

ПРИЛОГ

МЕТОДОЛОГИЈА ДОДАВАЊА КОЛИЧИНА РАДОВА НА ТВРЂАВИ РАДИ ПОВЕЋАЊА УКУПНЕ ЦЕНЕ РАДОВА

Синхронизованим радом извођача радова на тврђави Орнамент Инвестинжењеринга и стручног надзора Сафежа, реализује се енормно повећање количина, у циљу поскупљења радова на кулама и зидовима у доњем делу тврђаве - где неопремљени извођач може да допре и на којима једино ради.

Шеф Стручног надзора г. Жељко Тмушић је на самом почетку радова, 5. новембра 2014. године, на састанку у општини Голубац, са представницима Аустријске развојне агенције из Беча, општине, инвеститора, завода, извођача најавио да су сви пројекти добро започели, осим што је за тврђаву потребно прибавити још толико пара колико је већ дато и да то мора да обезбеди, иначе ће бити урађено само пола посла.

Од почетка радова је Стручни надзор, у синхронизацији са извођачем, Орнамент Инвестинжењерингом, почео да се примењује неколико начина да се увећају количине изведених радова на објектима у близини асфалтног пута.

Методологија ће бити приказана на Бедему 3-4, који је између Куле 3 и Куле 4, у средњем делу тврђаве.

Извођач, који је тврдио да му пројекат и материјал не одговарају, имао је пуну подршку стручног надзора Сафежа у изјавама да нису геодетски проверене количине и да треба да се уради допуна пројекта.

У покушају да разреши ситуацију и убрза радове, председник општине Голубац, др Небојша Мијовић, ангажовао је геодетску радњу и заказао геодетско снимање Бедема 3-4 и комисијску контролу стања, дана 2. јула 2015. године. На снимање и комисијски преглед зида је позвао представнике Аустријске развојне агенције Срђана Радовића, члана Скупштине Тврђаве Сенишу Темеринског, стручног надзора Предрага Јошића, одговорног извођача Тихомира Стошића, пројектанта конструкције Ненада Киша и координатора сарадње општине и Тврђаве Игора Лонговића. Овакав комисијски преглед је и предвиђен техничком документацијом. Није се одазвао само представник Сафежа Предраг Јошић, који истовремено ради за Сафеж као стручни надзор и за Тврђаву као координатор за безбедност (сукоб интереса).

После прегледа зида и детаљног геодетског снимања контуре и оштећења зида, на основу геодетског снимка предузеће ВМС је израдило детаљне цртеже зида, са свим статичким елементима за извођење. Геодетским снимањем су потврђене количине зидања и презиђивања из Главног пројекта, односно детаљним мерењем је утврђено да су чак мање за 10%. Пројектант ВМС је доставио тражену допуну пројекта 15. јула 2015, али је већ 16. јула 2015. стручни надзор на недељном састанку констатовао да „Надзор је мишљења да достављена допуна није у складу са прописима, као и да документација није на потребном нивоу за извођење радова.“ О овом ставу стручног надзора пројектант није обавештен.

Стручни надзор је тиме изашао из својих овлашћења, јер он не може оцењивати техничку документацију и стручност пројектанта, али је овакав закључак имао своју јасну финансијску сврху.

Наиме, стручни надзор је, неовлашћено и без знања пројектанта, упутио захтев Аустријској развојној агенцији, која је финансијер пројекта, допис (TR2.L.15-06-25S-

019 од 25. јуна 2015), којим предлажу да одобри додатне радове и увећања на Кулама 4, 5 и 9, као и Бедемима 3-4, 4-5 и 8-9.

Управо за Бедем 3-4 је Сафеж тражио повећање количине зидања са 42 на 242 кубна метра, односно увећање за скоро 500%! Геодетски проверена количина износи 37 кубних метара, што значи да је овде лажно увећана количина за 200 кубних метара зида, у вредности од 32.000 евра. Тиме је укупна цена Бедема 3-4 повећана са пројектоване и уговорене од 28.861 евра на 58.861 евра! Ово се све дешава без знања пројектаната и инвеститора, уз упорне тврдње стручног надзора да пројекат „не одговара стању на терену“.

Из табеле која је дата у прилогу тог дописа види се да је Стручни надзор самовољно и неовлашћено чак додавао радове који нису пројектом предвиђени, а то је обијање постојећих спојница и фуговање-дерсовање нових спојница на наведеним кулама и бедемима. Осим наплате оваквог, накнадног рада, разлог за непотребно дерсовање је прикривање количине зидања, односно на фуговањем уједначеном зиду се не може без рушења утврдити изведена количина презиђивања.

Такви радови на обијању и поновном дерсовању нису предвиђени ни мерама техничке заштите које је донео Завод ни Главним пројектом реконструкције и конзервације, јер би значили обијање оригиналних, средњовековних спојница или спојница из поправки и новијих фаза тврђаве и непримерено уједначавање изгледа фасадних површина.

У циљу повећања цена и ангажовања што више средстава за објекте у доњој зони тврђаве, Стручни надзор је дао предлог Аустријској развојној агенцији, као финансијеру, да се изведу следећи додатни радови:

ПРИПРЕМНИ РАДОВИ

01-02 Настрешница и радне платформе (које коштају 250 евра/м²!) су увећане са 100 на 200 м², а није направљено ни 50 м²; РЕЗУЛТАТ: укупна цена припремних радова се попела са 43.200 на 68.200 евра;

ПРИВРЕМЕНИ РАДОВИ

05-01 Сकेла је увећана са 3.000 м² на 10.000 м², уз урађен кров само на једној кули!
РЕЗУЛТАТ: укупна цена привремених радова увећана са 37.500 на 107.500 евра.

КУЛА 4

05-01 Додато 1500 радних сати за чишћење зеленила са врха Куле 4. Да ли је 5 радника радило 39 дана на сечи једног дрвета?

05-01а Обијање спојница и

05-01б Дерсовање спојница - две измишљене позиције, само да се повећа цена и сакриле количине у позицијама 05-03 и 05-04;

05-03 Зидање је удвостручено

05-04 Презиђивање је 4 пута веће, а пошто је додата непостојећа позиција дерсовања крију се трагови повећања количина, јер без рушења не могу да се провере количине.

РЕЗУЛТАТ: Радови на кули 4 су увећани са 38.955 евра на 79.581 евра.

КУЛА 5

06-01 Уклањање зеленила са врха куле увећано 13 пута!

06-03 Обијање спојница и

06-04 Дерсовање - увећано за 50% без разлога.

РЕЗУЛТАТ: Радови на кули 5 су увећани са 53.878 евра на 67.422 евра.

КУЛА 9

10-04а Обијање спојница и

10-046 Дерсовање спојница - измишљене, непотребне позиције, по 450 м², а то је практично површина целе кула споља и изнутра!
РЕЗУЛТАТ: Радови на кули 9 су увећани са 17.958 евра на 27.678 евра.

БЕДЕМ 3-4

19-02 Зидање лица зида. У пројекту је предвиђено 42 м³, геодетским снимањем је проверена и потврђена количина од 37 м³, а стручни надзор додаје још 200 м³!
РЕЗУЛТАТ: Радови на Бедему 3-4 су унапред увећани са 26.861 евра на 58.861 евра.

БЕДЕМ 4-5

20-02а Обијање спојница и

20-02б Дерсовање су измишљене и непотребне позиције којих нема у пројекту.

Практично цео зид се непотребно обија ради наплате. РЕЗУЛТАТ: Радови на Бедему 4-5 су увећани са 17.646 евра на 26.286 евра.

БЕДЕМ 8-9

25-04 Обијање спојница и

25-05 Дерсовање и

25-06 Презиђивање су све измишљене спојнице, које су само ради наплате. Са зидањем зубаца су радови завршени, а ове три позиције су накнадно додате. РЕЗУЛТАТ: Радови на Бедему 8-9 су увећани са 10.624 евра на 19.264 евра.

