BUILDING DESIGN PARTNERSHIP SHALL HAVE NO RESPONSIBILITY FOR ANY USE MADE OF THIS DOCUMENT OTHER THAN FOR THAT WHICH IT WAS PREPARED AND ISSUED.

ALL DIMENSIONS SHOULD BE CHECKED ON SITE.

DO NOT SCALE FROM THIS DRAWING.

ANY DRAWING ERRORS OR DIVERGENCES SHOULD BE BROUGHT TO THE ATTENTION OF BUILDING DESIGN PARTNERSHIP AT THE ADDRESS SHOWN BELOW.

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL ARCHITECTS, ENGINEERS AND SPECIALIST DRAWINGS AND SPECIFICATIONS.
2. THIS DRAWING IS BASED ON:
   - 2.1. TOPOGRAPHICAL SURVEY DWG FILE REF. 20D0510-001 TO 004 DATED JULY 2020 BY SURVEY OPERATIONS.
   - 2.2. FULL UTILITIES SURVEY DWG FILE REF. 0620-ARC-13319 DATED 06/07/2020 BY SITE VISION SURVEYS
   - 2.3. PROPOSED SITE PLAN DWG FILE REF. "009433-SPA-01-XX-DR-L-910001" REVISION P02. RECEIVED ON 17/03/2021 BY SPACE ARCHITECTS
   - 2.4. LEVEL 00 GA DWG FILE REF. "009433-SPA-01-00-DR-A-010001" REVISION P06. RECEIVED ON 17/03/2021 BY SPACE ARCHITECTS
   - 2.5. UNITED UTILITIES RECORD MAP, UU REF. UUPS-ORD-175605 DATED 22/07/2020 (pdf)

A FULL CCTV SURVEY IS REQUIRED TO BE CARRIED OUT TO CONFIRM ALL ON SITE, AND ANY OFFSITE DRAINAGE ENCROACHING/CROSSING THE SITE. UNKNOWN EXISTING DRAINAGE MIGHT BE PRESENT, WHICH IS NOT CURRENTLY INDICATED ON THIS DRAWING.

3. BEFORE STARTING ANY WORKS, CONTRACTOR TO CHECK INVERT LEVELS AND POSITIONS OF EXISTING DRAINS, SEWERS, INSPECTIONS CHAMBERS AND MANHOLES AGAINST INFORMATION SHOWN ON THIS DRAWING, ENGINEER TO BE INFORMED IF FOUND DIFFERENT TO NOTED.
4. ROCKER PIPES ARE TO BE PROVIDED AT ALL CONCRETE CASED INTERFACES.
5. ALL DRAIN POINTS AND MANHOLE LOCATIONS/INVERT LEVELS/DIMENSIONS ARE TO BE CONFIRMED, SUBJECT TO DESIGN DEVELOPMENT.
6. EXTERNAL DRAINAGE OUTSIDE BUILDING FOOTPRINT: CLASS Z CONCRETE SURROUND TO BE PROVIDED FOR PIPES WITH COVER LESS THAN 1.2 m ABOVE THE CROWN OF THE PIPE FOR ROADS AND 0.6 m FOR SOFT AND PEDESTRIAN AREAS ONLY AND UNDER ALL FOUNDATIONS AND WHERE PIPES LAID WITHIN 1 m OF FOUNDATIONS.
7. SURFACE WATER: DESIGNED TO ACCOMMODATE 1in1, 1in30 AND 1in100 + 40% CC CRITICAL STORM EVENTS. SURFACE.
8. DESIGN SUBJECT TO CHANGE FOLLOWING:
   - 8.1. APPROVAL PROCESS WITH LOCAL AUTHORITIES AND WATER COMPANY
   - 8.2. CONFIRMATION OF INFILTRATION TEST
   - 8.3. HYDRAULIC MODELING
9. DRAINAGE DESIGN STRATEGY AND DISCHARGE RATES ARE TO BE APPROVED BY THE LOCAL AUTHORITIES (MANCHESTER CITY COUNCIL / LOCAL FLOOD AUTHORITY AND UNITED UTILITIES) AND THUS SUBJECT TO CHANGE.
10. CONNECTIONS TO EXISTING PUBLIC SEWER IN ACCORDANCE WITH UNITED UTILITIES REQUIREMENTS, TO BE APPROVED / AGREED WITH THE WATER AUTHORITY. FURTHER CCTV INVESTIGATION TO BE CARRIED OUT TO CONFIRM ALL EXISTING LEVELS AND CONDITION AND ASSESS FEASIBILITY OF REUSING EXISTING CONNECTIONS. ALL EXISTING DRAINAGE LEVELS, ESPECIALLY WHERE NEW MANHOLES ON EXISTING RUNS OR NEW CONNECTIONS TO EXISTING MANHOLES ARE PROPOSED, ARE TO BE CONFIRMED PRIOR TO THE COMMENCEMENT OF ANY WORKS ON SITE.
11. INFILTRATION: THE IS UNSUITABLE FOR INFILTRATION TECHNIQUES FOR SURFACE WATER MANAGEMENT DUE TO HIGH PERCHED GROUNDWATER, SOIL CONDITION AND PRESENCE OF MADE GROUND. TO BE CONFIRMED FOLLOWING RECEIPT OF TESTING RESULTS.
12. SURFACE WATER RUNOFF TREATMENT SUCH AS OIL SEPARATOR OR HYDRODYNAMIC VORTEX SEPARATOR (DOWNSTREAM DEFENDER) IS NOT DEEMED NECESSARY AT THIS STAGE BUT MAY BE REQUIRED BY THE LOCAL FLOOD AUTHORITY / UNITED UTILITIES.

