

901

Design

901 DESIGN, INCOPORATED
3720 Alumni Avenue,
Memphis TN, 38111
Tel: (901) 978-9000
Email: 901design@memphis.edu

Project

REST AREA ADJACENT
TO PROPOSED I69

List of Drawings

- S.1 Project Location
- S.2 Initial Site Topography
- S.3 Overall Site Layout

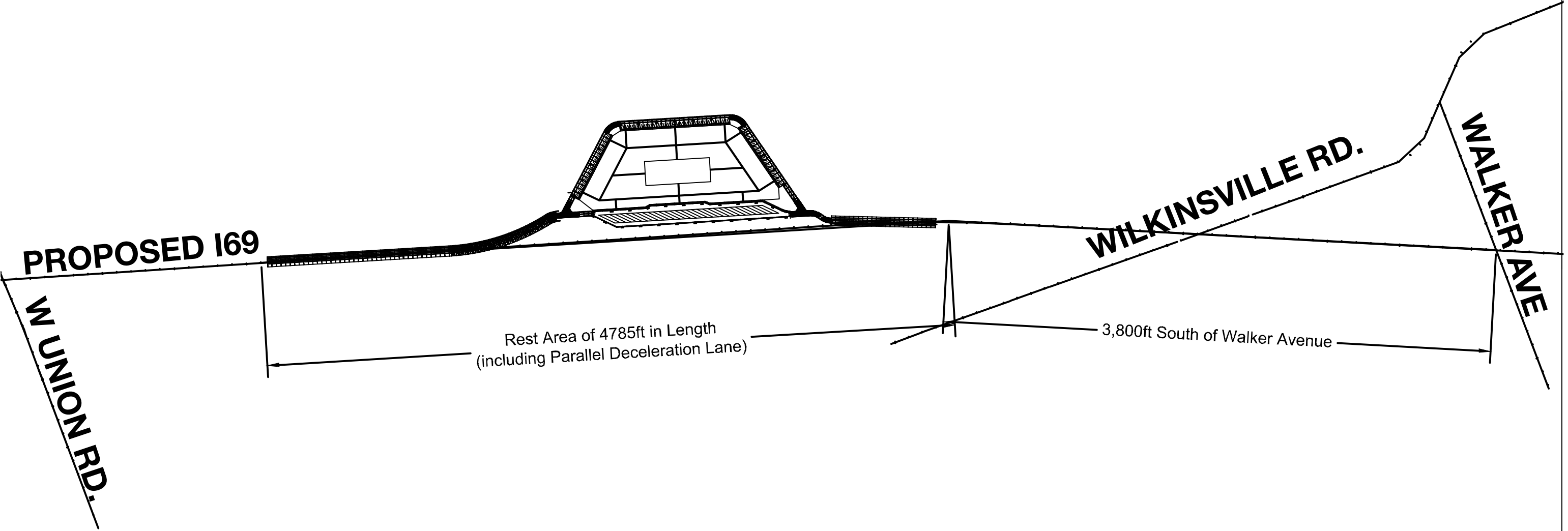
- S.A.1 Plumbing Plan
- S.A.2 RSF System
- S.A.3 Overall Layout

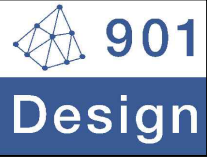
- S.B.1 Front View
- S.B.2 Side View
- S.B.3 Back View
- S.B.4 Complete Frame
- S.B.5 Roof System
- S.B.6 Truss
- S.B.7 Truss to Column
- S.B.8 Roof Connections
- S.B.9 Floorplan

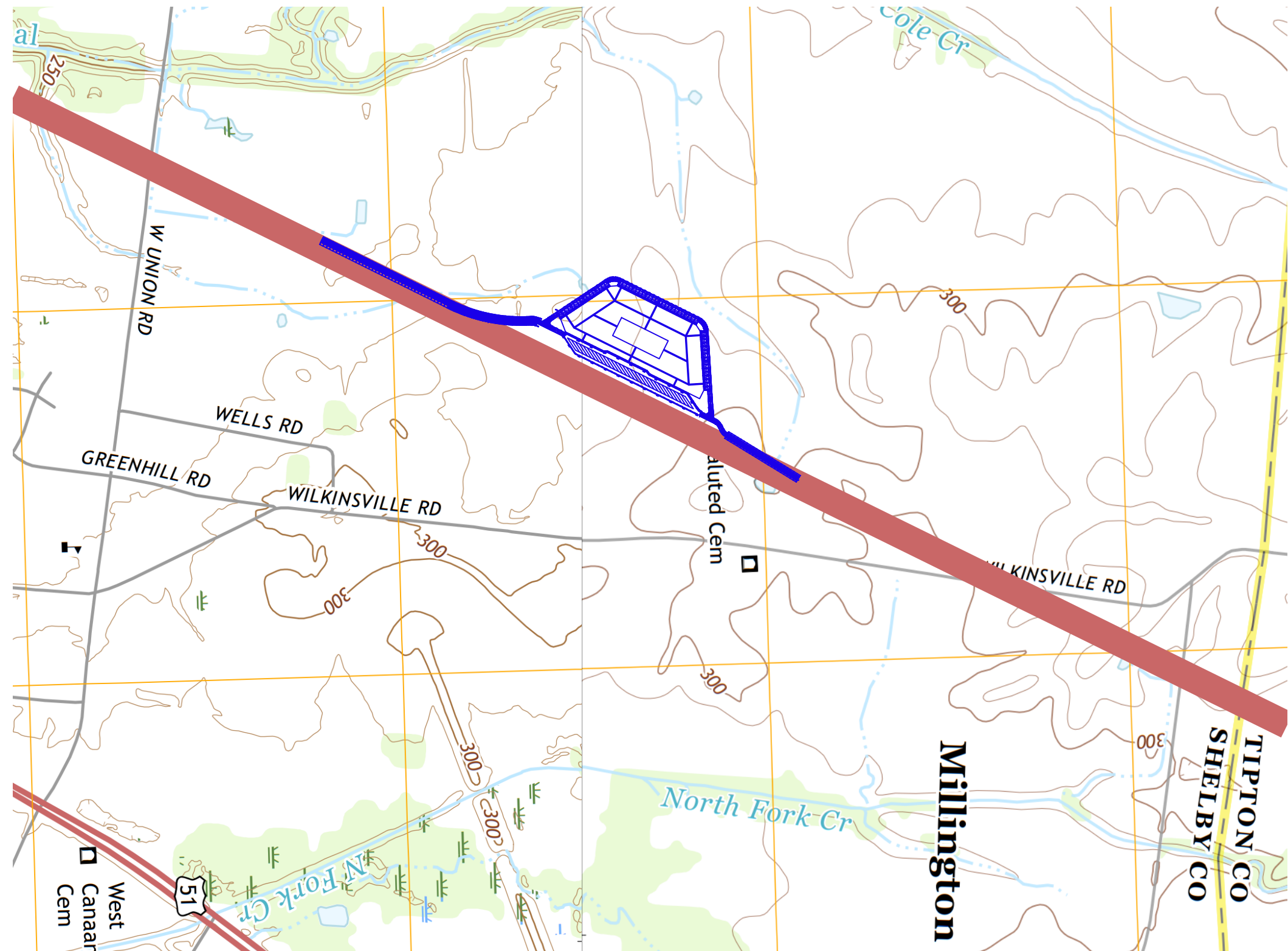
- S.C.1 Foundation Plan View
- S.C.2 Welded Wire Reinforcement Plan View
- S.C.3 Long Direction Beam and Slab Detail
- S.C.4 Short Direction Beam and Slab Detail

- S.D.1 Road Alignment 1
- S.D.2 Road Alignment 2
- S.D.3 Entrance Ramp
- S.D.4 Entrance Ramp Details
- S.D.5 Exit Ramp 1
- S.D.6 Exit Ramp 1 Details
- S.D.7 Exit Ramp 2
- S.D.8 Exit Ramp 2 Details
- S.D.9 Exit Ramp 3
- S.D.10 Exit Ramp 3 Details
- S.D.11 Car Parking
- S.D.12 Truck Parking
- S.D.13 Inner Roadways
- S.D.14 Other Details 1
- S.D.15 Accessible Parking
- S.D.16 Road Signage 1
- S.D.17 Road Signage 2
- S.D.18 Other Details 2
- S.D.19 Perpendicular Curb Ramp
- S.D.20 Smart Park Facilities

