

ELECTRICAL DRAWING LIST

DRAWING No.	DESCRIPTION
SP-E01	ELECTRICAL: LEGEND, DRAWING LIST & SITE PLAN
SP-E02	ELECTRICAL: SCHEDULES & DETAILS

ELECTRICAL LEGEND

⊙	DOWNLIGHT FIXTURE, LETTER DENOTES TYPE.
1'80' Q	WALL MOUNTED FIXTURE, LETTER DENOTES TYPE.
1'-A2	EXTERIOR LIGHT STANDARD FIXTURE, LETTER DENOTES TYPE.
⊕	15A, 120V, DUPLEX GFI RECEPTACLE C/W WEATHER PROOF ENCLOSURE.
⊕	JUNCTION BOX.
⊕	HARD WIRED CONNECTION TO EQUIPMENT.
---	U/G RACEWAY FOR COMMUNICATION SERVICES.
---	U/G RACEWAY FOR POWER SERVICES.
ABBREVIATIONS:	
HT	HEIGHT
GFI	GROUND FAULT INTERRUPTER
WP	WEATHER PROOF
U.G.	UNDERGROUND
N.T.S.	NOT TO SCALE
N.C.	NOT IN CONTRACT
C/W	COMPLETE WITH
U/G	UNDER GROUND
P/W	POWER SERVICES
COMMS	COMMUNICATION SERVICES

GENERAL NOTES

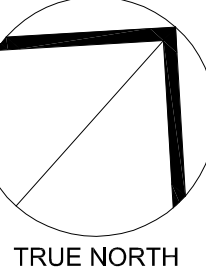
- ROUTING OF THE INCOMING BURIED SERVICES IS A PROPOSED DIAGRAMATIC ROUTING. COORDINATE WITH CIVIL DRAWINGS, LANDSCAPE DRAWINGS, AND HYDRO ONE DIGITE PRIOR TO COMMENCING WORK TO FINALIZE ROUTING.
- THE UTILITY CONTRACTOR SHALL MAKE ARRANGEMENTS FOR A SITE MEETING WITH THE GENERAL CONTRACTOR, HYDRO ONE AND THE ELECTRICAL CONTRACTOR PRIOR TO INSTALLATION OF BUILDING POWER SUPPLY INFRASTRUCTURE. THE PURPOSE OF THE MEETING IS TO COORDINATE THE WORK, REVIEW THE RESPONSIBILITIES OF HYDRO ONE, THE GENERAL CONTRACTOR, THE UTILITY CONTRACTOR AND THE ELECTRICAL CONTRACTOR TO ENSURE THAT THE INSTALLATION OF THE TRANSFORMER AND CABLE DUCTS ADHERE TO HYDRO ONE SPECIFICATIONS AND CSA REQUIREMENTS.
- SITE CONDUITS FOR LIGHTING AND RECEPTACLES ARE NOT SHOWN. UTILITY AND ELECTRICAL CONTRACTORS ARE TO PROVIDE LAYOUT AND COORDINATE.
- PROVIDE MINIMUM #8 AWG CONDUCTOR SIZE FOR SITE LIGHTING. ALL LIGHTING CONDUITS SHALL BE MINIMUM 35mm RIGID PVC. PROVIDE FINAL CONNECTIONS TO ELECTRICAL PANELS ONCE THEY ARE INSTALLED DURING BUILDING CONSTRUCTION.
- SIZE RECEPTACLE CONDUCTORS FOR VOLTAGE DROP AT 80% CIRCUIT LOADING AND PROVIDE A MINIMUM WIRE SIZE OF #8 AWG. PROVIDE FINAL CONNECTIONS TO ELECTRICAL PANELS ONCE THEY ARE INSTALLED DURING BUILDING CONSTRUCTION.
- PROVIDE A PRIMARY GROUND GRID BURIED BENEATH THE EXTERIOR OPEN PARKING AREAS OR GROUND LOOP AROUND PERIMETER OF BUILDING DEPENDING ON LOCAL SOILS RESISTIVITY AND THE RESULTS OF THE GROUND POTENTIAL ROSE (GPR) STUDY. REFER TO SPECIFICATIONS.
- COORDINATE MOUNTING HEIGHTS OF BUILDING MOUNTED LIGHT FIXTURES WITH ARCHITECTURAL ELEVATION DETAILS.

