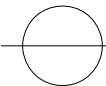
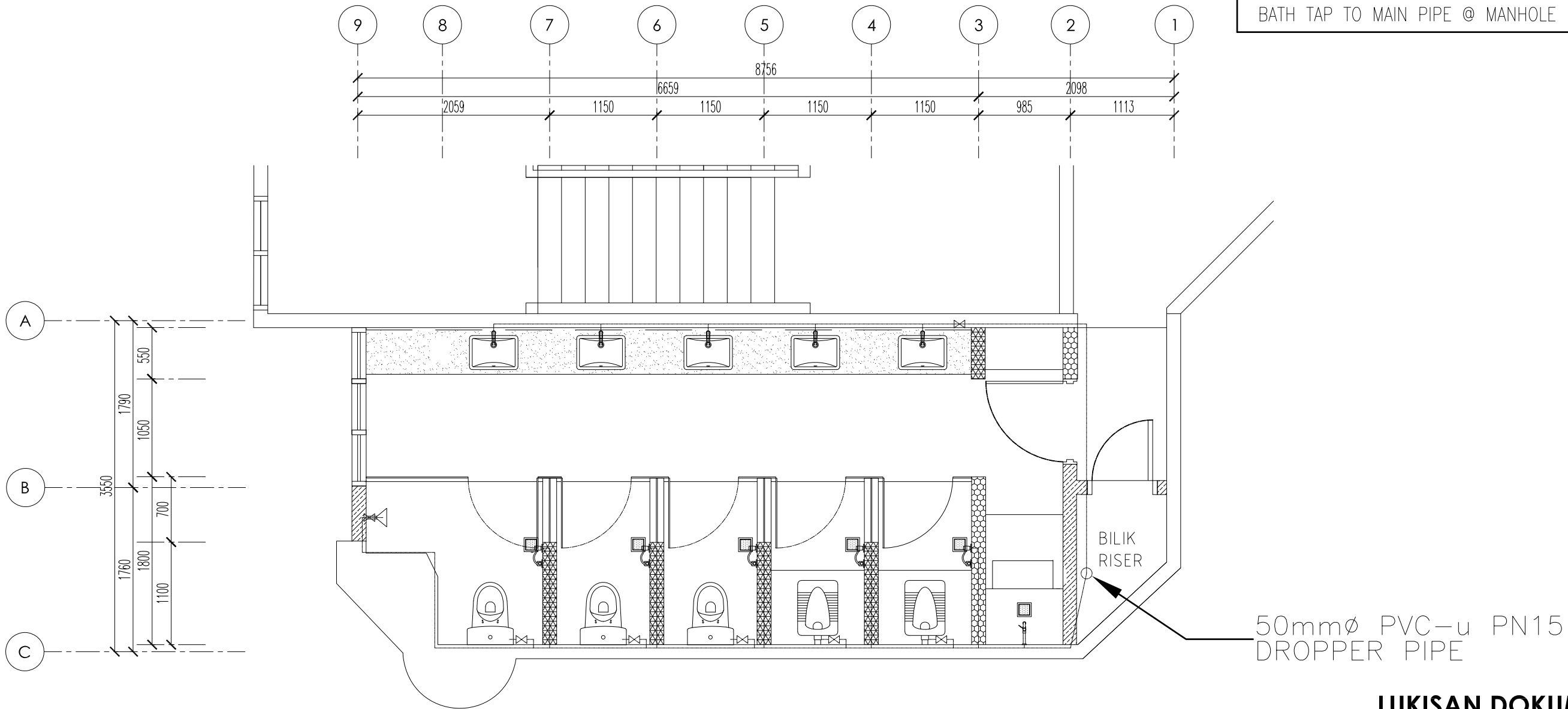


LEGEND FOR PIPING SIZE

FITTING	SIZE
BASIN TO GULLY TRAP & FLOOR TRAP	ø32
WATER CLOSET TO MANHOLE @ MAIN PIPE	ø100
FLOOR TRAP TO GULLY TRAP	ø75
GREASE TRAP	ø75
SINK TO GULLY TRAP @ FLOOR TRAP	ø40
GULLY TRAP TO MANHOLE	ø100
BATH TAP TO MAIN PIPE @ MANHOLE	ø100



INTERNAL COLD WATER PLUMBING LAYOUT
ARAS 2 & 3 - TANDAS STAF (L) SCALE 1 : 50

LUKISAN DOKUMENTASI

PERINGATAN
HANYA DIMENSI BERANGKA SAHAJA DILAKSANAKAN.
KONTRAKTOR MESTI MEMERIKSA SEMUA DIMENSI SEBENAR DI
TAPAK BINA. SEBARANG PERCANGGAHAN MESTI DILAPORKAN
DENGAN SEGERA KEPADA PEGAWAI PENGUASA SEBELUM
KERJA-KERJA DIMULAKAN.

PROJEK:
CADANGAN KERJA-KERJA NAIK TARAF TANDAS DI ARAS 2, 3, 4 & 5, BLOK A, KOMPLEKS ILHAM, KOLEJ PENGAJIAN SENI KREATIF (KPSK), UiTM SHAH ALAM.