Дакле, само на кулама и зидовима који су уз пут и на којима извођач ради до половине 2015. године, оваквим додавањем количина се наплаћује уместо уговорених 246.934 евра, скоро двоструко више - 456.184 евра.

То је основни разлог за понављање тврдње извођача и стручног надзора да „пројекат не ваља“ и да треба да се „препројектује“. Уствари, треба да се на сваки начин додају количине, како би се увећала наплата и драстично поскупели уговорени радови.

Аутора и одговорног пројектанта Марију Јовин нико није консултовао ни добио сагласност за ове додатне радове. Радови су изведени и поред њених дописа са противљењем, јер потпуна обрада фасада кула и лица зидова представља унифицирање и потирање аутентичности и историчности изгледа средњовековног објекта и драстично нарушавање примењеног конзерваторског поступка у пројекту, који има сагласност Републичког завода и грађевинску дозволу Министарства грађевинарства.

Овде се ради о поступању Стручног надзора Сафежа, које је противно Закону о планирању и изградњи и Правилнику о садржини и начину вршења стручног надзора.

Саставио:

Синиша Темерински, дипл. инж. арх.
Члан Скупштине ДОО Тврђава Голубачки град

Прилог: Допис Стручног надзора Аустријској развојној агенцији
бр. TP2.L.15-06-25S-019 од 25. јуна 2015. из
„MONTHLY REPORT No.11, Reporting Period: June 01 - June 30, 2015“

AUSTRIAN DEVELOPMENT AGENCY

1010 Wien, Zelinkagasse 2

Belgrade, 25/06/2015

ATTN: Mr. Srdjan Radovic

SUBJECT: TP2.L.15-06-25S-019 - Additional Works

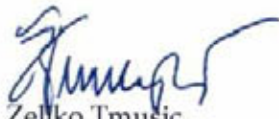
TP2 - REVITALIZATION AND CONSERVATION OF GOLUBAC FORTRESS

Dear Mr. Radovic,

With reference to your e-mail dated Mon, 22 Jun 2015 09:42:47, please find enclosed an estimation of additional quantities, calculated by our Supervisors. Please note that this is just a rough estimation for Tower 4, Tower 5, Rampart 8-9 and Rampart 4-5.

Please, also note that Conservation Supervision has issued verbal approval (but never in writing) for bastard pointing of the walls of the Towers.

Yours sincerely,



Zeljko Tmusic

Team Leader

Enclosure: Estimation of quantities

PREPARATIONAL WORKS

	Work Description	Unit of Measure	Qty	Unit Price	Total Price	Additional quantity	Estimated total price
01 00	PREPARATION WORK						
	Site establishment						
01 01	Contractor's Site offices	sum	1.00	500.00	500.00		500.00
01 02	Investor's and Site supervision's Site office	sum	1.00	500.00	500.00		500.00
01 03	Toilets including maintenance, cleaning and disposal	sum	1.00	2,000.00	2,000.00		2,000.00
01 04	Removal of site accommodation and temporary works in connection with site accommodation	sum	1.00	400.00	400.00		400.00
	Temporary works in connection with Site establishment						
01 05	Temporary basis and foundations for site accommodation	sum	1.00	200.00	200.00		200.00
01 06	Connection to temporary services including drainage	sum	1.00	200.00	200.00		200.00
01 07	Temporary site roads, paths and pavings (including on-site car parking)	sum	1.00	200.00	200.00		200.00
01 08	Temporary surface water drainage to temporary site roads, paths and pavements	sum	1.00	200.00	200.00		200.00
	Furniture and equipment						
01 09	Workstations for staff including maintenance	sum	1.00	1,800.00	1,800.00		1,800.00
01 10	General office furniture including maintenance	sum	1.00	1,200.00	1,200.00		1,200.00
01 11	Meeting room furniture including maintenance	sum	1.00	1,800.00	1,800.00		1,800.00
01 12	Heaters including maintenance of heaters	sum	1.00	400.00	400.00		400.00
01 13	Other office equipment including maintenance	sum	1.00	400.00	400.00		400.00
01 14	Removal of furniture and equipment	sum	1.00	200.00	200.00		200.00
	Sundries						
01 15	Site signboard	pc	1.00	200.00	200.00		200.00
01 16	Safety and information notice boards	sum	1.00	200.00	200.00		200.00
01 17	Tool stores	sum	1.00	1,800.00	1,800.00		1,800.00
01 02	Construct sheds, shelters and platform.	sq.m	100.00	250.00	25,000.00	100.00	50,000.00
	Temporary water supply						
01 18	Temporary connections	sum	1.00	400.00	400.00		400.00
01 19	Distribution equipment, installation and adoptions	sum	1.00	400.00	400.00		400.00
01 20	Meter charges	sum	1.00	200.00	200.00		200.00
	Temporary electricity supply						
01 21	Temporary connections	sum	1.00	1,000.00	1,000.00		1,000.00
01 22	Temporary electrical supply plant and equipment	sum	1.00	400.00	400.00		400.00
01 23	Distribution equipment, installation and adoptions	sum	1.00	400.00	400.00		400.00
01 24	Temporary substation and running cost	sum	1.00	1,200.00	1,200.00		1,200.00
01 25	Meter charges	sum	1.00	2,000.00	2,000.00		2,000.00
	TOTAL PREPARATION WORK				43,200.00		68,200.00
02 00	SECURITY						
	Security staff						
02 01	Security guards (day and night)	sum	1.00	24,000.00	24,000.00		24,000.00
02 02	Watchmen	sum	1.00	12,000.00	12,000.00		12,000.00
	Security equipment						
02 03	Site pass equipment	sum	1.00	1,200.00	1,200.00		1,200.00
02 04	Temporary vehicle control barriers	sum	1.00	1,200.00	1,200.00		1,200.00
	Hoardings, fences and gates						
02 05	Perimeter hoardings and fencing to site boundaries and to form site compounds	sum	1.00	1,800.00	1,800.00		1,800.00
02 06	Access gate	sum	1.00	1,000.00	1,000.00		1,000.00
02 06	Modification to line of hoarding and fencing during construction	sum	1.00	1,000.00	1,000.00		1,000.00
02 07	Dismantling and removal of hoarding , fencing, gates and the like	sum	1.00	400.00	400.00		400.00
	TOTAL SECURITY				42,600.00		42,600.00

PREPARATIONAL WORKS

	Work Description	Unit of Measure	Qty	Unit Price	Total Price	Additional quantity	Estimated total price
03 00	SAFETY AND ENVIRONMENTAL PROTECTION						
03 01	Site safety incentive scheme	sum	1.00	400.00	400.00		400.00
03 02	Personal protective equipment including for Investor	sum	1.00	1,000.00	1,000.00		1,000.00
03 04	Fire extinguishers	sum	1.00	800.00	800.00		800.00
03 05	Statutory safety signage	sum	1.00	1,200.00	1,200.00		1,200.00
03 06	Temporary traffic lights	sum	1.00	2,000.00	2,000.00		2,000.00
03 07	Barriers and safety scaffoldings	sum	1.00	1,200.00	1,200.00		1,200.00
03 08	Environmental protection measures	sum	1.00	1,200.00	1,200.00		1,200.00
	TOTAL SAFETY AND ENVIRONMENTAL PROTECTION				7,800.00		7,800.00
04 00	CONTROL AND PROTECTION						
04 01	Surveys	sum	1.00	400.00	400.00		400.00
04 02	Topographical survey	sum	1.00	1,000.00	1,000.00		1,000.00
04 03	Structural/dilapidations survey adjoining buildings	sum	1.00	1,000.00	1,000.00		1,000.00
04 04	Settling out primary grids	sum	1.00	1,000.00	1,000.00		1,000.00
04 05	Grid transfer and level checks	sum	1.00	1,000.00	1,000.00		1,000.00
04 06	Maintenance of grids	sum	1.00	1,200.00	1,200.00		1,200.00
04 07	Protection of finished works to project handover	sum	1.00	1,200.00	1,200.00		1,200.00
04 08	Provision of samples	sum	1.00	800.00	800.00		800.00
04 09	Provision of sample room	sum	1.00	1,200.00	1,200.00		1,200.00
	TOTAL CONTROL AND PROTECTION				8,800.00		8,800.00
05 00	TEMPORARY WORKS						
	Cranes, scaffolds and hoists						
05 01	Construct a scaffold	sq.m	3,000.00	10.00	30,000.00	7,000.00	100,000.00
05 02	Engage cranes and hoists.	day	250.00	30.00	7,500.00		7,500.00
	TOTAL TEMPORARY WORKS				37,500.00		107,500.00

