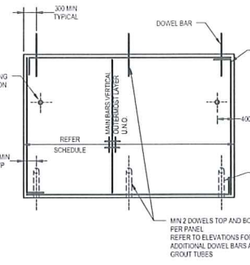
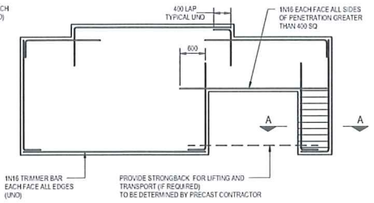
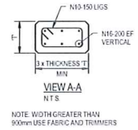



TYPICAL PANEL DETAIL




TYPICAL TRIMMER REINFORCEMENT VARIATIONS

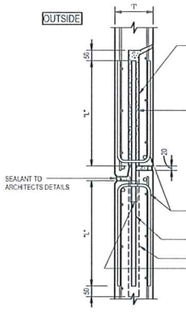



VIEW A-A
N.T.S.

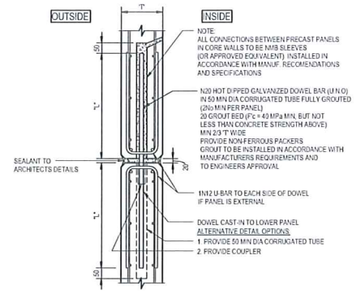
NOTE: WIDTH GREATER THAN 900mm USE FABRIC AND TRIMMERS

TYPICAL PANEL ELEVATIONS

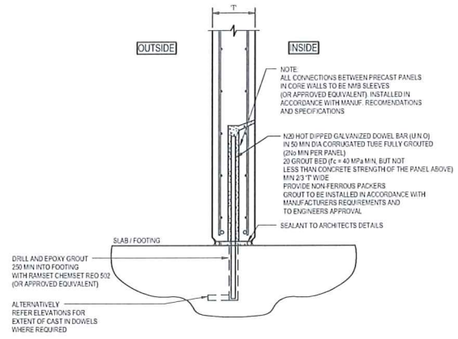
| BROOKFIELD MULTIPLEX DRAWING DISTRIBUTION | | | | | | | |
|---|---|---|---|---|---|---|---|
| CONSULTANTS | | SUBCONTRACTORS | | | | | |
| Architect | | Mechanical | | BMU | | Roller Doors | |
| Structural Engineer | | Electrical | | Curtain Wall | | Waterproofing | |
| Services | | Fire Protection | | Facade Cladding | | Stone | |
| Building Surveyor | | Hydraulic | | Louvres | | Ceramic Tiling | |
| Fire Engineer | | AV | | Shop Fronts | | Vinyl | |
| ESD | | Security | | Timber Cladding | | Carpet | |
| DDA | | Communications | | Balustrades | | Mirrors | |
| Accoustic | | Lifts | | Metalwork | | Toilet Partitions | |
| Traffic | | Escalators | | Blockwork | | Painting | |
| Town Planning | | Piling | | Doors | | Joinery | |
| Land Surveyor | | Earthworks | | Hardware | | Signage | |
| Interior Design | | Excavate & Retain | | Carpentry | | Workstations | |
| Signage | | Structure | | Plasterboard | | Furniture | |
| | | Precast | | Ceilings | | Civil/Ext Works | |
| Client / Super | | Special Precast | | Partitions | | Landscape | |
| Quantity Surveyor | | Structual Steel | | Internal Glazing | | Signed: | |
| | | | | | | Date: | |




TYPICAL EXTERNAL PANEL JOINT DETAIL




TYPICAL PANEL JOINT DETAIL




TYPICAL PRECAST PANEL TO BASE DETAIL

## PRECAST CONCRETE NOTES:

DIMENSIONS
ALL DIMENSIONS SHALL BE OBTAINED FROM THE ARCHITECTS DRAWINGS

DESIGN
PANELS HAVE BEEN DESIGNED AND DETAILED FOR IN SERVICE LOADS
ADDITIONAL REINFORCEMENT REQUIRED FOR LIFTING AND TRANSPORT SHALL BE DESIGNED AND PROVIDED BY THE MANUFACTURER