- SITE BOUNDARY (5.3ha)
- PROPOSED SURFACE WATER DRAINAGE
- PROPOSED RAINWATER PIPE (RWP)
- PROPOSED FOUL WATER DRAINAGE
- FG / SVP PROPOSED FLOOR GULLY (FG) / SOIL VENT PIPE (SVP)
- EXISTING PUBLIC SURFACE WATER NETWORK
- EXISTING PUBLIC FOUL WATER NETWORK
- PITCH DRAINAGE BY SPECIALIST
- PROPOSED FILTER DRAIN / RAIN GARDEN
- PROPOSED ACO / HAURATON CHANNEL
- PROPOSED ATTENUATION TANK
- PROPOSED PERMEABLE SURFACE WITH STORAGE
- PROPOSED MUGA PERMEABLE SURFACE WITH STORAGE
- SPORTS PITCHES & MUGA CONTRIBUTING AREAS
- RG PROPOSED ROAD GULLY (FINAL LOCATIONS TO BE CONFIRMED FOLLOWING RECEIPT OF LEVELS STRATEGY DRAWINGS)

CONTROFLOW FLOW CONTROL CHAMBER WITH GUARDED ORIFICE, LIMTED TO 5 l/s PER MUGA PITCH.

EXISTING MANHOLE AND INCOMING CONNECTIONS RETAINED, FURTHER CCTV INVESTIGATION TO BE CARRIED OUT TO ASCERTAIN CONNECTION

BINGO HALL
FOLLOWING THE TRANSFERS OF SEWERS IN 2011, AND CONFIRMATION FROM UU, THE EXISTING BIINGO HALL DRAINAGE BECOME UU ASSETS WHEN IT ENTERS THIS SITE. ANY DIVERSION AND CLOSURE / ABANDONMENT WORKS ARE SUBJECT TO AGREEMENT WITH UU AND RELEVANT APPLICATIONS ARE TO BE SUBMITTED AND APPROVED BY UU PRIOR TO THE COMMENCEMENT OF ANY WORKS.

MUGA PERMEABLE TARMAC SURFACE
0.35m DEEP STORAGE LAYER
STORAGE 50m^3 PER MUGA
TOTAL STORAGE 150m^3
(30% VOID RATIO ASSUMED).

AREA 2 - SOUTHEAST
EXISTING OFF-SITE DRAINAGE FROM THIS AREA, CROSSING INTO SITE, IS TO BE MAINTAINED AND/OR DIVERTED ACCORDINGLY TO RETAIN ITS CONNECTION TO THE ADOPTED NETWORK AT ITS EXISTING DISCHARGE RATE, AS AGREED WITH UU. SCHEME PROPOSALS ARE NOT CURRENTLY INDICATED AND ARE SUBJECT TO RECEIPT OF A FULL CCTV SURVEY.

EXISTING ROAD TO BE RETAINED INTO SITE, SUBJECT TO CONDITION AND SUITABLE TESTING TO CONFIRM EXISTING CONSTRUCTION DEPTHS. ALLOWANCE SHOULD BE MADE FOR THE REPLACEMENT OF EXISTING ROAD GULLY`S HOWEVER, EXISTING ROAD GULLIES TO BE RETAINED (SUBJECT TO CONDITION AND ACHIEVING A CONNECTION), DRAINING TO NEW SURFACE WATER NETWORK. POTENTIAL TO RE-USE EXISTING LOCAL DRAINAGE NETWORK, SUBJECT TO RECEIPT OF CCTV SURVEY.