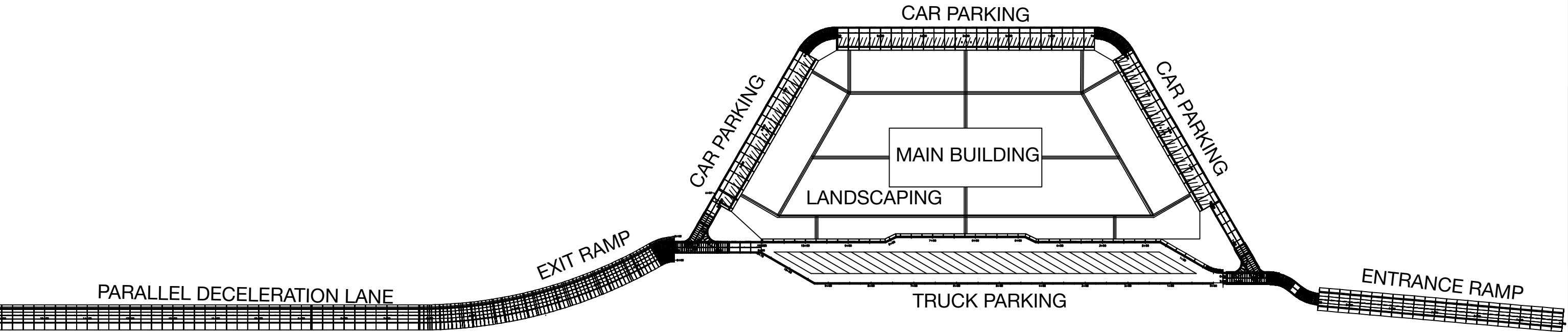
- S.E.1 Drainage Plan View
- S.E.2 Retention Detail
- S.E.3 Ditch Detail
- S.E.4 Pipe and Inlet Detail
- S.E.5 Storm Water Connection



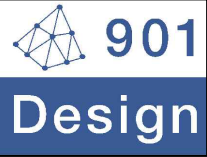
<div>Local Engineering Firm</div> <div><div>901 DESIGN, INCOPORATED 3720 Alumni Avenue, Memphis TN, 38111 Tel: (901) 978-9000 Email: 901design@memphis.edu</div></div> <div>General Director Huan Ngo</div>	Lead Engineer	Huan Ngo	Project REST AREA ADJACENT TO PROPOSED I69	File Name	S.1. Project Location
	Designed by	901 DESIGN		Drawing No.	S.1
	Drawn by	Huan Ngo	Drawing Title PROJECT LOCATION	Paper Size	11" x 17"
	Checked by	901 DESIGN		Issued Date	11/28/2018

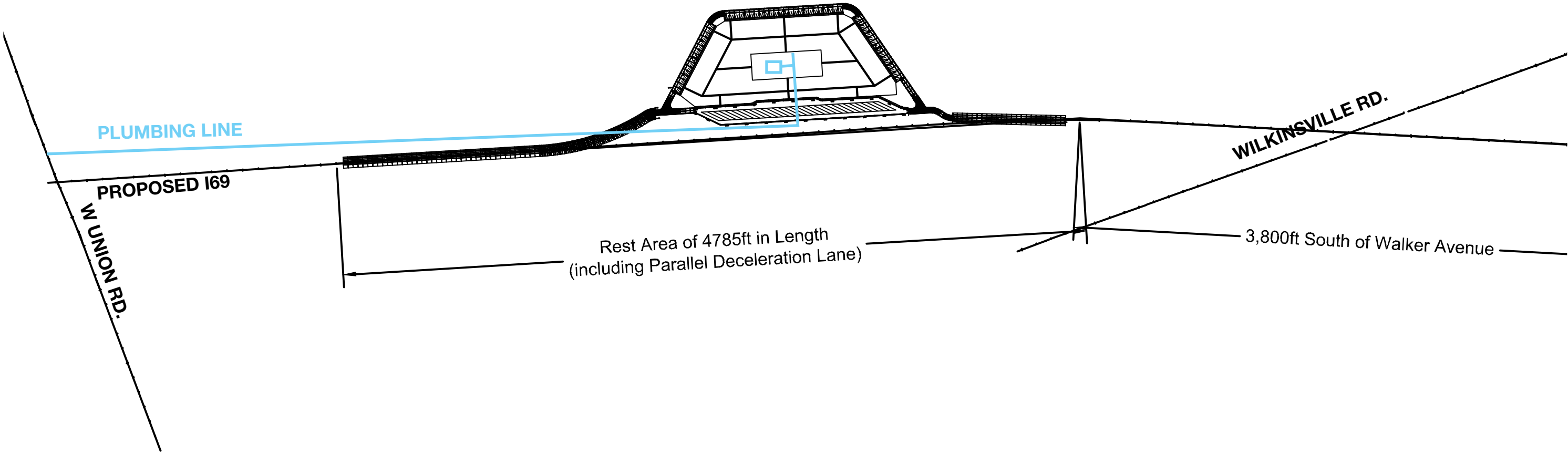


<div>Local Engineering Firm</div> <div><div><div><div></div><div>901</div><div>Design</div></div></div><div>901 DESIGN, INCOPORATED 3720 Alumni Avenue, Memphis TN, 38111 Tel: (901) 978-9000 Email: 901design@memphis.edu</div><div>General Director Huan Ngo</div></div>	Lead Engineer	Huan Ngo	Project REST AREA ADJACENT TO PROPOSED I69	File Name	S.2 Initial Site Topography
	Designed by	901 DESIGN		Drawing No.	S.2
	Drawn by	Huan Ngo	Drawing Title INITIAL SITE TOPOGRAPHY	Paper Size	11" x 17"
	Checked by	901 DESIGN		Issued Date	11/28/2018

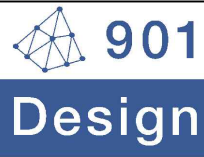


***NOTE:** DETAIL DIMENSION AND ALIGNMENT ARE SHOWN IN THE S.D TRANSPORTATION SET OF DRAWINGS

<div>Local Engineering Firm</div> <div><div>901 DESIGN, INCOPORATED 3720 Alumni Avenue, Memphis TN, 38111 Tel: (901) 978-9000 Email: 901design@memphis.edu</div></div> <div>General Director Huan Ngo</div>	Lead Engineer	Huan Ngo	Project REST AREA ADJACENT TO PROPOSED I69	File Name	S.3 Overall Layout
	Designed by	901 DESIGN		Drawing No.	S.3
	Drawn by	Huan Ngo	Drawing Title OVERALL LAYOUT	Paper Size	11" x 17"
	Checked by	901 DESIGN		Issued Date	11/28/2018



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General Director
Huan Ngo

Lead Engineer

Huan Ngo

Designed by

901 DESIGN

Drawn by

Huan Ngo

Checked by

901 DESIGN

Project

**REST AREA ADJACENT
TO PROPOSED I69**

Drawing Title

PLUMBING PLAN

File Name

S.A.1 Plumbing Plan

Drawing No.

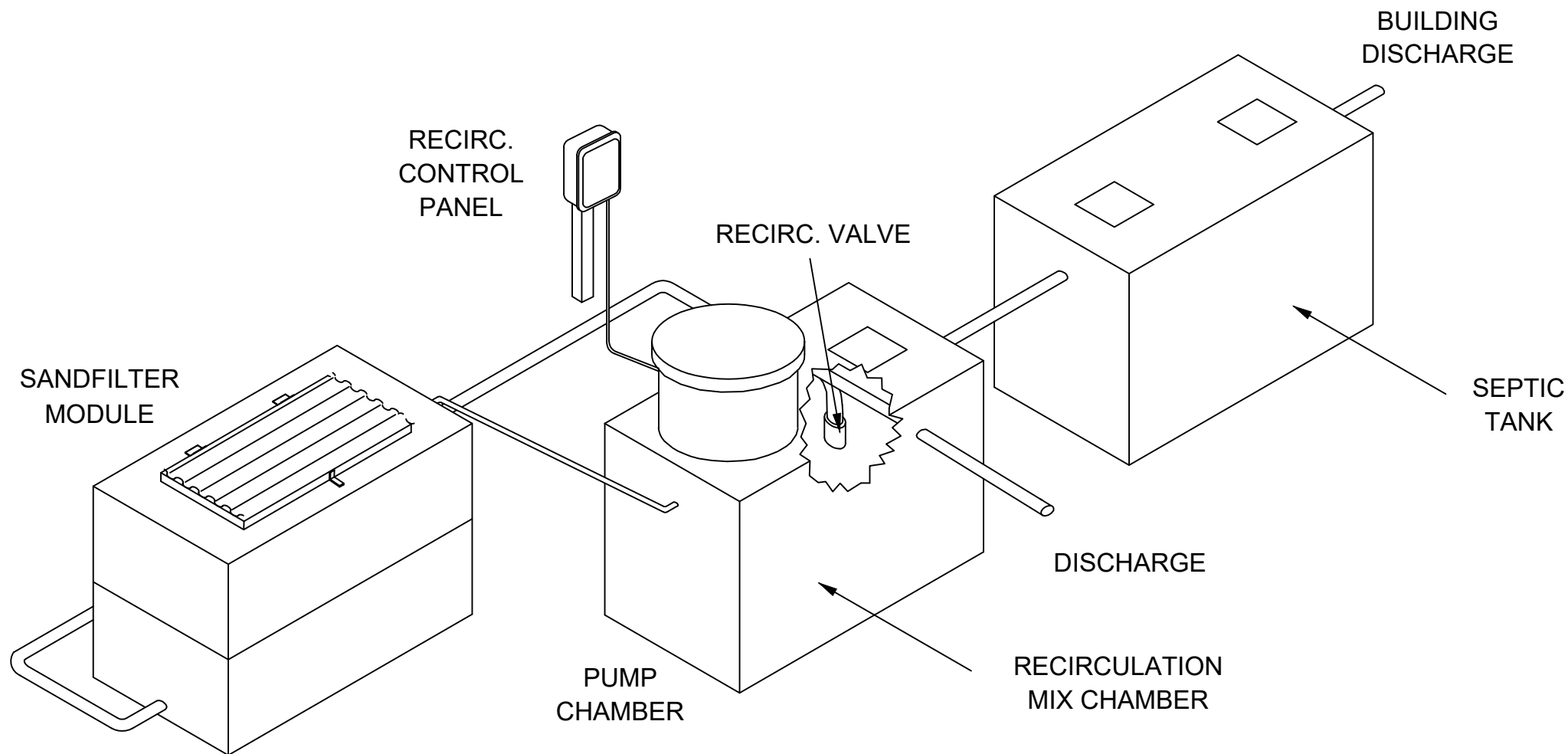
S.A.1

Paper Size

11" x 17"

