GENERAL NOTES

1) THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECT'S AND SPECIALISTS' DRAWINGS.
2) DO NOT SCALE FROM THIS OR ANY OTHER PCC CONSULTANTS LTD DRAWING.
3) ALL DIMENSIONS TO BE CHECKED ON SITE PRIOR TO CONSTRUCTION OR FABRICATION.

TEMPORARY WORKS

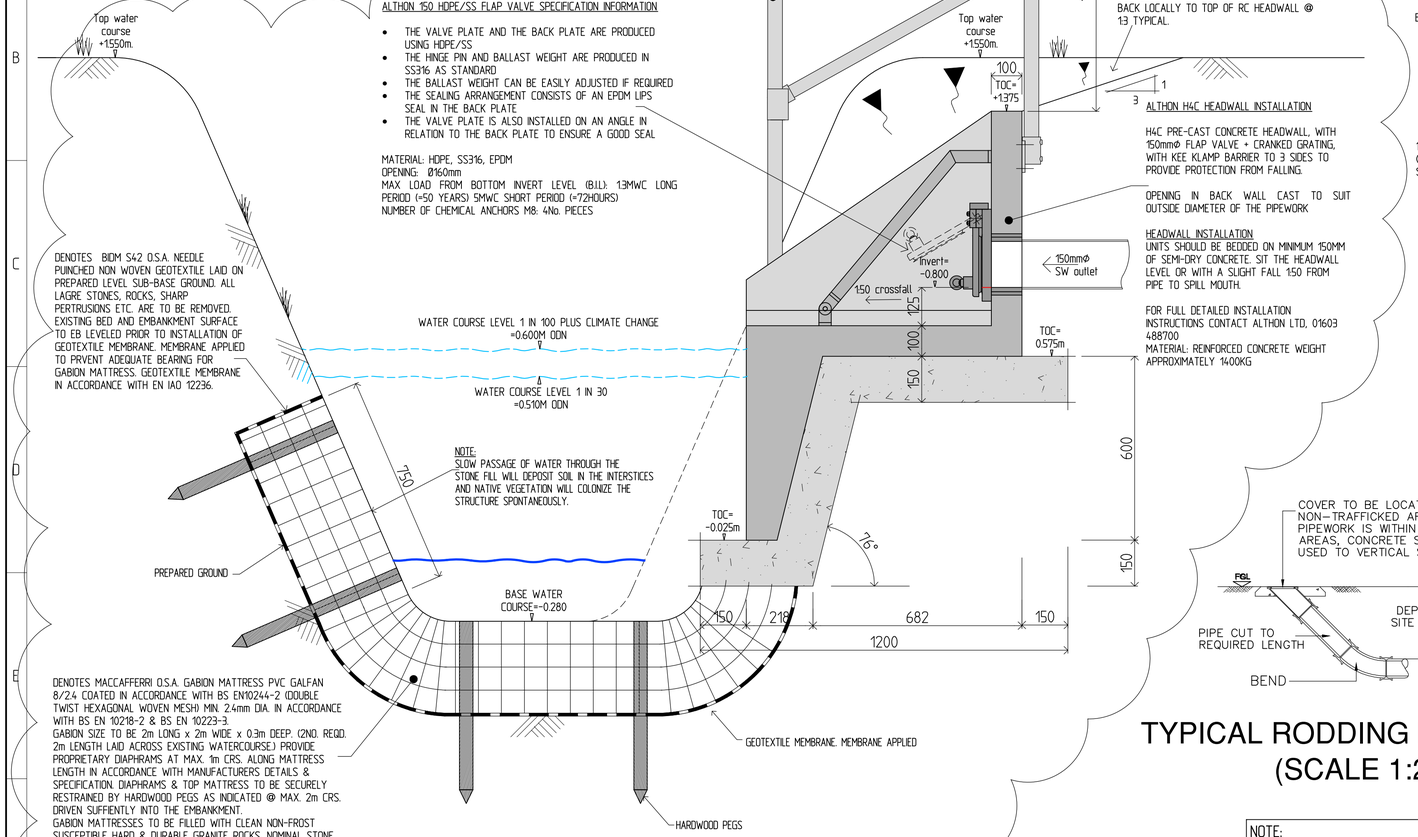
1) THE MAIN CONTRACTOR WILL BE RESPONSIBLE FOR ALL TEMPORARY WORKS. A SPECIALIST SUBCONTRACTOR SHOULD BE APPOINTED TO DESIGN AND INSTALL ALL TEMPORARY WORKS TO ADEQUATELY SUPPORT ALL APPLIED LOADS.
2) THE CONTRACTOR SHALL TAKE ALL APPROPRIATE MEASURES TO AVOID CAUSING INSTABILITY OR DAMAGE TO EXISTING STRUCTURES, SURFACE FINISHES ETC.