THE PRECAST CONTRACTOR IS RESPONSIBLE FOR ALL ELEMENTS OF DESIGN OF PANELS FOR DEMOULDING, TRANSPORTATION AND ERECTION, TOGETHER WITH DESIGN OF ALL PROPPING AND CAST-INS FOR LIFTING, PROPPING ETC

ALL PANELS SHALL BE PROPPED WITH A MINIMUM OF TWO PROPS
THE BASE OF THE PANEL MUST BE ADEQUATELY RESTRAINED
THE PROPS MUST BE FIXED AT THEIR BASE TO AN ELEMENT THAT CAN RESIST THE FORCES IMPOSED BY THE PROPS IN BOTH TENSION AND COMPRESSION
THE PROPS ARE TO BE FIXED TO ELEMENTS OF THE PERMANENT STRUCTURE. THE LOCATIONS AND LOADS ARE TO BE SUPPLIED TO IRWINCONSULT FOR THE PURPOSE OF CHECKING THE PERMANENT STRUCTURE

COMPUTATIONS & A CERTIFICATE OF COMPLIANCE BY PRACTISING STRUCTURAL ENGINEER REGARDING THE PROPOSED METHOD OF LIFTING AND ERECTION OF THE PANELS SHALL BE PROVIDED BY THE CONTRACTOR TRANSPORTING AND PROPPING

CONCRETE
ALL MATERIALS, METHOD OF MIXING, PLACING, TESTING, ETC, SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS AND REQUIREMENTS OF AS3600
ALL CONCRETE SHALL HAVE STANDARD 28 DAY COMPRESSIVE STRENGTH OF 40MPa
MAXIMUM WATER/CEMENT RATIO = 0.5
MINIMUM CONCRETE STRENGTH AT TIME OF LIFTING FROM FORMS IS 25MPa
REINFORCEMENT AND METAL DECKING MUST COMPLY WITH THE REQUIREMENTS OF THE GBCA TO ACHIEVE MAT-5
GREENSTAR COMPLIANCE
CONCRETE MUST COMPLY WITH THE REQUIREMENTS OF THE GBCA TO ACHIEVE MAT-4 CONCRETE GREENSTAR COMPLIANCE. REFER TO THE SPECIFICATION FOR FURTHER DETAILS

FITTINGS
ALL FITTINGS AND BOLTS SHALL BE GALVANISED STEEL OR BE MANUFACTURED FROM APPROVED NON-CORROSIVE MATERIAL

MANUFACTURE
SUBMIT DETAILS TO MAIN CONTRACTOR OF ALL PROPOSED LIFTING AND HANDLING ATTACHMENTS, TOGETHER WITH COMPUTATION OR TEST CERTIFICATES TO SHOW THAT ALL FITTINGS CAN SAFELY WITHSTAND THE LOADS APPLIED TO THEM, IN ACCORDANCE WITH AS3600

PANEL MAY BE SITE CAST OR CAST IN A CASTING YARD SHOP. DRAWINGS OF ALL PANELS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW PRIOR TO MANUFACTURE

FORMWORK SHALL BE FREE FROM MORTAR LEAKS AND BE SUFFICIENTLY RIGID TO RESIST THE EFFECT OF VIBRATION WITHOUT SIGNIFICANT DEFLECTION
FORMS SHALL BE COATED WITH A SUITABLE RELEASE AGENT
FINISH TO PANELS - CLASS 2 (IN ACCORDANCE WITH AS3610), UNLESS NOTED OTHERWISE BY THE ARCHITECT

ALL CONCRETE SHALL BE VIBRATED BY MEANS OF TABLE OR INTERNAL VIBRATORS

STEAM CURING, IF USED, SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS

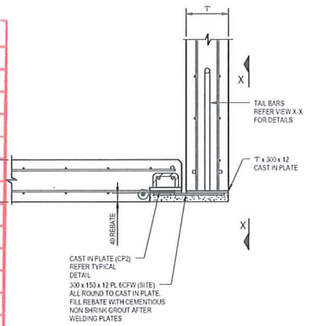
THE MANUFACTURER SHALL CAST IN ALL FERRULES, BOLTS, DOWELS ETC, SHOWN ON EITHER ARCHITECTURAL OR ENGINEERING DRAWINGS, TOGETHER WITH ADDITIONAL LIFTING POINTS AS MAY BE NECESSARY FOR SAFE HANDLING AND ERECTION

