GENERAL NOTES

1. ALL DIMENSIONS ARE IN MILLIMETRES (mm) UNLESS NOTED OTHERWISE AND ARE RELATED TO CENTRE LINES, UNLESS NOTED OTHERWISE EXCEPT IN THE CASE OF CHANNELS AND ANGLES WHERE DIMENSIONS RELATE TO CHANNEL AND ANGLE OUTSIDE FACES.
2. ALL LEVELS ARE IN METRES (m) AND RELATE TO ORDNANCE DATUM.
3. ALL CCS CONSULTING DRAWINGS ARE TO BE READ IN CONJUNCTION WITH
4. ALL RELEVANT ARCHITECTS, BUILDING SERVICES AND SPECIALIST DRAWINGS AND SPECIFICATIONS, INCLUDING HEALTH AND SAFETY PRE-CONSTRUCTION INFORMATION, HEALTH AND SAFETY RISK ASSESSMENTS AND CDM CO-ORDINATOR RISK REGISTER.
5. DO NOT SCALE FROM CCS CONSULTING DRAWINGS.
6. DO NOT DERIVE DIMENSIONS FROM DIGITAL MEDIA.
7. FOR DETAILS OF BUILDING SETTING OUT REFER TO ARCHITECTS DRAWINGS. ALL GRID SETTING OUT, DIMENSIONS AND LEVELS SHOWN ON CCS CONSULTING DRAWINGS SHOULD BE CONFIRMED BY THE ARCHITECT PRIOR TO START ON SITE.
8. ALL COLUMNS TO BE SET OUT WITH GRID UNO. ALL BEAMS AND BRACING SUPPORTED AT COLUMNS TO BE SET OUT TO COLUMN CENTRE LINES UNO.
9. ALL DIMENSIONS RELEVANT TO EXISTING BUILDINGS AND ANY OTHER EXISTING FEATURES SHALL BE CONFIRMED BY THE CONTRACTOR BEFORE CONSTRUCTION OR FABRICATION WORKS ARE COMMENCED.
10. THE STRUCTURE IS DESIGNED FOR THE PERMANENT CONDITION ONLY. THE CONTRACTOR IS RESPONSIBLE FOR THE STABILITY OF THE STRUCTURE DURING ITS TEMPORARY CONDITION AND ANY TEMPORARY WORKS REQUIRED DURING CONSTRUCTION. IF THE CONTRACTOR WISHES TO USE THE PERMANENT STRUCTURE AS TEMPORARY WORKS (E.G. CRANE SUPPORT) HE MUST DEMONSTRATE WITH DRAWINGS AND CALCULATIONS THAT THIS WILL NOT AFFECT THE FUTURE PERFORMANCE OF THE PERMANENT WORKS.
11. THE CONTRACTOR SHALL ENSURE THAT TEMPORARY LOADS IMPOSED ONTO NEW STRUCTURES SHALL BE LESS THAN THOSE FOR WHICH IT HAS BEEN DESIGNED.
12. HEAPING OF WET CONCRETE MUST BE STRICTLY AVOIDED. IF TEMPORARY CONSTRUCTION LOADS ARE LIKELY TO EXCEED 1.5kN/m² THE DECK MANUFACTURER IS TO BE CONSULTED.
