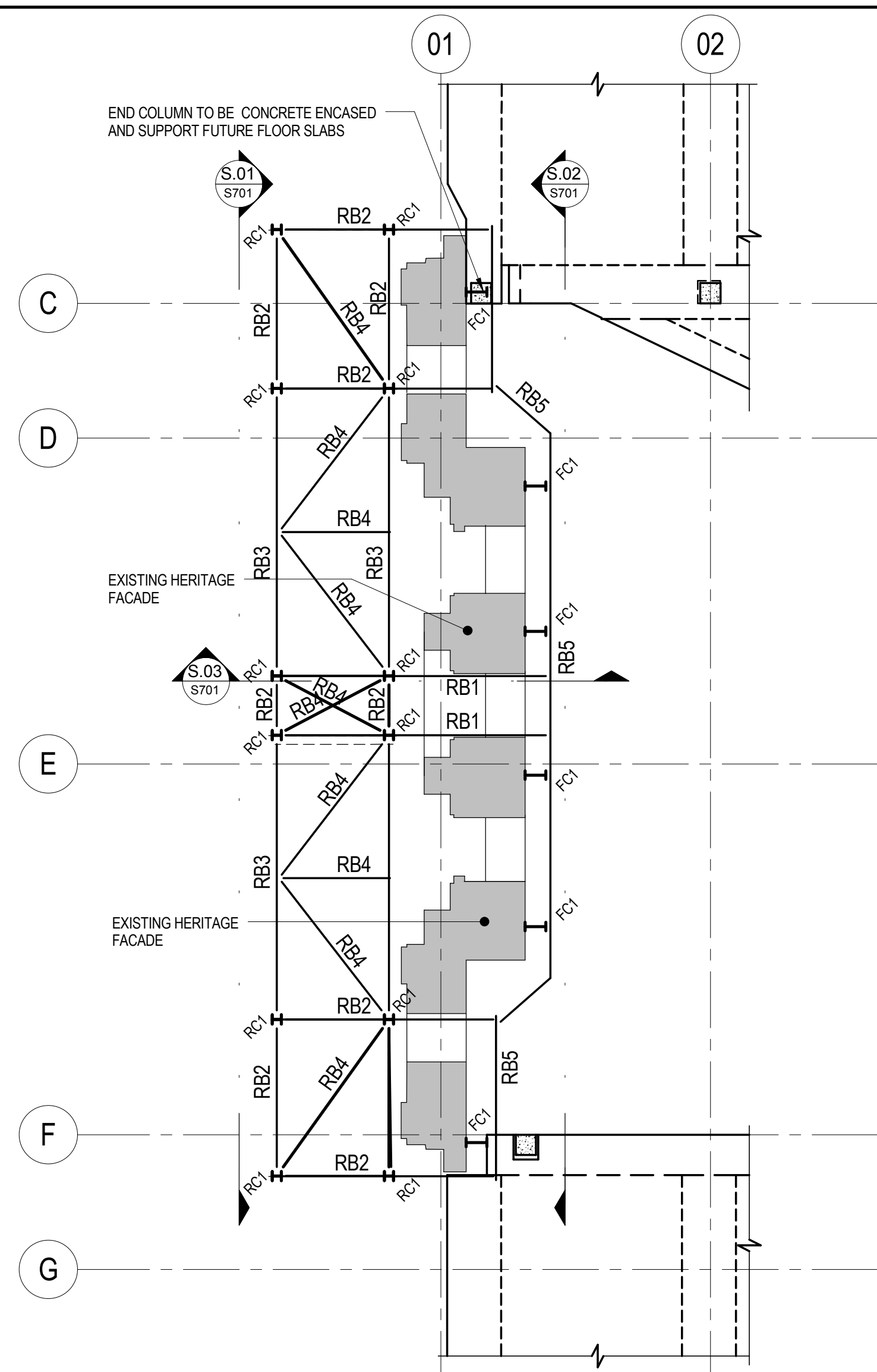
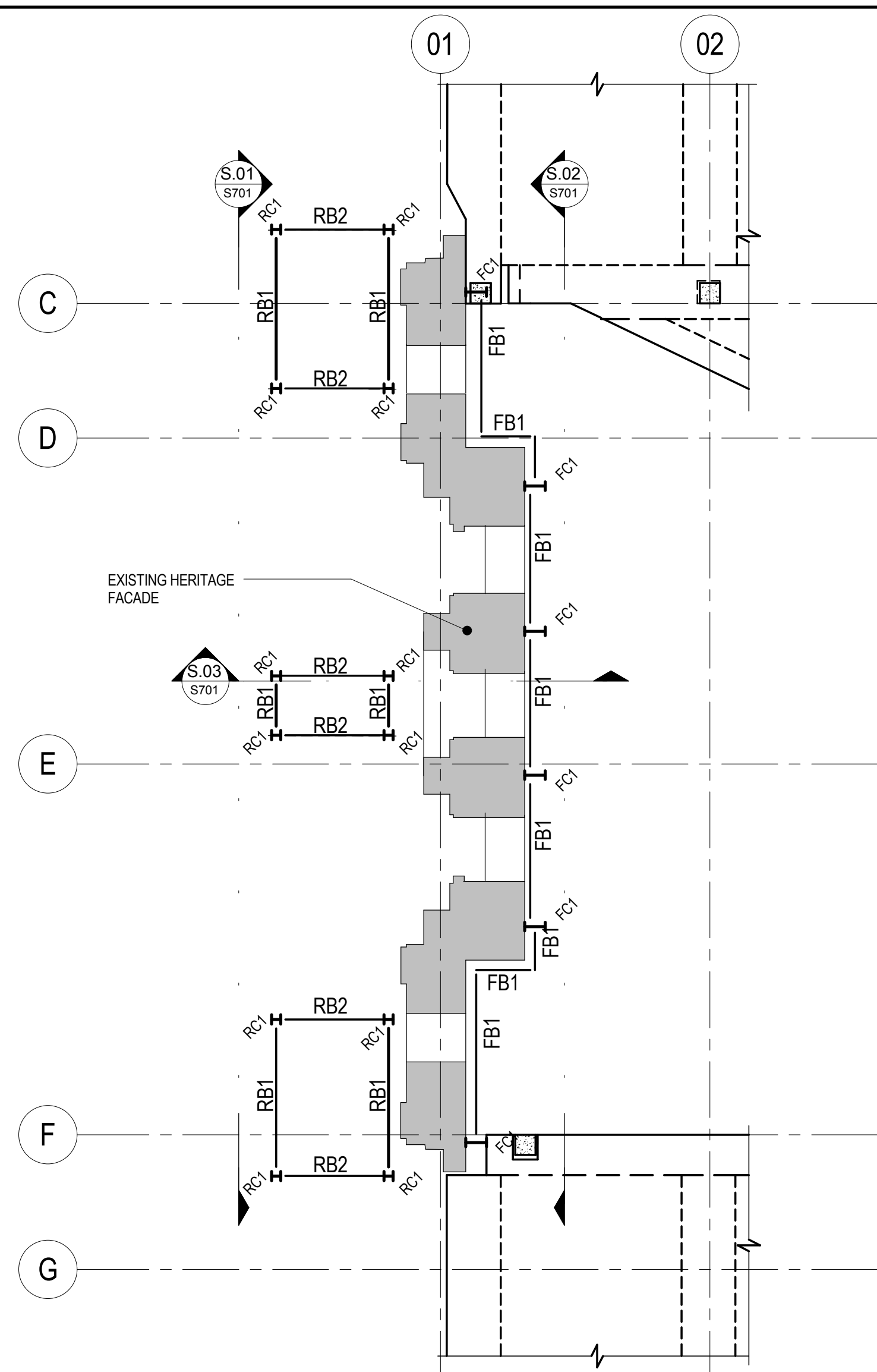


