PRICED BILL OF QUANTITIES FOR PRELIMINARY, PREPARATORY, CONSTRUCTION AND FINISHING WORKS ON YARD DECORATION

Aleksandar Nenković pr.
PROJEKTOVANJE GRAĐEVINSKIH OBJEKATA

DESIGNER: **VEKTOR SISTEM - Kragujevac**

INVESTOR: **CITY OF BELGRADE**

BUILDING: **PRIMARY SCHOOL ON CL 689/2 C.M. POLJANE**

PROJECT: **PGD**

DATE: **JULY, 2015**

GENERAL CONDITIONS

1 The works shall be performed in accordance with valid technical regulations, normatives and mandatory standards for this type of building.

2 Adequate material, in accordance with the valid standards, i.e. with quality certificate, shall be used.

3 Measures for the safety of building and works, equipment and investment material, workers, passers-by, traffic and neighbouring buildings shall be timely implemented.

4 Technical documents based on which the approval for building (building permit) was issued shall be adhered to.

5 Item price shall include all costs for works, material, transport, cleaning of the building after completion of works, tax duties, profit and other expenses for the completion of works in accordance with the Contract Documents, technical regulations and valid average norms in civil engineering.

Item Description	UoM	No. of Units		Unit Price (RSD)		Total (RSD)

A - PREPARATORY WORKS

pos 1 Building site preparation, fencing, marking…

lumpsum 1.00 x _____ = _____

pos 4 Dismount the existing metal fence towards the street. Leave the fence in an appropriate space for repair and remount. Calculation per m1 of dismounted fence.

m1 76.00 x _____ = _____

pos 5 Remove foundations and foundation beams of the existing metal fence toward the street. The foundations shall be completely removed and transported in parts to a landfill at a distance of up to 5 km. Calculation per m1 of removed foundations.

m1 76.00 x _____ = _____

pos 6 Make and install signboards and other warnings, in accordance with technical regulations. The signboard shall be 80x60 cm. Calculation per piece of signboard.

pcs 2.00 x _____ = _____

pos 7 Make and install signal lights for the construction site, positioned on the fence and/or scaffolding. The installation under 220 V (temporary construction site connection) or 12 V, with mesh protected lights, shall be mounted in agreement with the Supervisor, entirely in accordance with the regulations. Lumpsum calculation.

lumpsum 1.00 x _____ = _____

pos 8 Geodetic marking of inside traffic routes, paths and parking places, as well as the new fence line, securing the necessary points for gates and control during work. The price per m1 shall include recovery of the apex and traverse before the start of works.

m1 220.00 x _____ = _____

TOTAL A - PREPARATORY WORKS _____

B - CONSTRUCTION WORKS

I - EARTHWORKS

pos 1 Excavate III category soil using machines for fence foundations, partially excavating manually (edge and bottom cutting). Dig 60-cm deep, as wide as the mini dredger bucket (30 cm). The excavated material shall be disposed of in the construction site area, and excess shall be transported to a landfill at a distance of up to 5 km. Calculation per m3 of vegetated excavation including all the necessary actions to secure the excavation and the workers.

0.30*0.60*76.00= m^3 13.68 x _____ = _____

pos 2 Excavate III and IV category soil using machines, 30-cm deep, widely, in accordance with the designed profiles and set levels in the area of new lawns and plants, internal traffic routes, paths and parking, setting the soil on the side and disposing before transport. Machine and manual excavation shall be in proportion 70:30%.

1400x0.3

m^3 420.00 x _____ = _____

pos 3 Excavate surface III and IV category soil layer - deepen down to 50 cm, widely, in accordance with the designed profiles and set levels in the area of new internal traffic routes and parking, setting the soil on the side and disposing before transport. Machine and manual excavation shall be in proportion 70:30%.