13. ERECTION PHASING OF THE STEEL FRAME AND THE REQUIREMENTS FOR TEMPORARY STABILITY BRACING DURING ERECTION WORKS, ARE TO BE CO-ORDINATED BY THE STEELWORK SUB-CONTRACTOR AND THE MAIN CONTRACTOR, AND MUST CONSIDER OTHER SCHEDULED ACTIVITIES WITHIN THE OVERALL PROGRAMME. THE STEELWORK FABRICATOR IS TO PROVIDE ALL TEMPORARY LATERAL BRACING NECESSARY TO MAINTAIN STABILITY DURING ERECTION.
14. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO ENSURE THAT NOISE, VIBRATION AND DUST RESULTING FROM THE WORKS IS KEPT WITHIN REASONABLE LIMITS.
15. REFER TO THE ARCHITECTS DRAWINGS FOR THE ABOVE GROUND WATERPROOFING / WEATHERPROOFING / TANKING DETAILS.
16. REFER TO THE LANDSCAPE ARCHITECTS DRAWINGS FOR ALL EXTERNAL LANDSCAPING REQUIREMENTS INCLUDING EXTERNAL STAIRCASES AND STEPS AND SMALL RETAINING WALLS BETWEEN LANDSCAPING FEATURES. THESE ARE NOT CONSIDERED PART OF THE PRIMARY STRUCTURAL PACKAGE AND DETAILS ARE NOT INCLUDED ON THE CCS CONSULTING DRAWINGS. FOR COSTING, AN ALLOWANCE SHOULD BE MADE FOR ALL LANDSCAPING DETAILS BASED ON THE LANDSCAPE ARCHITECTS DRAWINGS.
17. MATERIALS AND PRODUCTS SPECIFIED ON ALL DRAWINGS SHALL BE AS STATED OR EQUAL APPROVED AND TO BE INSTALLED FULLY IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS.
18. WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE LATEST EUROCODES AND CODES OF PRACTICE.
19. THE STRUCTURES SHOWN ON THE STRUCTURAL DRAWINGS AND DESCRIBED IN THE STRUCTURAL SPECIFICATION CONSTITUTES ALL 'PRIMARY STRUCTURE'. ADDITIONAL STRUCTURE REQUIRED BY THE CONTRACTOR FOR SUPPORTING ITEMS, PLANT AND CRANAGE ETC. IS REFERRED TO AS 'SECONDARY STRUCTURE' AND DESIGN AND DETAILING SHALL BE THE FULL RESPONSIBILITY OF THE CONTRACTOR.
20. ALL PROPRIETARY PRODUCTS TO BE USED STRICTLY IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
21. ALL INSULATION, DPM'S AND DPC'S ARE TO BE SPECIFIED BY THE ARCHITECT. REFER TO ARCHITECTS DRAWINGS, DETAILS AND SPECIFICATIONS.
22. ALL EXPOSED OPENINGS WITHIN THE FLOOR STRUCTURES (EXCLUDING STAIR VOIDS) ARE TO BE DECKED OVER, OR FIXED BARRIERS INSTALLED, TO PROVIDE FALL PROTECTION.
23. CONTRACTOR TO PROVIDE A SEALING COMPOUND TO THE SLAB TO PREVENT MOISTURE DAMAGING FINISHES (TO ARCHITECTS SPECIFICATION).