FAÇADE RETENTION - GROUND FLOOR
SCALE: 1:100

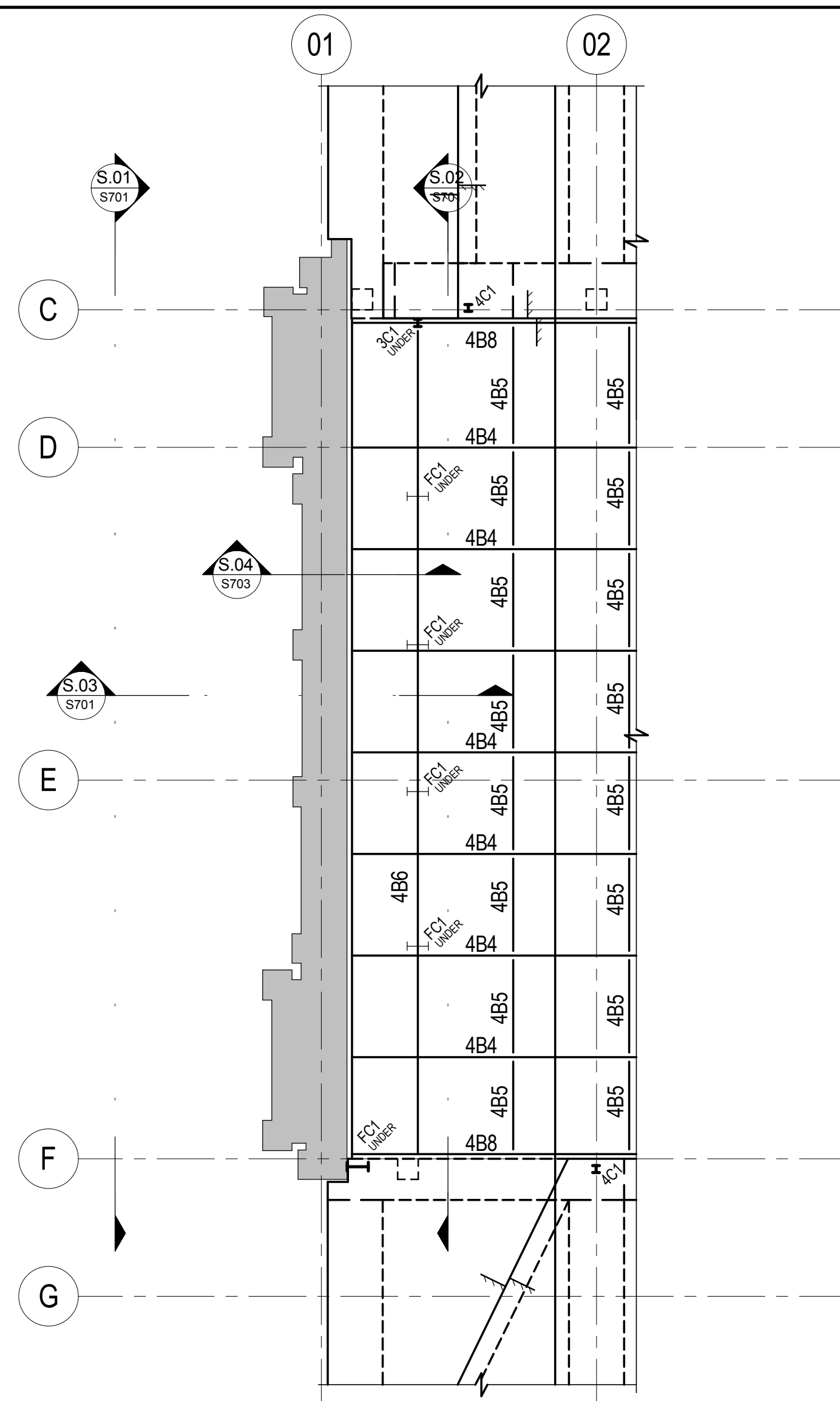
NOTE:
FAÇADE RETENTION PLANS SHOW
STRUCTURE TO COMPLETED NEW
BUILDING BEHIND.



FAÇADE RETENTION PLAN - RL 46.050
SCALE: 1:100
(FAÇADE RETENTION PLAN - RL 54.660 SIMILAR)



FAÇADE RETENTION PLAN - RL 48.530
SCALE: 1:100
(FAÇADE RETENTION PLAN - RL 51.540 SIMILAR)