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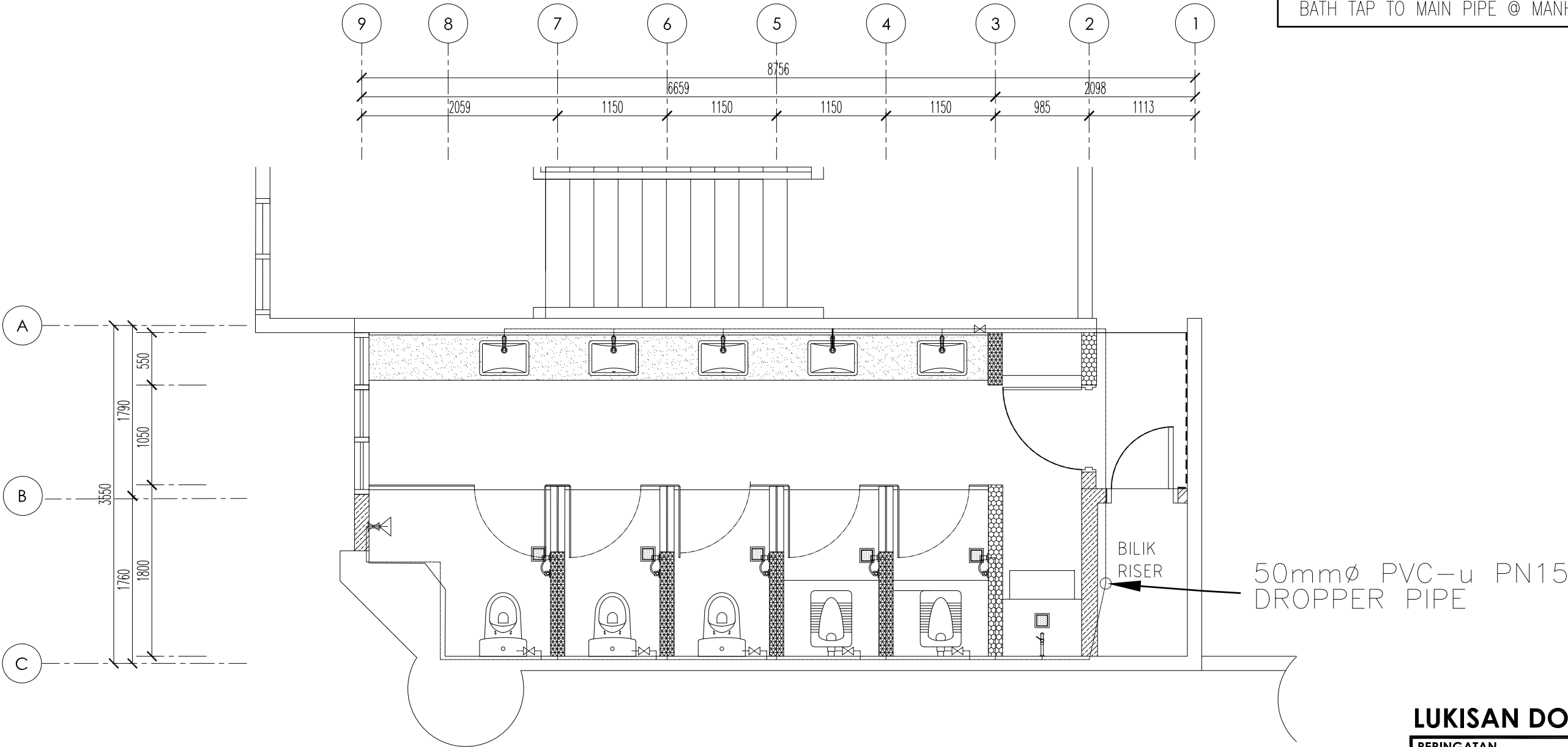
NO. RUJUKAN PROJEK:
200-PPH(BPI.5/3/25) MECH-CW
TAJUK LUKISAN:
INTERNAL COLD WATER PLUMBING LAYOUT ARAS 2&3 - TANDAS STAF (L)

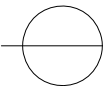
TARIKH:
20 09
24 SEP
SKALA:
1:50

NAIB CANSOLOR	: DATUK PROF. TS. DR. SHAHRIN SAHIB @ SAHIBUDDIN	INDEKS PINDAAN
TIMBALAN NAIB CANSOLOR	: PROF. TS. SR. DR MD. YUSOF HAMID	
PENGARAH JABATAN PEMBANGUNAN & INFRASTRUKTUR	: IR. TS. AZMAN SAUBIRAN	
KETUA BAHAGIAN PEMBANGUNAN INFRA	: TS. MOHAMMED IZRAI ABD. RAZAK	
ARKITEK	: ZULFADLI MOHAMED SALLEH	
DILUKIS OLEH	: MAZIAN SAAD	
PENGURUS PROJEK / DISEMAK	: MUHAMMAD ASYRIF ABD. AZIZ	NO HELAIAN: 01

LEGEND FOR PIPING SIZE

FITTING	SIZE
BASIN TO GULLY TRAP & FLOOR TRAP	ø32
WATER CLOSET TO MANHOLE @ MAIN PIPE	ø100
FLOOR TRAP TO GULLY TRAP	ø75
GREASE TRAP	ø75
SINK TO GULLY TRAP @ FLOOR TRAP	ø40
GULLY TRAP TO MANHOLE	ø100
BATH TAP TO MAIN PIPE @ MANHOLE	ø100



 **INTERNAL COLD WATER PLUMBING LAYOUT**
ARAS 4 & 5 - TANDAS STAF (L) SCALE 1 : 50

LUKISAN DOKUMENTASI

PERINGATAN
HANYA DIMENSI BERANGKA SAHAJA DILAKSANAKAN.
KONTRAKTOR MESTI MEMERIKSA SEMUA DIMENSI SEBENAR DI
TAPAK BINA. SEBARANG PERCANGGAHAN MESTI DILAPORKAN
DENGAN SEGERA KEPADA PEGAWAI PENGUASA SEBELUM
KERJA-KERJA DIMULAKAN.

