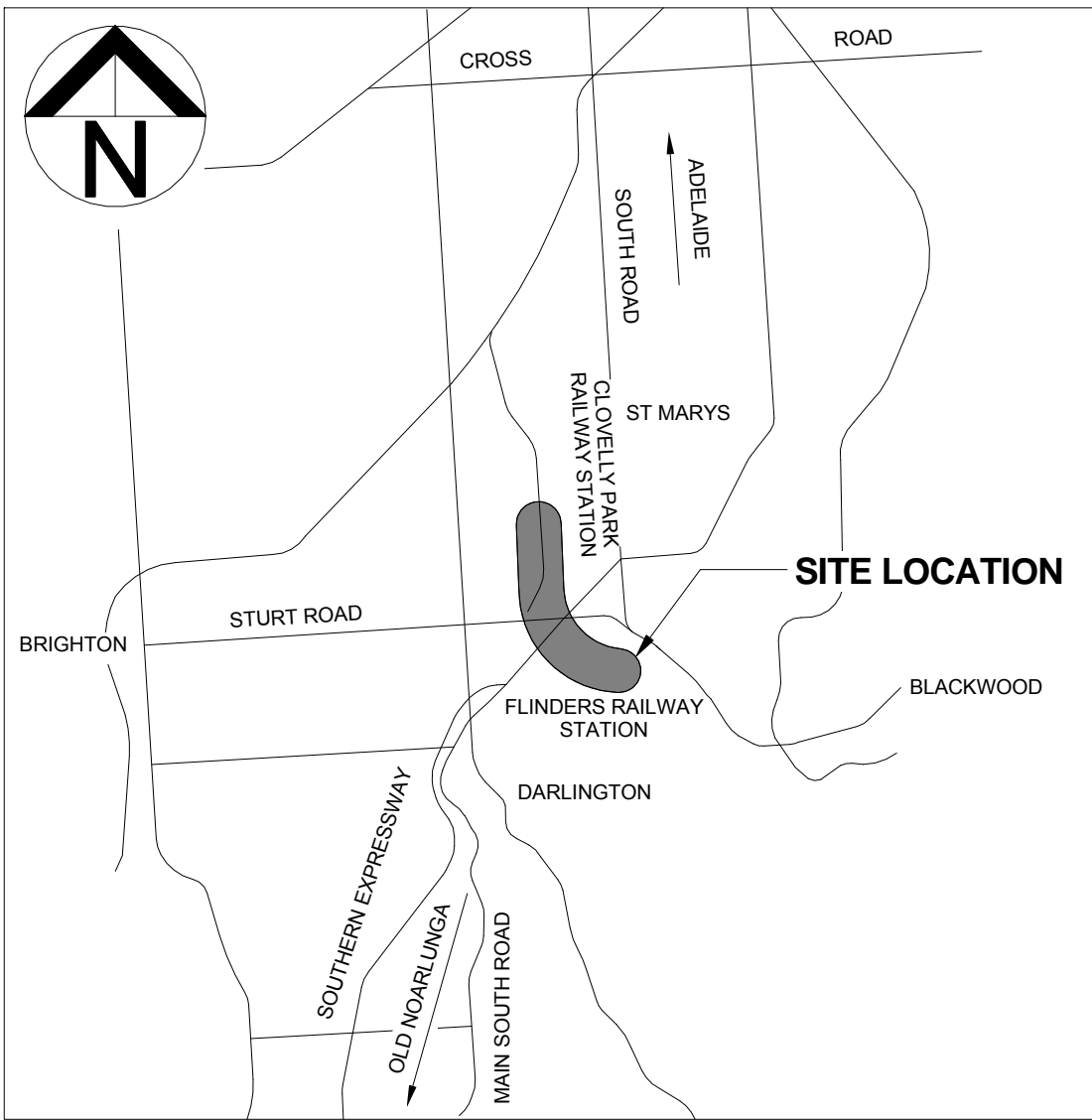
SHEET	TITLE
CS1-DRG- 352498	TITLE AND INDEX
CS1-DRG- 352499	STATION PRECINCT PLAN
CS1-DRG- 352500	STATION PLAZA
CS1-DRG- 352501	ELEVATED WALKWAY PLANS
CS1-DRG- 352502	ELEVATED WALKWAY FCIC LANDING PLAN
CS1-DRG- 352503	PLAZA CANOPY ROOF PLAN + RCP
CS1-DRG- 352504	REFLECTED CEILING PLAN - ELEVATED WALKWAY
CS1-DRG- 352505	ROOF PLAN - STATION PLAZA
CS1-DRG- 352506	ROOF PLAN - ELEVATED WALKWAY
CS1-DRG- 352507	STATION PLAZA & ELEVATED WALKWAY SECTIONS
CS1-DRG- 352508	STATION PLAZA & ELEVATED WALKWAY SECTIONS
CS1-DRG- 352509	ELEVATED WALKWAY TYPICAL MODULE
CS1-DRG- 352510	ELEVATED WALKWAY SECTION
CS1-DRG- 352511	STATION PLAZA & ELEVATED WALKWAY SECTIONS
CS1-DRG- 352512	ELEVATED WALKWAY SECTION
CS1-DRG- 352514	RETAINING WALL ELEVATION
CS1-DRG- 352515	ELEVATED WALKWAY ELEVATION
CS1-DRG- 352516	ELEVATED WALKWAY SPAN SECTIONS
CS1-DRG- 352517	STAIR + LIFT CORE 2 & RAMP PLAN
CS1-DRG- 352518	LIFT CORE 2 PLAN + ELEVATIONS
CS1-DRG- 352519	LIFT CORE 2 + RSS WALL ELEVATION
CS1-DRG- 352520	WALKWAY & STAIR CROSS SECTION
CS1-DRG- 352521	STAIR SECTION + DETAILS
CS1-DRG- 352522	WALKWAY SECTION + DETAILS
CS1-DRG- 352523	ER BUILDING + BICYCLE ENCLOSURE
CS1-DRG- 352524	ER BUILDING ELEVATIONS
CS1-DRG- 352525	ER BUILDING SECTION
CS1-DRG- 352526	ER BUILDING SECTION
CS1-DRG- 352527	ER BUILDING DETAIL
CS1-DRG- 352528	ER BUILDING DETAIL
CS1-DRG- 352529	ER BUILDING WET AREAS

SHEET	TITLE
CS1-DRG- 35000	ELEVATED WALKWAY - DEMOLITION PLANS
CS1-DRG- 35001	ELEVATED WALKWAY - REST POINT
CS1-DRG- 35002	ELEVATED WALKWAY - REST POINT DETAILS
CS1-DRG- 35003	ELEVATED WALKWAY - PIER 2 + ABUTMENT B
CS1-DRG- 35004	ELEVATED WALKWAY - PIER 2 + ABUTMENT B DETAILS
CS1-DRG- 35005	ELEVATED WALKWAY - FCIC LANDING
CS1-DRG- 35006	ELEVATED WALKWAY - FCIC DETAILS
CS1-DRG- 35007	ELEVATED WALKWAY - FLARED GUTTER DETAIL
CS1-DRG- 35008	ELEVATED WALKWAY - REFLECTED CEILING PLAN
CS1-DRG- 35009	ELEVATED WALKWAY - ROOF PLAN
CS1-DRG- 35010	ELEVATED WALKWAY - DETAILS 01
CS1-DRG- 35011	ELEVATED WALKWAY - DETAILS 02
CS1-DRG- 35015	BALUSTRADE DETAILS
CS1-DRG- 351672	STATION GENERAL ARANGEMENT PLAN
CS1-DRG- 351673	STATION GENERAL ARANGEMENT PLAN
CS1-DRG- 351674	STATION GENERAL ARANGEMENT PLAN
CS1-DRG- 351675	STATION REFLECTED CEILING PLAN
CS1-DRG- 351676	STATION REFLECTED CEILING PLAN
CS1-DRG- 351677	STATION ROOF PLAN
CS1-DRG- 351678	STATION ROOF PLAN
CS1-DRG- 351681	PLATFORM ELEVATION
CS1-DRG- 351682	PLATFORM SECTION
CS1-DRG- 351683	PLATFORM SECTION
CS1-DRG- 351684	PLATFORM DETAILS
CS1-DRG- 351685	PLATFORM DETAILS
CS1-DRG- 351686	SIGNAGE DETAILS
CS1-DRG- 351687	PLAZA CANOPY
CS1-DRG- 351688	PLAZA CANOPY DETAILS

NO LONGER IN USE

NO LONGER IN USE

LOCALITY PLAN



GENERAL NOTES:

Contractor and subcontractor shall verify all dimensions of this drawing and site conditions prior to any work commencing. Any discrepancies must be cleared via the architect and main design consultant (Jacobs) through an RFI.

If any discrepancies between architectural documentation and other discipline documentation are noted it is the contractors responsibility to raise an RFI and await response before proceeding.

The manufacturer shall not commence any works prior to the return of approved shop drawings signed by the relevant consultants.

Figured dimensions take precedence over scaled dimensions.

3d drawings are for visual reference only. 2d drawings take precedence over 3d visual images. This drawing should be read in conjunction with all relevant contracts, specifications, schedules and drawings.

Note: this drawing issue including all clouded revisions tagged as this revision is revised for all previous trade packages previously issued.

Coordinate base is Local.

All levels shown on the drawings are to the Australian height datum (AHD).

NOTES:

Refer to structural engineer's drawings for:
· Bridge setout, details + sequencing
· Anti-Throwscreen stanchion setout, fixings, details etc.

Refer to structural engineer's for sub-soil, retaining and piling details.

Refer civil engineers packages for setout and grading of all paths and plazas.

Refer to MEP + Utilities engineer's packages for location of sub-floor services, conduits, reticulation etc.

Refer to specifications for all materials. Specification takes precedence over drawings.

Refer Finishes Schedule for all materials, finishes etc.

Refer Landscape Architect's package for all surface finishes for paths and plazas, ground treatment and planting in planters.

For additional setout information where no dimensioning shown, refer to reference tags for detailed architectural drawings.

C	ISSUED FOR 100% INTER-DISCIPLINARY REVIEW
B	ISSUED FOR 70% REVIEW
A	ISSUED FOR 30% REVIEW
REV	DESCRIPTION

DRN	DSGN	CHK	APRV	DATE
-	-	-	-	11.07.18
-	-	-	-	18.04.18
-	-	-	-	12.12.17

NOT FOR CONSTRUCTION

RD005 - ARCHITECTURE - STATION

GATEWAY SOUTH

INDEX SHEET REF: CS1-DRG-352498

100 MILLIMETRES ON ORIGINAL DRAWING

DESIGNED: FLD

DRAFTED: FLD

CHECKED: FLD

APPROVED:

TITLE: -

DATE: -

FLINDERS LINE
ARCHITECTURE
ARCHITECTURE - FLINDERS STATION

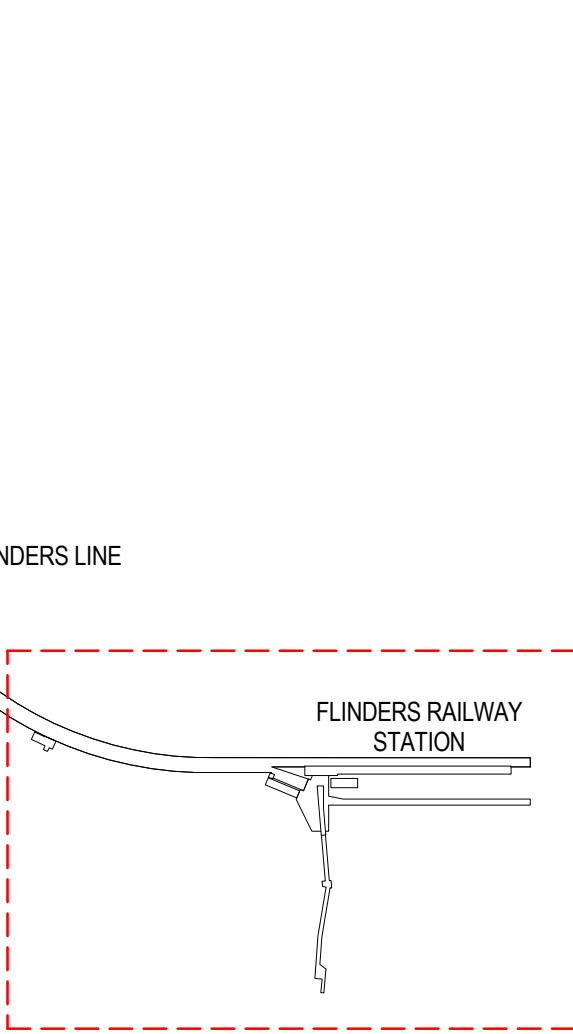
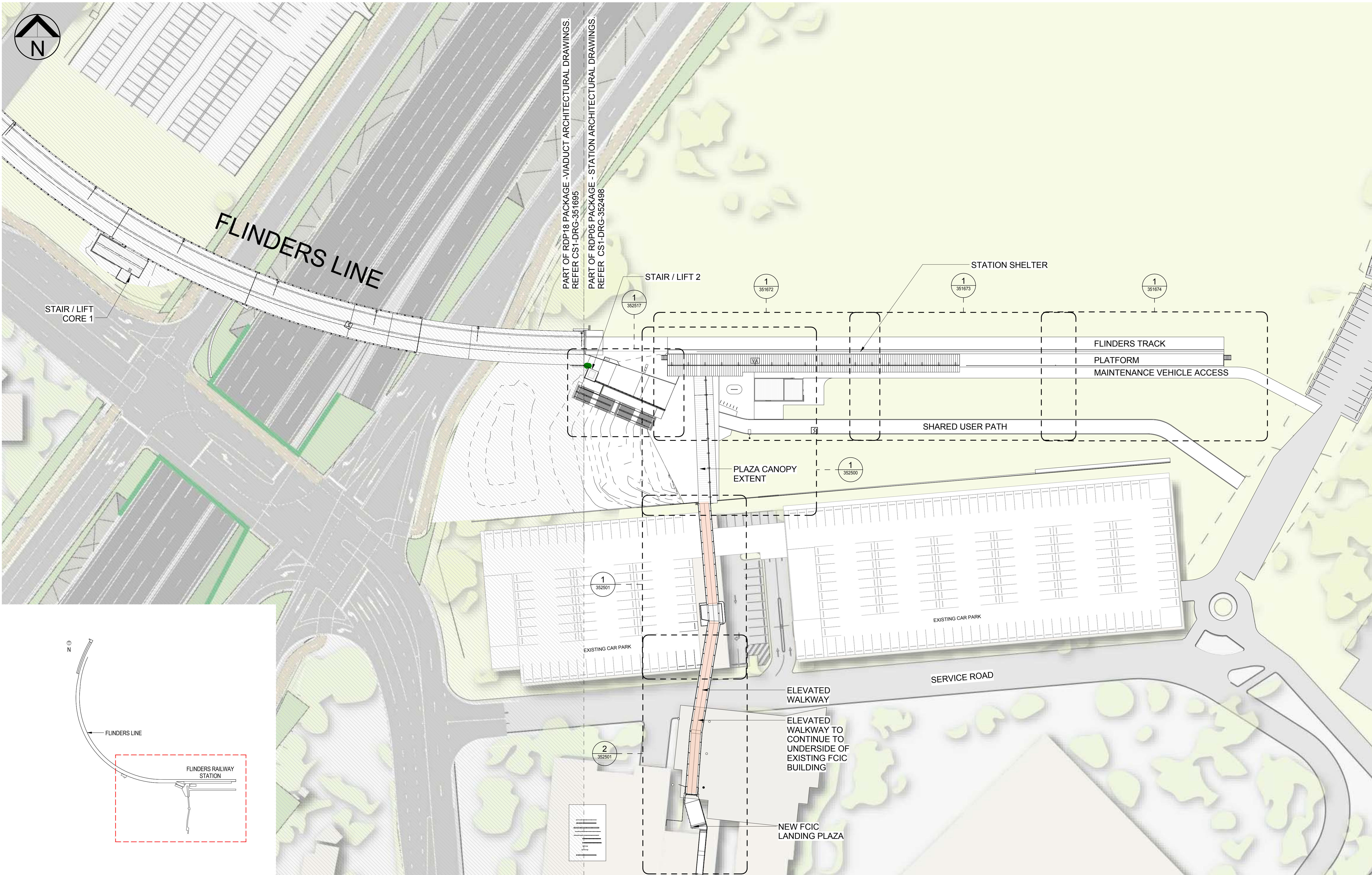
TITLE AND INDEX

Government of South Australia
Department of Planning,
Transport and Infrastructure

CS1-DRG-352498

SCALE(S): NTS
REVISION: C

SIZE: A1
SHEET:



C	ISSUED FOR 100% INTER-DISCIPLINARY REVIEW
B	ISSUED FOR 70% REVIEW
A	ISSUED FOR 30% REVIEW
REV	DESCRIPTION

DRN	DSGN	CHK	APRV	DATE
-	-	-	-	11.07.18
-	-	-	-	18.04.18
-	-	-	-	12.12.17

NOT FOR CONSTRUCTION

RDP05 - ARCHITECTURE - STATION

GATEWAY SOUTH

INDEX SHEET REF: CS1-DRG-352498

TECHNICAL APPROVAL: O. SHALLEY

PROJECT APPROVAL: D. RICHTER

DESIGNED: FLD

DRAFTED: FLD

CHECKED: FLD

APPROVED:

TITLE: -

DATE: -

FLINDERS LINE
ARCHITECTURE
ARCHITECTURE - FLINDERS STATION
STATION PRECINCT PLAN

Government of South Australia
Department of Planning,
Transport and Infrastructure

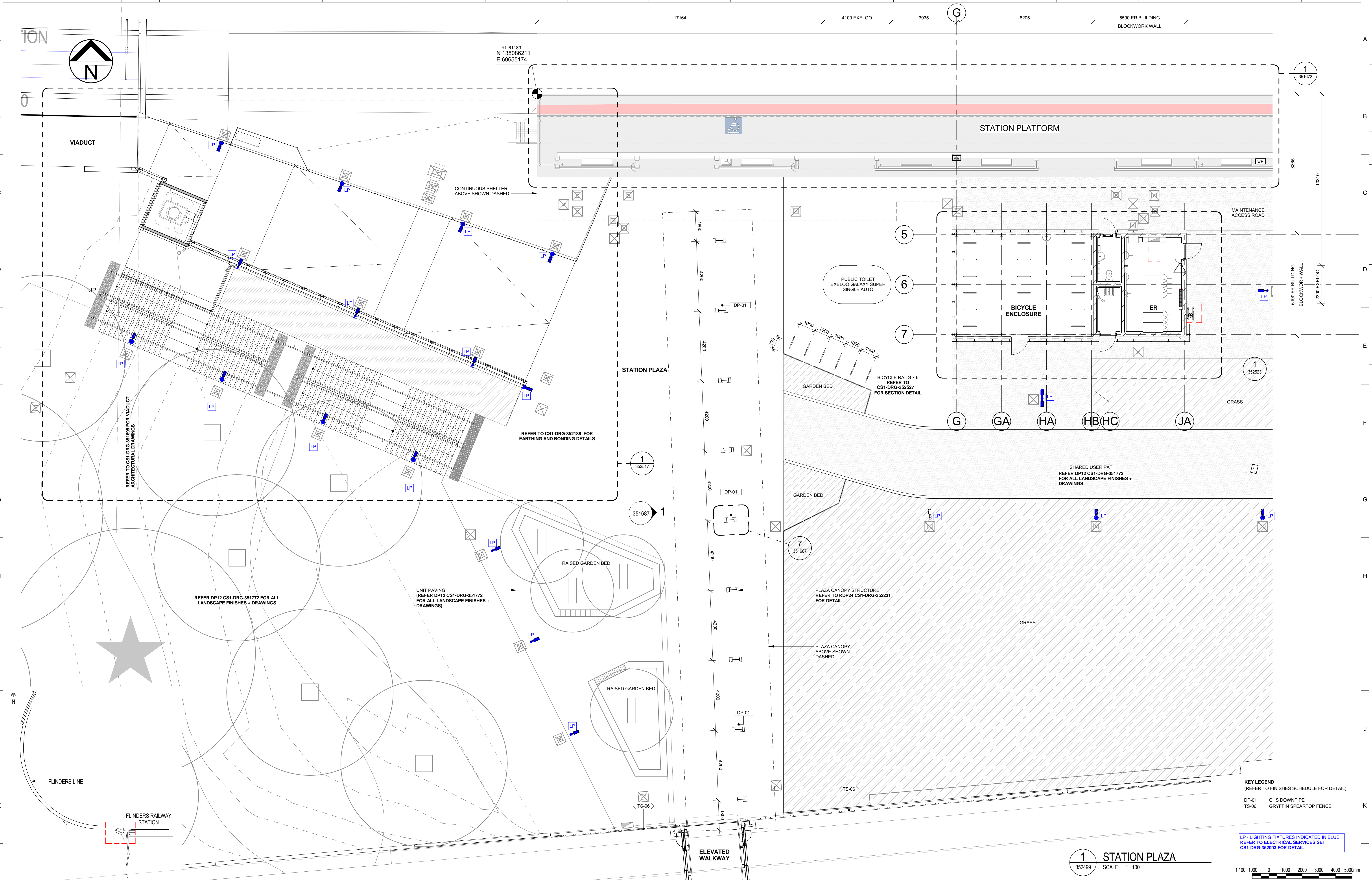
CS1-DRG-352499

SCALE(S): As indicated

REVISION: C

SIZE: A1

SHEET:




KEY LEGEND
(REFER TO FINISHES SCHEDULE FOR DETAIL)

DP-01	CHS DOWNPIPE
TS-06	GRYFFIN SPEARTOP FENCE

SP - LIGHTING FIXTURES INDICATED IN BLUE
REFER TO ELECTRICAL SERVICES SET
S1-DRG-352093 FOR DETAIL

1 STATION PLAZA
352499 SCALE 1 : 100

 **Government of South Australia**
Department of Planning,
Transport and Infrastructure


CS1-DRG-352500	
SCALE(S): As indicated	SIZE: A1

REVISION: C	SHEET:
16	17

C	ISSUED FOR 100% INTER-DISCIPLINARY REVIEW
B	ISSUED FOR 70% REVIEW
A	ISSUED FOR 30% REVIEW
REV	DESCRIPTION

				11.07.18
-	-	-	-	18.04.18
-	-	-	-	12.12.17
DRN	DSGN	CHK	APRV	DATE

NOT FOR CONSTRUCTION

DP05 - ARCHITECTURE - STATION GATEWAY SOUTH INDEX SHEET REF: CS1-DRG-352498		
MECHANICAL APPROVAL: SHALLEV	PROJECT APPROVAL: D. RICHTER	

DESIGNED: FLD
DRAFTED: FLD
CHECKED: FLD
APPROVED:
TITLE: -
DATE:

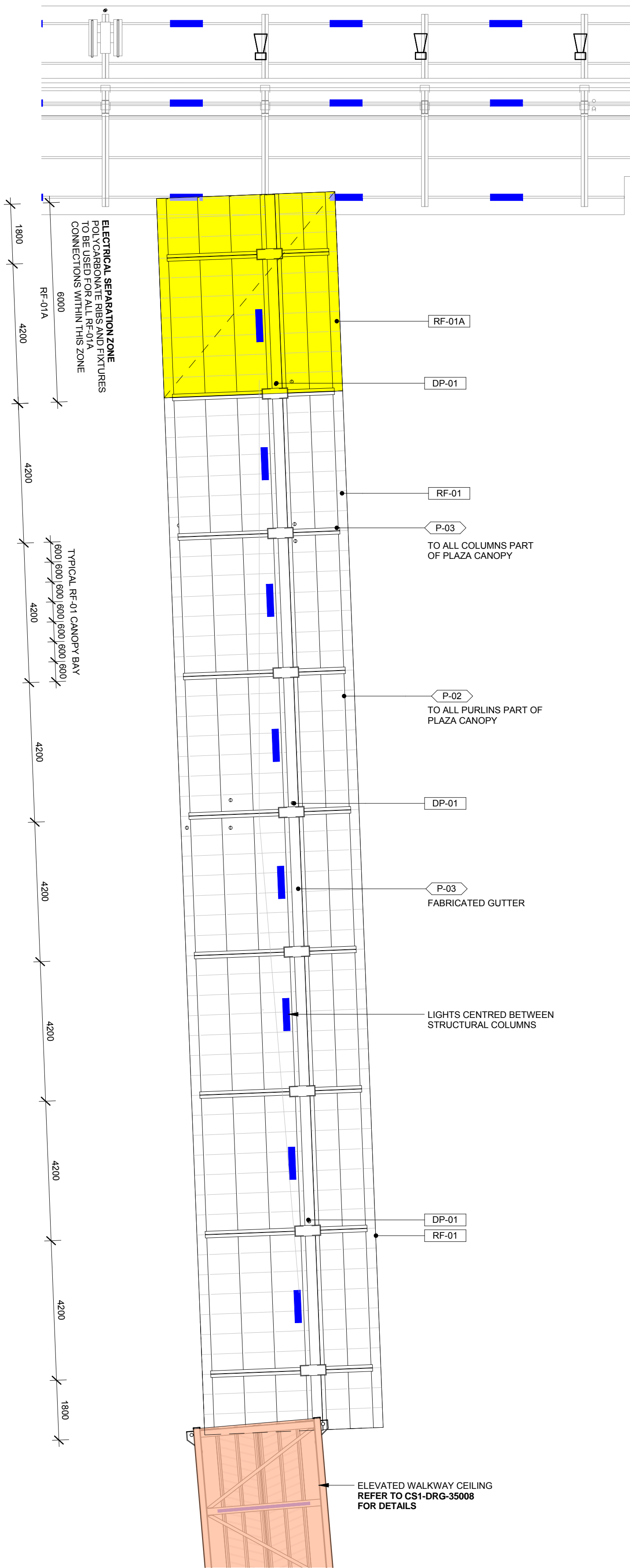
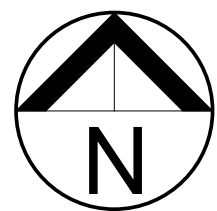
FLINDERS LINE
ARCHITECTURE
ARCHITECTURE - FLINDERS STATION
STATION PLAZA