EXCAVATIONS AND FILLING

1. ALL TRENCHES AND PITS EXCAVATED FOR THE CONSTRUCTION OF DRAINAGE AND FOUNDATIONS MUST BE ADEQUATELY SUPPORTED AT ALL TIMES TO SAFEGUARD THE STABILITY OF ADJACENT STRUCTURES AND PLANT AND THE SAFETY AND WELFARE OF SITE OPERATIVES
2. ALL WORK IN OPEN EXCAVATIONS AND CONFINED SPACES SHALL BE CARRED OUT IN ACCORDANCE WITH CURRENT HEALTH AND SAFETY REGULATIONS.
3. ALL STONE FILL SHALL BE CLEANED, WELL GRADED, CRUSHED STONE, 50 MM DOWN AND SHALL BE LAID AND COMPACTED IN LAYERS NOT EXCEEDING 150mm THICKNESS.

CONCRETE WORKS

1) ALL REINFORCED CONCRETE TO BE GRADE PAV2 MIX - IN ACCORDANCE WITH BS 8500:PART 1
2) ALL CONCRETE SHALL BE IN ACCORDANCE WITH BS 8500:PART 2 & BS EN 206-1
3) ALL BAR REINFORCEMENT SHALL BE TO BS 8666: 2000 ALL FABRIC REINFORCEMENT SHALL BE TO BS 4483:1998 AND MINIMUM LAP LENGTH SHALL BE 450 MM.
4) ALL REINFORCEMENT SHALL BE SUFFICIENTLY SUPPORTED, POSITIONED AND RESTRAINED USING PROPRIETARY CHAIRS AND SPACERS TO ACHIEVE THE REQUIRED COVER.
5) THE CONCRETE COVER REQUIREMENTS SHALL BE MINIMUM 40 MM TO ALL REINFORCEMENT (U.N.O). IF CAST WITHIN FORMWORK. COVER SHALL BE MIN. 75MM IF CAST AGAINST GROUND.



ALTHON 150 HDPE/SS FLAP VALVE SPECIFICATION INFORMATION

- THE VALVE PLATE AND THE BACK PLATE ARE PRODUCED USING HDPE/SS
- THE HINGE PIN AND BALLAST WEIGHT ARE PRODUCED IN SS316 AS STANDARD
- THE BALLAST WEIGHT CAN BE EASILY ADJUSTED IF REQUIRED
- THE SEALING ARRANGEMENT CONSISTS OF AN EPDM LIPS SEAL IN THE BACK PLATE
- THE VALVE PLATE IS ALSO INSTALLED ON AN ANGLE IN RELATION TO THE BACK PLATE TO ENSURE A GOOD SEAL

MATERIAL: HDPE, SS316, EPDM
OPENING: Ø160mm
MAX LOAD FROM BOTTOM INVERT LEVEL (B.I.L): 1.3MWC LONG PERIOD (=50 YEARS) 5MWC SHORT PERIOD (=72HOURS)
NUMBER OF CHEMICAL ANCHORS M8: 4No. PIECES

ALTHON H4C HEADWALL INSTALLATION

H4C PRE-CAST CONCRETE HEADWALL, WITH 150mmØ FLAP VALVE + CRANKED GRATING, WITH KEE KLAMP BARRIER TO 3 SIDES TO PROVIDE PROTECTION FROM FALLING.

OPENING IN BACK WALL CAST TO SUIT OUTSIDE DIAMETER OF THE PIPEWORK

HEADWALL INSTALLATION
UNITS SHOULD BE BEDDED ON MINIMUM 150MM OF SEMI-DRY CONCRETE. SIT THE HEADWALL LEVEL OR WITH A SLIGHT FALL 1:50 FROM PIPE TO SPILL MOUTH.