PROJEK:
CADANGAN KERJA-KERJA NAIK TARAF TANDAS DI ARAS 2, 3, 4 & 5, BLOK A, KOMPLEKS ILHAM, KOLEJ PENGAJIAN SENI KREATIF (KPSK), UiTM SHAH ALAM.



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NO. RUJUKAN PROJEK:
200-PPH(BPI.5/3/25) MECH-CW
TAJUK LUKISAN:
INTERNAL COLD WATER PLUMBING LAYOUT ARAS 4&5 - TANDAS STAF (L)

TARIKH:
20 09 24 SEP
SKALA:
1:50

NAIB CANSOLOR	: DATUK PROF. TS. DR. SHAHRIN SAHIB @ SAHIBUDDIN	INDEKS PINDAAN
TIMBALAN NAIB CANSOLOR	: PROF. TS. SR. DR MD. YUSOF HAMID	
PENGARAH JABATAN PEMBANGUNAN & INFRASTRUKTUR	: IR. TS. AZMAN SAUBIRAN	
KETUA BAHAGIAN PEMBANGUNAN INFRA	: TS. MOHAMMED IZRAI ABD. RAZAK	
ARKITEK	: ZULFADLI MOHAMED SALLEH	
DILUKIS OLEH	: MAZIAN SAAD	
PENGURUS PROJEK / DISEMAK	: MUHAMMAD ASYRIF ABD. AZIZ	NO HELAIAN: 02

LEGEND FOR PIPING SIZE

FITTING	SIZE
BASIN TO GULLY TRAP & FLOOR TRAP	ø32
WATER CLOSET TO MANHOLE @ MAIN PIPE	ø100
FLOOR TRAP TO GULLY TRAP	ø75
GREASE TRAP	ø75
SINK TO GULLY TRAP @ FLOOR TRAP	ø40
GULLY TRAP TO MANHOLE	ø100
BATH TAP TO MAIN PIPE @ MANHOLE	ø100



INTERNAL COLD WATER PLUMBING

ARAS 2, 3, 4 & 5 - TANDAS STAF (L)

SCALE 1 : 50

PROJEK:
CADANGAN KERJA-KERJA NAIK TARAF TANDAS DI ARAS 2, 3, 4 & 5, BLOK A, KOMPLEKS ILHAM, KOLEJ PENGAJIAN SENI KREATIF (KPSK), UiTM SHAH ALAM.



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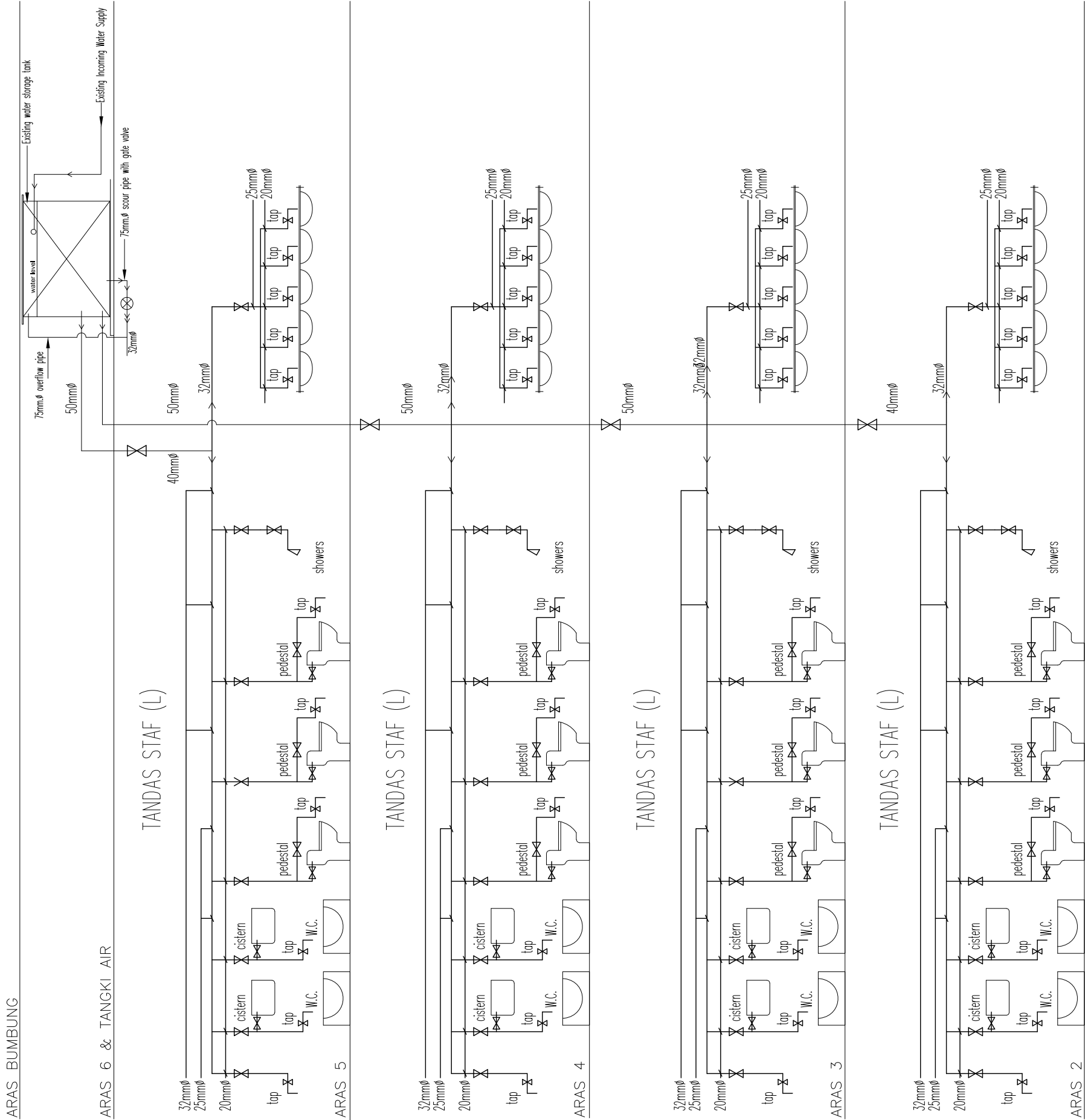
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200-PP11(BPI.5/3/25) MECH-CW

