

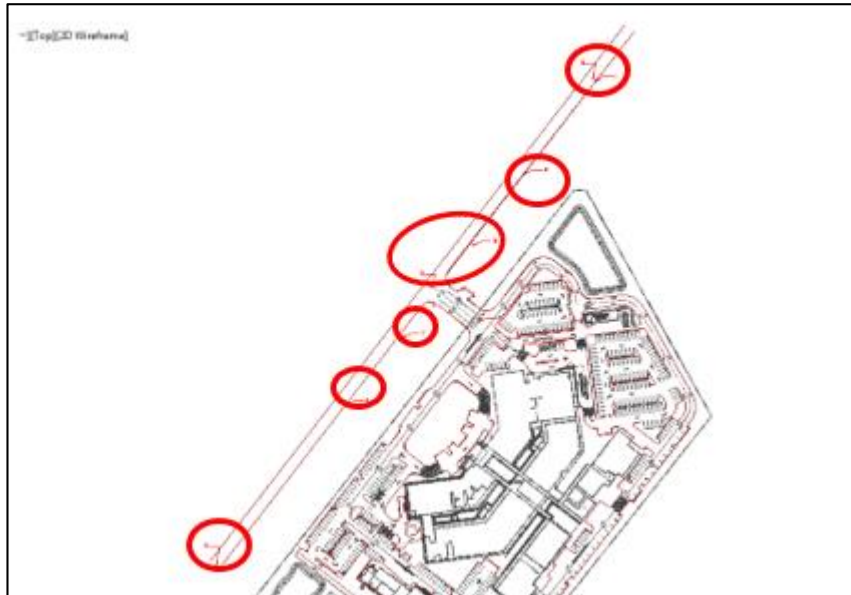
BAB 1: REKABENTUK AWALAN_JALAN MASUK

Create Alignment

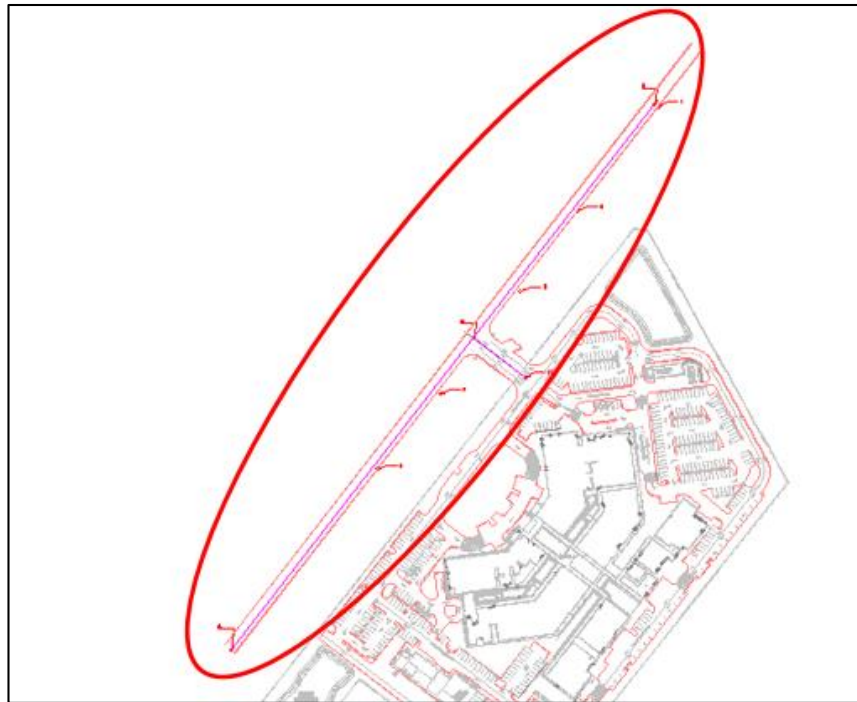
Fail latihan: C3D19_WIP_F0_03RD.dwg.

ARAHAN:

1. Open fail C3D19_WIP_F0_02EW > Data shortcut > RC > set working folder > 01 Hospital Latihan_Rekabentuk Awalan_Jalan Masuk 2. Create data shortcut > Pilih data shortcut seperti berikut ; i. 02EW_02_Rekabentuk Konsep ii. 02EW_08_Rekabentuk Awalan *Tutup fail 3. Folder latihan > 01 Hospital Latihan_Rekabentuk Awalan_Jalan Masuk > 01_WIP > Copy fail C3D19_WIP_F0_00TP > rename C3D19_WIP_F0_03RD 4. Open fail C3D19_WIP_F0_03RD > XREF > 01 Hospital Latihan_Rekabentuk Awalan_Jalan Masuk > 05_Incoming > jkrAR-01 (BMhpB1_19_001)_A1_wt01_(s) 190101 > check locate geographic data > ok 5. LA > enter > turn on layer 01_Align Mark Rajah 5a	6. Bina alignment mengikut kriteria seperti berikut; i. Name : 03RD_CL_01_Jalan Sedia Ada ii. Type: Centerline iii. Alignment label set : 01 No Label Set iv. Design Criteria tab : Check use criteria-based design (Fail :Arahan Teknik JKR 8_86_REVISED) v. Use design check set : uncheck vi. Lukis alignment tangent – tangent (no curve) dari center A ke B. 7. Bina alignment 03RD_CL_02_Jalan Masuk dari titik C ke D menggunakan kriteria yang sama. Rajah 7a
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Rajah 5a



Rajah 7a

BAB 1: REKABENTUK AWALAN_JALAN MASUK

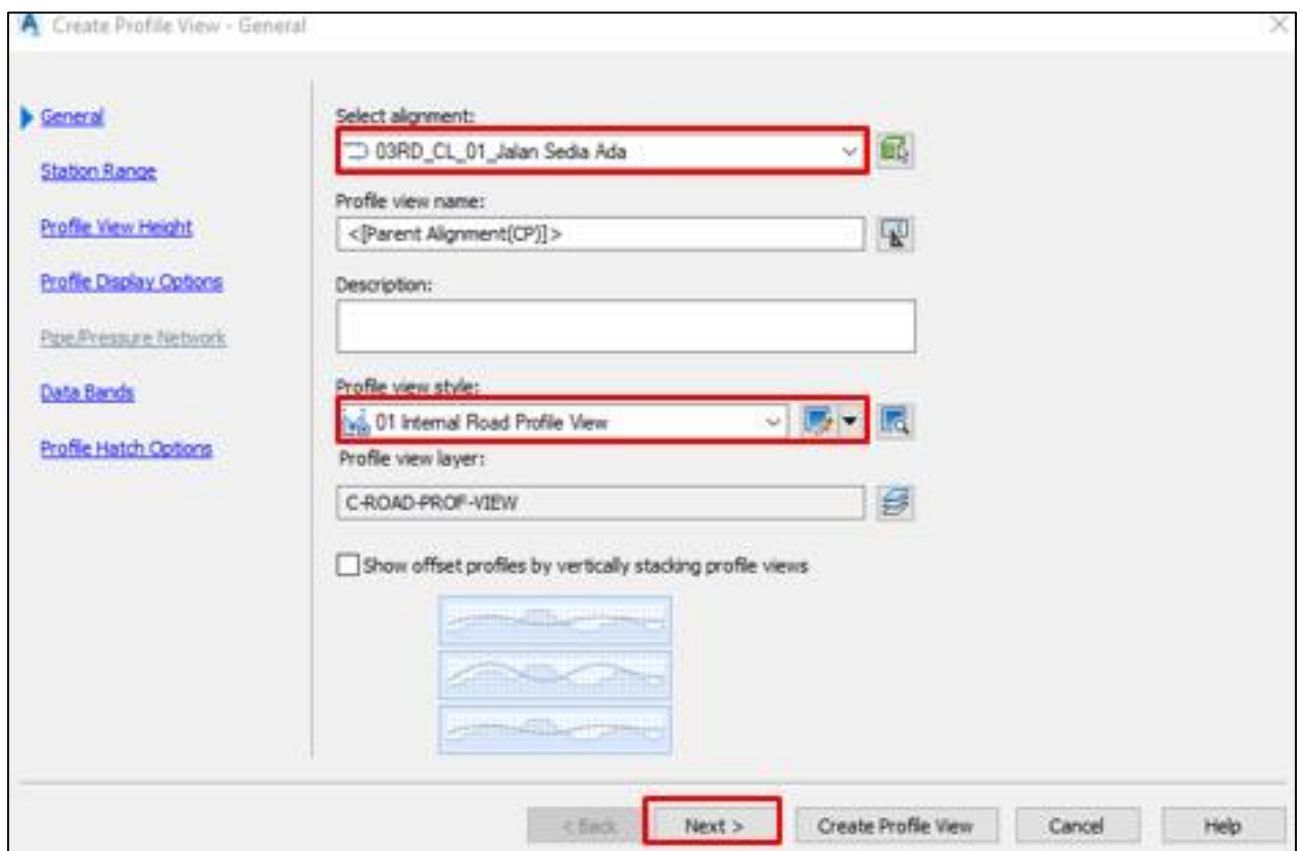
Create Profile

Fail latihan: C3D19_WIP_F0_03RD.dwg.

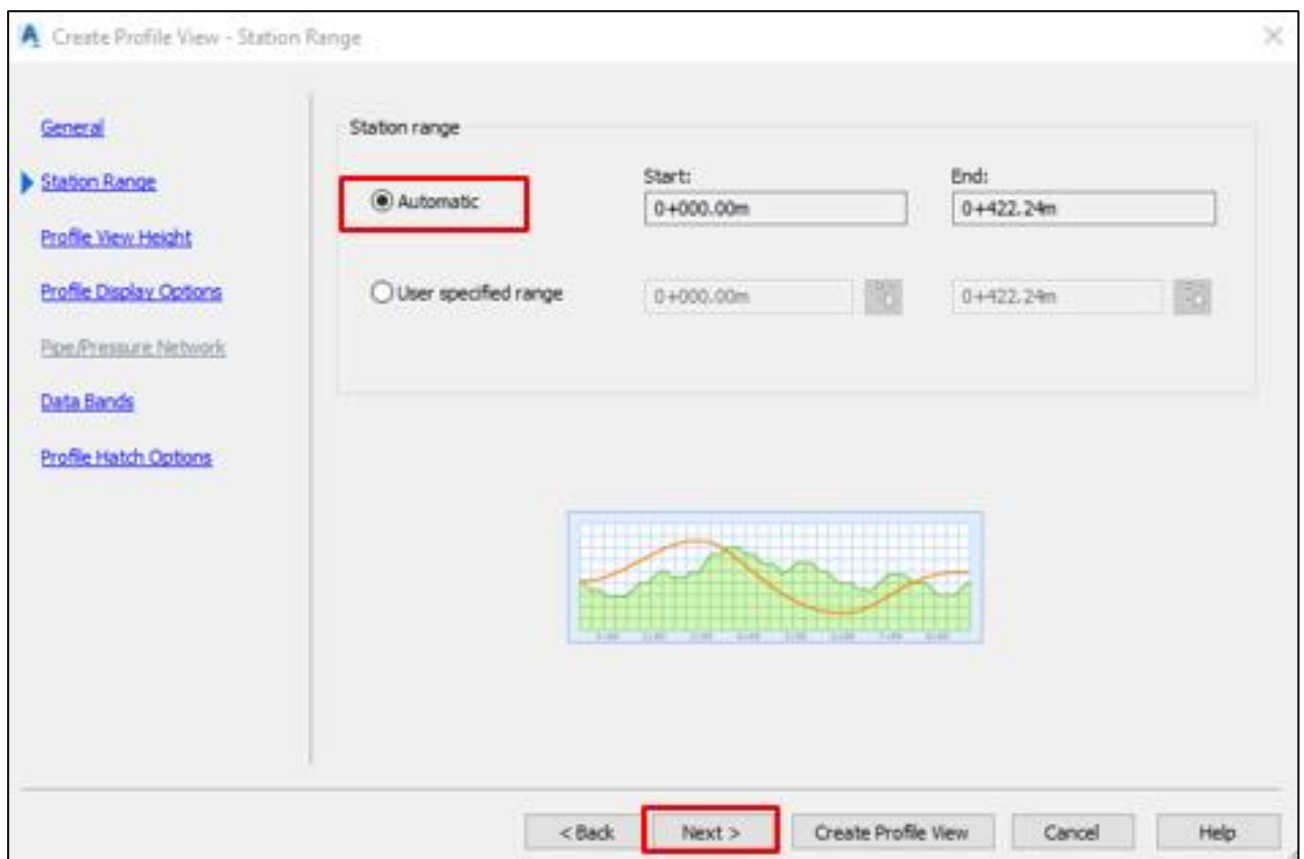
ARAHAN:

