

MAKLUMAT SPESIFIKASI KERJA (SKOP TERPERINCI)

Tajuk Projek : CADANGAN KERJA-KERJA NAIKTARAF TANDAS DI ARAS 2, 3, 4 & 5 BLOK A, KOMPLEKS ILHAM KOLEJ PENGAJIAN SENI KREATIF (KPSK), UNIVERSITI TEKNOLOGI MARA, SHAH ALAM, SELANGOR.

Keterangan : 4.1 - Kerja-Kerja Mekanikal
NEW PLUMBING WORKS (COLD WATER & SANITARY) - Semua ringkasan tawaran hendaklah dibaca bersama-sama lukisan dan spesifikasi tambahan yang disediakan.

BIL	KETERANGAN	UNIT	HARGA (RM)
A	INTERNAL COLD WATER PLUMBING		
	Lokasi: Tandas Staf (L) Aras 2, 3, 4, & 5		
	General		
	The piping installation specified herein shall be complete and include all valves, mounting brackets, expansion joints and all accessories. Pipe work, valves, fittings and all accessories shall comply with the UiTM as per drawing		
1	To dismantle all existing piping at the toilet from Aras 2, 3, 4, & 5 c/w bends, elbows, tees, valve and all related accessories	L/S	
2	To check, service and repair (if necessary) existing domestic water storage tank and existing incoming pipe c/w change new float ball and gate valve and all related accessories.	L/S	
3	To supply and install PVC-u PN 15 50mm Dia. distribution droper riser pipes c/w valves, fitting, support and all other accessories tapping from existing domestic water storage tank as per drawing	L/S	
4	To supply and install new balancing pipe PVC-u PN 15 65mm Dia. incoming riser pipes c/w stopcock, valves, fitting, support, pipe bracket and all other accessories tapping from existing incoming water tank outlet at roof area (approximate pipe length = 200meter)	L/S	
5	To supply and install new PVC-u PN 15 distribution pipes tapping from riser and run concealed in wall to all tap, basin, water closet c/w bends, elbows, tees, hanger, valves, stopcock and all accessories.		
i	Aras 2 - New Tandas Staf (L)	L/S	
ii	Aras 3 - New Tandas Staf (L)	L/S	
iii	Aras 4 - New Tandas Staf (L)	L/S	
iv	Aras 5 - New Tandas Staf (L)	L/S	
6	Testing and Commissioning		
6.1	Complete testing and commissioning of the above witnessed by UiTM Superintendent Officer (S.O.).	L/S	
7	OPERATION & MAINTENANCE MANUAL, SHOP AND AS - BUILT DRAWINGS		
i	Shop Drawings as specified	L/S	
ii	Operation and Maintenance Manual c/w As - Built Drawing as specified	L/S	
iii	One set of Intermediate As - Built print & softcopy (Pendrive) Autocad Format	L/S	
8	OTHER ITEMS		

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BIL	KETERANGAN	UNIT	HARGA (RM)
	Any other items not mentioned in the specification or drawing or above but necessary to complete the installation.		
i		
ii		
iii		
B	INTERNAL SANITARY PLUMBING		
1	To dismantle all existing sanitary piping at the toilet from Aras 2, 3, 4, & 5 until to existing Inspection chamber c/w bends, elbows, tees, and all related accessories	L/S	
2	To check, service and repair existing nearest inspection chamber and to make sure connecting sanitary piping inspection chamber to inspection chamber until external c&s manhole was functionable.	L/S	
3	Supply and install uPVC underground pipe (Brown) to connect all sanitary ware to gully trap, floor trap & inspection chamber with various size of pipe c/w excavation works, tee joint, y joint bends, rodding eyes, support/hangers, joint sleeves through walls/floors, pipe connection and all other accessories discharge to gully traps and manholes:- (Please refer Sanitary Plumbing drawing)		
	i. Aras 2 - New Tandas Staf (L)	L/S	
4	Supply and install uPVC aboveground pipe to connect all sanitary ware with various size of pipe c/w tee joint, y joint bends, rodding eyes, support/hangers, joint sleeves through walls/floors, pipe connection and all other accessories discharge to inspection chamber:- (Please refer Sanitary Plumbing drawing)		
	i. Aras 3 - New Tandas Staf (L)	L/S	
	ii. Aras 4 - New Tandas Staf (L)	L/S	
	iii. Aras 5 - New Tandas Staf (L)	L/S	
5	MISCELLANEOUS		
5.1	Concrete masonry works, excavation and filling up to accommodate run of pipes from building to external equipments and services. Concrete plinth and foundations for all equipment installed.	L/S	
6	Testing and Commissioning		
6.1	Complete testing and commissioning of the above witnessed by UiTM Superintendent Officer (S.O.).	L/S	
7	OPERATION & MAINTENANCE MANUAL, SHOP AND AS - BUILT DRAWINGS		

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Keterangan : 4.1 - Kerja-Kerja Mekanikal
NEW PLUMBING WORKS (COLD WATER & SANITARY) - Semua ringkasan tawaran hendaklah dibaca bersama-sama lukisan dan spesifikasi tambahan yang disediakan.