FAÇADE RETENTION PLAN - LEVEL 4
SCALE: 1:100

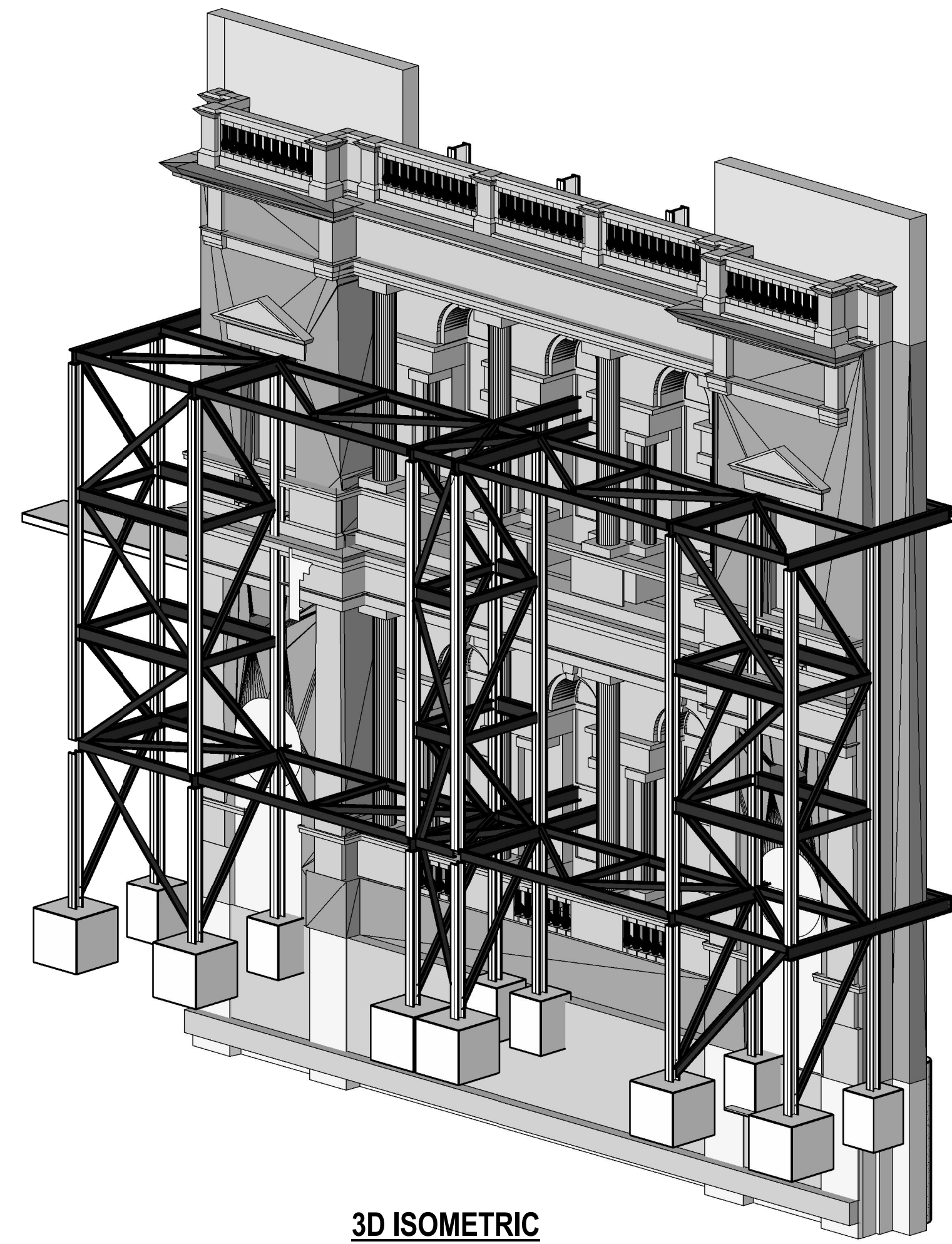
TEMPORARY FAÇADE RETENTION PAD FOOTING SCHEDULE		
MARK	DIMENSIONS	REMARKS
TPF1	125x125x1200	TEMPORARY PAD FOOTING
TPF2	90x90x1200	TEMPORARY PAD FOOTING

PERMANENT FAÇADE STEEL COLUMN SCHEDULE		
MARK	SIZE	REMARKS
FC1	460x882	STEEL COLUMN

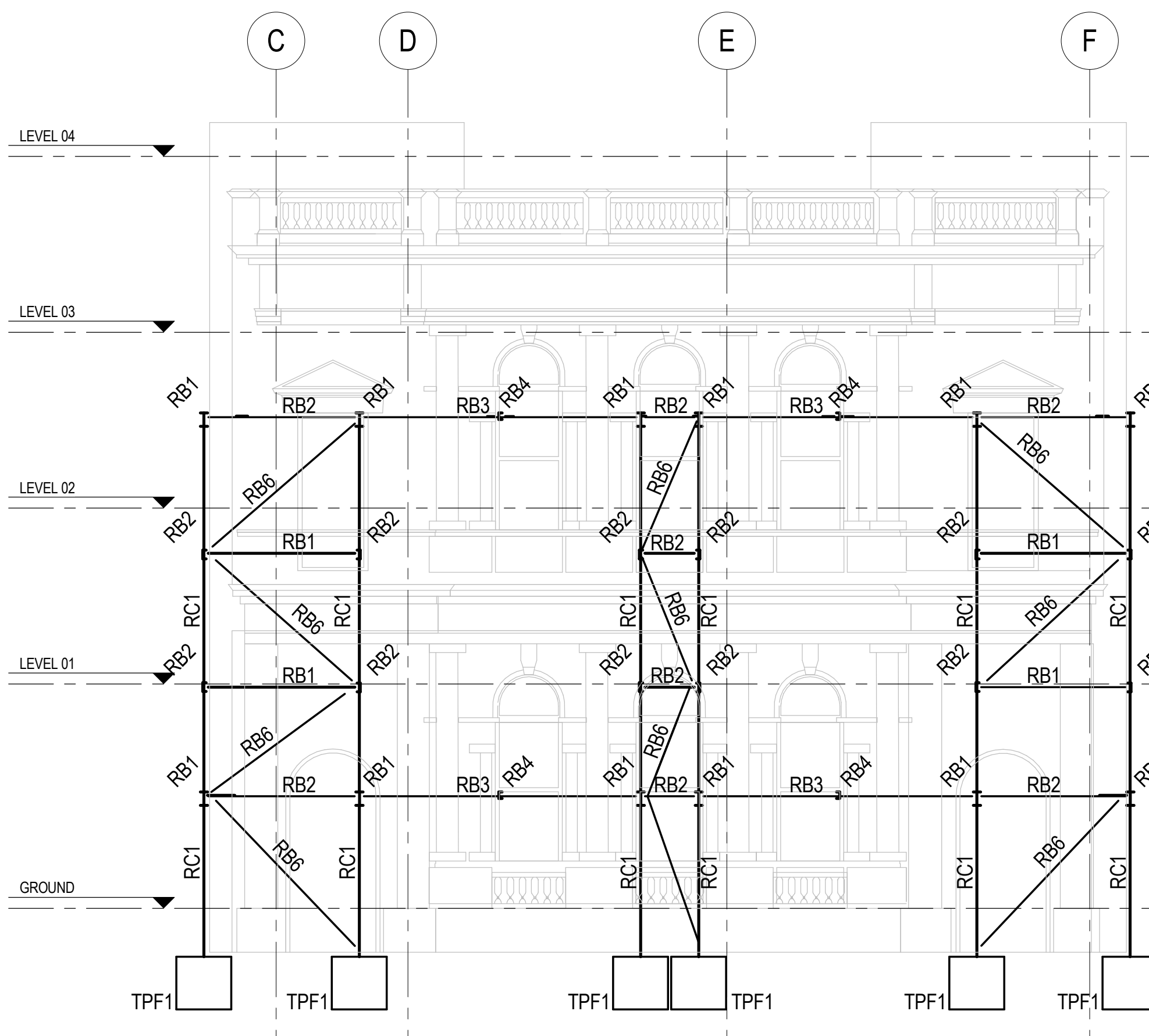
PERMANENT FAÇADE RETENTION STEEL WORK SCHEDULE		
MARK	SIZE	REMARKS
FB1	250x250x6.0 SHS	PERMANENT FLOOR BEAM