1. Data Shortcut > Surface > 02EW_02_Rekabentuk Konsep > RC > Create reference > isi maklumat pada jadual seperti berikut; i. Name: 02EW_02_Rekabentuk Konsep ii. Style: 01 No Display 2. Profile tools > Create surface profile seperti berikut: i. Alignment: 03RD_CL_01_jalan Sedia Ada ii. Select surface: 02EW_02_Rekabentuk Konsep > Add iii. Draw in profile view 3. Create Profile View seperti rajah berikut; Rajah 3a General Rajah 3b Station Range Rajah 3c Profile View Height Rajah 3d Profile Display Option Rajah 3e Data Band Rajah 3f Profile Hatch Options Rajah 3g Create profile view	4. Profile creation tools > klik tajuk profile > Create profile mengikut kriteria seperti berikut; i. Alignment: 03RD_CL_01_Jalan Sedia Ada ii. Name: Rekabentuk iii. Profile style: 02 Design Profile iv. Profile Label Set: 01 No Label v. Design Criteria tab: Check use criteria-based design (Fail: Arahan Teknik JKR 8_86_REVISED) vi. Use design check set: uncheck 5. Draw tangent – tangent (no curve) Rajah 5a 6. Ulang langkah 2 dan 3 untuk 03RD_CL_02_Jalan Masuk Rajah 6a 7. Klik Profile view jalan masuk > launch pad panel > expand > add crossings to profile view > select object (command bar) > klik garisan rekabentuk pada profile jalan sedia ada > enter. 8. Isi maklumat pada jadual Add Crossing to Profile View seperti berikut; Rajah 8a
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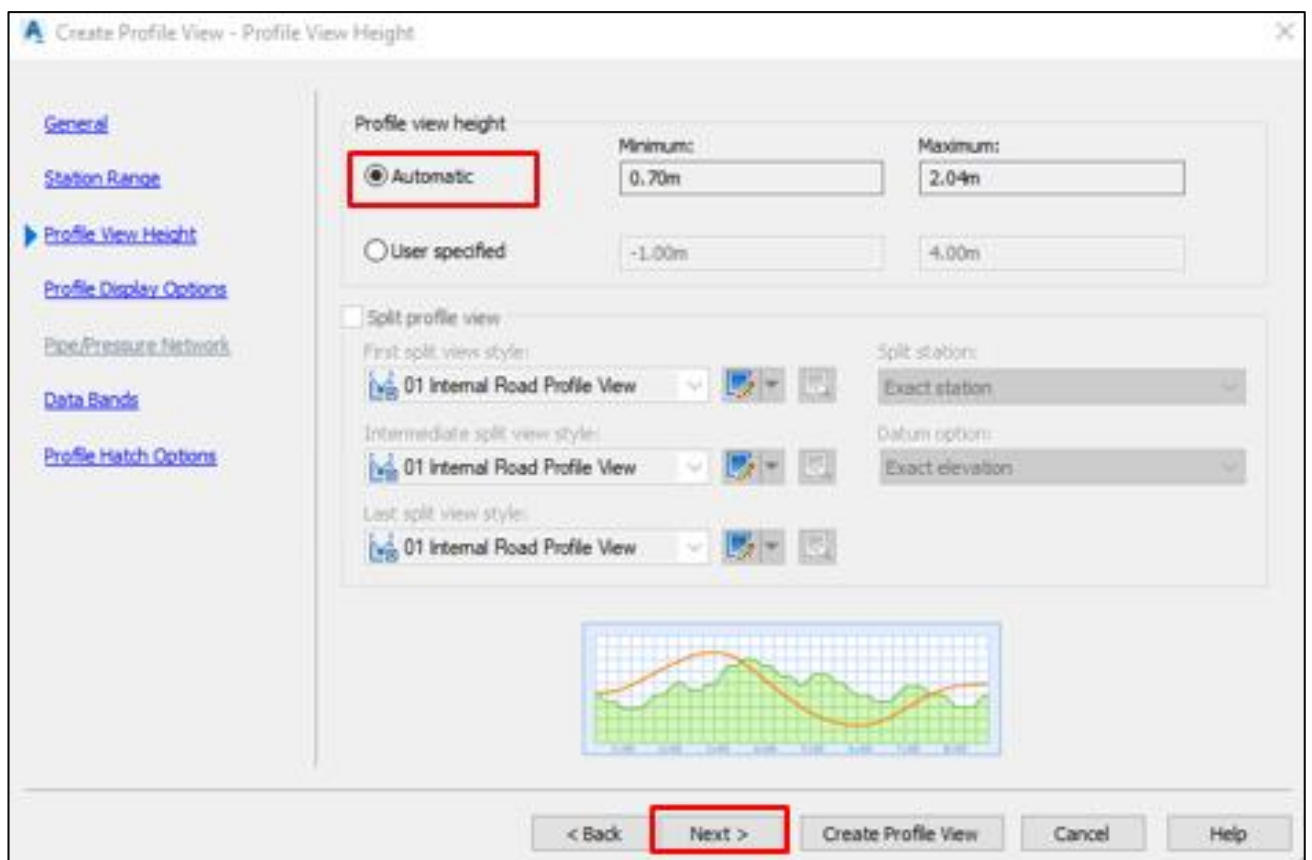
9. Profile creation tools > klik tajuk profile Jalan Masuk > Create profile mengikut kriteria seperti berikut; i. Alignment: 03RD_CL_02_Jalan Masuk ii. Name: Rekabentuk iii. Profile style: 02 Design Profile iv. Profile Label Set: 01 No Label v. Design Criteria tab: Check use criteria-based design (Fail: Arahan Teknik JKR 8_86_REVISED) vi. Use design check set: uncheck > Ok	10. Draw tangents rujuk rajah 10a + Adjust platform (Profile grid view) i. Grade out = 3.2 11. Insert PVI > klik pada intersection point Rajah 11a
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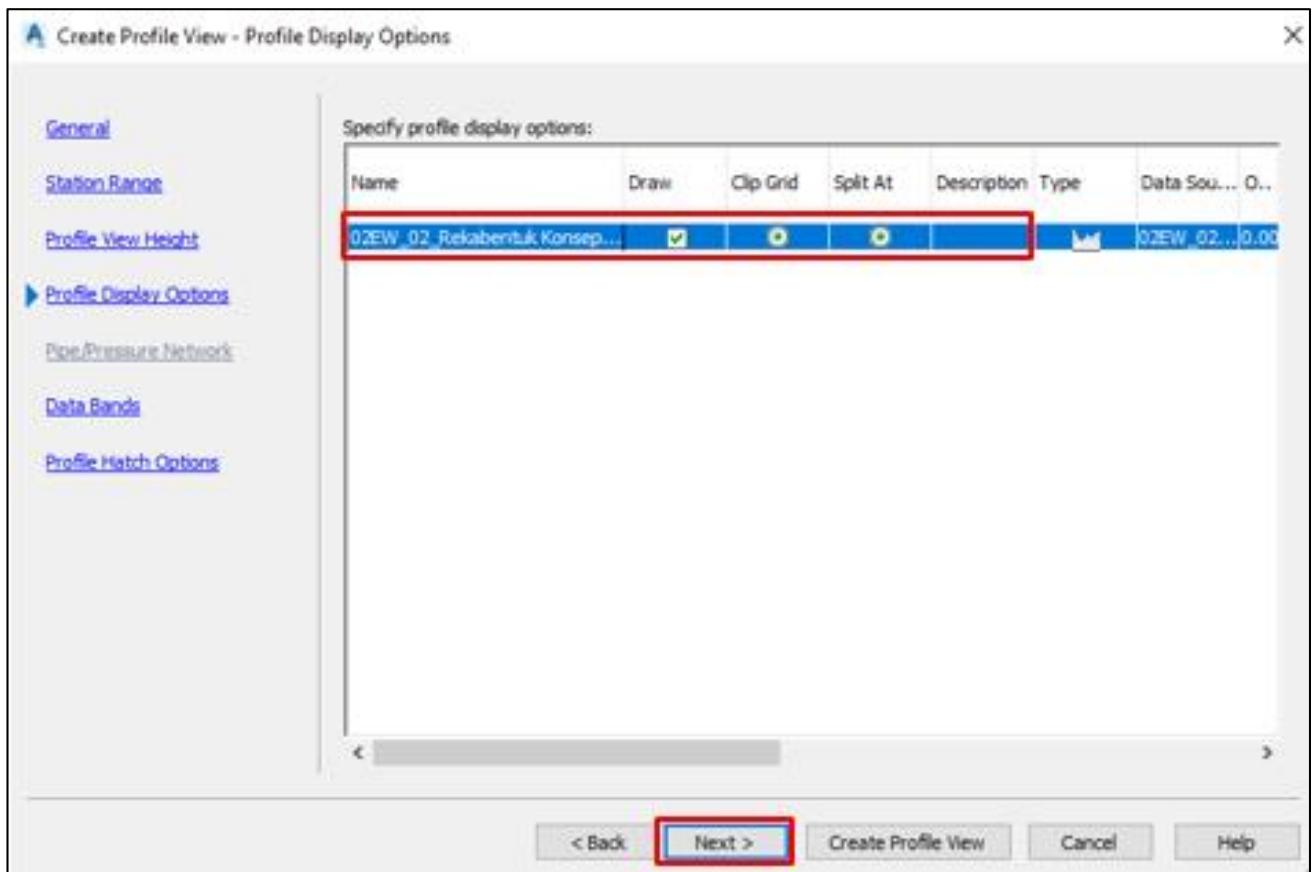
Rajah 3a



