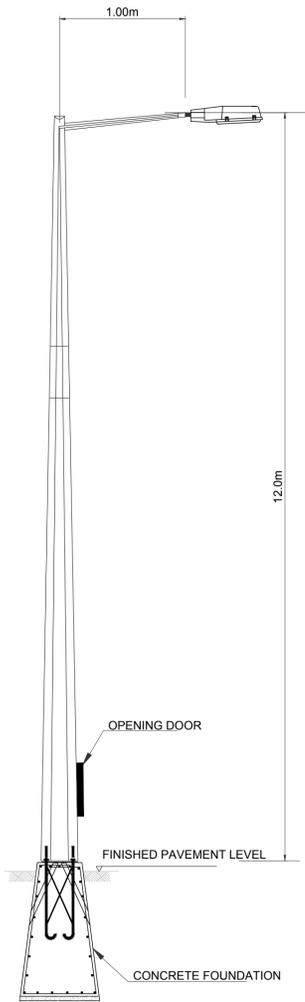
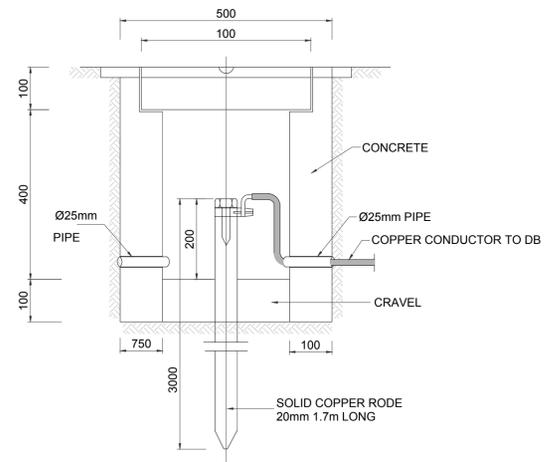


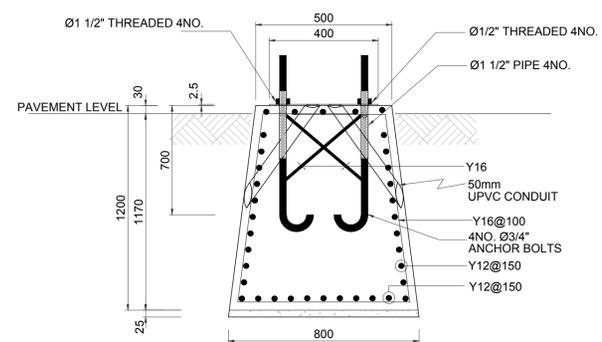
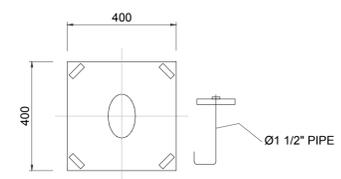
NOTES :