TEMPORARY FAÇADE RETENTION STEEL COLUMN SCHEDULE		
MARK	SIZE	REMARKS
RC1	200x200x6	TEMPORARY RETENTION STEEL COLUMN

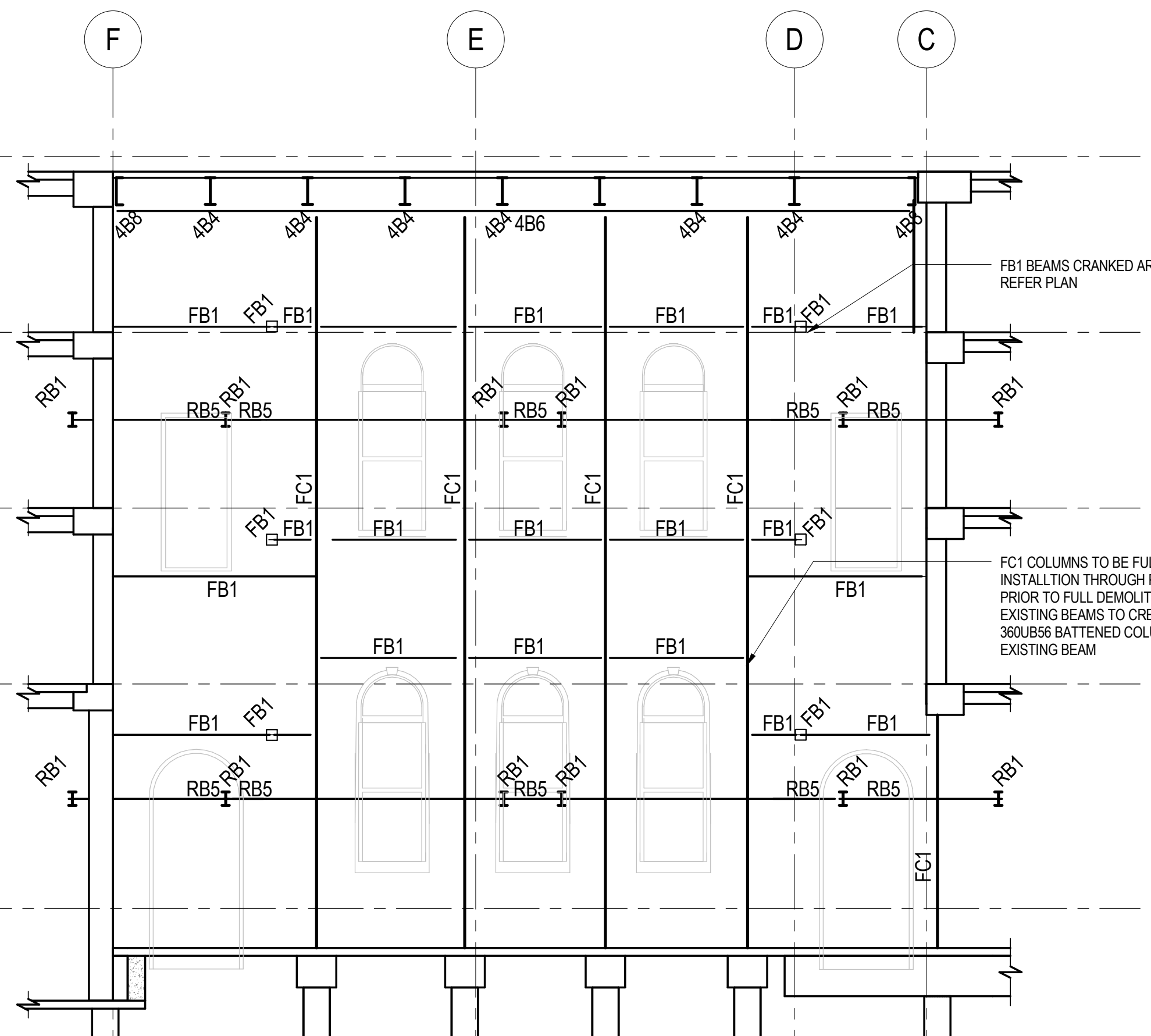
TEMPORARY FAÇADE RETENTION STEEL WORK SCHEDULE		
MARK	SIZE	REMARKS
RB1		
RB2		
RB3		
RB4	150PFC	TEMPORARY STEEL BEAM
RB5	200x200x6	TEMPORARY STEEL BEAM
RB6	150x150x12 EA	TEMPORARY STEEL BEAM



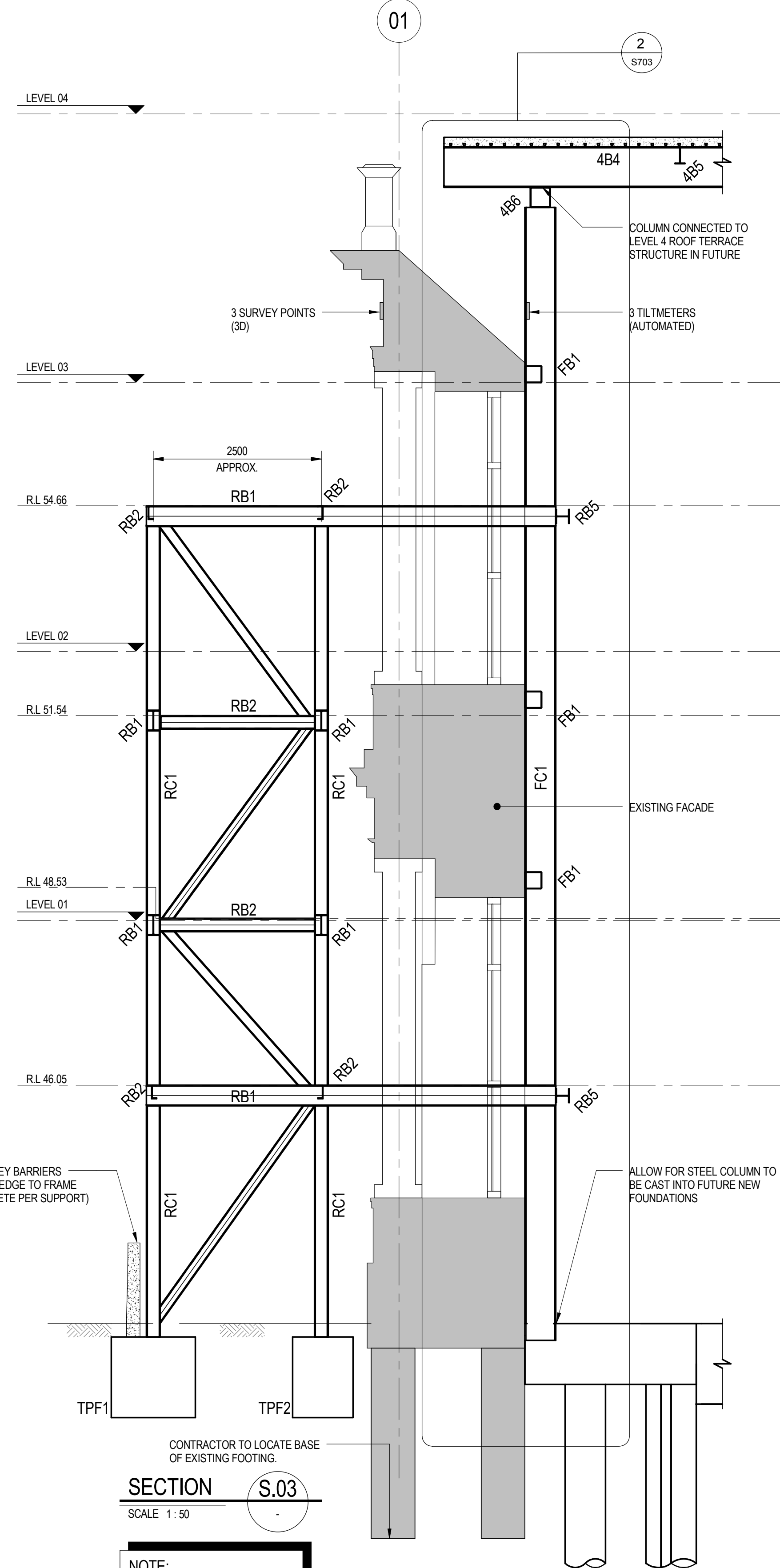
3D ISOMETRIC
SCALE:



SECTION S.01
SCALE: 1:100
FRONT ELEVATION



SECTION S.02
SCALE: 1:100
REAR ELEVATION



SECTION S.03
SCALE: 1:50

NOTE:
BUILDER TO CONFIRM ALL LEVELS
ON SITE PRIOR TO ANY STEELWORK
FABRICATION

WORK IN PROGRESS

Rev	Description	By	Date	Rev	Description	By	Date
2	50% C.D. ISSUE	BP	15.06.12				
1	PRELIMINARY ISSUE	BP	04.06.12				

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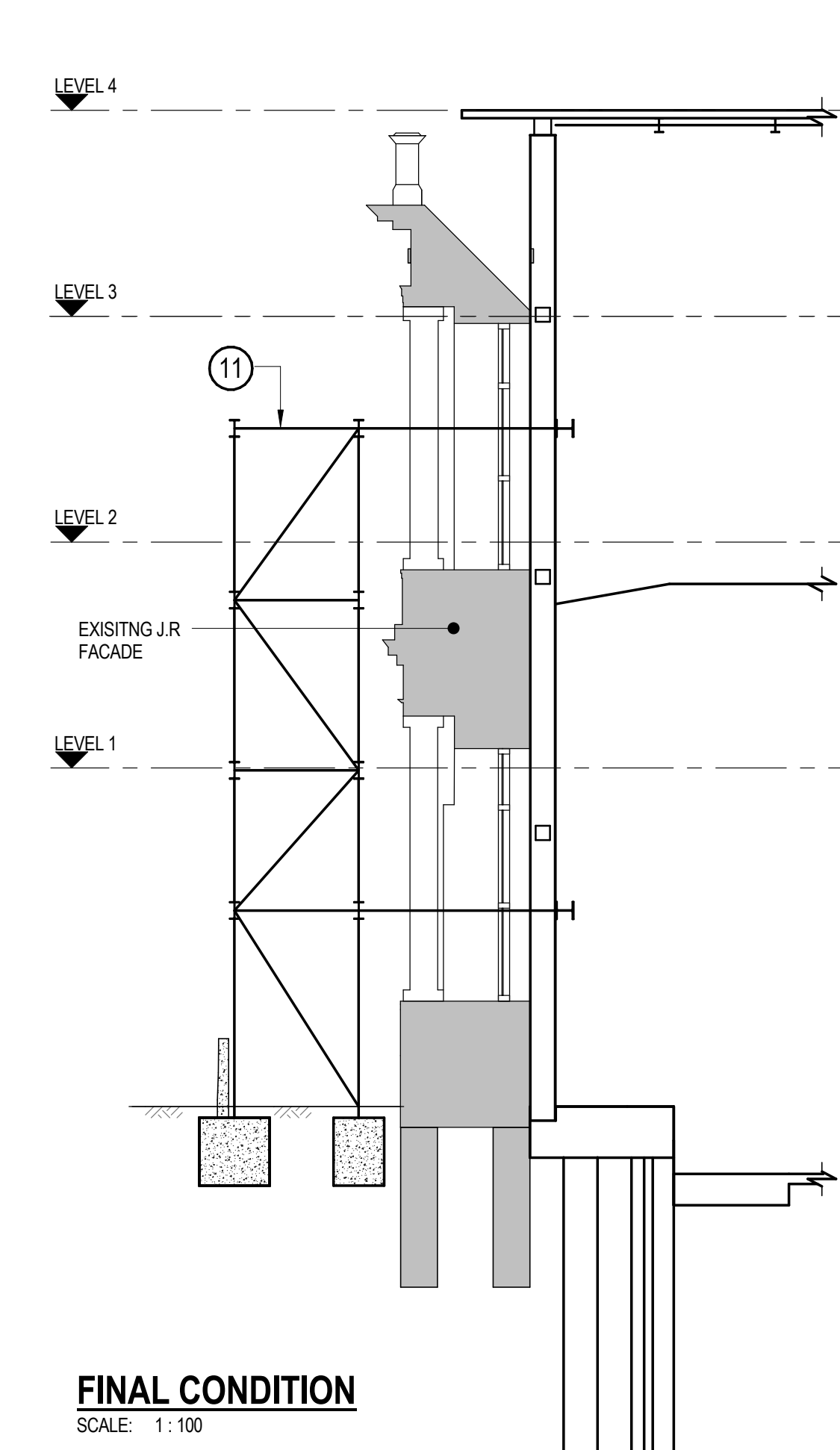
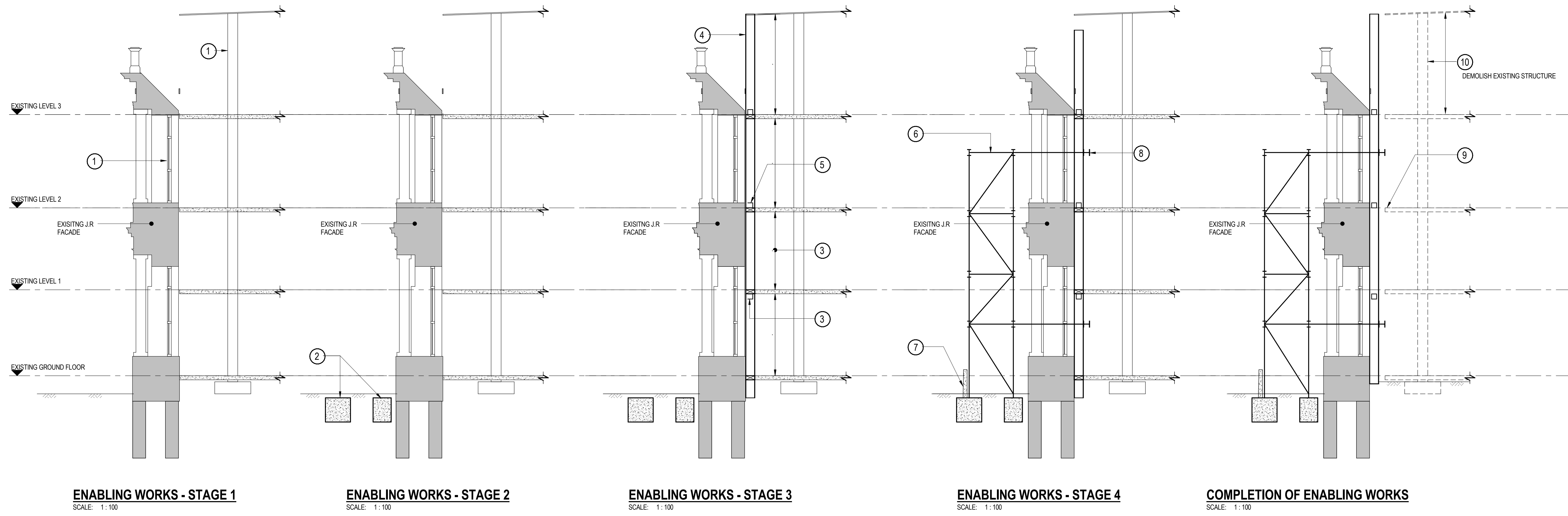
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Project
**FACULTY OF ARCHITECTURE
BUILDING AND PLANNING**

