KEY:

SITE INFRASTRUCTION

— HV — HV — YLDL HV CABLE ROUTE BURIED AT 900mm(MIN) BFL

PRIVATE EXTERNAL SERVICES DUCT ROUTES.

——— 100mmø PVC LOW VOLTAGE SERVICES DUCTS. BURIED AT 450mm(MIN) BFL (600mm (MIN) BFL - CARRIAGE WAYS)

——— 100mmø PVC EXTRA LOW VOLTAGE SERVICES DUCTS BURIED AT 450mm(MIN) BFL (600mm (MIN) BFL - CARRIAGE WAYS)

— G — G — GAS MAIN ROUTE BURIED AT 750mm(MIN) BFL. NOTE: WHERE THE DESIGNATION 'PRIVATE' IS PRESENT GAS MAIN IS PRIVATE.

PRIVATE WATER MAIN ROUTE.

— PW — PW — PORTABLE WATER MAIN (150mmø MDPE) BURIED AT 900mm (MIN) BFL

— FW — FW — FIRE FIGHTING WATER MAIN (INCOMING FED - 125mmø MDPE) BURIED AT 900mm (MIN) BFL

CABLE CHAMBER (FINAL SPECIFICATION BY CIVILS/STRUCTURAL ENGINEER)

THE FOLLOWING PREFIXES DENOTE:

D1 - TURNING CHAMBER FOR LOW VOLTAGE SERVICES
D2 - TURNING CHAMBER FOR EXTRA LOW VOLTAGE SERVICES

SECURITY

CCTV POLE POSITION. NOTE, CCTV POLES TO C/W CUT OUT SWITCHES TO ALLOW LOOP IN & OUT OF POWER CIRCUITS. FINAL LOCATIONS TBC BY CHT

GT1, 2, 3, 8 & 10 — ACCESS CONTROLLED PEDESTRIAN GATE AS PER CHT SPECIFICATION

NOTE:

ALL COMPONENTS TO BE EXTERNALLY RATED AND VANDAL RESISTANT. POLES TO COME WITH ANTI CLIMB MEASURES FOR FURTHER DETAILS OF ACCESS CONTROLLED GATES PLEASE REFER TO PRIVATE EXTERNAL SECURITY PACKAGE

LIGHTING

L1 — 150W CDM-T LAMP, IP66 RATED, COLUMN MOUNTED TYPE LUMINAIRE C/W ELECTRONIC CONTROL GEAR, LONG & NARROW REFLECTOR, FLAT TOUGHENED GLASS, LINEAR COLUMN BRACKET AND 6m TUBULAR STEEL COLUMN (RAL COLOUR TBC BY ARCHITECT)

L2 — TWIN 150W CDM-T LAMP, IP66 RATED, COLUMN MOUNTED TYPE LUMINAIRE C/W ELECTRONIC CONTROL GEAR, LONG & NARROW REFLECTOR, FLAT TOUGHENED GLASS, LINEAR COLUMN BRACKET AND 6m TUBULAR STEEL COLUMN (RAL COLOUR TBC BY ARCHITECT)

L3 — 70W CDM-T LAMP, IP66 RATED, BUILDING MOUNTED TYPE LUMINAIRE C/W INTEGRAL CONTROL GEAR, TOPWARD THROW CUT OFF REFLECTOR, FLAT TOUGHENED GLASS AND SINGLE BRACKET FOR WALL MOUNTING (RAL COLOUR TBC BY ARCHITECT)

FP — EXTERNAL FEEDER PILLAR C/W FINAL DISTRIBUTION SWITCHGEAR & LIGHTING CONTROLS. REFER TO DR_00_EW_11_01 FOR FURTHER DETAILS
NOTE: ALL FEEDER PILLARS TO C/W ANTI FROST TUBULAR HEATERS WITH THERMOSTATIC CONTROL. FINAL DETAILING BY CHT

FOR CONTINUATION SEE DRG. BP4L_KIN_WSP_DR_96_EX_00_001

SHAW LANE

SOUTH STREET

KNOWSLEY

SHAW LANE

MAINTENANCE GARAGE TO BE PROVIDED WITH A 63A TPN SUPPLY EMANATING FROM FEEDER PILLAR No 3B. REFER TO DR_09_LL_01 FOR FURTHER DETAILS