SUBSTRUCTURE - GROUND BEARING SLAB

1. BEARING STRATUM FOR THE GROUND BEARING SLAB AND GROUND BEARING SLAB EDGE THICKENINGS IS TO PROVIDE A MINIMUM ALLOWABLE BEARING PRESSURE OF 250kN/m2. FOUNDATION SIZES PROVIDED ON THE DRAWINGS ARE BASED ON ACHIEVING THIS ALLOWABLE BEARING PRESSURE.
2. THE CONTRACTOR SHALL EXCAVATE TO SUFFICIENT DEPTH TO ACHIEVE THE ALLOWABLE BEARING PRESSURE STATED ON THE DRAWINGS. THE CONTRACTOR SHALL INSPECT THE BEARING FORMATION IN ACCORDANCE WITH THE SPECIFICATION AND CARRY OUT A PLATE BEARING TEST OR OTHER EQUIVALENT TEST TO ENSURE THE ALLOWABLE BEARING PRESSURE IS ACHIEVED.
3. IF THE STATED ALLOWABLE BEARING PRESSURE IS NOT ACHIEVED, OVERDIG THE BEARING STRATA UNTIL THE ALLOWABLE BEARING PRESSURE IS ACHIEVED AND UP FILL WITH MASS CONCRETE.

SUBSTRUCTURE - GENERALLY

1. REFER TO THE CCS CONSULTING EXCAVATION AND FILLING SPECIFICATION FOR ALL RELEVANT NOTES.
2. EXISTING SUB STRUCTURES ARE PESENT ON THIS SITE. AN ALLOWANCE SHOULD BE MADE BY CONTRACTOR FOR REMOVAL OF THESE SUBSURFACE STRUCTURES/OBSTRUCTIONS DURING CONSTRUCTION OF THE PROPOSED DEVELOPMENT.
3. THE FINAL SURFACE OF ALL FORMATIONS SHALL BE WELL ROLLED, SMOOTH AND FREE FROM MOVEMENT UNDER COMPACTION PLANT, RIDGES, CRACKS, LOOSE MATERIALS, RUTS OR OTHER DEFECTS AND CLEAN, FREE OF DETRITUS. ANY OPEN FRACTURE/JOINT SHOULD BE FILLED. FORMATION MUST ALSO BE PROTECTED FROM INCLEMENT WEATHER AND MUST BE DRY PRIOR TO POURING BLINDING.
4. ALL FOUNDATIONS TO BE POSITIONED CENTRALLY ABOUT COLUMN UNO.
5. 50mm BLINDING CONCRETE IS REQUIRED UNDER ALL REINFORCED CONCRETE ELEMENTS CAST ON THE GROUND, CAST WITH A SMOOTH AND LEVEL FINISH.
6. WHERE HARDCORE IS TO BE USED THE MATERIAL SHOULD BE WELL GRADED WITH A MAXIMUM NOMINAL SIZE OF 75mm. UNLESS SPECIFIED OTHERWISE IN THE CCS CONSULTING EXCAVATION AND FILLING SPECIFICATION IT SHALL BE COMPACTED IN 150mm MAXIMUM LAYERS AS SOON AS POSSIBLE AFTER SPREADING.
7. BACKFILLING AROUND FOUNDATIONS, DUCTS ETC. IS TO BE CARRIED OUT IN ACCORDANCE WITH THE CCS CONSULTING EXCAVATION AND FILLING SPECIFICATION.
8. WHERE EXISTING DRAINS AND FOUNDATIONS OCCUR UNDER NEW FOUNDATIONS THEY ARE TO BE GRUBBED OUT. SOFT SPOTS AT FOUNDATION LEVELS ARE TO BE EXCAVATED AND BACKFILLED IN ACCORDANCE WITH THE SPECIFICATION.
9. ALL BURIED STRUCTURES ARE TO BE REMOVED AND BACKFILLED IN ACCORDANCE WITH THE EXCAVATION AND FILLING SPECIFICATION.
10. ALLOWANCE TO BE MADE IN THE METHOD OF CONSTRUCTION FOR GROUNDWATER CONTROL MEASURES AND TEMPORARY SUPPORT TO ALL EXCAVATIONS.
11. A COMPETENT ENGINEER FROM THE CONTRACTORS TEAM IS TO INSPECT ALL FOUNDATION FORMATIONS. WHERE RELEVANT THE STRUCTURAL ENGINEER AND THE CONTRACTORS ENGINEER ARE TO AGREE AN ACCEPTABLE LEVEL OF FORMATION ON SITE. THEREAFTER, NOTIFICATION MUST BE GIVEN TO THE ENGINEER THAT THE CONTRACTOR IS SATISFIED WITH THE PROCEEDING FORMATIONS BEFORE LAYING ANY FOUNDATION CONCRETE.
12. THE ENGINEER/CONTRACT ADMINISTRATOR MAY VARY THE LEVEL OF ANY FOUNDATION IF THEY CONSIDER THE BEARING STRATA IS NOT SUITABLE.

IN-SITU CONCRETE

1. REFER TO CCS CONSULTING IN-SITU CONCRETE SPECIFICATION FOR ALL RELEVANT NOTES.
   - CONCRETE GRADE FOR ALL OTHER ELEMENTS UNO - C32/40