Client
**UNIVERSITY OF MELBOURNE
PARKVILLE CAMPUS**

Drawing Title HERITAGE FAÇADE RETENTION DETAILS - SHEET 1			
Date	Drawn	Checked	Approved
04/16/12	B.P.	D.I.	B.R.
Scales at A0 As indicated	Job No. 09ME0504	Sheet No. S701	Rev. 2



CONSTRUCTION PROCEDURE FOR SUPPORT OF EXISTING J.R. FACADE DURING ENABLING WORKS

ASSUMED SEQUENCE FOR SUPPORT OF EXISTING J.R. FACADE

1. REMOVE WINDOWS & DOORS AND STORE APPROPRIATELY. DECOMMISSION LIFT OF EXISTING FACADE.
2. CAST FOOTINGS FOR EXTERNAL TEMPORARY STEEL FRAME. COORDINATE WITH SERVICES DIVERSIONS IN FRONT OF J.R. FACADE.
3. PROP INTERNAL CONCRETE BEAMS SPANNING ONTO FACADE. BREAK OUT LOCAL POCKETS IN FLOORS WHERE PERMANENT STEEL COLUMNS ARE TO BE INSTALLED.
4. INSTALL NEW STEEL COLUMNS (DROPPED IN FROM THE ROOF) AND FIX BACK TO THE EXISTING J.R. FACADE AS PER DETAILS.
5. INSTALL HORIZONTAL STEEL ELEMENTS AND FIX BACK TO THE EXISTING J.R. FACADE AS PER DETAILS.
6. CONSTRUCT EXTERNAL HOARDING FRAME.
7. INSTALL KENTLEDGE BARRIERS TO FRONT OF RETENTION STEELWORK.
8. INSTALL TEMPORARY HORIZONTAL RISERS AND CONNECT TO PERMANENT STEEL COLUMNS FIXED TO EXISTING J.R. FACADE.
9. EXISTING SLABS TO BE CAREFULLY SAN-CUT WHERE THEY ARE SUPPORTED ON THE J.R. FACADE.
10. BALANCE OF DEMOLITION CAN OCCUR.
11. ONCE THE LEVEL 4 STEEL IS COMPLETE, THE LEVEL 4 SLAB IS POURED AND THE MAIN STRUCTURE IS SUITABLY BRACED AND CONNECTED TO THE STEELWORK TO THE REAR OF THE J.R. FACADE THE TEMPORARY STEEL CAN BE REMOVED.

DESIGN RESPONSIBILITY
 1. THESE DRAWINGS INDICATE DESIGN INTENT FOR THE TEMPORARY WORKS TO RESTRAIN THE JOSEPH REED FACADE. THE CONTRACTOR IS RESPONSIBLE FOR THE DETAILED DESIGN OF THE TEMPORARY WORKS AND IS TO SUBMIT DETAILED DRAWINGS AND COMPUTATIONS FOR CHECKING.

2. THE ELEMENTS IDENTIFIED AS PERMANENT ON THESE DRAWINGS ARE THE DESIGN RESPONSIBILITY OF IRWINCONSULT IN THE PERMANENT CONDITION. THE CONTRACTOR IS TO ENSURE THAT THESE ELEMENTS ARE CHECKED FOR THE FORCES APPLIED IN THE TEMPORARY CONDITION, OR SUPPLY THESE FORCES TO IRWINCONSULT FOR CHECKING.

3. THE EXISTING CONDITIONS SHOWN ON THESE DRAWINGS ARE BASED ON BEST AVAILABLE INFORMATION. THE CONTRACTOR MUST VERIFY THIS INFORMATION BY SITE SURVEY WITH PARTICULAR ATTENTION TO:
 3.1 EXISTING FOUNDATIONS - THE DEPTH OF THE EXISTING FOUNDATIONS IS NOT KNOWN. THE CONTRACTOR IS TO OPEN AN EXPLORATORY HOLE IN THE REAR OF THE WALL TO VERIFY THE INTERNAL MAKE-UP OF THE WALL AND THE CONDITION OF ANY TIES FOUND THEREIN.

SURVEY AND MONITORING
 1. A SYSTEM IS TO BE ESTABLISHED TO ENSURE THAT THE POSITION AND PLUMB OF THE FACADE CAN BE MONITORED THROUGHOUT THE DEMOLITION AND CONSTRUCTION.

2. DURATION OF MONITORING:
 THE MONITORING SYSTEMS ARE TO BE INSTALLED AND FUNCTIONAL AT LEAST 2 WEEKS BEFORE COMMENCEMENT OF DEMOLITION TO THE COMPLETION OF BASEMENT AND GROUND FLOOR SLAB. THE MONITORING INTERVALS CAN THEN BE RELAXED FOR THE BALANCE OF THE MONITORING PERIOD.

3. MONITORING FREQUENCY:
 THE INTERVALS BETWEEN MONITORING ARE TO REMAIN UNCHANGED FOR THE TIME BETWEEN COMMENCEMENT OF DEMOLITION TO THE COMPLETION OF BASEMENT AND GROUND FLOOR SLAB. THE MONITORING INTERVALS CAN THEN BE RELAXED FOR THE BALANCE OF THE MONITORING PERIOD.