BIL	KETERANGAN	UNIT	HARGA (RM)
7.1	Shop Drawings as specified	L/S	
7.2	Operation and Maintenance Manual c/w As - Built Drawing as specified	L/S	
7.3	One set of Intermediate As - Built print & softcopy (Pendrive) Autocad Format	L/S	
C	INTERNAL COLD WATER PLUMBING		
	Lokasi: Tandas Staf (P) Aras 2, 3, 4, & 5		
	General		
	The piping installation specified herein shall be complete and include all valves, mounting brackets, expansion joints and all accessories. Pipe work, valves, fittings and all accessories shall comply with the UiTM as per drawing		
1	To dismantle all existing piping at the toilet from Aras 2, 3, 4, & 5 c/w bends, elbows, tees, valve and all related accessories	L/S	
2	To check, service and repair (if necessary) existing domestic water storage tank and existing incoming pipe c/w change new float ball and gate valve and all related accessories.	L/S	
3	To supply and install PVC-u PN 15 50mm Dia. distribution droper riser pipes c/w valves, fitting, support and all other accessories tapping from existing domestic water storage tank as per drawing	L/S	
4	To supply and install new balancing pipe PVC-u PN 15 65mm Dia. incoming riser pipes c/w stopcock, valves, fitting, support, pipe bracket and all other accessories tapping from existing incoming water tank outlet at roof area (approximate pipe length = 200meter)	L/S	
5	To supply and install new PVC-u PN 15 distribution pipes tapping from riser and run concealed in wall to all tap, basin, water closet c/w bends, elbows, tees, hanger, valves, stopcock and all accessories.		
i	Aras 2 - New Tandas Staf (P)	L/S	
ii	Aras 3 - New Tandas Staf (P)	L/S	
iii	Aras 4 - New Tandas Staf (P)	L/S	
iv	Aras 5 - New Tandas Staf (P)	L/S	
6	Testing and Commissioning		
6.1	Complete testing and commissioning of the above witnessed by UiTM Superintendent Officer (S.O.).	L/S	
7	OPERATION & MAINTENANCE MANUAL, SHOP AND AS - BUILT DRAWINGS		
i	Shop Drawings as specified	L/S	

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Keterangan : 4.1 - Kerja-Kerja Mekanikal
NEW PLUMBING WORKS (COLD WATER & SANITARY) - Semua ringkasan tawaran hendaklah dibaca bersama-sama lukisan dan spesifikasi tambahan yang disediakan.

BIL	KETERANGAN	UNIT	HARGA (RM)
ii	Operation and Maintenance Manual c/w As - Built Drawing as specified	L/S	
iii	One set of Intermediate As - Built print & softcopy (Pendrive) Autocad Format	L/S	
8	OTHER ITEMS		
	Any other items not mentioned in the specification or drawing or above but necessary to complete the installation.		
i		
ii		
iii		
D	INTERNAL SANITARY PLUMBING		
1	To dismantle all existing sanitary piping at the toilet from Aras 2, 3, 4, & 5 until to existing Inspection chamber c/w bends, elbows, tees, and all related accessories	L/S	
2	To check, service and repair existing nearest inspection chamber and to make sure connecting sanitary piping inspection chamber to inspection chamber until external c&s manhole was functionable.	L/S	
3	Supply and install uPVC underground pipe (Brown) to connect all sanitary ware to gully trap, floor trap & inspection chamber with various size of pipe c/w excavation works, tee joint, y joint bends, rodding eyes, support/hangers, joint sleeves through walls/floors, pipe connection and all other accessories discharge to gully traps and manholes:- (Please refer Sanitary Plumbing drawing)		
	i. Aras 2 - New Tandas Staf (P)	L/S	
4	Supply and install uPVC aboveground pipe to connect all sanitary ware with various size of pipe c/w tee joint, y joint bends, rodding eyes, support/hangers, joint sleeves through walls/floors, pipe connection and all other accessories discharge to inspection chamber:- (Please refer Sanitary Plumbing drawing)		
	i. Aras 3 - New Tandas Staf (P)	L/S	
	ii. Aras 4 - New Tandas Staf (P)	L/S	
	iii. Aras 5 - New Tandas Staf (P)	L/S	
5	MISCELLANEOUS		
5.1	Concrete masonry works, excavation and filling up to accommodate run of pipes from building to external equipments and services. Concrete plinth and foundations for all equipment installed.	L/S	

MAKLUMAT SPESIFIKASI KERJA (SKOP TERPERINCI)

Tajuk Projek : CADANGAN KERJA-KERJA NAIKTARAF TANDAS DI ARAS 2, 3, 4 & 5 BLOK A, KOMPLEKS ILHAM KOLEJ PENGAJIAN SENI KREATIF (KPSK), UNIVERSITI TEKNOLOGI MARA, SHAH ALAM, SELANGOR.