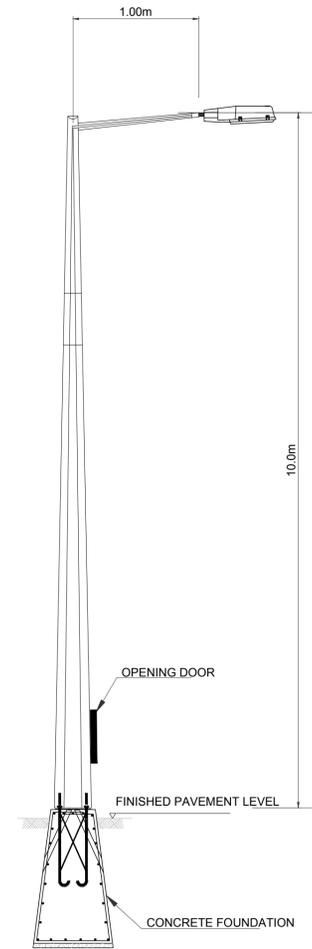
12m SINGLE SIDED HIGH LIGHTING POLE



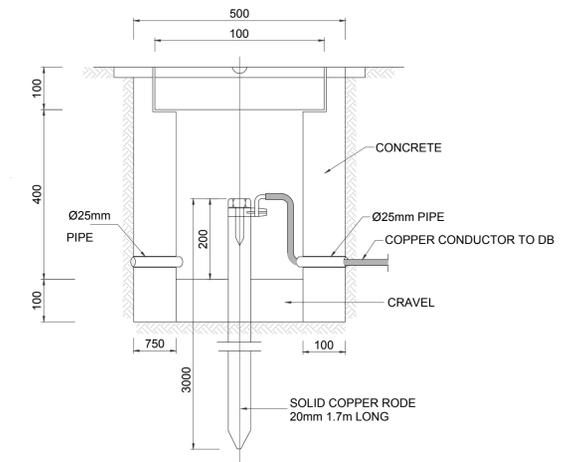
EARTHING DETAIL
M.H WITH COPPER ROD



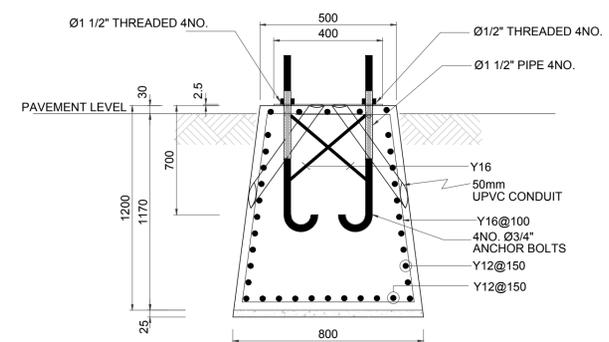
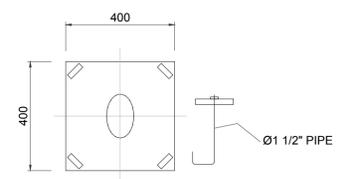
STREET LIGHTING BASE DETAIL



10m SINGLE SIDED HIGH LIGHTING POLE



EARTHING DETAIL
M.H WITH COPPER ROD



STREET LIGHTING BASE DETAIL

DETAIL (1): 12m STREET LIGHTING DETAILS - SCALE: NTS

DETAIL (2): 10 m STREET LIGHTING DETAILS - SCALE: NTS

Rev.	Date	Description	Checked

Client
 Greater Amman Municipality

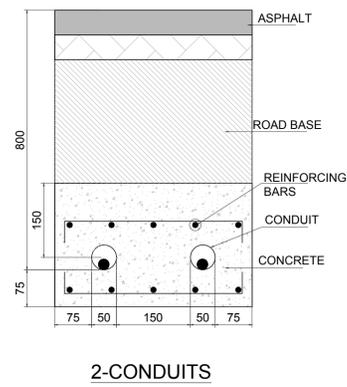
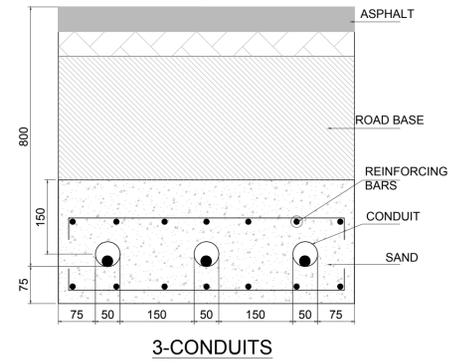
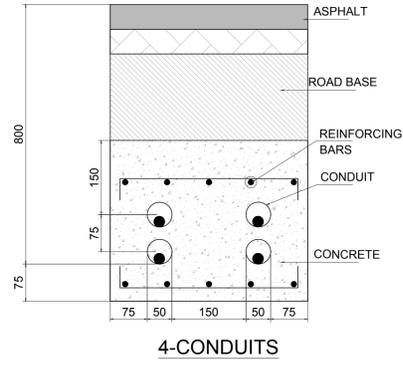
Project Name
 BUS RAPID TRANSIT (BRT) SYSTEM
 IN AMMAN - PACKAGE 10 A & C
 NASER BIN JAMEEL STREET

Consultants
steer davis gleave
CONSOLIDATED CONSULTANTS GROUP

Drawing Title
**ELECTRICAL DETAILS
 (1 OF 2)**

Designed By	Design Team	Date	OCT 2018
Drawn By	Design Team	Stage	-
Checked By	T. Al-Arqan	Sheet Size	A1
Approved By	S. Ayyash	Scale	NTS
Drawing No. :	E-001	Rev.	00

NOTES :