TAJUK LUKISAN:

TYPICAL INTERNAL COLD WATER PLUMBING DIAGRAMMATIC LAYOUT

TARIKH:	20 09 24 SEP	NAIB CANSOLOR	: DATUK PROF. TS. DR. SHAHRIN SAHIB @ SAHIBUDDIN	INDEKS PINDAAN
		TIMBALAN NAIB CANSOLOR	: PROF. TS. SR. DR MD. YUSOF HAMID	
		PENGARAH JABATAN PEMBANGUNAN & INFRASTRUKTUR	: IR. TS. AZMAN SAUBIRAN	
		KETUA BAHAGIAN PEMBANGUNAN INFRA:	TS. MOHAMMED IZRAI ABD. RAZAK	
		ARKITEK	: ZULFADLI MOHAMED SALLEH	
		DILUKIS OLEH	: MAZIAN SAAD	
		PENGURUS PROJEK / DISEMAK	: MUHAMMAD ASYRIF ABD. AZIZ	NO HELAIAN: 03



LUKISAN DOKUMENTASI

PERINGATAN

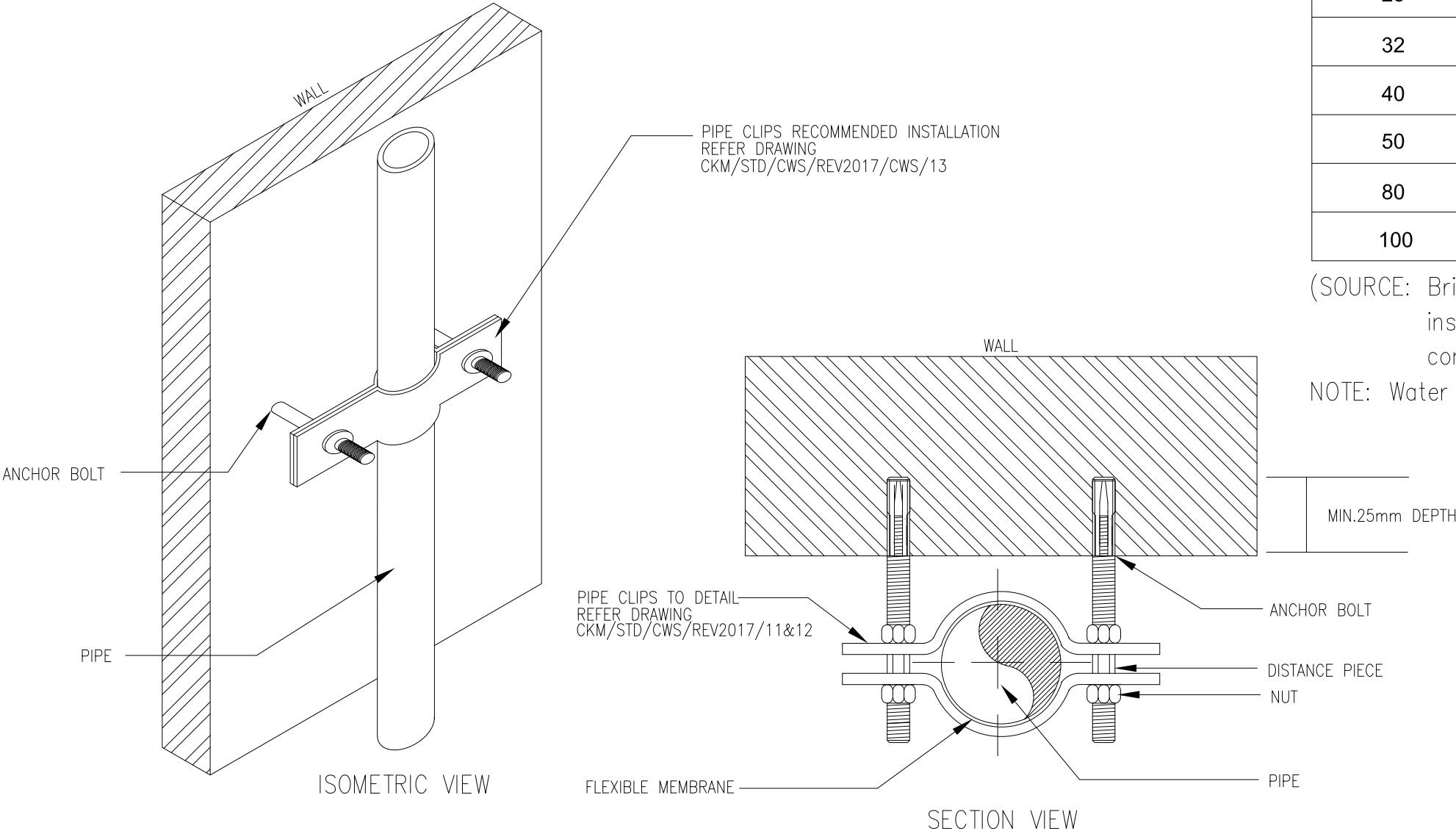
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KONTRAKTOR MESTI MEMERIKSA SEMUA DIMENSI SEBENAR DI
TAPAK BINA. SEBARANG PERCANGHAHAN MESTI DILAPORKAN
DENGAN SEGERA KEPADA PEGAWAI PENGUASA SEBELUM
KERJA-KERJA DIMULAKAN.