DRAWING NOTES

- TRANSITION FROM UTILITY OVERHEAD SERVICE TO UNDERGROUND SERVICE AT THIS LOCATION. PROVIDE WIRING IN DUCT BANK AS PER SPECIFICATIONS. ONE (1) CABLE PER DUCT TO CUSTOMER OWNED POLE ON PROPERTY AS SHOWN. ALLOW FOR AN ADDITIONAL 3m OF CABLES COILED ON GROUND. HYDRO ONE TO MAKE FINAL CONNECTIONS AND PROVIDE TERMINATIONS AT HYDRO ONE POLE.
- PROVIDE 16.8m (55'-0") CLASS L CONCRETE POLE US88A-5504-L-1-PS AND 200A LOAD BREAK 3 POLE GANG OPERATED SWITCH WITH 30A FUSES. POLE TO BE BURIED MINIMUM 2.59m (8'-6") IN THE GROUND WITH ENGINEERED BASE TO SUIT EQUIPMENT WEIGHT. PROVIDE US W SERIES ENTRY BOXES AND RUN LOAD WIRING INSIDE POLE. RUN LINE WIRING SURFACE MOUNTED ON THE BACK OF THE POLE. TRANSITION FROM OVERHEAD SERVICES TO LOAD BREAK SWITCH AND DIP BACK DOWN TO UNDERGROUND SERVICE AT THIS LOCATION. PROVIDE GROUNDING AND CABLE GUARDS AS PER SPECIFICATIONS AND AS PER OESC REQUIREMENTS.
- PROVIDE NEW CUSTOMER OWNED TRANSFORMER C/W 2108mm x 2255mm US-1-E-1-SPS PRECAST BASE. PROVIDE PRIMARY GROUNDING AS PER OESC BULLETIN 36-10-20 FOR TAMPER RESISTANT EQUIPMENT. COORDINATE WORK WITH HYDRO ONE AND INSPECTION AUTHORITY.

THESE DESIGN DOCUMENTS ARE PREPARED SOLELY FOR THE USE BY THE PARTY WITH WHOM THE DESIGN PROFESSIONAL HAS ENTERED INTO A CONTRACT AND THERE ARE NO REPRESENTATIONS OF ANY KIND MADE BY THE DESIGN PROFESSIONAL TO ANY PARTY WITH WHOM THE DESIGN PROFESSIONAL HAS NOT ENTERED INTO A CONTRACT.

THE PAPER COPY OF THE DRAWINGS ISSUED FOR BUILDING PERMIT AND/OR TENDER WILL TAKE PRECEDENCE OVER ELECTRONIC COPIES.



TRUE NORTH

PROJECT NORTH

2. SITE PLAN CONTROL, RESUBMISSION SEP 13/19

1. ISSUED FOR SITE PLAN APPLICATION JUL 05/19

REVISION No. DESCRIPTION DATE



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PROJECT:
KINAXIS OFFICE BUILDING
8700 CAMPEAU DRIVE
KANATA, ONT.

DRAWING:
ELECTRICAL:
LEGEND, DRAWING LIST
& SITE PLAN

DATE: JUNE 2019
DESIGNED BY: M.O.
DRAWN BY: M.O.
CHECKED BY: G.O.M.
SCALE: AS SHOWN

No. CHGS. 2

PROJECT No.

19147

DRAWING No.