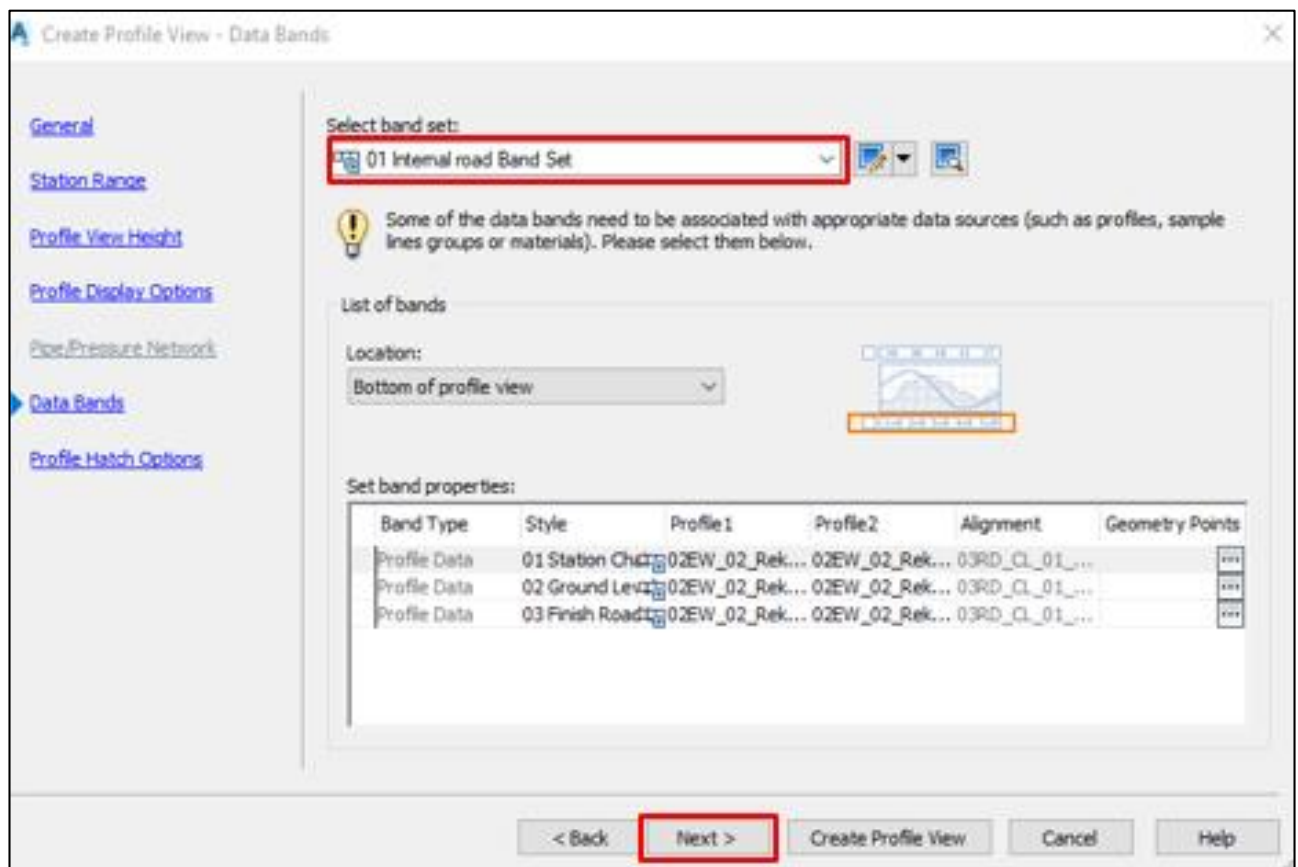
Rajah 3b



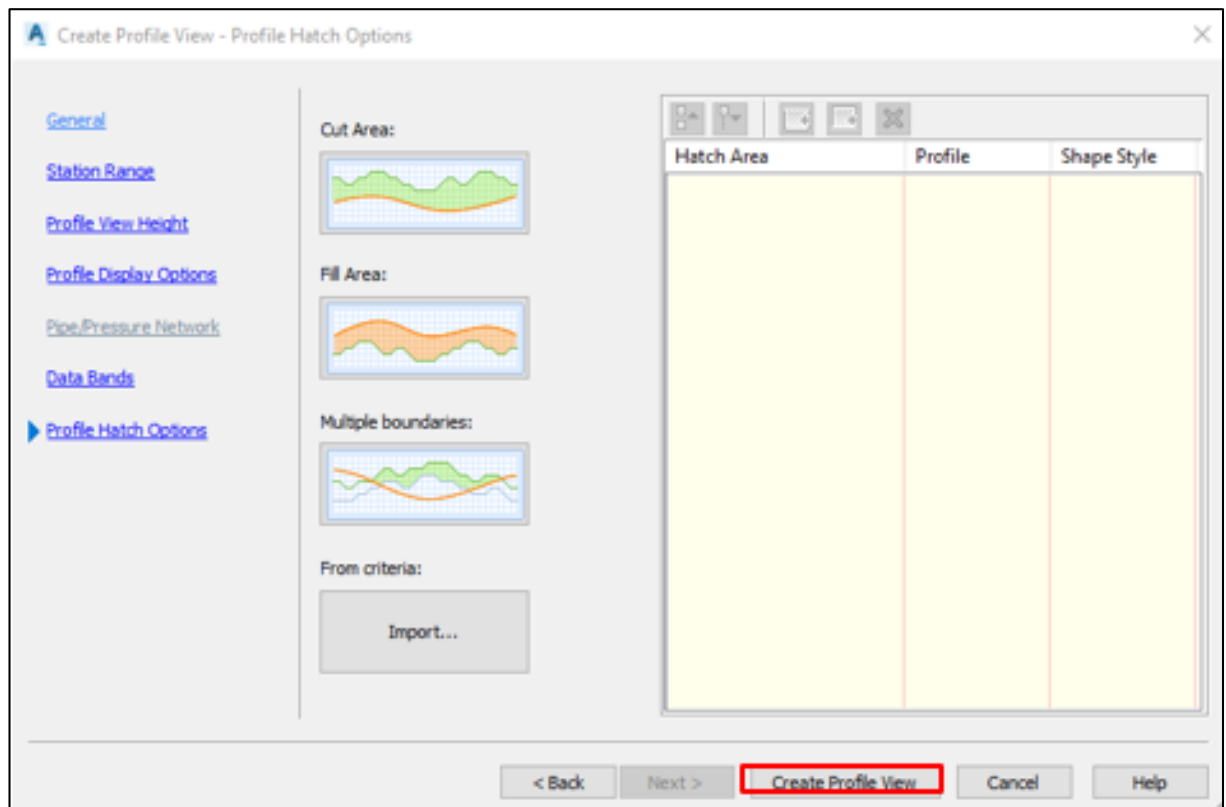
Rajah 3c



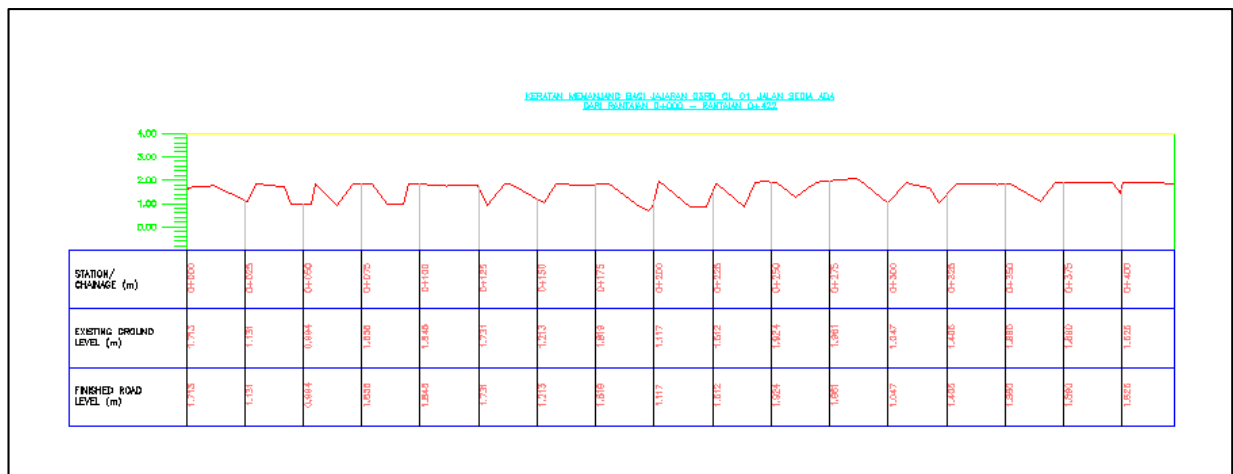
Rajah 3d



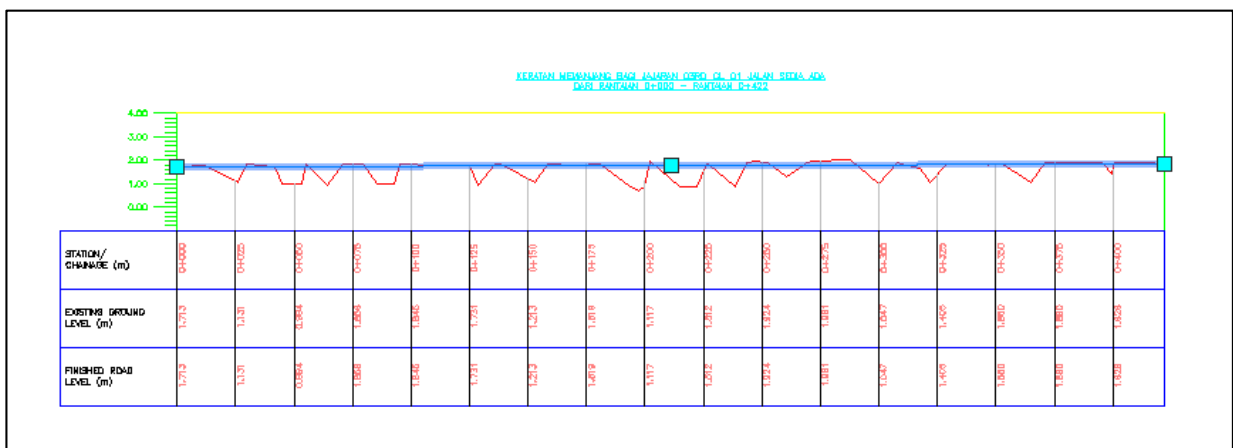
Rajah 3e



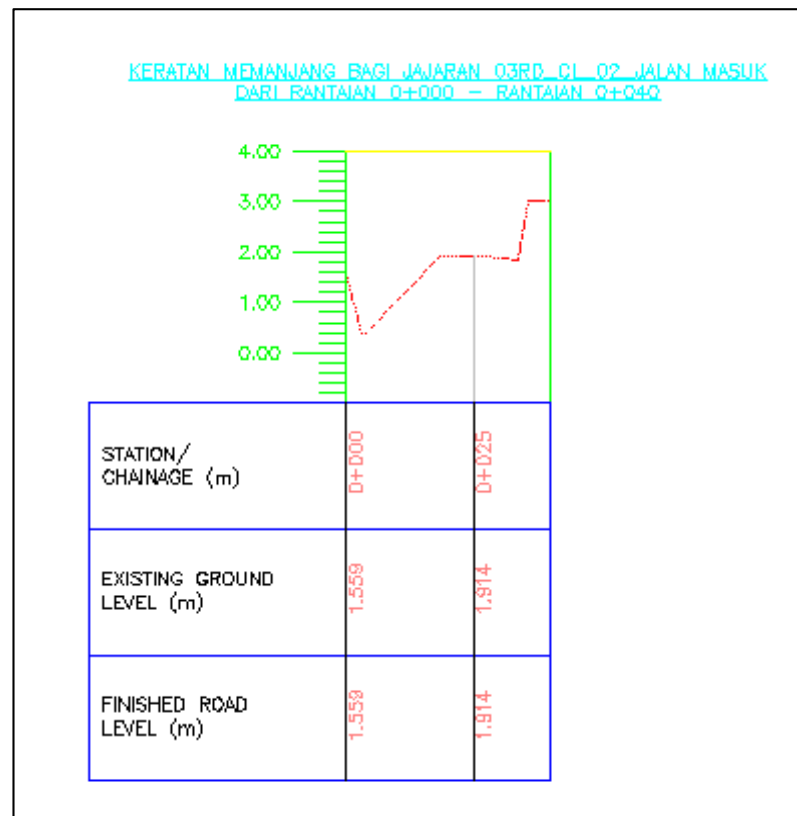
Rajah 3f



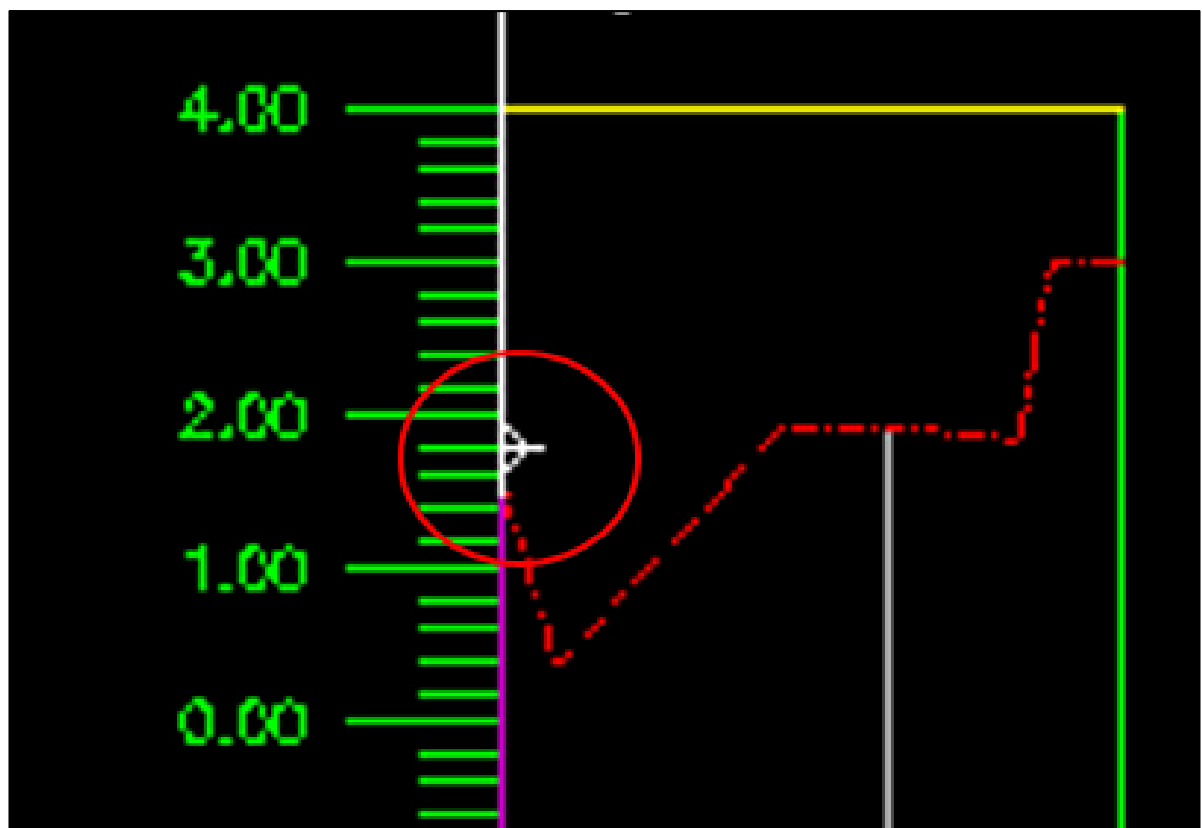
Rajah 3g



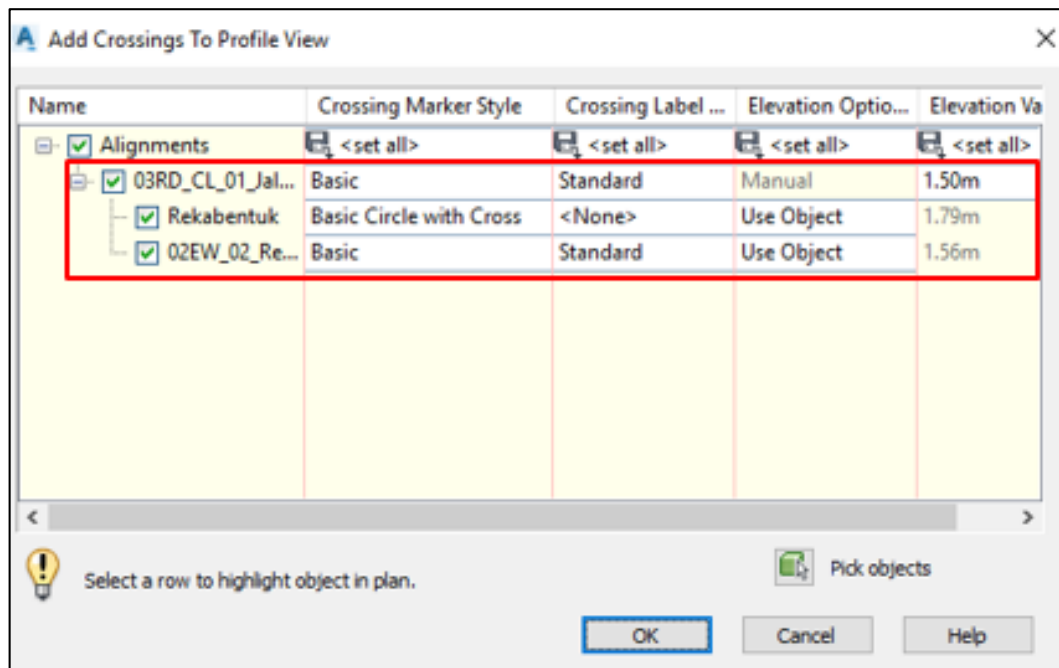
Rajah 5a



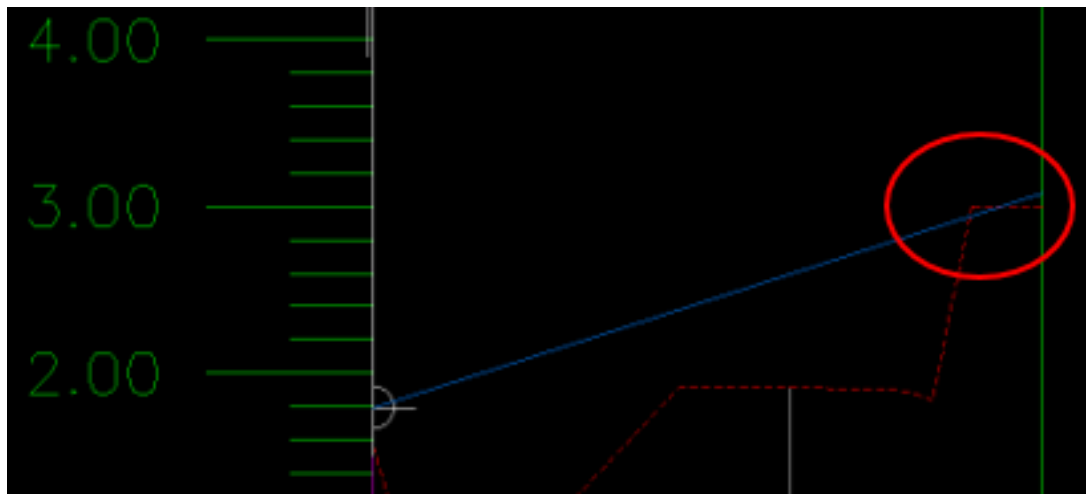
Rajah 6a



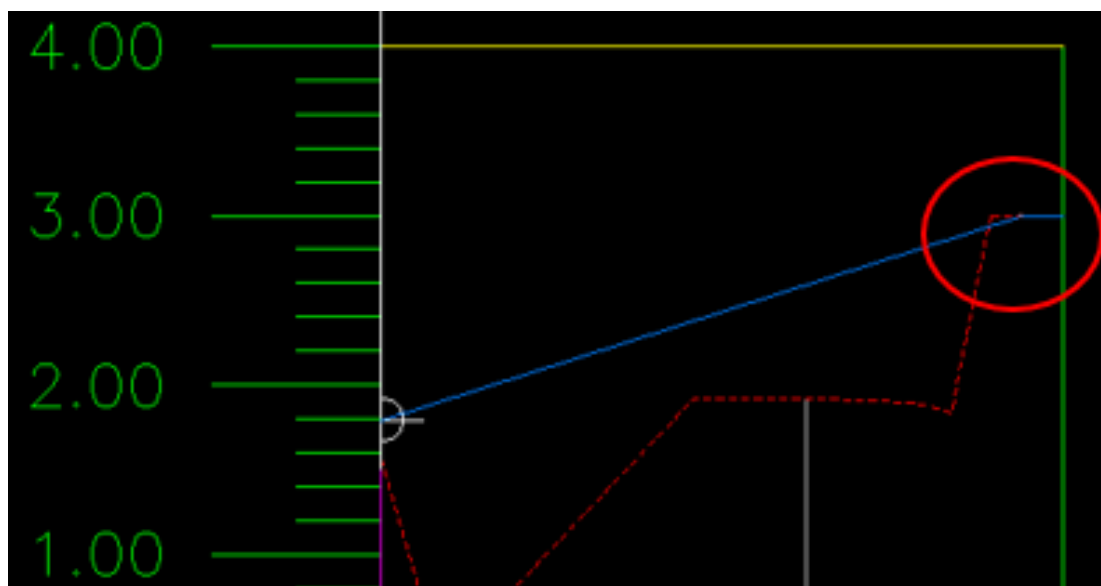
Rajah 7a



Rajah 8a



Rajah 10a



Rajah 11a

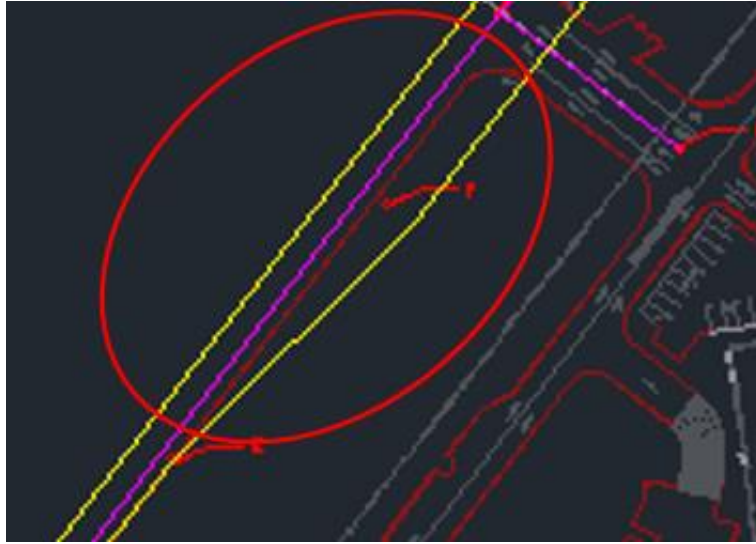
BAB 1: REKABENTUK AWALAN_JALAN MASUK

Offset Alignment

Fail latihan: C3D19_WIP_F0_03RD.dwg.

ARAHAN:

1. Alignment tools > create offset alignment > 03RD _CL_01_Jalan Sedia Ada > enter > Isi maklumat jadual seperti berikut: i. Offset Name template: 03RD _OFF_01_Jalan Sedia Ada_<[Side]> ii. General tab -Alignment style: 02 Kerb Alignment iii. Create offset Profile tab -Parent profile : Rekabentuk -Cross Slope : -2.5 2. Toolspace > prospector > alignment > offset alignment > 03RD _OFF_01_Jalan Sedia Ada_Right > RC > Properties > tukar nama 03RD _OFF_02_Jalan Sedia Ada_Right 3. Adjust alignment 4. Create Offset alignment 03RD _OFF_02_Jalan Sedia Ada_Right Rajah 4a Rajah 4b	5. Create offset alignment untuk jalan masuk seperti jadual berikut. Rajah 5a Rajah 5b Rajah 5c 6. Alignment > create connected alignment > first alignment > 03RD _OFF_02_Jalan Sedia Ada_Right > second alignment > 03RD _OFF_02_Jalan Masuk Kanan > location > luar alignment 7. Isi maklumat table create alignment connected seperti berikut: Rajah 7a Rajah 7b Rajah 7c 8. Ulang langkah 6 dan 7 untuk 03RD _OFF_02_Jalan Masuk Kiri
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Rajah 4a



Rajah 4b

Name Template

Name formatting template

Property fields:

Next Counter ▼ Insert

Name:

03RD_OFF_<[Next Counter]>_Jalan Masuk_<[Side]>

Incremental number format

Number style:

01, 02, 03... ▼

Starting number: 3 Increment value: 1

OK Cancel Help

Rajah 5a

Create Offset Alignments

Alignment to offset from:

03RD_CL_02_Jalan Masuk ▼ 📁

Offsets name template:

03RD_OFF_<[Next Counter]>_Jalan Masuk_<[Side]> 📁

Station range

☒ From start ☒ To end

0+000.00m 📁 0+040.19m 📁

No. of offsets on left: 1 No. of offsets on right: 1

Incremental offset on left: 3.000m Incremental offset on right: 3.000m

General **Widening Criteria** **Create Offset Profile**

☒ Create profile for offset alignment

Parent profile:

Rekabentuk (1) ▼ 📁

Superimpose onto profile view:

<none> ▼ 📁

Cross slope from parent profile:

2.50% 📁

Profile name:

<[Alignment Name(CP)]> - <[Offset Value(P3)RN|Sn|OF|AP] 📁

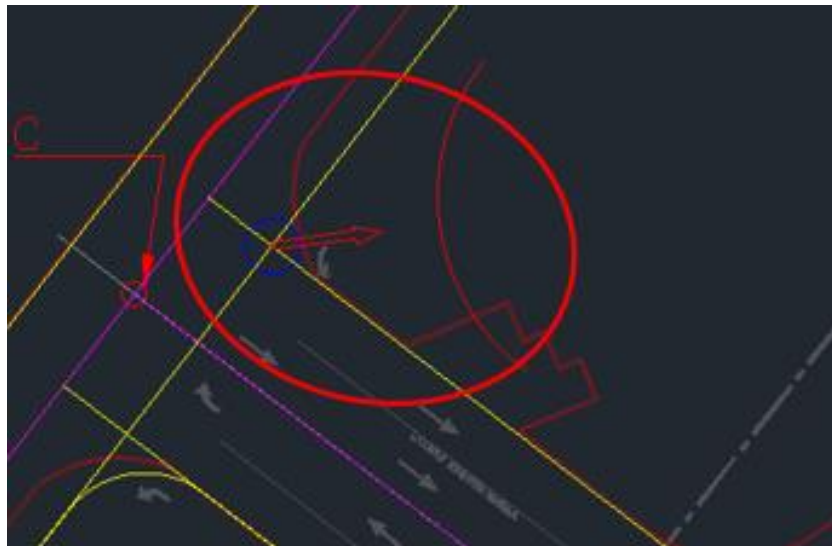
Profile style:

01 Existing Ground Profile ▼ 📁 🔍

Rajah 5b



Rajah 5c



Rajah 6a

Name Template

Name formatting template

Property fields:

Next Counter ▼ Insert

Name:

03RD_CON_<Next Counter>_Simpan Masuk Right

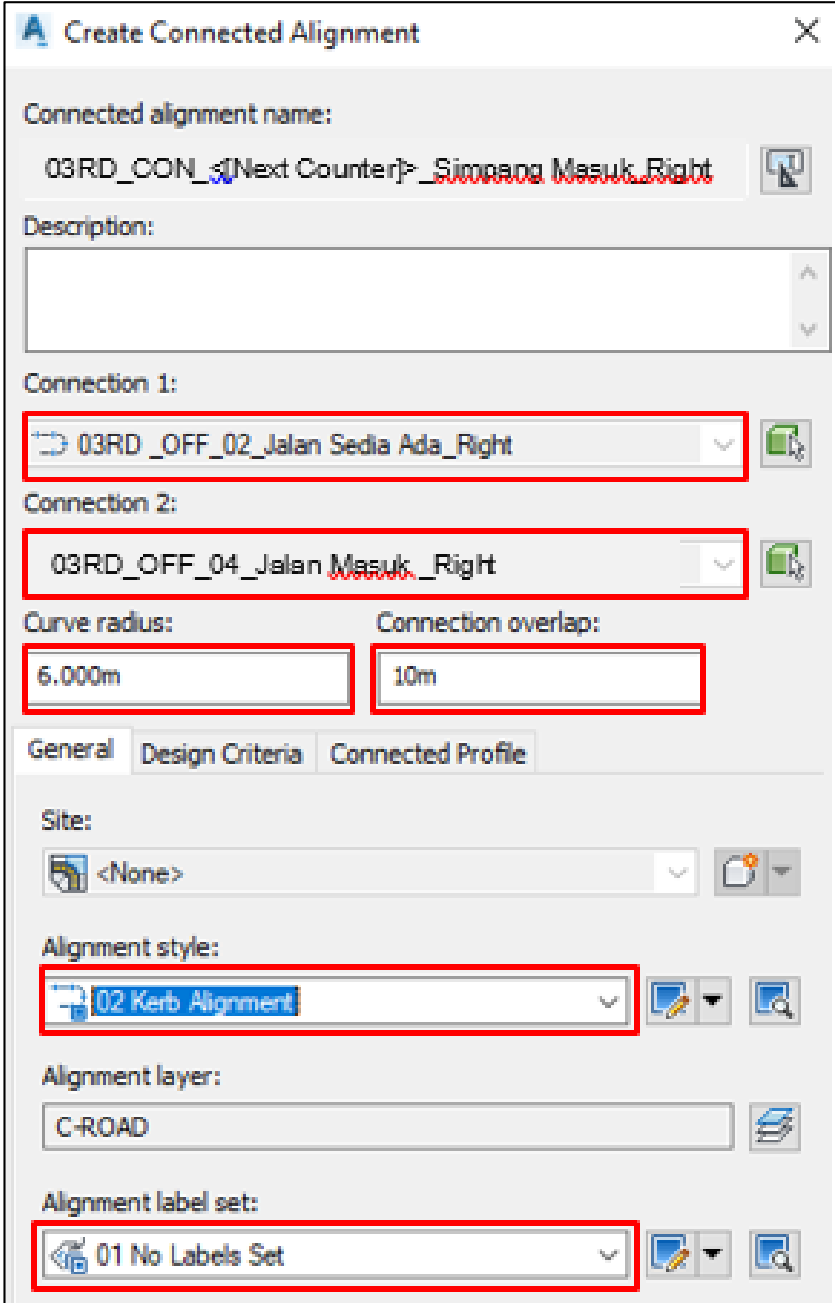
Incremental number format

Number style:

01, 02, 03... ▼

Starting number: 1 Increment value: 1

Rajah 7a



Create Connected Alignment

Connected alignment name:
03RD_CON_<(Next Counter)>_Simpang Masuk_Right

Description:

Connection 1:
03RD_OFF_02_Jalan Sedia Ada_Right

Connection 2:
03RD_OFF_04_Jalan Masuk_Right

Curve radius: 6.000m Connection overlap: 10m

General Design Criteria Connected Profile

Site:
<None>

Alignment style:
02 Kerb Alignment

Alignment layer:
C-ROAD

Alignment label set:
01 No Labels Set

Rajah 7b

BAB 1: REKABENTUK AWALAN_JALAN MASUK

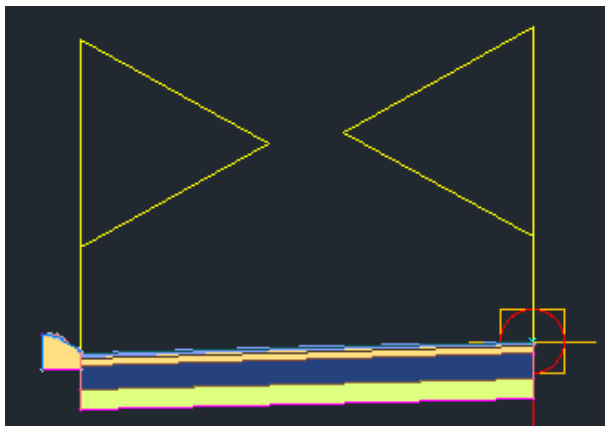
Create Corridor

Fail latihan: C3D19_WIP_F0_03RD.dwg.

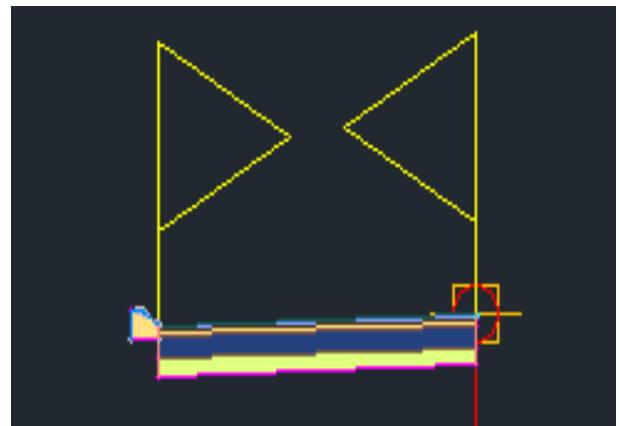
ARAHAN:

1. Tool palette > rc > new palette > rename > Latihan > RC > Import sub assemblies > 01 Hospital Latihan_Rekabentuk Awalan_Jalan Masuk > 06_Resources > 04 Family > C3D18_rd-sa_Semi Mountable Kerbs Type SM 1 > open > ok 2. Create assembly i. Name: 03RD_01_Simpang Masuk_Turapan Penuh ii. Assembly style: Basic iii. Code Set Style: 02 JKR All Codes > ok 3. Tool palette > lanes > LaneSuperelevationAOR > Ubah parameter seperti berikut; i. Side: Left ii. Default slope: -2.50% iii. Pave1 Depth: 0.040m iv. Pave2 Depth: 0.060m v. Base Depth: 0.200m vi. Sub-base Depth: 0.150m 4. Tool palette > Semi Mountable Kerbs Type SM 1 > Klik pada hujung jalan. Rajah 4a 5. Copy kedua-dua komponen > mirror > klik assembly 03RD_01_Simpang Masuk_Turapan Penuh	6. Create assembly i. Name: 03RD_02_Simpang Masuk_Turapan Sisi Kiri ii. Assembly style: Basic iii. Code Set Style: 02 JKR All Codes > ok 7. Copy bahagian kiri subassembly 03RD_01_Simpang Masuk_Turapan Penuh > Letakkan pada assembly 03RD_02_Simpang Masuk_Turapan Sisi Kiri. Rajah 7a 8. Create assembly i. Name: 03RD_03_Simpang Masuk_Kerb Kanan ii. Assembly style: Basic iii. Code Set Style: 02 JKR All Codes > ok 9. Tool palette > Semi Mountable Kerbs > letakkan pada bahagian kiri assembly 10. Tool palette > LaneSuperelevationAOR > tukar parameter jalan seperti berikut; i. Side: Right ii. Default slope: 2.50% iii. Pave1 Depth: 0.040m iv. Pave2 Depth: 0.060m v. Base Depth: 0.200m vi. Sub-base Depth: 0.150m
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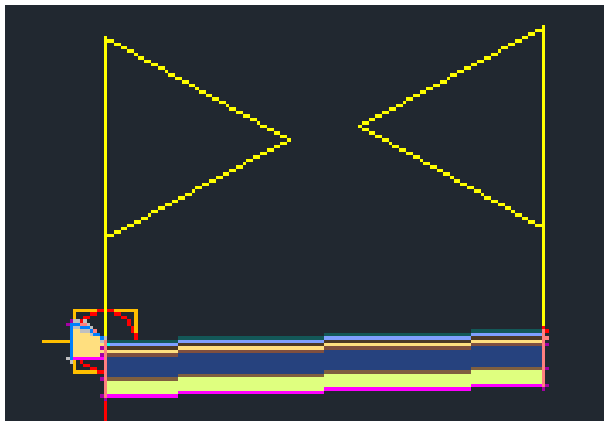
11. Create assembly i. Name: 03RD_04_Simpang Masuk_Kerb Kiri ii. Assembly style: Basic iii. Code Set Style: 02 JKR All Codes > ok	12. Klik 03RD_03_Simpang Masuk_Kerb Kanan > mirror > Letakkan pada assembly 03RD_04_Simpang Masuk_Kerb Kiri
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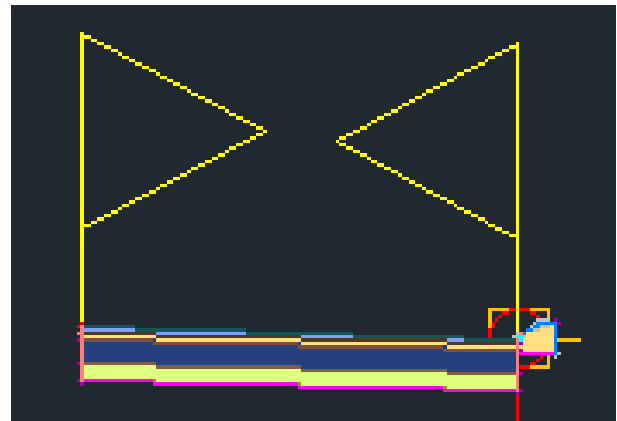
Rajah 4a



Rajah 7a



Rajah 10



Rajah 12

BAB 1: REKABENTUK AWALAN_JALAN MASUK

Create Corridor

Fail latihan: C3D19_WIP_F0_03RD.dwg.

ARAHAN:

- Corridor > Create corridor > isi jadual Create corridor seperti di bawah; Name: 03RD_01_Simpang Masuk Corridor Style: 01 JKR General Corridor Alignment: 03RD_CL_01_Jalan Sedia Ada Profile: Rekabentuk Assembly: 03RD_01_Simpang Masuk_Turapan Penuh Set baseline and region parameters: Check > ok - Set frequency Along Tangents: 10.000m Curve increment: 10.000m Along spirals: 10.000m Along vertical curves: 10.000m - Target mapping Rajah 3a - Rebuild corridor - Klik Corridor > split region > Klik pada corridor > esc > Jarakkan corridor - Klik kedua – dua lengkung dan samakan alignment jalan sedia ada > Esc. Rajah 6a	- Prospector tab > Corridors > 03RD_01_Simpang Masuk > RC > properties. - Parameter tab > RG - 03RD_01_ Simpang Masuk_Turapan Penuh - (2) > RC > insert region after > assembly > 03RD_02_Simpang Masuk_Turapan Sisi Kiri > ok - Klik RG - 03RD_02_Simpang Masuk_Turapan Sisi Kiri - (1) > Set frequency Along Tangents: 10.000m Curve increment: 10.000m Along spirals: 10.000m Along vertical curves: 10.000m - Target mapping Rajah 10a - Rebuild corridor > object viewer - Prospector tab > Corridors > 03RD_01_Simpang Masuk > RC > properties - Add baseline seperti berikut; - Baseline type: Alignment and profile - Alignment: 03RD_CL_02_Jalan Masuk > ok - BL- 03RD_CL_02_Jalan Masuk – (4) > Vertical baseline > select a profile > Rekabentuk (1) > ok.
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15. BL - 03RD_CL_02_Jalan Masuk - (6) > RC > Add region > Assembly > 03RD_01_Simpang Masuk_Turapan Penuh > ok 16. Set frequency i. Along Tangents: 10.000m ii. Curve increment: 10.000m iii. Along spirals: 10.000m iv. Along vertical curves: 10.000m 17. Target mapping Rajah 17a 18. Adjust alignment Jalan masuk Rajah 18a 19. Prospector tab > Corridors > 03RD_01_Simpang Masuk > RC > properties 20. Add baseline seperti berikut; i. Baseline type: Alignment and profile ii. Alignment: Klik lengkung jalan masuk kiri 21. BL- 03RD_CON_01_Simpang Masuk _Kiri - (5) > Vertical baseline >select a profile > 03RD_CON_01_Simpang Masuk _Kiri > ok 22. BL- 03RD_CON_01_Simpang Masuk _Kiri - (5) > Rc > Add region > Assembly > 03RD_04_Simpang Masuk_Kerb Kiri > ok	23. Set frequency i. Along Tangents: 1.000m ii. Curve increment: 1.000m iii. Along spirals: 1.000m iv. Along vertical curves: 1.000m 24. End station > klik point C 25. Target mapping Rajah 25a 26. RG - 03RD_04_Simpang Masuk_Kerb Kiri – (3) > RC > Insert region after > assembly > 03RD_04_Simpang Masuk_Kerb Kiri > ok 27. Set frequency i. Along Tangents: 1.000m ii. Curve increment: 1.000m iii. Along spirals: 1.000m iv. Along vertical curves: 1.000m 28. Target mapping Rajah 28a Rajah 28b 29. Ok > Rebuild corridor. Ulang langkah yang sama (16 hingga 25) untuk Jalan Masuk sebelah kanan. Rajah 29a
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Target Mapping

Corridor name:
03RD_01_Simpang Masuk

Assembly name: 03RD_01_Simpang Masuk_Turapan Penuh Start Station: 0+000.00 End Station: 0+422.24

Target	Object Name	Subassembly	Assembly Gr...
Surfaces	<Click here to set all>		
Width or Offset Targets			
Width Target	03RD_OFF_01_Jalan Sedia Ada_Left	LaneSuperele...	Left
Width Target	03RD_OFF_02_Jalan Sedia Ada_Right	LaneSuperele...	Right
Slope or Elevation Targets			
Outside Elevation Target	03RD_OFF_01_Jalan Sedia Ada_Left-03RD_OFF_01_Jalan Se...	LaneSuperele...	Left
Outside Elevation Target	03RD_OFF_02_Jalan Sedia Ada_Right-03RD_OFF_01_Jalan S...	LaneSuperele...	Right

Rajah 3a



Rajah 5a



Rajah 6a

Target Mapping

Corridor name:
03RD_01_Simpang Masuk

Assembly name: 03RD_02_Simpang Masuk_Turapan Sisi Kiri Start Station: 0+218.45 End Station: 0+265.37

Target	Object Name	Subassembly	Assembly Gr...
Surfaces	<Click here to set all>		
Width or Offset Targets			
Width Target	03RD_OFF_01_Jalan Sedia Ada_Left	LaneSuperele...	Left
Slope or Elevation Targets			
Outside Elevation Target	03RD_OFF_01_Jalan Sedia Ada_Left-03RD_OFF_01_Jalan Se...	LaneSuperele...	Left

Rajah 10a

Target Mapping

Corridor name:
03RD_01_Simpang Masuk

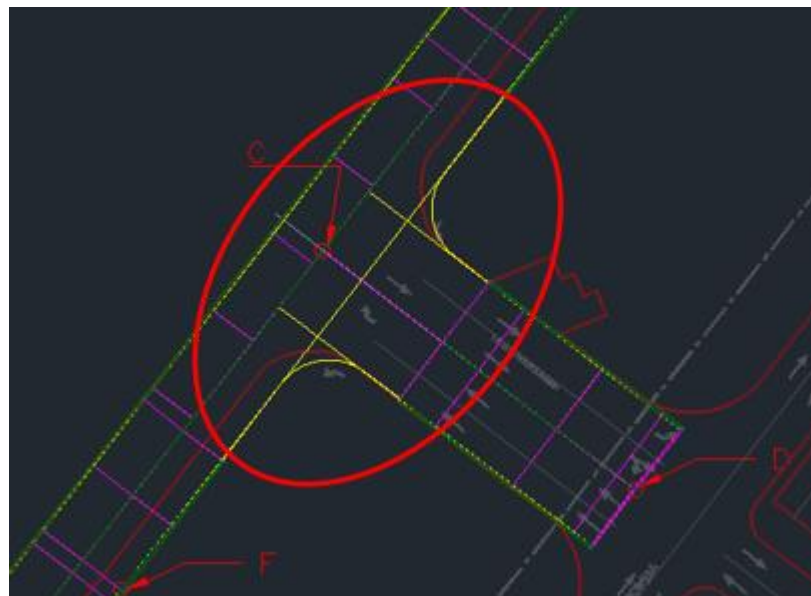
Assembly name:
03RD_01_Simpang Masuk_Turapan Penuh