PLOTTED: 12/07/2018 10:56:50 AM

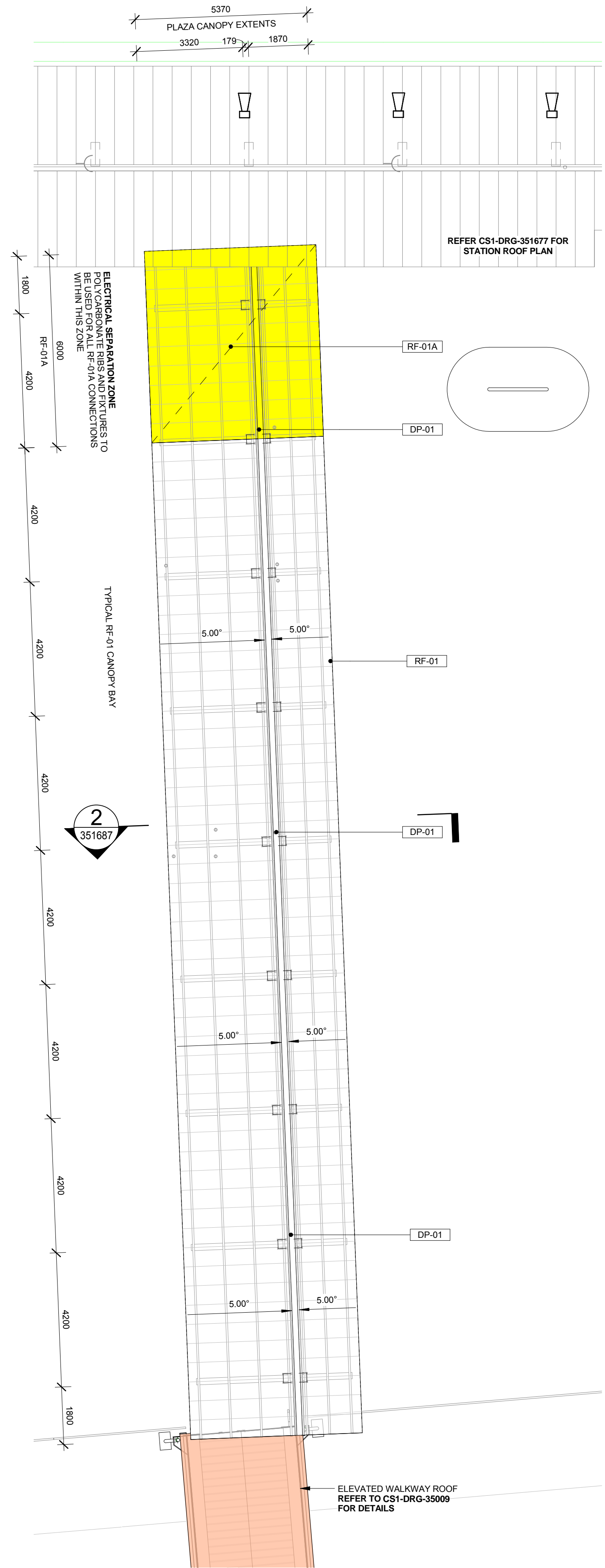


				11.07.18
-	-	-	-	18.04.18
-	-	-	-	12.12.17
DRN	DSGN	CHK	APRV	DATE

SCALE(S): As indicated	SIZE: A1
REVISION: C	SHEET:



1 PLAZA CANOPY - REFLECTED CEILING PLAN
SCALE 1:100



2 PLAZA CANOPY - ROOF PLAN
SCALE 1:100

KEY LEGEND
(REFER TO FINISHES SCHEDULE FOR DETAIL)

- DP-01 CHS DOWNPIPE
P-02 STEELWORK PAINT
P-03 STEELWORK PAINT
RF-01 DANPALON MULTICELL ROOF
RF-01A DANPALON MULTICELL ROOF

LIGHTING FIXTURES INDICATED IN BLUE
REFER TO ELECTRICAL SERVICES SET
RDP24 CS1-DRG-352231 FOR DETAIL

1:100 1000 0 1000 2000 3000 4000 5000mm

REV	DESCRIPTION	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
A	ISSUED FOR 100% INTER-DISCIPLINARY REVIEW																	
DRN	DSGN	CHK	APRV	DATE	11.07.18													

NOT FOR CONSTRUCTION

GATEWAY SOUTH

RD05 - ARCHITECTURE - STATION

DESIGNED: FLD

DRAFTED: FLD

CHECKED: FLD

APPROVED:

INDEX SHEET REF: CS1-DRG-352498

TECHNICAL APPROVAL: O.SHALLEV

PROJECT APPROVAL: D.RICHTER

DATE: 11.07.18

FLINDERS LINE

ARCHITECTURE

ARCHITECTURE - FLINDERS STATION

PLAZA CANOPY ROOF PLAN + RCP

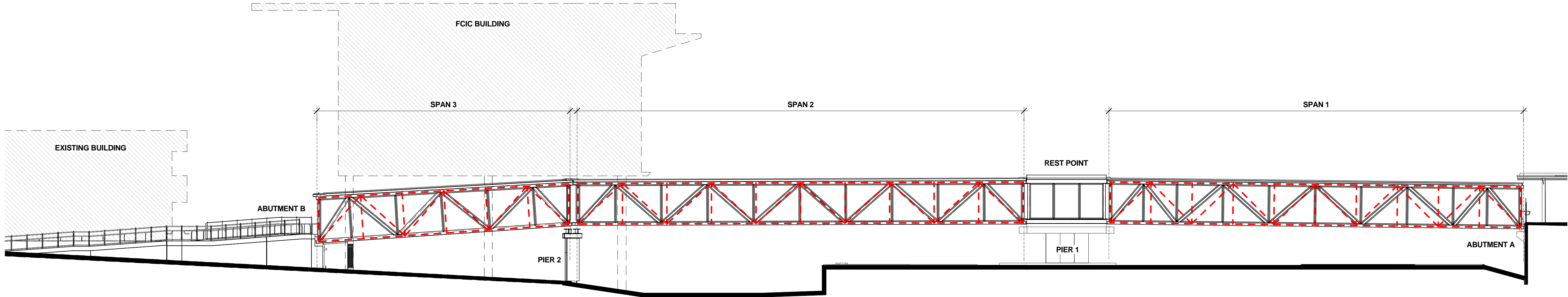
CS1-DRG-352503

SCALE(S): As indicated

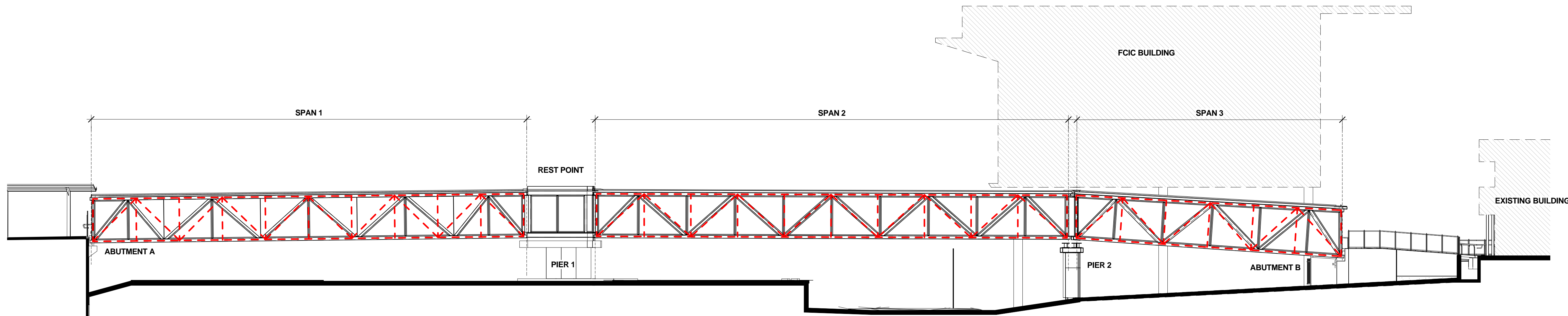
REVISION: A

SIZE: A1

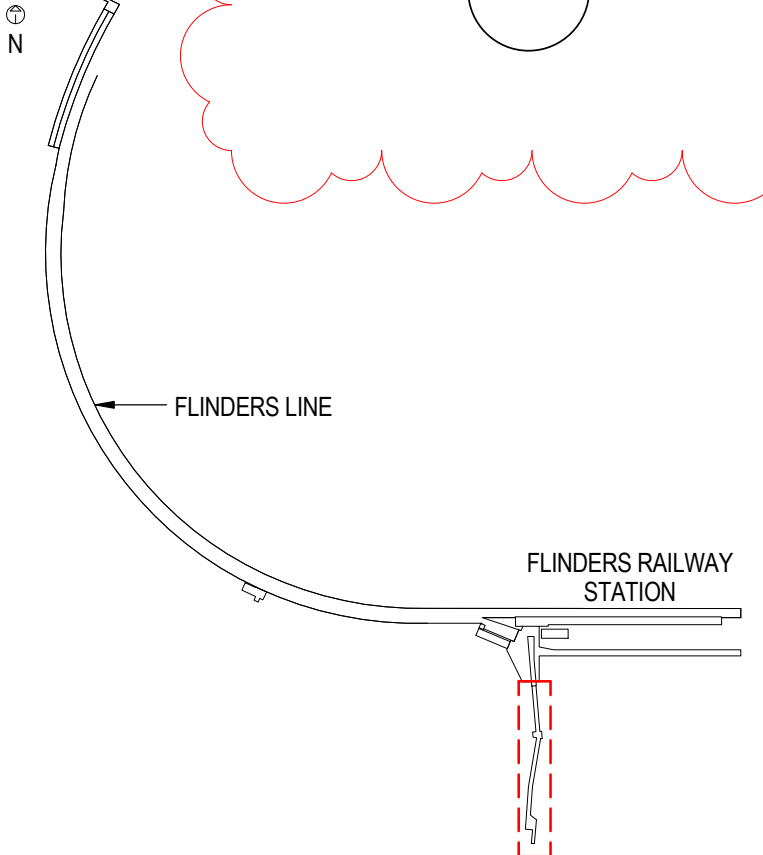
SHEET:



1 ELEVATED WALKWAY EAST ELEVATION

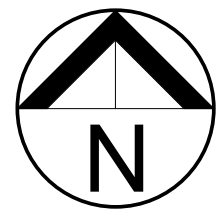


2 ELEVATED WALKWAY WEST ELEVATION



ELEVATED WALKWAY DRAWINGS
IN ABEYANCE PENDING UPDATED
STRUCTURAL MODEL REFLECTING
RATIONALISED EQUAL SETOUT OF
ELEVATED WALKWAY TRUSS

THIS DRAWING IS FOR INDICATIVE PURPOSES ONLY



1
352522

VIADUCT

TS-01 CONTINUE VIADUCT
THROWSCREEN TO
LIFT FACE

LANDING
RL 59840

WALKWAY
1:22

2
352522

352518

352519

REFER TO DRAWING
CS1-DRG-352518 FOR
BASE LEVEL OF
STAIRS AND LIFT

STAIR BASE LEVEL
RL 52150

TAC-01

PC-02

REFER TO CS1-DRG-351895 FOR VIADUCT
ARCHITECTURAL DRAWINGS

2
352520

THROUGH TO HVAC
EQUIPMENT ROOM

BAL-03F

BAL-03C

BAL-03G

BAL-03A

LANDING
RL 54256

LANDING
RL 56363

LANDING
RL 58469

TOP OF STAIR
RL 60570

SLOPED LANDSCAPE
REFER DP12 CS1-DRG-351772 FOR ALL
LANDSCAPE FINISHES + DRAWINGS

3
352520

352520

352521

352522

352523

352524

352525

352526

352527

352528

352529

352530

352531

352532

352533

352534

352535

352536

352537

352538

352539

352540

352541

352542

352543

352544

352545

352546

352547

352548

352549

352550

352551

352552

352553

352554

352555

352556

352557

352558

352559

352560

352561

352562

352563

352564

352565

352566

352567

352568

352569

352570

352571

352572

352573

352574

352575

352576

352577

352578

352579

352580

352581

352582

352583

352584

352585

352586

352587

352588

352589

352590

352591

352592

352593

352594

352595

352596

352597

352598

352599

352600

352601

352602

352603

352604

352605

352606

352607

352608

352609

352610

352611

352612

352613

352614

352615

352616

352617

352618

352619

352620

352621

352622

352623

352624

352625

352626

352627

352628

352629

352630

352631

352632

352633

352634

352635

352636

352637

352638

352639

352640

352641

352642

352643

352644

352645

352646

352647

352648

352649

352650

352651

352652

352653

352654

352655

352656

352657

352658

352659

352660

352661

352662

352663

352664

352665

352666

352667

352668

352669

352670

352671

352672

352673

352674

352675

352676

352677

352678

352679

352680

352681

352682

352683

352684

352685

352686

352687

352688

352689

352690

352691

352692

352693

352694

352695

352696

352697

352698

352699

352700

352701

352702

352703

352704

352705

352706

352707

352708

352709

352710

352711

352712

352713

352714

352715

352716

352717

352718

352719

352720

352721

352722

352723

352724

352725

352726

352727

352728

352729

352730

352731

352732

352733

352734

352735

352736

352737

352738

352739

352740

352741

352742

352743

352744

352745

352746

352747

352748

352749

352750

352751

352752

352753

352754

352755

352756

352757

352758

352759

352760

352761

352762

352763

352764

352765

352766

352767

352768

352769

352770

352771

352772

352773

352774

352775

352776

352777

352778

352779

352780

352781

352782

352783

352784

352785

352786

352787

352788

352789

352790

352791

352792

352793

352794

352795

352796

352797

352798

352799

352800

352801

352802

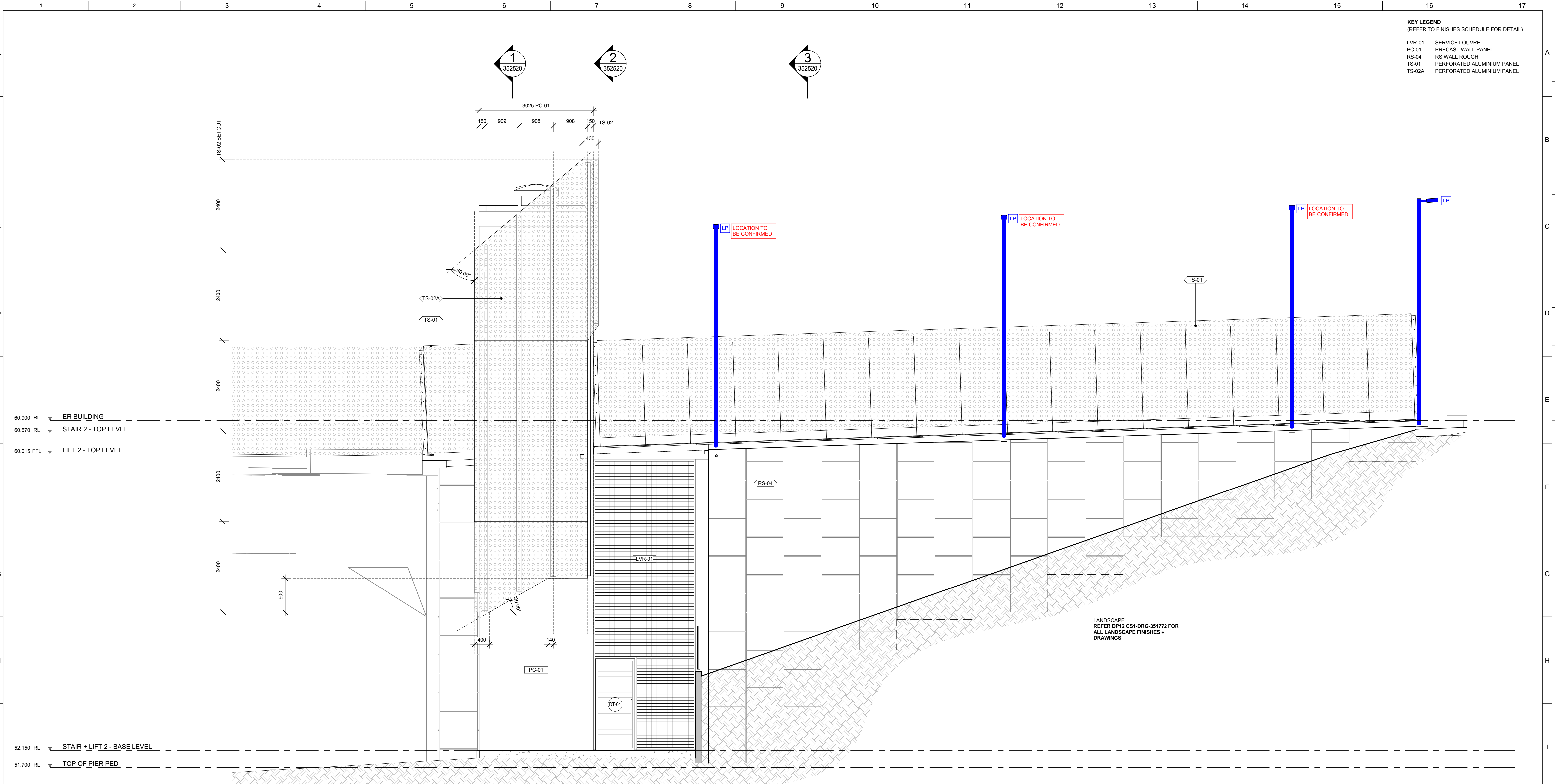
352803

352804

352805

352806

- KEY LEGEND
(REFER TO FINISHES SCHEDULE FOR DETAIL)
- LVR-01 SERVICE LOUVRE
 - PC-01 PRECAST WALL PANEL
 - RS-04 RS WALL ROUGH
 - TS-01 PERFORATED ALUMINIUM PANEL
 - TS-02A PERFORATED ALUMINIUM PANEL

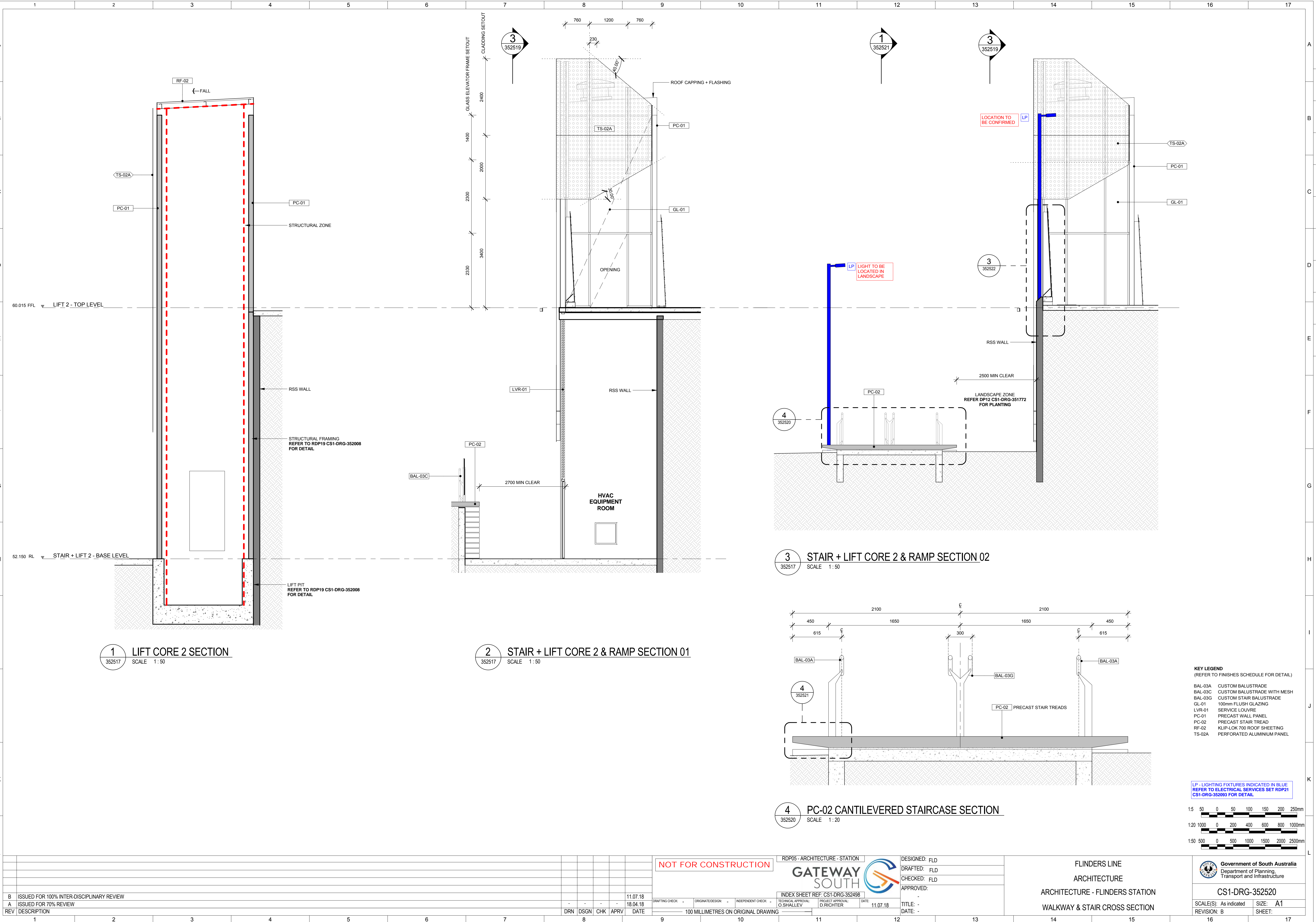


3 LIFT CORE 2 + RSS WALL ELEVATION
352517 SCALE 1:50

LP - LIGHTING FIXTURES INDICATED IN BLUE
REFER TO ELECTRICAL SERVICES SET RDP21
CS1-DRG-352093 FOR DETAIL.