Parking 12.5*8=100
Traffic route - 231.35
331.35*0.20

m^3 66.27 x _____ = _____

pos 4 Purchase, transport, spread and compact buffer layer under the parking, plateau and paths on the ground d=20 cm. Compacting shall be done mechanically up to the compression level of 30 Mpa. The material for backfilling must not contain any sludgy content and other compressible substances. After compacting, the backfill must be of designed thickness and straight profile with accuracy of +/- 1 cm. Calculation per m3.
(100+94.59+33.92+32.13)*0.20=260.64*0.20=260.60

m3 52.12 x _____ = _____

pos 5 Purchase, transport, spread and compact the buffer layer for traffic route base, d=40 cm. The compacting shall be done mechanically up to compression module of 60 MPa. The material for backfilling must not contain any sludgy content or other compressible substances. After compacting, the backfill must be of designed thickness and straight profile with accuracy of 1 cm. Calculation per m3 shall also include geodetic surveying of the profile during and after completed rolling.

231.35*0.4

m3 92.54 x _____ = _____

TOTAL EARTHWORKS _____

II - CONCRETE WORKS

pos 1 Purchase material, transport, make the concrete and pour it in the foundations and foundation beams of the metal fence towards the street, using MB 30 concrete, on the buffer layer, simultaneously building in base points for metal fence posts. Overground section shall be made in metal formwork by vibrating the concrete mixture. Reinforce with 4Ø 8; U Ø6/25. Calculation per m3 complete.

(0.30*0.80*72.00).=

m3 17.28 x _____ = _____

pos 2 Purchase material, transport, make and pour the concrete for the plateau d+10 cm for rubbish containers, using MB30 concrete, on a buffer layer of d+20 cm, simultaneously making smooth cement screed inclined towards the street. Reinforce using reinforcement mesh Q 188. Calculation per m2 complete.

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m2 19.04 x _____ = _____

TOTAL CONCRETE WORKS _____

III - GROUND LEVEL WORKS

pos 1 Purchase and install prefabricated concrete kerbs, type 1, 18/24/50 in grey, to separate the asphalt surface of the traffic route from the surrounding ground. The kerbs shall be set in a layer of cement mortar in 1:2 proportion, using wet procedure. Joints shall be grouted and slightly retracted in relation to the kerb. On the part of the kerb line where the kerbs are arching, the kerbs shall be cut radially to a maximum of 4 pieces, and the arch formed using suitable number of smaller pieces. The kerbs shall be built in cement screed. Calculation per m1 of kerb including fee for geodetic control.

m1 106.73 x _____ = _____

pos 2 Purchase and install prefabricated concrete kerbs, type 2, **8/25/50** in white, for kerbing pedestrian paths and plateau. The kerbs shall be built in cement screed. Calculation per m1 of the kerb including fee for geodetic control.

22.61+21.42*2+11.85+3.53+8.02*2+5.13=

m1 102.00 x _____ = _____

pos 3 Purchase and install prefabricated concrete Behaton elements for paving pedestrian paths and parking, dimensions and colours in accordance with the project. The elements shall be built in sand. Calculation per m2, including the necessary sand - grit, to be spread in a layer 3-cm thick. Behaton elements shall be built in between previously set type 1 kerbs (12/18/60) and concrete fence of the complex. Build in two colours, according to the drawing (Attachment 3)

m2 260.60 x _____ = _____

TOTAL GROUND LEVEL WORKS _____

TOTAL B - CONSTRUCTION WORKS (I-III) _____

C - FINISHING WORKS

IV - METAL WORKS

pos 1 Repair previously dismounted steel fence. The steel sheets of the fence shall be separated from the dilapidated posts and replaced with new ones using steel profiles 40/40/2. Steel sheets shall be sanded and painted with base metal paint 2x. The new posts shall be painted and fixed to the previously concreted anchors at 2 m1. The prepared steel sheets shall be fixed to the new posts by welding. The posts shall be sealed from the top using plastic plugs. Calculation per m1 of complete fence.