Start Station:
0+000.00

End Station:
0+040.19

Target	Object Name	Subassembly	Assembly Gr...
Surfaces	<Click here to set all>		
Width or Offset Targets			
Width Target	03RD_OFF_03_Jalan Sedia Ada_Left	LaneSuperele...	Left
Width Target	03RD_OFF_04_Jalan Sedia Ada_Right	LaneSuperele...	Right
Slope or Elevation Targets			
Outside Elevation Target	03RD_OFF_03_Jalan Sedia Ada_Left-03RD_OFF_03_Jalan Se...	LaneSuperele...	Left
Outside Elevation Target	03RD_OFF_04_Jalan Sedia Ada_Right-03RD_OFF_04_Jalan S...	LaneSuperele...	Right

Rajah 17



Rajah 18a

Target Mapping

Corridor name:
03RD_01_Simpang Masuk

Assembly name:
03RD_04_Simpang Masuk_Kerb Kiri

Start Station:
0+000.00

End Station:
0+015.25

Target	Object Name	Subassembly	Assembly Gr...
Surfaces	<Click here to set all>		
Width or Offset Targets			
Width Target	03RD_CL_01_Jalan Sedia Ada	LaneSuperele...	Left
Slope or Elevation Targets			
Outside Elevation Target	03RD_CL_01_Jalan Sedia Ada-Rekabentuk	LaneSuperele...	Left

Rajah 25a

Target Mapping

Corridor name: 03RD_01_Simpang Masuk

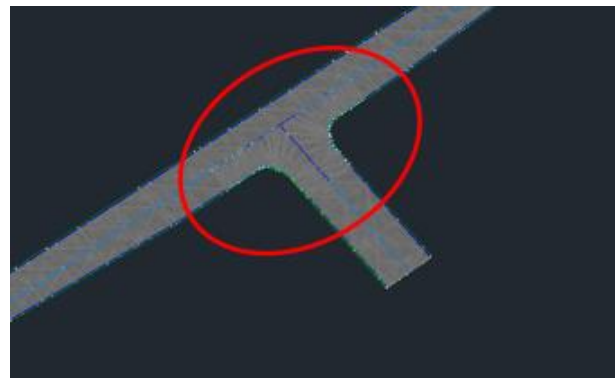
Assembly name: 03RD_04_Simpang Masuk_Kerb Kiri Start Station: 0+015.25 End Station: 0+023.86

Target	Object Name	Subassembly	Assembly Gr...
Surfaces	<Click here to set all>		
Width or Offset Targets			
Width Target	03RD_CL_02_Jalan Masuk	LaneSuperele...	Left
Slope or Elevation Targets			
Outside Elevation Target	03RD_CL_02_Jalan Masuk-Rekabentuk (1)	LaneSuperele...	Left

Rajah 28a



Rajah 28b



Rajah 29a

BAB 2: REKABENTUK AWALAN_JALAN DALAMAN

Create Feature Line

Fail latihan: C3D19_WIP_F0_03RD.dwg.

ARAHAN:

1. Open fail C3D19_WIP_F0_03RD > Data shortcut > RC > set working folder > 02 Hospital Latihan_Rekabentuk Awalan_Jalan Dalaman 2. Data shortcut > surface > 02EW_08_Rekabentuk Awalan > RC > create reference > style > 01 No Display > ok. 3. Create surface seperti berikut: i. Name: 03RD_01_Jalan Dalaman ii. Style: 02 Border Only iii. Render Material: 02 Border Only > ok 4. Buat polyline untuk Jalan Dalaman (turn on layer 01 Draf Jalan Dalaman) > isolate object. Rajah 4a 5. Create feature line from objects > Pilih semua jalan dalaman > enter	6. Isi maklumat feature line seperti berikut; Rajah 6a Rajah 6b Rajah 6c 7. Jalan Dalaman > RC > rebuild Automatic 8. Create surface seperti berikut: i. Name: 03RD_02_Pave ii. Style: 03 Triangles iii. Render Material: 02 Border Only > ok 9. 03RD_02_Pave > definition > breaklines > RC > add > mid- ordinate distance > 0.001 > ok > pilih semua feature line > enter > object viewer. Rajah 9a 10. Display order > send to back > delete feature line Rajah 10a 11. End isolated object > Object viewer Rajah 11a
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Rajah 4a

Name Template

Name formatting template

Property fields:
Next Counter

Name:
03RD_Site1_Jalan Dalam_<[Next Counter]>

Incremental number format

Number style:
01, 02, 03...

Starting number: 1 Increment value: 1

OK Cancel Help

Rajah 6a

Create Feature Lines

Site:
Site 1

☒ Name
03RD_Site1_Jalan Dalam_<[Next Counter]>

☐ Style
Basic Feature Line

Layer
☒ C-TOPO-FEAT
☐ Use current layer
☐ Use selected entity layer

Conversion options
☒ Erase existing entities
☒ Assign elevations
☐ Weed points

OK Cancel Help

Rajah 6b

Assign Elevations

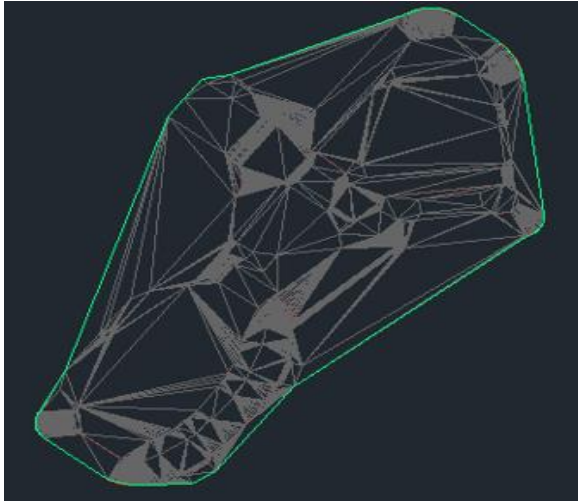
Options
☐ Elevation: 0.000m
☐ From gradings
☒ From surface

03RD_01_Jalan Dalam

☐ Insert intermediate grade break points
☒ Relative elevation to surface: 0.000m

OK Cancel Help

Rajah 6c



BAB 2: REKABENTUK AWALAN_JALAN DALAMAN

Paste Surface

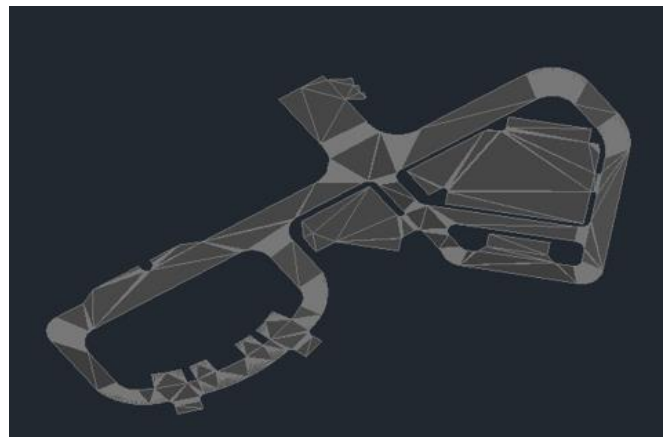
Fail latihan: C3D19_WIP_F0_03RD.dwg.

ARAHAN:

1. Create surface seperti berikut; i. Name: 03RD_03_Pave1 ii. Style: 01 No Display > ok 2. 03RD_03_Pave1 > definition > edit > Paste surface > 03RD _02_Pave > ok. 3. 03RD_03_Pave1 > definition > edit > raise/ lower surface > Elevation = - 0.04 > enter. 4. Create surface seperti berikut; i. Name: 03RD_04_Pave2 ii. Style: 01 No Display > ok 5. 03RD_04_Pave2 > definition > edit > Paste surface > 03RD_03_Pave1 > ok. 6. 03RD_04_Pave2 > definition > edit > raise/ lower surface > Elevation: -0.06 > enter. 7. Create surface seperti berikut; i. Name: 03RD_05_Base ii. Style: 01 No Display > ok 8. 03RD_05_Base > definition > edit > Paste surface > 03RD _04_Pave2 > ok.	9. 03RD_05_Base > definition > edit > raise/ lower surface > Elevation: -0.2 > enter. 10. Create surface seperti berikut; i. Name: 03RD_06_Sub Base ii. Style: 01 No Display > ok 11. 03RD_06_Sub Base > definition > edit > Paste surface > 03RD _05_Base > ok. 12. 03RD_06_Sub Base > definition > edit > raise/ lower surface > Elevation: -0.15 > enter. 13. Prospector tab > surface > tukarkan semua surface style seperti berikut; i. 03RD _02_Pave: 03 Triangles ii. 03RD_03_Pave1: 03 Triangles iii. 03RD_04_Pave2: 03 Triangles iv. 03RD_05_Base: 03 Triangles v. 03RD_06_Sub Base: 03 Triangles 14. Klik surface > object viewer
--	---

Name	Style
 02EW_02_Rekabentuk Konse	01 No Display
 02EW_08_Rekabentuk Awala	01 No Display
 03RD_01_Jalan Dalaman	01 No Display
 03RD_02_Pave	03 Triangles
 03RD_03_Pave1	03 Triangles
 03RD_04_Pave2	03 Triangles
 03RD_05_Base	03 Triangles
 03RD_06_Sub Base	03 Triangles

Rajah 13a



Rajah 14a

BAB 2: REKABENTUK AWALAN_JALAN DALAMAN

Kerb

Fail latihan: C3D19_WIP_F0_03RD.dwg.

ARAHAN:

- Create assembly seperti berikut; Name: 03RD_05_Kerb_Kerb Kanan Code Set Style: 02 JKR All Codes - Copy kerb Kanan Rajah 2a - Create assembly seperti berikut; Name: 03RD_06_Kerb_Kerb Kiri Code Set Style: 02 JKR All Codes - Mirrorkan kerb kanan Rajah 4a - Prospector tab > site > site1 > feature line > Rc > select > Isolate selected object Rajah 5a - Create corridor seperti berikut Name: 03RD_02_Kerb Corridor Style: 01 JKR General Corridor Baseline Type: Feature Line - Site: Site 1 Feature Line: 03RD_Site 1_Jalan Dalamaman_02 Assembly: 03RD_05_Kerb_Kerb Kanan Set baseline and Region parameters: Check > ok	- Tukarkan frequency corridor seperti berikut; - Along tangent: 1.000m - Curve increment: 1.000m - Along spiral: 1.000m - Along vertical curves: 1.000m - Add baseline seperti berikut; - Baseline type: Feature Line - Feature Line: 03RD_Site 1_Jalan Dalamaman_04 > ok - BL-03RD_Site1_Jalan Dalamaman_04 > RC > add region > assembly > 03RD_06_Kerb_Kerb Kiri > ok - Tukarkan frequency seperti berikut; - Along tangent: 1.000m - Curve increment: 1.000m - Along spiral: 1.000m - Along vertical curves: 1.000m - Add baseline seperti berikut; - Baseline type: Feature Line - Feature Line: Klik 03RD_Site 1_Jalan Dalamaman_03 > ok - BL-03RD_Site1_Jalan Dalamaman_03 > RC > add region > assembly > 03RD_06_Kerb_Kerb Kiri > ok - Tukarkan frequency seperti berikut; - Along tangent: 1.000m - Curve increment: 1.000m - Along spiral: 1.000m - Along vertical curves: 1.000m
--	--

14. Add baseline seperti berikut;

- i. Baseline type: Feature Line
- ii. Feature Line: Klik 03RD_Site
1_Jalan Dalamam_01 > ok

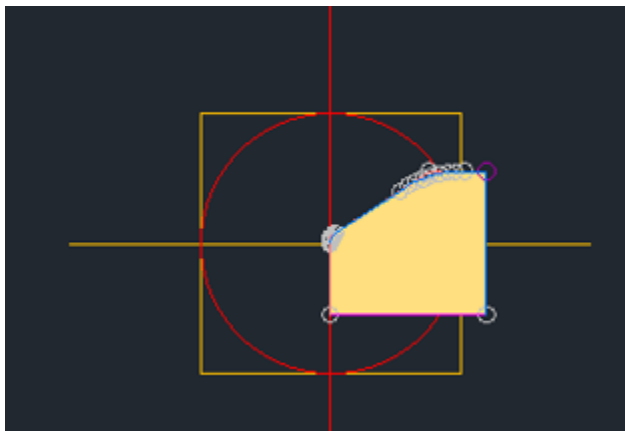
15. BL-03RD_Site1_Jalan Dalamam_01 >
RC > add region > assembly >
03RD_06_Kerb_Kerb Kiri > ok

16. Tukarkan frequency seperti berikut;

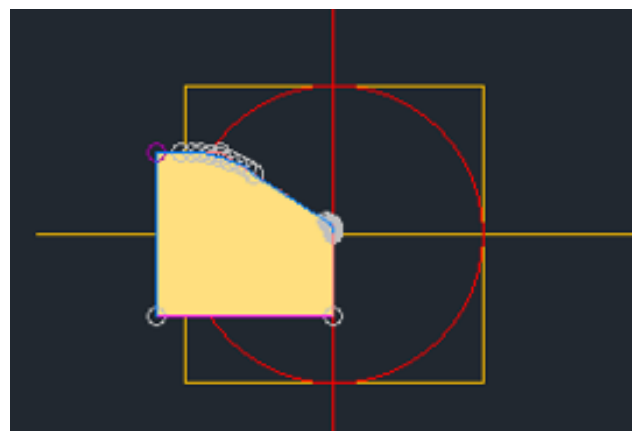
- i. Along tangent: 1.000m
- ii. Curve increment: 1.000m
- iii. Along spiral: 1.000m
- iv. Along vertical curves: 1.000m

Rajah 16a

17. Rebuild corridor > Object Viewer



Rajah 2a



Rajah 4a

Baseline and Region Parameters - 03RD_02_Kerb

Name	Horizont...	Vertical B...	Assem...	Star...	End Station	Frequency	Target	Overrides
BL - 03RD_Site1_Jalan Dalamam_02 - (7)	03RD_Site...	03RD_Site...		0+0...	0+642.08m	...	...	
RG - 03RD_05_Kerb_Kerb Kanan - (3)			03RD_0...	0...	0+642.08m	1.000m	...	...
BL - 03RD_Site1_Jalan Dalamam_04 - (8)	03RD_Site...	03RD_Site...		0+0...	0+305.37m	...	...	
RG - 03RD_06_Kerb_Kerb Kiri - (8)			03RD_0...	0...	0+305.37m	1.000m	...	...
BL - 03RD_Site1_Jalan Dalamam_03 - (9)	03RD_Site...	03RD_Site...		0+0...	0+096.61m	...	...	
RG - 03RD_06_Kerb_Kerb Kiri - (9)			03RD_0...	0...	0+096.61m	1.000m	...	...
BL - 03RD_Site1_Jalan Dalamam_01 - (10)	03RD_Site...	03RD_Site...		0+0...	0+199.20m	...	...	
RG - 03RD_06_Kerb_Kerb Kiri - (10)			03RD_0...	0...	0+199.20m	1.000m	...	...

Rajah 16a

BAB 3: REKABENTUK TERPERINCI_RAMP

Create Feature Line

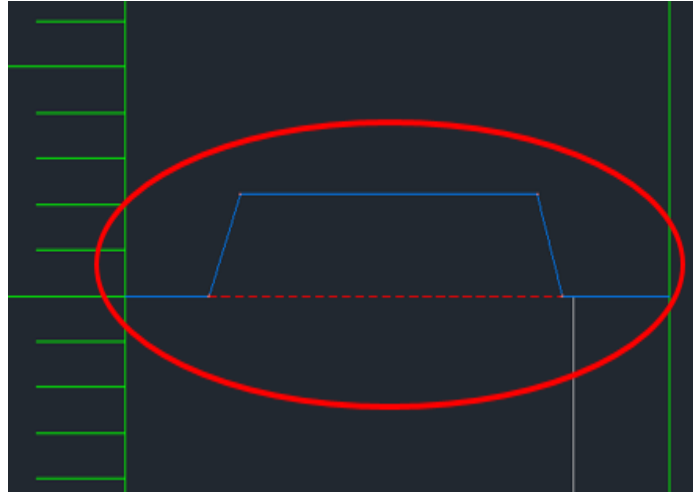
Fail latihan: C3D19_WIP_F0_03RD.dwg.