SP-E01

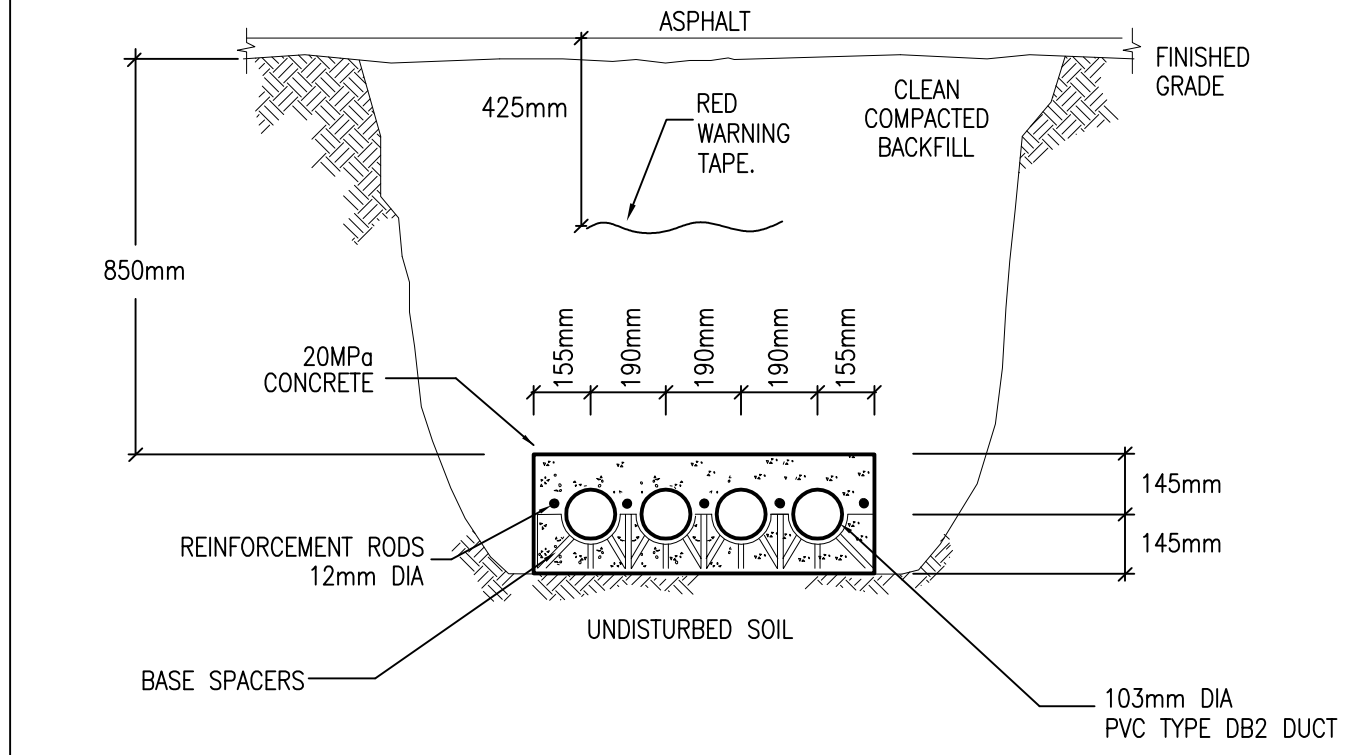
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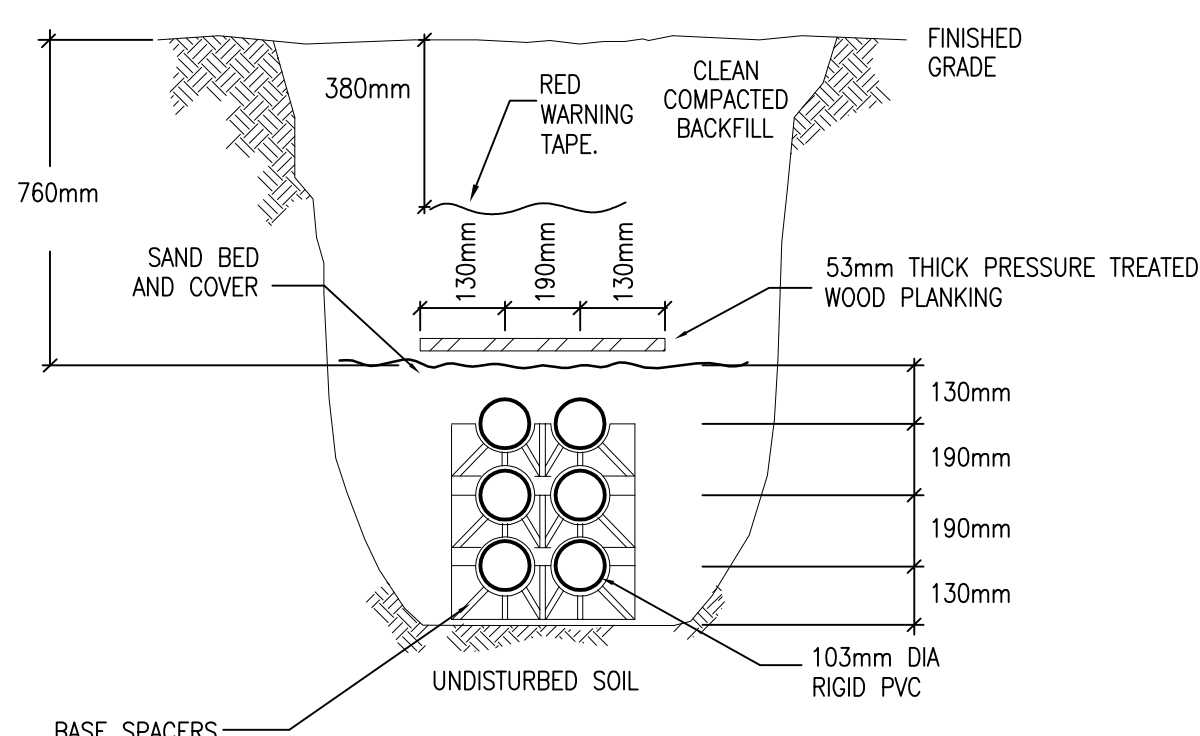
SITE PLAN LIGHTING FIXTURE SCHEDULE						
TYPE	DESCRIPTION	LAMPS	LED DIMMING DRIVER	DIMMING RANGE	VOLT	MOUNTING
4-AA5	POLE MOUNTED FIXTURE EQUAL TO EATON "GLEON" SERIES	4-59W LED	0-10V	10-100%	347	SQUARE ALUMINUM POLE 10.7m ABOVE GRADE
1-AA3	POLE MOUNTED FIXTURE EQUAL TO EATON "GLEON" SERIES	1-34W LED	0-10V	10-100%	347	SQUARE ALUMINUM POLE 10.7m ABOVE GRADE
2-AA2	POLE MOUNTED FIXTURE EQUAL TO EATON "GLEON" SERIES	2-59W LED	0-10V	10-100%	347	SQUARE ALUMINUM POLE 10.7m ABOVE GRADE
1-AA2	POLE MOUNTED FIXTURE EQUAL TO EATON "GLEON" SERIES	1-113W LED	0-10V	10-100%	347	SQUARE ALUMINUM POLE 10.7m ABOVE GRADE
1-AA	POLE MOUNTED FIXTURE EQUAL TO EATON "GLEON" SERIES	1-59W LED	0-10V	10-100%	347	SQUARE ALUMINUM POLE 10.7m ABOVE GRADE
BB	BUILDING MOUNTED FIXTURE EQUAL TO EATON "GWC" SERIES	34W LED	0-10V	10-100%	347	SURFACE WALL MOUNTED
CC	CANOPY LIGHT FIXTURE EQUAL TO COOPER "TIT" SERIES	28W LED	0-10V	10-100%	347	SURFACE
DD	150mm DOWNLIGHT FIXTURE EQUAL TO HALO "HCS/HMS" SERIES	10.1W LED	0-10V	1-100%	347	RECESSED
REMARKS						