COVER
COVER TO ALL REINFORCEMENT SHALL BE 30mm MIN

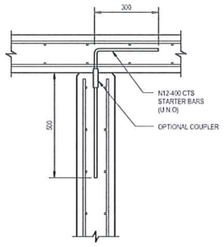
ERECTION
ALL PANELS SHALL BE ADEQUATELY PROPPED UNTIL ADEQUATELY ATTACHED TO A STABLE STRUCTURE. THE BUILDER SHALL SUBMIT PROPPING DETAILS AND ASSOCIATED CERTIFICATE OF COMPLIANCE PRIOR TO COMMENCING CONSTRUCTION

| WALL SCHEDULE | | | |
|---|---|---|---|
| MARK | SIZE | CONCRETE STRENGTH | REINFORCEMENT |
| P150-1 | 150 THICK | 40 MPa | SL82 MESH EACH FACE WITH N16 TRIMMER CONTINUOUS EACH FACE |
| P200-1 | 200 THICK | 40 MPa | N16-300 EF. VERT. N12-300 EF. HORIZ. WITH N16 TRIMMER CONTINUOUS EACH FACE |

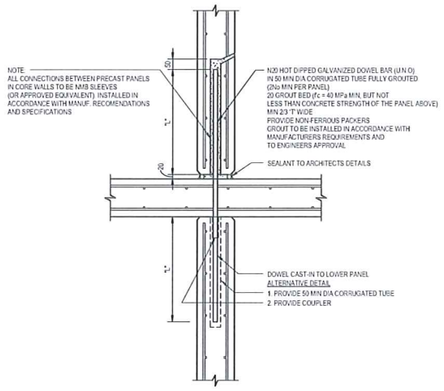
ADDITIONAL TO PPR




WELD PLATE WP3
(FIRE RATED CONNECTION)




TYPICAL PRECAST WALL TO SLAB OVER DETAIL

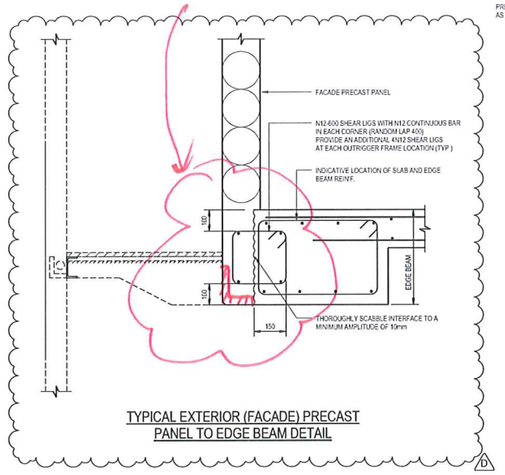



TYPICAL INTERNAL PRECAST

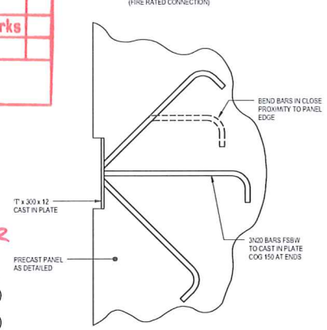
| PRECAST PANEL DOWEL BAR LAP LENGTHS ('L') | | |
|---|---|---|
| BAR SIZE | SPLICE LENGTHS IN STANDARD DETAILS | MIN f'c |
| N20 | 500 | 40 |
| N24 | 700 | 40 |
| N28 | 1000 | 40 |
| N32 | 1200 | 40 |

TYPICAL LAP SPLICE IN DOWEL BARS (PRECAST PANELS)