Issued Date


11/28/2018



RECIRCULATING SAND FILTER SYSTEM

SCOPE: HOUSEHOLD SEWAGE WILL FLOW BY GRAVITY THROUGH A TREATMENT UNIT, TYPICALLY A SEPTIC TANK, TO THE SANDFILTER FEED TANK. FROM THE SANDFILTER FEED TANK THE EFFLUENT IS PUMPED TO THE SANDFILTER WHERE, AFTER TREATMENT, IT FLOWS BY GRAVITY TO A RECIRC VALVE WHERE ALL OF THE EFFLUENT WILL BE SENT BACK TO THE RECIRCULATION TANK AND THE OVERFLOW TO DISPOSAL. IF SURFACE DISCHARGE, CHLORINATE THE EFFLUENT AND FLOW BY GRAVITY THROUGH A SERIES OF CHLORINE CONTACT CHAMBERS. THE FINAL CONTACT CHAMBER WILL ALSO ACT AS A SAMPLE MODULE. FROM THE CONTACT CHAMBERS THE EFFLUENT WILL FLOW BY GRAVITY TO A DISCHARGE POINT.

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Huan Ngo

Lead Engineer	Huan Ngo		
Designed by	Mark Rippy		
Drawn by	Mark Rippy		
Checked by	Huan Ngo		

Project

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TO PROPOSED I69

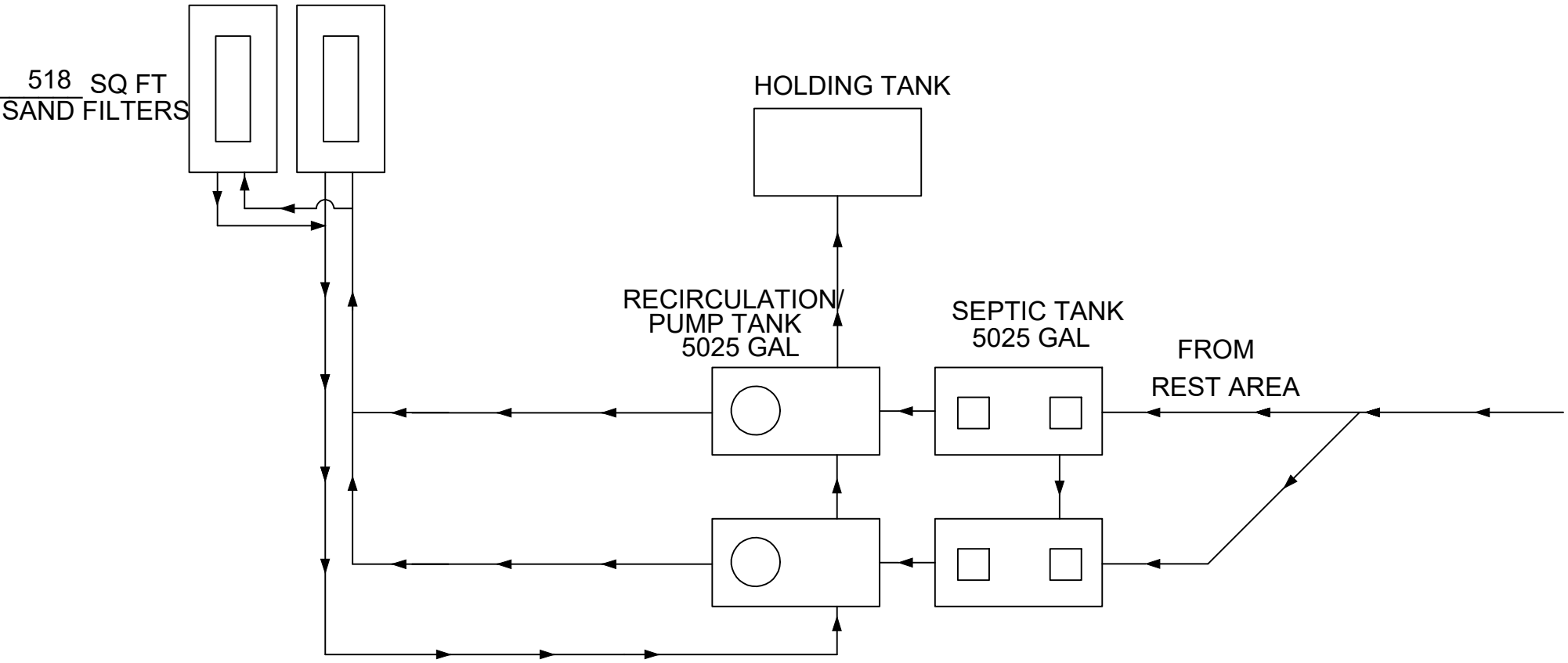
Drawing Title

RSF SYSTEM

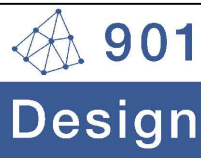
File Name	S.A.2 RSF SYSTEM		
Drawing No.	S.A.2		
Paper Size	11" x 17"	Issued Date	11/28/18

TWO
SAND FILTER MODULES
NOT TO SCALE

TANK information:
2-5025 **GALLON SEPTIC TANKS, 2-5025 GALLON**
SANDFILTER DOSE TANKS, 2-518 SQ. FT.
SANDFILTER TANK. INSTALL TANKS TO AVOID SWALES
OR LOW LYING AREAS!



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Huan Ngo

Lead Engineer	Huan Ngo		
Designed by	Mark Rippy		
Drawn by	Mark Rippy		
Checked by	Huan Ngo		

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REST AREA ADJACENT
TO PROPOSED I69

Drawing Title

OVERALL LAYOUT

File Name	S.A.3 Overall Layout		
Drawing No.	S.A.3		
Paper Size	11" x 17"	Issued Date	11/28/18



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Lead Engineer	Steve Thusius
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Designed by	Steve Thusius
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Drawn by	Steve Thusius
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Checked by	Mark Rippy
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Project

**REST AREA ADJACENT
TO PROPOSED I69**

Drawing Title	FRONT VIEW
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File Name	S.B.1 Front View
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Drawing No.	S.B.1
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Paper Size	11' x 17"	Issued Date	11/28/18
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Lead Engineer	Steve Thusius		
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Drawn by	Steve Thusius		
Checked by	Mark Rippy		
Project REST AREA ADJACENT TO PROPOSED I69			
Drawing Title	SIDE VIEW		
File Name	S.B.2 Side View		
Drawing No.	S.B.2		
Paper Size	11' x 17"	Issued Date	11/28/18