= 6697 LUMENS, 4000K, 70 CR, TYPE SMO DISTRIBUTION = FULL CUT-OFF = FACTORY INSTALLED DIMMING OCCUPANCY SENSOR = BLACK MOUNTING HT. INCLUDES HT. OF BASE						
= 4201 LUMENS, 4000K, 70 CR, TYPE T3R DISTRIBUTION = 600mA DRIVER, FULL CUT-OFF = FACTORY INSTALLED DIMMING OCCUPANCY SENSOR = BLACK MOUNTING HT. INCLUDES HT. OF BASE						
= 6697 LUMENS, 4000K, 70 CR, TYPE S12 DISTRIBUTION = FULL CUT-OFF = FACTORY INSTALLED DIMMING OCCUPANCY SENSOR = BLACK MOUNTING HT. INCLUDES HT. OF BASE						
= 12205 LUMENS, 4000K, 70 CR, TYPE S12 DISTRIBUTION = FULL CUT-OFF = FACTORY INSTALLED DIMMING OCCUPANCY SENSOR = BLACK MOUNTING HT. INCLUDES HT. OF BASE						
= 5604 LUMENS, 4000K, 70 CR, TYPE S1R DISTRIBUTION = FULL CUT-OFF, SIDE LIGHT ELIMINATOR = FACTORY INSTALLED DIMMING OCCUPANCY SENSOR = BLACK MOUNTING HT. INCLUDES HT. OF BASE						
= 4204 LUMENS, 4000K, 70 CR, TYPE T2 DISTRIBUTION = 600mA DRIVER = FULL CUT-OFF, BLACK FINISH						
= 3500 LUMENS, 4000K, 80 CR = WIDE DISTRIBUTION = FACTORY INSTALLED DIMMING OCCUPANCY SENSOR = BLACK FINISH						
= 1000 LUMENS, 4000K, 80 CR = C RATED HOUSING, PHS RATED BELOW FINISHED CEILING = FACTORY INSTALLED 347-120V STEPDOWN TRANSFORMER = MEDIUM 60° BEAM ANGLE, WHITE FINISH						