m1 72.00 x _____ = _____

pos 2 Make single metal pedestrian gate using steel box profiles, height 110 cm, width 100 cm. The gate shall be equipped with a handle and lock with cylinder key. It shall be fixed to the fence posts using steel hinges. Calculation per piece of mounted gate.

pcs 1.00 x _____ = _____

pos 3 Make double metal car gate using steel box profiles, height 110 cm, width 2x150 cm. The gate shall be equipped with handle, fixing bar and lock with cylinder key. It shall be fixed to the fence posts using steel hinges. Calculation per piece of mounted gate.

pcs 1.00 x _____ = _____

TOTAL METAL WORKS _____

TOTAL C - FINISHING WORKS (IV) _____

D - HORTICULTURE WORKS

V - SEEDLINGS

pos 1 Purchase, load, transport and spread fertile clean soil in a 20-cm layer. Shape the soil according to the design, giving it a 20% super elevation so that the soil would set in the designed levels. Finely level and roll using wooden roller.
Calculation per m3 of filled fertile clean soil.

(1400-(231.35+260.60))*0.20=

m3 181.61 x _____ = _____

pos 2 Make the lawn by filling in humus, seeding the grass and maintaining the lawn. Purchase, load and transport fertile humus soil in a layer 10-cm thick, giving it a 20% super elevation so that the soil would set in the designed levels. Finely level and roll using wooden roller and sow the grass:
- Festuca Rubra 40%, Festuca Ovina 30%, Poa Pratensis 20%, Trifolium Repens 10%
The sowing of grass seeds shall be done straight in two crossed directions, in clear weather without precipitation or wind. After sowing, the seeds shall be set in the ground using iron sheepsfoot roller, and rolled using wooden roller and water abundantly until the grass sprouts fully. The watering shall be continued daily until the first cutting. The first cutting shall be done using a scythe when the grass reaches the height of 10-15 cm, and second cutting shall be done using a mower.
Calculation per m2 of grassed surface.

m2 908.05 x _____ = _____

TOTAL SEEDLINGS
SVEGA SADNICE _____

VI - MISCELLANEOUS WORKS - SITE FURNISHINGS

pos 1 Purchase and install outdoor concrete bench for sitting and resting. Dimensions 180/40/50. (Type PKDB 027 - Korali Kraljevo or similar). The bench must be industrially cast using high quality concrete mixture MB30 with outer finishing in white cement and built-in wooden seating elements. Wood seating slats dimensions 5/12 cm shall be made of oak wood glued together out of at least 3 lamellae with "comb" joints. The wooden elements shall be impregnated for protection and coated with stain coating. Calculation per piece.

pcs 4.00 x _____ = _____

pos 2 Purchase and install in specified places individual metal rubbish bins, dimensions: diameter 38 cm, height 50/80 (Type KOST 025 - Korali Kraljevo or similar).
They shall be fixed to the base over previously concreted steel anchor plate. Calculation per piece.

pcs 2.00 x _____ = _____

TOTAL MISCELLANEOUS WORKS - SITE FURNISHINGS _____

TOTAL D - HORTICULTURE WORKS (V-VI) _____

SUMMARY

A - PREPARATORY WORKS	**RSD**	
A - TOTAL PREPARATORY WORKS	**RSD**	
B - CONSTRUCTION WORKS		
I - EARTHWORKS	**RSD**	
II - CONCRETE WORKS	**RSD**	
III - GROUND LEVEL WORKS	**RSD**	
B - TOTAL CONSTRUCTION WORKS (I - III)	**RSD**	
C - FINISHING WORKS		
IV - METAL WORKS	**RSD**	
C - TOTAL FINISHING WORKS (IV)	**RSD**	
D - HORTICULTURE WORKS		
V - SEEDLINGS	**RSD**	
VI - MISCELLANEOUS WORKS - SITE FURNIS	**RSD**	
D - TOTAL HORTICULTURE WORKS UKUPNO (V-VI)		
TOTAL A+B+C+D		