ARCHITECTURAL WORKS

	Work Description	Unit of Measure	Qty	Unit Price	Total Price	Additional quantity	Estimated total price
01 00	PRELIMINARY WORKS						
	Grubbing up						
	Remove plants from the free fortress areas.						
01 01	diameter up to 10 cm	pcs	30.00	40.00	1,200.00		1,200.00
01 02	diameter from 10 to 20 cm	pcs	10.00	60.00	600.00		600.00
01 03	bushes	pcs	100.00	30.00	3,000.00		3,000.00
	TOTAL PRELIMINARY WORKS				4,800.00		4,800.00
02 00	TOWER 1						
	Preliminary Works						
02 01	Remove plants.	hour	40.00	10.50	420.00		420.00
	Masonry work						
02 02	Clean the walls.	cu.m	30.00	42.00	1,260.00		1,260.00
02 03	Rebuild removed wall portions with the existing stone in the original way, as designed.	cu.m	30.00	84.00	2,520.00		2,520.00
02 04	Brickwork. Build the missing portions of the walls of the polygonal base and circular tower, according to the marked spots and spacing.	cu.m	40.00	78.00	3,120.00		3,120.00
02 05	Build reveals.	cu.m	70.00	160.00	11,200.00		11,200.00
02 06	Construct staircases.	lm	15.00	21.00	315.00		315.00
02 07	Reconstruct stone door frames and lintels.	cu.m	0.20	600.00	120.00		120.00
02 08	Facade wall faces.	sq.m	30.00	60.00	1,800.00		1,800.00
02 09	Brickwork. Build a half-brick thick wall adjacent to the built staircase, to separate the Tower room from the staircase and support the arch above it.	sq.m	10.00	30.00	300.00		300.00
02 10	Fill in bearings of exposed strengthening beams.	lm	20.00	30.00	600.00		600.00
02 11	Fill in bearings of brick-infilled strengthening beams.	lm	8.00	30.00	240.00		240.00
	Carpentry Work						
02 12	Make and place joists.	cu.m	1.10	420.00	462.00		462.00
02 13	Roof structure.	sq.m	65.50	47.60	3,117.80		3,117.80
02 14	Roof covering with boards.	sq.m	107.50	26.60	2,859.50		2,859.50
02 15	Roofing laths.	sq.m	107.50	6.30	677.25		677.25
02 16	Roof shingles.	sq.m	107.50	39.20	4,214.00		4,214.00
	Waterproofing						
02 17	Roof waterproofing.	sq.m	107.50	6.30	677.25		677.25
	Joinery Work						
02 18	Make a ladder.	pcs	1.00	280.00	280.00		280.00
02 19	Construct wooden stairs.	lm	2.90	84.00	243.60		243.60
02 20	Make and place doors.	pcs	2.00	280.00	560.00		560.00
02 21	Single shutters for reveals shall be made of the 2nd class pinewood boards (3 cm thick).	pcs	8.00	98.00	784.00		784.00
02 22	Flooring.	sq.m	13.00	33.60	436.80		436.80
	TOTAL WORKS - TOWER 1				36,207.20		36,207.20
03 00	TOWER 2						
	Preliminary Works						
03 01	Make repairs to rock.	lump sum	1.00	400.00	400.00		400.00

ARCHITECTURAL WORKS

	Work Description	Unit of Measure	Qty	Unit Price	Total Price	Additional quantity	Estimated total price
03 02	Remove plants.	hour	20.00	4.90	98.00		98.00
	Masonry work						
03 03	Clean the walls.	cu.m	10.00	42.00	420.00		420.00
03 04	Underpinning and infilling.	cu.m	10.00	84.00	840.00		840.00
03 05	Stonework.	cu.m	25.00	160.00	4,000.00		4,000.00
03 06	Build reveals.	cu.m	7.50	160.00	1,200.00		1,200.00
	Carpentry Work						
03 07	Roof structure.	sq.m	29.50	47.60	1,404.20		1,404.20
03 08	Roof covering with boards.	sq.m	49.50	33.60	1,663.20		1,663.20
03 09	Roofing laths.	sq.m	49.50	6.30	311.85		311.85
03 10	Roof shingles.	sq.m	49.50	39.20	1,940.40		1,940.40
	Waterproofing						
03 11	Roof waterproofing.	sq.m	49.50	4.90	242.55		242.55
	Joinery Work						
03 12	Single shutters for reveals shall be made of the 2nd class pinewood boards (3 cm thick).	pcs	8.00	98.00	784.00		784.00
	TOTAL WORKS - TOWER 2				13,304.20		13,304.20
04 00	TOWER 3						
	Preliminary Works						
04 01	Remove plants.	hour	40.00	10.50	420.00		420.00
	Masonry work						
04 02	Clean the walls.	cu.m	27.00	42.00	1,134.00		1,134.00
04 03	Rebuilding.	cu.m	27.00	84.00	2,268.00		2,268.00
04 04	Brickwork.	cu.m	22.00	120.00	2,640.00		2,640.00
04 05	Build reveals.	cu.m	20.00	160.00	3,200.00		3,200.00
	Carpentry Work						
04 06	Make and place joists.	cu.m	3.90	476.00	1,856.40		1,856.40
04 07	Roof structure.	sq.m	99.50	47.60	4,736.20		4,736.20
04 08	Roof covering with boards.	sq.m	160.50	33.60	5,392.80		5,392.80
04 09	Roofing laths.	sq.m	160.50	6.30	1,011.15		1,011.15
04 10	Roof shingles.	sq.m	160.50	39.20	6,291.60		6,291.60
	Waterproofing						
04 11	Roof waterproofing.	sq.m	160.50	6.30	1,011.15		1,011.15
	Joinery Work						
04 12	Construct wooden stairs.	lm	12.70	84.00	1,066.80		1,066.80
04 13	Make pinewood fences between floor levels, as per joinery drawings.	lm	18.00	26.60	478.80		478.80
04 14	Construct machicolations.	pcs	2.00	47.60	95.20		95.20
04 15	Flooring.	sq.m	85.00	33.60	2,856.00		2,856.00
	TOTAL WORKS - TOWER 3				34,458.10		34,458.10
05 00	TOWER 4						
	Preliminary Works						
05 01	Remove plants.	hour	60.00	10.50	630.00	1,500.00	16,380.00
	Masonry work						
05 01a	Strip the joints	sq.m	0.00	4.80	0.00	600.00	2,880.00
05 01b	Make flat joints	sq.m	0.00	16.80	0.00	800.00	13,440.00
05 02	Clean the walls.	cu.m	36.00	42.00	1,512.00		1,512.00
05 03	Rebuilding.	cu.m	36.00	84.00	3,024.00	39.00	6,300.00
05 04	Build walls.	cu.m	12.00	120.00	1,440.00	44.00	6,720.00
05 05	Build reveals.	cu.m	20.00	160.00	3,200.00		3,200.00
05 06	Flooring in the chapel.	sq.m	18.50	56.00	1,036.00		1,036.00
05 07	Rebuild damaged wall faces.	cu.m	5.00	98.00	490.00		490.00

