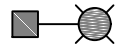







LEGEND

-  LUMINAIRE ON STREETLIGHT POLE
-  LIGHT BOLLARD
-  ELECTRICAL PANEL
-  PULL BOX
-  ELECTRICAL TRANSFORMER
-  UNDERGROUND CIRCUIT

GENERAL NOTES

1. ALL BRANCH CIRCUIT CONDUCTORS ARE Cu RW90 XPLE IN RPVC CONDUIT, UNLESS NOTED OTHERWISE.
2. EACH BRANCH CIRCUIT CONDUIT SHALL HAVE A GREEN BONDING WIRE, SIZED IN ACCORDANCE WITH THE CANADIAN ELECTRICAL CODE.
3. BOLLARD CONDUITS TO BE PLACED AT 0.25m BACK OF WALK UNLESS NOTED OTHERWISE.
4. THE ELECTRICAL PANEL SHALL BE GROUNDED IN ACCORDANCE WITH THE CANADIAN ELECTRICAL CODE.
5. ENSURE THE FOLLOWING MINIMUM SEPARATIONS BETWEEN LIGHTING INSTALLATIONS AND OTHER UNDERGROUND UTILITIES ARE MET:

WATER, SANITARY AND STORM: 3m

SHALLOW UTILITIES (ELECTRICAL, COMMUNICATION, GAS): 1m

HIGH PRESSURE PIPELINES AND GAS LINES: AS PER UTILITY OWNER REQUIREMENTS
6. ALL WORK IN THE PROXIMITY OF POWER LINES SHALL BE PERFORMED IN ACCORDANCE WITH ALBERTA ELECTRICAL UTILITY CODE.
7. NOTIFY THE ENGINEER, PRIOR INSTALLATION, IF THE SURVEYED LOCATIONS DO NOT MEET THE OFFSETS SHOWN ON THE DRAWING OR THE REQUIRED CLEARANCES.
8. THE CONTRACTOR SHALL REQUEST CLARIFICATION FROM THE ENGINEER FOR ANY MISSING, AMBIGUOUS OR CONFLICTING INFORMATION, DETAIL, DRAWING OR SPECIFICATION.
9. POLE COORDINATES DENOTE CENTER OF BASE.
10. INSTALLATION OF THE TRANSFORMER BASE, GROUNDING AND DUCTING MUST BE INSTALLED BY A FORTISALBERTA APPROVED INSTALLER. THE INSTALLATION SHALL FOLLOW THE REQUIREMENTS OF THE FORTISALBERTA "CUSTOMER INSTALLED PRE-CAST BASE, GROUNDING AND DUCTING PROCESS". ALL INSTALLATIONS TO BE COORDINATED WITH THE FORTISALBERTA FIELD COORDINATOR.
11. FORTISALBERTA PRIMARY MUST MAINTAIN A MINIMUM OF 1.0m SEPARATION TO THE SECONDARY FACILITIES.
12. CONTRACTOR TO COORDINATE DESIGN AND INSTALLATION WITH FORTISALBERTA.

BOLLARD NOTES

1. BOLLARD SPECIFICATIONS INDICATE THE BASE PLATE CAN ACCOMMODATE ONLY ONE 3/4" CONDUIT. CONTRACTOR TO VERIFY ACTUAL OPENING DIMENSIONS BEFORE INSTALLING THE CONDUITS.
2. USE REDUCER TO TRANSITION TO 3/4" CONDUIT, IF NEEDED, AND USE "Y" CONNECTOR TO ENTER BOLLARD BASE.

LUMINAIRE TYPE

- ST2 STERNBERG 1527LED TYPE II - 1527LED-F-ARC27T2-MDL03-FG-EZ
- ST3 STERNBERG 1527LED TYPE III - 1527LED-F-ARC27T3-MDL03-FG-EZ
- ST4 STERNBERG 1527LED TYPE IV - 1527LED-F-ARC27T4-MDL03-FG-EZ
- B1 EATON INVUE ARBOR BOLLARD 762mm (30") - ABB-B1-LED-30-D1-A-BK-8030
- B2 EATON INVUE ARBOR BOLLARD 1067mm (42") - ABB-B1-LED-42-D1-A-BK-8030