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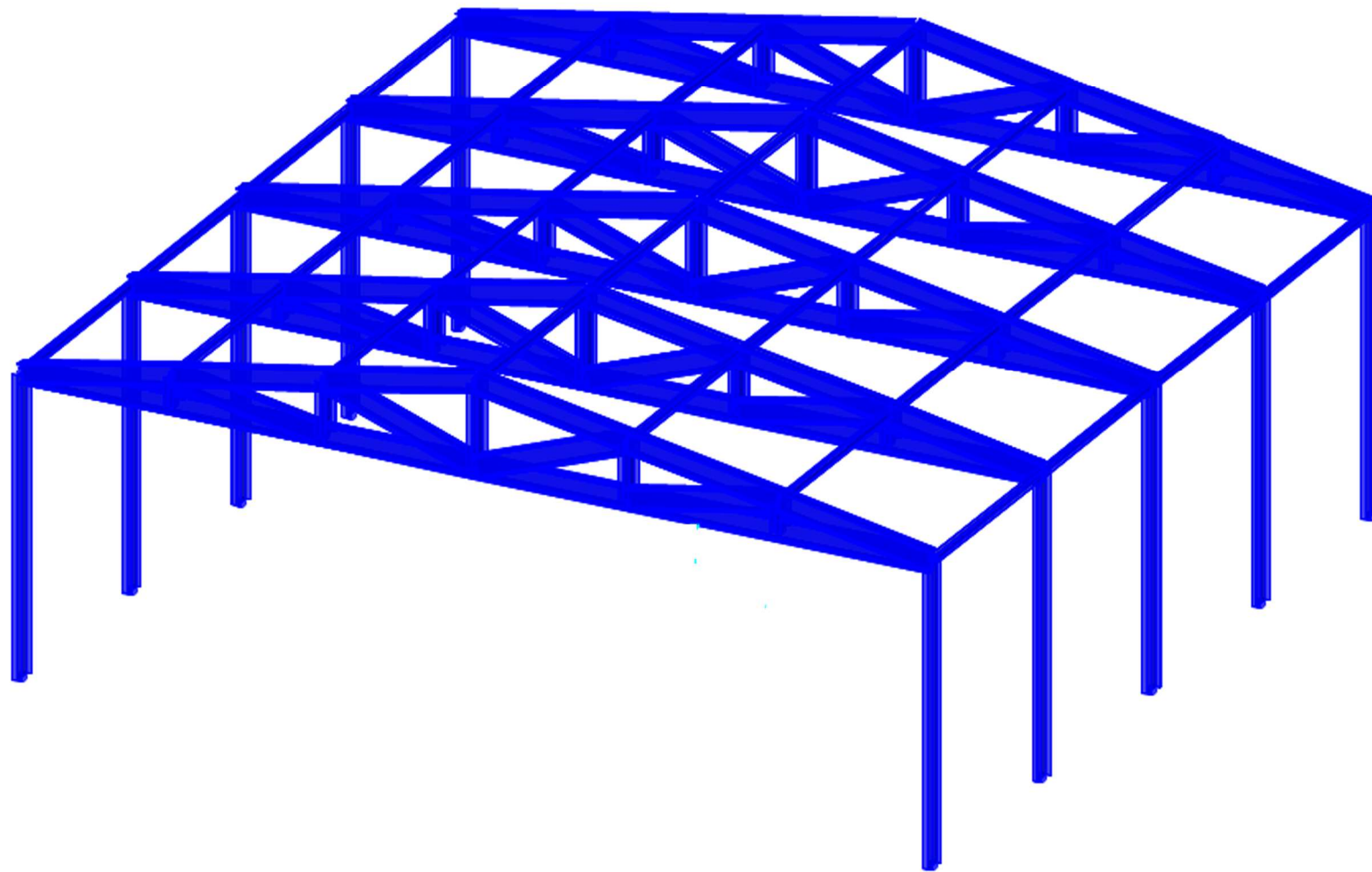
3720 Alumni Avenue,

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Lead Engineer	Steve Thusius		
Designed by	Steve Thusius		
Drawn by	Steve Thusius		
Checked by	Mark Rippy		
<div>Project</div> <div>REST AREA ADJACENT TO PROPOSED I69</div>			
Drawing Title	BACK VIEW		
File Name	S.B.3 Back View		
Drawing No.	S.B.3		
Paper Size	11' x 17"	Issued Date	11/28/18



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Lead Engineer	Steve Thusius
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Designed by	Steve Thusius
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Drawn by	Steve Thusius
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Checked by	Mark Rippy
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Project

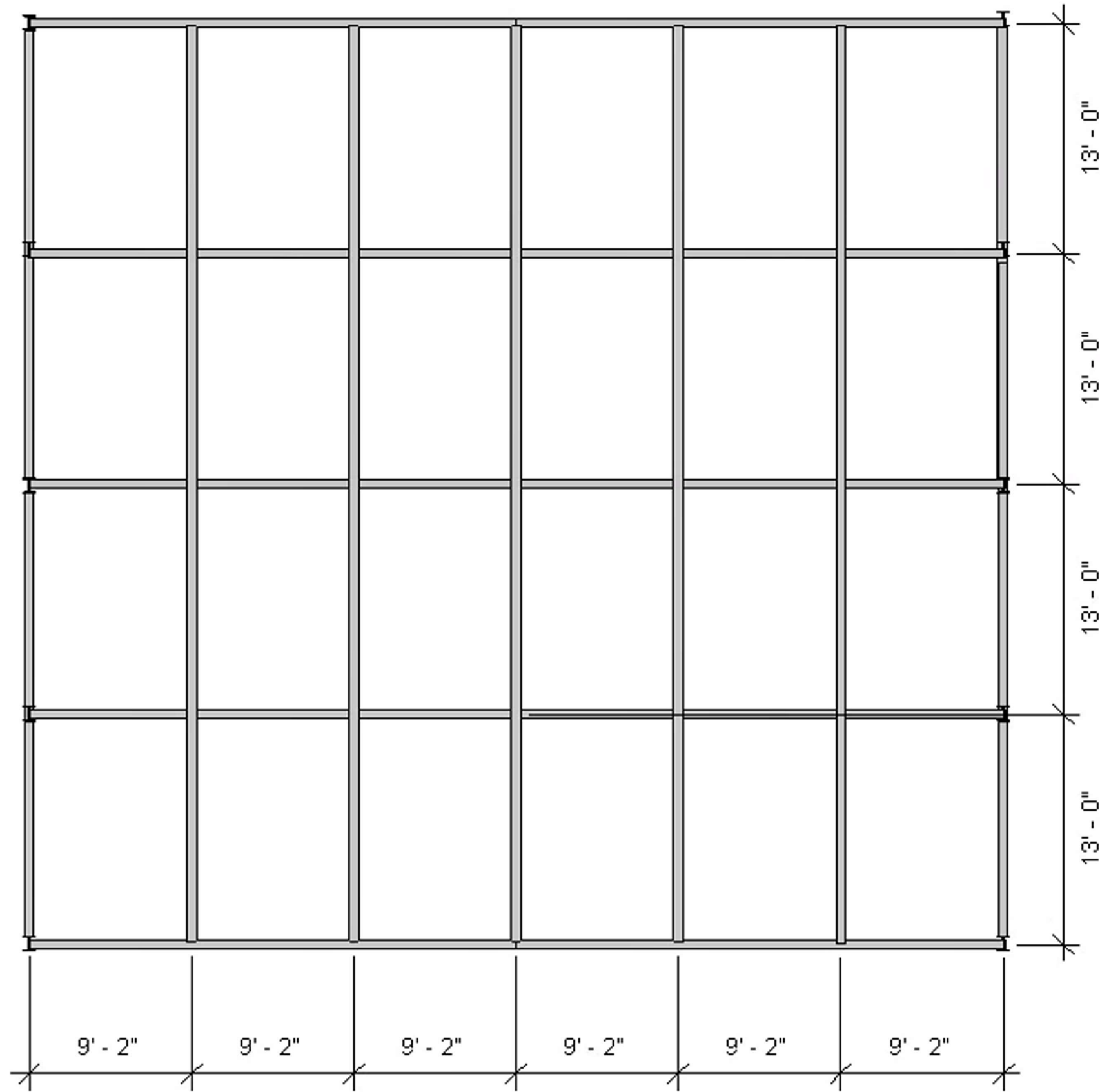
**REST AREA ADJACENT
TO PROPOSED I69**

Drawing Title	COMPLETE FRAME
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File Name	S.B.4 Complete Frame
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Drawing No.	S.B.4
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Paper Size	11' x 17"	Issued Date	11/28/18
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Designed by	Steve Thusius
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Drawn by	Steve Thusius
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Checked by	Mark Rippy
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Project