RECOMMENDED MAXIMUM SPACING OF SUPPORT
FOR ALL CLASSES OF PIPE FOR WATER (VERTICAL)

PIPE SIZE (mm)	RECOMMENDED MAXIMUM SPACING OF SUPPORTS (m)	
	NON-METAL	METAL
20	1.0	2.4
25	1.1	2.4
32	1.3	3.0
40	1.3	3.0
50	1.6	3.6
80	2.1	3.6
100	2.5	3.6

(SOURCE: British Standard Institute. (2010). BS EN 806–4: Specifications installations inside buildings conveying water for human consumption. Installation)

NOTE: Water temperature should not exceed 65°C



PIPE CLIPS VERTICAL SUPPORT

ARAS 2, 3, 4 & 5 - TANDAS STAF (L)

PROJEK:
CADANGAN KERJA-KERJA NAIK TARAF TANDAS DI ARAS 2, 3, 4 & 5, BLOK A, KOMPLEKS ILHAM, KOLEJ PENGAJIAN SENI KREATIF (KPSK), UTM SHAH ALAM.



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NO. RUJUKAN PROJEK:
200-PPH(BPI.5/3/25) MECH-CW

TAJUK LUKISAN: TERATAI BLOCK 2
PIPE CLIPS VERTICAL SUPPORT

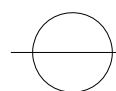
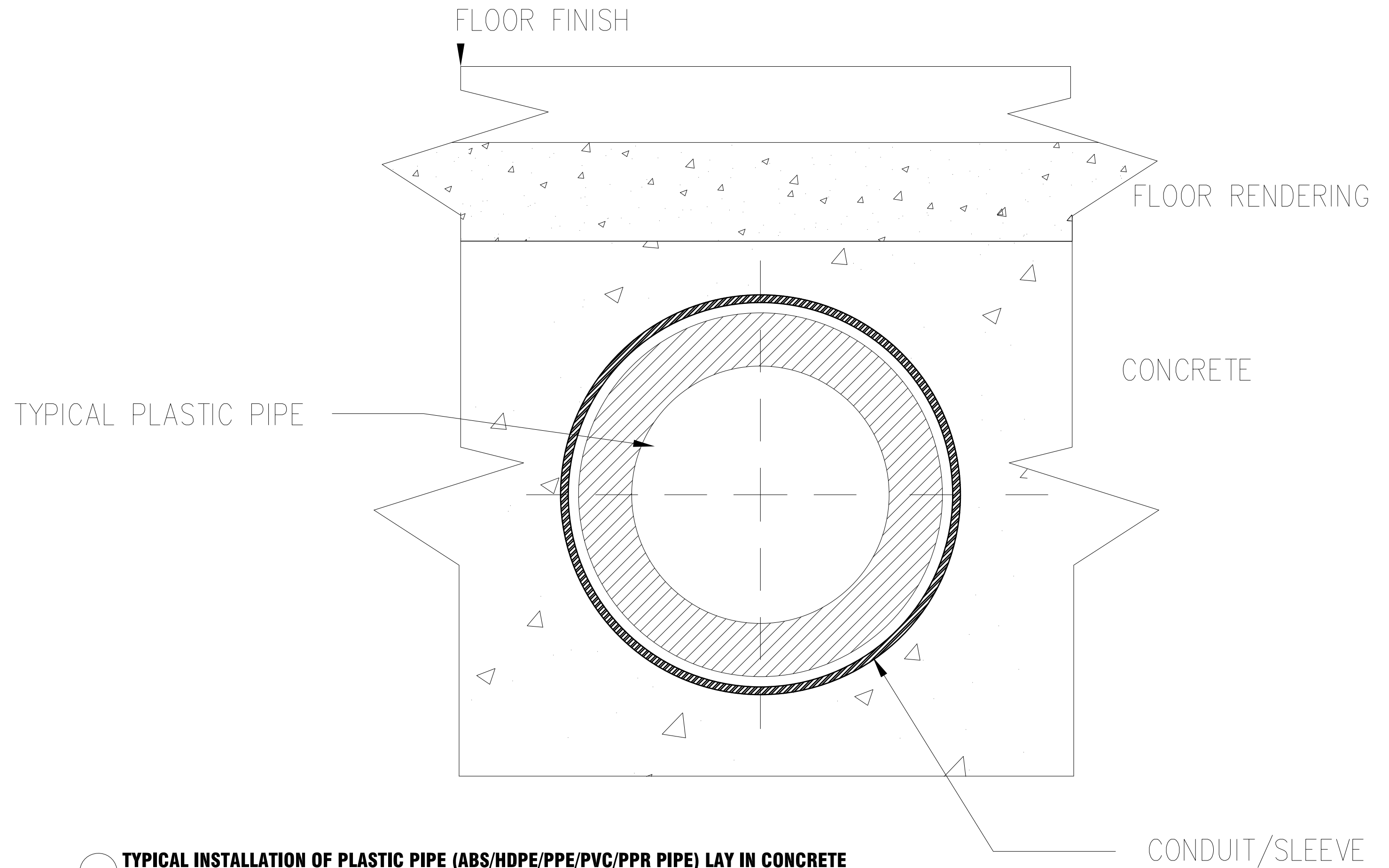
TARIKH:
20 09
24 Sep