POLE TYPE

- 20' 20 ft POLE C/W 5 ft x 2 ft CANDY-CANE ARM

BASE TYPE

- P STREETLIGHT POLE BASE
- B LIGHTING BOLLARD BASE
- W RETAINING WALL LIGHTING BOLLARD BASE

JUNCTION BOX


- JB OLDCASTLE COMPOSITE SYNTERTECH 1118-12

ABBREVIATIONS

- BW BACK OF WALK
- CCT CIRCUIT
- EOP EDGE OF PAVEMENT
- EOW EDGE OF WALK
- Ex. EXISTING
- LG LIP OF GUTTER
- NA NOT APPLICABLE
- RW RETAINING WALL

LIGHTING PANEL										
LOCATION: UPPER ROUNDABOUT										
MAIN BREAKER 60A										
VOLTAGE 120/240V										
PHASE 1										
CCT NO	DESCRIPTION	POWER	AMPS	BRKR	BUS	BRKR	AMPS	POWER	DESCRIPTION	CCT NO
1	1, 2, 4	198W	1.7	15A	A	15A	1.1	265W	3, 5, 6, 7	2
3	8, 9, 10, 11	265W	2.2	15A	B	15A	1.0	121W	12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22	4
5	23, 24, 25	33W	0.4	15A	A	15A	1.1	132W	26, 28, 30, 32, 34, 36, 38, 40, 42, 44, 46, 50	6
7	27, 29, 31, 33, 35, 37, 39, 41, 43, 45, 47, 49	132W	1.1	15A	B	15A			FUTURE BUS DIGITAL SIGN AND SHELTER	8
9	SPARE			15A	A	15A			SPARE	10
11					A					12
13					A					14
15					A					16
17					B					18

WIRE AND CONDUIT SIZE		
	WIRE SIZE	CONDUIT SIZE
BOLLARDS		
FROM PANEL TO FIRST BOLLARD	#8	27mm
BETWEEN BOLLARDS	#12	21mm
POLES		
FROM PANEL TO FIRST POLE	#10	27mm
BETWEEN POLES	#10	27mm
BUS DIGITAL SIGN AND SHELTER		
ALL	N/A	27mm

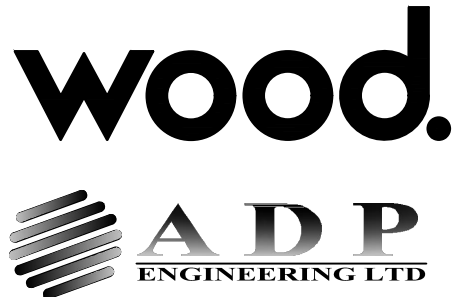


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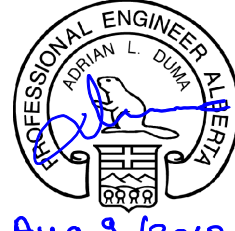
wood.
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ENGINEERING LTD

Consultant's Name
Nom de l'expert-conseil

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#134, 10615 - 48 Street SE
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revisions	description	date