     TO BS8110: MIN CEMENT CONTENT 300kg/m³ OPC; MAX FREE WATER / CEMENT RATIO 0.6, MAX AGGREGATE SIZE 20mm.
2. ALL DIMENSIONS TO SLAB EDGE TO BE CONFIRMED BY THE ARCHITECT.
3. UNO CONCRETE COVER TO OUTERMOST REINFORCEMENT TO BE:
   - FOUNDATIONS - 50mm BOTTOM, 50mm SIDE AND TOP
4. THE ABOVE COVERS RELATE TO CONCRETE CAST AGAINST FORMED SURFACES. WHERE CONCRETE IS CAST AGAINST NON-AGGRESSIVE SOIL, THE COVER TO REINFORCEMENT SHALL BE INCREASED TO 75mm.
5. ALL CONCRETE FACES TO BE CAST AGAINST FORMWORK UNLESS PRIOR CONSENT IS GRANTED BY THE ENGINEER.
7. ANY FORMWORK OR TEMPORARY PROPPING REQUIRED TO BE DESIGNED AND INSTALLED BY THE MAIN CONTRACTOR. DETAILS TO BE ISSUED TO CCS FOR COMMENT PRIOR COMMENCEMENT.
8. REFER TO ARCHITECTS DRAWINGS FOR DETAILS OF REBATES, CHAMFERS, ETC TO EXPOSED CONCRETE CONSTRUCTION.
9. 25x25 FILLETS TO BE INSTALLED TO ALL EDGES.
10. 100mm TROWELLED VERGE TO ALL EDGES AND BRUSHED FINISH TO ALL HORIZONTAL SURFACES.
11. THE EXPOSED FACES OF THE CONCRETE STRUCTURES ARE TO BE INSPECTED IN ACCORDANCE WITH THE CCS CONSULTING IN-SITU CONCRETE SPECIFICATION. EXPOSED CONCRETE TO FOLLOW ARCHITECTURAL REQUIREMENTS WITH RESPECT TO FINISH, TEXTURE AND COLOUR.
12. NO HOLES, CHASES OR OTHER OPENINGS TO BE CUT OR ANY REINFORCEMENT TO BE CUT, BENT OR DISPLACED IN ANY PART OF THE STRUCTURE WITHOUT PRIOR APPROVAL OF THE ENGINEER.
13. PENETRATIONS LESS THAN 300mm SQUARE OR DIAMETER ARE NOT SHOWN ON THE STRUCTURAL DRAWINGS - REFER TO BUILDERS WORK DRAWINGS FOR DETAILS. BUILDINGS WORK DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER FOR COMMENT. ALL PROPOSED OPENINGS/ CORES TO REINFORCED CONCRETE TO NOT EXCEED 300mm DIAMETER WITH MINIMUM 3xDIAMTER SPACING. ALL PROPOSED OPENINGS TO BE CHECKED BY CCS ENGINEERS PRIOR TO CORING.
14. WHERE REQUIRED PENETRATIONS OF THIS SIZE SHOULD BE FORMED PRIOR TO POURING AND REINFORCEMENT LOCALLY DISPLACED TO SUIT.
15. CONSTRUCTION JOINT POSITIONS OTHER THAN THOSE DETAILED ON THE DRAWINGS ARE TO BE AGREED WITH THE ENGINEER IN ADVANCE OF CONSTRUCTION. THE JOINTS SHOULD BE CLEANED AND ALL LOOSE CONCRETE / DEBRIS REMOVED AND ROUGHENED PRIOR TO CONCRETING THE ADJACENT POUR.
16. MAXIMUM LENGTH OF TIME BEFORE POURING AGAINST PREVIOUS DAYS WORK IS 4 DAYS.
17. ALL REINFORCEMENT TO BE GRADE 500 CONFORMING TO BS 4449:2005 AND SCHEDULED IN ACCORDANCE WITH BS 8666:2005
18. ALL REINFORCEMENT SHALL BE SECURELY SUPPORTED IN ITS CORRECT POSITION DURING CONCRETING BY APPROVED BAR CHAIRS, SPACERS OR SUPPORT BARS. THESE TEMPORARY ELEMENTS WILL NOT BE SHOWN ON CCS CONSULTING REINFORCEMENT DRAWINGS.
19. SURFACE HOLES RESULTING FROM THE USE OF FORMWORK THROUGH TIES SHALL BE PLUGGED WITH A SEMI-DRY 1:3 CEMENT: SAND MIX WELL RAMMED IN.
20. SIZE OF CONCRETE ELEMENTS DO NOT INCLUDE THICKNESS OF APPLIED FINISHES.
21. NO HOLES, CHASES OR EMBEDMENT OF PIPES OTHER THAN THOSE SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE MADE IN CONCRETE MEMBERS WITHOUT THE PRIOR APPROVAL OF THE ENGINEER.
22. THE CONTRACTOR SHALL PROVIDE INFORMATION OF THEIR METHODS OF CONTROLLING THE CURING OF CONCRETE AND SHALL DETAIL THESE IN A METHOD STATEMENT FOR SUBMISSION TO THE ENGINEER/ARCHITECT IN ACCORDANCE WITH THE SPECIFICATION.