NOTE:
PROVIDE HAND-HELD WIRELESS CONFIGURATION REMOTE FOR SUCCESSFUL IMPLEMENTATION OF PROGRAMMING, A MINIMUM OF TWO (2) HAND-HELD REMOTES ARE REQUIRED.

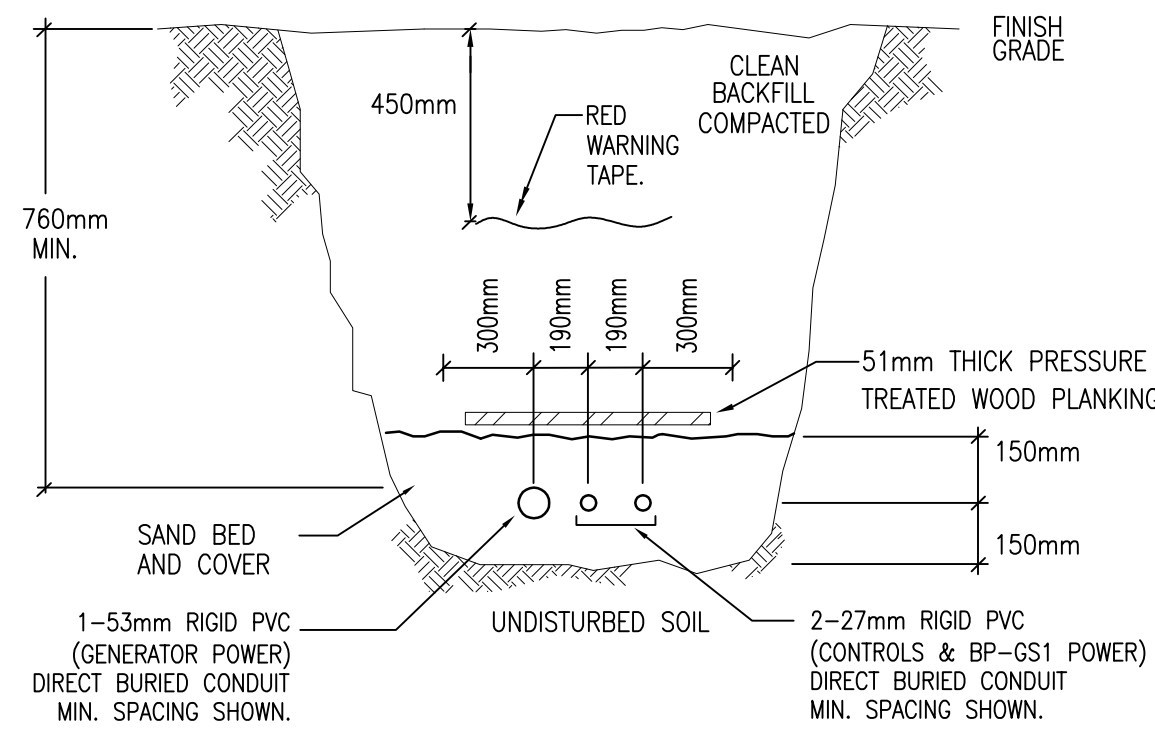
STATISTICS						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Landscaped Garden	+	1.9 fc	6.0 fc	0.5 fc	12.0:1	3.8:1
Main Entrance	+	1.8 fc	9.4 fc	0.0 fc	N / A	N / A
Parking Lot	+	1.4 fc	13.2 fc	0.1 fc	132.0:1	14.0:1
Pathway	+	1.8 fc	6.2 fc	0.0 fc	N / A	N / A
Property Line	+	0.0 fc	0.5 fc	0.0 fc	N / A	N / A
Rear Entrance	+	3.8 fc	9.4 fc	1.3 fc	7.2:1	2.9:1
Covered Bike Parking	+	2.3 fc	4.8 fc	1.2 fc	4.0:1	1.9:1