Client

PARKS CANADA AGENCY

BANFF NATIONAL PARK, P.O. BOX 900
BANFF, ALBERTA, T1L 1K2

project title

MOUNTAIN AVENUE
IMPROVEMENTS

approved by
AD

designed by
AD

drawn by
MB

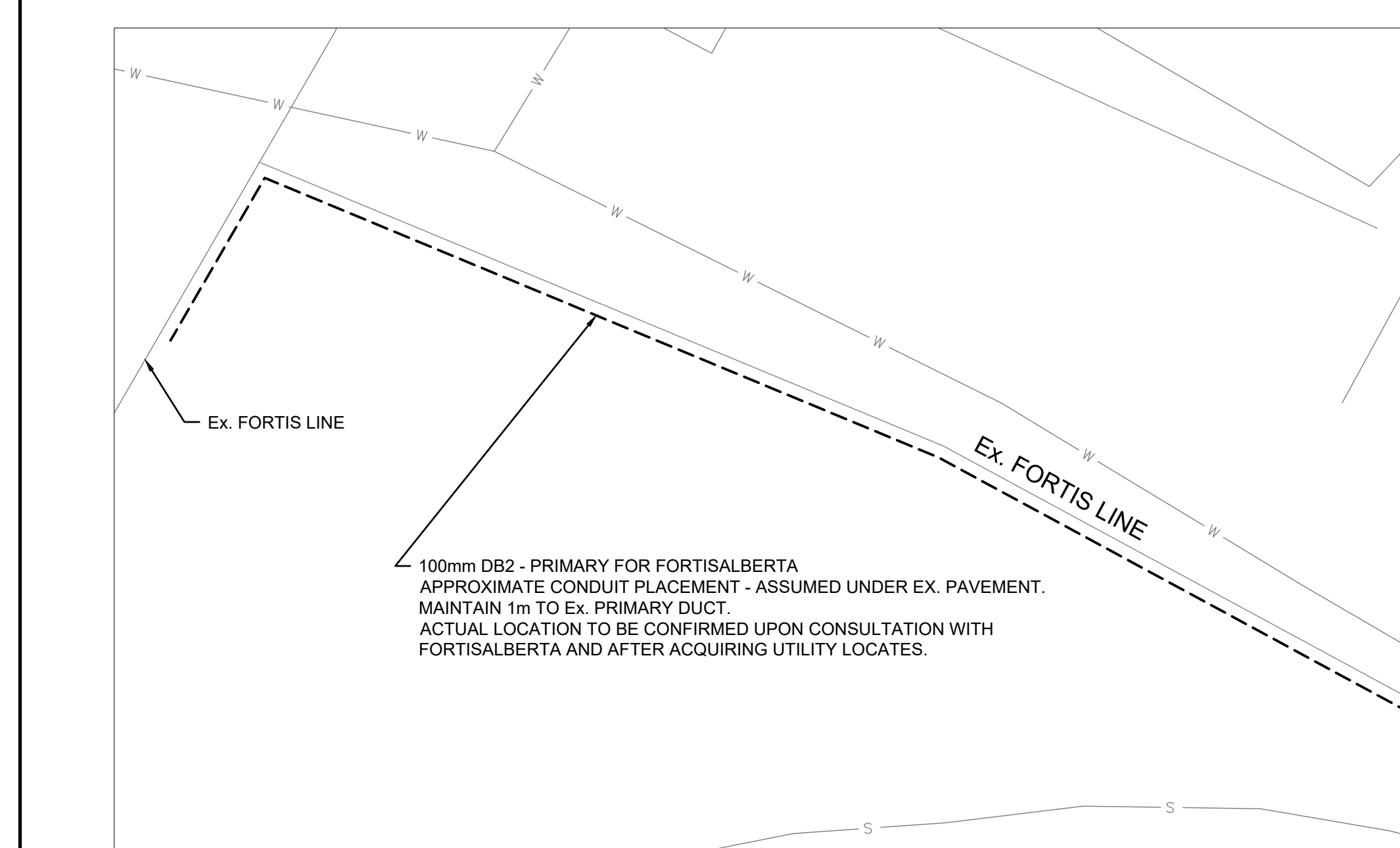
PWGSC Project Manager
LM

PWGSC, Architectural and Engineering Resources Manager
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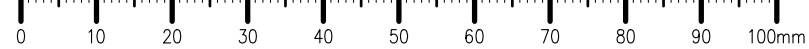
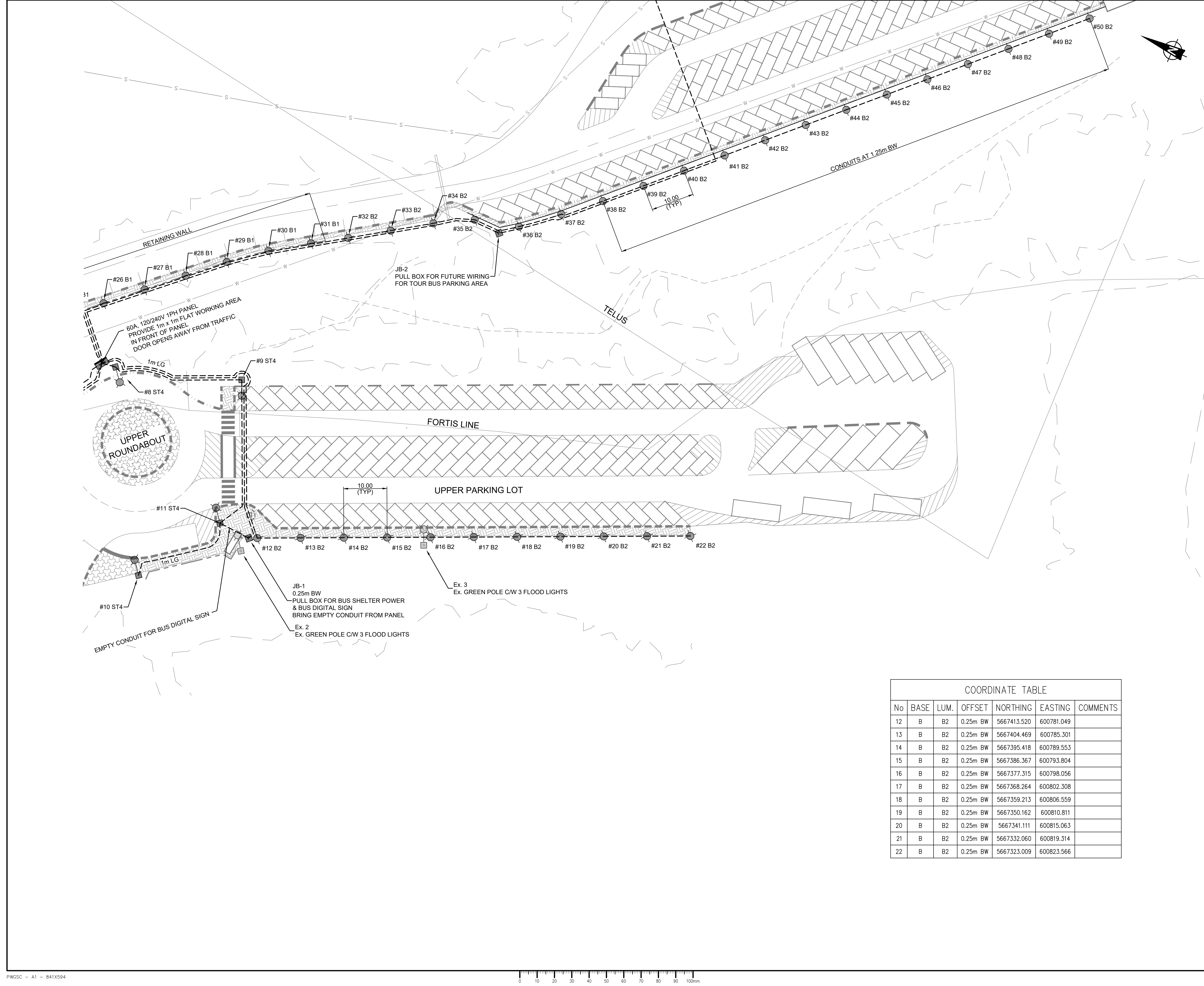
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drawing title
LIGHTING
COVER PAGE

project no.	sheet	revision no.
CT164101	E-001 OF 5	0



COORDINATE TABLE						
No	BASE	LUM.	OFFSET	NORTHING	EASTING	COMMENTS
23	B	B2	0.25m BW	5667491.660	600793.765	
24	B	B2	0.25m BW	5667483.848	600801.150	
25	W	B1	TOP OF RETAINING WALL	5667475.782	600808.431	
26	W	B1	TOP OF RETAINING WALL	5667468.515	600815.300	
27	W	B1	TOP OF RETAINING WALL	5667461.248	600822.170	
28	W	B1	TOP OF RETAINING WALL	5667453.981	600829.039	
29	W	B1	TOP OF RETAINING WALL	5667446.711	600835.896	
30	W	B1	TOP OF RETAINING WALL	5667439.053	600842.251	
31	W	B1	TOP OF RETAINING WALL	5667430.883	600847.986	
32	B	B2	0.75m BW	5667423.609	600852.720	
33	B	B2	0.75m BW	5667415.419	600858.375	
34	B	B2	0.75m BW	5667407.194	600864.063	
35	B	B2	0.75m BW	5667398.886	600868.333	
36	B	B2	0.75m BW	5667388.943	600871.691	







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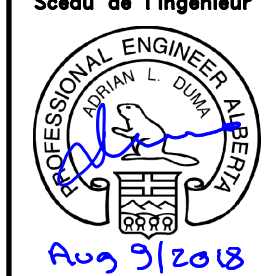
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PARKS CANADA AGENCY