ARCHITECTURAL WORKS

	Work Description	Unit of Measure	Qty	Unit Price	Total Price	Additional quantity	Estimated total price
05 08	Plastering in the chapel.	sq.m	80.00	7.70	616.00		616.00
05 09	Flooring in the ground floor.	sq.m	18.50	14.00	259.00		259.00
	Stone Cutting Work						
05 10	Reconstruction of the frame for the entrance door to the chapel and to the room on the first level.	cu.m	0.75	560.00	420.00		420.00
	Carpentry Work						
05 11	Make and place joists.	cu.m	5.50	476.00	2,618.00		2,618.00
05 12	Construct and place bearing beams of the chapel floor.	cu.m	1.40	420.00	588.00		588.00
05 13	Roof structure.	sq.m	88.00	47.60	4,188.80		4,188.80
05 14	Roof covering with boards.	sq.m	140.00	33.60	4,704.00		4,704.00
05 15	Roofing laths.	sq.m	140.00	6.30	882.00		882.00
05 16	Roof shingles.	sq.m	145.00	39.20	5,684.00		5,684.00
	Waterproofing						
05 17	Roof waterproofing.	sq.m	140.00	6.30	882.00		882.00
	Joinery Work						
05 18	Flooring.	sq.m	80.00	33.60	2,688.00		2,688.00
05 19	Construct wooden stairs.	lm	12.50	84.00	1,050.00		1,050.00
05 20	Construct wooden stairs for entering the chapel.	pcs	1.00	240.00	240.00		240.00
05 21	Make and place doors.	pcs	3.00	300.00	900.00		900.00
05 22	Make and place windows of the first class pinewood, as per joinery drawings.	pcs	4.00	84.00	336.00		336.00
05 23	Single shutters for reveals shall be made of the 2nd class pinewood boards (3 cm thick).	pcs	16.00	98.00	1,568.00		1,568.00
	TOTAL WORKS - TOWER 4				38,955.80		79,581.80
06 00	TOWER 5						
	Preliminary Works						
06 01	Remove decayed timber and plants from the tower.	hour	30.00	10.50	315.00	400.00	4,515.00
	Masonry work						
06 02	Crack grouting.	lit	1,000.00	2.00	2,000.00		2,000.00
06 03	Strip the joints.	sq.m	540.00	4.80	2,592.00	260.00	3,840.00
06 04	Make flat joints.	sq.m	540.00	16.80	9,072.00	260.00	13,440.00
06 04a	Rebuild damaged wall faces.	cu.m	0.00	98.00	0.00	16.00	1,568.00
06 04b	Build walls	cu.m	0.00	120.00	0.00	18.00	2,160.00
	Stone Cutting Work						
06 05	Make stone door frames.	cu.m	0.36	600.00	216.00		216.00
	Carpentry Work						
06 06	Make and place joists.	cu.m	10.00	476.00	4,760.00		4,760.00
06 07	Roof structure.	sq.m	121.00	47.60	5,759.60		5,759.60
06 08	Roof covering with boards.	sq.m	206.00	33.60	6,921.60		6,921.60
06 09	Roofing laths.	sq.m	206.00	6.30	1,297.80		1,297.80
06 10	Roof shingles.	sq.m	211.00	39.20	8,271.20		8,271.20
	Waterproofing						
	Roof waterproofing.	sq.m	206.00	6.30	1,297.80		1,297.80
	Joinery Work						
06 11	Flooring.	sq.m	150.00	33.60	5,040.00		5,040.00
06 12	Construct wooden stairs.	m	27.00	84.00	2,268.00		2,268.00
06 13	Make and place doors.	pcs	3.00	280.00	840.00		840.00

ARCHITECTURAL WORKS

	Work Description	Unit of Measure	Qty	Unit Price	Total Price	Additional quantity	Estimated total price
06 14	Make and place windows of the first class pinewood, as per joinery drawings.	pcs	7.00	112.00	784.00		784.00
06 15	Make a window without frames.	pcs	1.00	35.00	35.00		35.00
06 16	Make and place doors.	pcs	3.00	280.00	840.00		840.00
06 17	Single shutters for reveals shall be made of the 2nd class pinewood boards (3 cm thick).	pcs	16.00	98.00	1,568.00		1,568.00
TOTAL WORKS - TOWER 5					53,878.00		67,422.00
07 00	TOWER 6						
	Preliminary Works						
07 01	Remove plants.	hour	40.00	10.50	420.00		420.00
	Masonry work						
07 02	Clean the walls.	cu.m	20.00	42.00	840.00		840.00
07 03	Rebuilding.	cu.m	20.00	84.00	1,680.00		1,680.00
07 04	Brickwork.	cu.m	32.00	78.00	2,496.00		2,496.00
07 05	Build reveals.	cu.m	28.00	200.00	5,600.00		5,600.00
07 06	Rebuild the staircase.	cu.m	2.50	160.00	400.00		400.00
	Carpentry Work						
07 07	Make and place joists.	cu.m	4.50	476.00	2,142.00		2,142.00
07 08	Roof structure.	sq.m	129.00	47.60	6,140.40		6,140.40
07 09	Roof covering with boards.	sq.m	204.00	33.60	6,854.40		6,854.40
07 10	Roofing laths.	sq.m	204.00	6.30	1,285.20		1,285.20
07 11	Roof shingles.	sq.m	160.50	39.20	6,291.60		6,291.60
	Waterproofing						
07 12	Roof waterproofing.	sq.m	210.00	6.30	1,323.00		1,323.00
	Joinery Work						
07 13	Construct wooden stairs.	lm	15.30	84.00	1,285.20		1,285.20
07 14	Make pinewood fences between floor levels, as per joinery drawings.	lm	14.00	31.50	441.00		441.00
07 15	Flooring.	sq.m	45.00	33.60	1,512.00		1,512.00
TOTAL WORKS - TOWER 6					38,710.80		38,710.80
08 00	TOWER 7						
	Preliminary Works						
08 01	Remove plants.	hour	30.00	10.50	315.00		315.00
	Masonry work						
08 02	Clean the walls.	cu.m	30.00	42.00	1,260.00		1,260.00
08 03	Rebuilding.	cu.m	30.00	84.00	2,520.00		2,520.00
08 04	Build walls.	cu.m	20.00	120.00	2,400.00		2,400.00
08 05	Build reveals.	cu.m	30.00	160.00	4,800.00		4,800.00
	Stone Cutting Work						
08 06	Construct stone door frames.	cu.m	0.36	600.00	216.00		216.00
	Carpentry Work						
08 07	Make and place joists.	cu.m	9.50	476.00	4,522.00		4,522.00
08 08	Roof structure.	sq.m	195.00	47.60	9,282.00		9,282.00
08 09	Roof covering with boards.	sq.m	315.00	33.60	10,584.00		10,584.00
08 10	Roofing laths.	sq.m	320.00	6.30	2,016.00		2,016.00
08 11	Roof shingles.	sq.m	325.00	39.20	12,740.00		12,740.00
	Waterproofing						
08 12	Roof waterproofing.	sq.m	320.00	6.30	2,016.00		2,016.00
	Joinery Work						
08 13	Flooring.	sq.m	128.00	33.60	4,300.80		4,300.80
08 14	Construct wooden stairs.	lm	16.70	84.00	1,402.80		1,402.80