4. MONITORING PLAN:
 THE CONTRACTOR IS TO SUBMIT A PLAN FOR MONITORING THAT INCLUDES:
 4.1 PHYSICAL SURVEY OF FIXED TARGETS, INCLUDING THE PROPOSED POSITIONS OF FIXED SURVEY TARGETS AND FIXED POSITIONS FROM WHICH THESE CAN BE CLEARLY SIGHTED AT ALL STAGES DURING CONSTRUCTION. THE PROPOSED INTERVAL OF SURVEY OF THE FIXED POINTS IS TO BE OUTLINED.
 4.2 AUTOMATED MONITORING OF THE PLUMB / VERTICALITY OF THE WALL USING TILTMETERS OR SIMILAR LINKED TO A LOGGING / RECORDING SYSTEM THAT WILL RAISE AN ALARM SHOULD THE WALL MOVE BEYOND THE ALLOWABLE MOVEMENTS OUTLINED BELOW.

5. HANDOVER ON COMPLETION:
 THE CONTRACTOR IS TO INCLUDE PROVISION FOR THE SURVEY AND MONITORING SYSTEM TO BE TAKEN OVER BY THE MAIN CONTRACTOR ON COMPLETION OF THE ENABLING WORKS CONTRACT.

ALLOWABLE MOVEMENTS
 1. THE ULTIMATE MAXIMUM ALLOWABLE OUT-OF-PLUMB OF THE WALL IS TO BE CALCULATED AS BEING THE OUT-OF-PLUMB AT WHICH THE HORIZONTAL LOAD IS GREATER THAN THE MAXIMUM DESIGN LOAD CALCULATED IN ACCORDANCE WITH THE DESIGN CRITERIA BELOW.

2. THE MONITORING PLAN IS TO ADOPT A LIMIT OF 80% OF THE ABOVE OUT-OF-PLUMB. THE RESULTS OF THE SURVEY AND TILTMETERS ARE TO BE COMPARED WITH THIS LIMIT AND THE FOLLOWING ACTIONS TAKEN:
 GREEN - MOVEMENT OF UP TO 50% OF THE CALCULATED LIMIT - NO ACTION REQUIRED.
 AMBER - MOVEMENT BETWEEN 50% AND 75% OF THE CALCULATED LIMIT - INFORM PROJECT SUPERVISOR, ARCHITECT AND STRUCTURAL ENGINEER.
 - INVESTIGATE CAUSE OF MOVEMENT.
 - PREPARE PLAN FOR REMEDIAL ACTION TO BE TAKEN IF MOVEMENT EXCEEDS RED LIMIT.
 RED - MOVEMENT OF 75% OF THE LIMIT - STOP ALL WORK DESTABILISING WALL.
 - IMPLEMENT REMEDIAL ACTION PLAN.
 - INFORM PROJECT SUPERVISOR, ARCHITECT, AND STRUCTURAL ENGINEER.

DESIGN CRITERIA
 1. LOADS
 THE TEMPORARY RETENTION IS TO BE DESIGNED FOR THE GREATER OF:
 - THE HORIZONTAL LOADS RESULTING FROM THE EXISTING OUT-OF-PLUMB, PLUS
 - THE EXISTING OUT-OF-BALANCE MOMENT RESULTING FROM THE DISTRIBUTION OF MASS OF THE WALL PLUS
 - WIND AND EARTHQUAKE LOADS AS DEFINED BY THE RELEVANT PARTS OF AS1170 OR
 - 1.5% OF THE VERTICAL DEAD LOAD AT EACH LEVEL TAKEN AS ACTING HORIZONTALLY.

THE WINDOWS WILL BE REMOVED DURING CONSTRUCTION. HOWEVER, THE DESIGN IS TO ASSUME A SOLID FACADE AND NOT REDUCE WIND LOADS TO ACCOUNT FOR THE REDUCED AREA WITHOUT WINDOWS. THE EARTHQUAKE LOADS SHOULD ASSUME THE MASS OF TWO WORKING PLATFORMS FOR THE STONE MASON LOCATED AT RLS 54.66 AND 46.06 APPROX.

1. DEFLECTIONS
 1.1 THE COMBINATION OF OUT-OF-PLUMB PLUS MAXIMUM DEFLECTION IS NEVER TO RESULT IN A SCENARIO WHERE THE RESULTING HORIZONTAL LOAD EXCEEDS THE DESIGN HORIZONTAL LOAD AS OUTLINED ABOVE.
 1.2 THE REFLECTION IS NEVER TO EXCEED HEIGHT/100.

2. THE SUBMITTED COMPUTATIONS ARE TO INCLUDE A CLEAR RESPONSE TO THE ABOVE CRITERIA, TAKING INTO ACCOUNT THE RESULTS OF THE PLUMBNESS / VERTICALITY SURVEY.

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1	PRELIMINARY ISSUE	BP	04.06.12								