BANFF NATIONAL PARK, P.O. BOX 900
BANFF, ALBERTA, T1L 1K2

project title

MOUNTAIN AVENUE
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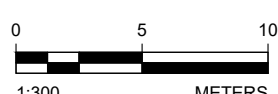
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LM

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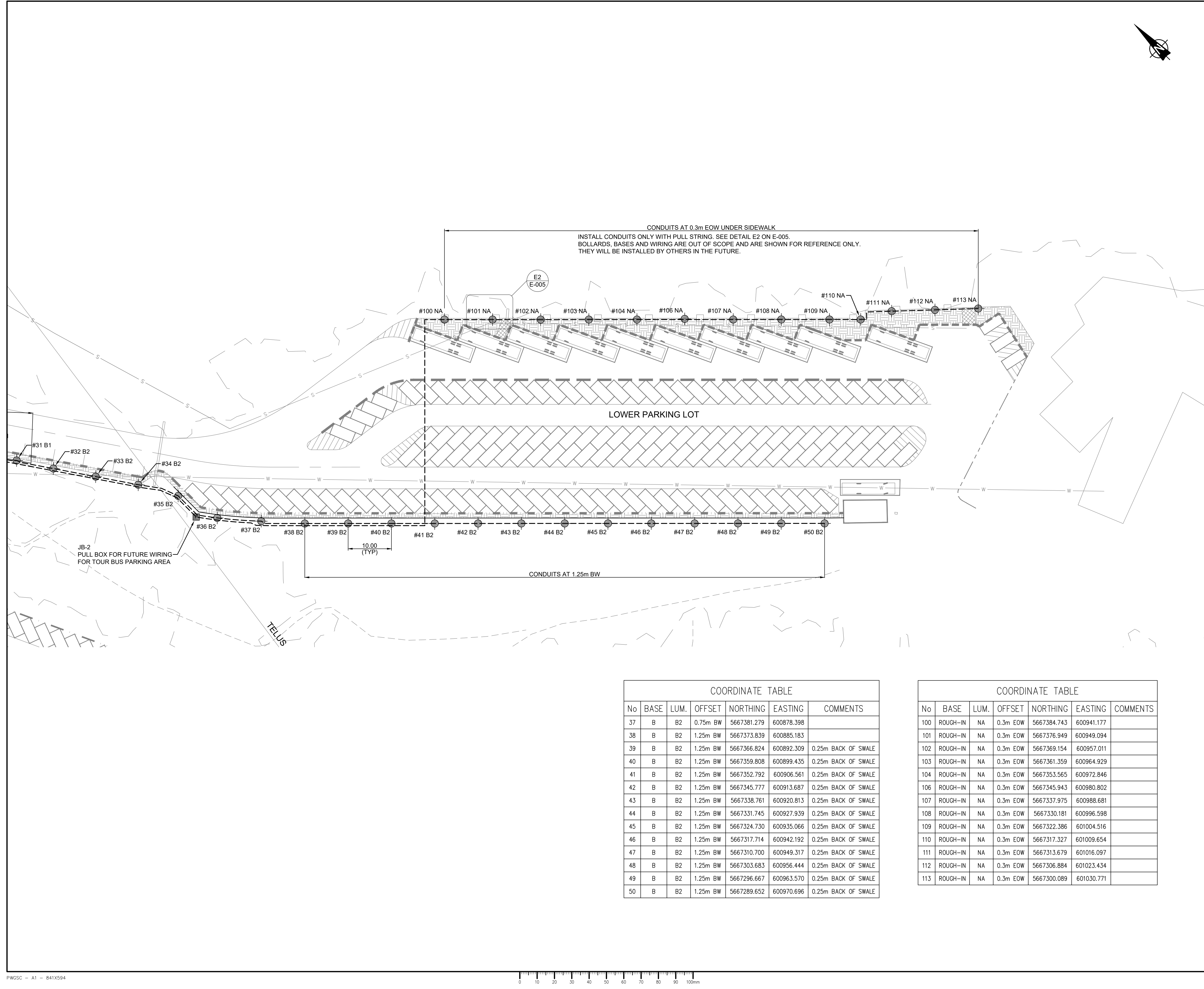
drawing title