B ISSUED FOR 100% INTER-DISCIPLINARY REVIEW				11.07.18				DRN DSGN CHK APRV DATE				NOT FOR CONSTRUCTION				GATEWAY SOUTH				RDP05 - ARCHITECTURE - STATION				DESIGNED: FLD DRAFTED: FLD CHECKED: FLD APPROVED: -				FLINDERS LINE ARCHITECTURE ARCHITECTURE - FLINDERS STATION LIFT CORE 2 + RSS WALL ELEVATION				CS1-DRG-352519				SCALE(S): 1:50 REVISION: B				SIZE: A1 SHEET: -																											
A ISSUED FOR 70% REVIEW				18.04.18																				INDEX SHEET REF: CS1-DRG-352498				TECHNICAL APPROVAL: O. SHALLEV PROJECT APPROVAL: D. RICHTER DATE: 11.07.18																																							
REV DESCRIPTION																																																																			
1				2				3				4				5				6				7				8				9				10				11				12				13				14				15				16				17			



B ISSUED FOR 100% INTER-DISCIPLINARY REVIEW				11.07.18			
A ISSUED FOR 70% REVIEW				18.04.18			
REV DESCRIPTION				DATE			
1	2	3	4	5	6	7	8
DRN	DSGN	CHK	APRV	DATE	DATE	DATE	DATE

NOT FOR CONSTRUCTION

RDPO5 - ARCHITECTURE - STATION

GATEWAY SOUTH

INDEX SHEET REF: CS1-DRG-352498

TECHNICAL APPROVAL: O. SHALLEV
PROJECT APPROVAL: D. RICHTER
DATE: 11.07.18

DESIGNED: FLD
DRAFTED: FLD
CHECKED: FLD
APPROVED: -
TITLE: -
DATE: -

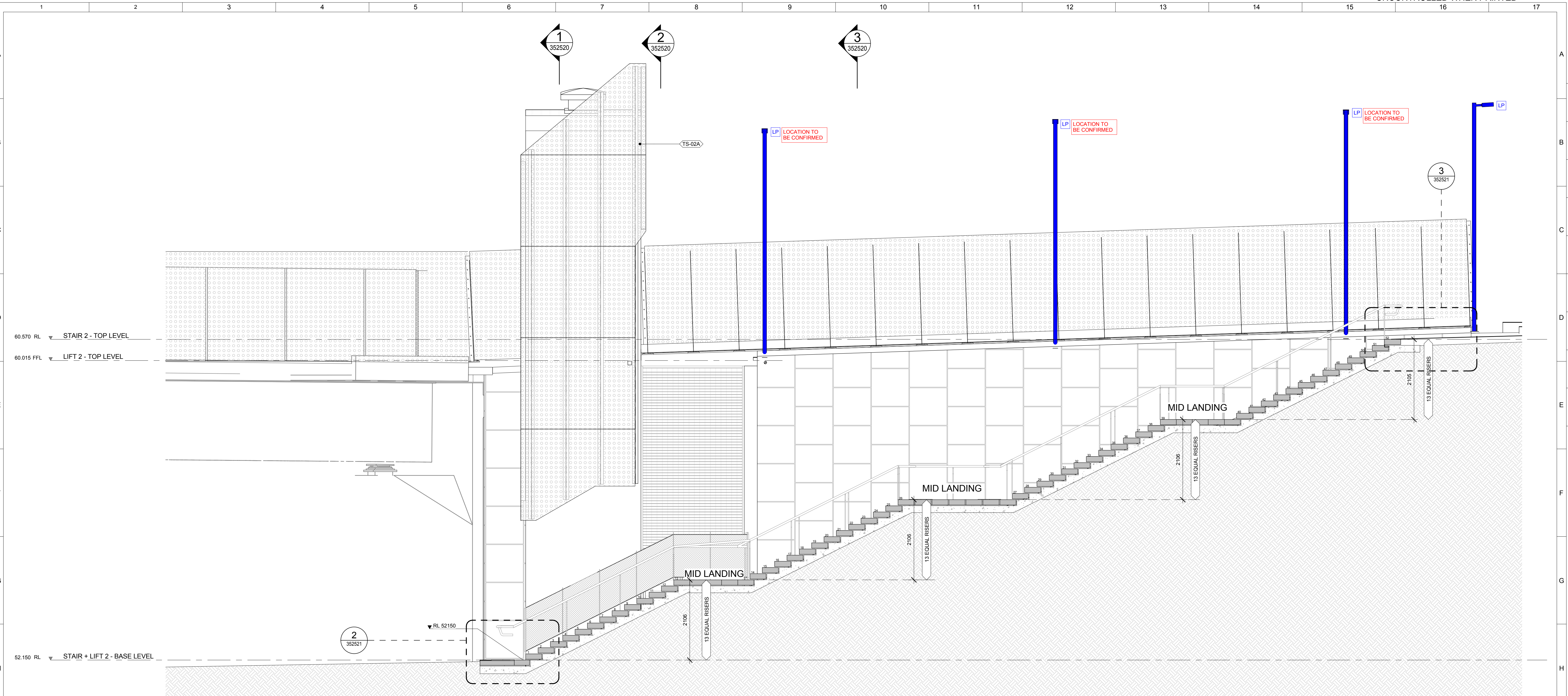
FLINDERS LINE
ARCHITECTURE
ARCHITECTURE - FLINDERS STATION
WALKWAY & STAIR CROSS SECTION

Government of South Australia
Department of Planning,
Transport and Infrastructure

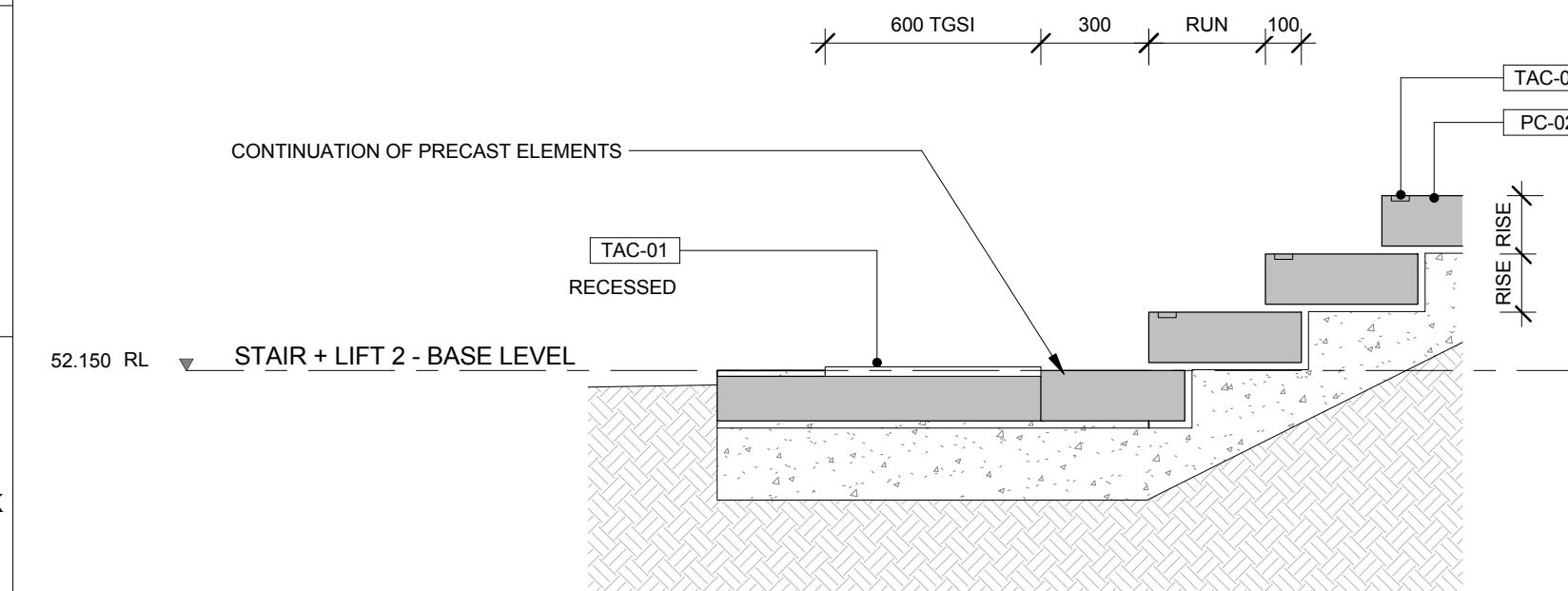
CS1-DRG-352520

SCALE(S): As indicated
REVISION: B

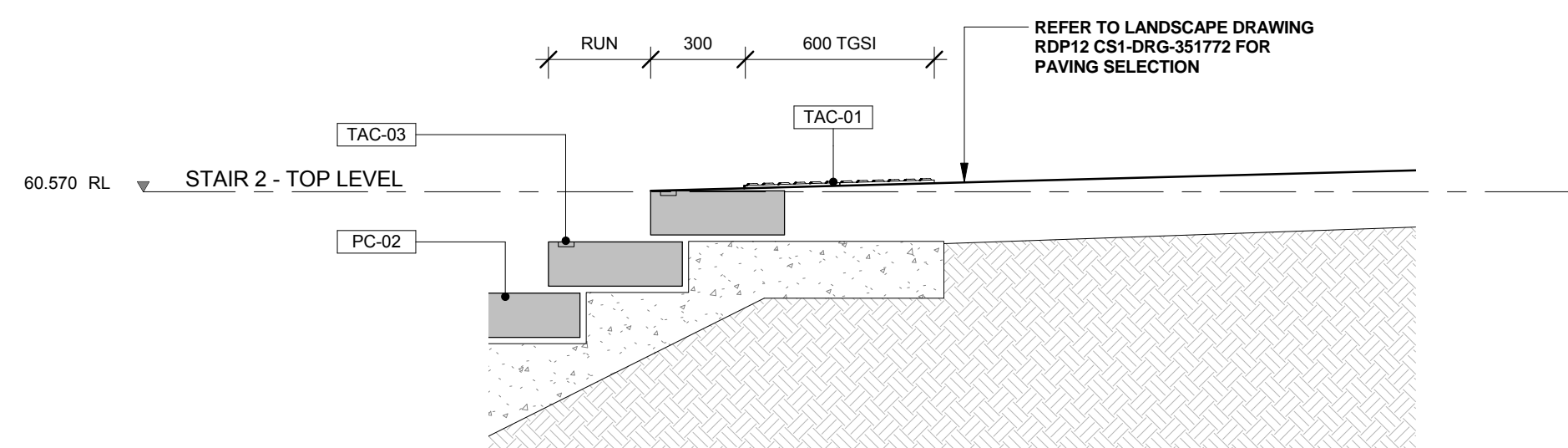
SIZE: A1
SHEET: -



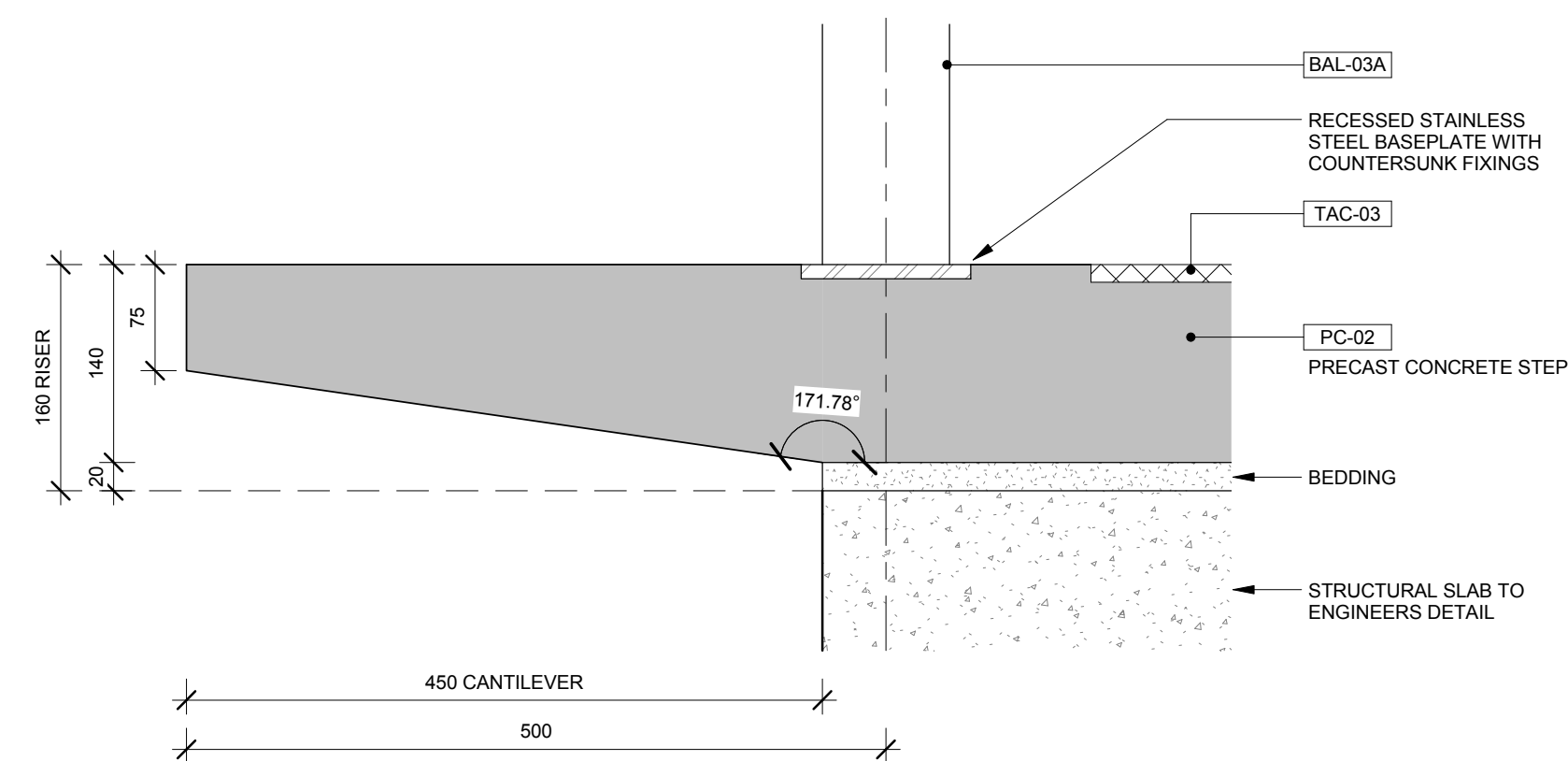
1 STAIR 2 SECTION
352517 SCALE 1:50



2 BASE LEVEL TO STAIR DETAIL SECTION
352521 SCALE 1:20



3 TOP LEVEL TO STAIR DETAIL SECTION
352521 SCALE 1:20

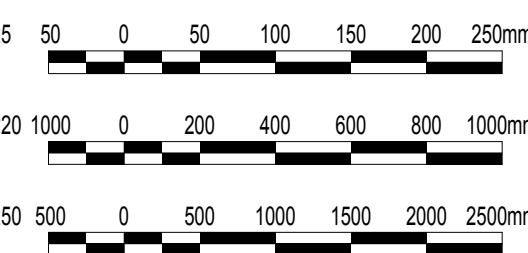


4 TYP PC-02 CANTILEVERED STEP & LANDING DETAIL
352520 SCALE 1:5

KEY LEGEND
(REFER TO FINISHES SCHEDULE FOR DETAIL)

BAL-03A CUSTOM BALUSTRADE
PC-02 PRECAST STAIR TREAD
TAC-01 TACTILE INDICATOR
TAC-03 CAST IN STAIR NOSING
TS-02A PERFORATED ALUMINIUM PANEL

LP - LIGHTING FIXTURES INDICATED IN BLUE
REFER TO ELECTRICAL SERVICES SET RDP21
CS1-DRG-352093 FOR DETAIL



B ISSUED FOR 100% INTER-DISCIPLINARY REVIEW
A ISSUED FOR 70% REVIEW
REV DESCRIPTION

DRN DSGN CHK APRV DATE

11.07.18
18.04.18

NOT FOR CONSTRUCTION

RDP05 - ARCHITECTURE - STATION

GATEWAY SOUTH

INDEX SHEET REF: CS1-DRG-352498

DRAFTING CHECK - ORIGINATOR/DESIGN - INDEPENDENT CHECK -
TECHNICAL APPROVAL O. SHALLEV PROJECT APPROVAL D. RICHTER DATE 11.07.18

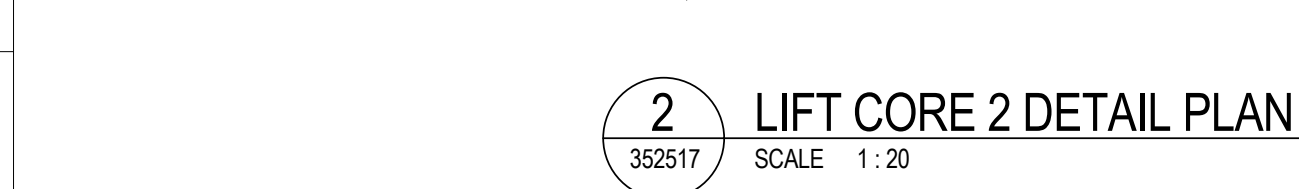
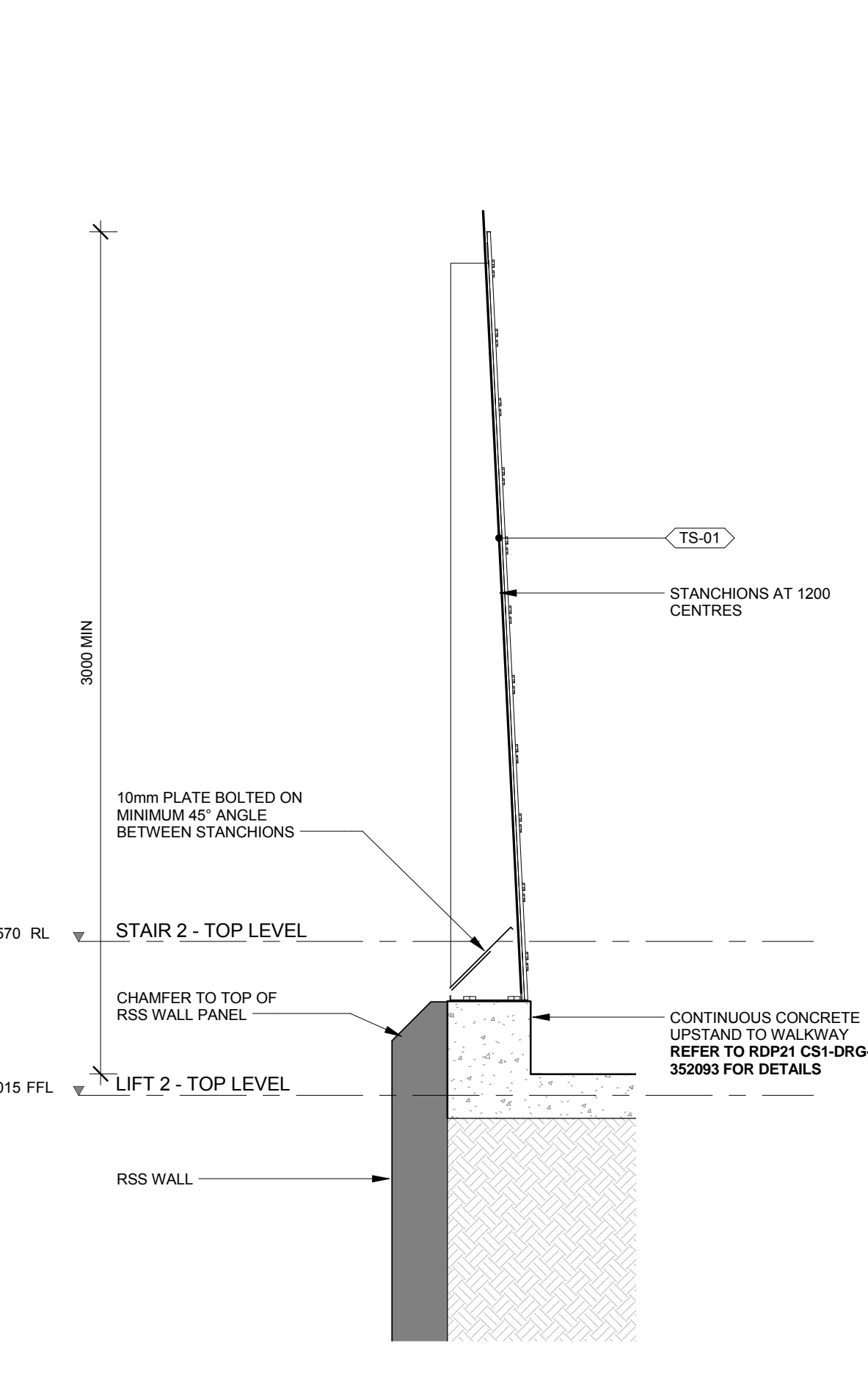
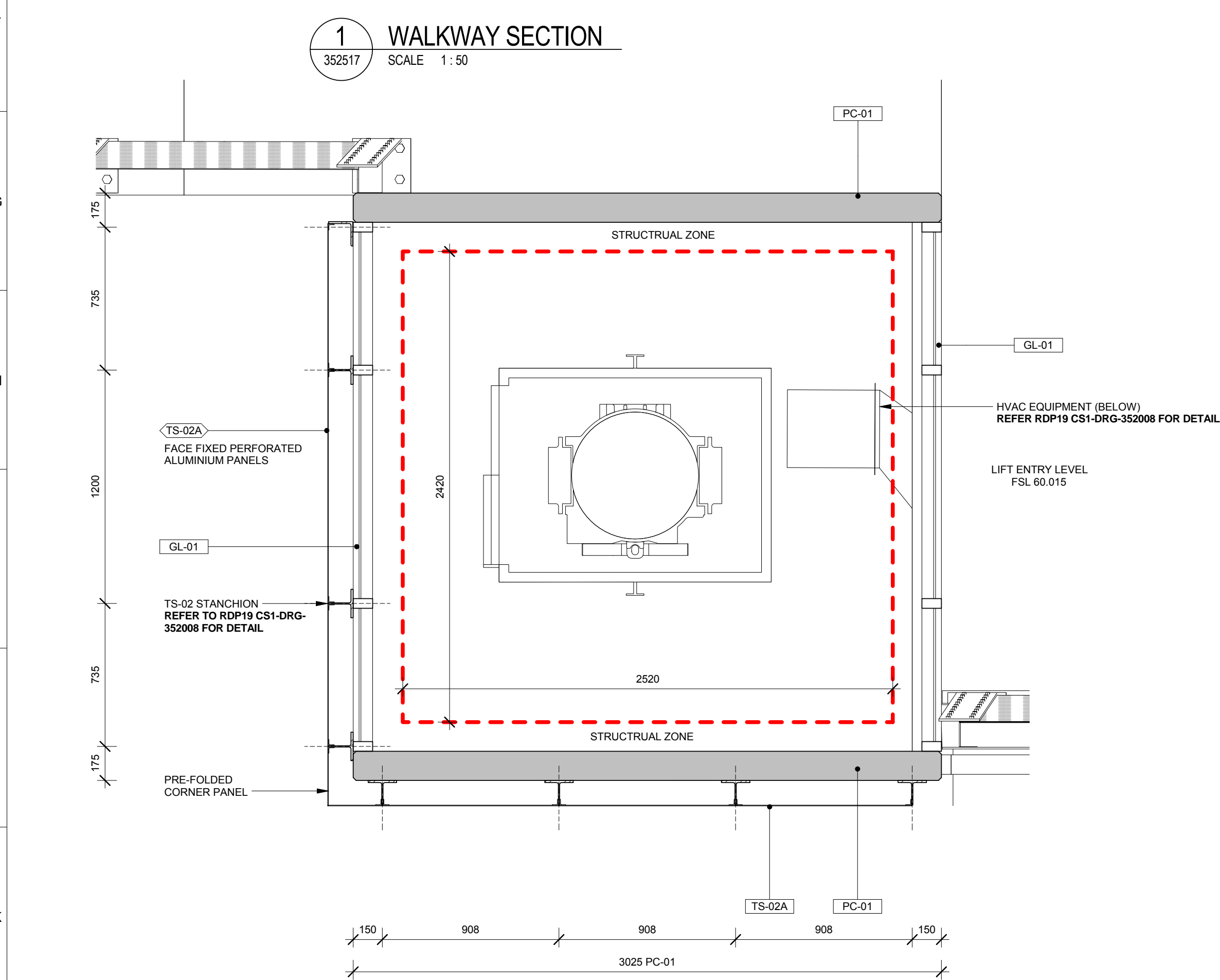
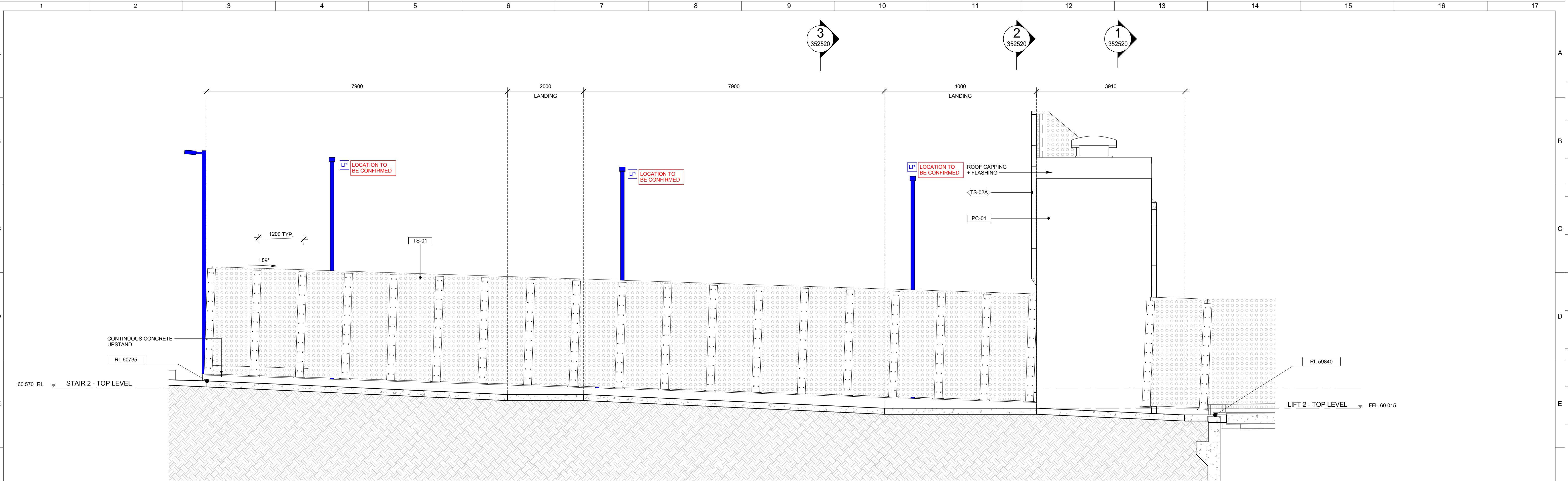
DESIGNED: FLD
DRAFTED: FLD
CHECKED: FLD
APPROVED:
TITLE: -
DATE: -

FLINDERS LINE
ARCHITECTURE
ARCHITECTURE - FLINDERS STATION
STAIR SECTION + DETAILS

Government of South Australia
Department of Planning,
Transport and Infrastructure