SKALA:
N.T.S

NAIB CANSOLOR	: DATUK PROF. TS. DR. SHAHRIN SAHIB @ SAHIBUDDIN
PENOLONG NAIB CANSOLOR	: PROF. TS. SR. DR MD. YUSOF HAMID
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PENGURUS PROJEK / DISEMAK	: MUHAMMAD ASYRIF ABD. AZIZ

INDEKS PINDAAN

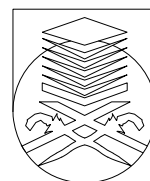
HELAIAN: **04**



TYPICAL INSTALLATION OF PLASTIC PIPE (ABS/HDPE/PPE/PVC/PPR PIPE) LAY IN CONCRETE

ARAS 2, 3, 4 & 5 - TANDAS STAF (L)

PROJEK:
CADANGAN KERJA-KERJA NAIK TARAF TANDAS DI ARAS 2, 3, 4 & 5, BLOK A, KOMPLEKS ILHAM, KOLEJ PENGAJIAN SENI KREATIF (KPSK), UTM SHAH ALAM.



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NO. RUJUKAN PROJEK:
200-PPII(BPI.5/3/25) MECH-CW

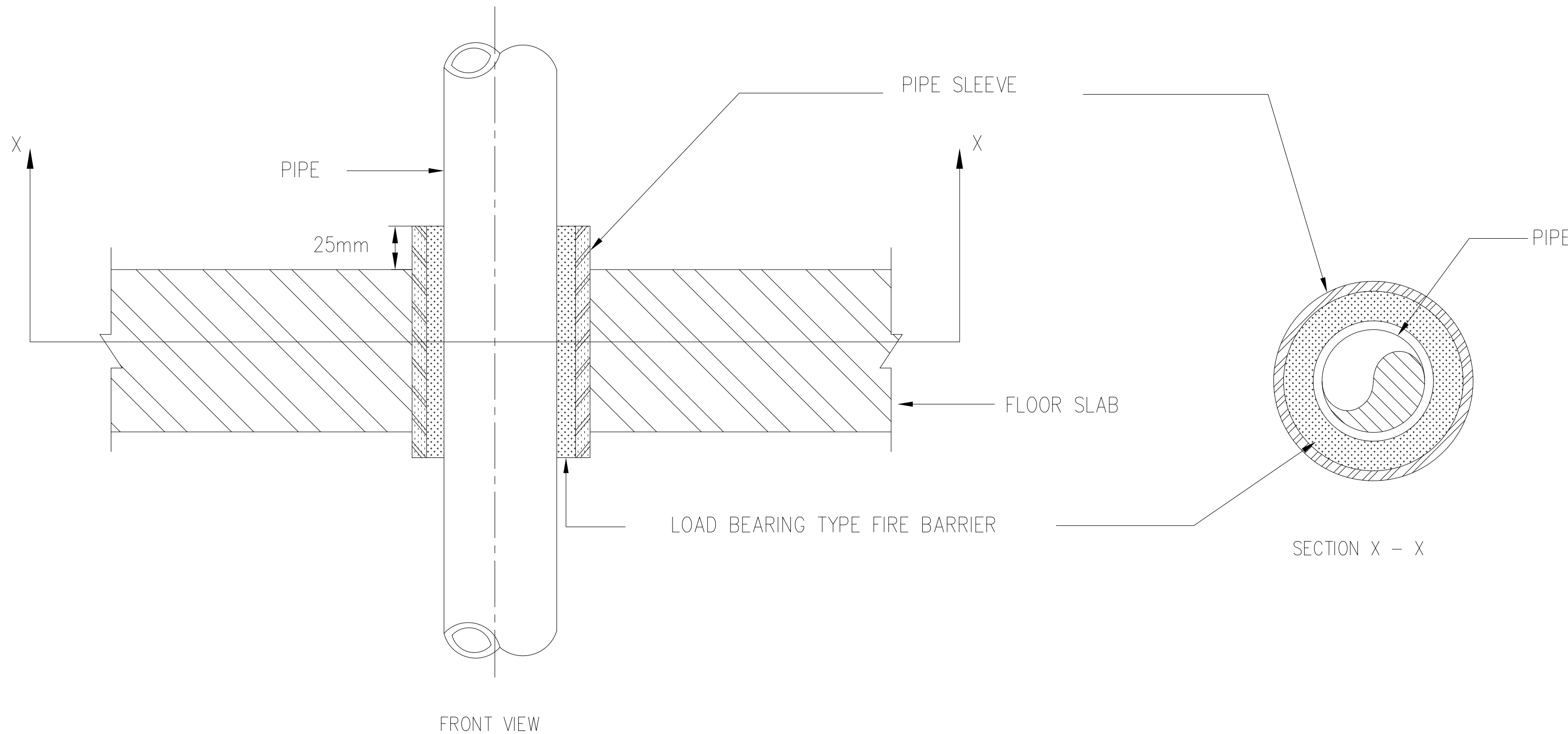
TAJUK LUKISAN: TERATAI BLOCK 2
TYPICAL INSTALLATION OF PLASTIC PIPE (ABS/HDPE/PPE/PVC/PPR PIPE) LAY IN CONCRETE

TARIKH:
20 09
24 Sep

SKALA:
N.T.S

NAIB CANSOLOR	: DATUK PROF. TS. DR. SHAHRIN SAHIB @ SAHIBUDDIN
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DILUKIS OLEH	: MAZIAN SAAD
PENGURUS PROJEK / DISEMAK	: MUHAMMAD ASYRIF ABD. AZIZ

INDEKS PINDAAN	
HELAIAN:	05

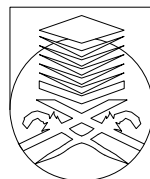


NOTES : SLEEVE SHALL BE SAME MATERIAL OF PIPE

DETAIL OF PIPE SLEEVE THROUGH FLOOR/SLAB

ARAS 2, 3, 4 & 5 - TANDAS STAF (L)

PROJEK:
CADANGAN KERJA-KERJA NAIK TARAF TANDAS DI ARAS 2, 3, 4 & 5, BLOK A, KOMPLEKS ILHAM, KOLEJ PENGAJIAN SENI KREATIF (KPSK), UTM SHAH ALAM.