ARAHAN:

1. Open fail C3D19_WIP_F0_03RD > Data shortcut > RC > set working folder > 03 Hospital Latihan_Rekabentuk Terperinci_Ramp 2. Alignment Creation tools > Cipta alignment seperti berikut; i. Name: 03RD_CL_3_Ramp ii. Alignment style: 01 Road Alignment iii. Alignment Label Set: No Label Set iv. Use criteria- based design: uncheck > ok 3. Tangent- tangent (no curve) Rajah 3a	4. Create surface profile seperti berikut; i. Alignment: 03RD_CL_03_Ramp ii. Select surface: Rekabentuk Awalan > Add > Draw in profile view 5. Create Profile View menggunakan default setting 6. Profile creation Tools > Klik Tajuk profile > Name > Ramp > ok 7. Tangent – tangent (no curve) 8. Rajah 7a Edit profile seperti berikut Rajah 8a 9. Create 2 (dua) polyline Rajah 9a
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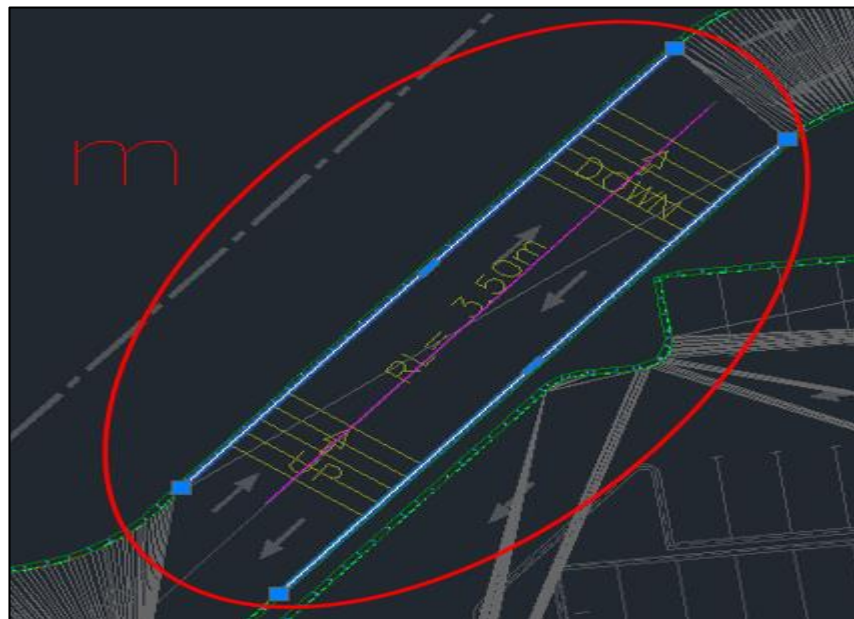
Rajah 3a



Rajah 7a

No.	PVI Station	PVI Elevation	Grade In	Grade Out	A (Grade Change)
1	0+000.00m	3.000m		0.00%	
2	0+001.86m	3.000m	0.00%	6.00%	6.00%
3	0+010.19m	3.500m	6.00%	0.00%	6.00%
4	0+016.67m	3.500m	0.00%	-6.00%	6.00%
5	0+025.00m	3.000m	-6.00%	0.00%	6.00%
6	0+030.41m	3.000m	0.00%		

Rajah 8



Rajah 9a

BAB 3: REKABENTUK TERPERINCI_RAMP

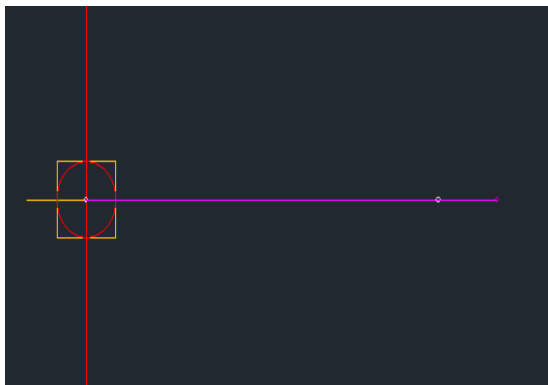
Create Feature Line

Fail latihan: C3D19_WIP_F0_03RD.dwg.

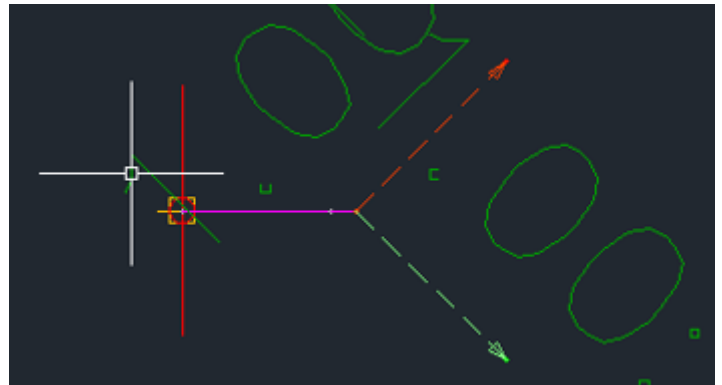
ARAHAN:

1. Create assembly seperti berikut; i. Name: 03RD_07_Ramp_Ramp ii. Assembly style: Basic iii. Code Set style: 02 JKR All Codes > ok 2. Tool pallette > generic > LinkWidthAndSlope i. Slope: 0 > Klik pada assembly ii. Side: Right 3. Tool pallette > generic > LinkWidthAndSlope i. Width: 0.500m ii. Slope: 0 > Klik pada assembly iii. Side: Right 4. Tool pallette > daylight > DayLightMaxWidth i. Cut Slope: 1.00:1 ii. Fill Slope: 1.00:1 iii. Klik pada assembly iv. Rajah 4a 5. Pilih ketiga- tiga subassemblies > mirror > klik assembly 03RD_07_Ramp_Ramp Rajah 5a	6. Create corridor seperti berikut; i. Name: 03RD_03_Ramp ii. Corridor style: Basic iii. Alignment: 03RD_CL_03_Ramp iv. Profile: Ramp v. Assembly: 03RD_07_Ramp_Ramp vi. Target Surface: 02EW_08_Rekabentuk Awalan vii. Set baseline and region parameters: check 7. Tetapkan target Rajah 7a 8. Rebuild corridor > object viewer Rajah 8a 9. Rebuild automatic all surface 10. 03RD_03_Ramp> Rc > Corridor properties > surface tab > isi maklumat seperti di rajah; Rajah 10a 11. 03RD_07_Ramp > Rc > surface properties; i. Surface tab (Bina Corridor Surface) Rajah 11a 12. Rebuild Corridor 13. 03RD_07_Ramp > RC > surface properties > Surface style: 03 Triangles
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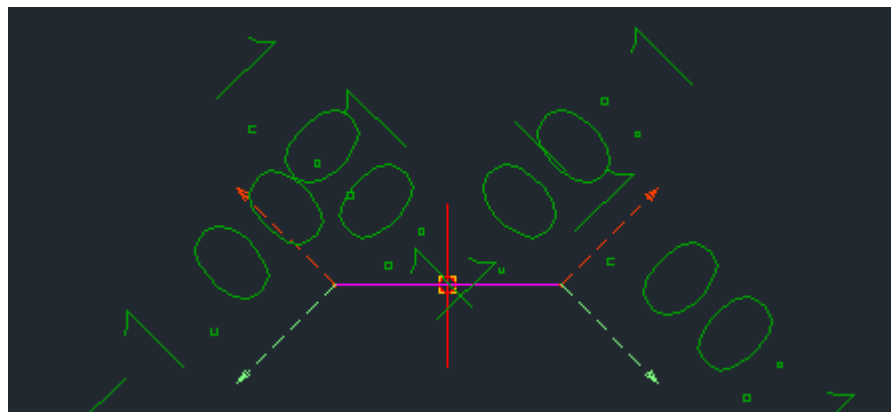
14. Object viewer 15. Tukar semua style surface kepada 01 no display 16. Prospector tab > surface > 03RD_01_Jalan Dalam Base > Definition > Edit > Paste Surface > 03RD_07_Ramp > ok 17. 03RD_01_Jalan Dalam Base > Rc > Surface Properties > Surface style > 03 Triangles > ok 18. 03RD_02_Pave > Surface style > 03 Triangles > ok > Object viewer 19. Prospector tab > site > Site 1 > Feature Line > Rc > Select > isolate object	20. Pilih feature line luar > elevation from surface Rajah 20a Rajah 20b Rajah 20c 21. Rc > isolate > end isolation 22. Pilih feature line dan 03RD_02_Pave > isolate 23. 03RD_02_Pave > Edit > Delete line > F > enter 24. End object isolation Rajah 24a
---	---



Rajah 3a



Rajah 4a



Rajah 5a

Target Mapping

Corridor name:
03RD_03_Ramp

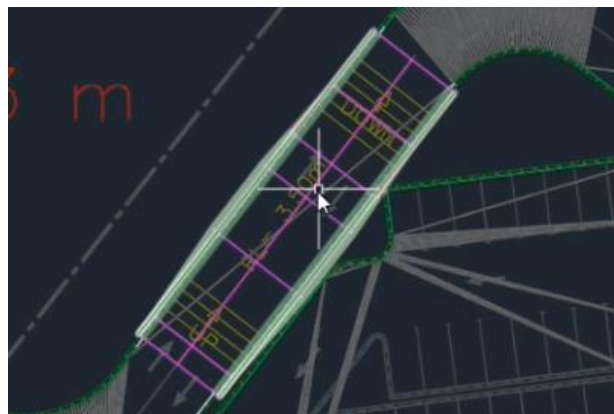
Assembly name:
03RD_07_Ramp_Ramp

Start Station:
0+000.00

End Station:
0+030.41

Target	Object Name	Subassembly	Assembly Gr...
(+) Surfaces	<Click here to set all>		
Target Surface	02EW_08_Rekabentuk Awalan	DaylightMax...	Right
Target Surface	02EW_08_Rekabentuk Awalan	DaylightMax...	Left
(+) Width or Offset Targets			
Offset Target	Polyline- 1	LinkWidthAn...	Right
Offset Target	<None>	LinkWidthAn...	Right
Offset Target	<None>	DaylightMax...	Right
Offset Target	Polyline- 2	LinkWidthAn...	Left
Offset Target	<None>	LinkWidthAn...	Left
Offset Target	<None>	DaylightMax...	Left
(-) Slope or Elevation Targets			

Rajah 7a



Rajah 8a

Corridor Properties - 03RD_03_Ramp

Information | Parameters | Codes | Feature Lines | Surfaces | Boundaries | Slope Patterns

Add data

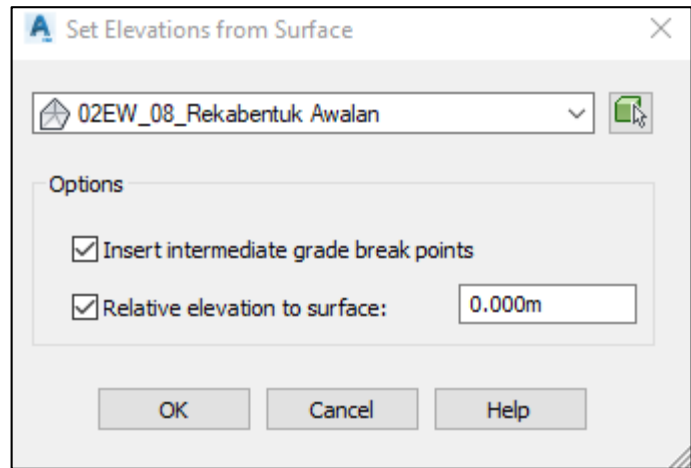
Data type: Links Specify code: Top

Name	Surface Style	Render Material	Add as Breakline	Overhang Corr...	Description
03RD_07_Ramp	05 Contours ...	ByLayer		Top Links	
Top			☒		

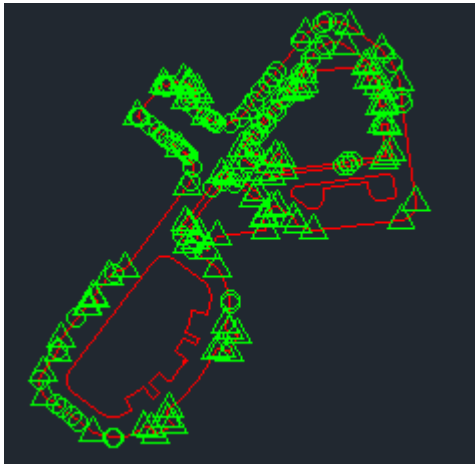
Rajah 11a



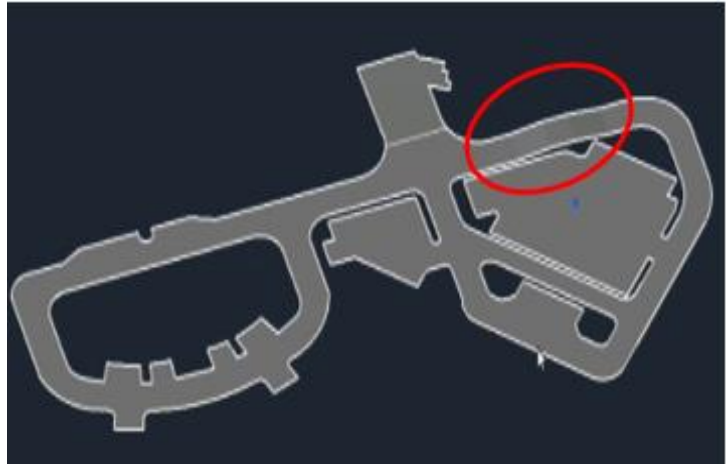
Rajah 20a



Rajah 20b



Rajah 20c



Rajah 24a

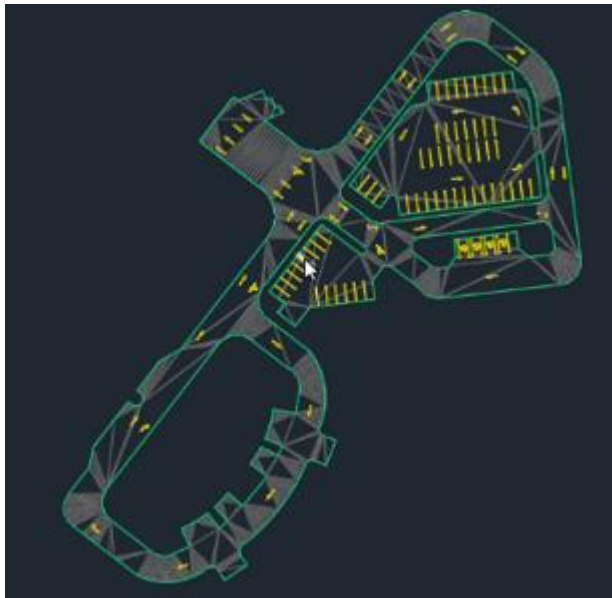
BAB 4: REKABENTUK TERPERINCI_ROAD MARKING

Extrude Road Marking

Fail latihan: C3D19_WIP_F0_03RD.dwg.