ARCHITECTURAL WORKS

	Work Description	Unit of Measure	Qty	Unit Price	Total Price	Additional quantity	Estimated total price
08 15	Make pinewood fences between floor levels, as per joinery drawings.	lm	22.50	31.50	708.75		708.75
08 16	Make and place a door.	pcs	1.00	350.00	350.00		350.00
TOTAL WORKS - TOWER 7					59,433.35		59,433.35
09 00	TOWER 8						
	Preliminary Works						
09 01	Remove plants.	hour	36.00	10.50	378.00		378.00
	Masonry work						
09 02	Clean the walls.	cu.m	30.00	42.00	1,260.00		1,260.00
09 03	Rebuilding.	cu.m	20.00	98.00	1,960.00		1,960.00
09 04	Rebuild damaged wall faces.	cu.m	30.00	160.00	4,800.00		4,800.00
09 05	Building walls.	cu.m	30.00	120.00	3,600.00		3,600.00
09 06	Build reveals.	cu.m	30.00	160.00	4,800.00		4,800.00
09 07	Fill in bearings of exposed strengthening beams.	lm	25.00	17.50	437.50		437.50
09 08	Fill in bearings of brick-infilled strengthening beams.	lm	50.00	17.50	875.00		875.00
	Stone Cutting Work						
09 09	Reconstruction of the door frame for the entrance to the tower.	cu.m	0.36	600.00	216.00		216.00
	Carpentry Work						
09 10	Make and place joists.	cu.m	11.30	476.00	5,378.80		5,378.80
09 11	Make and place scantlings for adjusting the slope.	lm	60.00	17.50	1,050.00		1,050.00
09 12	Roof structure.	sq.m	177.50	47.60	8,449.00		8,449.00
09 13	Roof covering with boards.	sq.m	305.00	33.60	10,248.00		10,248.00
09 14	Roofing laths.	sq.m	305.00	6.30	1,921.50		1,921.50
09 15	Roof shingles.	sq.m	310.00	39.20	12,152.00		12,152.00
	Waterproofing						
09 16	Level 4 waterproofing.	sq.m	33.00	6.30	207.90		207.90
09 17	Roof waterproofing.	sq.m	305.00	6.30	1,921.50		1,921.50
	Joinery Work						
09 18	Flooring.	sq.m	112.00	33.60	3,763.20		3,763.20
09 19	Construct wooden stairs.	lm	22.00	84.00	1,848.00		1,848.00
09 20	Construct wooden stairs for entering the tower.	pcs	1.00	350.00	350.00		350.00
09 21	Make pinewood fences between floor levels, as per joinery drawings.	lm	14.55	31.50	458.33		458.33
09 22	Make and place doors.	pcs	3.00	350.00	1,050.00		1,050.00
TOTAL WORKS - TOWER 8					67,124.73		67,124.73
10 00	TOWER 9						
	Masonry work						
10 01	Clean the walls.	cu.m	4.00	42.00	168.00		168.00
10 02	Rebuilding.	cu.m	4.00	98.00	392.00		392.00
10 03	Build walls.	cu.m	20.00	160.00	3,200.00		3,200.00
10 04	Footpath paving.	sq.m	69.00	48.00	3,312.00		3,312.00
10 04a	strip the joints	sq.m	0.00	4.80	0.00	450.00	2,160.00
10 04b	make flat joints	sq.n	0.00	16.80	0.00	450.00	7,560.00
	Joinery Work						
10 05	Make and place beams for wooden platforms.	cu.m	0.65	476.00	309.40		309.40
10 06	Make and place platforms.	sq.m	28.00	336.00	9,408.00		9,408.00

ARCHITECTURAL WORKS

	Work Description	Unit of Measure	Qty	Unit Price	Total Price	Additional quantity	Estimated total price
10 07	Construct wooden stairs for exiting towards the footpath.	pcs	1.00	350.00	350.00		350.00
10 08	Make wooden fences on the level 3.	lm	26.00	31.50	819.00		819.00
TOTAL WORKS - TOWER 9					17,958.40		27,678.40
11 00 PALACE							
Masonry work							
11 01	Clean the walls and remove damaged parts.	cu.m	40.00	42.00	1,680.00		1,680.00
11 02	Rebuilding.	cu.m	40.00	84.00	3,360.00		3,360.00
11 03	Build walls.	cu.m	1,160.00	120.00	139,200.00		139,200.00
11 04	Building double lancet arches.	cu.m	4.40	200.00	880.00		880.00
11 05	Brickwork.	sq.m	45.50	30.00	1,365.00		1,365.00
11 06	Wall plastering with lime mortar.	sq.m	730.00	10.00	7,300.00		7,300.00
11 07	Ground floor slab plastering.	sq.m	300.00	12.00	3,600.00		3,600.00
11 08	Laying cement screed over of the ground floor slab.	sq.m	300.00	21.00	6,300.00		6,300.00
11 09	Paint walls.	sq.m	730.00	4.20	3,066.00		3,066.00
Stone Cutting Work							
11 10	Construct and place double lancets.	cu.m	2.00	200.00	400.00		400.00
11 11	Reconstruct door frames.	cu.m	2.20	200.00	440.00		440.00
11 12	Flooring.	sq.m	300.00	25.20	7,560.00		7,560.00
	Footing.	cu.m	0.50	600.00	300.00		300.00
Concrete Work							
11 13	Light weight prefabricated ceiling.	sq.m	300.00	17.50	5,250.00		5,250.00
11 14	Construct a floor slab.	sq.m	225.00	42.00	9,450.00		9,450.00
Carpentry Work							
11 15	Construct a wooden ceiling above the ground floor using firwood timber with the dimensions 20/20 cm, according to the Structural Design.	cu.m	24.00	336.00	8,064.00		8,064.00
11 16	Construct and place wooden posts and girders on the ground floor.	cu.m	5.90	420.00	2,478.00		2,478.00
11 17	Roof structure.	sq.m	565.00	47.60	26,894.00		26,894.00
11 18	Roof covering with boards.	sq.m	630.00	33.60	21,168.00		21,168.00
11 19	Roofing laths.	sq.m	630.00	6.30	3,969.00		3,969.00
11 20	Roof shingles.	sq.m	640.00	39.20	25,088.00		25,088.00
Joinery Work							
11 21	Loft flooring.	sq.m	312.00	33.60	10,483.20		10,483.20
11 22	Loft ceiling.	sq.m	550.00	33.60	18,480.00		18,480.00
11 23	Construct wooden stairs in the loft.	lm	6.00	84.00	504.00		504.00
11 24	Build wooden landings.	sq.m	37.00	47.60	1,761.20		1,761.20
11 25	Construct wooden stairs in the loft.	pcs	2.00	350.00	700.00		700.00
11 26	Make and place external doors.	pcs	5.00	420.00	2,100.00		2,100.00
11 27	Make and place internal doors.	pcs	5.00	420.00	2,100.00		2,100.00
11 28	Make and place arched windows.	pcs	6.00	196.00	1,176.00		1,176.00
11 29	Make and place a window.	pcs	1.00	168.00	168.00		168.00
11 30	Make and place arched windows.	pcs	15.00	266.00	3,990.00		3,990.00
11 31	Glaze double lancet windows without frames.	sq.m	9.50	42.00	399.00		399.00
Waterproofing and Thermal Insulation							
11 32	Supply and lay waterproofing and thermal insulation of the ground floor slab.	sq.m	300.00	22.40	6,720.00		6,720.00