MASONRY - GENERAL

1. REFER TO ARCHITECTS DRAWINGS FOR SETTING OUT OF ALL MASONRY WALLS, FIXINGS AND SUPPORT DETAILS.
2. ALL INTERNAL WALLS TO BE FORMED IN LIGHTWEIGHT METAL STUD PARTITIONS UNO.
3. WHERE NOTED INTERNAL WALLS ARE TO BE FORMED WITH 100mm NWC BLOCKWORK WITH A MINIMUM COMPRESSIVE STRENGTH OF 7.3N/mm2.
4. ALL BLOCKWORK TO BE CONSTRUCTED WITH MORTAR TYPE M6 (II) UNO.
5. ALL BLOCKWORK BELOW DPC LEVEL IS TO BE DENSE SOLID BLOCK WITH NO VOIDS AND A MINIMUM COMPRESSIVE STRENGTH OF 7.3N/mm² AND A MAXIMUM WATER ABSORPTION RATE OF 7%.
6. ALL BRICKWORK BELOW DPC LEVEL IS TO BE A MINIMUM COMPRESSIVE STRENGTH OF 27N/mm² AND MAXIMUM WATER ABSORPTION OF 7%.
7. ALL MORTAR BELOW DPC LEVEL IS TO BE 1:3 CEMENT: SAND (GRADE 2). NO ADDITIVES WILL BE PERMITTED WITHOUT THE PRIOR WRITTEN CONSENT OF THE ENGINEER.
8. ALL BRICKWORK ABOVE DPC LEVEL IS TO HAVE A MINIMUM COMPRESSIVE STRENGTH OF 27.0N/mm² AND A MAXIMUM ABSORPTION RATE OF 12%, UNO.
9. ALL BLOCKWORK ABOVE DPC LEVEL IS TO HAVE A MINIMUM COMPRESSIVE STRENGTH OF 7.3N/mm², UNO.
10. VERTICAL MOVEMENT JOINTS SHOULD BE PROVIDED IN CLAY MASONRY WALLS AT MAXIMUM 12m c/c.
11. VERTICAL MOVEMENT JOINTS SHOULD BE PROVIDED IN CONCRETE BLOCK WALLS AT MAXIMUM 6m c/c.
12. MOVEMENT JOINT LOCATIONS AND SPACINGS SHOULD BE CONFIRMED BY THE SUB-CONTRACTOR TO ENSURE JOINT SPACING AND LAYOUT SHOWN IS SUITABLE WITH THE BLOCK TYPE USED. FINAL DESIGN OF THE JOINT SPACING IS THE RESPONSIBILITY OF THE SUB-CONTRACTOR.
13. REFER TO ARCHITECTS DRAWINGS FOR SETTING OUT OF ALL MASONRY WALLS.
14. REFER TO THE ARCHITECTS DRAWINGS FOR FINAL DETAILS AND LOCATIONS OF MASONRY TIES, FIXINGS, SUPPORT DETAILS, HEAD RESTRAINTS AND MOVEMENT JOINTS.
15. WHERE SINGLE LEAF BLOCKWORK WALLS ARE SHOWN BY THE ARCHITECT, ALLOW FOR PROPRIETARY COLD ROLLED WINDPOSTS AT 3.5m MAX c/c. ANCON WP2 150x70x6 OR EQUAL APPROVED.
16. ALL WALL TIES TO BE STAINLESS STEEL AND SHALL BE IN ACCORDANCE WITH BS.1243 OR MEET WITH THE REQUIREMENTS OF DD140 PART 2.
17. WALL TIES TO BE AT 450mm VERTICAL AND 900mm HORIZONTAL CENTRES. AROUND OPENINGS AND VERTICAL UN-BONDED OR RETURNED EDGES, TIES SHALL BE PROVIDED AT 225mm VERTICAL CENTRES AND WITHIN 225mm OF THE EDGE.
18. ALL MASONRY WALLS ARE TO HAVE A VERTICALLY SLOTTED HEAD RESTRAINT TO THE FULL LENGTH OF THE WALL. UNO THE FOLLOWING STANDARD DETAIL SHOULD BE ADOPTED: ANCON IHR-B OR EQUAL APPROVED @ 450mm c/c.
19. MASONRY TIES BETWEEN THE MASONRY AND ANY RESTRAINING WINDPOSTS OR RC STRUCTURE SHOULD BE PROVIDED AT 225mm VERTICAL CENTRES.
20. THE FINAL SELECTION OF ALL PROPRIETARY MASONRY RESTRAINT PRODUCTS SPECIFIED ON THE CCS CONSULTING DRAWINGS IS THE RESPONSIBILITY OF THE MASONRY SUB-CONTRACTOR BASED ON THE MANUFACTURER/SUPPLIER SELECTED AND THE APPROPRIATE DESIGN LOADING.
21. MINIMUM BEARING OF OTHER STRUCTURAL ELEMENTS ONTO MASONRY TO BE (UNLESS NOTED OTHERWISE) :-

STEEL	100mm
PRECAST UNITS	90mm
TIMBER	70mm
LINTELS	150mm

22. CONCRETE PADSTONES WHERE SHOWN ARE TO BE A MINIMUM 440mm LONG x 215mm DEEP UNLESS NOTED OTHERWISE. ALL PADSTONES TO STEEL BEAMS SHOULD COME COMPLETE WITH 2No. M16 DIAMETER RAGE BOLTS FOR POSITIVE CONNECTION.
22. BUILDERS WORKS IN CONNECTION WITH OPENINGS - ALL PROPOSED OPENINGS/ CORES TO MASONRY WALLS TO NOT EXCEED 300mm DIAMETER WITH MINIMUM 3xDIAMTER SPACING. ALL PROPOSED OPENINGS TO BE CHECKED BY CCS ENGINEERS PRIOR TO CORING.