ARAHAN:

1. Open fail C3D19_WIP_F0_03RD > Data shortcut > RC > set working folder > 04 Hospital Latihan_Rekabentuk Terperinci_Road Marking 2. La > enter > Turn on > 01_Draf Road Marking 3. Surfaces > 03RD_02_Pave > Style > 03 Triangles • Semua surface style mesti 01 No Display 4. Klik road marking> Select similar > isolated object Rajah 4a 5. Klik surface> extract from surface > extract solid from surface > Isi maklumat seperti berikut; i. Surface: 03RD_02_Pave ii. Depth: 0.003 iii. Layer: C-TOPO iv. Insert into current drawing: Check > Create solid 6. Select 03RD_02_Pave > object viewer	7. Tukar surface style 03RD_02_Pave > 01 No Display 8. Alihkan pandangan model pada south Rajah 8a 9. Pilih semua road marking > RC > properties > elevation > 0 > enter 10. Taip XTR > object extrude > pilih semua road marking > enter > arah ke atas melepasi surface > esc Rajah 10a 11. Klik home > top 12. Taip Interfere > enter > first object > surface >second object > semua road marking > enter • Interference Checking box appear 13. Uncheck delete interference object created on close > close. Rajah 13a 14. Delete road marking yang telah di extrude 15. Delete surface (hanya tinggal road marking) Rajah 15
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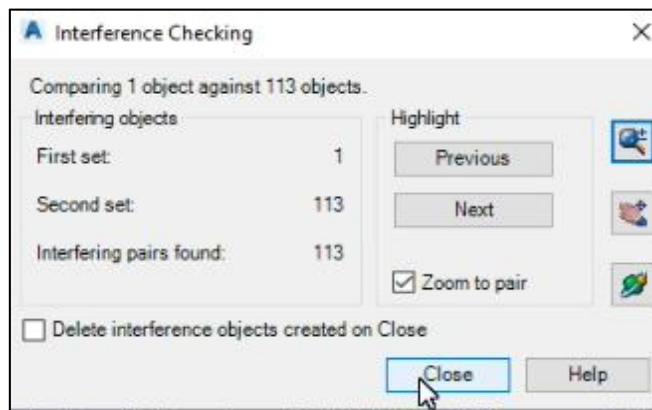
Rajah 4a



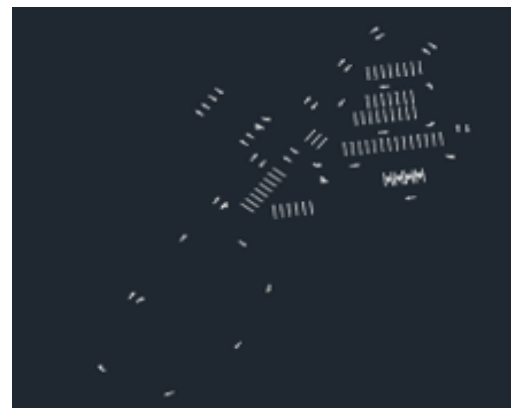
Rajah 8a



Rajah 10a



Rajah 13a



Rajah 15a

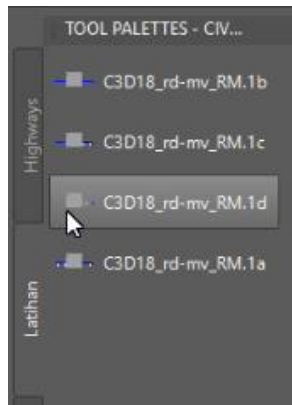
BAB 4: REKABENTUK TERPERINCI_ROAD MARKING

Signage

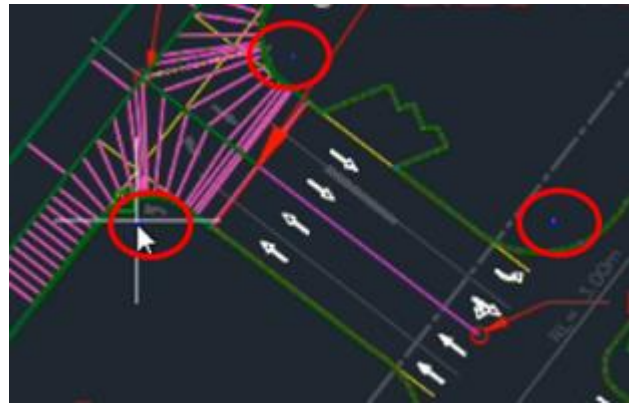
Fail latihan: C3D19_WIP_F0_03RD.dwg.

ARAHAN:

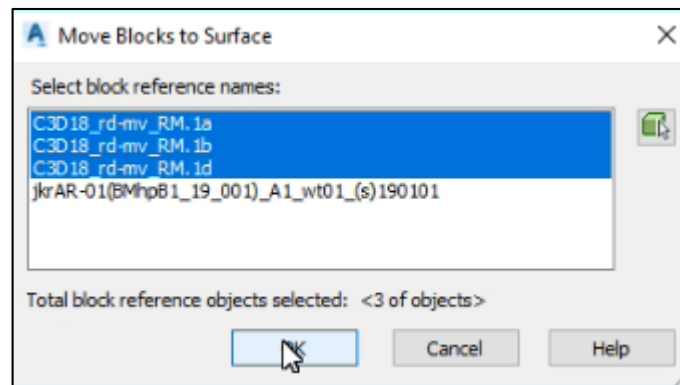
1. Tool pallet > Rc > civil multiview blocks 2. Rc > New pallete > latihan > enter 3. Drag MV Block dari folder latihan ke Tool pallete latihan Rajah 3a 4. Klik MV block > letakkan pada jalan masuk Rajah 4a 5. Surface > 03RD_01_Jalan Dalam Base > Rc > surface properties > style > 04 Contours 1m and 5m > ok 6. Klik surface dan ketiga- tiga signage > isolate object > object viewer	7. Modify tab > surface > surface tools > move to surface > move block to surface > Klik surface dan pilih block seperti rajah berikut; Rajah 7a 8. Select surface dan signage > object viewer 9. La > enter > new layer > name > Road Marking 10. Pilih road marking > select similar > properties > layer > Road Marking 11. La > enter > new layer > name > Road Signage 12. Pilih ketiga-tiga road signage > properties > layer > Road Signage
---	---



Rajah 3a



Rajah 4a



Rajah 7a

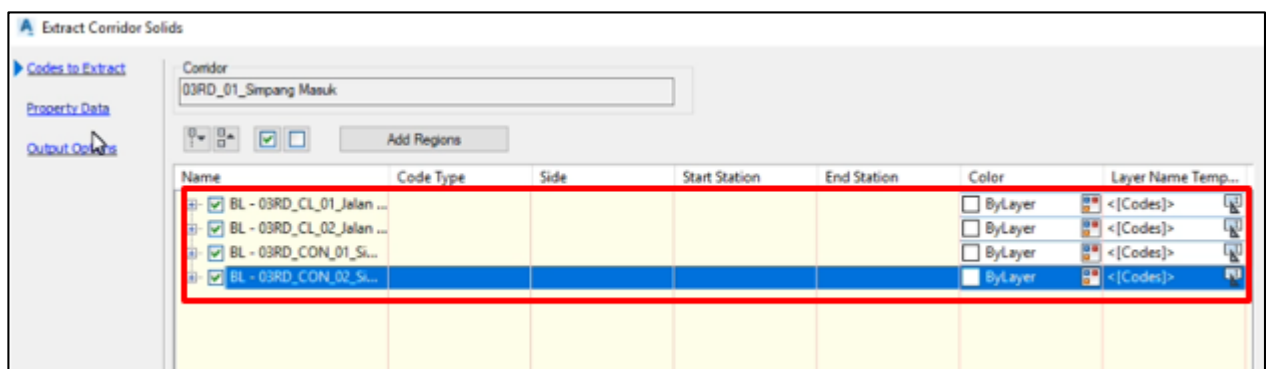
BAB 5: REKABENTUK TERPERINCI_PENGURUSAN MODEL

Extract Solid From Corridor

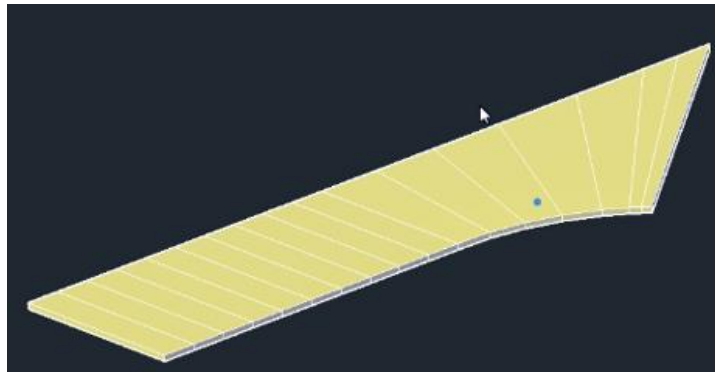
Fail latihan: C3D19_WIP_F0_03RD.dwg.

ARAHAN:

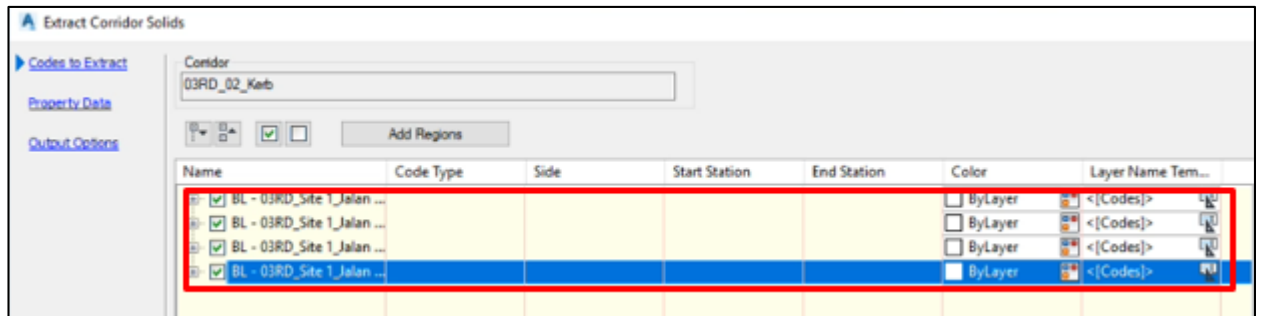
- | | |
|---|--|
| <ol style="list-style-type: none">1. Open fail C3D19_WIP_F0_03RD > Data shortcut > RC > set working folder 05 Hospital Latihan_Rekabentuk Terperinci_Pengurusan Model2. Klik Corridor jalan luar > Rc > isolate object3. Klik corridor jalan > extract corridor solid > all region
Isi jadual seperti rajah di bawah;
Codes to Extract: Rajah 3a
Property data: Untick All Property data
Output Options: Choose Default setting > Extract Solid
Rajah 3b | <ol style="list-style-type: none">4. Isolate object > object viewer5. Rc > end isolation object6. Klik corridor kerb > extract corridor solid > all region
Isi jadual seperti rajah di bawah;
Codes to Extract: Rajah 6a
Property data: Untick All Property data
Choose Default setting > Extract Solid7. Klik solid > object viewer
Rajah 7a |
|---|--|



Rajah 3a



Rajah 3b



Rajah 6a



Rajah 7a

BAB 5: REKABENTUK TERPERINCI_PENGURUSAN MODEL

Extract Solid From Surface

Fail latihan: C3D19_WIP_F0_03RD.dwg.

ARAHAN:

1. Prospector tab > surface > 03RD_03_Pave1 > Rc > surface properties > Surface style > 03 Triangles > ok 2. Klik surface > Extract from surface > Extract solid from surface > isi jadual seperti berikut: i. Depth: 0.04 ii. Layer: Pave1 iii. Color: By layer > Create solid 3. Tukar surface style 03RD_03_Pave1 kepada 01 No display 4. Prospector tab > surface > 03RD_04_Pave2 > Rc > surface properties > Surface style > 03 Triangles > ok 5. Klik surface > Extract from surface > Extract solid from surface > isi jadual seperti berikut: i. Depth: 0.06 ii. Layer: Pave2 iii. Color: By layer > Create solid	6. Klik surface 03RD_05_ Base > Extract from surface > Extract solid from surface > isi jadual seperti berikut: i. Depth: 0.2 ii. Layer: Base iii. Color: By layer > Create solid 7. Klik surface 03RD_06_ Sub Base > Extract from surface > Extract solid from surface > isi jadual seperti berikut: i. Depth: 0.15 ii. Layer: Sub Base iii. Color: By layer > Create solid 8. End isolation 9. LA > enter> turn off semua layer 10. Turn On layer berikut; i. Curb ii. Pave1 iii. Pave2 iv. Base v. Subbase vi. Road Marking vii. Road Signage 11. Detach Lukisan Arkitek
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BAB 5: REKABENTUK TERPERINCI_PENGURUSAN MODEL

Property Data

Fail latihan: C3D19_WIP_F0_03RD.dwg.

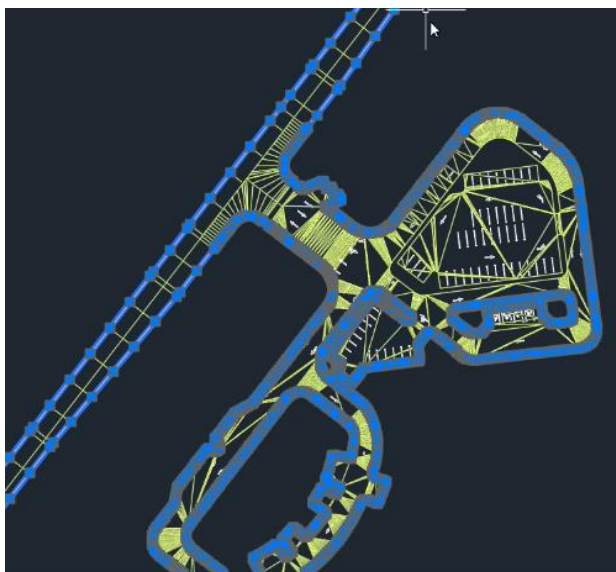
ARAHAN:

1. Manage tab > Property Set Data panel > Define Property sets 2. Property Set Definition > Rc > new General tab i. Name: Turapan Applies To Tab: i. Solid (3D): Check Definition tab > Add manual Property definition: i. New Property - Name: Jenis Turapan - Type: Text - Default: - - ii. New Property - Name: Jenis Ujian - Type: Text - Default: - - iii. New Property - Name: Nama Pembekal - Type: Text - Default: - - iv. New Property - Name: No Telefon Pembekal - Type: Text - Default: - - v. New Property - Name: Tarikh Pasang - Type: Text - Default: - -	vi. New Property - Name: Tarikh Ujian - Type: Text - Default: - - vii. New Property - Name: Tarikh Waranty Pembekal - Type: Text - Default: - - viii. Add Automatic Property definition: a) Categorized tab - Volume: Check - *Langkah i – viii (Rajah 2) 3. Klik Ok > ok 4. Property Set Definition > Turapan > Rc > copy > paste (pada tempat yang sama) 5. Rename > Bebendul 6. Property Set Definition > Bebendul Applies To Tab: i. Solid (3D): Check Definition tab: Jenis Turapan > delete > Apply 7. Property Set Definition > Bebendul > Rc > copy > paste (pada tempat yang sama) 8. Rename > Road Marking Applies To Tab: i. Solid (3D): Check Definition tab: volume> delete > Apply 9. Property Set Definition > Road Marking > Rc > copy > paste (pada tempat yang sama)
---	--

10. Rename > Road Signage > ok	14. Select solid > Add Property Data Set > Pilih Property berikut;
11. Klik kerb > RC > select similar > Rc > properties > Extended Data Tab > Add Property Data Set > General > ok	i. General
12. Extended Data Tab > Add Property Data Set > Bebendul > ok	ii. Road Signage > ok
13. Klik road marking > RC > select similar > Add Property Data Set	15. Save file
i. Road Marking	16. Taip NWCout > enter > 05 Hospital Latihan_Rekabentuk
ii. General > ok	Terperinci_Pengurusan Model > 02_Share > jkrCv19-03(BMhpB1_19_001)_A1_wt01_(s)190101

Name	Description	Type	Source	Default	Units	Format	Example
 Jenis Turapan	Jenis Turapan	Text		--		Standard	--
 Jenis Ujian	Jenis Ujian	Text		--		Standard	--
 Nama Pembekal	Nama Pembekal	Text		--		Standard	--
 No.Tel Pembekal	No.Tel Pembekal	Text		--		Standard	--
 Tarik Pasang	Tarik Pasang	Text		--		Standard	--
 Tarikh Ujian	Tarikh Ujian	Text		--		Standard	--
 Tarikh Waranti Pembekal	Tarikh Waranti ...	Text		--		Standard	--
 Volume	Volume	Automatic	Solid (3...			Standard	

Rajah 2a



Rajah 12a



Rajah 14a

BAB 6: PENYEDIAAN LUKISAN

Setting Layout

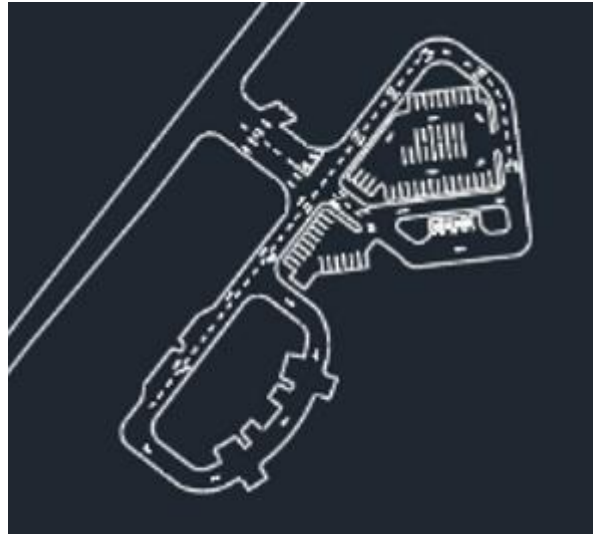
Fail latihan: C3D19_WIP_F0_03RD.dwg.