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NO. RUJUKAN PROJEK:

200-PPII(BPI.5/3/25) MECH-CW

TAJUK LUKISAN: TERATAI BLOCK 2

**DETAIL OF PIPE
SLEEVE THROUGH FLOOR/SLAB**

TARIKH:

**20 09
24 Sep**

SKALA:

N.T.S

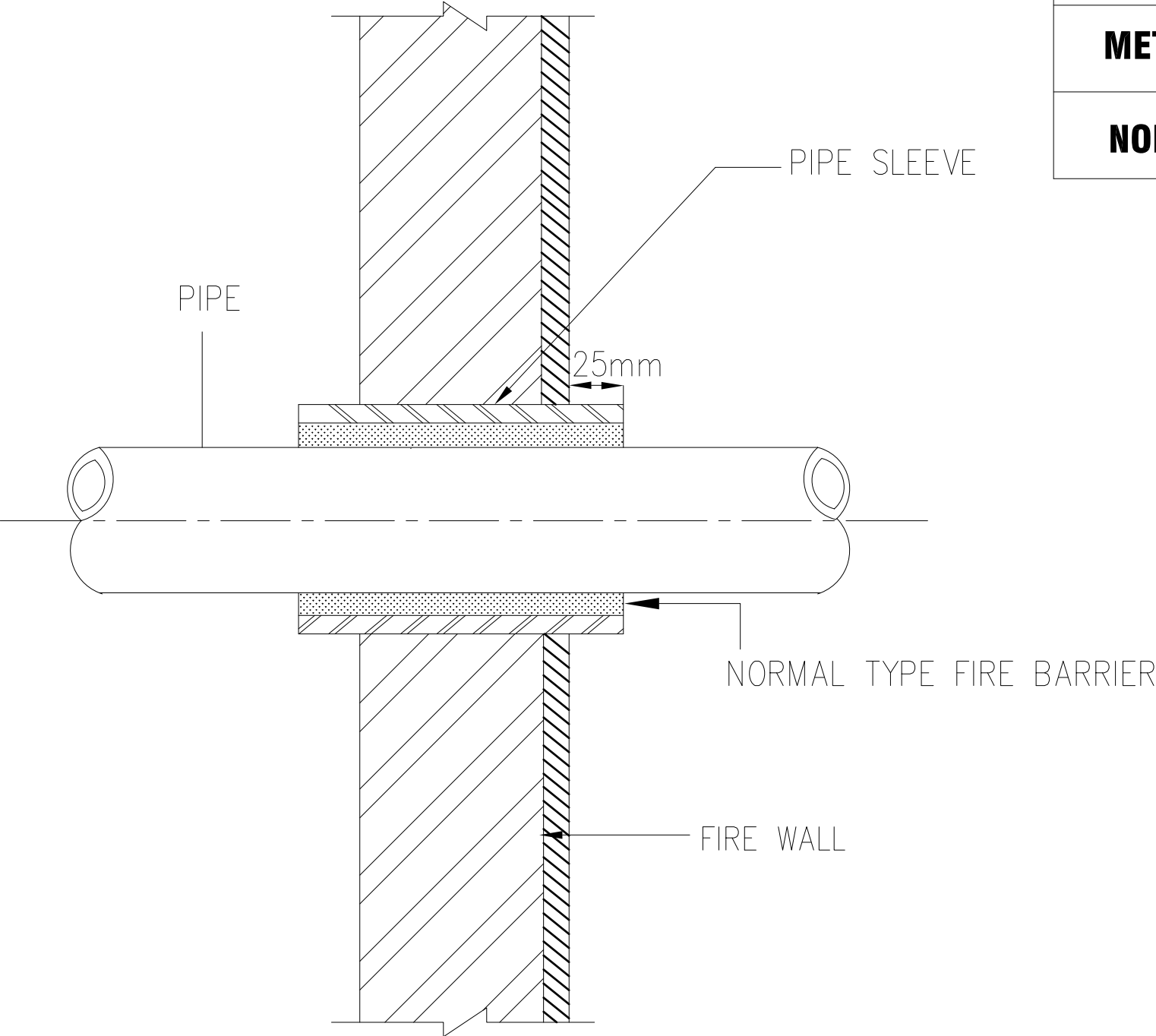
NAIB CANSOLOR : DATUK PROF. TS. DR. SHAHRIN SAHIB @ SAHIBUDDIN
PENOLONG NAIB CANSOLOR : PROF. TS. SR. DR MD. YUSOF HAMID
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KETUA BAHAGIAN PEMBANGUNAN INFRA: TS. MOHAMMED IZRAI ABD. RAZAK
ARKITEK : ZULFADLI MOHAMED SALLEH
DILUKIS OLEH : MAZIAN SAAD
PENGURUS PROJEK / DISEMAK : MUHAMMAD ASYRIF ABD. AZIZ