POWER CIRCUITS OFF FEEDER PILLAR No3B
- DB1/EXT/1A
- DB1/EXT/1B
- DB1/EXT/1C
- DB1/EXT/1D
- DB1/EXT/2A
- DB1/EXT/2B
- DB1/EXT/2C
- DB1/EXT/3A
- DB1/EXT/3B
- DB1/EXT/3C
- DB1/EXT/3D
- DB1/EXT/4A
- DB1/EXT/4B
- DB1/EXT/4C
- DB1/EXT/4D
- DB1/EXT/5A
- DB1/EXT/5B
- DB1/EXT/5C
- DB1/EXT/5D
- DB1/EXT/6A
- DB1/EXT/6B
- DB1/EXT/6C
- DB1/EXT/6D

FEEDER PILLAR No4 (FOR ALL WEATHER PITCH LIGHTING REFER TO DR_09_EW_LL_01 FOR FURTHER DETAILS)

FEEDER PILLAR No5 (EXISTING FEEDER PILLAR TO BE REUSED TO SUPPLY AND FEED THE NEWLY COMBINED AND EXISTING TRACK EXTERNAL LIGHTING. REFER TO DRAWING DR_09_LL_01 FOR FURTHER DETAILS

NOTES:

1. THIS DRAWING SHOWS THE DESIGN INTENT ONLY AND REQUIRES FURTHER DETAILING BY LOR, CHT AND THE OTHER DESIGN TEAM MEMBERS
2. REFER TO THE ARCHITECTS DOCUMENTATION FOR ALL SETTING OUT INFORMATION INTERNALLY WITHIN THE BUILDING
3. REFER TO THE LANDSCAPE ARCHITECTS DOCUMENTATION FOR ALL SETTING OUT INFORMATION EXTERNALLY TO THE BUILDING.
4. REFER TO STRUCTURAL ENGINEERS DOCUMENTATION FOR ALL DETAILS & SETTING OUT INFORMATION OF FOUNDATIONS, TRENCHING AND INCOMING SERVICES PENETRATIONS
5. REFER TO CIVIL ENGINEERS DOCUMENTATION FOR ALL DETAILS & SETTING OUT INFORMATION OF HIGHWAYS, SURFACE WATER DRAINAGE & FOUL DRAINAGE.
6. REFER TO KINGFISHER'S EXTERNAL LUMINAIRE SCHEDULE FOR DETAILS OF ALL LUMINAIRES AND LIGHTING COLUMN TYPES/FINISHES/ETC (NOTE, ALL TYPES/FINISHES ETC TO BE AGREED WITH CLIENT & RELEVANT DESIGN TEAM MEMBERS).
7. ALL SERVICE ENTRY DUCTS ENTERING INTO THE BUILDING SHALL TERMINATE AT THE ELECTRICAL RISER CUPBOARD LOCATED TRENCH UNLESS STATED OTHERWISE.
8. LOR SHALL ALLOW FOR ALL EARTHWORKS ASSOCIATED WITH THE PROVISION OF INCOMING UTILITY SERVICES FROM THE SITE BOUNDARY TO THE TERMINATION POINTS SHOWN WITHIN THE ACE DEVELOPMENT.
9. ALL CABLEWAYS INCLUDING CABLE TURNING CHAMBERS SHALL BE PROVIDED BY LOR SUCH THAT ALL SERVICES ARE INSTALLED SEPARATELY.
10. CHT SHALL NOTE THE FOLLOWING,