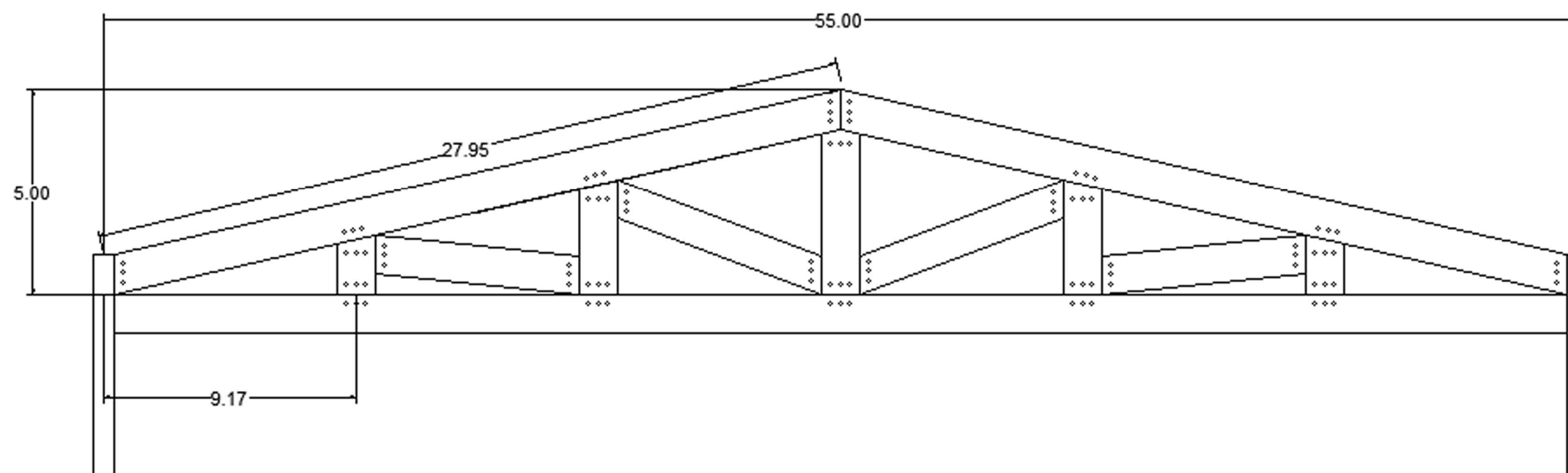
**REST AREA ADJACENT
TO PROPOSED I69**

Drawing Title	ROOF SYSTEM
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File Name	S.B.5 Roof System
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Drawing No.	S.B.5
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Paper Size	11' x 17"	Issued Date	11/28/18
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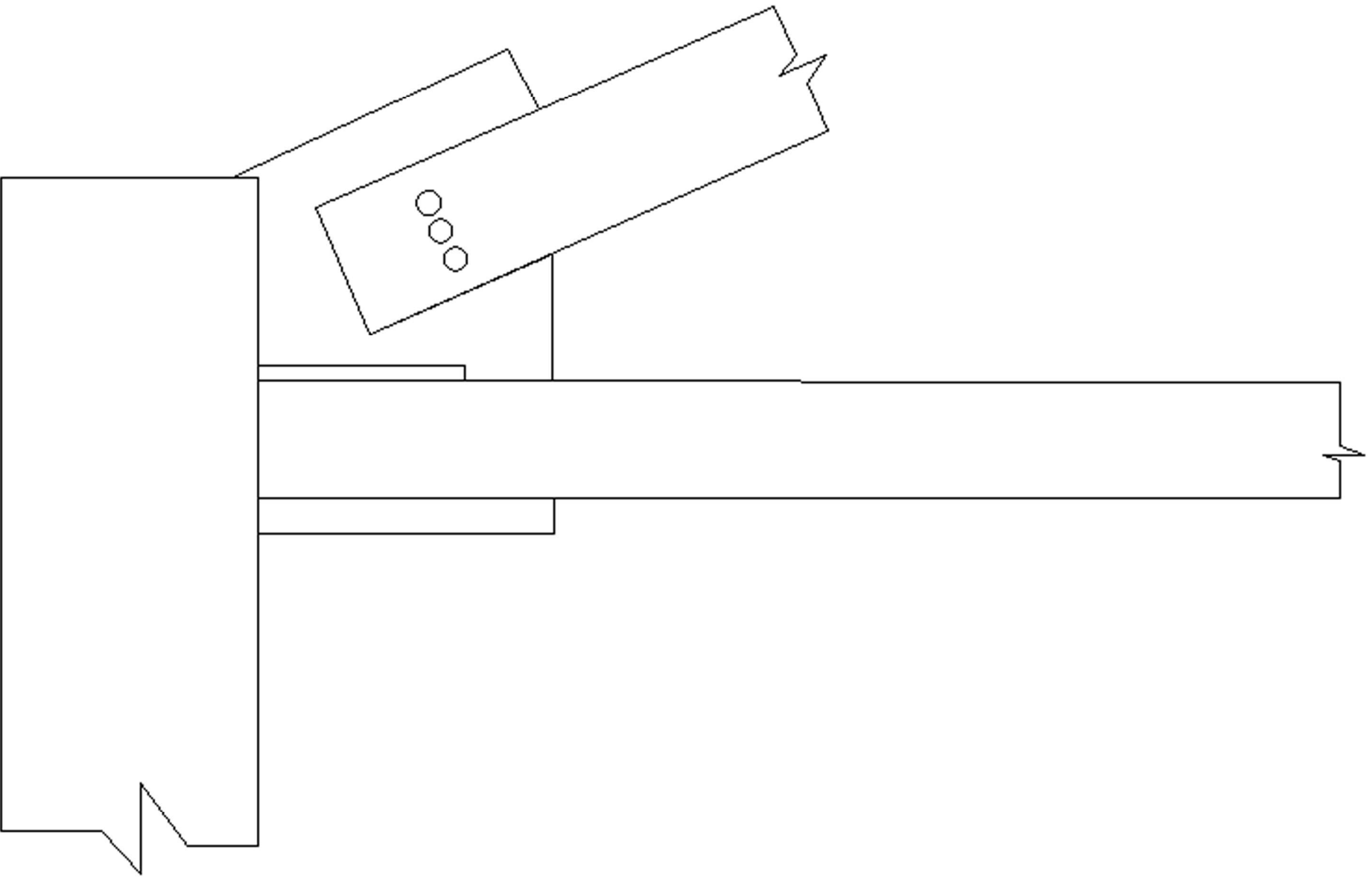
Tel: (901) 978-9000
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Lead Engineer	Steve Thusius
Designed by	Steve Thusius
Drawn by	Steve Thusius
Checked by	Mark Rippy

Project

REST AREA ADJACENT TO PROPOSED I69

Drawing Title		TRUSS	
File Name	S.B.6 Truss		
Drawing No.	S.B.6		
Paper Size	11' x 17"	Issued Date	11/28/18





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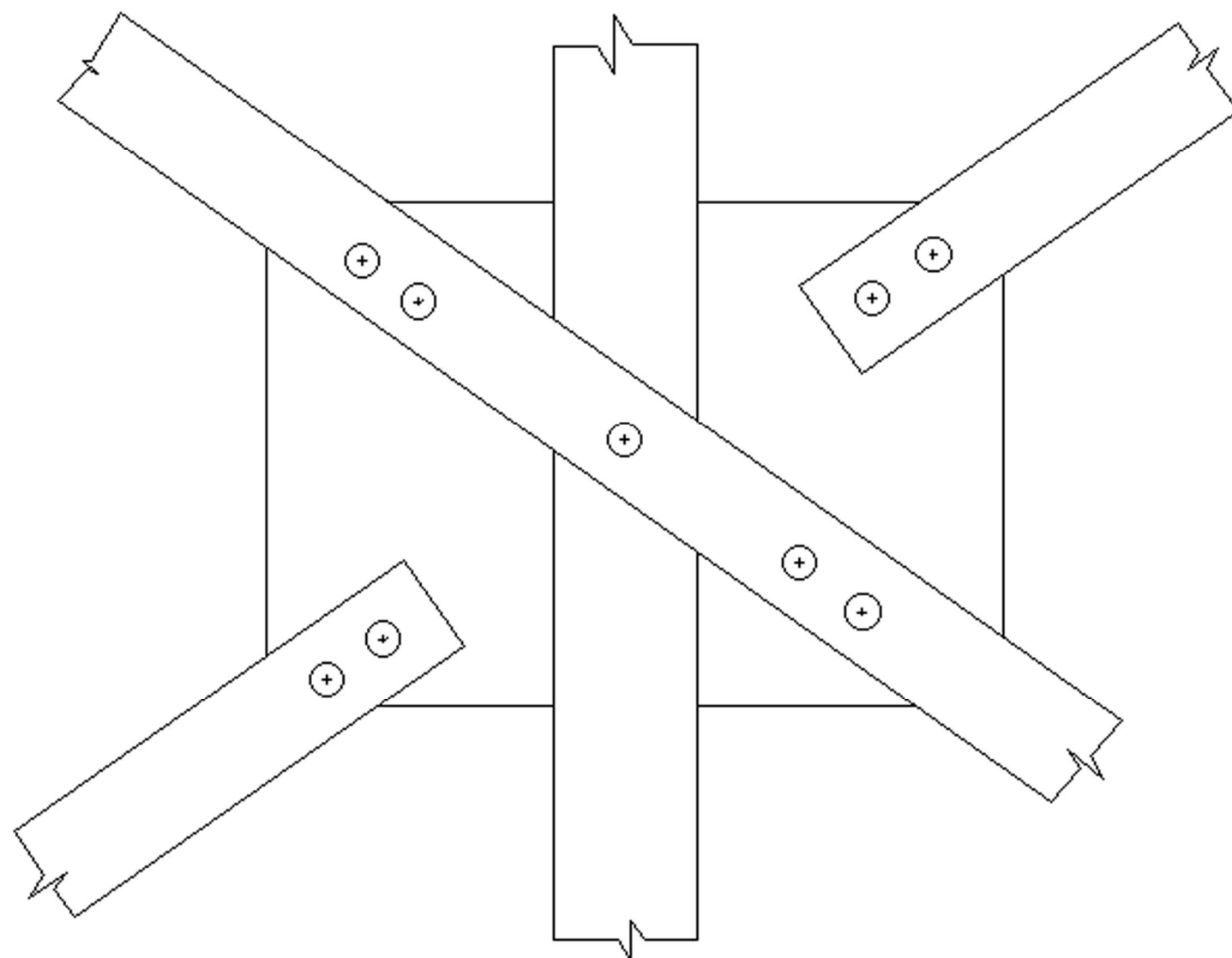
3720 Alumni Avenue,

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Lead Engineer	Steve Thusius		
Designed by	Steve Thusius		
Drawn by	Steve Thusius		
Checked by	Mark Rippy		
<div>Project</div> <div>REST AREA ADJACENT TO PROPOSED I69</div>			
Drawing Title	TRUSS TO COLUMN		
File Name	S.B.7 Truss to Column		
Drawing No.	S.B.7		
Paper Size	11' x 17"	Issued Date	11/28/18



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Lead Engineer	Steve Thusius
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Designed by	Steve Thusius
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Drawn by	Steve Thusius
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Checked by	Mark Rippy
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Project