ARCHITECTURAL WORKS

	Work Description	Unit of Measure	Qty	Unit Price	Total Price	Additional quantity	Estimated total price
11 33	Waterproofing and thermal insulation of the loft ceiling.	sq.m	312.00	16.80	5,241.60		5,241.60
11 34	Waterproofing and thermal insulation of the roof.	sq.m	550.00	11.20	6,160.00		6,160.00
11 35	Horizontal damp proofing.	sq.m	160.00	26.60	4,256.00		4,256.00
11 36	Horizontal damp proofing.	sq.m	40.00	42.00	1,680.00		1,680.00
	Metalwork						
11 37	Make and place a 2-wing grille door.	pcs	1.00	336.00	336.00		336.00
	TOTAL RECONSTRUCTION WORKS - PALACE				344,067.00		344,067.00
12 00	CANTEEN						
	Preliminary Works						
12 01	Remove plants.	hour	40.00	10.50	420.00		420.00
	Masonry work						
12 02	Remove loose wall portions and clean the walls.	cu.m	12.00	70.00	840.00		840.00
12 03	Rebuilding.	cu.m	12.00	84.00	1,008.00		1,008.00
12 04	Build walls with stone.	cu.m	55.00	160.00	8,800.00		8,800.00
12 05	Building the wall face.	cu.m	8.00	160.00	1,280.00		1,280.00
12 06	Underpinning for forming the levels.	cu.m	16.00	120.00	1,920.00		1,920.00
12 07	Filling for forming the required level.	cu.m	16.00	140.00	2,240.00		2,240.00
12 08	Flooring.	cu.m	38.00	80.00	3,040.00		3,040.00
	Stone Cutting Work						
12 09	Reconstruction of the frame for the entrance door to the tower.	cu.m	0.36	600.00	216.00		216.00
	Carpentry Work						
12 10	Roof structure.	sq.m	123.00	47.60	5,854.80		5,854.80
12 11	Roof covering with boards.	sq.m	123.00	33.60	4,132.80		4,132.80
12 12	Roofing laths.	sq.m	123.00	6.30	774.90		774.90
12 13	Roof shingles.	sq.m	128.00	39.20	5,017.60		5,017.60
12 14	Construct wooden stairs.	pcs	16.00	350.00	5,600.00		5,600.00
	Waterproofing						
	Roof waterproofing.	sq.m	123.00	6.30	774.90		774.90
	Joinery Work						
12 15	Board ceiling.	sq.m	100.00	33.60	3,360.00		3,360.00
12 16	Make and place doors.	pcs	2.00	350.00	700.00		700.00
12 17	Make and place windows.	pcs	3.00	98.00	294.00		294.00
12 18	Wooden fencing for the existing stair flight.	lm	2.80	31.50	88.20		88.20
	TOTAL WORKS - CANTEEN				46,361.20		46,361.20
13 00	STOREROOMS						
	Preliminary Works						
13 01	Remove plants.	hour	20.00	10.50	210.00		210.00
	Masonry work						
13 02	Clean the walls.	cu.m	5.00	42.00	210.00		210.00
13 03	Rebuilding.	cu.m	5.00	98.00	490.00		490.00
13 04	Build walls.	cu.m	30.00	160.00	4,800.00		4,800.00
13 05	Build arches.	sq.m	35.00	112.00	3,920.00		3,920.00
13 06	Brick flooring.	sq.m	24.00	12.60	302.40		302.40
13 07	Wall plastering.	sq.m	80.00	10.00	800.00		800.00
	Stone Cutting Work						

ARCHITECTURAL WORKS

	Work Description	Unit of Measure	Qty	Unit Price	Total Price	Additional quantity	Estimated total price
13 08	Reconstruction of the entrance door frame.	cu.m	0.48	600.00	288.00		288.00
	Carpentry Work						
13 09	Roof structure.	sq.m	64.00	47.60	3,046.40		3,046.40
13 10	Roof covering with boards.	sq.m	64.00	33.60	2,150.40		2,150.40
13 11	Roofing laths.	sq.m	64.00	6.30	403.20		403.20
13 12	Roof shingles.	sq.m	66.00	39.20	2,587.20		2,587.20
	Waterproofing						
13 13	Roof waterproofing.	sq.m	64.00	6.30	403.20		403.20
	Joinery Work						
13 14	Make and place doors.	pcs	2.00	350.00	700.00		700.00
	TOTAL RECONSTRUCTION WORKS - STOREROOMS				20,310.80		20,310.80
14 00	GUARDHOUSE 1						
	Preliminary Works						
14 01	Additions to the Design.						
	Masonry work						
14 02	Remove loose wall portions and clean the walls.	cu.m	5.00	42.00	210.00		210.00
14 03	Rebuilding.	cu.m	5.00	98.00	490.00		490.00
14 04	Building with stone and tufa.	cu.m	35.00	120.00	4,200.00		4,200.00
14 05	Build partition walls.	sq.m	35.00	36.00	1,260.00		1,260.00
14 06	Wall plastering.	sq.m	104.00	10.00	1,040.00		1,040.00
14 07	Paint walls.	sq.m	104.00	4.90	509.60		509.60
14 08	Filling beneath the floor.	cu.m	10.00	84.00	840.00		840.00
14 09	Laying cement screed.	sq.m	56.00	8.00	448.00		448.00
	Concrete Work						
14 10	Construct a floor slab.	sq.m	56.00	15.00	840.00		840.00
	Stone Cutting Work						
14 11	Stone flooring.	sq.m	56.00	47.60	2,665.60		2,665.60
	Carpentry Work						
14 12	Construct and place joists using firwood timber with the dimensions 14/20 cm, according to the Structural Design.	cu.m	2.20	476.00	1,047.20		1,047.20
14 13	Joist covering with boards.	sq.m	56.00	33.60	1,881.60		1,881.60
14 14	Roof structure.	sq.m	95.00	47.60	4,522.00		4,522.00
14 15	Roof covering with boards.	sq.m	104.00	33.60	3,494.40		3,494.40
14 16	Roofing laths.	sq.m	104.00	6.30	655.20		655.20
14 17	Roof shingles.	sq.m	110.00	39.20	4,312.00		4,312.00
	Joinery Work						
14 18	Make and place door.	pcs	1.00	490.00	490.00		490.00
14 19	Make and place windows.	pcs	5.00	140.00	700.00		700.00
14 20	Make and place internal doors.	pcs	3.00	350.00	1,050.00		1,050.00
	Waterproofing and Thermal Insulation						
14 21	Supply and lay waterproofing and thermal insulation of the floor slab.	sq.m	56.00	19.60	1,097.60		1,097.60
14 22	Supply and lay waterproofing and thermal insulation of the ceiling.	sq.m	56.00	16.80	940.80		940.80
14 23	Roof waterproofing.	sq.m	104.00	6.30	655.20		655.20
	TOTAL WORKS - GUARDHOUSE 1				33,349.20		33,349.20
15 00	GUARDHOUSE 2						
	Preliminary Works						

ARCHITECTURAL WORKS

	Work Description	Unit of Measure	Qty	Unit Price	Total Price	Additional quantity	Estimated total price
15 01	Remove plants from and around the building.	hour	8.00	10.50	84.00		84.00
	Masonry work						
15 02	Clean the walls.	cu.m	4.00	42.00	168.00		168.00
15 03	Rebuilding.	cu.m	5.00	84.00	420.00		420.00
15 04	Build external walls.	sq.m	108.00	54.00	5,832.00		5,832.00
15 05	Build partition walls.	sq.m	43.00	48.00	2,064.00		2,064.00
15 06	Wall plastering.	sq.m	68.00	10.00	680.00		680.00
15 07	Painting walls.	sq.m	68.00	4.90	333.20		333.20
15 08	Filling.	cu.m	4.00	84.00	336.00		336.00
15 09	Laying cement screed.	sq.m	38.00	7.70	292.60		292.60
	Concrete Work						
15 10	Construct a floor slab.	sq.m	38.00	15.00	570.00		570.00
	Tiling Work						
15 11	Granite tile flooring.	sq.m	38.00	26.60	1,010.80		1,010.80
15 12	Wall tiling.	sq.m	20.00	25.20	504.00		504.00
	Carpentry Work						
15 13	Construct and place joists using firwood timber with the dimensions 14/20 cm, according to the Structural Design.	cu.m	2.60	476.00	1,237.60		1,237.60
15 14	Joist covering with boards.	sq.m	38.00	26.60	1,010.80		1,010.80
15 15	Roof structure.	sq.m	68.00	33.60	2,284.80		2,284.80
15 16	Roof covering with boards.	sq.m	70.00	26.60	1,862.00		1,862.00
15 17	Roofing laths.	sq.m	70.00	6.30	441.00		441.00
15 18	Roof shingles.	sq.m	74.00	36.40	2,693.60		2,693.60
	Joinery Work						
15 19	Make and place entrance doors.	pcs	2.00	490.00	980.00		980.00
15 20	Make and place internal doors.	pcs	4.00	350.00	1,400.00		1,400.00
15 21	Make and place internal doors with glazed sections.	pcs	2.00	350.00	700.00		700.00
15 22	Make and place large size windows.	pcs	2.00	154.00	308.00		308.00
15 23	Make and place small size windows.	pcs	3.00	84.00	252.00		252.00
	Waterproofing and Thermal Insulation						
15 24	Supply and lay waterproofing and thermal insulation of the floor slab.	sq.m	38.00	19.60	744.80		744.80
15 25	Supply and lay waterproofing and thermal insulation of the ceiling.	sq.m	38.00	16.80	638.40		638.40
15 26	Roof waterproofing.	sq.m	70.00	6.30	441.00		441.00
15 27	Supply and lay thermal insulation of external walls.	sq.m	108.00	5.60	604.80		604.80
	TOTAL WORKS - GUARDHOUSE 2				27,893.40		27,893.40
16 00	RAMPART 1-2						
	Masonry Work						
16 01	Build a rampart.	cu.m	50.00	84.00	4,200.00		4,200.00
	Metalwork						0.00
16 02	Steel pipe fencing.	kg	770.00	2.24	1,724.80		1,724.80
	TOTAL WORKS - RAMPART 1-2				5,924.80		5,924.80
17 00	RAMPART 1-3						
	Masonry Work						
17 01	Build a rampart and footpath.	cu.m	28.00	98.00	2,744.00		2,744.00
17 02	Build reveals.	cu.m	20.00	160.00	3,200.00		3,200.00
	Metalwork						0.00
17 03	Steel pipe fencing.	kg	490.00	2.24	1,097.60		1,097.60