    EARTH CONDUCTORS SHALL BE PROVIDED IN ACCORDANCE WITH BS7430 & ALL CURRENT AMENDMENTS & CONNECTED TO THE PROTECTIVE EXTERNAL LIGHTING COLUMNS TO ENSURE THE RESISTANCE TO EARTH OF THE NEUTRAL POINTS IS LESS THAN 20Ω BEFORE ANY CURRENT PROTECTIVE OR BONDING CONDUCTORS ARE CONNECTED TO THE NEUTRAL TERMINAL.
11. ALL STATUTORY AUTHORITIES SHALL BE CONTACTED PRIOR TO COMMENCING ANY INSTALLATION WORKS ASSOCIATED WITH THE INSTALLATION OF THE STATUTORY AUTHORITY'S EQUIPMENT. ALL WORKS INCLUDING EQUIPMENT SPECIFICATIONS ARE SUITABLE, APPROVED & MEET THE NEEDS OF THE STATUTORY AUTHORITY ASSOCIATED.
12. LOR SHALL BE RESPONSIBLE FOR CO ORDINATING THE PHASING OF THE INSTALLATION OF THE STATUTORY AUTHORITY EQUIPMENT.
13. ENC/YEDL 11 SUBSTATION TO BE CONSTRUCTED TO ENE/YEDL/CE ELECTRIC SPECIFICATION (NOTE, REFERENCE SHOULD BE MADE TO POWER ON CONNECTIONS CONSTRUCTION DRAWINGS).
14. THE LIGHTING CURFEW TO COMMENCE FROM 23:00HRS ONWARDS (THE FLOODLIT TENNIS AND FOOTBALL PITCH TO HAVE A LIGHTING CURFEW OF 22:00HRS). THE LIGHTING CURFEW TO APPLY TO THE COLUMN MOUNTED LUMINAIRES ONLY (BUILDING MOUNTED FITTINGS FOR SECURITY PURPOSES AND FUNCTIONING OF THE CCTV SYSTEM WILL REMAIN ON UNTIL DAWN).
15. IT IS THE INTENTION TO LIMIT THE EXTENT OF DUCTING TO AREAS OF HARD STANDING ONLY WHERE SOFT DG IS PRESENT THEN SERVICES SHALL BE BURIED DIRECT UNLESS STATED OTHERWISE.
16. NOT USED
17. ALL COLUMN MOUNTED EXTERNAL CCTV CAMERAS AND COLUMN MOUNTED LUMINAIRES TO COME WITH 600M2/300 CATEGORY 1&2 TYPE ELECTRONIC SURGE PROTECTION DEVICES
18. REFERENCE SHOULD BE MADE TO THE NJUG DOCUMENTS FOR GUIDANCE ON THE POSITIONING OF ALL UNDERGROUND APPARATUS FOR NEW DEVELOPMENT SITES
19. SERVICES DUCTS ENTER INTO THE EXTERNAL RISERS VIA THE TYPICAL DUCT ENTRY DETAIL. REFER TO DETAIL 4 FOR FURTHER DETAILS
20. DUCTS MAKE SLOW SWEEPING BENDS AND COORDINATE WITH THE FINAL SWITCHGEAR POSITIONS TO ALLOW SERVICES TO BE ROUTED ON FINAL INSTALLATION.
23. EXTERNALLY DISTRIBUTED SPRINKLER MAINS TO BE SIZED BY THE SPRINKLER SYSTEM SPECIALIST.
24. REFERENCE SHOULD BE MADE TO THE FOLLOWING MEP SERVICE DRAWINGS INCONJUNCTION WITH THIS DRAWING.
    - DR_62_BW_xx_xx SERIES
    - DR_54_xx_xx_xxx SERIES
    - DR_53_xx_xx_xxx SERIES
    - BR_50_EC_00_01
    - DR_BW_LL 500 & 503

C01	18.04.11	SK	FOR CONTRACT	SK	SK
P01	13.10.10	SK	PRELIMINARY ISSUE	SK	SK
REV	DATE	BY	DESCRIPTION	CHK	APP

DRAWING STATUS: FOR CONTRACT

WSP
Three White Rose Office Park, Millshaw Park Lane, Leeds, LS11 0DL
Tel: +44 (0)113 395 6200 Fax: +44 (0)113 395 6201
www.wspgroup.com

CLIENT: Barnsley Partnership For Learning

CONTRACTOR: LAING O'ROURKE

ARCHITECT:

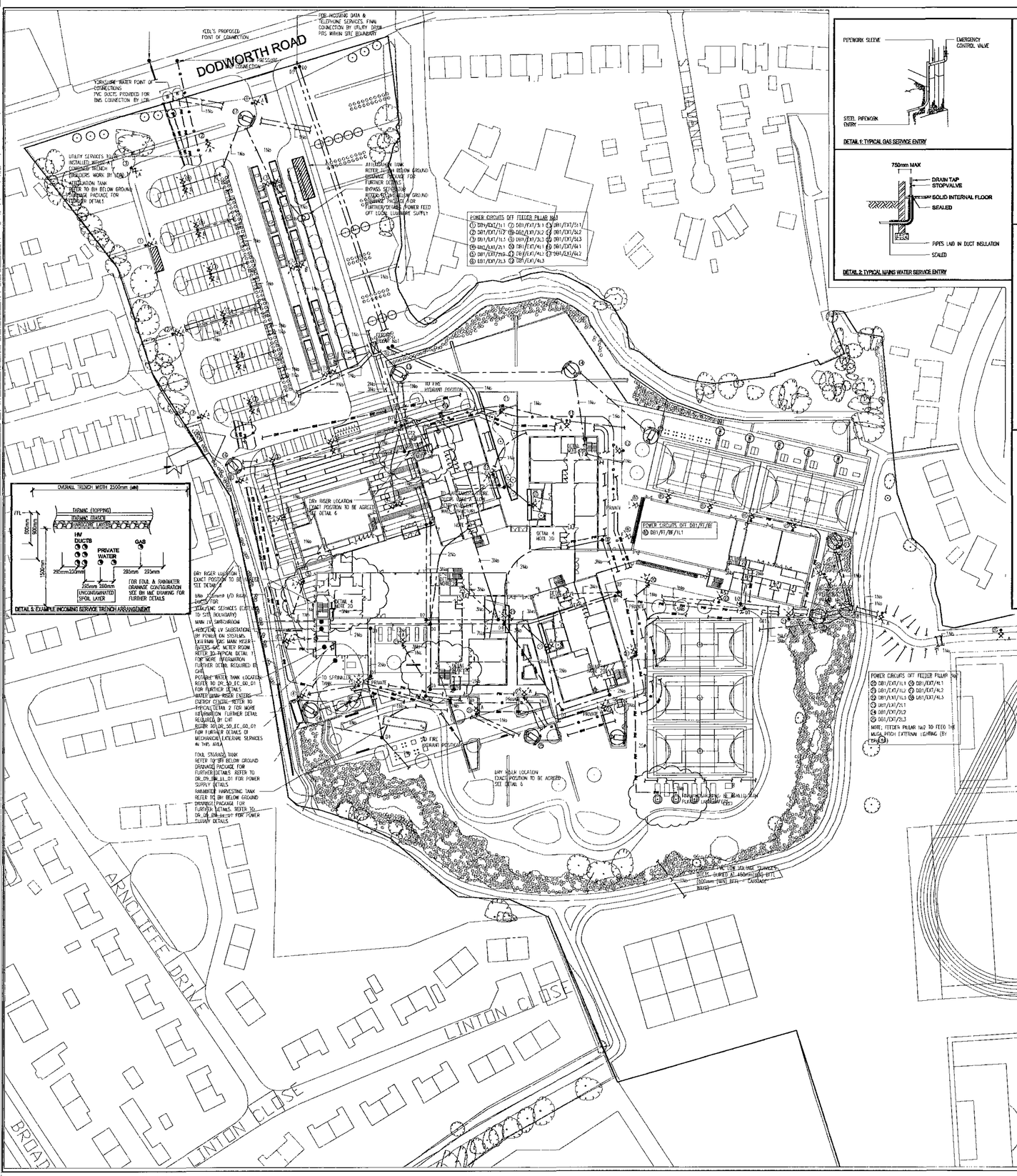
PROJECT: HOLGATE KINGSTONE ALC

TITLE: COMBINED MEP SERVICES LAYOUT EXTERNAL SERVICES SHEET 2 OF 2

SCALE @ A3: 1:500	CHECKED: SK	APPROVED: SK
PROJECT No: 24321403	DESIGNED: SK	DRAWN: SK
DATE: SEPT '10		

DRAWING No: BP4L_KIN_WSP_DR_96_EX_00_003 REV: C01

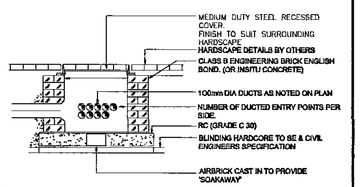
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DETAIL 6: EXAMPLE INCOMING SERVICE TRENCH ARRANGEMENT