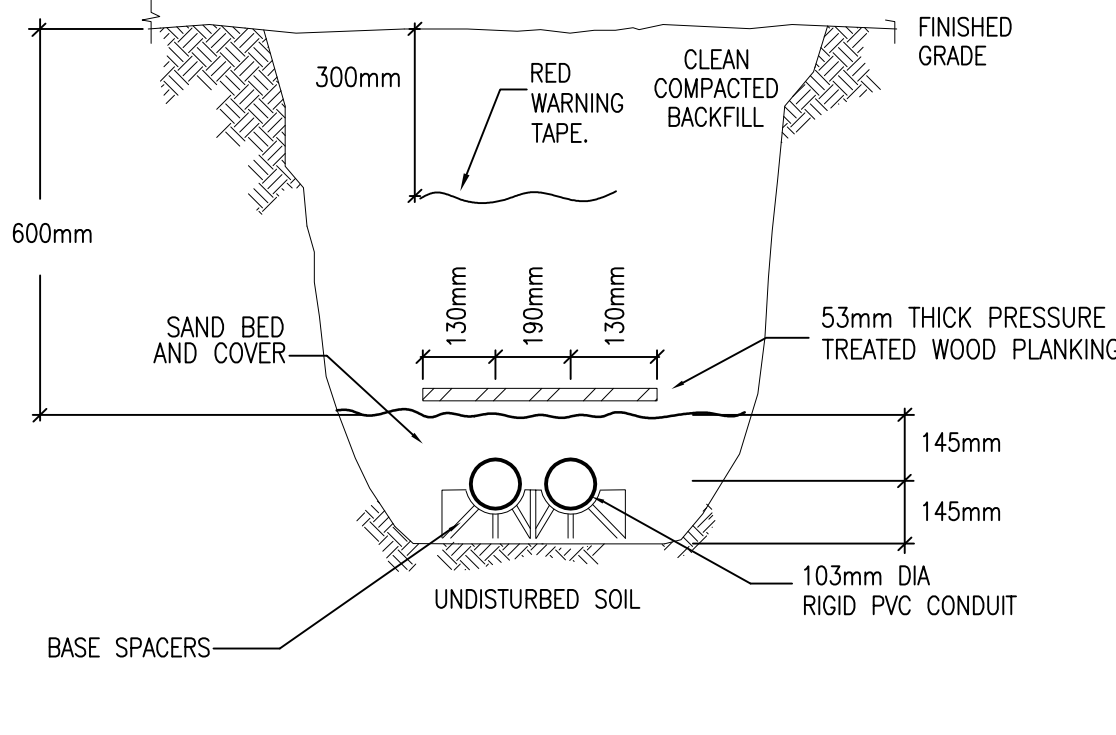
1 TRENCH DETAIL - PRIMARY 4 CELL
SP-E02 CONCRETE ENCASED
N.T.S.



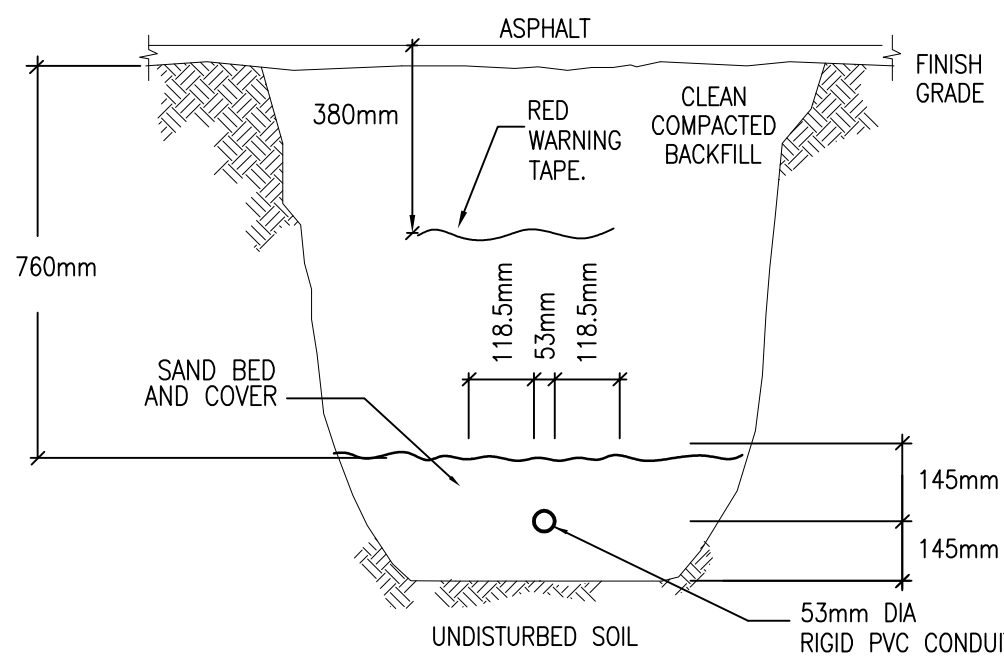
2 TRENCH DETAIL - SECONDARY 6 CELL
SP-E02 DIRECT BURIED
N.T.S.