DETAIL (3): STREET LIGHTING CABLES IN STREET CROSSING - SCALE: NTS

Rev.	Date	Description	Checked

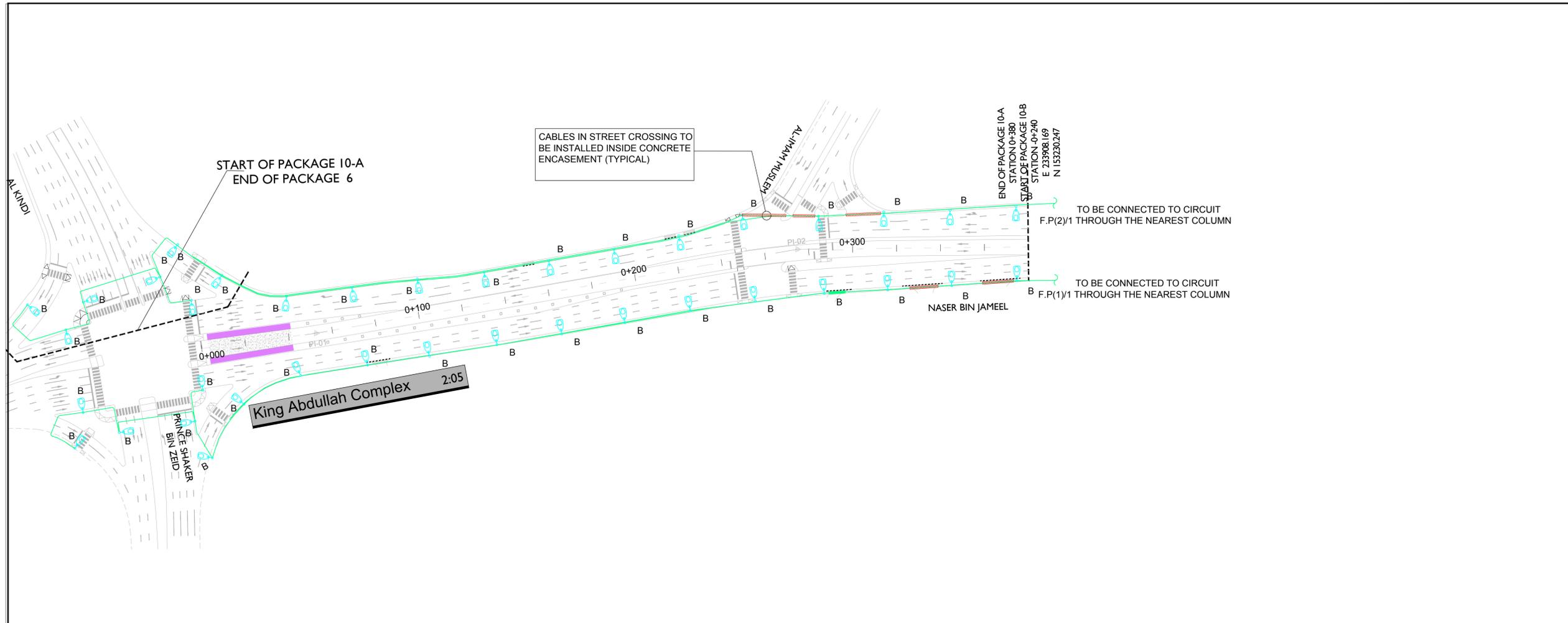
Client
 Greater Amman Municipality

Project Name
 BUS RAPID TRANSIT (BRT) SYSTEM
 IN AMMAN - PACKAGE 10 A & C
 NASER BIN JAMEEL STREET

Consultants
 **steer davis gleave**
 **CONSOLIDATED CONSULTANTS GROUP**

Drawing Title
**ELECTRICAL DETAILS
 (2 OF 2)**

Designed By	Design Team	Date	OCT 2018
Drawn By	Design Team	Stage	-
Checked By	T. Al-Arqan	Sheet Size	A1
Approved By	S. Ayyash	Scale	NTS
Drawing No. :	E-002	Rev.	00