DETAIL 1: TYPICAL GAS SERVICE ENTRY

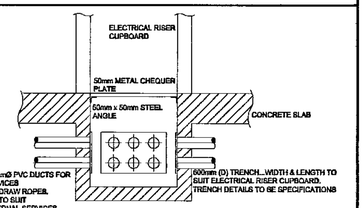
DETAIL 2: TYPICAL MAINS WATER SERVICE ENTRY



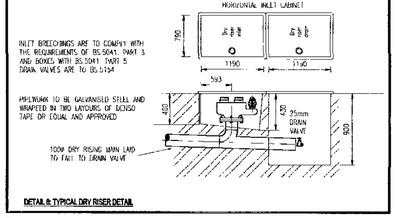
NOTE:
UNDER THE TRAFFICKED AREAS, CABLE DUCTS 75mm AND LARGER SHALL BE ENCASED IN 150mm C20 CONCRETE TO BE & CIVIL ENGINEERS SPECIFICATION.

ALL CABLE CHAMBER DETAILS BY SE&CIVIL ENGINEERS SPECIFICATIONS.

DETAIL 3: TYPICAL CABLE TURNING CHAMBER



DETAIL 4: TYPICAL TRENCH DETAIL FOR INCOMING ELECTRICAL SERVICES INTO THE ELECTRICAL RISER CUPBOARDS



DETAIL 5: TYPICAL DRY RISER DETAIL

KEY:

SITE INFRASTRUCTURE

- HV — HV — YCDL HV CABLE ROUTE BURIED AT 900mm(MIN) BFTL
- PRIVATE EXTERNAL SERVICES DUCT ROUTES.
- 100mmø PVC LOW VOLTAGE SERVICES DUCTS BURIED AT 450mm(MIN) BFTL (600mm (MIN) BFTL CARRIAGE WAYS).
- 100mmø PVC EXTRA LOW VOLTAGE SERVICES DUCTS BURIED AT 450mm(MIN) BFTL (600mm (MIN) BFTL - CARRIAGE WAYS)
- G — G — G — GAS MAIN ROUTE BURIED AT 750mm(MIN) BFTL. NOTE. WHERE THE DESIGNATION 'PRIVATE' IS PRESENT GAS MAIN IS PRIVATE
- PRIVATE WATER MAIN ROUTE.
- FW — FW — POTABLE RATED MAIN (90mmø MDPE) BURIED AT 900mm (MIN) BFTL
- FW — FW — FIRE FIGHTING WATER MAIN (INCOMING FEED 125mmø MDPE) BURIED AT 900mm (MIN) BFTL
- D1 CABLE CHAMBER (FINAL SPECIFICATION BY CM(S/STRUCTURAL ENGINEER)

THE FOLLOWING PREFIXES \&NDR;

D1 – TURNING CHAMBER FOR LOW VOLTAGE SERVICES
D2 – TURNING CHAMBER FOR EXTRA LOW VOLTAGE SERVICES

SECURITY

- CCTV POLE POSITION NOTE, CCTV POLES TO C/W CUT OUT SWITCHES TO ALLOW LOOP IN & OUT OF POWER CIRCUITS FINAL LOCATIONS TBC BY CM
- GT1, 2, 3, & 10 ACCESS CONTROLLED PEDESTRIAN GATE AS PER CM SPECIFICATION

NOTE:

ALL COMPONENTS TO BE EXTERNALLY RATED AND VANDAL RESISTANT POLES TO COME WITH ANTI CLIMB MEASURES FOR FURTHER DETAILS OF ACCESS CONTROLLED GATES PLEASE REFER TO PLANTS EXTERNAL SECURITY PACKAGE.