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BIL	KETERANGAN	UNIT	HARGA (RM)
6	Testing and Commissioning		
6.1	Complete testing and commissioning of the above witnessed by UiTM Superintendent Officer (S.O.).	L/S	
7	OPERATION & MAINTENANCE MANUAL, SHOP AND AS - BUILT DRAWINGS		
7.1	Shop Drawings as specified	L/S	
7.2	Operation and Maintenance Manual c/w As - Built Drawing as specified	L/S	
7.3	One set of Intermediate As - Built print & softcopy (Pendrive) Autocad Format	L/S	
E	INTERNAL COLD WATER PLUMBING		
	Lokasi: Tandas Pelajar Aras 2, 4, 5 & Tandas OKU Aras 3		
	General		
	The piping installation specified herein shall be complete and include all valves, mounting brackets, expansion joints and all accessories. Pipe work, valves, fittings and all accessories shall comply with the UiTM as per drawing		
1	To dismantle all existing piping at the toilet from Aras 2, 3, 4, & 5 c/w bends, elbows, tees, valve and all related accessories	L/S	
2	To check, service and repair (if necessary) existing domestic water storage tank and existing incoming pipe c/w change new float ball and gate valve and all related accessories.	L/S	
3	To supply and install PVC-u PN 15 50mm Dia. distribution droper riser pipes c/w valves, fitting, support and all other accessories tapping from existing domestic water storage tank as per drawing	L/S	
4	To supply and install new PVC-u PN 15 distribution pipes tapping from riser and run concealed in wall to all tap, basin, water closet c/w bends, elbows, tees, hanger, valves, stopcock and all accessories.		
i	Aras 2 - New Tandas Pelajar	L/S	
ii	Aras 3 - New Tandas Pelajar & OKU	L/S	
iii	Aras 4 - New Tandas Pelajar	L/S	
iv	Aras 5 - New Tandas Pelajar	L/S	
5	Testing and Commissioning		
5.1	Complete testing and commissioning of the above witnessed by UiTM Superintendent Officer (S.O.).	L/S	
6	OPERATION & MAINTENANCE MANUAL, SHOP AND AS - BUILT DRAWINGS		

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BIL	KETERANGAN	UNIT	HARGA (RM)
i	Shop Drawings as specified	L/S	
ii	Operation and Maintenance Manual c/w As - Built Drawing as specified	L/S	
iii	One set of Intermediate As - Built print & softcopy (Pendrive) Autocad Format	L/S	
8	OTHER ITEMS		
	Any other items not mentioned in the specification or drawing or above but necessary to complete the installation.		
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F	INTERNAL SANITARY PLUMBING		
1	To dismantle all existing sanitary piping at the toilet from Aras 2, 3, 4, & 5 until to existing Inspection chamber c/w bends, elbows, tees, and all related accessories	L/S	
2	To check, service and repair existing nearest inspection chamber and to make sure connecting sanitary piping inspection chamber to inspection chamber until external c&s manhole was functionable.	L/S	
3	Supply and install uPVC underground pipe (Brown) to connect all sanitary ware to gully trap, floor trap & inspection chamber with various size of pipe c/w excavation works, tee joint, y joint bends, rodding eyes, support/hangers, joint sleeves through walls/floors, pipe connection and all other accessories discharge to gully traps and manholes:- (Please refer Sanitary Plumbing drawing)		
	i. Aras 2 - New Tandas Pelajar	L/S	
4	Supply and install uPVC aboveground pipe to connect all sanitary ware with various size of pipe c/w tee joint, y joint bends, rodding eyes, support/hangers, joint sleeves through walls/floors, pipe connection and all other accessories discharge to inspection chamber:- (Please refer Sanitary Plumbing drawing)		
	i. Aras 3 - New Tandas Pelajar & OKU	L/S	
	ii. Aras 4 - New Tandas Pelajar	L/S	
	iii. Aras 5 - New Tandas Pelajar	L/S	
5	MISCELLANEOUS		

MAKLUMAT SPESIFIKASI KERJA (SKOP TERPERINCI)

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BIL	KETERANGAN	UNIT	HARGA (RM)
5.1	Concrete masonry works, excavation and filling up to accommodate run of pipes from building to external equipments and services. Concrete plinth and foundations for all equipment installed.	L/S	
6	Testing and Commissioning		
6.1	Complete testing and commissioning of the above witnessed by UiTM Superintendent Officer (S.O.).	L/S	
7	OPERATION & MAINTENANCE MANUAL, SHOP AND AS - BUILT DRAWINGS		
7.1	Shop Drawings as specified	L/S	
7.2	Operation and Maintenance Manual c/w As - Built Drawing as specified	L/S	
7.3	One set of Intermediate As - Built print & softcopy (Pendrive) Autocad Format	L/S	
JUMLAH (RM)			