- NOTES:**
1. ALL DIMENSIONS IN METERS UNLESS OTHERWISE INDICATED.
 2. CABLES TO BE PROTECTED BY UPVC CONDUIT WITH CONCRETE ENCASUREMENT AT EACH ROAD CROSSING.
 3. BOLTS AND CONDUITS TO BE FIXED BY MEANS OF A TEMPLATE WHILE CASTING THE BLOCK.
 4. THE STEEL WIRE ARMOUR OF THE CABLES TO BE BONDED TO THE POLE BY MEANS OF SUITABLE CLAMPS.
 5. EACH FEEDER PILLAR SHOULD HAVE ITS EARTHING ROD IN ADDITION TO MAIN EARTHING LEAD.
 6. IT IS THE CONTRACTOR RESPONSIBILITY TO PROVIDE FOR THE ENGINEER'S APPROVAL A COMPLETE LIGHTING STUDY WHERE THE FOLLOWING VALUES FOR ROAD PARAMETERS SHALL BE ACHIEVED:
 - a. $L_m \geq 1.5 \text{ cd/m}^2$
 - b. $U_0 \geq 0.4$
 - c. $U_l \geq 0.7$
 - d. $T_l \leq 10$
 - e. $SR \geq 0.5$
 7. FOR FEEDER PILLAR DETAILS REFER TO DRAWING NO E-04 OF PACKAGE 10-B

- LEGEND:**
- FEEDER PILLAR
 - 12 METER HIGH SINGLE ARM STREET LIGHTING POLE WITH 150W LED LAMP, 18000 LUMEN, IP66, HOUSING MADE OF DIE-CAST ALUMINUM.
 - 10 METER HIGH SINGLE ARM STREET LIGHTING POLE WITH 150W LED LAMP, 18000 LUMEN, IP66, HOUSING MADE OF DIE-CAST ALUMINUM
 - CONCRETE ENCASUREMENT DUCT FOR CABLES IN STREET CROSSING