CS1-DRG-352521

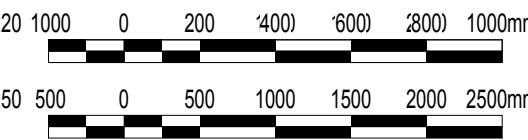
SCALE(S): As indicated
REVISION: B
SIZE: A1
SHEET:

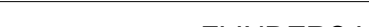



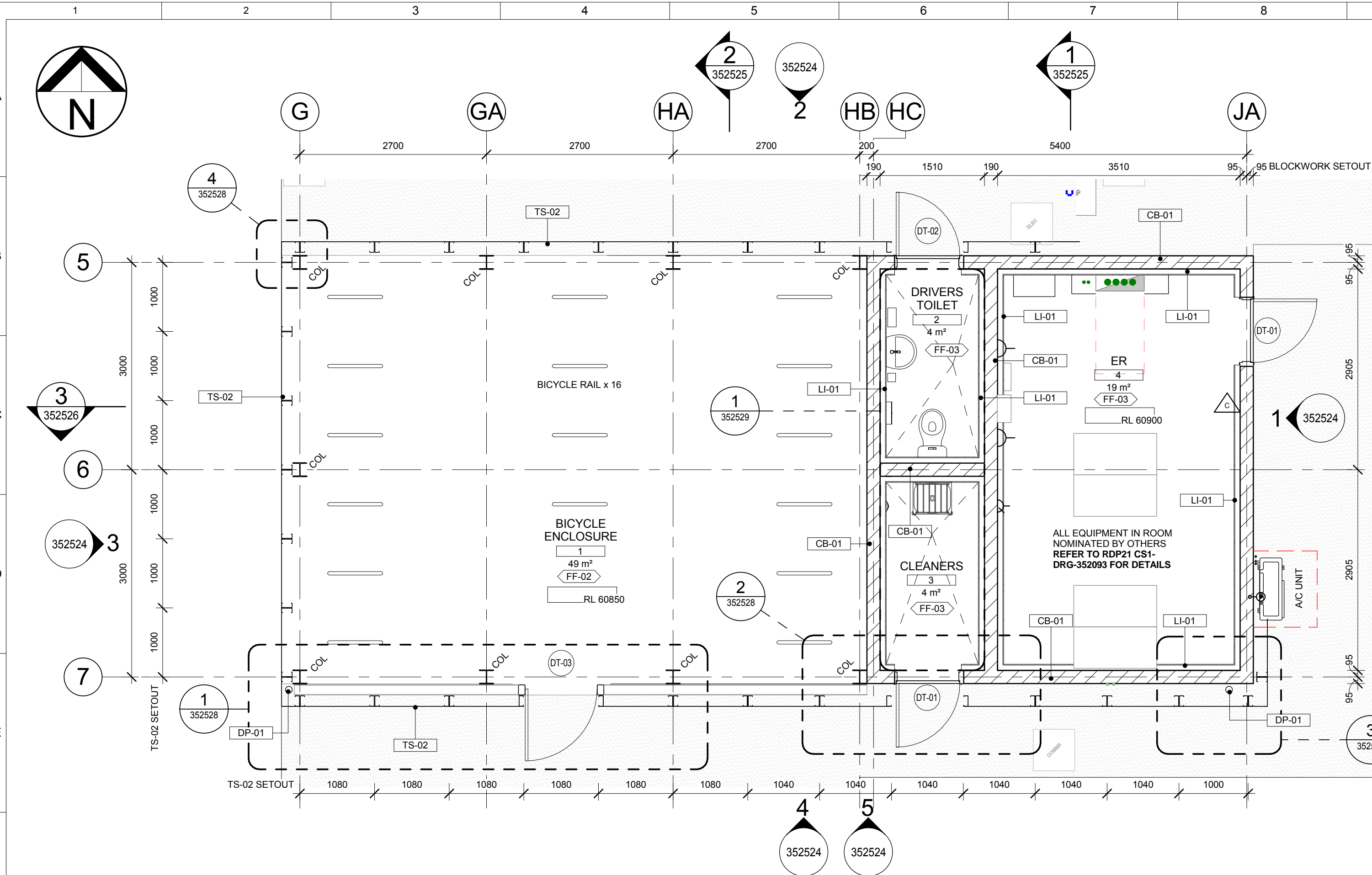
KEY LEGEND
(REFER TO FINISHES SCHEDULE FOR DETAIL)

GL-01 100mm FLUSH GLAZING
PC-01 PRECAST WALL PANEL
TS-01 PERFORATED ALUMINIUM PANEL
TS-02A PERFORATED ALUMINIUM PANEL

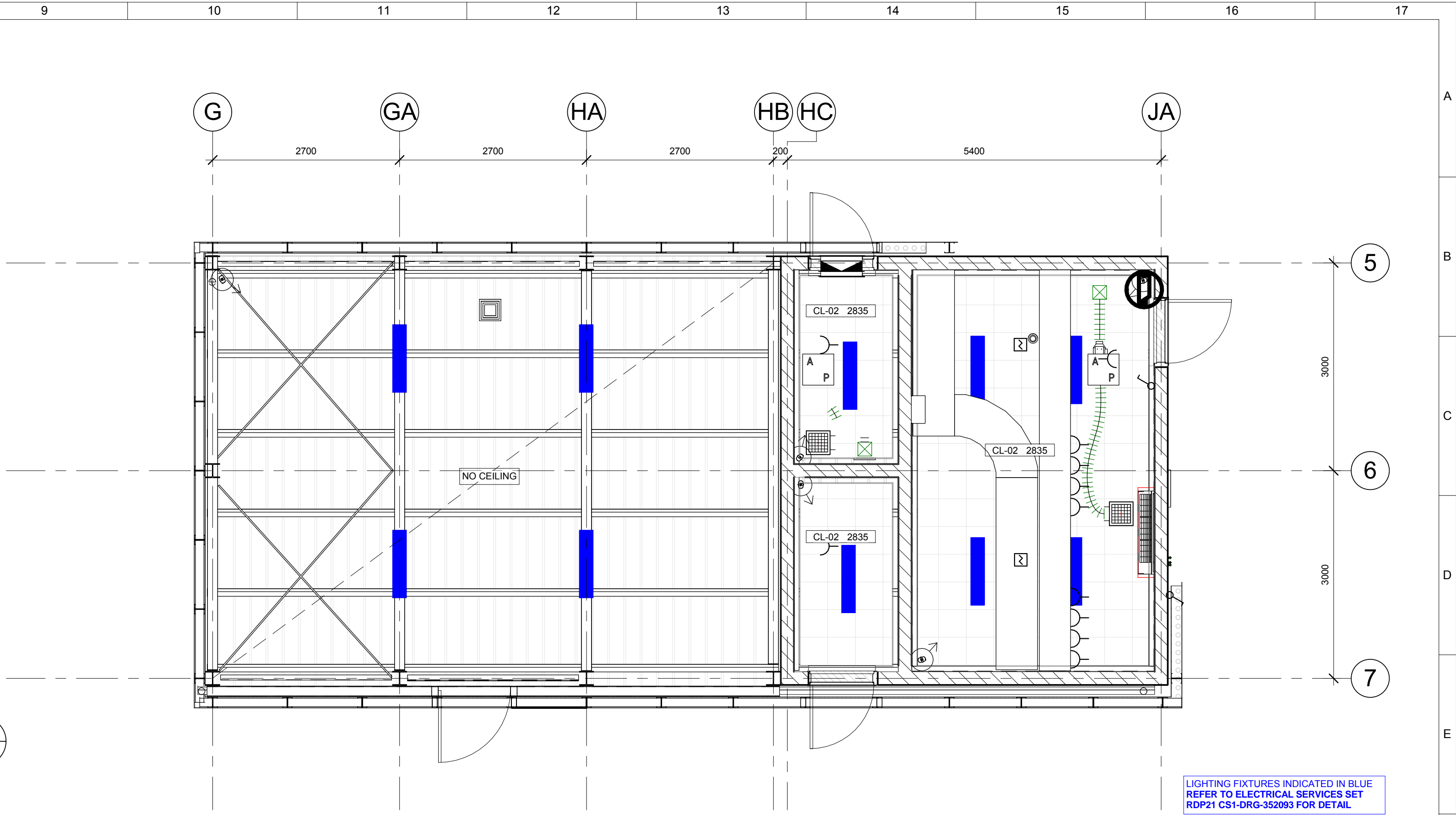
LP - LIGHTING FIXTURES INDICATED IN BLUE
REFER TO ELECTRICAL SERVICES SET RDP21
CS1-DRG-352093 FOR DETAIL



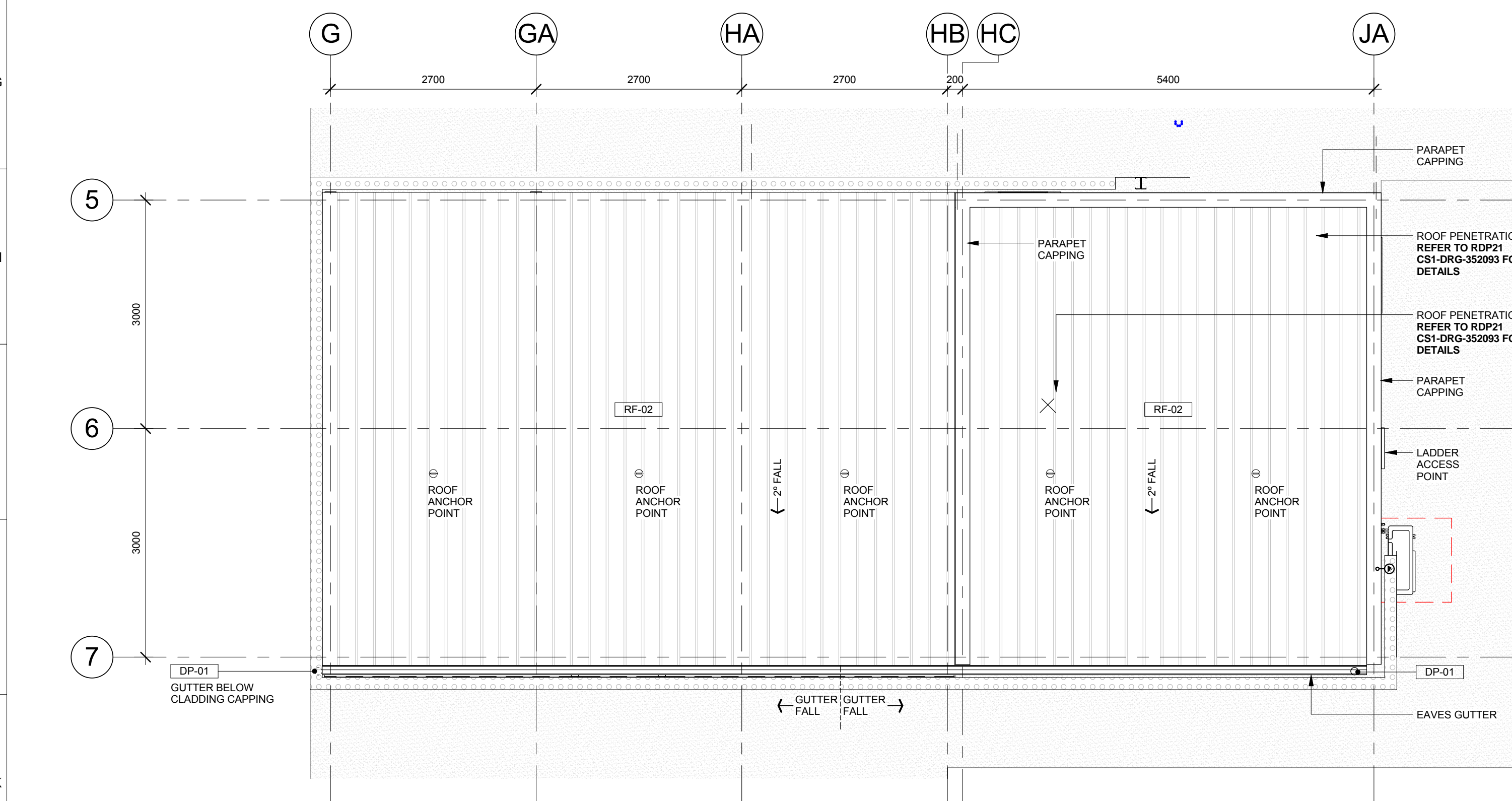
										NOT FOR CONSTRUCTION										RDP05 - ARCHITECTURE - STATION										GATEWAY SOUTH																				DESIGNED: FLD										FLINDERS LINE ARCHITECTURE										 Government of South Australia Department of Planning Transport and Infrastructure																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
																																								DRAFTED: FLD																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
																																								CHECKED: FLD																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
																																								APPROVED:																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
B ISSUED FOR 100% INTER-DISCIPLINARY REVIEW																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													



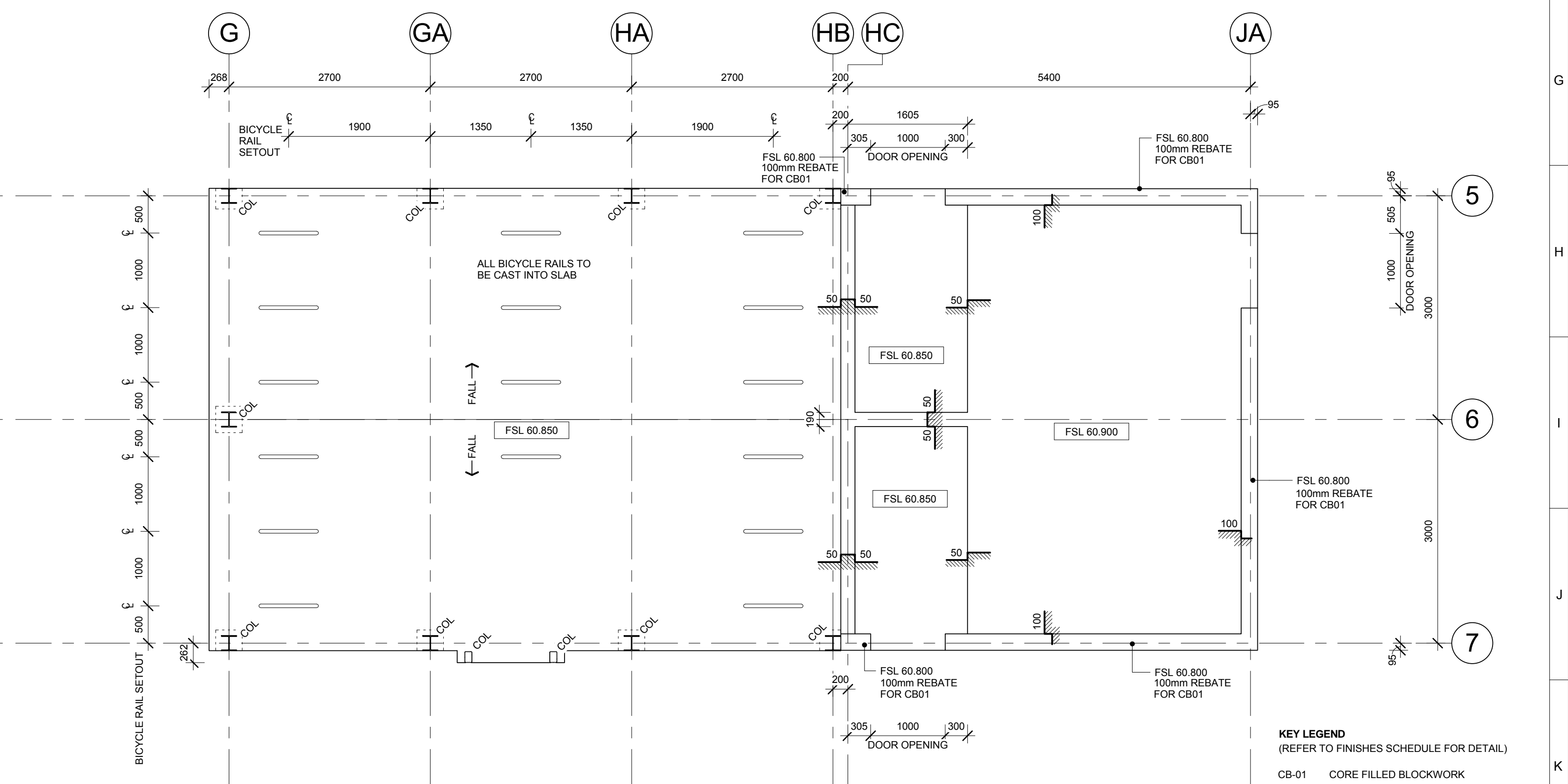
1 ER BUILDING + BICYCLE ENCLOSURE FLOOR PLAN
SCALE 1:50



3 ER BUILDING + BICYCLE ENCLOSURE REFLECTED CEILING PLAN
SCALE 1:50



2 ER BUILDING + BICYCLE ENCLOSURE ROOF PLAN
SCALE 1:50



4 ER BUILDING + BICYCLE ENCLOSURE CONCRETE PROFILE PLAN
SCALE 1:50

KEY LEGEND
(REFER TO FINISHES SCHEDULE FOR DETAIL)

- CB-01 CORE FILLED BLOCKWORK
- DP-01 GHS DOWNPIPE
- FF-02 BROOM FINISH TO CONCRETE
- FF-03 STATIC DISSIPATIVE VINYL
- LI-01 PLASTERBOARD ON STUD
- RF-02 KLIP-LOK 700 ROOF SHEETING
- TS-02 PERFORATED ALUMINIUM PANEL REFER TO ELEVATION FOR TYPE



B	ISSUED FOR 100% INTER-DISCIPLINARY REVIEW
A	ISSUED FOR 70% REVIEW
REV	DESCRIPTION

DRN	DSGN	CHK	APRV	DATE
-	-	-	-	11.07.18
-	-	-	-	18.04.18

NOT FOR CONSTRUCTION

RDP05 - ARCHITECTURE - STATION

GATEWAY SOUTH

INDEX SHEET REF: CS1-DRG-352498

100 MILLIMETRES ON ORIGINAL DRAWING

DESIGNED: FLD
DRAFTED: FLD
CHECKED: FLD
APPROVED:
TITLE: -
DATE: -

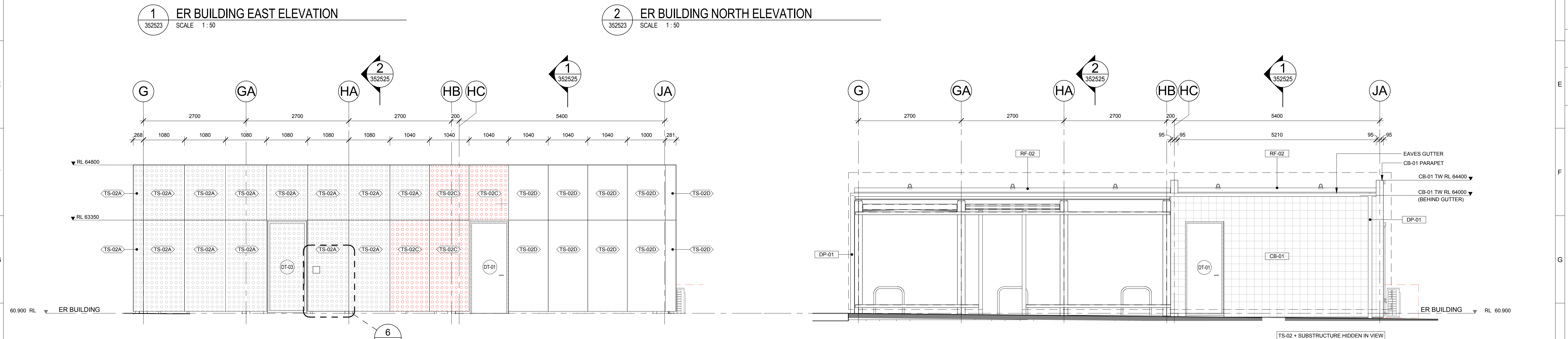
FLINDERS LINE
ARCHITECTURE
ARCHITECTURE - FLINDERS STATION
ER BUILDING + BICYCLE ENCLOSURE

Government of South Australia
Department of Planning,
Transport and Infrastructure

CS1-DRG-352523

SCALE(S): 1:50
REVISION: B

SIZE: A1
SHEET:



2 ER BUILDING NORTH ELEVATION
352523 SCALE 1:50




5 ER BUILDING SOUTH ELEVATION 02
352523 SCALE 1:50

P05 - ARCHITECTURE - STATION



TITLE: -
DATE: -

 **Government of South Australia**
Department of Planning,
Transport and Infrastructure

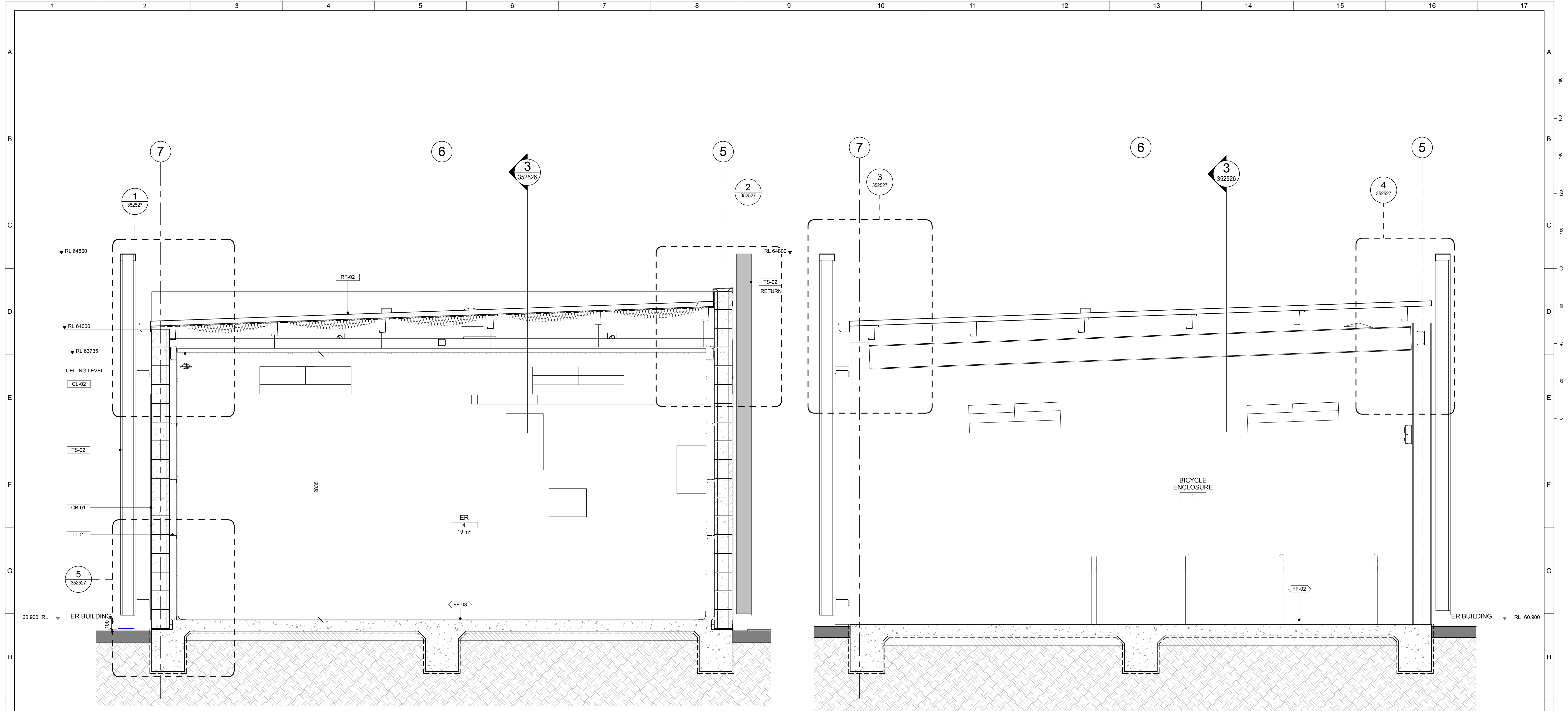
001 RDD 252524

CS1-DRG-352524

SCALE(S): As indicated	SIZE: A1
REVISION: B	SHEET:

16	17
----	----

PLOTTED: 12/07/2018 10:53:04 AM



1 ER BUILDING SECTION 1
SCALE 1:20

2 ER BUILDING SECTION 2
SCALE 1:20

KEY LEGEND
(REFER TO FINISHES SCHEDULE FOR DETAIL)

- CB-01 CORE FILLED BLOCKWORK
- CL-02 T-BAR CEILING
- FF-02 BROOM FINISH TO CONCRETE
- FF-03 STATIC DISSIPATIVE VINYL
- LI-01 PLASTERBOARD ON STUD
- RF-02 KLIP-LOK 700 ROOF SHEETING
- TS-02 PERFORATED ALUMINIUM PANEL
REFER TO ELEVATION FOR TYPE



B	ISSUED FOR 100% INTER-DISCIPLINARY REVIEW
A	ISSUED FOR 70% REVIEW
REV	DESCRIPTION

DRN	DSGN	CHK	APRV	DATE
-	-	-	-	11.07.18
-	-	-	-	18.04.18

NOT FOR CONSTRUCTION

RDP05 - ARCHITECTURE - STATION

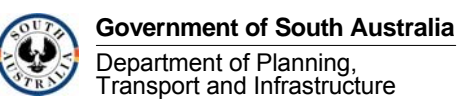


INDEX SHEET REF: CS1-DRG-352498

100 MILLIMETRES ON ORIGINAL DRAWING

DESIGNED: FLD
DRAFTED: FLD
CHECKED: FLD
APPROVED:
TITLE: -
DATE: -

FLINDERS LINE
ARCHITECTURE
ARCHITECTURE - FLINDERS STATION
ER BUILDING SECTION



CS1-DRG-352525















SCALE(S): 1:20
REVISION: B
SIZE: A1
SHEET:

SURFACE DRAIN SETOUT POINTS		
POINT	EASTING	NORTHING
S1	69806.381	138025.867
S2	69800.019	138051.142
S3	69646.662	138037.928
S4	69675.188	138043.436
S5	69799.700	138054.156
S6	69610.386	138040.077
S7	69675.188	138043.436
S8	69799.700	138054.156

LEGEND (cont.)