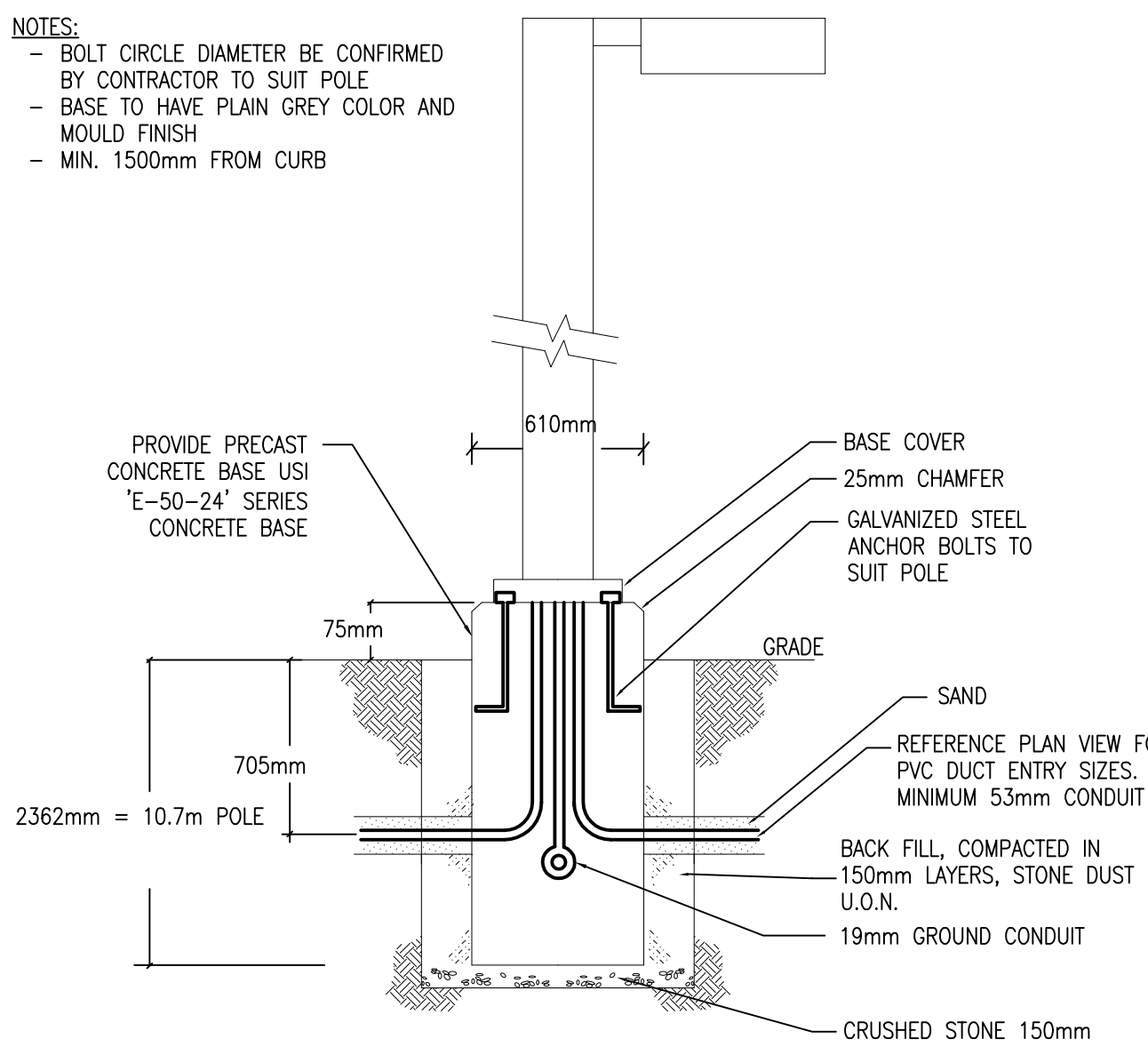
3 GENERATOR TRENCH DETAIL
SP-E02 DIRECT BURIED
N.T.S.