Rev.	Date	Description	Checked

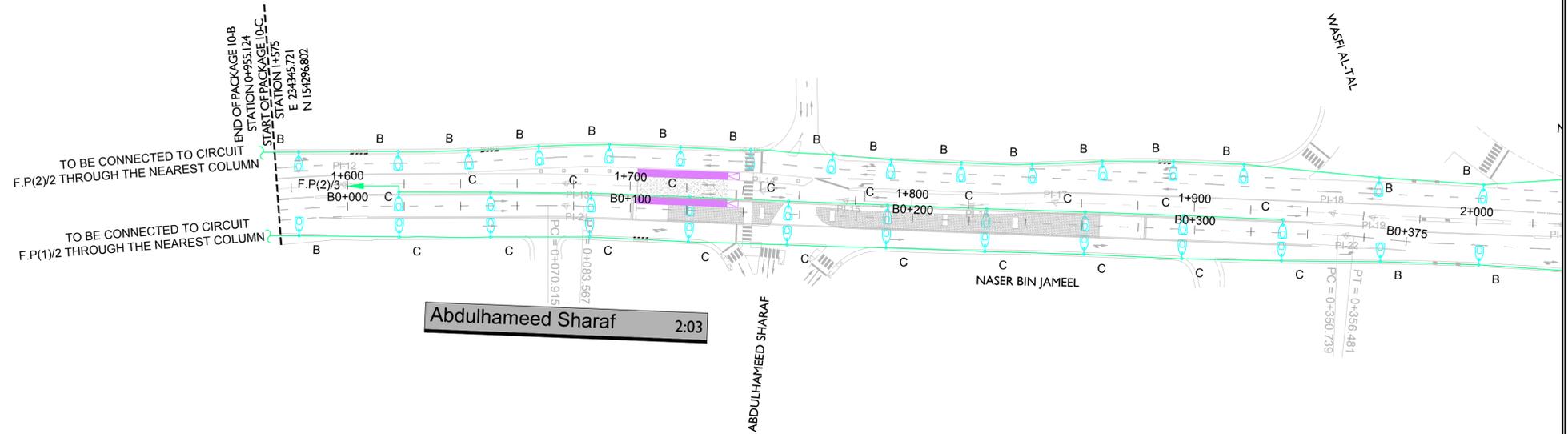


Project Name
 BUS RAPID TRANSIT (BRT) SYSTEM
 IN AMMAN - PACKAGE 10 A & C
 NASER BIN JAMEEL STREET



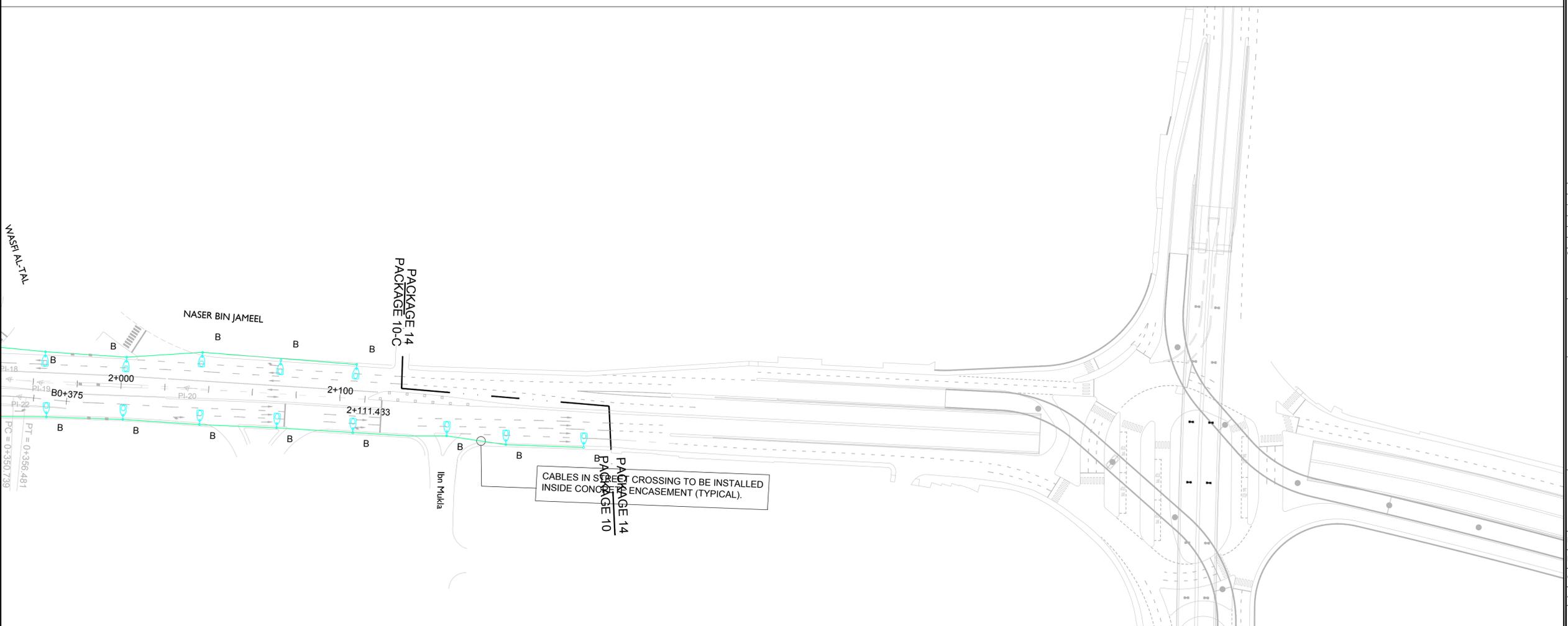
Drawing Title
 STREET LIGHTING
 (1 OF 2)

Designed By	Design Team	Date	OCT 2018
Drawn By	Design Team	Stage	-
Checked By	T. Al-Arqan	Sheet Size	A1
Approved By	S. Ayyash	Scale	1: 1000
Drawing No. :	E-004	Rev.	00



- NOTES:**
1. ALL DIMENSIONS IN METERS UNLESS OTHERWISE INDICATED.
 2. CABLES TO BE PROTECTED BY UPVC CONDUIT WITH CONCRETE ENCASEMENT AT EACH ROAD CROSSING.
 3. BOLTS AND CONDUITS TO BE FIXED BY MEANS OF A TEMPLATE WHILE CASTING THE BLOCK.
 4. THE STEEL WIRE ARMOUR OF THE CABLES TO BE BONDED TO THE POLE BY MEANS OF SUITABLE CLAMPS.
 5. EACH FEEDER PILLAR SHOULD HAVE ITS EARTHING ROD IN ADDITION TO MAIN EARTHING LEAD.
 6. IT IS THE CONTRACTOR RESPONSIBILITY TO PROVIDE FOR THE ENGINEER'S APPROVAL A COMPLETE LIGHTING STUDY WHERE THE FOLLOWING VALUES FOR ROAD PARAMETERS SHALL BE ACHIEVED:
 - a. $L_m \geq 1.5 \text{ cd/m}^2$
 - b. $U_0 \geq 0.4$
 - c. $U_l \geq 0.7$
 - d. $T_l \leq 10$
 - e. $SR \geq 0.5$
 7. FOR FEEDER PILLAR DETAILS REFER TO DRAWING NO E-04 OF PACKAGE 10-B