FOR FULL DETAILED INSTALLATION INSTRUCTIONS CONTACT ALTHON LTD, 01603 488700
MATERIAL: REINFORCED CONCRETE WEIGHT APPROXIMATELY 1400KG

DENOTES BIDM S42 O.S.A. NEEDLE PUNCHED NON WOVEN GEOTEXTILE LAID ON PREPARED LEVEL SUB-BASE GROUND. ALL LAGRE STONES, ROCKS, SHARP PERTRUSIONS ETC. ARE TO BE REMOVED. EXISTING BED AND EMBANKMENT SURFACE TO EB LEVELED PRIOR TO INSTALLATION OF GEOTEXTILE MEMBRANE MEMBRANE APPLIED TO PRVENT ADEQUATE BEARING FOR GABION MATTRESS. GEOTEXTILE MEMBRANE IN ACCORDANCE WITH EN IAO 12236.

NOTE:
SLOW PASSAGE OF WATER THROUGH THE STONE FILL WILL DEPOSIT SOIL IN THE INTERSTICES AND NATIVE VEGETATION WILL COLONIZE THE STRUCTURE SPONTANEOUSLY.

DENOTES MACCAFFERRI O.S.A. GABION MATTRESS PVC GALFAN 8/2.4 COATED IN ACCORDANCE WITH BS EN10244-2 (DOUBLE TWIST HEXAGONAL WOVEN MESH) MIN. 2.4mm DIA. IN ACCORDANCE WITH BS EN 10218-2 & BS EN 10223-3.
GABION SIZE TO BE 2m LONG x 2m WIDE x 0.3m DEEP. (2ND. REQD. 2m LENGTH LAID ACROSS EXISTING WATERCOURSE.) PROVIDE PROPRIETARY DIAPHRAMS AT MAX. 1m CRS. ALONG MATTRESS LENGTH IN ACCORDANCE WITH MANUFACTURERS DETAILS & SPECIFICATION. DIAPHRAMS & TOP MATTRESS TO BE SECURELY RESTRAINED BY HARDWOOD PEGS AS INDICATED @ MAX. 2m CRS. DRIVEN SUFFIENTLY INTO THE EMBANKMENT.
GABION MATTRESSES TO BE FILLED WITH CLEAN NON-FROST SUSCEPTIBLE HARD & DURABLE GRANITE ROCKS. NOMINAL STONE SIZES OF BETWEEN 100mm MIN. TO 200mm MAX. TO PREVENT WASHOUT THROUGH GABION MATTRESSES.
MATTRESSES TO BE LAID, LACED TOGETHER, FILLED ETC; ALL IN ACCORDANCE WITH THE MANUFACTURERS DETAILS & SPECIFICATIONS.

MATTRESS INSTALLATION:-

CARRY THE WIRED-UP MATTRESS TO ITS FINAL POSITION AND WIRE IT SECURLEY TO THE ADJACENT MATTRESS IN ACCORDANCE WITH THE MANUFACTURERS LACING DETAILS & SPECIFICATION. ON SLOPES, THE MATTRESS SHOULD BE LAID WITH THE 2m WIDTH DIMENSION ALONG THE SLOPE, NOT UP THE SLOPE.

WHEN THE MATTRESS IS TO BE PLACED OVER A FILTER CLOTH/GEOTEXTILE MEMBRANE, CARE MUST BE TAKEN TO ENSURE THAT ANY PROJECTING ENDS OF WIRE ARE BENT UPWARDS TO AVOID PUNCTURING OR TEARING THE CLOTH. MATTRESSES SHOULD BE PLACED AND TIED TOGETHER EMPTY – IT IS DIFFICULT TO WIRE TWO MATTRESSES TOGETHER WHEN ONE IS FULL OF STONE.

WHERE STAKING IS SPECIFIED ON STEEP SLOPES, THE UNITS SHOULD BE SECURED BY HARDWOOD PEGS AS INDICATED. PEGS TO BE DRIVEN INTO THE GROUND JUST BELOW THE UPPER END PANEL AT THE TOP OF THE BANK AND AT DIAPHRAM LOCATIONS.