ARAHAN:

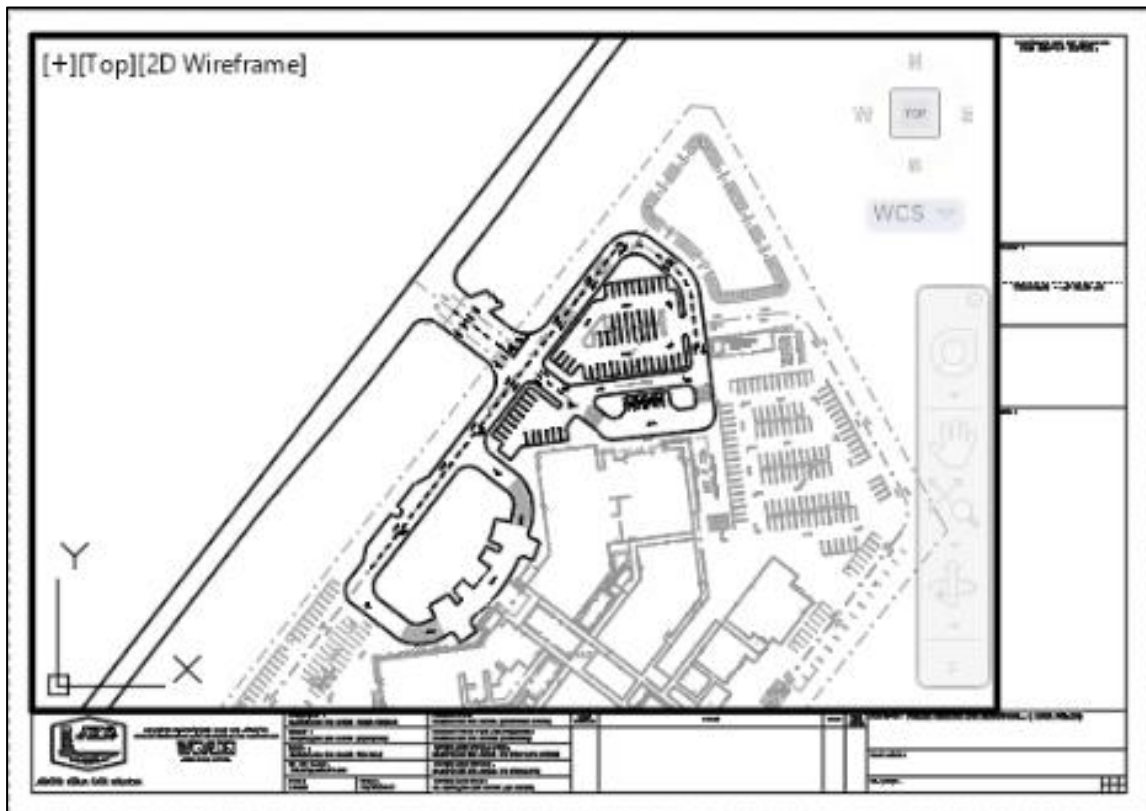
1. Open fail C3D19_WIP_F0_03RD > Data shortcut > RC > set working folder > 06 Hospital Latihan_Penyediaan Lukisan > Select folder 2. La > enter > select all > turn off all layer 3. Turn on layer berikut i. 01_TB ii. 02_Notes iii. 03_Map iv. 04_Road Marking v. 05_Road Signage vi. 06_Simbol 4. Prospector > corridor > 03RD_01_Simpang Masuk > Rc > properties i. Codes tab Code Set Style: None ii. Feature line tab • Code > BackCurb > Connect > $\sqrt{}$ > Feature Line style > 01_Corridor Curb_Road Marking • Code > Flange > Connect > $\sqrt{}$ > Feature Line style > 01_Corridor Curb_Road Marking • Klik OK	5. Prospector > corridor > 03RD_02_Kerb > Rc > properties i. Codes tab Code Set Style: None ii. Feature Line tab • Backcurb > Feature Line style > 01_Corridor Curb_Road Marking • Flange > Feature Line style > 01_Corridor Curb_Road Marking > ok 6. Rebuild corridor 7. Open fail jkrAR-01(BMhpB1_19_001)_A1_wt01_(s)190101 8. Select model arkitek > tukar color kepada 251 > save > tutup fail 9. Fail C3D19_WIP_F0_03RD > xref > attach > jkrAR-01(BMhpB1_19_001)_A1_wt01_(s)190101 > Open > locate using geographic data > check 10. Layout tab > kik viewport > ZE > enter > Scale > 1:500 > lock viewport 11. Layout viewport > rectangular > Masukkan gambar peta Rajah 11a 12. Layout viewport > rectangular > masukkan sistem koordinat Rajah 12a 13. Layout viewport > rectangular > masukkan nota. Rajah 13a
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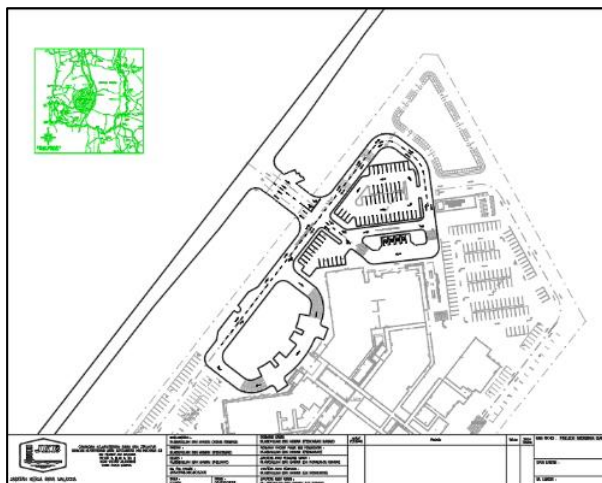
Rajah 3a



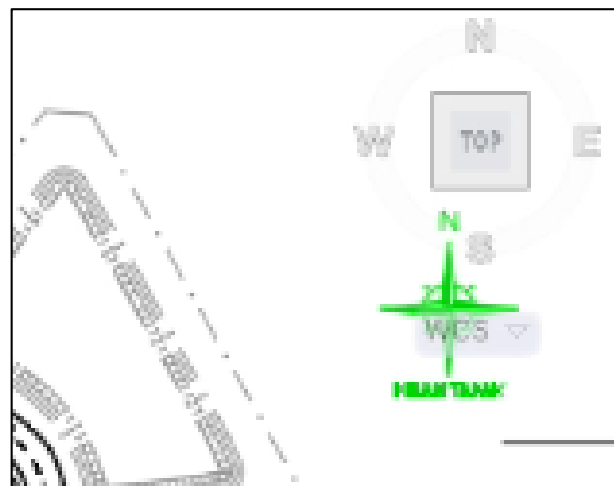
Rajah 6a



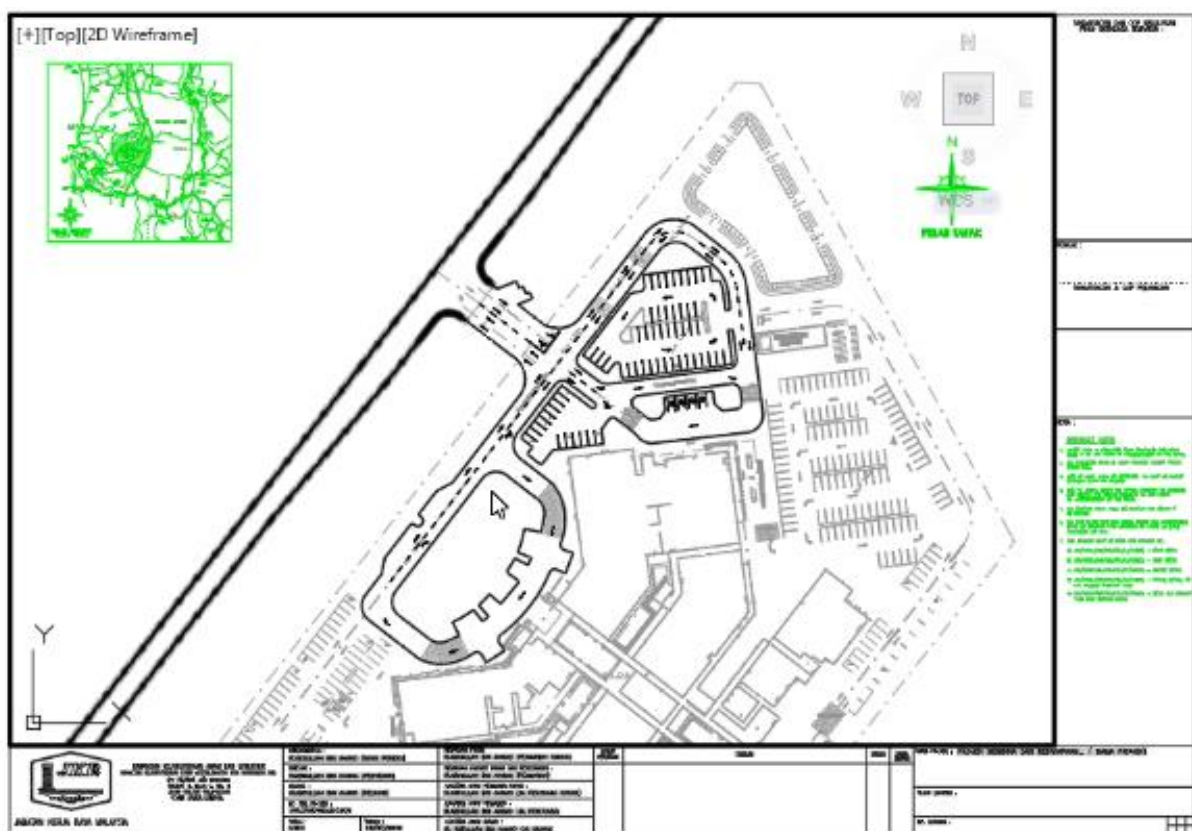
Rajah 10a



Rajah 11a



Rajah 12a



Rajah 13a

BAB 6: PENYEDIAAN LUKISAN

Setting Layout

Fail latihan: C3D19_WIP_F0_03RD.dwg.

ARAHAN:

1. Application menu > drawing utilities > drawing properties > Summary tab > isi maklumat seperti berikut i. Title: Projek Membina dan Menyiapkan Hospital ii. Subject: Lukisan Jalan Dalam iii. Author: Ir. Abdullah Bin Ahmad 2. Custom tab > isi maklumat seperti rajah berikut: Rajah 2a 3. Sheet set manager > New sheet Set > Isi Maklumat seperti berikut; i. Begin • Create a sheet set using: Existing drawing ii. Sheet Set Details • Name of new sheet set: Lukisan Hospital Latihan • Store set: Folder Latihan > 02 Coursework > 06 Hospital Latihan_Penyediaan Lukisan> 01_WIP > Shortcuts • Choose Layouts - C3D19_WIP_F0_03RD • Confirm - Finish	4. Rename sheet Tittle > Pelan Lukisan Jalan Dalam 5. Turn on layer berikut; i. 0 ii. 01_TB iii. 02_Notes iv. 03_Map v. 04_Road Marking vi. 05_Road Signage vii. 06_Symbol 6. Taip MText > enter > klik pada tajuk lukisan > Pelan Lukisan Jalan Dalam 7. Taip MText > enter > klik pada no lukisan > JKR.CKAS/07.500/020/MOIS/J26/KT/Insert field/01 Rajah 7a 8. Rea > enter 9. Pelan Lukisan Jalan Dalam layout > RC > page setup manager > pelan kerja tanah > modify > plot style table > monochrome.ctb > klik button edit > pilih color 251 > screening > 50 > save as > Template Lukisan BKA > save > save & close > ok >plot style table > Template Lukisan BKA > ok 10. Turn On semua layer untuk Xref Rajah 10a
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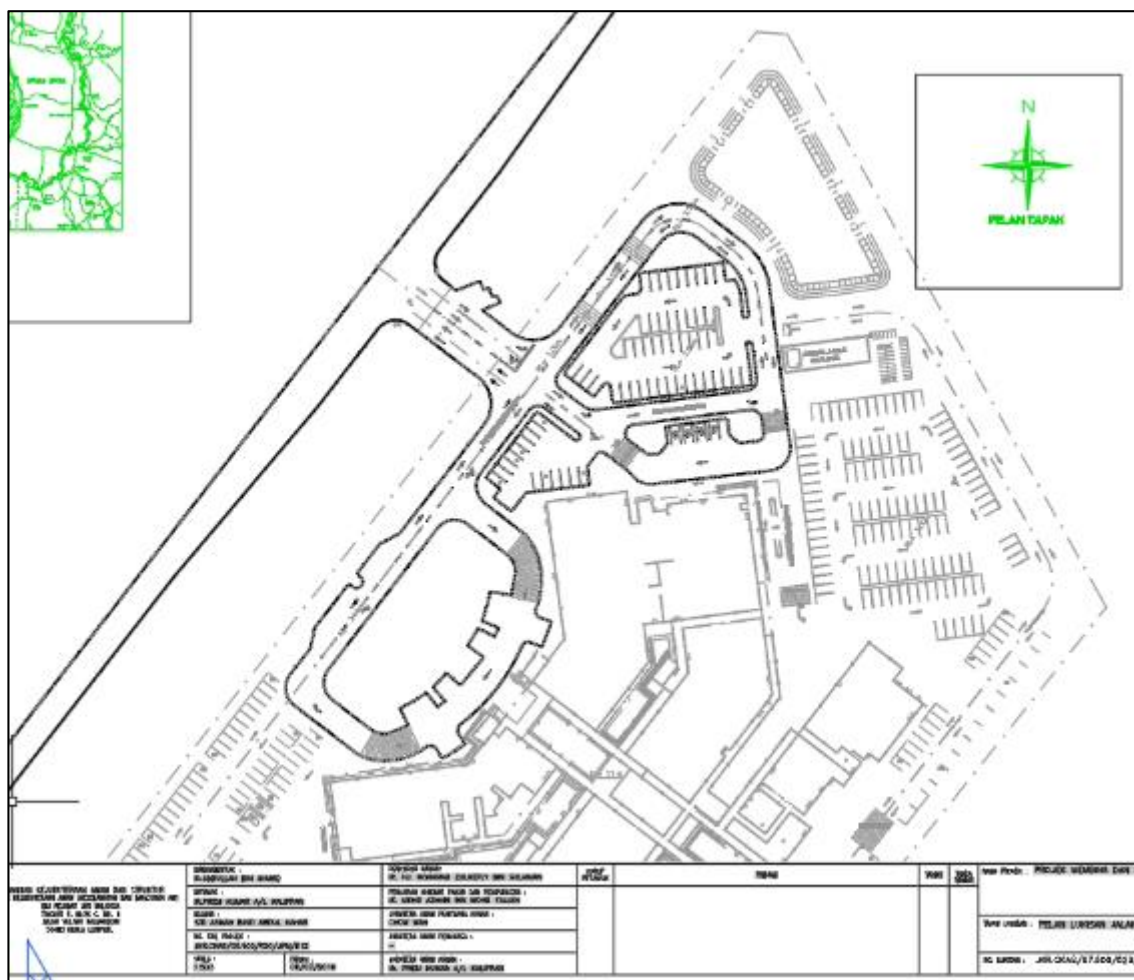
11. Sheet set manager > Lukisan Hospital Latihan > Rc > Resave all sheet 12. Sheet set manager > Lukisan Hospital Latihan > RC > publish > Publish to DWFx	13. Publish file > Folder Latihan > 02 Coursework > 06 Hospital Latihan_Penyediaan Lukisan > 03_Publish 14. Rename file > jkrCv19_1_(BMhpB1_19_001)F1_RD_190101a
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Rajah 2a

NAMA PROJEK :	PROJEK MEMBINA DAN MENYIAPKAN HOSPITAL LATIHAN
TAJUK LUKISAN :	PELAN LUKISAN JALAN DALAMAN
NO. LUKISAN :	JKR.CKAS/07.500/020/MOIS/J26/KT/01/01

Rajah 7a



Rajah 10a