0 — 100
This drawing may have been reduced — original scale : 100mm

Reference Drawings | Legend | Notes

New 2.2m high and 2.4m wide pedestrian gate

New 2.2m high and 6m wide gate

+65.620(ex)

+64.430(ex)

65.550(ex)

8.5m x 1.6m X 2.8m HIGH MINIMUM ENCLOSURE HOUSING 5No. 100kW INVERTERS, ISOLATORS, PV DISTRIBUTION BOARD AND LOCAL LIGHTING AND POWER DISTRIBUTION BOARD LOCATED IN EXISTING LANDSCAPING

2 x 185mm² XLPE/SWA/LSZH + 95mm² CPC CABLES DIRECT BURIED IN SOFT DIG AREA

2No. 75mmØ COMMS DUCTS

DB/PV1
DB/CPN

ELECTRICAL DI
EQUIPMENT TC
STEEL WEATHE
ENCLOSURE c/
ANTI-CONDENS

TYPICAL CENTURION 2 X 2 PREFORMED PE CABLE DRAW PIT FOR COMMS INSTALLED BY ISG

COMMS CABLE ENTRY INTO BUILDING VIA NEW PLANT SPACE TO BE DESIGNED & INSTALLED BY ISG

ISOLATOR BY ISG MOUNTED WITHIN CEILING VOID

2 x 185mm² XLPE/SWA/LSZH + 95mm² CPC CABLEs RUN WITHIN 2No. 150Ø CABLE DUCTS ACROSS ROADWAY

APPROX 1800 x 800 X 1000 DEEP CABLE DRAW PIT BY WARDEN

PROPOSED CABLE ENTRIES RISE EXTERNALLY TO BUILDING, LV ON 300W CABLE TRAY & COMMS/DATA ON 100W CABLE BASKET, PROTECTED BY BOXING IN, APPROX 250D x 1000W x 3500H (APPROX), ENTERS AT CEILING VOID LEVEL. BUILDING PENETRATION AND EXTERNAL ENCLOSURE DESIGNED & INSTALLED BY WARDEN CONSTRUCTION

NOTIONAL CABLE ROUTE FROM INTERNAL 630A ISOLATOR. ISG TO INSTALL ISOLATOR AND 2 x 185mm² 4c + 95mm² CPC ON DEDICATED 450mm WIDE LADDER RACK FROM ISOLATOR TO SWITCHROOM SWITCHBOARD PV TIER. INDICATIVE CABLE ROUTE THROUGH BUILDING. FINAL ROUTE AND CONTAINMENT DESIGN TO BE UNDERTAKEN BY ISG.

INDICATIVE CABLE ROUTE THROUGH BUILDING. FINAL ROUTE AND CONTAINMENT DESIGN TO BE UNDERTAKEN BY ISG.

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INDICATIVE CABLE ROUTE THROUGH BUILDING. FINAL ROUTE AND CONTAINMENT DESIGN TO BE UNDERTAKEN BY ISG.

NOTIONAL CABLE ROUTE FROM INTERNAL 630A ISOLATOR. ISG TO INSTALL ISOLATOR AND 2 x 150mm² 4c + 95mm² CPC ON DEDICATED 450mm WIDE LADDER RACK FROM ISOLATOR TO SWITCHROOM SWITCHBOARD PV TIER. INDICATIVE CABLE ROUTE THROUGH BUILDING. FINAL ROUTE AND CONTAINMENT DESIGN TO BE UNDERTAKEN BY ISG.

ISOLATOR BY ISG MOUNTED WITHIN CEILING VOID

WARDEN CONSTRUCTION TO PROVIDE CABLE BASKET TRAY TO EXISTING COMMS CONTAINMENT WITHIN THE BUILDING AT HIGH LEVEL

TYPICAL CENTURION 2 X 2 PREFORMED PE CABLE DRAW PIT FOR COMMS INSTALLED BY WARDEN

WARDEN TO CONSTRUCT A NEW CABLE DRAW PIT APPROX 1800 x 800 X 1000.

