

**Procurement Of Execution Of Works On The Construction Of Buildings Within Phase II With The Appropriate Infrastructure Planning Of Social Housing Complex On The Cadastral Parcel Number 3672/3 Ko Ovča, City Municipality Palilula, Belgrade, Serbia**

**CLARIFICATION No.7**

**Published on - 09.03.2016.**

ИП ИСТРАЖИВАЊЕ И РАЗВОЈ ДОО БЕОГРАД  
Бр. 42111  
09.03 2016 год.  
БЕОГРАД

No.	Question	Answer
	<b>Question dated: 04/03/2016.</b>	
1.	<p>Upon insight into your last corrigendum, which was published on your website, in part landscaping, we consider that the technical description is missing, as well as technical conditions and graphic documentation which relates to the public lighting inside the block. Please publish it on your website.</p>	<p>Technical conditions for the execution are defined in technical rulebooks and the recommendations from PC PIS Directorate for electricity distribution Serbia and EPD Belgrade, SRPS standards and Laws which regulate this area which the contractor is obliged to obey fully.</p> <p>Technical description and graphic documentation are provided in the attachment of this Clarification.</p>

Procurement Committee

**Procurement Of Execution Of Works On The Construction Of Buildings Within Phase II With The Appropriate Infrastructure Planning Of Social Housing Complex On The Cadastral Parcel Number 3672/3 Ko Ovča, City Municipality Palilula, Belgrade, Serbia**

**Attachment of Clarification no.7**

**TECHNICAL DESCRIPTION  
of electrical installations of public lighting  
in the complex of social housing in Ovča (2. phase)**

For the lighting of designed roads and pedestrian surfaces it has been planned to set up of thirteen (13) new galvanized steel poles, similar to the type OMEGA 2360 "PETIT JEAN". Poles are of height five (5) meters (4 pcs.) and four (4) meters (9 pcs.). On top of the poles the lamps equivalent to the type: NANO 2N/2048/100/-25.5/105 with sodium bulb of high pressure power 70 W (4 pcs.) and ALURA/1584/70/125 with metal halogen bulb of power 70 W and ceramic burner (9 pcs.), are to be installed. The way of installation is shown in the table 1.

*Table 1*

<i>poles (height m)</i>	<i>pcs.</i>	<i>light bulb (equivalent to the type)</i>	<i>installation</i>	<i>pcs.</i>	<i>light source power (W)</i>
5	4	NANO 2N/2048/70/-25.5/105	direct	4	70
4	9	ALURA/1584/70/125	direct	9	70 MH

Power of the lighting should be outlet by the cable PP00-A 4x25 mm<sup>2</sup>, according to the system of input-output in the poles.

Cables are to be installed partly freely to the ground, and partly in protective pipes, at places where the route of the newly designed cable is intersecting the road.

Protection from direct contact is provided through application of TN-C/S protection system. One conductor supply cable PP00-A 4x25 mm<sup>2</sup>, unifies the neutral and protective conductor (PEN conductor). Inside the pole, up to the light bulb, three-core cable PP00-Y 3x2,5 mm<sup>2</sup> is put, where the third core is a protective conductor which is tied to the metal pole on the inside. Inside every pole, an efficient connecting of the metal construction of the pole the neutral and protective conductor is done, which go up to the light bulb.