DRAINAGE NOTES

1. EXISTING DETAILS SHOWN ON THIS DRAWING INCLUDING KERBLINES, EXISTING DRAINS, CHAMBERS, SEWERS, PIPEWORK, STUB CONNECTIONS WHERE NEW CONNECTIONS, DIVERSIONS OR ABANDONMENT ARE SHOWN, INVERT LEVELS AND PIPE SIZES SHALL BE CHECKED AND CONFIRMED TO THE ENGINEER PRIOR TO THE COMMENCEMENT OF ANY WORKS. ANY DISCREPANCIES SHALL BE REPORTED TO THE ENGINEER FOR ACTION PRIOR TO ANY NEW CONSTRUCTION.
2. ALL PROPOSED SVP/ SS/ RWP LOCATIONS TO BE CONFIRMED BY ARCHITECT/ M&E CONTRACTOR.
3. DISCHARGE UNITS FOR EACH SVP AND SS TO BE CONFIRMED BY M&E ENGINEER TO ESTABLISH FW DISCHARGE RATES.
4. ALL DRAINAGE WORKS SHALL BE CARRIED OUT IN ACCORDANCE WITH THE REQUIREMENTS OF THE LOCAL AUTHORITY AND IN CONJUNCTION WITH ALL RELEVANT BRITISH STANDARDS, CODES OF PRACTICE AND "SEWERS FOR ADOPTION" 7th EDITION AND ADDENDUMS AS APPROPRIATE.
5. ALL DRAINAGE SHALL COMPLY WITH THE TYPICAL DRAINAGE CONSTRUCTION DETAILS AND THE REQUIREMENTS OF BS EN 752.
6. ACCESS COVERS AND FRAMES SHALL COMPLY WITH THE LOADINGS SPECIFIED AND TO BS EN 124 AND KITEMARKED OR IF RECESSED COVERS ARE SPECIFIED THEN IN ACCORDANCE WITH FACTA ASSOCIATION EQUIVALENT.
7. THE PROPOSED BUILDING OUTLINES SHOWN ON THE DRAWING ARE FOR INFORMATION ONLY. REFER TO THE ARCHITECTS PLANS FOR PRECISE LOCATION SETTING OUT INFORMATION AND DETAILS.
8. FOR SETTING OUT DIMENSIONS OF SS, SVP, RWP, FLOOR GULLY & OTHER DRAINAGE 'POP-UP' LOCATIONS REFER TO ARCHITECTS OR MECHANICAL & ELECTRICAL ENGINEERS DRAWINGS.
9. ALL UNDER-SLAB DRAINAGE SHALL BE LAID AT GRADIENTS OF 1 in 40 MIN. FOR FOUL PIPEWORK AND 1 in 80 MIN. FOR SURFACE WATER UNLESS NOTED OTHERWISE.
10. AT LEAST ONE SOIL PIPE AT THE HEAD OF EACH FOUL RUN SHALL BE VENTED TO THE ATMOSPHERE.
11. ALL RAINWATER DOWNPIPES SHALL BE ACCESSIBLE ABOVE GROUND FOR RODDING PURPOSES.
12. COVER LEVELS SHOWN ON THIS DRAWING ARE APPROXIMATE AND SHALL BE ADJUSTED TO SUIT FINISHED LEVELS ON SITE BY THE CONTRACTOR. COVERS SHALL BE ORIENTATED TO SUIT FINISHES WHERE APPROPRIATE.
13. ALL PRIVATE DRAINAGE PIPEWORK FOR FOUL AND SURFACE WATER SYSTEMS HAVE BEEN DESIGNED ON THE BASIS OF UPVC TO BS EN 1401-1 UNLESS NOTED OTHERWISE.
14. ALL ADOPTABLE DRAINAGE PIPEWORK FOR FOUL AND SURFACE WATER SYSTEMS HAVE BEEN DESIGNED ON THE BASIS OF CLAYWARE, CONCRETE OR PLASTIC TO COMPLY WITH 'SEWERS FOR ADOPTION' 7TH EDITION.
15. ALL DRAINAGE PIPEWORK SHALL BE LAID SOFFIT TO SOFFIT UNLESS NOTED OTHERWISE.