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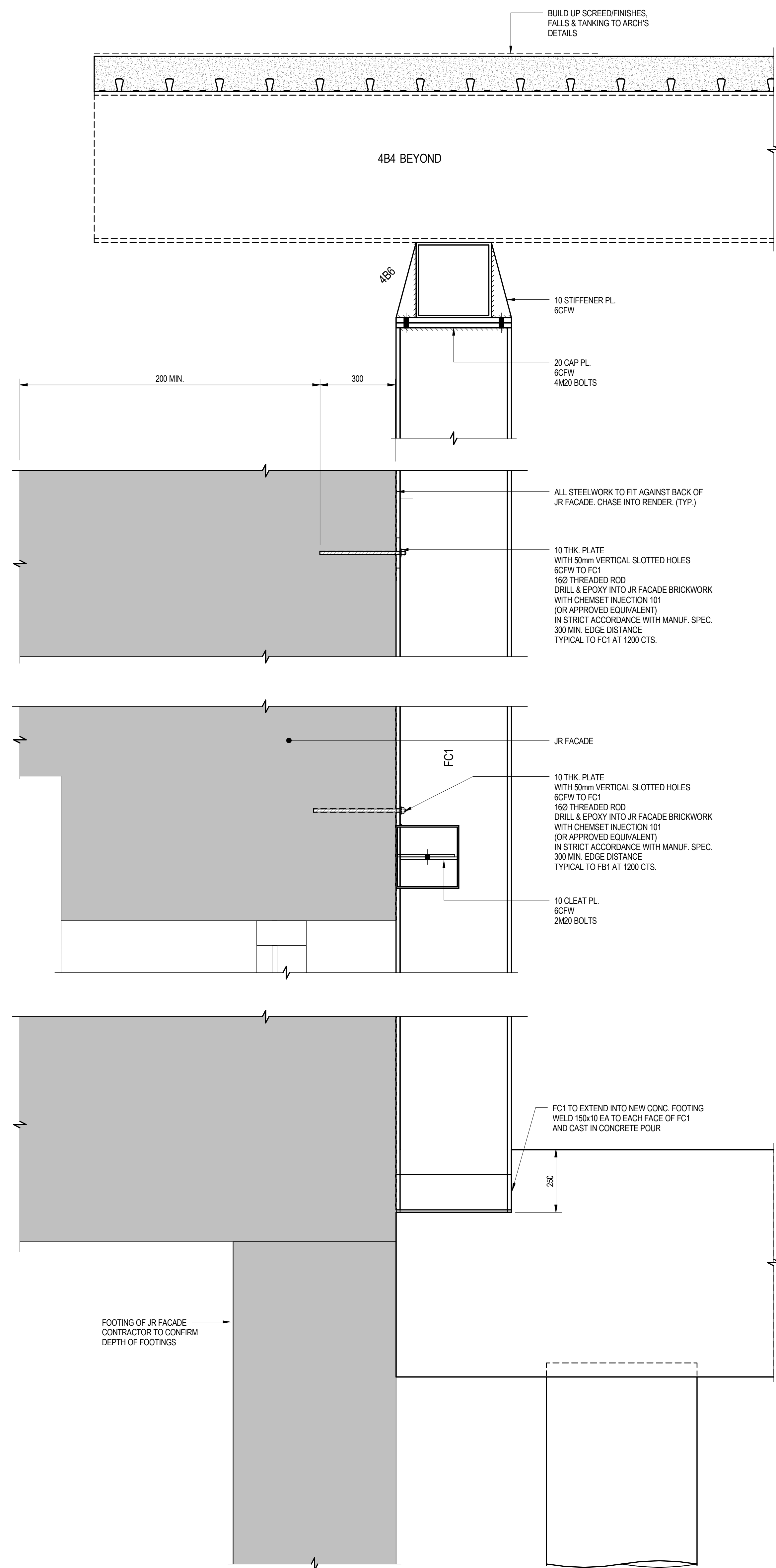
Project
**FACULTY OF ARCHITECTURE
 BUILDING AND PLANNING**

Client
**UNIVERSITY OF MELBOURNE
 PARKVILLE CAMPUS**

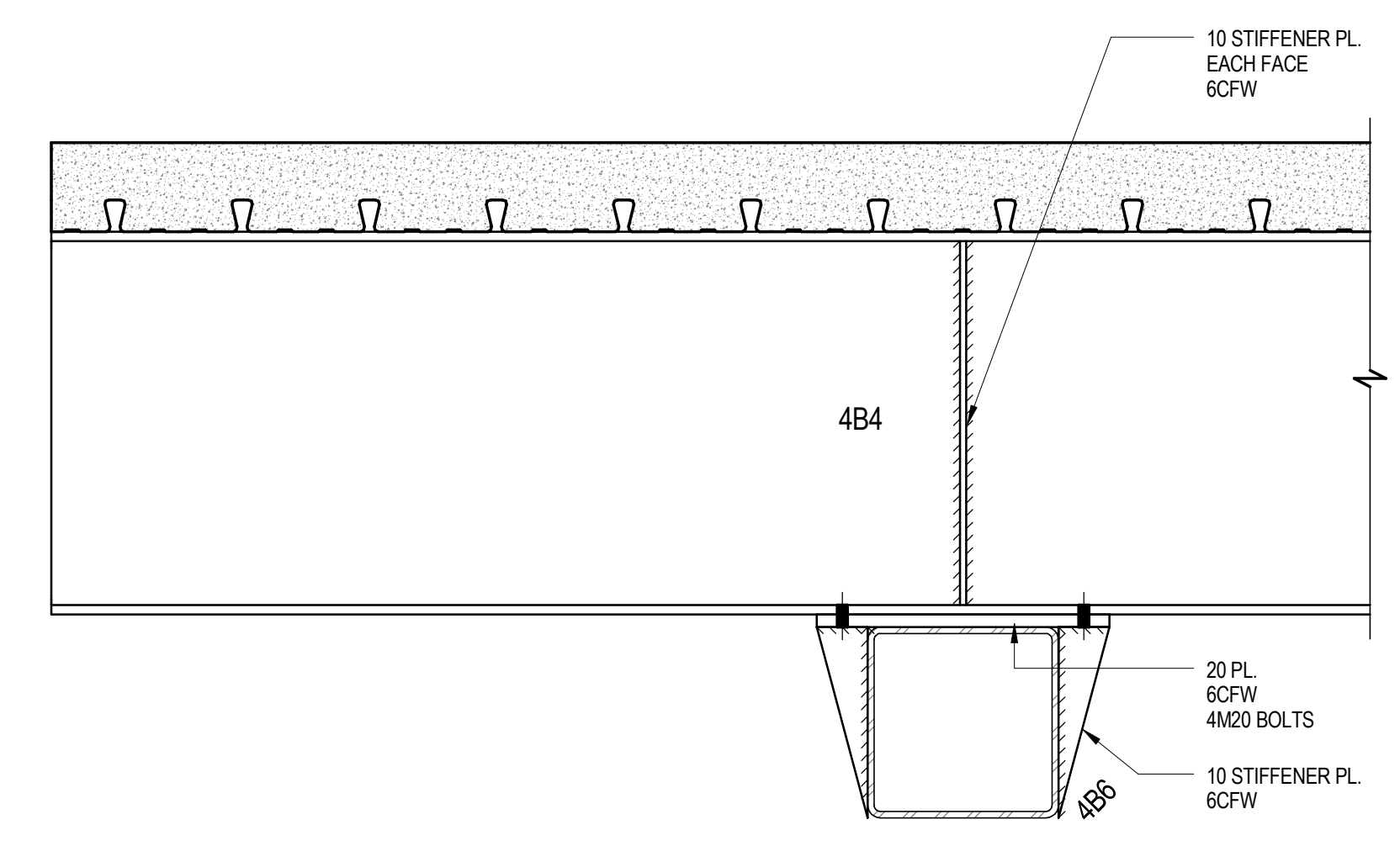
Drawing Title
HERITAGE FACADE RETENTION DETAILS - SHEET 2

Date	Drawn	Checked	Approved
04/16/12	B.P.	D.I.	B.R.
Scales as AD	Job No.	Sheet No.	Rev.
As indicated	09ME0504	S702	2

WORK IN PROGRESS



DETAIL S.03A
SCALE 1:10



SECTION S.04
SCALE 1:10

WORK IN PROGRESS

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Project FACULTY OF ARCHITECTURE BUILDING AND PLANNING				Drawing Title HERITAGE FACADE RETENTION DETAILS - SHEET 3			
Date 05/29/12	Drawn B.P.	Checked D.I.	Approved B.R.	Client UNIVERSITY OF MELBOURNE PARKVILLE CAMPUS	Job No. 09ME0504	Sheet No. S703	Rev. 2
Scales at A0 1:10							