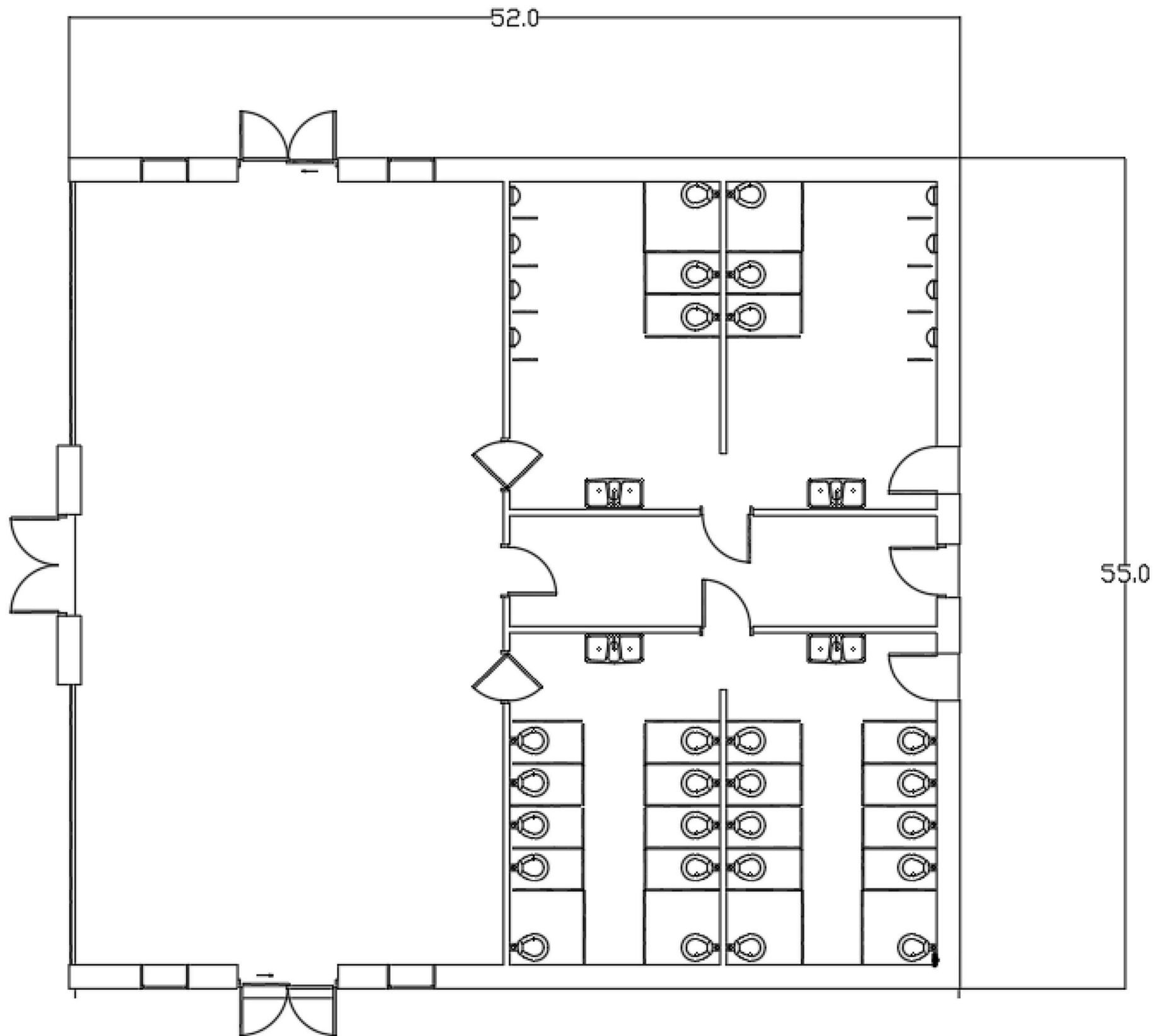
**REST AREA ADJACENT
TO PROPOSED I69**

Drawing Title	ROOF CONNECTIONS
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File Name	S.B.8 Roof Connections
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Drawing No.	S.B.8
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Paper Size	11' x 17"	Issued Date	11/28/18
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Lead Engineer	Steve Thusius
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Designed by	Steve Thusius
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Drawn by	Steve Thusius
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Checked by	Mark Rippy
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Project