16. WHERE NEW DRAINAGE IS SITUATED WITHIN 5 METRES OF NEW OR EXISTING TREES THE PIPEWORK SHALL BE ENCASED IN CONCRETE TO REDUCE THE RISK OF ROOT INGRESS.
17. CONCRETE ENCASEMENT OF THE PIPEWORK SHALL BE REQUIRED WHERE THE VERTICAL CLEARANCE BETWEEN TWO PIPES CROSSING IS LESS THAN 300mm.
18. ALL EXISTING DRAINAGE SHALL BE ASSUMED TO BE 'LIVE' AND SHALL BE MAINTAINED AT ALL TIMES DURING THE WORKS. EXISTING DRAINAGE SHALL BE RECONNECTED TO THE NEW DRAINAGE SYSTEM UNLESS PROVEN TO BE REDUNDANT FOR ABANDONMENT. ALL EXISTING DRAINAGE TO BE ABANDONED SHALL BE SEALED BY APPROPRIATE MEANS.
19. ALL DRAINAGE CONNECTING TO THE PUBLIC SEWER NETWORK SHALL NOT COMMENCE UNTIL RECEIPT OF THE APPROVAL FROM THE DRAINAGE AUTHORITY AND SHALL COMPLY WITH REQUIREMENTS USING VITRIFIED CLAY PIPEWORK TO BS EN 295 WITH PLAIN SLEEVED OR SOCKETED FLEXIBLE JOINTS SUBJECT TO THEIR APPROVAL.
20. WHERE DRAINAGE WORKS ARE CARRIED OUT IN THE PUBLIC HIGHWAY, THE RELEVANT NECESSARY APPROVALS AND ROAD OPENING NOTICES SHALL BE OBTAINED FROM THE HIGHWAY AUTHORITY AND UTILITY COMPANIES.
21. ALL UNDERGROUND DRAINAGE SHALL BE LAID AT GRADIENTS OF 1:40 MIN. FOR FOUL PIPEWORK AND 1:80 MIN. FOR SURFACE WATER UNLESS NOTED OTHERWISE.
22. UPON COMPLETION, ALL NEW DRAINAGE INSTALLATIONS TOGETHER WITH ANY EXISTING DRAINAGE RETAINED SHALL BE JETTED AND CCTV SURVEYED. CONTRACTOR TO ENSURE THAT THE DRAINAGE SYSTEM IS FULLY OPERATIONAL, FREE OF EXCESS DEBRIS / SILT AND ALL IDENTIFIED FAULTS RECTIFIED.
23. EXACT LOCATIONS OF PROPOSED MANHOLES AND INSPECTION CHAMBERS TO BE DETERMINED AND AGREED ON SITE.
24. ALL PIPES BUILT INTO THE MANHOLE INVERTS SHALL BE INSTALLED WITH SOFFIT LEVELS UNLESS SHOWN OTHERWISE.
25. THE CONTRACTOR SHALL CONTROL ACCURATE LINE AND LEVEL OF PIPE LAYING BY USE OF AN OPTICAL LASER.
26. THE CONTRACTOR SHALL PROTECT THE PIPELINE FROM DAMAGE BY SITE TRAFFIC DURING THE CONSTRUCTION PROCESS.
27. PIPEWORK SHALL COMPLY WITH THE FOLLOWING REQUIREMENTS U.N.O. -
    - 27.1. CLAYWARE PIPES TO BS 65.
    - 27.2. MAIN RUNS 150mm DIAMETER, MINIMUM CRUSHING STRENGTH 40kN/m ON CLASS B FLAT BED.
    - 27.3. PIPEWORK WITH LESS THAN 600mm COVER FROM FINISHED ROAD LEVEL SHALL BE PROTECTED WITH A 150mm C20 CONCRETE BED AND SURROUND.
    - 27.4. SOFT SPOTS IN THE TRENCH FORMATION SHALL BE REMOVED AND REPLACED WITH GRANULAR BEDDING UNLESS INSTRUCTED OTHERWISE.
    - 27.5. UNLESS NOTED OTHERWISE MANHOLE COVERS SHALL BE DUCTILE IRON TO BS 497 BLACK COATED WITH 600 x 600 SQUARE OPENING AS FOLLOWS;