LIGHTING

- A 150W CDM-T LAMP, IP66 RATED, COLUMN MOUNTED TYPE LUMINAIRE C/W ELECTRONIC CONTROL GEAR, LONG & NARROW REFLECTOR, FLAT TOUGHENED GLASS, LINEAR COLUMN BRACKET AND 6m TUBULAR STEEL COLUMN (RAL COLOUR TBC BY ARCHITECT)
- B TWIN 150W CDM-T LAMP, IP66 RATED, COLUMN MOUNTED TYPE LUMINAIRE C/W ELECTRONIC CONTROL GEAR, LONG & NARROW REFLECTOR, FLAT TOUGHENED GLASS, LINEAR COLUMN BRACKET AND 6m TUBULAR STEEL COLUMN (RAL COLOUR TBC BY ARCHITECT)
- F 70W CDM-T LAMP, IP66 RATED, BUILDING MOUNTED TYPE LUMINAIRE C/W INTEGRAL CONTROL GEAR, FORWARD THROW CUT OFF REFLECTOR, FLAT TOUGHENED GLASS AND SINGLE BRACKET FOR WALL MOUNTING (RAL COLOUR TBC BY ARCHITECT)
- EXTERNAL TFEDER PILLAR C/W TRAN DISTRIBUTION SWITCHGEAR & LIGHTING CONTROLS. REFER TO DR_DR_EW_LL_01 FOR FURTHER DETAILS NOTE, ALL FEEDER PILLARS TO C/W ANTI FROST TUBULAR HEATERS WITH THERMOSTATIC CONTROL. FINAL DETAILING BY CM?.

DO NOT SCALE

NOTES:

1. THIS DRAWING SHOWS THE DESIGN INTENT ONLY AND REQUIRES FURTHER DETAILING BY LDR, CM? AND THE OTHER DESIGN TEAM MEMBERS.
2. REFER TO THE ARCHITECTS DOCUMENTATION FOR ALL SETTING OUT INFORMATION INTERNALLY WITHIN THE BUILDING
3. REFER TO THE LANDSCAPE ARCHITECTS DOCUMENTATION FOR ALL SETTING OUT INFORMATION EXTERNALLY TO THE BUILDING
4. REFER TO STRUCTURAL ENGINEERS DOCUMENTATION FOR ALL DETAILS & SETTING OUT INFORMATION OF FOUNDATIONS, TRENCHING AND INCOMING SERVICES PENETRATIONS.
5. REFER TO CIVIL ENGINEERS DOCUMENTATION FOR ALL DETAILS & SETTING OUT INFORMATION OF HIGHWAYS, SURFACE WATER DRAINAGE & FOUL DRAINAGE
6. REFER TO KINGFISHER'S EXTERNAL LUMINAIRE SCHEDULE FOR DETAILS OF ALL LUMINAIRES AND LIGHTING COLUMN TYPES/FINISHES/ETC. (NOTE, ALL TYPES/FINISHES ETC TO BE AGREED WITH CLIENT & RELEVANT DESIGN TEAM MEMBERS.)
7. ALL SERVICE ENTRY DUCTS ENTERING INTO THE BUILDING SHALL TERMINATE AT THE ELECTRICAL RISER CUPBOARD (CCATD) UNLESS STATED OTHERWISE
8. LDR SHALL ALLOW FOR ALL EARTHWORKS ASSOCIATED WITH THE PROVISION OF INCOMING UTILITY SERVICES FROM THE SITE BOUNDARY TO THE TERMINATION POINTS SHOWN WITHIN THE ALC DEVELOPMENT
9. ALL CABLEWAYS INCLUDING CABLE TURNING CHAMBERS SHALL BE PROVIDED BY LDR SUCH THAT ALL SERVICES ARE INSTALLED SEPARATELY.
10. CM SHALL NOTE THE FOLLOWING.

    EARTH CONDUCTORS SHALL BE PROVIDED IN ACCORDANCE WITH BS7430 & ALL CURRENT AMENDMENTS & CONNECTED TO THE PROJECT WIDE EXTERNAL LIGHTING COLUMNS TO ENSURE THE RESISTANCE TO EACH OF THE NEUTRAL POINTS IS LESS THAN 20Ω BEFORE ANY CURRENT PROTECTIVE OR BONDING CONDUCTORS ARE CONNECTED TO THE NEUTRAL TERMINAL