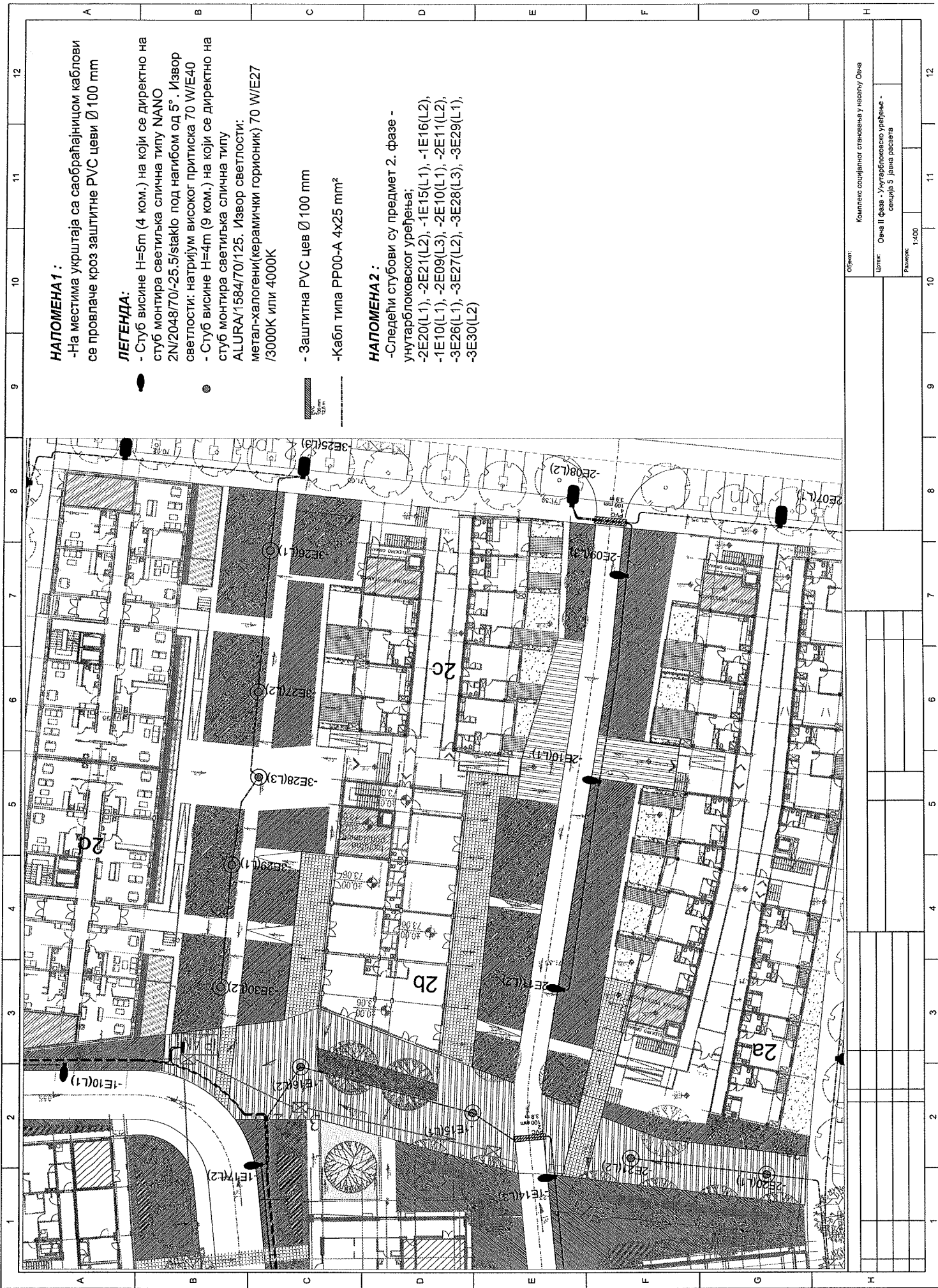
In order to achieve conditions for safety from the voltage touch for the poles of public lighting in zones of child playgrounds, in vicinity of kindergartens, schools and parks, a measure of shaping the potential with the ring grounding is applied according to the internal standards of EPDB. Ground connection is done by laying the copper string in the form of the ring at the depth of 0.5.m and at the distance of 1m from the pole. Poles where the shaping of the potential is done are provided further in the table (poles are provided according to the distribution boards in the table no.3).

Table 3

RO-JO/1		RO-JO/2	
-1E15(L1)	-2E20(L1)	-3E26(L1)	
-1E16(L2)	-2E21(L2)	-3E27(L2)	
		-3E28(L3)	
		-3E29(L1)	
		-3E30(L2)	

Works in the vicinity of the existing cables are to be done manually or with the mechanization which does not cause damage to the isolation and with taking all necessary measures of precaution and protection!

All works should be done according to the governing technical regulations and conditions and with the constant supervision and consultations with the departments of Electric Power Distribution Belgrade and PUC „Javno osvetljenje“ Belgrade!



**НАПОМЕНА 1 :**

-На местима укрштаја са саобраћајницом каблови се провлаче кроз заштитне PVC цеви Ø 100 mm

**ЛЕГЕНДА:**

- Стуб висине H=5m (4 ком.) на који се директно на стуб монтира светилњака слична типу NANO 2N/2048/70/-25.5/staklo под нагибом од 5°. Извор светлости: натријум високог притиска 70 W/E40
- Стуб висине H=4m (9 ком.) на који се директно на стуб монтира светилњака слична типу метал-халогени(керамички горионик) 70 W/E27 ALURA/1584/70/125. Извор светлости: /3000K или 4000K



- Заштитна PVC цев Ø 100 mm

- Кабл типа PP00-A 4x25 mm²

**НАПОМЕНА 2 :**

- Следећи стубови су предмет 2. фазе - унутарблоковог уређења:  
 -2E20(L1), -2E21(L2), -1E15(L1), -1E16(L2),  
 -1E10(L1), -2E09(L3), -2E10(L1), -2E11(L2),  
 -3E26(L1), -3E27(L2), -3E28(L3), -3E29(L1),  
 -3E30(L2)

Објект:

Комплекс социјалног становања у насељу Овча

Цртеж: Овча II фаза - Унутарблоково уређење - секција 5 - јавна расвета

Размере:

1:400

10 11 12