MATTRESS FILLING:-

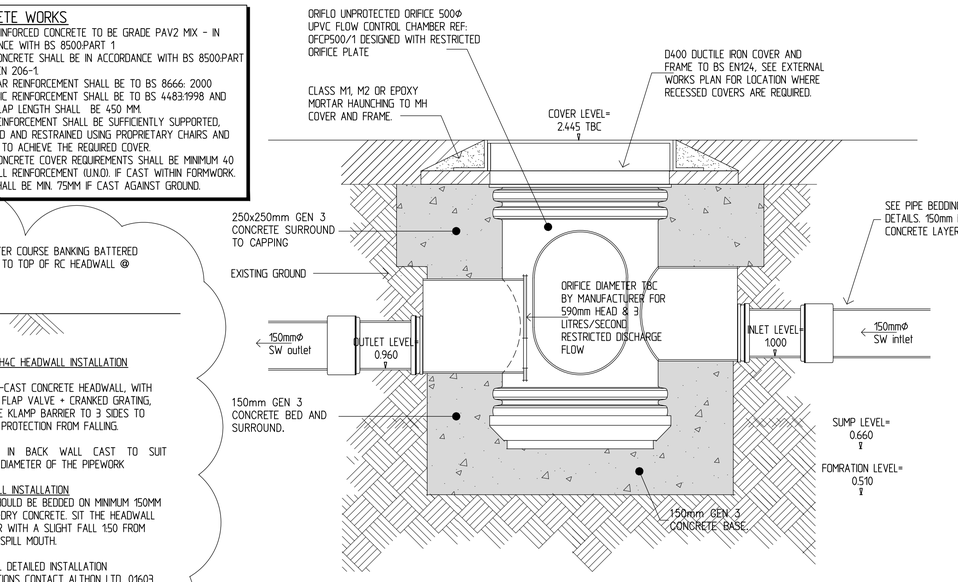
THE STONE FILL MATERIAL SHOULD BE PLACED BY HAND TO ENSURE THE GABION MATTRESS ARE NOT DAMAGED. ENSURE THAT EACH COMPARTMENT IS COMPLETELY FILLED, USING AN ASSORTMENT OF STONE SIZES BETWEEN 100mm MIN. AND 200mm MAX.

START FILLING AT THE BOTTOM OF THE SLOPE. FILLING SHOULD BE DONE UNIT BY UNIT, BUT SEVERAL UNITS SHOULD BE READY FOR FILLING AT ANY ONE TIME. ENSURE THAT THE DIAPHRAM TOPS ARE ACCESSIBLE FOR WIRING.

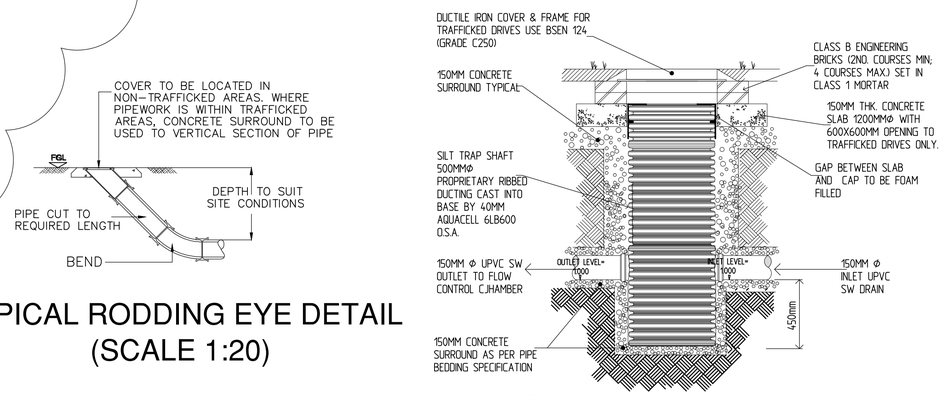
SLIGHTLY OVER FILL TO ALLOW FOR SETTLEMENT. TIE DOWN THE LIDS TO THE ENDS OF THE MATTRESSES AND THEN SECURELY WIRE THEM TO THE SIDES AND DIAPHRAMS, USING ALTERNATE SINGLE AND DOUBLE LOOPS.