ARCHITECTURAL WORKS

	Work Description	Unit of Measure	Qty	Unit Price	Total Price	Additional quantity	Estimated total price
	TOTAL WORKS - RAMPART 1-3				7,041.60		7,041.60
18 00	RAMPART 2-4						
	Masonry Work						
18 01	Removal and rebuilding.	cu.m	30.00	84.00	2,520.00		2,520.00
18 02	Rebuild walls.	cu.m	30.00	120.00	3,600.00		3,600.00
18 03	Reconstruct the rock below the rampart.	cu.m	500.00	77.00	38,500.00		38,500.00
18 04	Build stairs.	lm	80.00	70.00	5,600.00		5,600.00
	Stone Cutting Work						
18 05	Make sandstone door frames.	cu.m	0.36	600.00	216.00		216.00
	Joinery Work						
18 06	Make and place a two wing door.	pcs	1.00	490.00	490.00		490.00
	Metalwork						
18 07	Steel pipe fencing.	kg	875.00	2.24	1,960.00		1,960.00
	TOTAL WORKS RAMPART 2-4				52,886.00		52,886.00
19 00	RAMPART 3-4						
	Masonry Work						
19 01	Removal and rebuilding.	cu.m	50.00	84.00	4,200.00		4,200.00
19 02	Build the wall face.	cu.m	42.00	160.00	6,720.00	200.00	38,720.00
19 03	Build stone stairs.	cu.m	7.00	160.00	1,120.00		1,120.00
19 04	Build walls.	cu.m	48.00	120.00	5,760.00		5,760.00
19 05	Build reveals.	cu.m	25.00	160.00	4,000.00		4,000.00
	Stone Cutting Work						
19 06	Make stone door frames and brackets.	cu.m	0.68	600.00	408.00		408.00
	Joinery Work						
19 07	Construct and place machicolation.	pcs	1.00	600.00	600.00		600.00
19 08	Make and place a door.	pcs	1.00	490.00	490.00		490.00
	Carpentry Work						
19 09	Laying shingles over the machicolation roof.	sq.m	2.50	36.40	91.00		91.00
	Metalwork						
19 10	Steel pipe fencing.	kg	1,200.00	2.24	2,688.00		2,688.00
19 11	Steel pipe and sheet metal stairs.	kg	400.00	1.96	784.00		784.00
	TOTAL WORKS - RAMPART 3-4				26,861.00		58,861.00
20 00	RAMPART 4-5						
	Preliminary Works						
20 01	Removal of plants from the rampart.	hour	8.00	10.50	84.00		84.00
	Masonry Work						
20 02	Reconstruction of the passage - rampart gate.	cu.m	84.00	160.00	13,440.00		13,440.00
20 02a	strip the joints	sq.m	0.00	4.80	0.00	400.00	1,920.00
20 02b	make flat joints	sq.m	0.00	16.80	0.00	400.00	6,720.00
	Stone Cutting Work						
20 03	Make stone door frame.	cu.m	1.20	600.00	720.00		720.00
	Joinery Work						
20 04	Make and place a two wing door.	pcs	1.00	490.00	490.00		490.00
	Metalwork						
20 05	Steel pipe fencing.	kg	1,300.00	2.24	2,912.00		2,912.00
	TOTAL WORKS - RAMPART 4-5				17,646.00		26,286.00
21 00	RAMPART 3-6						
	Masonry Work						
21 01	Removal and rebuilding.	cu.m	20.00	84.00	1,680.00		1,680.00

ARCHITECTURAL WORKS

	Work Description	Unit of Measure	Qty	Unit Price	Total Price	Additional quantity	Estimated total price
21 02	Build stone stairs.	cu.m	6.00	160.00	960.00		960.00
21 03	Build walls.	cu.m	22.00	120.00	2,640.00		2,640.00
21 04	Build reveals.	cu.m	22.00	160.00	3,520.00		3,520.00
	Metalwork						
21 05	Steel pipe fencing.	kg	950.00	2.24	2,128.00		2,128.00
	TOTAL WORKS - RAMPART 3-6				10,928.00		10,928.00
22 00	RAMPART 5-8						
	Masonry Work						
22 01	Demolition of the final conservation layer.	cu.m	16.00	42.00	672.00	60.00	3,192.00
22 02	Build rampart.	cu.m	310.00	160.00	49,600.00	90.00	64,000.00
	TOTAL WORKS - RAMPART 5-8				50,272.00		67,192.00
23 00	RAMPART 6-7						
	Masonry Work						
23 01	Removal and rebuilding.	cu.m	26.00	84.00	2,184.00		2,184.00
23 02	Build stone stairs.	cu.m	8.00	160.00	1,280.00		1,280.00
23 03	Build walls.	cu.m	26.00	120.00	3,120.00		3,120.00
23 04	Build reveals.	cu.m	20.00	160.00	3,200.00		3,200.00
	Metalwork						
23 05	Steel pipe fencing.	kg	1,200.00	2.24	2,688.00		2,688.00
	TOTAL WORKS - RAMPART 6-7				12,472.00		12,472.00
24 00	RAMPART 7-8						
	Preliminary Works						
24 01	Remove plants from the rampart.	hour	24.00	10.50	252.00		252.00
	Masonry Work						
24 02	Removal and rebuilding.	cu.m	36.00	84.00	3,024.00		3,024.00
24 03	Build stone stairs.	cu.m	7.00	160.00	1,120.00		1,120.00
24 04	Build rampart wall.	cu.m	26.00	120.00	3,120.00		3,120.00
24 05	Demolition of concrete arch.	cu.m	7.00	84.00	588.00		588.00
24 06	Reconstruction of the passage - rampart gate.	cu.m	80.00	160.00	12,800.00		12,800.00
	Stone Cutting Work						
24 07	Make stone door frames.	cu.m	1.20	600.00	720.00		720.00
	Joinery Work						
24 08	Make a two wing door with tongue and groove boards (the first class pinewood boards).	pcs	1.00	490.00	490.00		490.00
	Metalwork						
24 09	Steel pipe fencing.	kg	1,300.00	2.24	2,912.00		2,912.00
	TOTAL WORKS - RAMPART 7-8				25,026.00		25,026.00
25 00	RAMPART 8-9						
	Masonry Work						
25 01	Removal and rebuilding.	cu.m	16.00	84.00	1,344.00		1,344.00
25 02	Build ramparts.	cu.m	20.00	160.00	3,200.00		3,200.00
25 03	Build reveals.	cu.m	38.00	160.00	6,080.00		6,080.00
25 04	Strip the joints	sq.m	0.00	4.80	0.00	400.00	1,920.00
25 05	make flat joints	sq.m	0.00	16.80	0.00	400.00	6,720.00
25 06	Rebuild damaged wall faces.	cu.m	0.00	98.00	0.00	15.00	1,470.00
	TOTAL WORKS - RAMPART 8-9				10,624.00		19,264.00
26 00	WALL K-O						
	Masonry Work						
26 01	Removal and rebuilding	cu.m	10.00	84.00	840.00		840.00