SYMBOL	DESCRIPTION
WATER	
•	FIRE PLUG MARKER POST
◐FM	FIRE PLUG MARKER REFLECTOR
□	IRRIGATION CONTROL BOX
•	HYDRANT
•	INSPECTION COVER
□	JUNCTION BOX
•	METER
•	TAP
—	UNDERGROUND PIPE
==	ABOVE GROUND PIPE
STORMWATER	
==	EXISTING PIPE / CULVERT
—●—●—●—●—●—●—●—●—●—	PROPOSED STORMWATER PIPE
—●—●—●—●—●—●—●—●—●—	DRAINAGE SWALE
—●—●—●—●—●—●—●—●—●—	SPOON DRAIN
—●—●—●—●—●—●—●—●—●—	ACO K100 TRENCH DRAIN WITH H
□	PROPOSED INSPECTION BOX
□	GRATED INLET PIT
□	900 SIDE ENTRY PIT


LEGEND (cont.)

SYMBOL	DESCRIPTION
GAS	
	INSPECTION COVER
	JUNCTION BOX
	MARKER POST
	METER
	UNDERGROUND PIPE
SEWER	
	INSPECTION COVER
	JUNCTION BOX
	UNDERGROUND PIPE
	VENT
REMOVAL	
	SERVICE TO BE REMOVED
CONTOURS	
	MINOR EXISTING CONTOUR
	MAJOR EXISTING CONTOUR
	MINOR DESIGN CONTOUR
	MAJOR DESIGN CONTOUR

1. FOR GENERAL NOTES REFER TO DRAWINGS CS1-DRG-352094 TO CS1-DRG-352096
2. FOR TREE REMOVAL REFER TO VEGETATION REMOVAL DRAWING CS1-DRG-352323

RDP21 - FLINDERS STATION


GATEWAY
SOUTH



EV SHEET REF: 201-PDS-050005

DESIGNED:	FLD
DRAFTED:	FLD
CHECKED:	FLD
APPROVED:	

GENERAL CONSTRUCTION SETOUT AND LEVEL - SHEET 01

 **Government of South Australia**
Department of Planning,
Transport and Infrastructure

CS1-DRG-352097

SHEET: 1 OF XX

B	ISSUED FOR 70% REVIEW
A	ISSUED FOR 30% REVIEW
REV	DESCRIPTION

-	-	-	-	24.04.18
-	-	-	-	21.12.17
DRN	DSGN	CHK	APRV	DATE

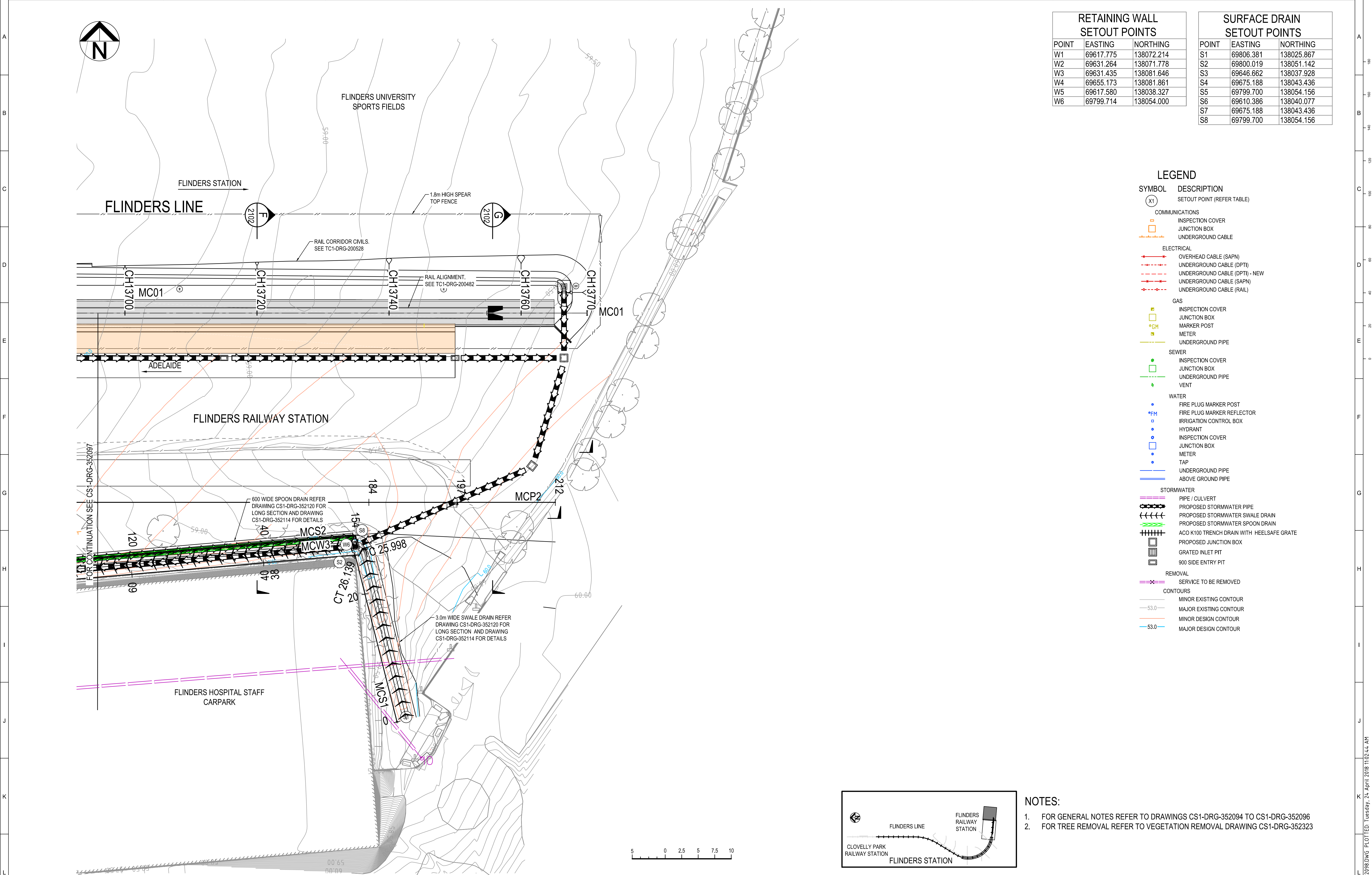
INDEX SHEET REF: CS1-DRG-352093		
TECHNICAL APPROVAL: S.KERRY	PROJECT APPROVAL: D.RICHTER	DATE: 24.04.18
 ALL DIMENSIONS ARE IN METRES U		

TITLE: -
DATE: -

PLAN

SCALE(S): 1:250	SIZE: A1
REVISION: 0	SHEET: 1 OF 11

SHEET: 1 OF XX



SURFACE DRAIN SETOUT POINTS		
POINT	EASTING	NORTHING
S1	69806.381	138025.867
S2	69800.019	138051.142
S3	69646.662	138037.928
S4	69675.188	138043.436
S5	69799.700	138054.156
S6	69610.386	138040.077
S7	69675.188	138043.436
S8	69799.700	138054.156

SYMBOL	DESCRIPTION
(X1)	SETOUT POINT (REFER TABLE)

GAS

- INSPECTION COVER
- JUNCTION BOX
- MARKER POST
- METER
- UNDERGROUND PIPE

SEWER









INSPECTION COVER


JUNCTION BOX





UNDERGROUND PIPE

VENT

WATER	
•	FIRE PLUG MARKER POST
◐FM	FIRE PLUG MARKER REFLECTOR
◻	IRRIGATION CONTROL BOX
•	HYDRANT
•	INSPECTION COVER
◻	JUNCTION BOX
•	METER
•	TAP
— — — — —	UNDERGROUND PIPE
=====	ABOVE GROUND PIPE

STORMWATER	
	PIPE / CULVERT
	PROPOSED STORMWATER PIPE
	PROPOSED STORMWATER SWALE DRAIN
	PROPOSED STORMWATER SPOON DRAIN
	ACO K100 TRENCH DRAIN WITH HEELS SAFE GRATE
	PROPOSED JUNCTION BOX
	GRATED INLET PIT
	900 SIDE ENTRY PIT


REMOVAL
 **SERVICE TO BE REMOVED**

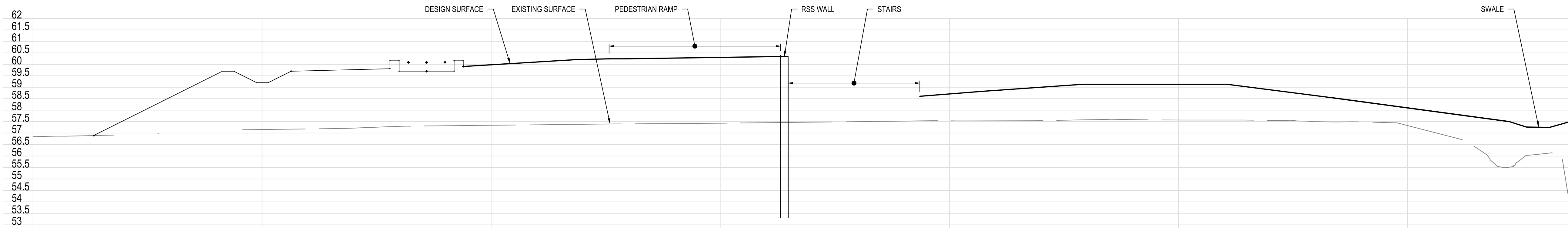
CONTOURS
 **MINOR EXISTING CONTOUR**
 **MAJOR EXISTING CONTOUR**
 **MINOR DESIGN CONTOUR**
 **MAJOR DESIGN CONTOUR**



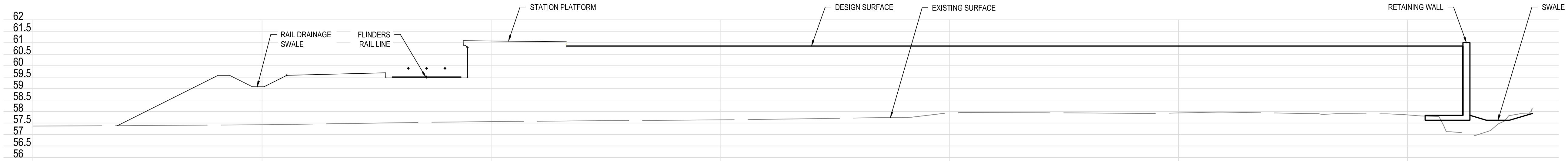
NOT FOR CONSTRUCTION

DESIGNED: FLD
DRAFTED: FLD
CHECKED: FLD
APPROVED:
TITLE: -
DATE: -


Government of South Australia
 Department of Planning,
 Transport and Infrastructure



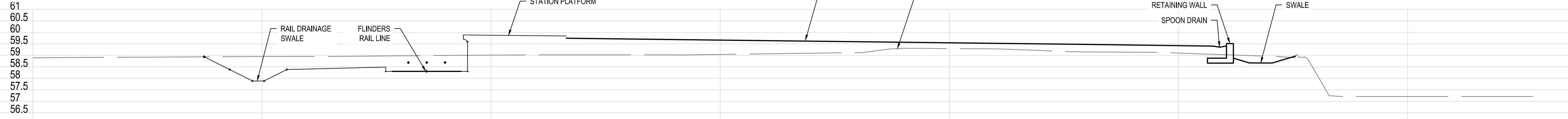
C SECTION
352097 SCALE 1:100



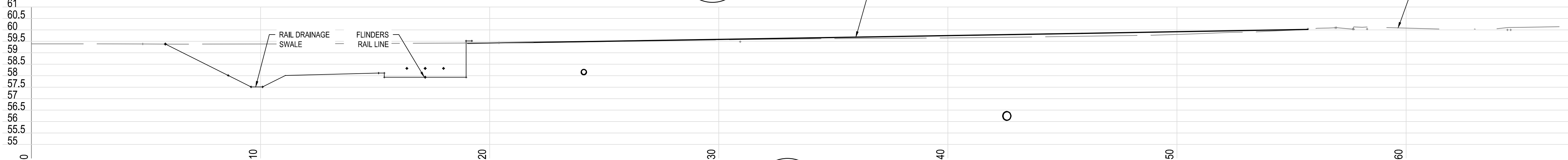
D SECTION
352097 SCALE 1:100



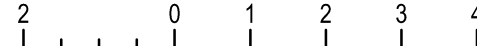
E SECTION
352097 SCALE 1:100



F SECTION
352098 SCALE 1:100



G SECTION
352098 SCALE 1:100



REV	DESCRIPTION	DRN	DSGN	CHK	APRV	DATE
B	ISSUED FOR 70% REVIEW	-	-	-	-	24.04.18
A	ISSUED FOR 30% REVIEW	-	-	-	-	21.12.17

NOT FOR CONSTRUCTION

GATEWAY SOUTH

INDEX SHEET REF: CS1-DRG-352093

TECHNICAL APPROVAL: S.KERRY

PROJECT APPROVAL: D.RICHTER

DATE: 24.04.18

DESIGNED: FLD

DRAFTED: FLD

CHECKED: FLD

APPROVED:

FLINDERS LINE STATION

FLINDERS STATION - SHEET 02

CROSS SECTIONS

Government of South Australia
Department of Planning, Transport and Infrastructure

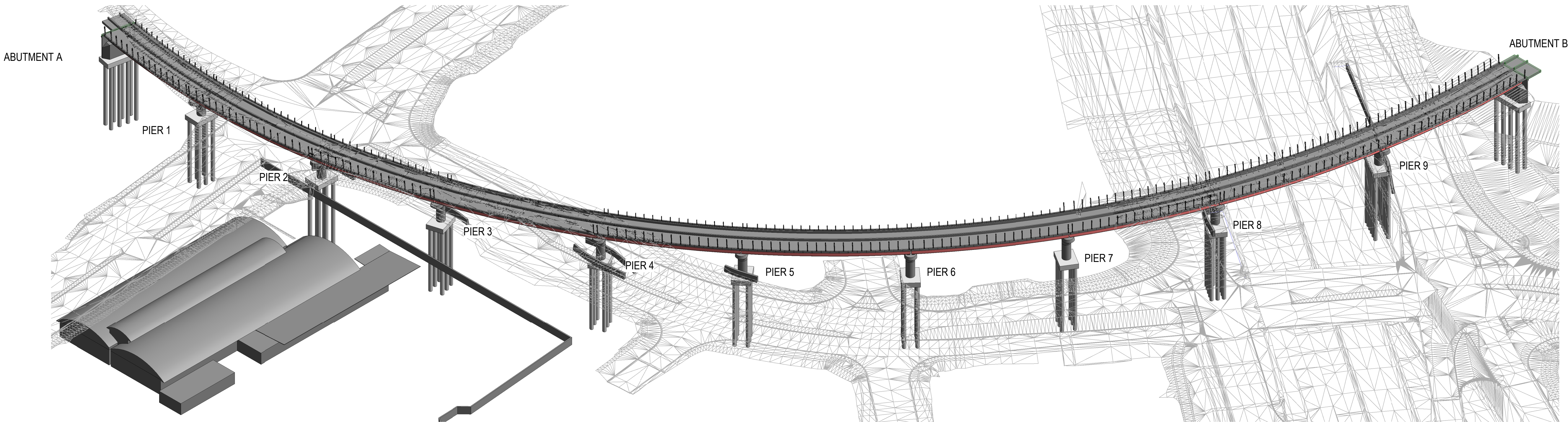
CS1-DRG-352102

SCALE(S): AS SHOWN
REVISION: B

SIZE: A1
SHEET: 1 OF XX

FLINDERS LINK PROJECT

VIADUCT - SUBSTRUCTURE



DRAWING INDEX

TITLE AND INDEX

SHEET	TITLE
CS1-DRG-359944	VIADUCT SUBSTRUCTURE - COVER SHEET
CS1-DRG-359945	VIADUCT SUBSTRUCTURE - GENERAL NOTES - SHEET 1
CS1-DRG-359946	VIADUCT SUBSTRUCTURE - GENERAL NOTES - SHEET 2

PLAN

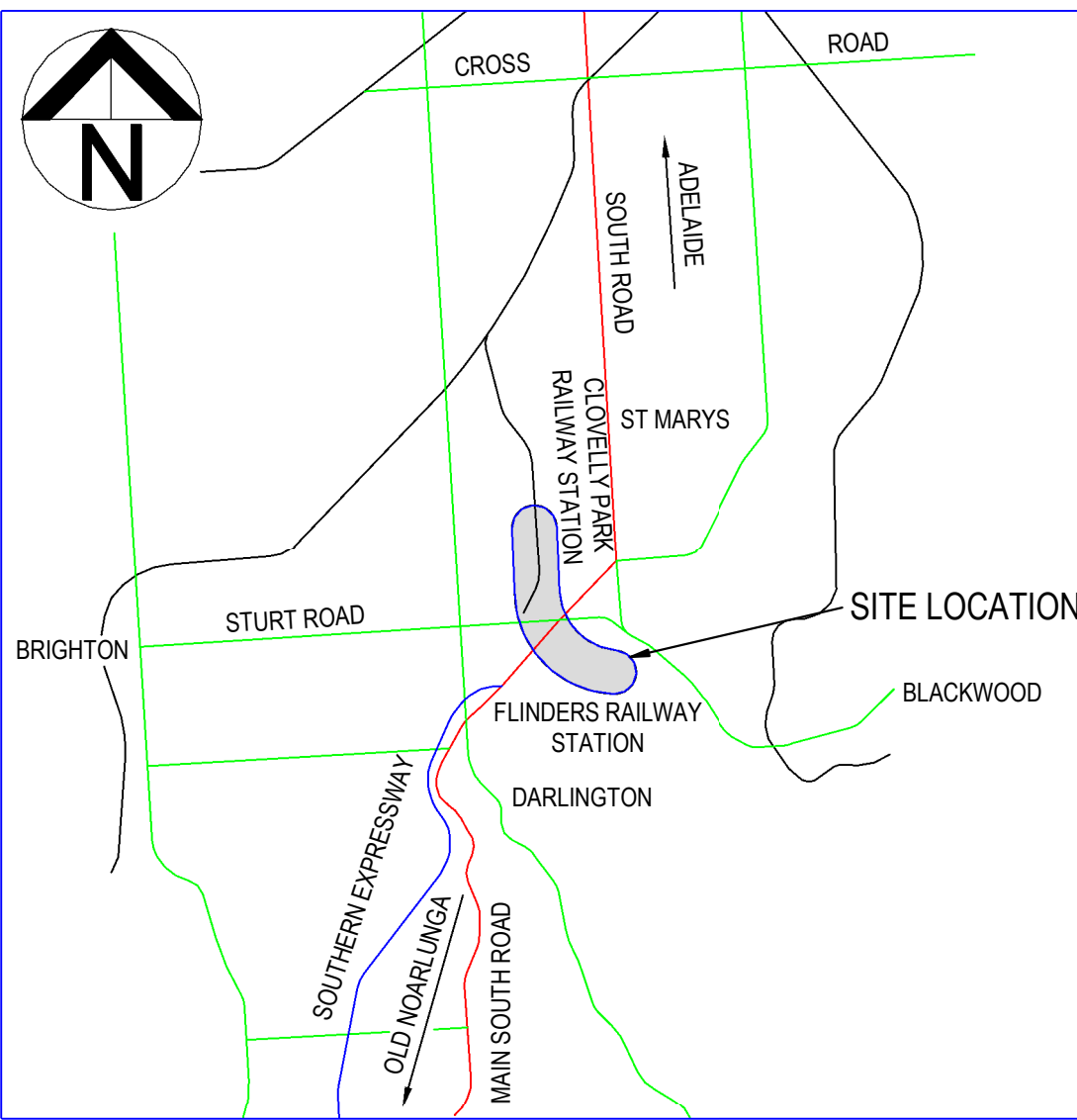
SHEET	TITLE
CS1-DRG-359948	GENERAL ARRANGEMENT - CHAINAGE 13138.44 - 13350.00
CS1-DRG-359949	GENERAL ARRANGEMENT - CHAINAGE 13350.00 - 13565.00

STAGING DETAILS

SHEET	TITLE
CS1-DRG-359952	CONSTRUCTION STAGING - SHEET 1

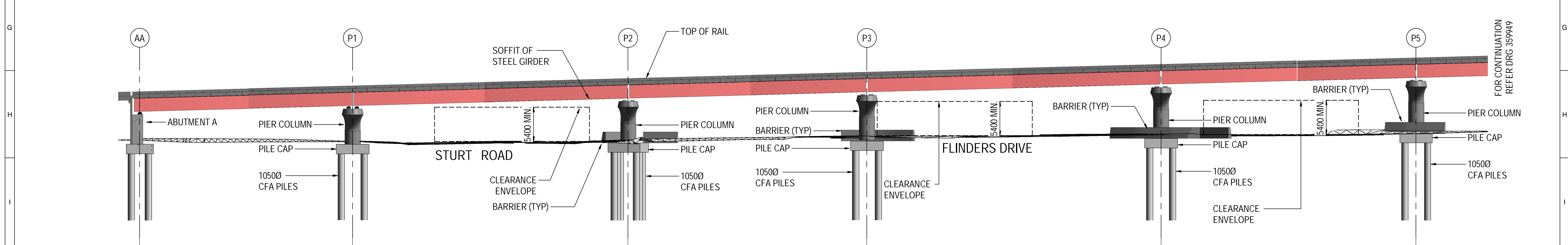
DETAILS

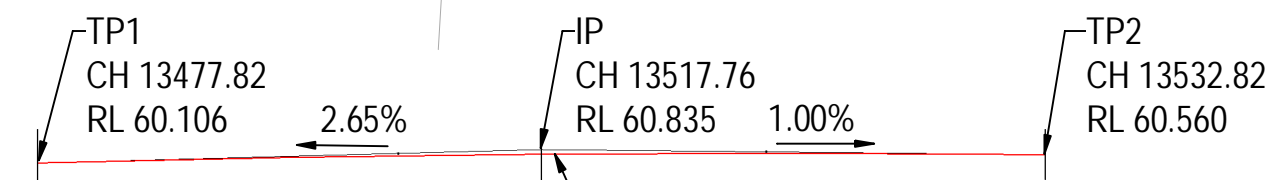
SHEET	TITLE
CS1-DRG-359956	PILE SCHEDULE AND DETAILS - SHEET 1
CS1-DRG-359957	PILE SCHEDULE AND DETAILS - SHEET 2
CS1-DRG-359960	PIERS 1 - 7 PILECAP CONCRETE - SHEET 1
CS1-DRG-359961	PIERS 1 - 7 PILECAP CONCRETE - SHEET 2
CS1-DRG-359962	PIERS 1 - 7 PILECAP CONCRETE - SHEET 3
CS1-DRG-359964	PIERS 1 - 7 PILECAP REINFORCEMENT - SHEET 1
CS1-DRG-359967	PIER 8 PILECAP CONCRETE - SHEET 1
CS1-DRG-359968	PIER 8 PILECAP CONCRETE - SHEET 2
CS1-DRG-359970	PIER 8 PILECAP REINFORCEMENT - SHEET 1
CS1-DRG-359973	PIER 9 PILECAP CONCRETE - SHEET 1
CS1-DRG-359974	PIER 9 PILECAP CONCRETE - SHEET 2
CS1-DRG-359976	PIER 9 PILECAP REINFORCEMENT - SHEET 1
CS1-DRG-359977	PIER 9 PILECAP REINFORCEMENT - SHEET 2
CS1-DRG-359979	TYPICAL PIER CONCRETE - SHEET 1
CS1-DRG-359983	TYPICAL PIER REINFORCEMENT - SHEET 1
CS1-DRG-359994	BAR SHAPES DIAGRAM