HIGHWAYS	-	CLASS D400
CAR PARKS	-	CLASS D400
LANDSCAPED AREAS	-	CLASS B125

28. **HEALTH & SAFETY:**
    THE WORKS SHALL BE CARRIED OUT BY SPECIALIST, COMPETENT AND EXPERIENCED CONTRACTORS. ALL OPERATIVES SHALL HAVE RECEIVED FULL AND APPROPRIATE TRAINING WITH APPROPRIATE QUALIFICATIONS FOR THE OPERATIONS THEY ARE REQUIRED TO UNDERTAKE. ALL WORK SHALL BE CARRIED OUT IN ACCORDANCE WITH THE RELEVANT HEALTH & SAFETY REGULATIONS.

HIGHWAY NOTES:

1. CBR TESTS ARE TO BE UNDERTAKEN ON TOP SURFACE OF THE SUB-LAYER BY AN APPROVED TESTING COMPANY. THE NUMBER AND LOCATIONS ARE THE BE DETERMINED BY A REPRESENTATIVE OF MCC HIGHWAYS. A MINIMUM CBR VALUE OF 30% TO BE ACHIEVED ON TOP OF THE SUB-BASE AT EACH LOCATION FOR THE ROAD ADOPTION TO PROGRESS.
2. PPC EDGINGS WILL BE REQUIRED FOR DEMARCATION BETWEEN PRIVATE DRIVEWAYS & ADOPTABLE DROPPED VEHICLE CROSSINGS.
3. CCTV SURVEYS WILL BE REQUIRED ON ALL HIGHWAY DRAINS (INCLUDING GULLY CONNECTIONS) FOLLOWING ROAD & DRAINAGE CONSTRUCTION.
4. ALL ROAD GULLIES WITHIN THE WORKS BOUNDARY ARE TO BE DE-SILTED PRIOR TO HANDOVER.
5. THE KERB FACE FOR VEHICULAR DROPPED CROSSINGS = 25mm.
6. THE KERB FACE FOR PEDESTRIAN DROPPED CROSSINGS = MAX. 6mm
7. THE LOCATION OF ALL SIGNAGE & (BOLLARDS) TO BE AGREED ON SITE WITH A REPRESENTATIVE OF LOCAL HIGHWAY AUTHORITY (LHA) PRIOR TO INSTALLATION.
8. ALL NEW MANHOLE COVERS AND FRAMES IN THE S38/ S278 WORKS ARE TO BE (U.N.O.) 150mm dp (MIN.), DUCTILE IRON TO BS 497 BLACK COATED WITH 600 x 600 SQUARE OPENING AS FOLLOWS:

HIGHWAYS	-	CLASS D400
CAR PARKS	-	CLASS D400
LANDSCAPED AREAS	-	CLASS B125

9. ANY REFLECTORISED SIGNS REQUIRED ARE TO BE TO 'CLASS REF. 2 (12899:2001)'.
10. ALL PERMANENT ROAD MARKINGS SHALL BE OF THERMOPLASTIC MATERIAL IN ACCORDANCE WITH BS EN 1871 AND BS EN 1436. ALL ROAD MARKING SHALL BE WHITE OR YELLOW AND SHALL BE REFLECTORISED IN ACCORDANCE WITH CLAUSE 1212. ALL ROAD MARKINGS SHALL HAVE SOLID GLASS BEADS INCORPORATED INTO THE THERMOPLASTIC MIXTURE IN ACCORDANCE WITH CLAUSE 1212.
11. THE SKID RESISTANCE LEVEL FOR ALL ROAD MARKINGS SHOULD NOT BE LESS THAN 55 (CLASS S3) AT ALL LOCATIONS, AS DEFINED IN TABLE 7 OF BS EN 1436.
12. PRIOR TO THE APPLICATION OF THERMOPLASTIC MATERIAL A TACK COAT COMPATIBLE WITH THE ROAD SURFACE AND THE MARKING MATERIAL SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.
13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THOROUGHLY CLEANING THE CARRIAGEWAY SURFACE TO ENABLE A STRONG BOND TO BE FORMED BETWEEN THE ROAD MARKING MATERIAL AND THE CARRIAGEWAY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE APPROPRIATE METHODS FOR CLEANING THE CARRIAGEWAY.
14. THE CONTRACTOR SHALL PROTECT THE NEWLY LAID ROAD MARKINGS FROM BEING TRAFFICKED BY VEHICLES OR PEDESTRIANS UNTIL THE MATERIAL HAS COOLED SUFFICIENTLY TO PREVENT DAMAGE TO THE MARKINGS OR INJURY TO THE PUBLIC'
15. THE THICKNESS OF THERMOPLASTIC ROAD MARKINGS, INCLUDING SURFACE APPLIED SOLID GLASS BEADS, SHALL BE 4MM +/- 1MM ABOVE THE TOP OF THE EDGE LINE'

notes :

1. IF THIS DRAWING HAS BEEN RECEIVED ELECTRONICALLY IT IS THE RECIPIENTS RESPONSIBILITY TO PRINT THE DOCUMENT TO THE CORRECT SCALE
2. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS STATED OTHERWISE. IT IS RECOMMENDED THAT INFORMATION IS NOT SCALED OFF THIS DRAWING
3. THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT DRAWINGS AND SPECIFICATIONS
4. ANY DISCREPANCIES NOTED ON SITE ARE TO BE REPORTED TO THE ENGINEER IMMEDIATELY.

REV.	DESCRIPTION	DATE	DRW.	CHK.
P1	PRELIMINARY ISSUE	06.02.25	JF	AT

Preliminary Issue - For Discussion Purposes Only

NHS Manchester University NHS Foundation Trust

APPOINTED PARTY LOGO/INFORMATION

ccs consulting MANCHESTER • LONDON • LEEDS

PROJECT: ENW MRI ISS BUILDING

TITLE: GENERAL NOTES

STATUS	PURPOSE OF ISSUE
S1	FOR COMMENTS

DRAWN BY	CHECKED BY	DATE
JF	BF	FEB. '25

SCALE (@A1)	PROJECT NUMBER
AS SHOWN	HE-019

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HE019 - CCS - S1 - ZZ - DR - S - 0001	P1