ARCHITECTURAL WORKS

	Work Description	Unit of Measure	Qty	Unit Price	Total Price	Additional quantity	Estimated total price
26 02	Build stone wall.	cu.m	10.00	160.00	1,600.00		1,600.00
	TOTAL WORKS - WALL K-O				2,440.00		2,440.00
27 00	UNDERPINNINGS						
	Preliminary Works						
27 01	Remove plants from four underpinnings in the northern part of the Fortress and from one underpinning in the southern part of the Fortress.	hour	24.00	10.50	252.00		252.00
	Masonry Work						
27 02	Removal and rebuilding.	cu.m	50.00	84.00	4,200.00		4,200.00
27 03	Build walls.	cu.m	95.00	160.00	15,200.00		15,200.00
	Metalwork						
27 04	Steel pipe fencing.	kg	950.00	2.24	2,128.00		2,128.00
	TOTAL WORKS - UNDERPINNING				21,780.00		21,780.00
28 00	REMOVAL OF ROAD RUNNING THROUGH THE FORTRESS						
28 01	Remove bituminous overlay from inside the fortress.	sq.m	1,280.00	14.00	17,920.00		17,920.00
28 02	Removal of road embankment.	cu.m	850.00	14.00	11,900.00		11,900.00
	TOTAL WORKS - ROAD REMOVAL				29,820.00		29,820.00
29 00	CONSTRUCTION OF FOOTPATHS						
29 01	Construct footpaths.	sq.m	1,000.00	36.00	36,000.00		36,000.00
29 02	Build a stage platform.	sq.m	130.00	33.00	4,290.00		4,290.00
29 03	Build an auditorium.	lm	60.00	42.00	2,520.00		2,520.00
29 04	build and erect a bridge.	cu.m	8.00	480.00	3,840.00		3,840.00
	TOTAL WORKS - CONSTRUCTION OF FOOTPATHS				46,650.00		46,650.00
30 00	TUNNEL REFURBISHMENT						
	Preliminary Works						
30 01	Sand blasting of tunnel walls.	sq.m	1,500.00	5.60	8,400.00		8,400.00
30 02	Removal of bedding.	sq.m	700.00	12.60	8,820.00		8,820.00
	Concrete and Reinforced Concrete Works						
30 03	Lean concrete bedding.	sq.m	250.00	28.00	7,000.00		7,000.00
30 04	Lay a foundation slab.	sq.m	250.00	18.00	4,500.00		4,500.00
30 05	Build a concrete wall.	cu.m	13.00	126.00	1,638.00		1,638.00
	Masonry Work						
30 06	Build stone walls.	cu.m	50.00	120.00	6,000.00		6,000.00
30 07	Underpinning in the lateral tunnel.	cu.m	4.00	120.00	480.00		480.00
30 08	Terrace fencing walls in the lateral tunnel.	cu.m	3.60	120.00	432.00		432.00
30 09	Filling for terrace formation.	cu.m	20.00	77.00	1,540.00		1,540.00
30 10	Construct stone footpaths.		450.00	33.00	14,850.00		14,850.00
30 11	Laying cement screed.	sq.m	245.00	7.70	1,886.50		1,886.50
	Waterproofing and Thermal Insulation						
30 12	Thermal insulation of the tunnel wall.	sq.m	50.00	4.20	210.00		210.00
30 13	Supply and lay waterproofing and thermal insulation of the slab for wooden structures.	sq.m	250.00	19.60	4,900.00		4,900.00
30 14	Waterproofing and thermal insulation of the ceilings for wooden structures.	sq.m	310.00	14.00	4,340.00		4,340.00

ARCHITECTURAL WORKS

	Work Description	Unit of Measure	Qty	Unit Price	Total Price	Additional quantity	Estimated total price
Carpentry Work							
30 15	Skeleton construction of wooden structures.	cu.m	25.00	476.00	11,900.00		11,900.00
30 16	Roof structure.	sq.m	250.00	47.60	11,900.00		11,900.00
30 17	Roof covering with boards.	sq.m	270.00	33.60	9,072.00		9,072.00
30 18	Roofing laths.	sq.m	270.00	6.30	1,701.00		1,701.00
30 19	Roof shingles.	sq.m	270.00	36.40	9,828.00		9,828.00
Joinery Work							
	Construct sandwich walls for wooden structures.						
30 20	Wall 3-1 shall consist of: 2,4 cm board; 2,4 cm OSB board; vapour permeable foil; 12 cm mineral wool; PVC foil; 2,4 cm board	sq.m	150.00	26.60	3,990.00		3,990.00
30 21	Wall 3-2 shall consist of: 2,4 cm board; 2,4 cm OSB board; vapour permeable foil; 12 cm mineral wool; PVC foil; 2x1.2 cm gypsum board; ceramic tiles laid on glue	sq.m	250.00	40.60	10,150.00		10,150.00
30 22	Wall 3-3 shall consist of: 2,4 cm board; vapour permeable foil; 12 cm mineral wool; PVC foil; 2 cm OSB board	sq.m	55.00	22.40	1,232.00		1,232.00
30 23	Wall 3-4 shall consist of: ceramic tiles laid on glue; 2x1,2 cm gypsum board; PVC foil; 12 cm mineral wool; PVC foil; 2 cm air space; 2x1,2 cm gypsum board; ceramic tiles laid on glue	sq.m	120.00	47.60	5,712.00		5,712.00
30 24	Wall 3-5 shall consist of: ceramic tiles laid on glue; 2x1,2 cm gypsum board; 2 cm air space; PVC foil; 12 cm mineral wool; PVC foil; 2,4 cm board	sq.m	35.00	29.40	1,029.00		1,029.00
30 25	Board ceiling.	sq.m	250.00	12.60	3,150.00		3,150.00
30 26	Make a pinewood fence.	lm	23.00	31.50	724.50		724.50
30 27	Stairs fencing in the lateral tunnel.	lm	5.00	56.00	280.00		280.00
30 28	Make and place glazed doors for wooden structures.	pcs	4.00	266.00	1,064.00		1,064.00
30 29	Make and place solid doors for wooden structures.	pcs	14.00	350.00	4,900.00		4,900.00
30 30	Make and place solid doors for wooden structures.	pcs	19.00	280.00	5,320.00		5,320.00
30 31	Make and place windows.	pcs	7.00	266.00	1,862.00		1,862.00
30 32	Make and place sash windows.	pcs	6.00	217.00	1,302.00		1,302.00
	Make and place fixed windows.						
30 33	Fixed window with the dimensions 90/165	pcs	26.00	196.00	5,096.00		5,096.00
30 34	Fixed window with the dimensions 90/125	pcs	8.00	168.00	1,344.00		1,344.00
Tiling Work							
30 35	Granite tile flooring.	sq.m	245.00	26.60	6,517.00		6,517.00
30 36	Wall tiling.	sq.m	300.00	25.20	7,560.00		7,560.00
Metalwork							
30 37	Make and place a 2-wing grille gate.	pcs	1.00	196.00	196.00		196.00
TOTAL WORKS - TUNNEL REFURBISHMENT					170,826.00		170,826.00