LOCALITY PLAN

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--





IP VERTICAL ALIGNMENT DIAGRAM



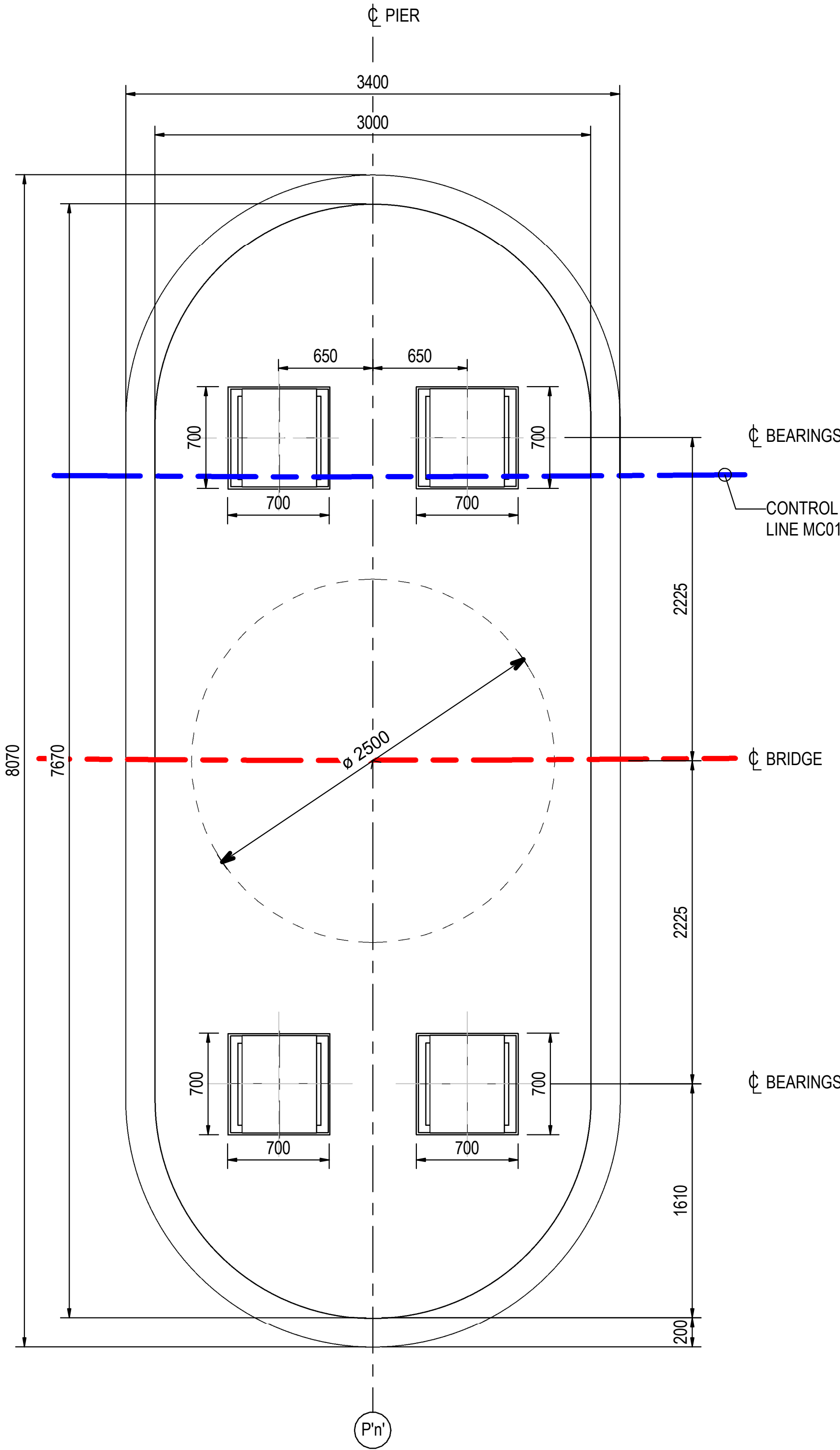
A	ISSUE FOR 30% REVIEW	-	-	-	-	13.08.18
EV	DESCRIPTION	DRN	DSGN	CHK	APRV	DATE

1:300 3000 0 3000 6000 9000 12000 15000mm

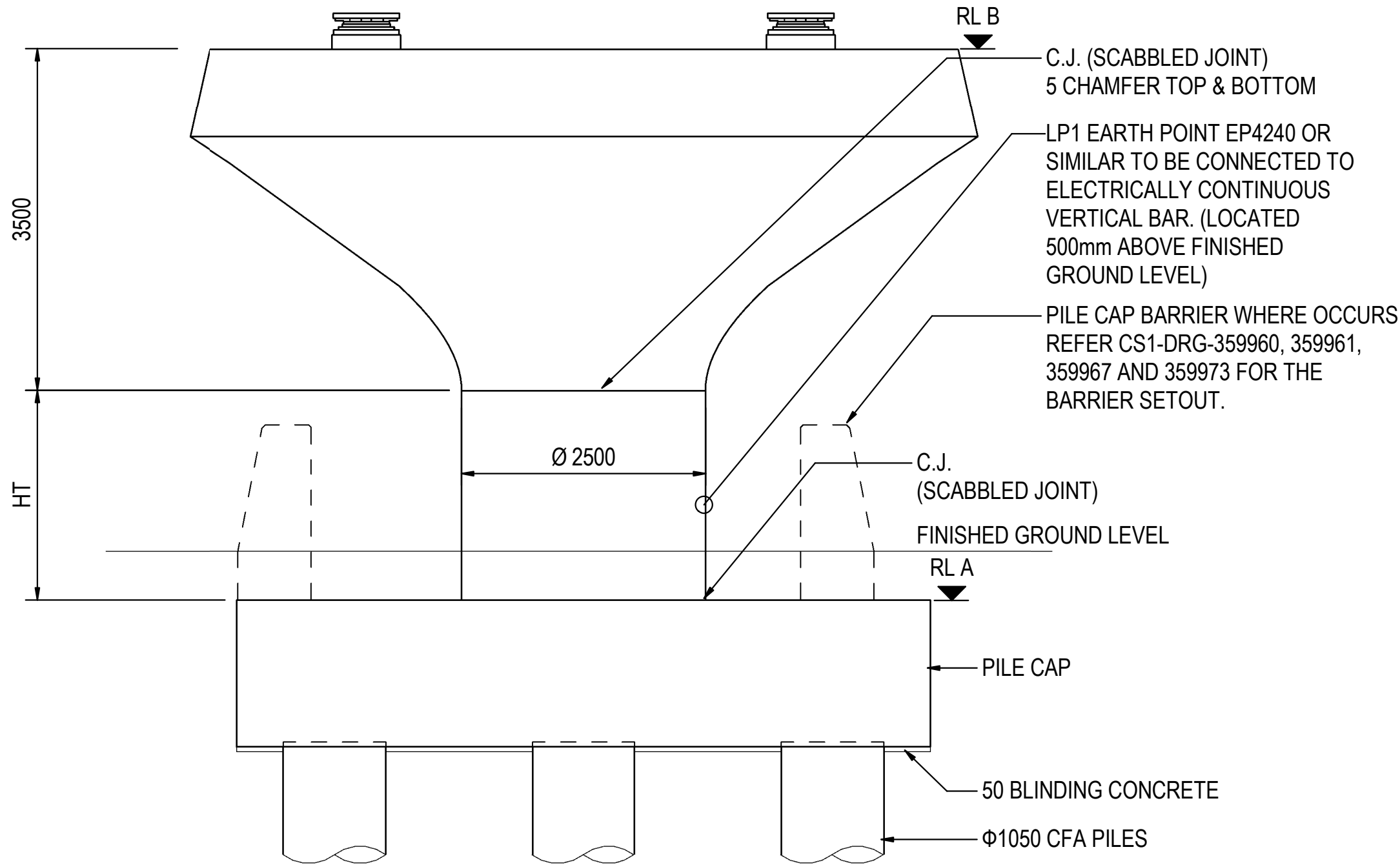
NOTED: 16/08/2018 2:44:29 PM

- NOTES:
- REFER CSI-DRG-359945 AND CSI-DRG-359946 FOR GENERAL NOTES.
 - REFER CS1-DRG-359946 FOR EARTHING AND BONDING NOTES.

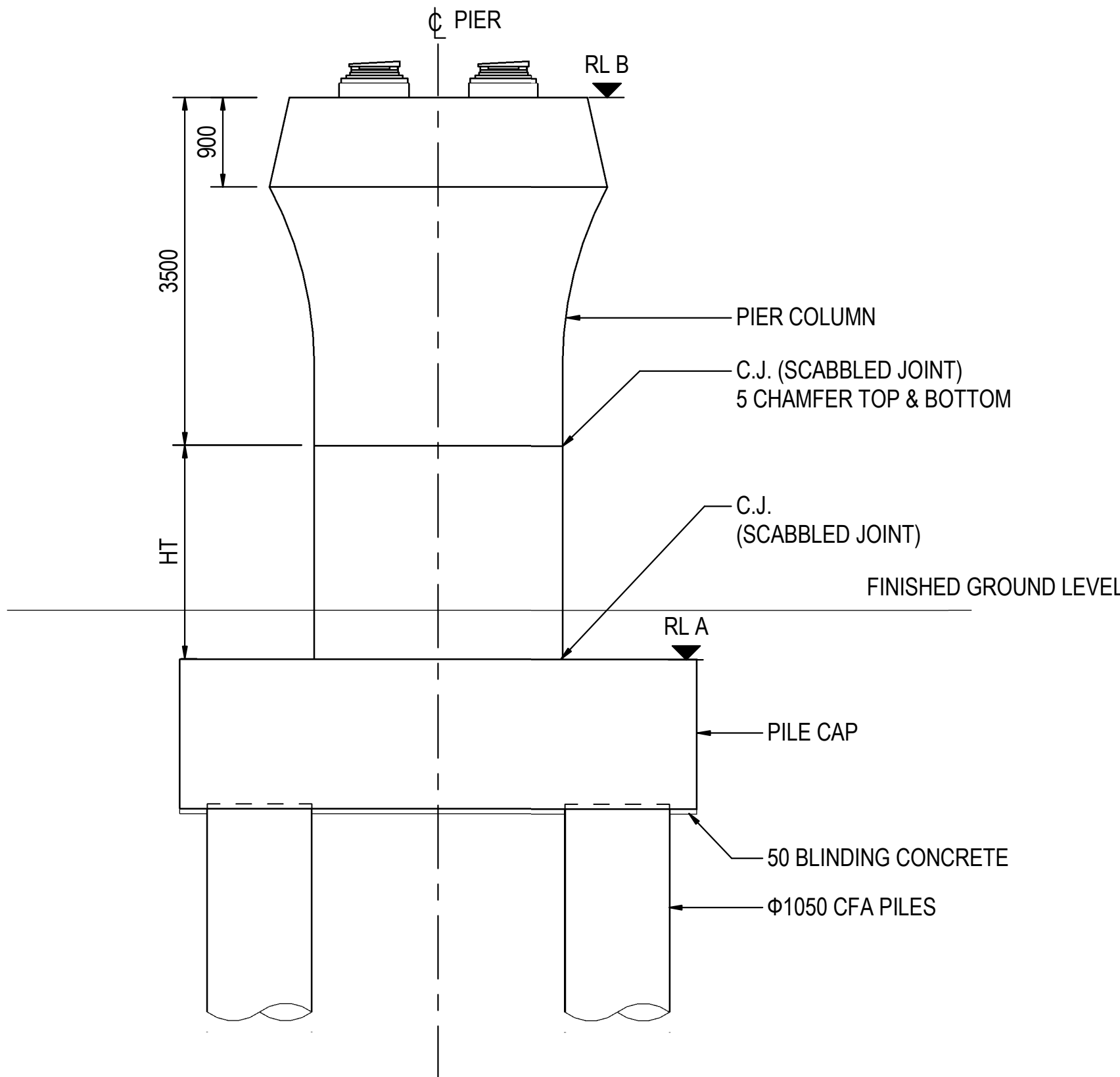
PIER SCHEDULE				
PIER No.	RL A (m)	RL B (m)	HEIGHT (m)	HT (m)
PIER 1	42.98	48.63	5.65	2.15
PIER 2	43.17	49.82	6.65	3.15
PIER 3	43.66	50.76	7.10	3.60
PIER 4	43.66	52.01	8.35	4.85
PIER 5	44.78	53.03	8.25	4.75
PIER 6	45.40	53.95	8.55	5.05
PIER 7	46.89	55.34	8.45	4.95
PIER 8	49.04	56.41	7.37	3.87
PIER 9	51.09	57.26	6.17	2.67



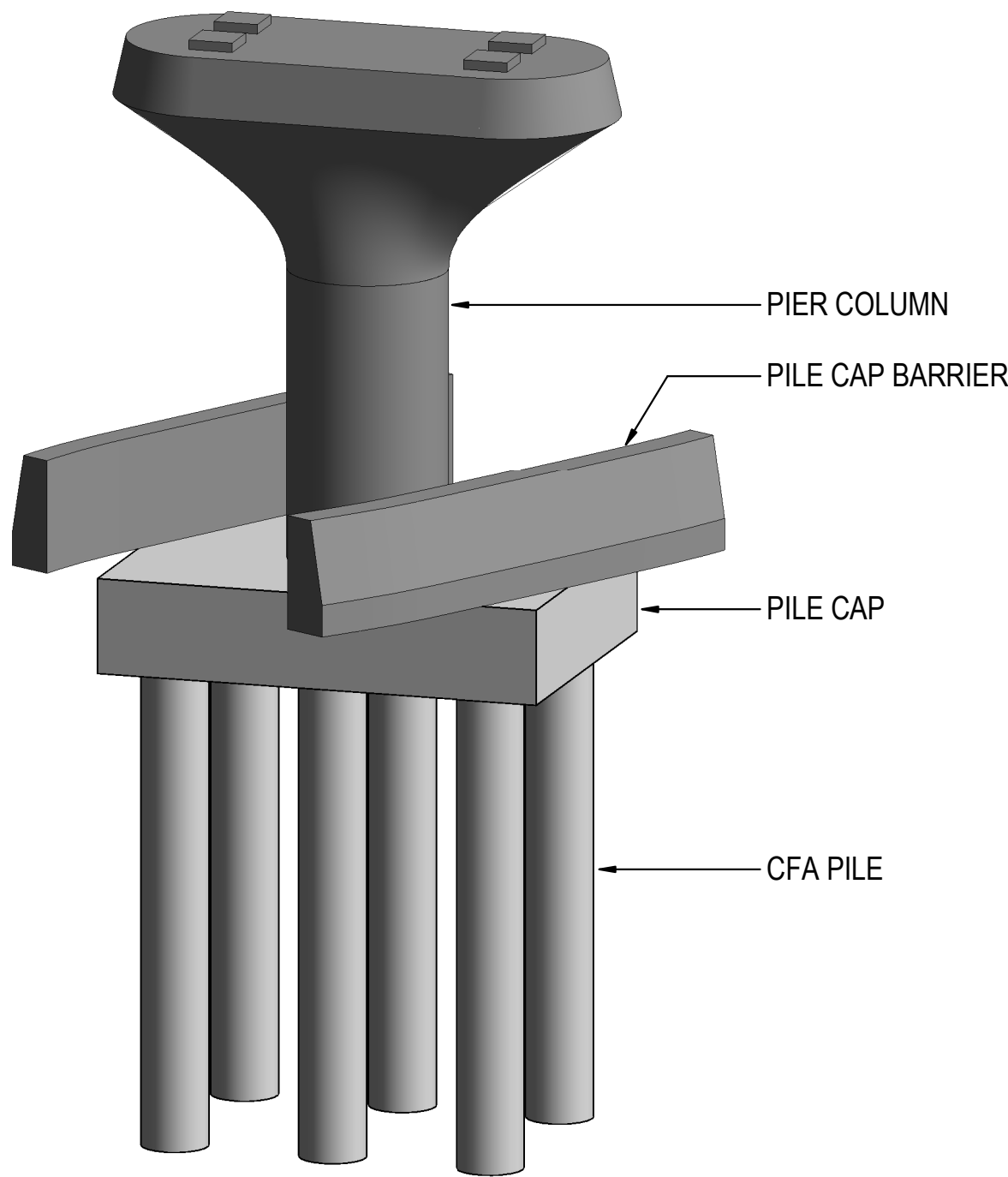
TYPICAL PIER PLAN
SCALE 1 : 25



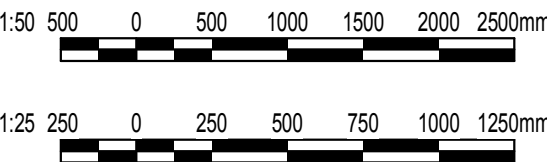
TYPICAL PIER ELEVATION
SCALE 1 : 50





TYPICAL PIER SIDE ELEVATION
SCALE 1 : 50



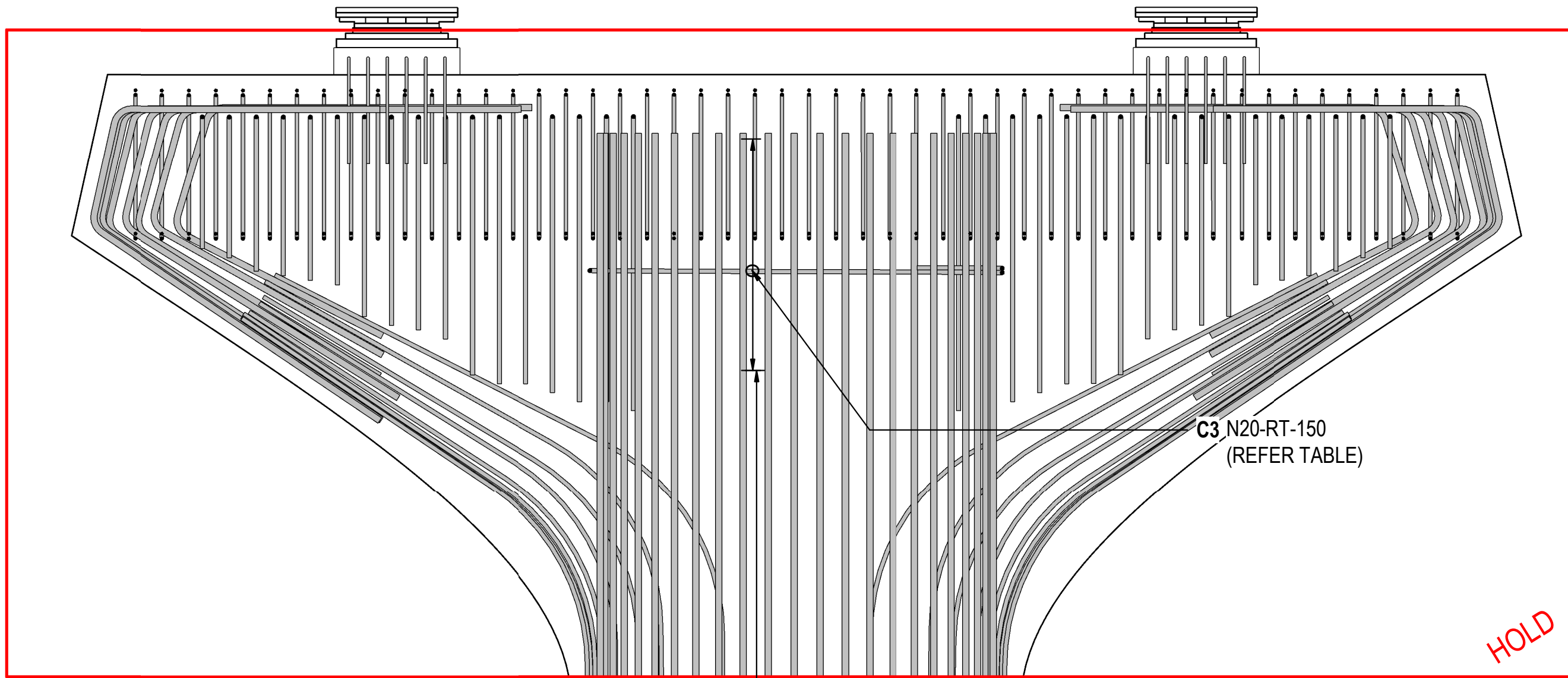
3D VIEW OF PIER



										<div>NOT FOR CONSTRUCTION</div> <div><div>RDP31 - VIADUCT - SUBSTRUCTURE</div><div><div>GATEWAY SOUTH</div><div></div></div><div>INDEX SHEET REF: CS1-DRG-359944</div></div> <div>DRAFTING CHECK: - 100 MILLIMETRES ON ORIGINAL DRAWING</div> <div>ORIGINATE DESIGN: - 100 MILLIMETRES ON ORIGINAL DRAWING</div> <div>INDEPENDENT CHECK: - 100 MILLIMETRES ON ORIGINAL DRAWING</div> <div>DESIGNER APPROVAL: A.SALIH 13.08.18</div> <div>PROJECT APPROVAL: W.KING 13.08.18</div> <div>DATE: 13.08.18</div>										<div>DESIGNED: FLD</div> <div>DRAFTED: FLD</div> <div>CHECKED: FLD</div> <div>APPROVED: -</div> <div>TITLE: -</div> <div>DATE: -</div>										<div>FLINDERS LINE</div> <div>VIADUCT - SUBSTRUCTURE</div> <div>TYPICAL PIER CONCRETE - SHEET 1</div> <div>DETAILS</div>										<div><div>Government of South Australia</div><div>Department of Planning, Transport and Infrastructure</div></div> <div>CS1-DRG-359979</div> <div>SCALE(S): As indicated</div> <div>REVISION: A</div> <div>SIZE: A1</div> <div>SHEET: XX OF XX</div>																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
A ISSUE FOR 30% REVIEW																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											

NOTES:

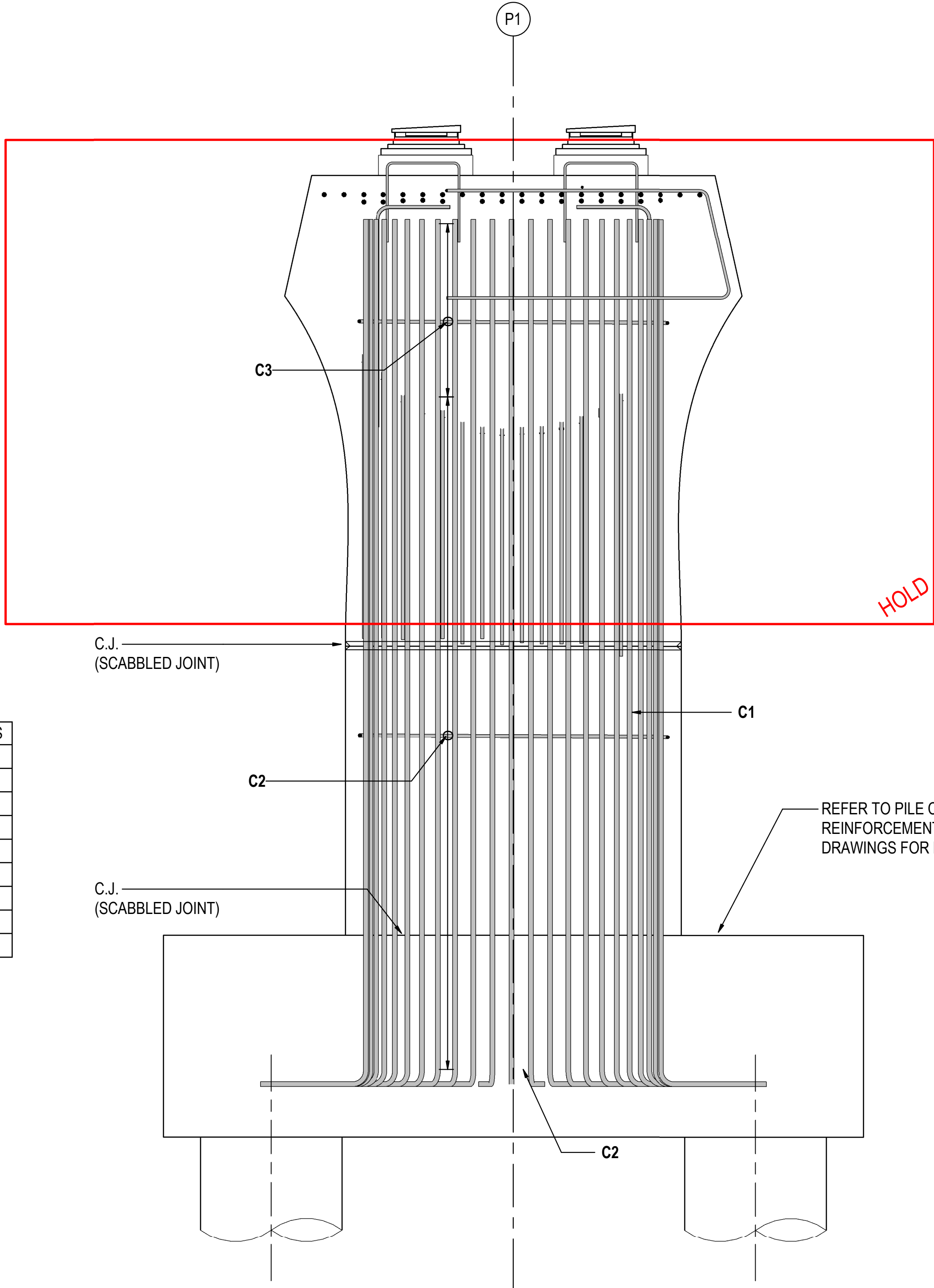
1. REFER CSI-DRG-359945 AND CSI-DRG-359946 FOR GENERAL NOTES.
2. REFER CS1-DRG-359946 FOR EARTHING AND BONDING NOTES.