- LEGEND:**
- FP FEEDER PILLAR
 - B 12 METER HIGH SINGLE ARM STREET LIGHTING POLE WITH 150W LED LAMP, 18000 LUMEN, IP66, HOUSING MADE OF DIE-CAST ALUMINUM.
 - C 10 METER HIGH SINGLE ARM STREET LIGHTING POLE WITH 150W LED LAMP, 18000 LUMEN, IP66, HOUSING MADE OF DIE-CAST ALUMINUM
 - CONCRETE ENCASEMENT DUCT FOR CABLES IN STREET CROSSING



Rev.	Date	Description	Checked

Client
 Greater Amman Municipality

Project Name
 BUS RAPID TRANSIT (BRT) SYSTEM IN AMMAN - PACKAGE 10 A & C NASER BIN JAMEEL STREET

Consultants
 steer davis gleave
 CONSOLIDATED CONSULTANTS GROUP

Drawing Title
 STREET LIGHTING (2 OF 2)

Designed By	Design Team	Date	OCT 2018
Drawn By	Design Team	Stage	-
Checked By	T. Al-Arqaan	Sheet Size	A1
Approved By	S. Ayyash	Scale	1: 1000
Drawing No. :	E-005	Rev.	00



- NOTES :**
1. ALL DIMENSIONS IN METERS UNLESS OTHERWISE INDICATED.
 2. CABLES TO BE PROTECTED BY UPVC CONDUIT WITH CONCRETE ENCASEMENT AT EACH ROAD CROSSING.
 3. BOLTS AND CONDUITS TO BE FIXED BY MEANS OF A TEMPLATE WHILE CASTING THE BLOCK.
 4. THE STEEL WIRE ARMOUR OF THE CABLES TO BE BONDED TO THE POLE BY MEANS OF SUITABLE CLAMPS.
 5. EACH FEEDER PILLAR SHOULD HAVE ITS EARTHING ROD IN ADDITION TO MAIN EARTHING LEAD.
 6. IT IS THE CONTRACTOR RESPONSIBILITY TO PROVIDE FOR THE ENGINEER'S APPROVAL A COMPLETE LIGHTING STUDY WHERE THE FOLLOWING VALUES FOR ROAD PARAMETERS SHALL BE ACHIEVED:
 - a. $L_m \geq 1.5 \text{ cd/m}^2$
 - b. $U_0 \geq 0.4$
 - c. $U_l \geq 0.7$
 - d. $T_l \leq 10$
 - e. $SR \geq 0.5$
 7. MINIMUM AVERAGE ILLUMINANCE FOR BRIDGE ZONE (LUX) $\geq 15 \text{ LUX}$
 - d- OVERALL UNIFORMITY FOR BRIDGE ZONE ≥ 0.4
 8. FOR FEEDER PILLAR DETAILS REFER TO DRAWING NO E-04 OF PACKAGE 10-B

LEGEND:

— SURFACE MOUNTED LIGHTING LUMINAIRE.
 A 41W LED 5000 LUMEN, HOUSING MADE OF ALUMINUM , IP 66

Rev.	Date	Description	Checked

Client

Project Name
 BUS RAPID TRANSIT (BRT) SYSTEM
 IN AMMAN - PACKAGE 10 A & C
 NASER BIN JAMEEL STREET

Consultants

Drawing Title
 UNDERBRIDGE
 LIGHTING SYSTEM

Designed By	Design Team	Date	OCT 2018
Drawn By	Design Team	Stage	-
Checked By	T. Al-Arqan	Sheet Size	A1
Approved By	S. Ayyash	Scale	1:400
Drawing No. :	E-006	Rev.	00