TO MEET THE REQUIREMENTS OF UNITED UTILITIES, SPORTS PITCHES THAT ARE TO SPORT ENGLAND STANDARDS AND CONTRIBUTE TO THE MAIN SURFACE WATER DRAINAGE NETWORK ARE TO BE DRAINED AT A RESTRICTED RATE, WITH SUITABLE SILT TRAPS AND CATCHPITS PROVIDED, PRIOR TO CONNECTION TO THE WIDER ONSITE DRAINAGE NETWORK. GRASSED SPORTS PITCHES ARE ALSO TO BE FULLY WRAPPED AND SEALED WITH AN APPROPRIATELY GAUGED IMPERMEABLE MEMBRANE, TO FULLY ISOLATE AND PROTECT FROM THE INGRESS OF GROUND WATER. DETAILS ARE TO BE PROVIDED BY THE SPECIALIST SPORTS PITCH CONTRACTORS.)

PITCH TO SPORT ENGLAND STANDARD
DRAINAGE SHOWN INDICATIVELY
DESIGNED AND DETAILED BY OTHERS
ASSUMED DISCHARGE 5l/s
AREA 6000m^2
0.3m DEEP STORAGE LAYER
STORAGE 540m^3
(30% VOID RATIO ASSUMED)

THIS DRAWING HAS BEEN DEVELOPED BASED ON THE INFORMATION CURRENTLY AVAILABLE AND IS SUBJECT TO CHANGE FOLLOWING DETAILED DESIGN AND FOLLOWING RECEIPT /CONFIRMATION OF FURTHER INFORMATION, AS FOLLOWS:-

1. POP-UP LOCATIONS ARE BASED ON PRELIMINARY MEP INFORMATION. FINAL POP UP POSITIONS AND RAINWATER PIPE POSITIONS SUBJECT TO FINAL ARCHITECTURAL AND MEP LAYOUTS.
2. EXISTING DRAINAGE TO BE GRUBBED OUT / DIVERTED OR MAINTAINED AS NECESSARY, TO BE REVIEWED AND CONFIRMED FOLLOWING RECEIPT OF CCTV SURVEY INFORMATION. APPLICATIONS REQUIRED TO BE APPROVED BY UNITED UTILITIES.
3. SETTING OUT OF INTERNAL AND EXTERNAL SERVICES SUBJECT TO RECEIPT OF FINAL MEP SERVICES LAYOUT.
4. CONFIRMATION OF PROPOSED FOUNDATIONS AND SLAB EDGE DETAILS.
5. SPORTS PITCH BUILD UPS ARE INDICATIVE ONLY AND ARE TO BE CONFIRMED BY THE SPECIALIST CONTRACTOR.
6. MUGA PITCH AND PERMEABLE BUILD UPS / DEPTHS ARE SUBJECT CHANGE FOLLOWING FINAL DETAILED DESIGN CALCULATIONS.
7. ATTENUATION TANK SIZE SUBJECT TO CHANGE FOLLOWING FINAL DETAILED DESIGN CALCULATIONS.
8. FINAL APPROVAL FROM UNITED UTILITIES OF AN ALLOWABLE DISCHARGE RATE OF 105l/s.
9. RECEIPT OF FINAL LANDSCAPE PROPOSALS, INCLUDING A DETAILED LEVELS STRATEGY.
10. RECEIPT OF FINAL ARCHITECTURAL LAYOUTS.
11. RECEIPT OF CCTV SURVEY AND SI REPORT.

WIP FOR PRICING PURPOSES ONLY

P01	Notes regarding offsite drainage revised.	LJ	DN 30/04/21
FIRST		NC	LJ 07/04/21
REVISION	DESCRIPTION	DRAWN	CHECKED DATE

WIP

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PROJECT TITLE
BELLE VUE CO-OP ACADEMY

BDP JOB NUMBER	SECURITY CLASSIFICATION
P3001502	COMMERCIAL IN CONFIDENCE

DRAWING TITLE
SITE WIDE DRAINAGE STRATEGY
GENERAL ARRANGEMENT
SHEET 3 OF 3

SCALE 1:200 @ A0
DATE 07/04/21

DRAWING NUMBER 009433-BDP-01-ZZ-DR-C-520003
REVISION P01