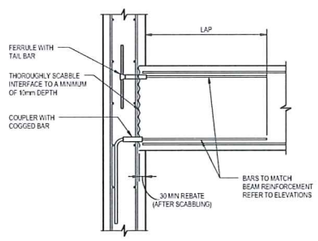
CONTINUOUS CAST-IN STEEL ANGLE TO PICK UP OUTRIGGER



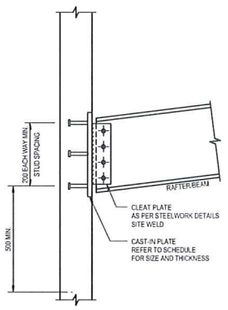

TYPICAL EXTERIOR (FACADE) PRECAST PANEL TO EDGE BEAM DETAIL



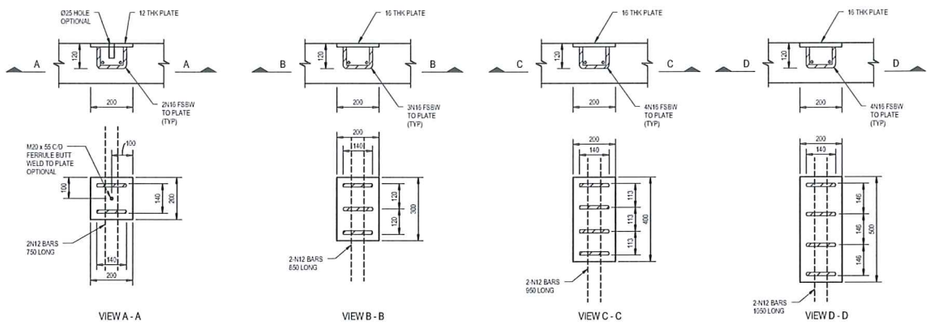

VIEW X-X



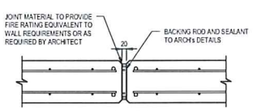

TYPICAL BAND BEAM TO PRECAST PANEL DETAIL



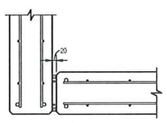

TYPICAL CAST-IN PLATE DETAIL
FOR SITE WELDED CLEATS




CAST-IN PLATE DETAILS
FOR SITE WELDED CLEATS

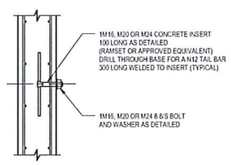



(PLAN VIEW)
PANEL TO PANEL DETAIL




(PLAN VIEW)
CORNER DETAIL

TYPICAL VERTICAL PANEL JOINTS




TYPICAL CAST IN FERRULE DETAIL

| CAST-IN PLATE SCHEDULE | |
|---|---|
| CONNECTION BEAM SIZE | ALTERNATIVE CAST IN PLATE |
| 150 UB 150 PFC 180 UB 150 PFC 200 UB 200 PFC 230 PFC 250 UB 250 PFC | CP2 |
| 250 PFC 250 UB 250 PFC 310 UB 300 PFC | CP3 |
| 360 UB - 460 UB | CP4 |
| 530 UB - 610 UB | CP5 |
| 700 WB - 800 WB | - |

| Rev | Description | By | Date | Rev | Description | By | Date | Rev | Description | By | Date | Rev | Description | By | Date |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| D | REVISED AS CLOUDED | BP | 05.04.13 | | | | | | | | | | | | |
| C | CONSTRUCTION ISSUE - CORE CHANGED TO PRECAST | BP | 25.03.13 | | | | | | | | | | | | |
| B | REVISED AS CLOUDED | BP | 18.03.13 | | | | | | | | | | | | |
| A | CONSTRUCTION ISSUE | BP | 14.01.13 | | | | | | | | | | | | |
| 4 | TENDER ISSUE | BP | 07.09.12 | | | | | | | | | | | | |
| 3 | TENDER ISSUE | BP | 31.08.12 | | | | | | | | | | | | |
| 2 | 75% C D ISSUE | BP | 27.07.12 | | | | | | | | | | | | |
| 1 | 50% C D ISSUE | BP | 15.06.12 | | | | | | | | | | | | |

CONSTRUCTION ISSUE

0 2000 4000 6000 8000 10000
SCALE INDICATED FOR REFERENCE ONLY. DO NOT SCALE DRAWINGS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Project
FACULTY OF ARCHITECTURE BUILDING AND PLANNING

Client
UNIVERSITY OF MELBOURNE PARKVILLE CAMPUS

Drawing Title
PRECAST DETAILS - SHEET 1

| Date | Drawn | Checked | Approved |
|---|---|---|---|
| 04/16/12 | B P | D I | B R |

| Scales at A0 | Job No | Sheet No | Rev. |
|---|---|---|---|
| As indicated | 09ME0504 | S609 | D |

05/04/2013 4:09:21 PM