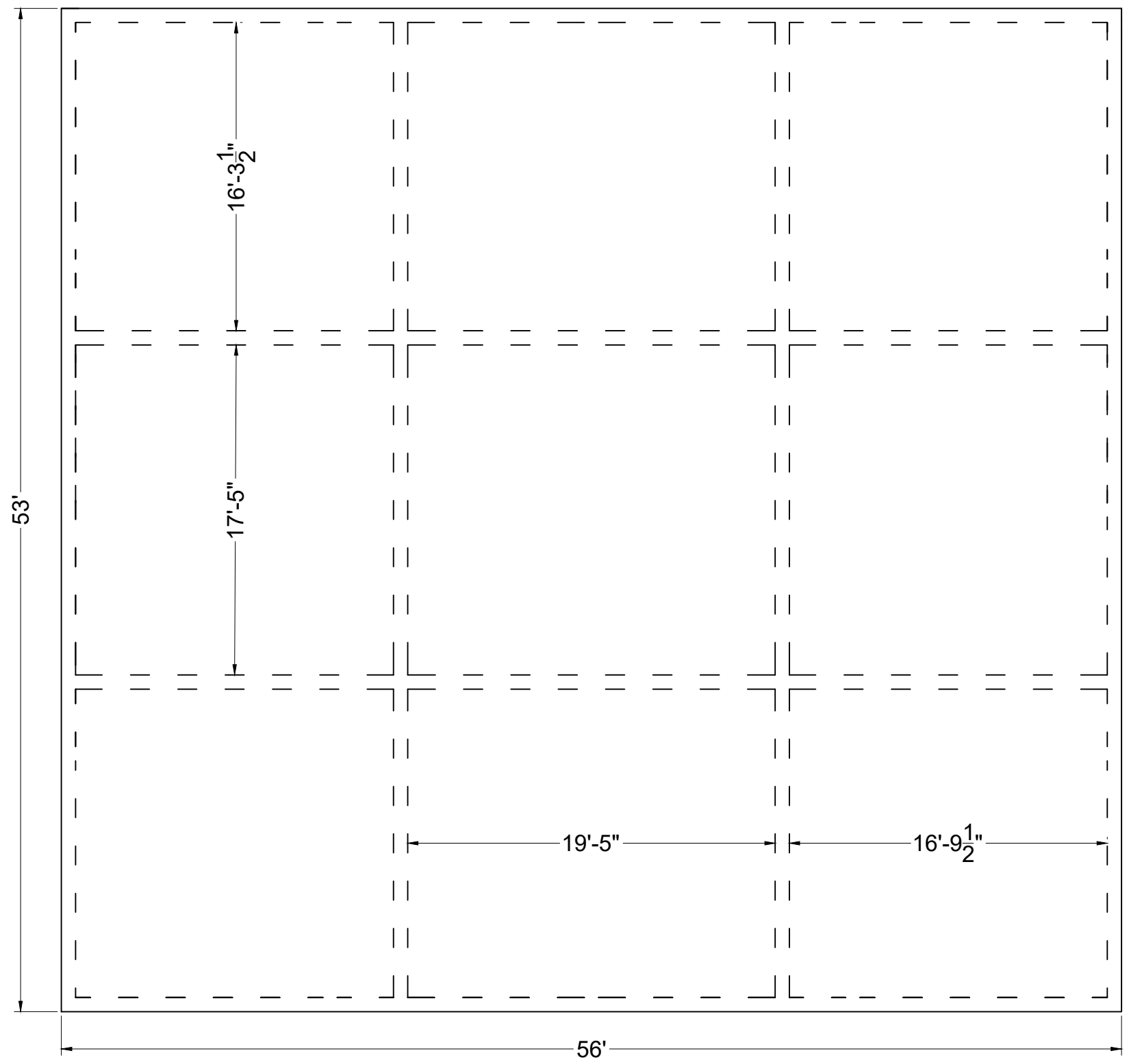
**REST AREA ADJACENT
TO PROPOSED I69**

Drawing Title	Floorplan
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File Name	S.B.9 Floorplan
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Drawing No.	S.B.9
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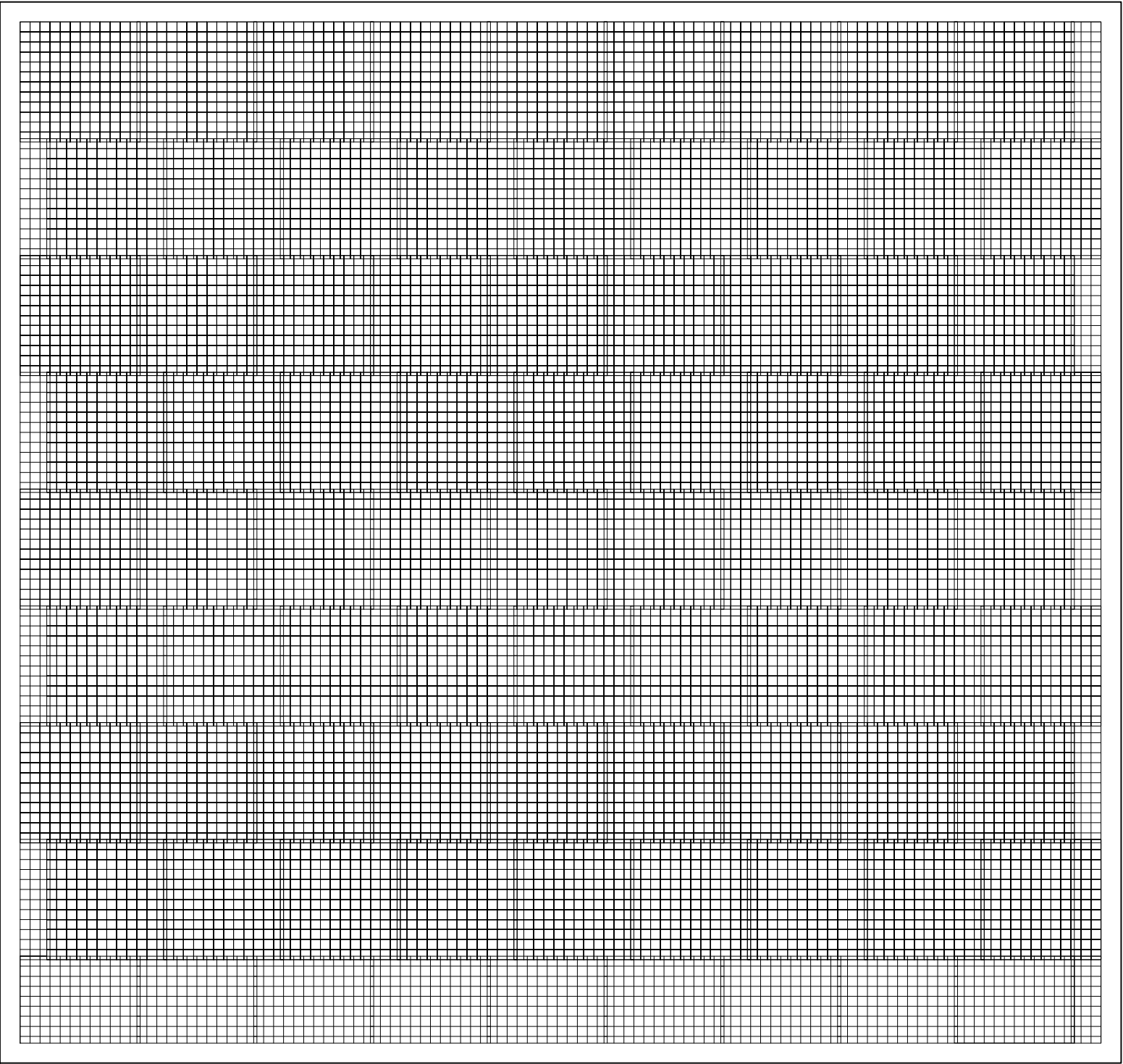
Paper Size	11' x 17"	Issued Date	11/28/18
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Foundation Plan View

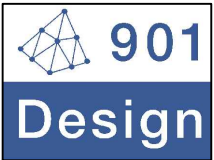
Local Engineering Firm			
		901 DESIGN, INCOPORATED 3720 Alumni Avenue, Memphis TN, 38111 Tel: (901) 978-9000 Email: 901design@memphis.edu	
General Director Huan Ngo			
Lead Engineer		Huan Ngo	
Designed by		Kendall Brown	
Drawn by		Kendall Brown	
Checked by		Mark Rippy	
Project REST AREA ADJACENT TO PROPOSED I69			
Drawing Title FOUNDATION PLAN VIEW			
File Name		S.C.1 Foundation Plan View	
Drawing No.		S.C.1	
Paper Size		11" x 17"	Issued Date 11/28/18

6'x6' W5 Welded
Wire Rienforcing



Welded Wire Reinforcement Details

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Lead Engineer	Huan Ngo		
Designed by	Kendall Brown		
Drawn by	Kendall Brown		
Checked by	Mark Rippy		

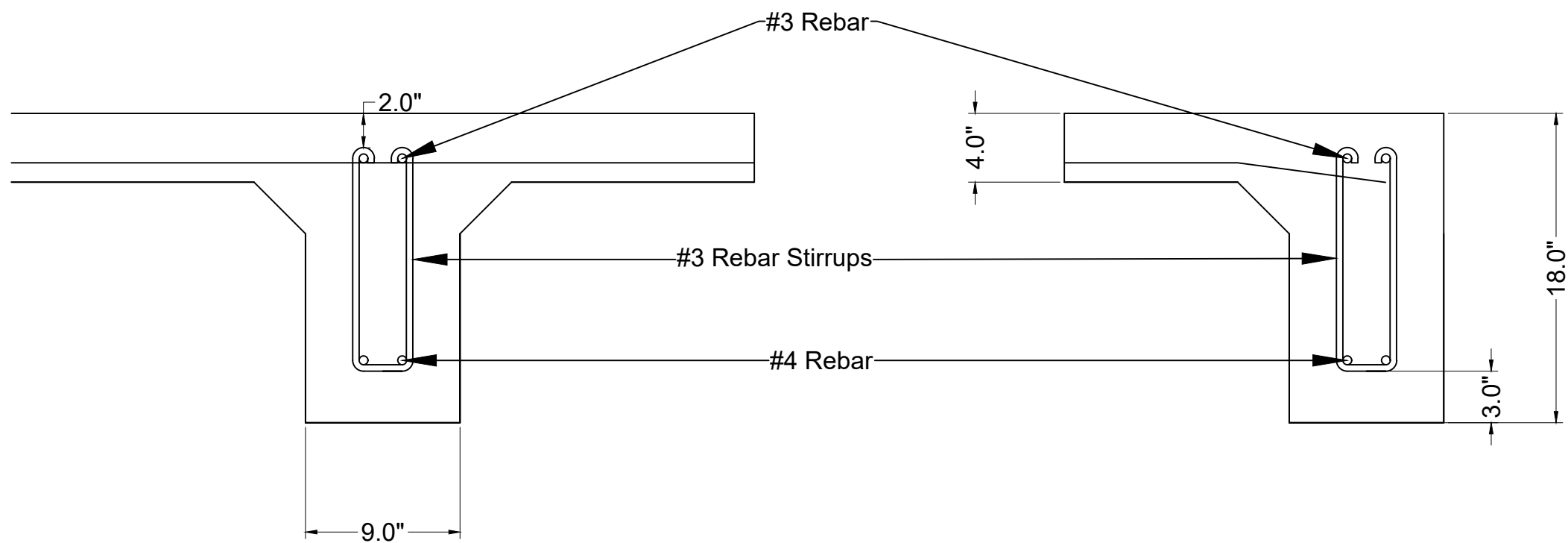
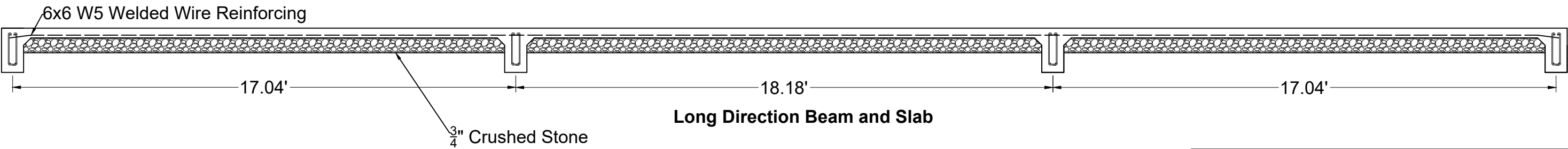
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REST AREA ADJACENT
TO PROPOSED I69

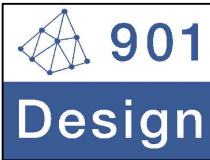
Drawing Title

WELDED WIRE REINFORCEMENT

File Name	S.C.2 Welded Wire Reinforcement		
Drawing No.	S.C.2		
Paper Size	11" x 17"	Issued Date	11/28/18



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General Director
Huan Ngo

Lead Engineer Huan Ngo

Designed by Kendall Brown

Drawn by Kendall Brown

Checked by Mark Rippy

Project

**REST AREA ADJACENT
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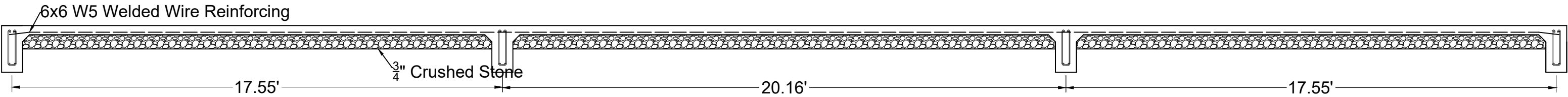
Drawing Title