LIGHTING
UPPER PARKING LOT



project no.	sheet	revision no.
CT164101	E-003 OF 5	0

COORDINATE TABLE						
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13	B	B2	0.25m BW	5667404.469	600785.301	
14	B	B2	0.25m BW	5667395.418	600789.553	
15	B	B2	0.25m BW	5667386.367	600793.804	
16	B	B2	0.25m BW	5667377.315	600798.056	
17	B	B2	0.25m BW	5667368.264	600802.308	
18	B	B2	0.25m BW	5667359.213	600806.559	
19	B	B2	0.25m BW	5667350.162	600810.811	
20	B	B2	0.25m BW	5667341.111	600815.063	
21	B	B2	0.25m BW	5667332.060	600819.314	
22	B	B2	0.25m BW	5667323.009	600823.566	





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BANFF NATIONAL PARK, P.O. BOX 900
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project title

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IMPROVEMENTS

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MB

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LM

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drawing title

LIGHTING
LOWER PARKING LOT

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1:400METERS

project no.
CT164101

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E-004
OF 5


revision no.
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ADRIAN L. DUMA

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PARKS CANADA AGENCY

**BANFF NATIONAL PARK, P.O. BOX 900
BANFF, ALBERTA, T1L 1K2**

project title

MOUNTAIN AVENUE IMPROVEMENTS

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designed by

AD

drawn by
MR

MB

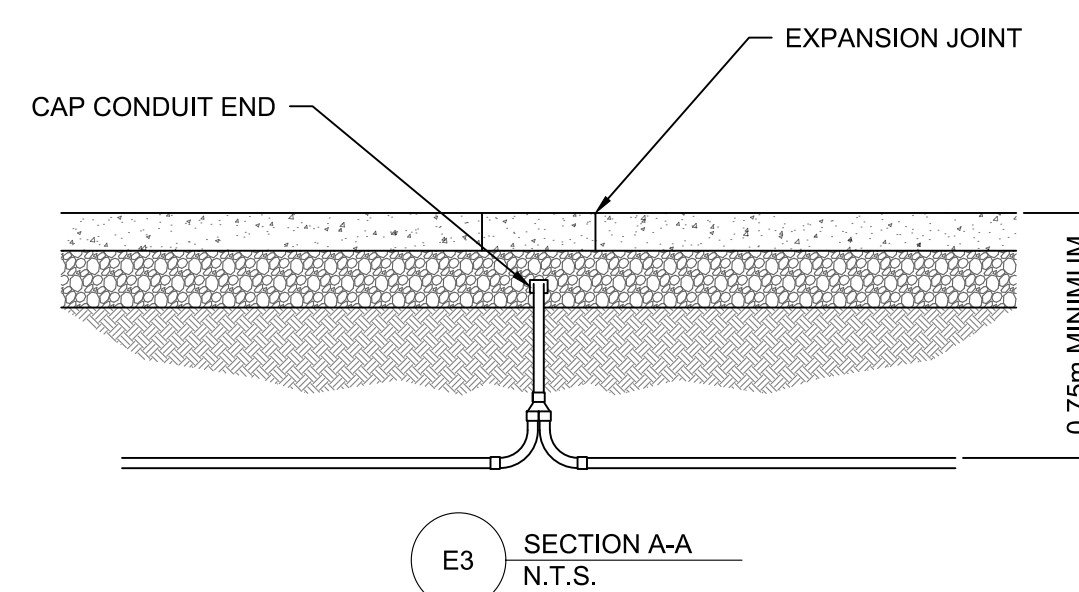
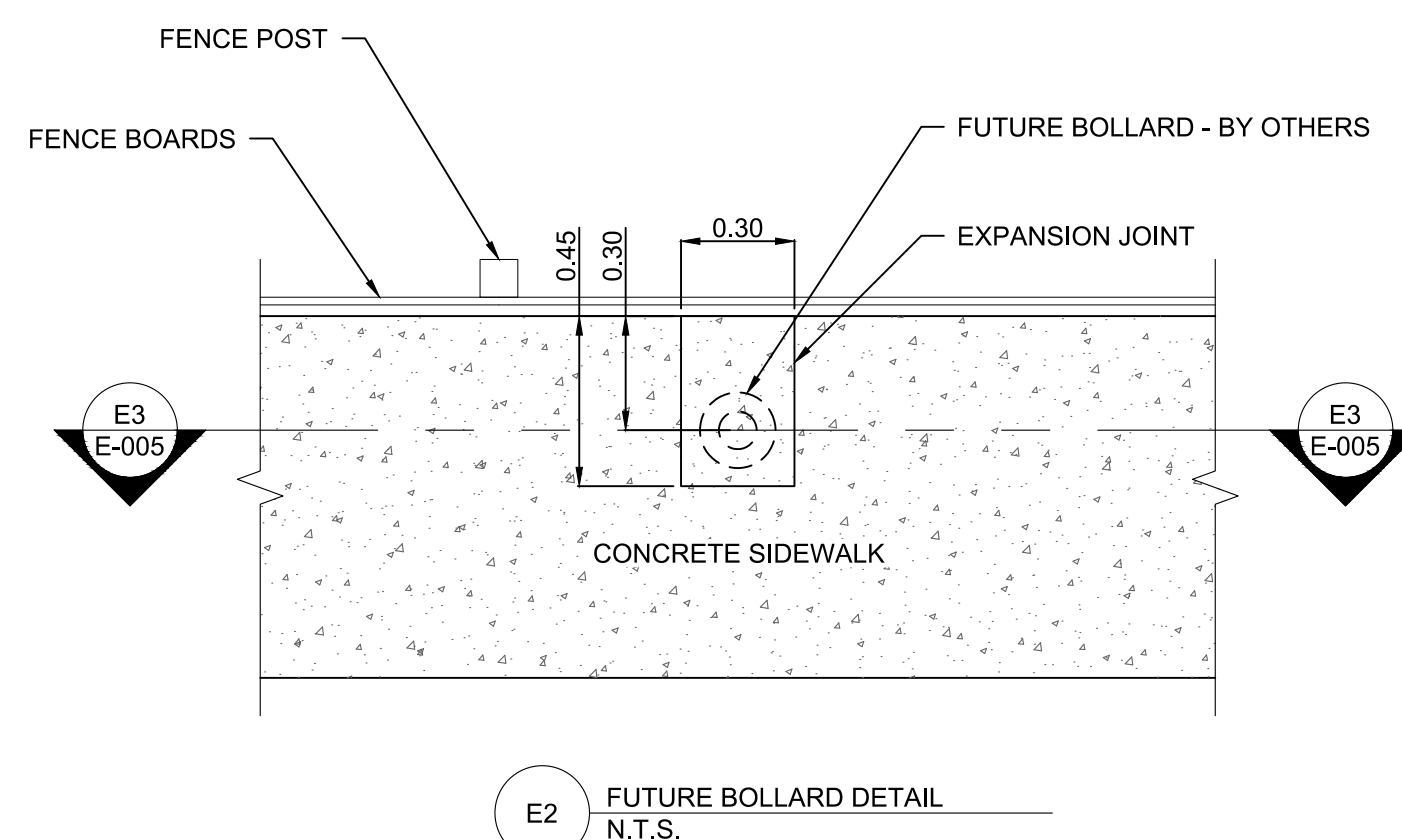
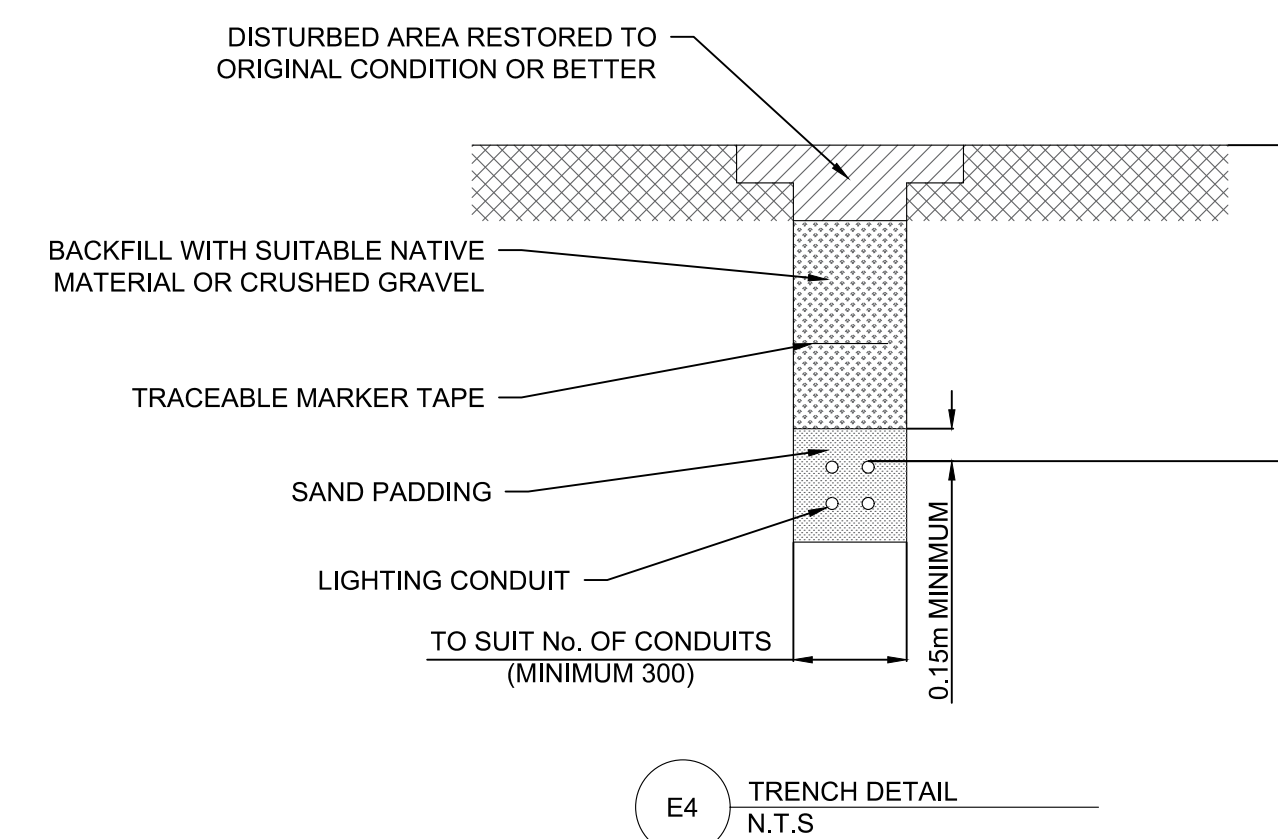
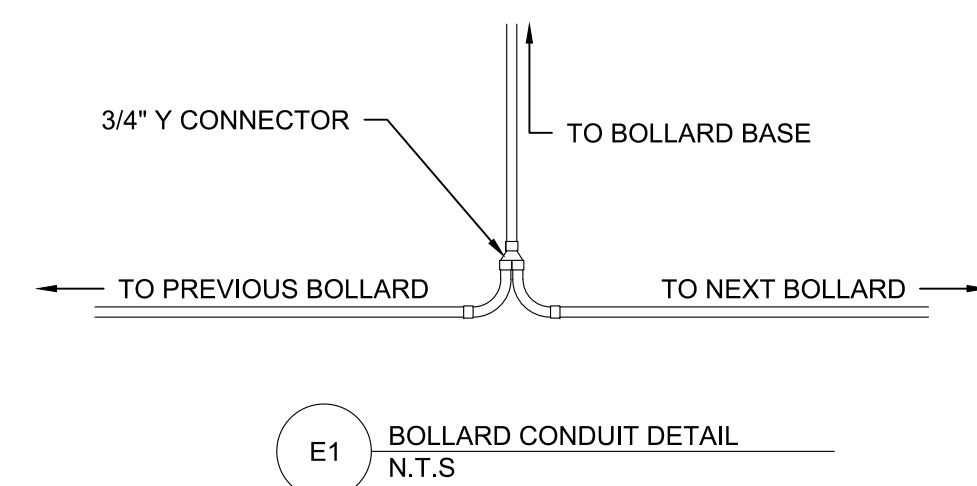
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LIGHTING DETAILS

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CT164101	E-005	0
	OF 5	



NOTE: REFER TO "LANDSCAPE DETAILS"
DRAWING FOR PAVEMENT STRUCTURE