INDEKS PINDAAN

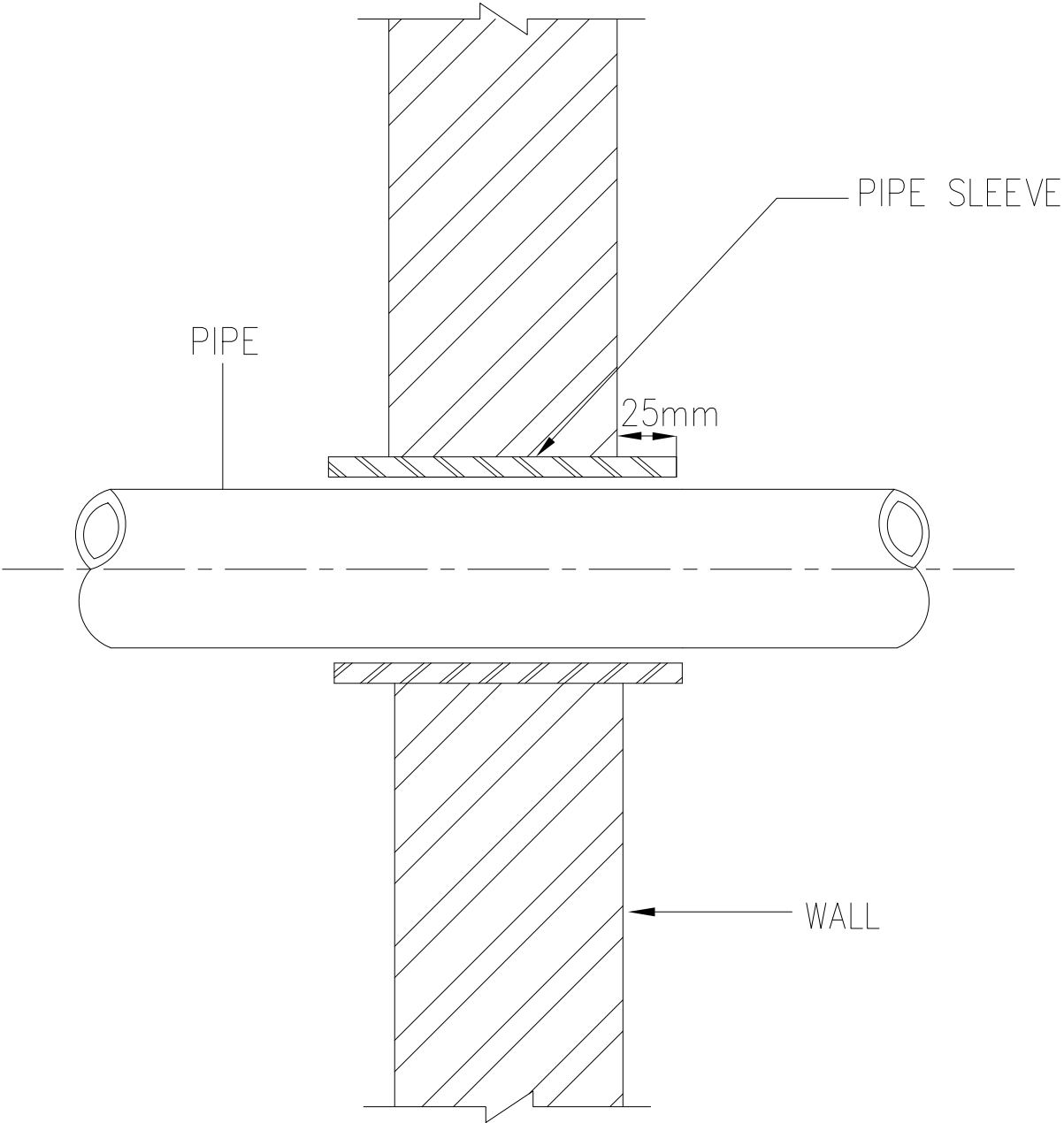
HELAIAN: **06**

RECOMMENDED PIPE SLEEVE MATERIAL

PIPE MATERIAL	PIPE SLEEVE MATERIAL
METAL	GALVANIZED IRON
NON-METAL	UPVC (HEAVY DUTY)



PIPE SLEEVE FOR PIPE THROUGH FIRE WALL



PIPE SLEEVE FOR PIPE THROUGH WALL



DETAIL OF PIPE SLEEVE THROUGH WALL

ARAS 2, 3, 4 & 5 - TANDAS STAF (L)

PROJEK:
CADANGAN KERJA-KERJA NAIK TARAF TANDAS DI ARAS
2, 3, 4 & 5, BLOK A, KOMPLEKS ILHAM, KOLEJ PENGAJIAN
SENI KREATIF (KPSK), UTM SHAH ALAM.



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NO. RUJUKAN PROJEK:
200-PPII(BPI.5/3/25) MECH-CW

TAJUK LUKISAN: TERATAI BLOCK 2
DETAIL OF PIPE
SLEEVE THROUGH WALL

TARIKH:
20 09
24 Sep

SKALA:
N.T.S

NAIB CANSOLOR : DATUK PROF. TS. DR. SHAHRIN SAHIB @ SAHIBUDDIN
PENOLONG NAIB CANSOLOR : PROF. TS. SR. DR MD. YUSOF HAMID
PENGARAH JABATAN PEMBANGUNAN INFRASTRUKTUR : IR. TS. AZMAN SAUBIRAN
KETUA BAHAGIAN PEMBANGUNAN INFRA : TS. MOHAMMED IZRAI ABD. RAZAK
ARKITEK : ZULFADLI MOHAMED SALLEH
DILUKIS OLEH : MAZIAN SAAD
PENGURUS PROJEK / DISEMAK : MUHAMMAD ASYRIF ABD. AZIZ

INDEKS PINDAAN

HELAIAN: 07