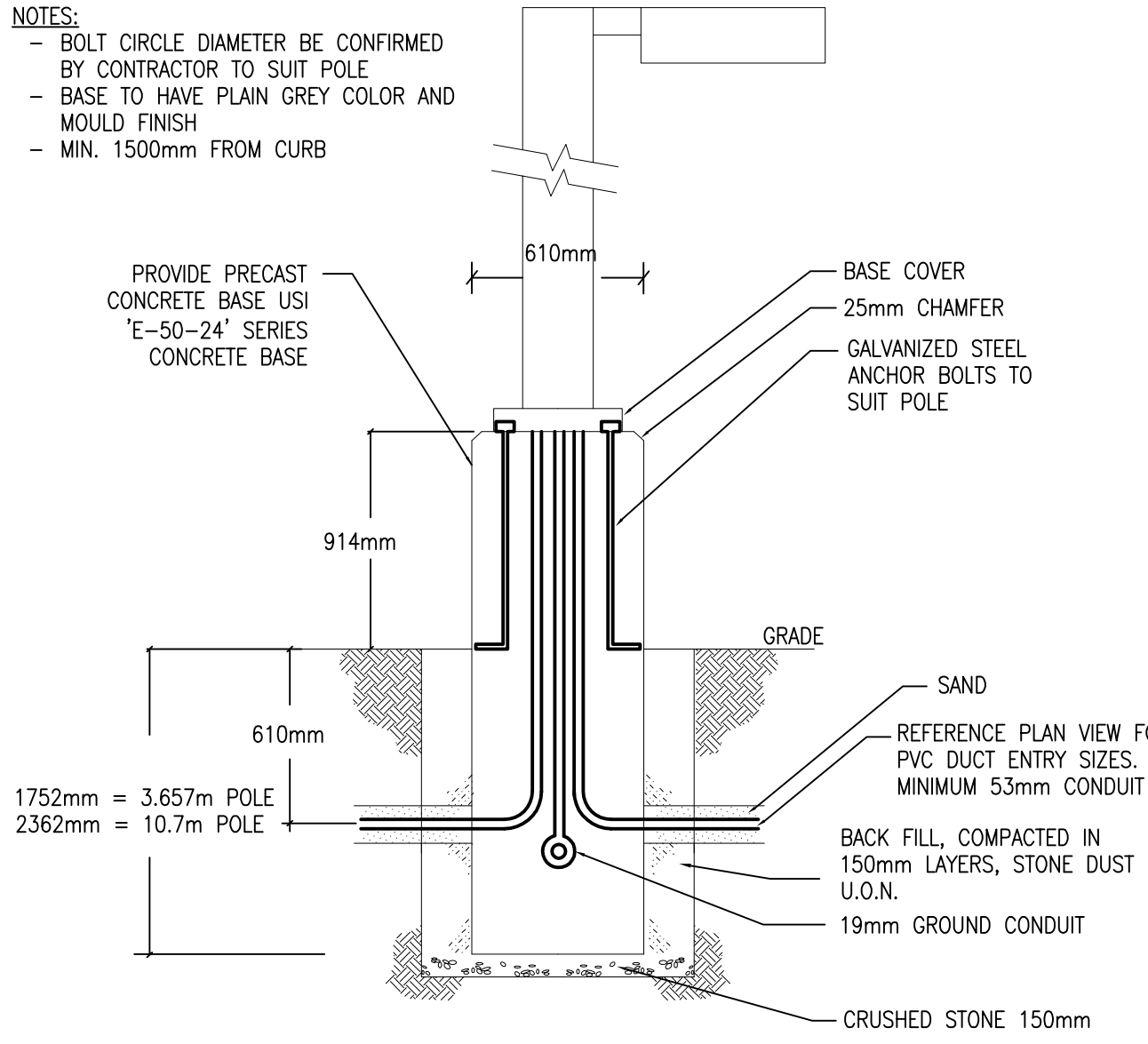
4 TRENCH DETAIL - COMMUNICATION 2 CELL
SP-E02 DIRECT BURIED
N.T.S.



5 DIRECT BURIED CONDUIT FOR EXTERIOR
SP-E02 LIGHTING STANDARDS OR POWER
N.T.S.



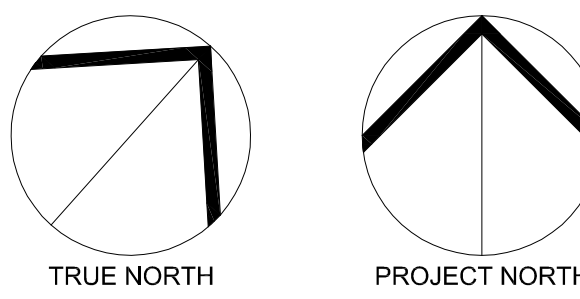
6 MOUNTING OF LAMP POST BASE
SP-E02 CURBED AREAS
N.T.S.



7 MOUNTING OF LAMP POST BASE
SP-E02 PARKING LOT AREAS (NO CURBS)
N.T.S.

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2.	SITE PLAN CONTROL RESUBMISSION	SEP 13/19
1.	ISSUED FOR SITE PLAN APPLICATION	JUL 05/19

REVISION No.	DESCRIPTION	DATE

PROJECT:
KINAXIS OFFICE BUILDING
8700 CAMPEAU DRIVE
KANATA, ONT.

DRAWING:
ELECTRICAL:
SCHEDULES & DETAILS

No. DWGS. 2	DATE: JUNE 2019
PROJECT No. 19147	DESIGNED BY: M.O.
	DRAWN BY: M.O.
	CHECKED BY: G.O.M.
	SCALE: N.T.S.
	DRAWING No. SP-E02