11. ALL STATUTORY AUTHORITIES SHALL BE CONTACTED PRIOR TO COMMENCING ANY INSTALLATION WORKS ASSOCIATED WITH THE INSTALLATION OF THE STATUTORY AUTHORITY'S EQUIPMENT. ALL WORKS INCLUDING EQUIPMENT SPECIFICATIONS ARE SATISFACTORILY APPROVED & MEET THE NEEDS OF THE STATUTORY AUTHORITY ASSOCIATED
12. LDR SHALL BE RESPONSIBLE FOR CO-ORDINATING THE PHASING OF THE INSTALLATION OF THE STATUTORY AUTHORITY EQUIPMENT
13. ENE/MTL LV SUBSTATIONS TO BE CONSTRUCTED TO ENE/MTL/LV ELECTRIC SPECIFICATION (NOTE, REFERANCE SHOULD BE MADE TO PLANTS ON CONNECTIONS CONSTRUCTION DRAWINGS)
14. THE LIGHTING CURFEW TO COMMENCE FROM 23.00HRS DOWNON (THE FLOODLIT TENNIS AND FOOTBALL PITCH TO HAVE A LIGHTING CURFEW OF 22.00HRS) THE LIGHTING CURFEW TO APPLY TO THE COLUMN MOUNTED LUMINAIRES ONLY (BUILDING MOUNTED FITTINGS FOR SECURITY PURPOSES AND FUNCTIONING OF THE CCTV SYSTEM WILL REMAIN ON 24/7/ BASIS)
15. IT IS THE INTENTION TO LIMIT THE EXTENT OF DUCTING TO AREAS OF HARD STANDING ONLY WHERE SOFT DIG IS PRESENT THEN SERVICES SHALL BE BURIED DIRECT UNLESS STATED OTHERWISE.
16. NOT USED
17. ALL COLUMN MOUNTED EXTERNAL CCTV CAMERAS AND COLUMN MOUNTED LUMINAIRES TO COMPLY WITH ENSMG3265 CATEGORY 1&2 TYPE ELECTRONIC SURGE PROTECTION DEVICES.
18. REFERANCE SHOULD BE MADE TO THE NAVIS DOCUMENTS FOR GUIDANCE ON THE POSITIONING OF ALL UNDERGROUND APPARATUS FOR NEW DEVELOPMENT SITES
19. SERVICES DUCTS ENTER INTO THE ELECTRICAL RISERS VIA THE TYPICAL DUCT ENTRY DETAIL. REFER TO DETAIL 4 FOR FURTHER DETAILS.
20. DUCTS MAKE SLOW SWEEPING BENDS AND COORDINATE WITH ING FINAL SWITCHGEAR POSITIONS TO ... LOW SERVICES TO BE ROUTED ON FINAL INSTALLATION
21. EXTERNALLY DISTRIBUTED SPRINKLER MAINS TO BE SIZED BY THE SPRINKLER SYSTEM SPECIALIST
24. REFERENCE SHOULD BE MADE TO THE FOLLOWING MEP SERVICE DRAWINGS INCONJUNCTION WITH THIS DRAWING.
    - DR_62_BW_xx_xx SERIES
    - DR_54_xx_xx_xxx SERIES
    - DR_53_xx_xx_xxx SERIES
    - DR_50_FC_00_01
    - DR_BW_11_502 & 503

C06	18.04.11	SB	AMENDED TO SUIT REVISED LAYOUT	JP	JP
C05	15.03.11	SA	ADDITIONAL DETAILS ADDED	JP	JP
C04	21.02.11	SB	GAS ADDED TO BLOCK B	BA	BA
C03	07.02.11	SA	ADDED TO SUIT FLOOR LAYOUTS	BA	BA
C02	10.01.11	SA	FOR CONTRACT	JP	JP
P01	04.11.10	SA	PRELIM ISSUE - SIGNAL 5 ADDED	JA	JP
P01	13.10.10	SA	PRELIMINARY ISSUE	JA	JP
REV	DATE	BY		CHK	APP

FOR CONTRACT

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www.wspgroup.com

CLIENT: Barnsley Partnership For Learning

CONTRACTOR: LAING O'ROURKE

ARCHITECT:

PROJECT: HOLGATE KINGSTONE ALC

TITLE: COMBINED MEP SERVICES LAYOUT EXTERNAL SERVICES SHEET 1 OF 2

SCALE @ A1	CHECKED	APPROVED
1:500	BK	BK
PROJECT No	DESIGNED	DRAWN
24321408	BK	BK
DATE		
SEPT '10		

DRAWING No: BP4L_KIN_WSP_DR_96_EX_00_002 REV: C05

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