EXISTING STRIP FOUNDATIONS TO BE AVOIDED DURING THE EXTERNAL WORKS (TYPICAL)

PROPOSED CABLE ENTRIES RISE EXTERNALLY TO BUILDING, LV ON 300W CABLE TRAY & COMMS/DATA ON 100W CABLE BASKET, PROTECTED BY BOXING IN, APPROX 250D x 1000W x 3500H (APPROX), ENTERS AT CEILING VOID LEVEL. BUILDING PENETRATION AND EXTERNAL ENCLOSURE DESIGNED & INSTALLED BY WARDEN CONSTRUCTION

WARDEN CONSTRUCTION TO INSTALL AND TERMINATE 2 x 150mm² XLPE/SWA/LSZH + 95mm² CPC CABLES LAID IN 2 x 150MMØ CABLE DUCTS

WARDEN CONSTRUCTION TO INSTALL 2No. 75mmØ COMMS DUCTS, STACKED, AND DRAW PITS OUT TO PV EQUIPMENT ROOM

ELECTRICAL DISTRIBUTION EQUIPMENT TO BE HOUSED IN STEEL WEATHERPROOF (IP54) ENCLOSURE c/w 100W ANTI-CONDENSATION HEATER

6.5m x 1.6m x 2.8m HIGH MINIMUM ENCLOSURE HOUSING 2No. 100kW INVERTERS, ISOLATORS, PV DISTRIBUTION BOARD AND LOCAL LIGHTING AND POWER DISTRIBUTION BOARD LOCATED IN EXISTING LANDSCAPING

Existing Velodrome

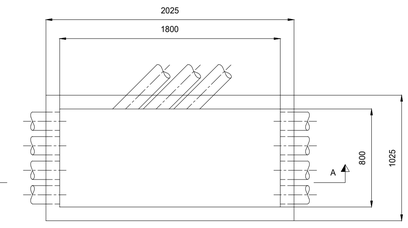
Link Building

Event Entrance

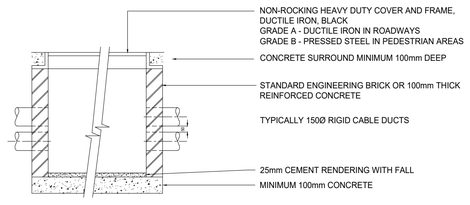
Canopy 2

ROOF 2

TYPICAL CENTURION 2 X 2 PREFORMED PE CABLE DRAW PIT FOR COMMS INSTALLED BY ISG



PLAN



SECTION A-A

ELECTRICAL INSTALLATIONS
TYPICAL GENERAL ARRANGEMENT CABLE INSPECTION/ DRAW PIT DETAIL
REFER TO NJUG SCHEDULE BELOW FOR BURIED DEPTHS

TABLE 1 – Recommended Colour Coding of Underground Utilities Apparatus
All depths are from the surface level to the crown of the apparatus

Utility	Duct	Pipe	Cable	Marker Systems	Recommended Minimum Depths	
					Footway/Verge	Carriageway
Electricity HV (High Voltage)	Black or red duct or tile	N/A	Red or black	Yellow with black and red legend or concrete tiles	450-1200mm	750-1200mm
Electricity LV (Low Voltage)	Black or red duct or tile	N/A	Black or red	Yellow with black legend	450mm	600mm
Communications	Grey, white, green, Black, purple	N/A	Black or light grey	Various	250 – 350mm	450 - 600mm

LEGEND

WORKS BY WARDEN CONSTRUCTION / EVO ENERGY

WORKS BY ISG

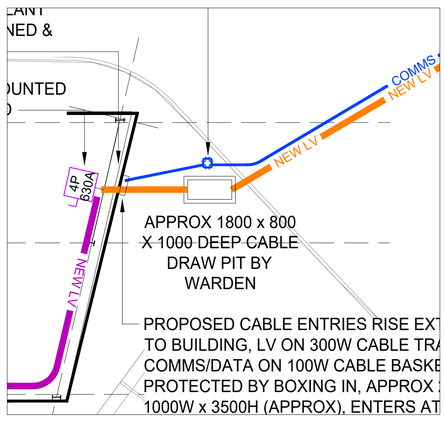
XP XXXA — FIELD ISOLATOR, NUMBER OF POLES AND RATING AS INDICATED. INSTALLER TO ENSURE SUITABLY SIZED ENCLOSURE IS SELECTED TO ENABLE THE TERMINATION OF THE CABLES SELECTED.

Reference Drawings | Legend | Notes

CABLE INSTALLATION INTO DUCTS:

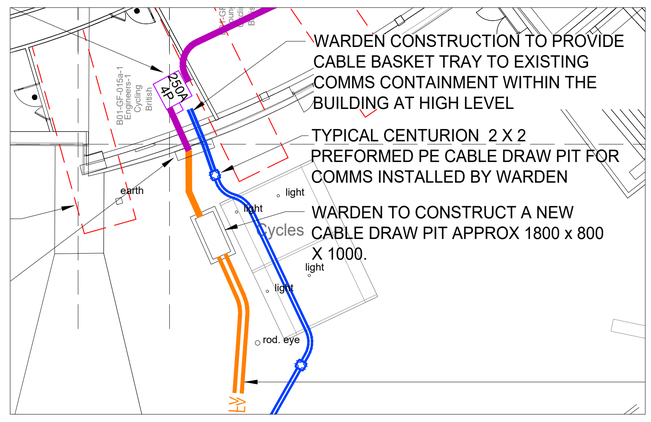
INSTALL CABLES INTO NEWLY PROVED AND CLEANED DUCT. USE LUBRICANTS, RECOMMENDED BY THE CABLE MANUFACTURER IN WRITING, TO ASSIST DRAWING PROCESS.
FLAKE CABLE IF DRUMS OR REELS ARE NOT SUITABLE FOR JACKING. AT INTERMEDIATE DRAW PITS WITH EXIT DUCT MORE THAN 15° OFF LINE OF ENTRY DUCT, FLAKE CABLE BEFORE ENTERING OR PROVIDE COMPREHENSIVE SYSTEM OF CORNER PLATES, ROLLER AND BLOCKS. USE MAXIMUM PRACTICAL SIZE OF TURNS WHEN FLAKING AND ENSURE DIRECTION IS CORRECT.
DO NOT EXCEED MANUFACTURER'S INSTALLATION TENSION ON CABLE AND ENSURE THE PULLING TENSION IS TAKEN ON CABLE ELEMENTS DESIGNED FOR THAT PURPOSE, THAT IS ARMOUR OR CONDUCTOR CORES AND NOT ON OTHER ELEMENTS, SUCH AS PLASTIC SHEATH OR CONDUCTOR INSULATION.
DO NOT ALLOW CABLES BEING PULLED INTO DUCTS TO TWIST. USE APPROPRIATE SWIVEL BETWEEN PULLING BOND AND CABLE STOCKING OR SIMILAR APPLIANCE.
BIND TREFOIL GROUPS OF SINGLE CORE CABLES INSTALLED INTO A SINGLE DUCT AT 1M INTERVALS. INSTALL EARTH OR PROTECTIVE CONDUCTORS INTO THE SAME DUCT AS THE ASSOCIATED CABLE WHERE PRACTICAL, THROUGH MANHOLES, DRAW PITS AND JOINTING CHAMBERS. BIND THE TWO CABLES TOGETHER. PULL ALL CABLES IN ONE DUCT AS A GROUP. ENSURE GROUP DOES NOT TWIST OR CROSS OVER. REPORT ANY DAMAGE TO CABLE SHEATH DURING INSTALLATION AND CARRY OUT ANY INSTRUCTED WORK TO REMEDY THE DAMAGE.
SEAL BETWEEN CABLE AND DUCT ENDS AFTER CABLE INSTALLATION. ENSURE CABLE ENDS IN JOINTING CHAMBERS ARE TEMPORARILY SEALED WHERE REQUIRED.
ENSURE BLANKING CAPS AND VERMIN RESISTANT SEALS ARE USED OVER ALL DUCT APERTURES AFTER CABLE INSTALLATIONS

NOTES:
1. EXTERNAL DRAINAGE & TOPOGRAPHICAL SURVEY HAS NOT YET BEEN COMPLETED. ALL EXTERNAL SERVICES SHOWN SUBJECT TO FINAL REVIEW.
2. DC CABLE ROUTES NOT SHOWN AT PRESENT



NORTH CAR PARK ISG/ WARDEN CONSTRUCTION
PV SYSTEM CABLE DRAW PIT





SOUTH CAR PARK ISG/ WARDEN CONSTRUCTION
PV SYSTEM CABLE DRAW PIT

Revision	Description	Drawn	Checked	Date
P5	Preliminary. Demarcation of responsibilities updated following MCC Client meeting .	CM	CM	MAR 22
P4	Preliminary. Entry route into Velodrome amended following review of foundation record drawings. Cable pit details added.	CM	CM	FEB 22
P3	Preliminary. Cables sizes updated & North PV Equipment Building Size Reduced in Line With Evo Energy Latest Details	CM	CM	FEB 22
P2	Preliminary. Issued for Comment	CM	CM	FEB 22
P1	Preliminary. Issued for Comment	CM	CM	FEB 22

Revisions

Project
NATIONAL CYCLING CENTRE
Stuart Street, Manchester, M11 4DQ

Title
PROVISION OF SOLAR CAR PORTS
NOTIONAL PV AC CABLE ROUTES

Scale/Size	Drawn	Designed	Software
1:250 @ A0	CM	CM	AutoCAD
	Date FEB 22	Date FEB 22	© Drawing Copyright

Walmsley Associates

Walmsley Associates Ltd.
Guildhall House, Guildhall Street,
Preston PR1 3NU

tel: 01257 232232
web: www.walmsleyassociates.co.uk
email: info@walmsleyassociates.co.uk

Project number	Drawing number	Revision
1631	1631 / E1	P5