NOTE:
PROVIDE GALVANISED BARS AND
LIGATURES (C1, C2 & C3)
FOR PIERS 8 AND 9.

TYPICAL PIER REINFORCEMENT ELEVATION
SCALE 1 : 25

PIER NUMBER	NO. OF C3 BARS
PIER 1	6
PIER 2	11
PIER 3	16
PIER 4	21
PIER 5	26
PIER 6	26
PIER 7	24
PIER 8	17
PIER 9	9



TYPICAL PIER REINFORCEMENT SIDE ELEVATION
SCALE 1 : 25

REV	DESCRIPTION	DRN	DSGN	CHK	APRV	DATE
A	ISSUE FOR 30% REVIEW	-	-	-	-	13.08.18

NOT FOR CONSTRUCTION

RDP31 - VIADUCT - SUBSTRUCTURE

GATEWAY SOUTH

INDEX SHEET REF: CS1-DRG-359944

DRAFTING CHECK	ORIGINATED/DESIGN	INDEPENDENT CHECK	TECHNICAL APPROVAL	PROJECT APPROVAL	DATE
-	-	-	A.SALIH	W.KING	13.08.18

DESIGNED: FLD
DRAFTED: FLD
CHECKED: FLD
APPROVED: -

TITLE: -
DATE: -

FLINDERS LINE
VIADUCT - SUBSTRUCTURE
TYPICAL PIER REINFORCEMENT - SHEET 1

DETAILS

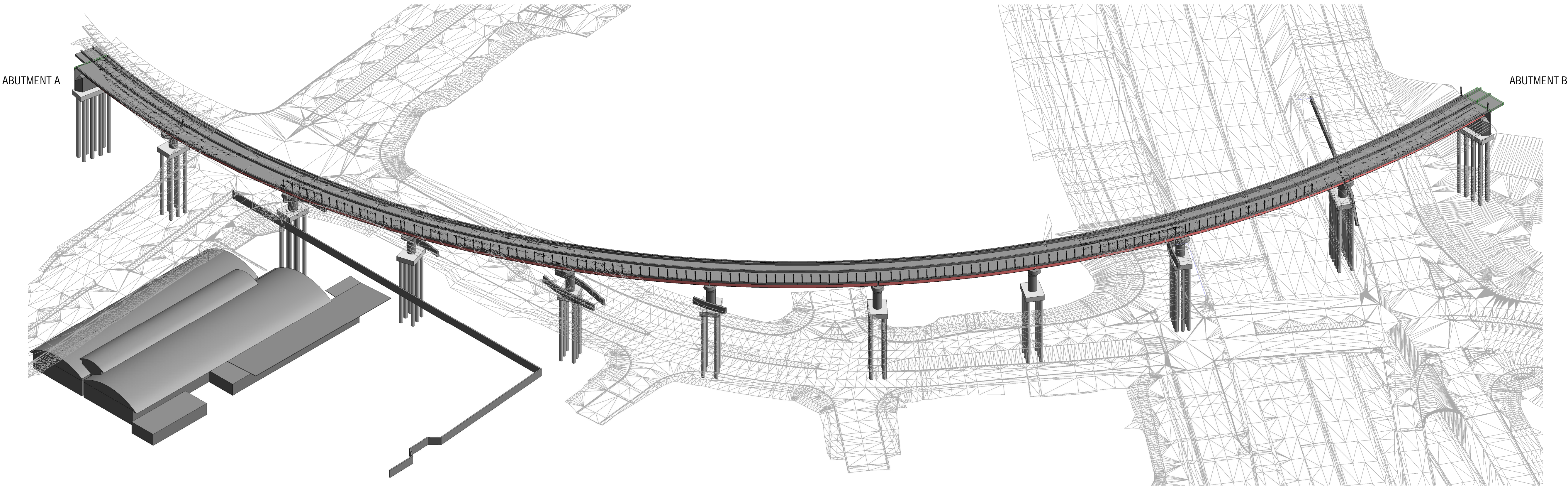
Government of South Australia
Department of Planning,
Transport and Infrastructure

CS1-DRG-359983

SCALE(S): As indicated	SIZE: A1
REVISION: A	SHEET: XX OF XX

FLINDERS LINK PROJECT

VIADUCT - SUPERSTRUCTURE



TITLE AND INDEX

SHEET	TITLE
CS1-DRG-360006	VIADUCT SUPERSTRUCTURE - COVER SHEET
CS1-DRG-360007	VIADUCT SUPERSTRUCTURE - GENERAL NOTES - SHEET 1
CS1-DRG-360008	VIADUCT SUPERSTRUCTURE - GENERAL NOTES - SHEET 2

PLAN

SHEET	TITLE
CS1-DRG-360010	GENERAL ARRANGEMENT - MC01 CH 13138.44 - 13350.00
CS1-DRG-360011	GENERAL ARRANGEMENT - MC01 CH 13350.00 - 13565.00
CS1-DRG-360012	GENERAL ARRANGEMENT - SHEET 1
CS1-DRG-360013	GENERAL ARRANGEMENT - SHEET 2

STAGING DETAILS

SHEET	TITLE
CS1-DRG-360018	CONSTRUCTION STAGING - SHEET 1

BEARING DETAILS

SHEET	TITLE
CS1-DRG-360022	BEARING SCHEDULE AND SETOUT - SHEET 1
CS1-DRG-360023	BEARING SCHEDULE AND SETOUT - SHEET 2
CS1-DRG-360024	BEARING SCHEDULE AND SETOUT - SHEET 3

GIRDER PLAN

SHEET	TITLE
CS1-DRG-360027	STEEL GIRDER LAYOUT - MC01 CH 13138.44 - 13350.00
CS1-DRG-360028	STEEL GIRDER LAYOUT - MC01 CH 13350.00 - 13565.00

GIRDER DETAILS

SHEET	TITLE
CS1-DRG-360032	GIRDER DETAILS - SEGMENT 1
CS1-DRG-360033	GIRDER DETAILS - SEGMENT 2
CS1-DRG-360034	GIRDER DETAILS - SEGMENT 3
CS1-DRG-360035	GIRDER DETAILS - SEGMENT 4
CS1-DRG-360036	GIRDER DETAILS - SEGMENT 5
CS1-DRG-360037	GIRDER DETAILS - SEGMENT 6
CS1-DRG-360038	GIRDER DETAILS - SEGMENT 7
CS1-DRG-360039	GIRDER DETAILS - SEGMENT 8
CS1-DRG-360040	GIRDER DETAILS - SEGMENT 9
CS1-DRG-360041	GIRDER DETAILS - SEGMENT 10
CS1-DRG-360042	STEEL GIRDER - TYPICAL DETAILS - SHEET 1
CS1-DRG-360043	STEEL GIRDER - TYPICAL DETAILS - SHEET 2
CS1-DRG-360044	STEEL GIRDER - TYPICAL DETAILS - SHEET 3
CS1-DRG-360045	STEEL GIRDER - TYPICAL DETAILS - SHEET 4
CS1-DRG-360046	STEEL GIRDER - TYPICAL DETAILS - SHEET 5
CS1-DRG-360047	STEEL GIRDER - TYPICAL DETAILS - SHEET 6

PRECAST PLAN

SHEET	TITLE
CS1-DRG-360054	PRECAST DECK PANEL PLAN - MC01 CH 13138.44 - 13300.00
CS1-DRG-360055	PRECAST DECK PANEL PLAN - MC01 CH 13300.00 - 13450.00
CS1-DRG-360056	PRECAST DECK PANEL PLAN - MC01 CH 13450.00 - 13565.00

PRECAST DETAILS

SHEET	TITLE
CS1-DRG-360059	PRECAST DECK PANEL - CONCRETE - SHEET 1
CS1-DRG-360060	PRECAST DECK PANEL - CONCRETE - SHEET 2
CS1-DRG-360061	PRECAST DECK PANEL - CONCRETE - SHEET 3
CS1-DRG-360062	PRECAST DECK PANEL - CONCRETE - SHEET 4
CS1-DRG-360063	PRECAST DECK PANEL - CONCRETE - SHEET 5
CS1-DRG-360064	PRECAST DECK PANEL - CONCRETE - SHEET 6
CS1-DRG-360065	PRECAST DECK PANEL - CONCRETE - SHEET 7
CS1-DRG-360069	PRECAST DECK PANEL - REINFORCEMENT - SHEET 1

DECK PLAN

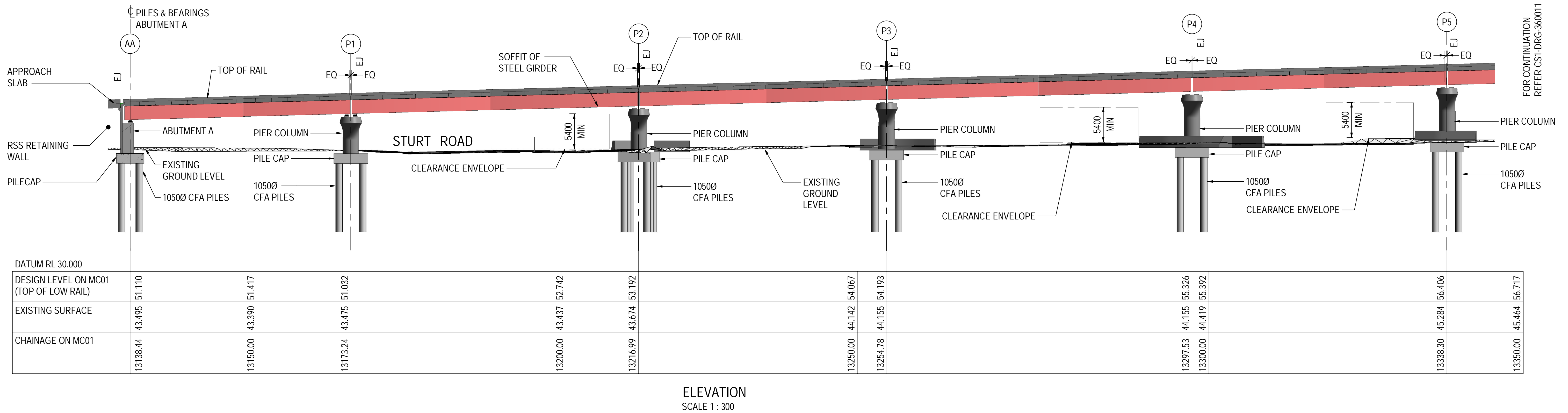
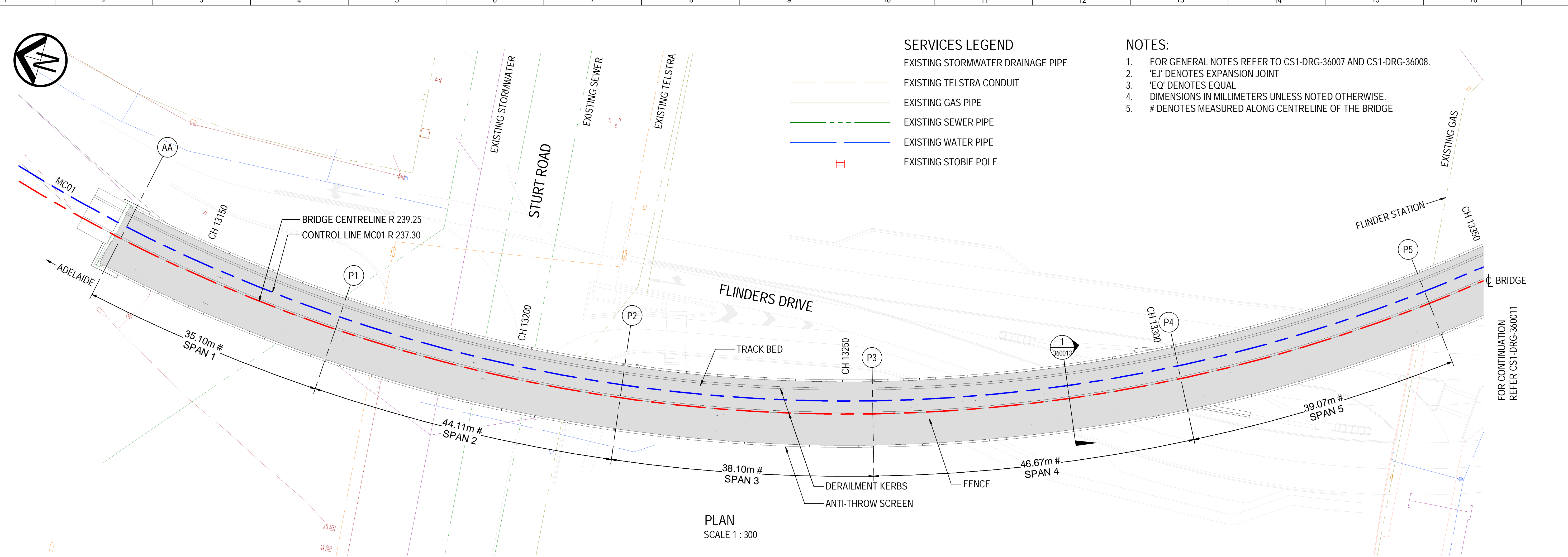
SHEET	TITLE
CS1-DRG-360074	DECK CONCRETE PLAN - MC01 CH 13138.44 - 13300.00
CS1-DRG-360075	DECK CONCRETE PLAN - MC01 CH 13300.00 - 13450.00
CS1-DRG-360076	DECK CONCRETE PLAN - MC01 CH 13450.00 - 13565.00
CS1-DRG-360077	DECK CONCRETE PLAN - SHEET 4
CS1-DRG-360080	DECK - REINFORCEMENT - MC01 CH 13138.44 - 13300.00
CS1-DRG-360081	DECK - REINFORCEMENT - MC01 CH 13300.00 - 13450.00
CS1-DRG-360082	DECK - REINFORCEMENT - MC01 CH 13450.00 - 13565.00
CS1-DRG-360086	TRACK BED - CONCRETE - MC01 CH 13138.44 - 13300.00
CS1-DRG-360087	TRACK BED - CONCRETE - MC01 CH 13300.00 - 13450.00
CS1-DRG-360088	TRACK BED - CONCRETE - MC01 CH 13450.00 - 13565.00
CS1-DRG-360092	TRACK BED - REINFORCEMENT - MC01 CH 13138.44 - 13300.00
CS1-DRG-360093	TRACK BED - REINFORCEMENT - MC01 CH 13300.00 - 13450.00
CS1-DRG-360094	TRACK BED - REINFORCEMENT - MC01 CH 13450.00 - 13565.00

DETAILS

SHEET	TITLE
CS1-DRG-360098	EXPANSION JOINT - SHEET 1
CS1-DRG-360099	EXPANSION JOINT - SHEET 2
CS1-DRG-360103	DECK DRAINAGE DETAILS - SHEET 1
CS1-DRG-360104	DECK DRAINAGE DETAILS - SHEET 2
CS1-DRG-360107	DECK WATERPROOFING - SHEET 1
CS1-DRG-360108	DECK WATERPROOFING - SHEET 2
CS1-DRG-360109	DECK WATERPROOFING - SHEET 3
CS1-DRG-360110	DECK WATERPROOFING - SHEET 4
CS1-DRG-360113	ANTI-THROW SCREENS - SHEET 1
CS1-DRG-360114	ANTI-THROW SCREENS - SHEET 2
CS1-DRG-360115	ANTI-THROW SCREENS - SHEET 3
CS1-DRG-360116	ANTI-THROW SCREENS - SHEET 4
CS1-DRG-360117	ANTI-THROW SCREENS - SHEET 5
CS1-DRG-360118	ARCHITECTURAL SCREENS STEELWORK - SHEET 1
CS1-DRG-360120	FENCE AND GATE DETAILS - SHEET 1
CS1-DRG-360125	SERVICES SUPPORT DETAILS - SHEET 1
CS1-DRG-360126	SERVICES SUPPORT DETAILS - SHEET 2
CS1-DRG-360132	BAR SHAPES DIAGRAM

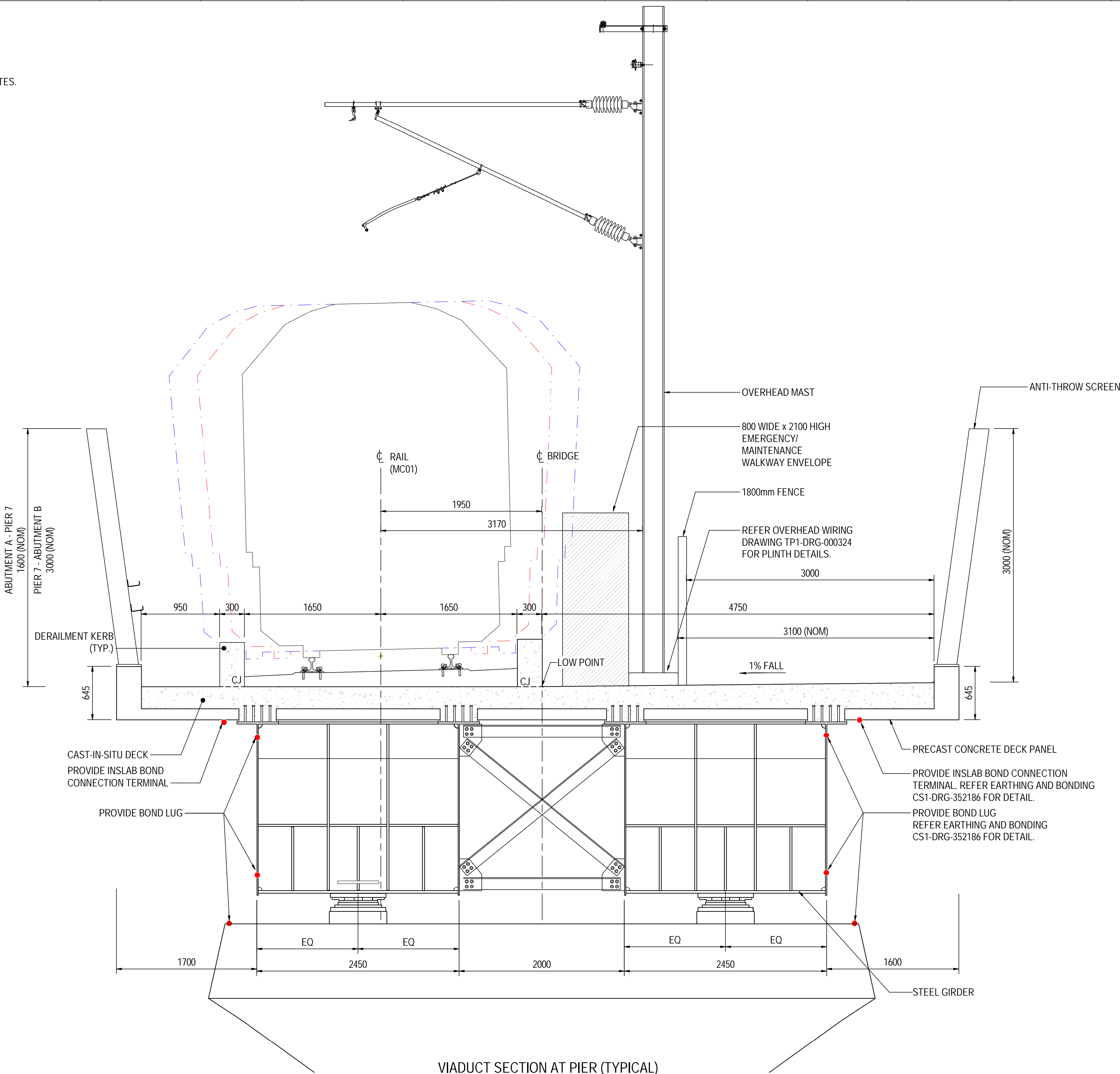
HOLD

HOLD

[illegible]

NOTES:

- 1. REFER TO CS1-DRG-360007 FOR GENERAL NOTES .
- 2. REFER TO CS1-DRG-360027 FOR GIRDER BONDING DETAIL.
- 3. REFER TO CS1-DRG-360008 FOR EARTHING AND BONDING NOTES.



VIADUCT SECTION AT PIER (TYPICAL)
SCALE 1 : 25



REV	DESCRIPTION	DRN	DSGN	CHK	APRV	DATE
A	ISSUE FOR 30% REVIEW	-	-	-	-	22.08.18

NOT FOR CONSTRUCTION	
GATEWAY SOUTH	
INDEX SHEET REF: CS1-DRG-360006	
TECHNICAL APPROVAL A.SALIH	PROJECT APPROVAL W.KING
DATE: 22.08.18	
100 MILLIMETRES ON ORIGINAL DRAWING	

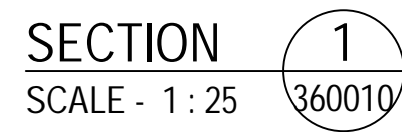
DESIGNED: FLD	FLINDERS LINE
DRAFTED: FLD	VIADUCT - SUPERSTRUCTURE
CHECKED: FLD	GENERAL ARRANGEMENT - SHEET 1
APPROVED: -	SECTION

SCALE(S): 1 : 25	SIZE: A1
REVISION: A	SHEET: XX OF XX

Government of South Australia Department of Planning, Transport and Infrastructure	
CS1-DRG-360012	
SCALE(S): 1 : 25	SIZE: A1
REVISION: A	SHEET: XX OF XX



PLOTTED: 22/08/2018 2:03:12 PM


1. REFER TO CS1-DRG-360007 FOR GENERAL NOTES .
2. REFER TO CS1-DRG-360027 FOR GIRDER BONDING DETAIL.
3. REFER TO CS1-DRG-360008 FOR EARTHING AND BONDING NOTES.



CS1-DRG-360013

SCALE(S): 1 : 25	SIZE: A1
REVISION: A	SHEET: XX OF XX

NOT FOR CONSTRUCTION			RDP32 - VIADUCT - SUPER STRUCTURE			DESIGNED: FLD	
						DRAFTED: FLD	
						CHECKED: FLD	
						APPROVED: -	
INDEX SHEET REF: CS1-DRG-360006							
DRAWING CHECK:	ORIGINATE DESIGN:	INDEPENDENT CHECK:	FIELD APPROVAL: A SAUJI	PROJECT APPROVAL: WORKING	DATE:	22.08.18	TITLE:
= 100 MILLIMETRES ON ORIGINAL DRAWING							DATE: -
							TITLE: -



Government of South Australia
Department of Planning,
Transport and Infrastructure

CS1-DRG-360013

SCALE(S): 1 : 25	SIZE: A1
REVISION: A	SHEET: XX OF XX

3



Flinders Link Detailed Design

Gateway South JV

Crime Prevention Through Environmental Design (CPTED) Report

Document No. | A

19 June 2018



Flinders Link Detailed Design

Project No: IW162000
Document Title: CPTED Report
Document No.: 50828REP01
Revision: A
Date: 19 June 2018
Project Director: Simon Kokar
Design Manager: Daniel Richter
Author: Grant Croft – MasterPlan SA Pty Ltd

Document History and Status

Revision	Date	Description	By	Review	Approved
A	23 April 2018	Draft CPTED Report	Grant Croft		
B	10 May 2018	Review of Draft CPTED Report	Daniel Richter		
C	14 May 2018	Updated CPTED Report	Grant Croft		
D	29 May 2018	Updated CPTED Report	Grant Croft		
E	1 June 2018	Updated CPTED Report	Grant Croft		
F	18 June 2018	Updated CPTED Report.	Grant Croft		

Contents

1.	Introduction.....	2
1.1	Project.....	2
1.2	Scope.....	2
2.	Introduction.....	3
2.1	What is CPTED	3
2.2	Guiding Principles of CPTED	3
2.2.1	Surveillance	3
2.2.2	Access Control	3
2.2.3	Territorial Reinforcement.....	4
2.2.4	Space Management	4
3.	Stakeholder Consultation.....	5
3.1	Sturt Police Station	5
3.2	SAPOL.....	5
3.3	Neighbourhood Watch.....	5
4.	Crime Risk Assessment	6
4.1	Definition of Crime Risk	6
4.2	Crime Statistics / Trends	6
4.3	Crime Risk Identification.....	7
5.	Assessment Against CPTED Guiding Principles.....	9
5.1	Surveillance	9
5.1.2	Sightlines Along Key Pedestrian and Cycling Routes and Access Points	11
5.1.5	Landscaping	13
5.2	Access Control	14
5.2.2	Design to Attract	16
5.2.4	Separation and protection of pedestrians from vehicles	16
5.3	Territorial Reinforcement.....	16
5.3.1	Design of Space to Encourage Ownership and Responsibility	17
5.3.2	Design of Space to Clearly Define Public and Private / Restricted Access	18
5.4	Space Management	18
5.4.2	Durability of External Materials, Finishes and Fixtures	19
6.	Summary	20

APPENDIX A – Architectural Drawings

APPENDIX B – Lighting Plan Drawings

APPENDIX C – CCTV Camera Plan Drawings

APPENDIX D – Landscaping Plan/s

Important Note about your Report

The sole purpose of this report and the associated services performed by Jacobs Group (Australia) Pty Ltd is to document the design in accordance with the scope of services set out in the contract between Jacobs Group (Australia) Pty Ltd and the joint venture of Fulton Hogan Construction Pty Ltd and Laing O'Rourke Australia Construction Pty Ltd trading as Gateway South ('the Client').