HEADWALL TO IDB OPEN WATERCOURSE TYPICAL SECTION (SCALE 1:10)

A02



SWFC-PROPRIETARY FLOW CONTROL CHAMBER TYPICAL SECTION (SCALE 1:10)

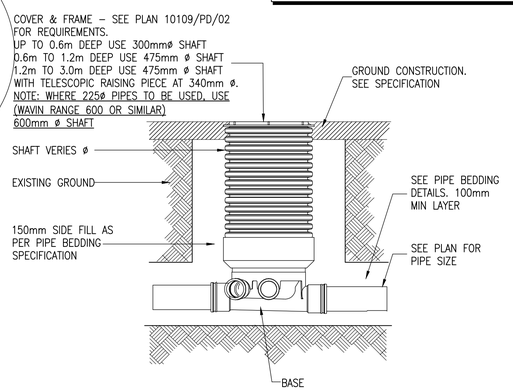


SILT TRAP MANHOLE TYPICAL DETAIL SCALE 1:20

COVER TO BE LOCATED IN NON-TRAFFICKED AREAS. WHERE PIPEWORK IS WITHIN TRAFFICKED AREAS, CONCRETE SURROUND TO BE USED TO VERTICAL SECTION OF PIPE

TYPICAL RODDING EYE DETAIL (SCALE 1:20)

NOTE:
REFER TO PCC CONSULTANTS LTD DRAWING NUMBER 10109/PD/01 & /02 FOR SURFACE WATER DRAINAGE GENERAL ARRANGEMENT LAYOUT.

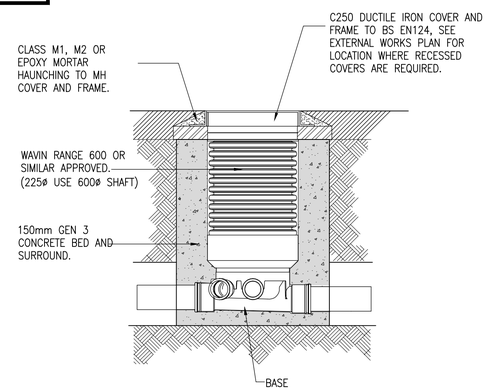


TYPE 1 CHAMBER

TYPICAL NON ENTRY PLASTIC INSPECTION CHAMBER

(IN PAVED AREAS AND NON VEHICULAR ROUTES)

1:20



TYPE 2 CHAMBER

TYPICAL NON ENTRY PLASTIC INSPECTION CHAMBER

(IN PAVED AREAS AND VEHICULAR ROUTES)

1:20

GENERAL NOTES

1. ALL EXISTING DRAINAGE NOT BEING REUSED TO BE GRUBBED OUT.
2. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT DRAWINGS.
3. SHOULD THERE BE ANY CONFLICT BETWEEN THE DETAILS INDICATED ON THIS DRAWING AND THOSE INDICATED ON OTHER DRAWINGS THE ENGINEER SHOULD BE INFORMED PRIOR TO CONSTRUCTION ON SITE.
4. UNTIL TECHNICAL APPROVAL HAS BEEN OBTAINED FROM THE RELEVANT AUTHORITY, IT SHOULD BE UNDERSTOOD THAT ALL DRAWINGS ISSUED ARE PRELIMINARY AND NOT FOR CONSTRUCTION. SHOULD THE CONTRACTOR COMMENCE SITE WORK PRIOR TO SUCH APPROVAL BEING GIVEN, IT IS ENTIRELY AT HIS OWN RISK.
5. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED.
6. THE RISK ASSESSMENTS FOR THIS PROJECT MUST BE REVIEWED PRIOR TO THE COMMENCEMENT OF ANY WORKS ON SITE.
7. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO EXECUTE THE WORKS AT ALL TIMES IN STRICT ACCORDANCE WITH THE REQUIREMENTS OF THE HEALTH AND SAFETY AT WORK ACT 1974, AND THE C.D.M. REGULATIONS 2007.
8. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ANY SERVICE APPARATUS IN THE VICINITY OF THE WORKS. THE CLIENT WILL ACCEPT NO CLAIMS WHATSOEVER IN RESPECT OF LOSSES OR DAMAGE CAUSED IN RESPECT OF SUCH APPARATUS, HOWEVER CAUSED.
9. THE CONTRACTOR SHALL CHECK ALL TIE-INS FOR LINE AND LEVEL WITH EXISTING BEFORE COMMENCING ANY WORKS. THE ENGINEER SHOULD BE NOTIFIED IMMEDIATELY IN WRITING, SHOULD ANY ERRORS BE FOUND.
10. ALL LEVELS ARE RELATED TO ORDNANCE DATUM.
11. ALL PRIVATE DRAINAGE WORKS TO BE IN ACCORDANCE WITH THE REQUIREMENTS OF BUILDING REGULATIONS 2000, PART H, "DRAINAGE AND WASTE DISPOSAL".
12. PIPES WITH LESS THAN 600MM COVER ARE TO BE PROTECTED IN ACCORDANCE WITH PART H.
13. ALL PIPES, CHAMBERS AND FITTINGS TO BE INSTALLED, BEDDED AND BACKFILLED IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS.
14. PIPE WHICH RUN ADJACENT TO BUILDINGS SHALL BE INSTALLED IN STRICT ACCORDANCE WITH PART H, CLAUSES 2.23 TO 2.25.
15. ALL DRAINS IN THE VICINITY OF EXISTING OR PROPOSED TREES TO BE CONSTRUCTED IN ACCORDANCE WITH THE REQUIREMENTS OF CURRENT NHBC STANDARDS.
16. ALL EXISTING LAND DRAINS ENCOUNTED ON SITE DURING CONSTRUCTION TO BE RE-CONNECTED.
17. SHOULD ANY CHANGE IN SLAB LEVEL BE CONSIDERED, AGREEMENT SHALL BE SOUGHT FROM THE CLIENTS ENGINEER PRIOR TO COMMENCEMENT AND SHALL TAKE FULL ACCOUNT OF ALL RESTRICTIONS TO THE SLAB LEVEL.
18. THE LAYOUT OF PIPELINES, MANHOLES ETC. IS DESIGNED TO SUIT THE PERMANENT CASE. ADDITIONAL LOADS OVER & ABOVE THOSE DESIGNED FOR MAY ARISE DURING THE CONSTRUCTION PROCESS. THE CONTRACTOR SHALL PROVIDE ANY NECESSARY TEMPORARY PROTECTION TO ENSURE THAT PIPELINES, MANHOLES ETC. ARE NOT DAMAGED AS A RESULT OF HIS METHOD OF WORKING.
19. ALL PROPOSED PRIVATE DRAINAGE TO BE 150Ø PIPEWORK UNLESS NOTED OTHERWISE, SW LAID AT 1:100, FW LAID AT 1:80; EXCEPT:-
    - 19.1. PIPEWORK FROM GULLYS AND SUMP UNITS TO BE 150Ø LAID AT 1:150; UNLESS STATED OTHERWISE.
    - 19.2. WHERE STATED OTHERWISE.
    - 19.3. DOWNSTREAM OF LARGER PIPEWORK.
20. ALL RWP'S TO HAVE RODDABLE ACCESS AND TO BE LOCATED BY THE ARCHITECT.

REV:	DETAILS:	DATE:	BY: CH'D:
A02	APPROVAL ISSUE - DETAILS AMENDED	23.07.21	PJ PJC
A01	APPROVAL ISSUE	07.04.21	PJ PJC

PCC Consultants
The Annexe, Holly House, 11 Meadow Lane, South Hykeham, Lincoln, LN6 9PF.
E. info@pccleconsult.co.uk www.pccleconsult.co.uk
T. 01522 695540

©

CLIENT:
HARRIS PROPERTY LTD
CANTERBURY ROAD
MARGATE
KENT. CT9 5NT

PROJECT DETAILS:
PROPOSED RESIDENTAIL DEVELOPMENT
5 DETACHED DWELLINGS
LAND SOUTH OF DROVE ROAD
SHEPEAU STOW, SPALDING
PE12 0UQ

DRAWING TITLE:
PROPOSED SW & FW DRAINAGE TYPICAL DRAINAGE DETAILS
(DRAWING 1 0F 2)

STATUS:
APPROVAL

DRAWN BY:	PROJECT DESIGNERS:	PAPER SIZE:
PJ	PJC	A0
DATE:	SCALE:	CHECKED:
APRIL 20	AS NOTED	PJC
DRAWING NUMBER:		REVISION:
10109/PD/03		A02