Jacobs derived the data in this report primarily from information provided by the Client, inspection of the Site by Jacobs, and with reference to relevant technical standards and guidelines available in the public domain. The passage of time, manifestation of latent conditions or impacts of future events may require further exploration at the site and subsequent data analysis, and re-evaluation of the findings, observations and conclusions expressed in this report.

In preparing this report, Jacobs has relied upon and presumed accurate certain information, (or absence thereof), relative to the Site provided by the Client and others identified herein. Except as otherwise stated in the report, Jacobs has not attempted to verify the accuracy or completeness of any such information.

The findings, observations and conclusions expressed by Jacobs in this report are not, and should not be considered, an opinion concerning the technical standards. Further, such data, findings, observations and conclusions are based solely upon site conditions and information supplied by the Client in existence at the time of the investigation.

The report has been prepared on behalf of and for the exclusive use of the Client, and is subject to and issued in connection with the provisions of the agreement between Jacobs and the Client, which permits the use of the document by the Principal for the purposes set out in the Contract Scope and Technical Requirements. Jacobs accepts no liability or responsibility whatsoever for or in respect of any use of the reliance upon this report by any third party.

1. Introduction

1.1 Project

The Flinders Link Project was announced by Federal and State Governments on 13 May 2016, with the two levels of government sharing equally the estimated \$85.5 million cost. The project comprises an extension of the Tonsley Rail Line to the Flinders Medical Centre, creating new connection to the health precinct and Flinders University, with a terminus at Flinders Station.

The primary elements are:

- rail viaduct providing a grade separated extension of the Tonsley Line;
- Flinders terminus station;
- integration with other transport modes:
 - shared path for cycling and walking access; and
 - bus connections on South Road.

1.2 Scope

Detailed within this report is our description of Crime Prevention Through Environmental Design (CPTED) and its guiding principles, identification of crime risk and crime statistics for the Bedford Park area, and assessment of the proposal against the guiding principles of CPTED. This report is to be read in conjunction with the 70% Design submission.

As part of the CPTED methodology, consultation with various project consultants, including the landscape architect, civil engineering team and project architect to gain an understanding of the consideration given to their design philosophy and they incorporated elements responding to the four guiding principles of CPTED into their design. In addition the South Australian Police (SAPOL) and the Neighbourhood Watch were consulted in order to obtain additional commentary from a law enforcement perspective, with a particular focus on the proposed layout from a crime risk perspective.

This report is to be read in conjunction with the following documentation:

- a full set of architectural drawings, attached as **Appendix A**;
- detailed lighting plans, attached as **Appendix B**;
- detailed CCTV camera location plans, attached as **Appendix C**; and
- a detailed landscaping plan, attached as **Appendix D**.

2. Introduction

Crime Prevention Through Environmental Design (CPTED) is guided by four (4) principles, which include:

- Surveillance;
- Access control;
- Territorial reinforcement; and
- Space management.

This report will detail the importance of CPTED in the design of public spaces, outline the four (4) guiding principles associated with its assessment, provide commentary from local law enforcement agencies and detail how the proposal is considered to satisfy the intent of these guiding principles.

2.1 What is CPTED

Crime Prevention Through Environmental Design, referred to herein as CPTED, is a multi-faceted approach to the design of public spaces in order to minimise and deter criminal behaviour. This is achieved through a range of design techniques including the provision of lighting, CCTV and improving the passive surveillance of space. When undertaking a review of any proposal it is important to view it through different angles, and this is done by utilising the four (4) guiding principles of CPTED. These principles are discussed in more detail below.

2.2 Guiding Principles of CPTED

There are four (4) guiding principles associated with CPTED, they include surveillance, access control, territorial reinforcement and space management. Details of each component is provided below.

2.2.1 Surveillance

Surveillance seeks to ensure that public spaces are designed to ensure maximum opportunities for the following:

- passive surveillance from adjacent buildings, public open spaces and roads;
- clear sightlines along key pedestrian and cycling routes and access points;
- effective lighting, not over lighting, to minimise 'blind spots';
- effective use of CCTV cameras; and
- appropriate landscaping to ensure it does not provide opportunities for potential offenders to hide or entrap victims.

2.2.2 Access Control

Access control seeks to ensure that public spaces are designed to ensure the following:

- design of spaces that direct people, as consequence of the design, which can be achieved in multiple ways, most commonly through the use of landscaping, fencing, lighting, seating or variations in paving treatments;
- the design of public spaces to attract and retain people rather than discouraging them, increasing opportunities for passive surveillance;
- restrict access to high-risk areas and assets; and
- use of bollards and / or other design elements to prevent vehicle access to pedestrian areas.

2.2.3 Territorial Reinforcement

Territorial reinforcement seeks to delineate spaces for specific uses, which can be achieved by ensuring the following:

- the design of public spaces encourages people to utilise the space and feel a sense of responsibility for its use and condition;
- design of public spaces that make a clear distinction between publicly accessible spaces and restricted / private access only areas;
- appropriate use of 'environmental markers' such as signage, variances in paving, lighting and fencing that defines the use of a space.

2.2.4 Space Management

Space management refers to the ongoing need to maintain the space to ensure it presents as an inviting place, this can be achieved by ensuring the following:

- public spaces are kept in a relatively clean and managed state;
- utilising materials, finishes and fixtures that are vandal resistant;
- utilising fixtures that are capable of being repaired relatively quickly; and
- implementation of an appropriate maintenance program is in place to maintain landscaping and lighting of pedestrian areas.

3. Stakeholder Consultation

An informal referral process was undertaken with local law enforcement agencies, including the Sturt Police Station, the South Australian Police (SAPOL) and the Warradale Neighbourhood Watch. The aim of this informal referral process was to seek guidance and experience from the very people who enforce the law, to better inform, advise and guide the design / layout of the proposed development.

3.1 Sturt Police Station

Crime statistics were obtained from the Sturt Police Station website, which are presented in **Section 4.2** of this report. These statistics are based on the month of February 2018 and the 6 month period from 1 July 2017 to 31 December 2017.

3.2 SAPOL

An informal referral to the South Australian Police (SAPOL) was made on 11 April 2018, with comments received on 18 April 2018. A summary of the comments received is provided below:

- ensure appropriate lighting within the walkways, stairways and station;
- comprehensive CCTV coverage;
- screening along the edge of the track to prevent pedestrians, passengers and cyclists from having sight into the Sturt Police Station;
- ensure landscaping materials do not include rocks / pebbles to avoid 'rock throwing' incidents;
- measures to prevent people entering the train tracks;
- measures to prevent people from jumping onto traffic from the shared use path;
- avoid using 'closed-in' infrastructure whereby people can hide behind;
- it would be beneficial once the development is complete to arrange an on-site meeting to discuss any areas that may need further consideration.

3.3 Neighbourhood Watch

The Warradale Neighbourhood Watch has been provided with a copy of the proposed plans for comment, however no response has yet been provided.

4. Crime Risk Assessment

Crime risk assessment is an important part of any CPTED report, as it is crucial to obtain an understanding of the likely types of crimes, in order to design to prevent and discourage them from occurring in the first place. Each development and space presents its own set of unique circumstances, based on a wide range of variables including, but not limited to:

- socio-economics of the immediate locality;
- nature of adjacent land uses (i.e. low density residential, commercial, industrial);
- level of existing passive surveillance (i.e. proximity to public roads and areas of high visibility); and
- presence of 'attractors' and 'enablers' within the built form that encourage and facilitate criminal behaviour, including large expanses of dense vegetation, prominence of solid structures which can be used to hide and conceal and areas with reduced line of sight from public areas to discourage anti-social and criminal behaviour.

4.1 Definition of Crime Risk

Crime risk assessment seeks to evaluate the likelihood / potential of crime within a specific area. This assessment includes utilising the most recent crime statistics for the local area, to determine the types of crime most prominent and likely, which is then used to inform the design and layout of public spaces. By way of example it might be found that instances of assault and anti-social behaviour are higher than other areas, and therefore focus should be turned to how best to manage and deter this kind of behaviour. Part of defining this risk is to seek advice and statistics from local law enforcement agencies as to the types and numbers of crime within a particular area.

4.2 Crime Statistics / Trends

Detailed in the tables below are the latest crime statistics, which have been obtained from the Sturt Police Station website. The statistics provided in the tables below are considered to be the most likely and relevant in context to the proposed development. There are two (2) tables, the first one illustrates recorded crimes within the month of February 2018, and the other over a 6 month period from 1 July 2017 to 31 December 2017.

Table 4.2.1: Bedford Park Crime Statistics for February 2018

Type of Offence	Number of Recorded Crimes in February 2018
Offences Against the Person	
Serious Assault resulting in injury	1
Serious Assault not resulting in injury	5
Common Assault	2
Threatening behaviour	1
Offences Against Property	
SCT – Non Residence	2
Theft from Motor Vehicle	5
Other theft	13
Other property damage and environmental	3
Graffiti	0
TOTAL	32

Table 4.2.2: Bedford Park Crime Statistics from 1 July 2017 to 31 December 2017

Type of Offence	Number of Recorded Crimes between 1 July 2017 and 31 December 2017
Offences Against the Person	
Serious Assault resulting in injury	0
Serious Assault not resulting in injury	11
Common Assault	10
Threatening behaviour	2
Offences Against Property	
SCT – Non Residence	0
Theft from Motor Vehicle	5
Other theft	23
Other property damage and environmental	7
Graffiti	1
TOTAL	59

Having regard to the statistics above, one can identify the three (3) main offences recorded are:

- serious assault not resulting injury;
- common assault; and
- other theft.

It is important to note when interpreting these statistics, that it is not possible to determine the exact location nor is it possible to determine if any of these crimes occurred at similar facilities such as the existing Tonsley Rail Station. What the statistics help indicate though is a picture and pattern of the types of crime prominent within a locality.

4.3 Crime Risk Identification

Having regard to the crime risk statistics for the Bedford Park area is a crucial component to obtaining a deeper understanding of the key crime risk areas that need to be taken into consideration when finalising the design and layout of the proposal. As indicated above, the specific crime risks identified / associated with the development include:

- theft from users of the plaza, station and covered walkways;
- assault;
- trespass onto restricted areas such as the train tracks; and
- damage to infrastructure and property.

It is important to note that crime statistics, whilst an important component, should not be the only identifier when it comes to understanding crime risk associated with a development. It is important to take a closer look at the specific components of a development, to identify possible attractors and enablers. In this instance the proposal seeks the construction of a shared use path which will run adjacent the rail line over Main South Road, a large open plaza / station area, and an expanse of blank concrete walls. These components present a range of opportunities for would be criminals if not managed and discouraged through appropriate design. These criminal and anti-social behaviours would likely include:

- enclosed and secluded areas that are screened from public view could encourage congregation of large groups, especially at night;
- track and train jumpers, if access is not restricted or inhibited;
- graffiti and vandalism of large blank walls, retaining walls and supporting infrastructure (i.e. lighting, seating, street furniture).

Having regard to the above, it is now important to identify the key physical areas and locations associated with the proposal that are considered to be of a high, medium to low level of risk, when it comes to the likelihood of crime and / or anti-social behaviour. In order to illustrate this a risk assessment matrix has been prepared, and is illustrated in Table 4.2.3 below.

Table 4.3.1: Risk Assessment Matrix

Level of Risk	Areas and Locations
High Level	<ul style="list-style-type: none"> • Rail infrastructure (i.e. tracks and associated equipment); • Pedestrian culvert link between Lynton Avenue and Birch Crescent; • Internal areas of shared use path over viaduct; • Stairwell to Main South Road; • Drainage area between existing carpark and retaining wall.
Medium Level	<ul style="list-style-type: none"> • Internal areas of elevated walkway; • Bike enclosure and equipment room; • Lift core access; • Pedestrian linkages to lift cores and stairwells; • Battered slopes adjacent stairwell and northern side of platform; • Station platform.
Low Level	<ul style="list-style-type: none"> • Open public plaza area; • Switchback ramp; • Access and egress points of shared use path and elevated walkway.

5. Assessment Against CPTED Guiding Principles

Having regard to the crime risk assessment undertaken above, a detailed discussion and assessment of the proposal has been undertaken against the four (4) guiding principles of CPTED, which are detailed in section 2.2 of this report. The assessment is provided below and should be read in conjunction with the plans and documentation attached.

5.1 Surveillance

The proposed development has been designed and sited to maximise opportunities for both passive and recorded surveillance, with a particular focus on the high to medium risk areas highlighted in the risk assessment matrix in Table 4.3.1 of this report.

This is achieved by creating an open plan urban environment that is predominantly void of large solid elements and obstacles, where practical, keeping in mind there are structural, architectural and infrastructure requirements with a project of this size that are unavoidable.

Extensive lighting and recorded surveillance through the installation of a CCTV camera network (refer to plans attached as **Appendix B** and **Appendix C**). Having regard to this, a detailed assessment of how the proposed development has evolved and been designed to ensure surveillance of the public spaces is maximised is detailed in the sections below.

5.1.1 Passive Surveillance from Adjacent Buildings, Public Open Spaces and Roads

The proposed development essentially seeks to relocate the existing Tonsley Railway Station to a section of land directly adjacent the Flinders University sports fields and Flinders Hospital carpark. This will result in substantial improvements to the passive surveillance of the public spaces, especially when compared to the existing layout of Tonsley Station, as illustrated in the pictures below.

Image 1: Existing Tonsley Station platform looking north.



Image 2: A pedestrian access point from the existing Tonsley Station.



As clearly illustrated by the images above, the current layout comprises dense and mature vegetation and the interface with adjacent streets and residential allotments, minimising visibility from other public spaces, and reducing opportunities for passive surveillance.

The proposed layout, inclusive of all design elements highlighted within the risk assessment matrix, has evolved to ensure the spaces are relatively open, allowing extensive and unobstructed views across the site, allowing users of the space sufficient time and space to make informed decisions as to how best to proceed if a threat is cited.

Further to this, the natural topography of the site and certain design elements, such as the elevated pedestrian walkway and shared use path, provide additional opportunities for increased levels of passive surveillance of the surrounding public spaces and associated infrastructure. Smaller design details such as glazing the front of all lifts, also provides an additional layer of surveillance.

Landscaping and placement of 'street' furniture within and surrounding the proposed development has been specifically considered, designed and located to ensure minimal impact to pedestrian sightlines and passive surveillance. The landscaping plan, ensures the height and density of plantings, in-particular along the battered slopes, were minimised reducing opportunities for concealment and improving pedestrian sightlines.

Furthermore, as will be discussed in later sections of this report, high risk areas identified within the risk assessment matrix have been appropriately considered, with extensive use of lighting, CCTV cameras and multiple vantage points ensuring a high level of visibility and deterrence for would be criminals and anti-social behaviour.

5.1.2 Sightlines Along Key Pedestrian and Cycling Routes and Access Points

The existing Tonsley Station does not provide sufficient sightlines along key pedestrian and cycling routes, nor key access points as illustrated in the images below. It should also be noted there is no defined pedestrian footpath along Lynton Avenue for patrons to use when accessing or egressing the station and therefore are forced onto a public road.

Image 3: Main pedestrian access point to the existing Tonsley Station.



Image 4: View of existing Tonsley Station platform as viewed from Lynton Avenue.



Having regard to this, the proposed development represents a substantial improvement on existing conditions, with sightlines along key pedestrian and cycling routes, inclusive of the switchback ramp, pedestrian culvert, shared use path over the viaduct and elevated walkway, substantially improved.

High to medium risk areas identified within the risk assessment matrix will have benefit of improved and extended sightlines, that are more open and readily visible from adjacent public spaces, void of large obtrusive structural elements (where possible), whilst also incorporating additional lighting and CCTV to ensure legitimate users have sufficient time and space to make informed decisions on how they wish to proceed should a risk be identified. Which leads into the other benefits of the proposed design, which provides users with multiple access points to utilise in the event they seek to avoid or escape a particular situation.

It should be acknowledged that, where practical, structural elements such as the supporting piers associated with the viaduct and elevated walkway, have been designed to minimise obstructions to sightlines, and opportunities for concealment. The eastern lift core was also relocated to ensure it was visible from Main South Road, whilst being setback far enough to avoid differential movement between structures.

5.1.3 Lighting

Attached to this report as **Appendix B**, are detailed lighting plans which illustrate the number and location of lighting within the project area. These plans clearly demonstrate there is a high, not excessive, level of lighting along all main cycling routes, pedestrian routes and access points, providing users with both a clear and defined path at during periods of low light. All areas identified as high to medium risk are considered to be appropriately lit, with additional light spill from adjacent street lighting near the switchback ramp and pedestrian culvert providing additional coverage.

The proposed lighting extends from the existing Tonsley Street Station, along the full extent of the shared use path, across the public plaza and station platform, down the set of stairs extending down to Main South Road and within the elevated walkway. The extent of this coverage provides legitimate users of the space with a high level of visibility, which provides people with more time and space to determine the best course of action should they gain sight of a situation, person and / or group they wish to avoid.

Maintenance of the lighting, in the instances globes need replacing, or damage has occurred, will be managed through the Department of Planning, Transport and Infrastructure (DPTI).

5.1.4 CCTV Cameras

The current station at Tonsley does not appear to have any CCTV camera coverage, which is often used as both a deterrent to potential criminals who run the increased chance of being caught, but also plays a significant role in providing law enforcement agencies with sufficient evidence should a crime or anti-social behaviour need to be investigated.

Plans attached as **Appendix C**, illustrate the number and location of CCTV cameras proposed, demonstrating extensive coverage across all design elements and areas, with particular regard to areas identified as high to medium risk areas, including the shared use path entrance, shared use path and elevated walkway.

Maintenance of the CCTV cameras, will be managed through the Department of Planning, Transport and Infrastructure (DPTI).

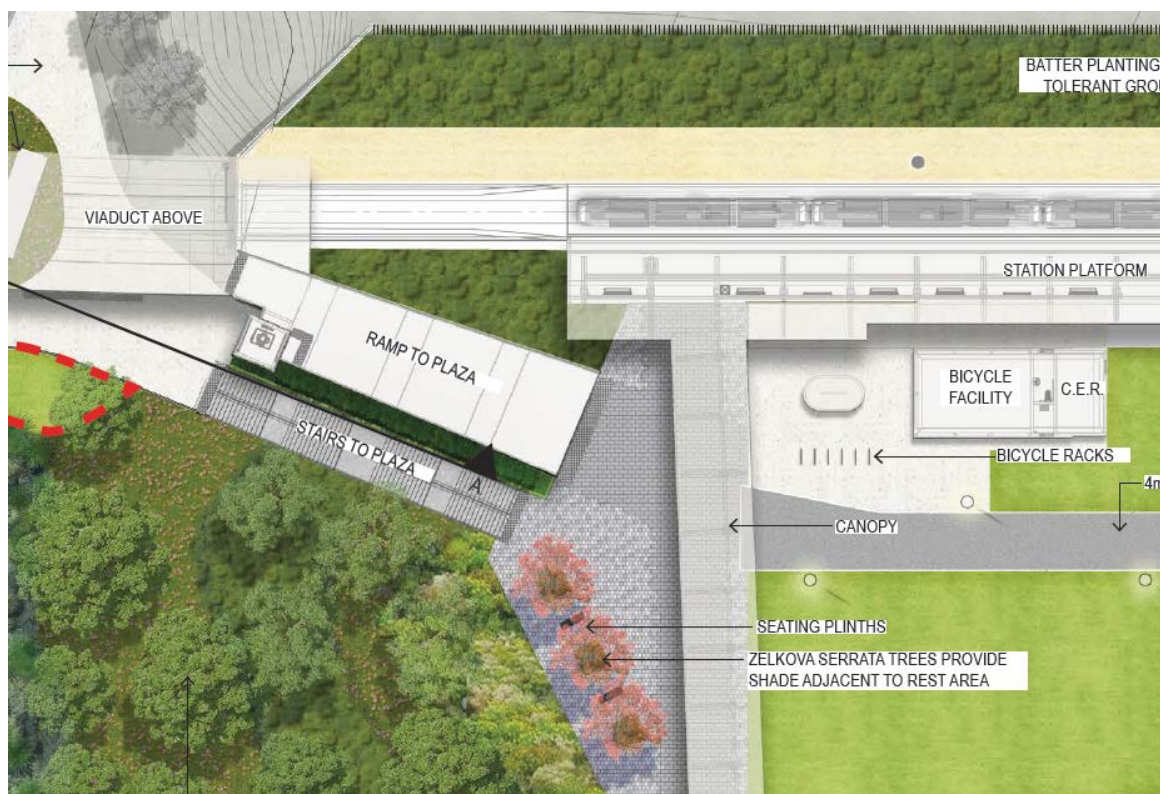
5.1.5 Landscaping

Currently views of the existing Tonsley Station from the adjacent road network and residents is substantially obstructed by dense and mature vegetation, as illustrated in **Images 3** and **4** above. The extent of this vegetation also provides opportunities for concealment of would be criminals.

Landscaping plans attached as **Appendix D**, illustrate the new plaza and station areas will comprise minimal areas of extensive and dense vegetation, as demonstrated in **Image 5** below. The only notable vegetation within this space is located adjacent the seating area, which will provide shading.

The proposed landscaping and location of public infrastructure such as seating and bicycle racks allow users, both within the space, and users coming into the space, to observe and identify potential risks. The lack of large obstructive infrastructure and landscaping also minimises opportunities for concealment.

Image 5: Landscape plan for plaza and station platform.



Denser vegetation is typically contained to the battered slopes associated with the detention basin and the northern side of the station platform, which are lower traffic areas. As previously mentioned, it should be noted that the landscaping plan prepared by *Tract*, purposefully chose plants and other forms of vegetation to minimise height and density in close proximity to areas adjacent likely to be frequented by pedestrians. For example the vegetation adjacent the stairs to the plaza area have been designed to ensure vegetation does not exceed 1.0 metre, ensuring sufficient separation and line of sight provided for users to make an informed decision as to whether to use the stairwell or the adjacent lift, which is access via the ramp.

It should also be noted that perimeter fencing, to a height of 1.80 metres, is proposed adjacent the northern edge of the battered slope adjacent the station platform, further restricting public access.

5.2 Access Control

It is our view that the current design and layout has adequately considered issues surrounding access control, with further work to be undertaken in the detailed design process, with specific regard to location of street furniture and signage. Having regard to this a more detailed discussion on the different aspects of access control is provided below and should be read in conjunction with architectural drawings attached as **Appendix A**.

5.2.1 Design to Direct

The proposed design and layout provides users with clear and defined paths to key access points and facilities through the use of canopy structures, variances in pavement patterns and colours and location of street furniture such as seating and bicycle racks, as illustrated in **Image 5** above, along with appropriate lighting and signage which further helps delineate the intended path for legitimate users of the space.

Image 6: Clear and defined access points for proposed Plaza and Station platforms.

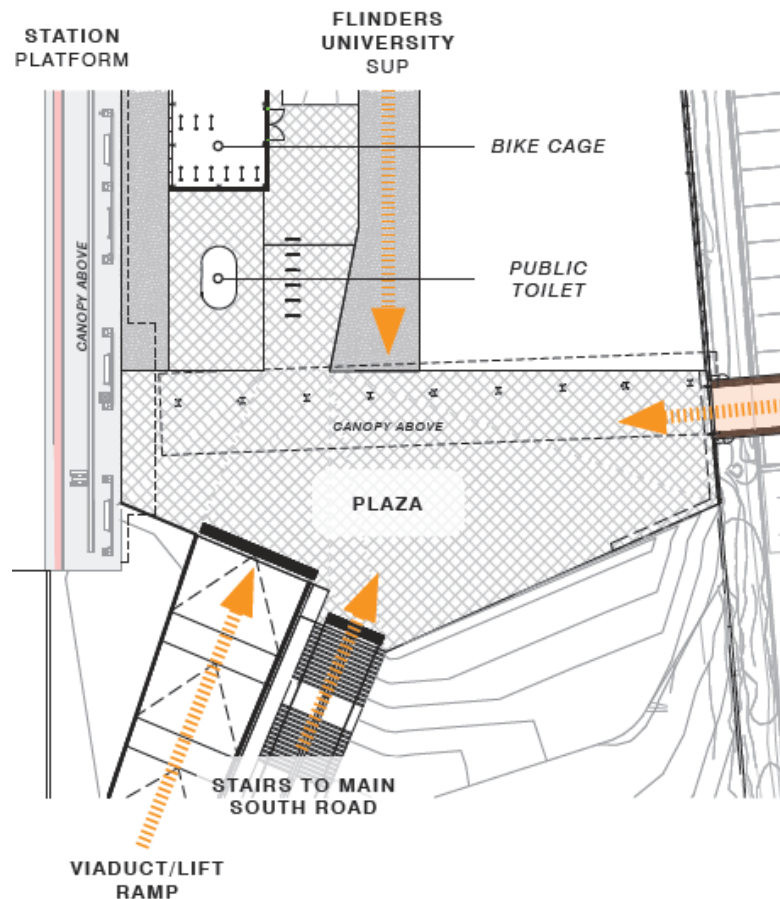


Image 7: Clear defined pedestrian footpaths.



Image 8: Cross section of underground pedestrian link from Lynton Avenue to Birch Crescent.