LONG DIRECTION BEAM & SLAB

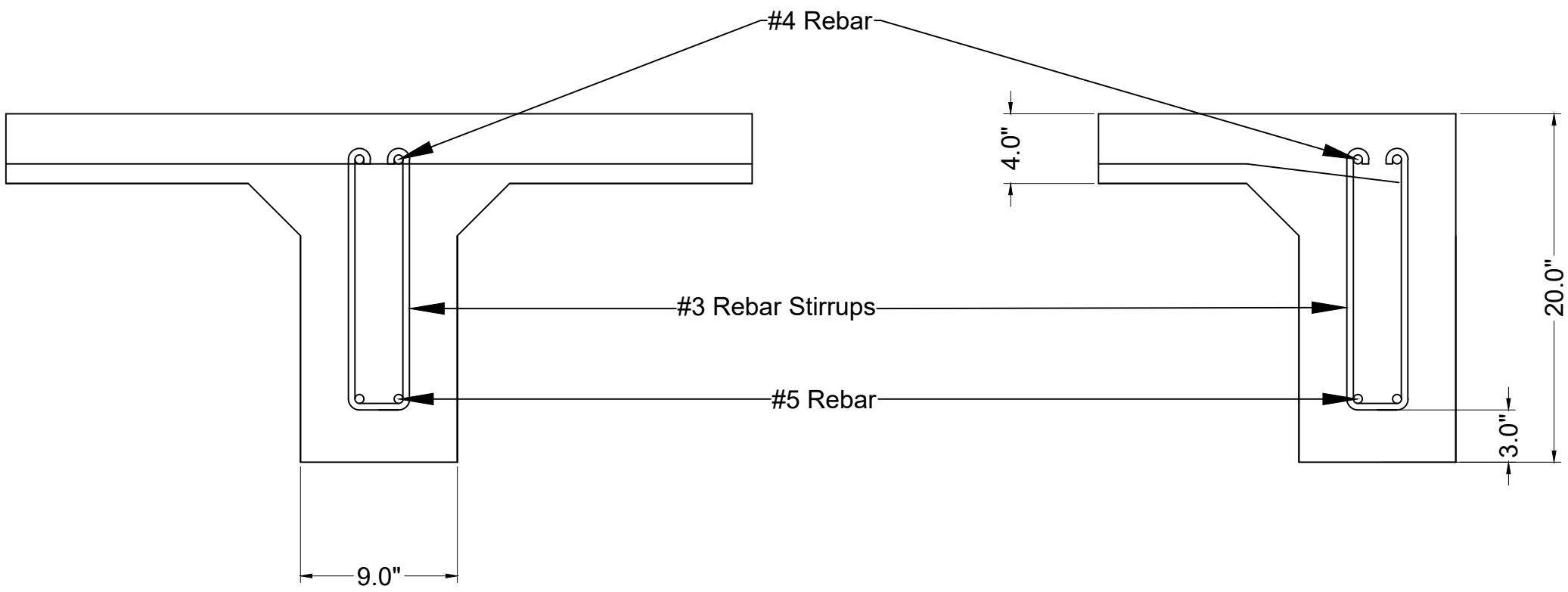
File Name S.C.3 Long Direction Beam & Slab

Drawing No. S.C.3

Paper Size 11" x 17" Issued Date 11/28/18

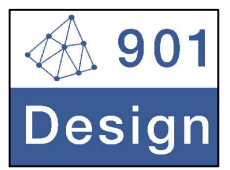


Short Direction Beam and Slab Detail



Long Direction Beam and Slab Detail

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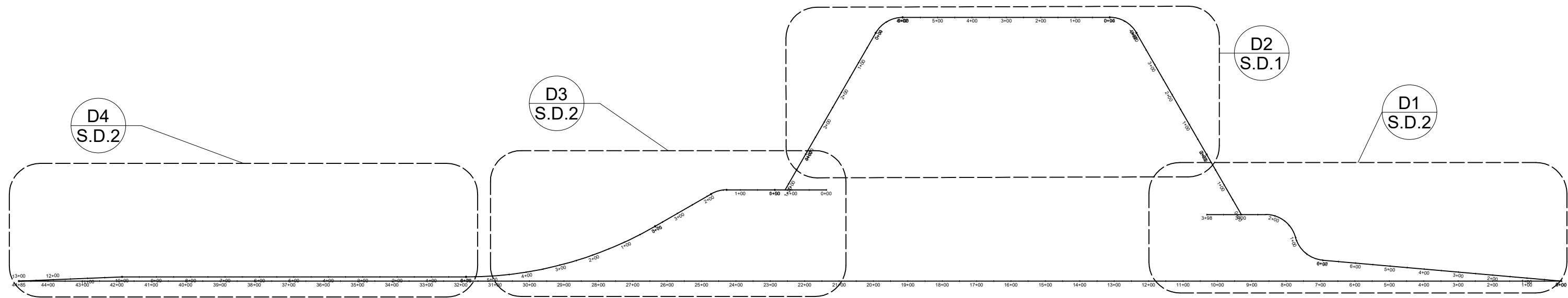
General Director
Huan Ngo

Lead Engineer	Huan Ngo
Designed by	Kendall Brown
Drawn by	Kendall Brown
Checked by	Mark Rippy

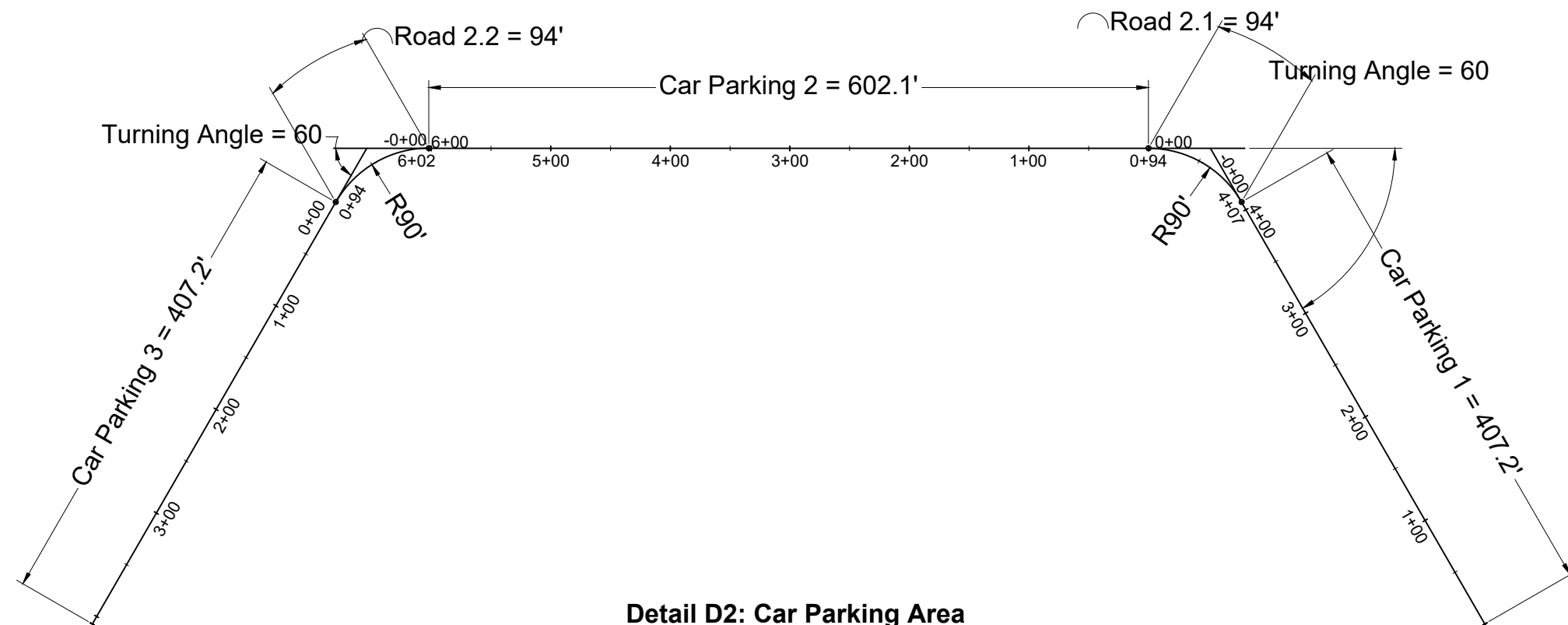
Project
**REST AREA ADJACENT
TO PROPOSED I69**

Drawing Title
SHORT DIRECTION BEAM & SLAB

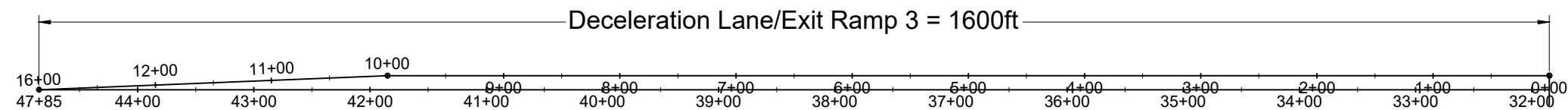
File Name	S.C.4 Short Direction Beam & Slab		
Drawing No.	S.C.4		
Paper Size	11" x 17"	Issued Date	11/28/18



Overall Alignment Parking Layout
Scale 1 to 3500

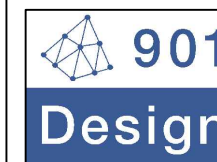


Detail D2: Car Parking Area
Scale 1 to 1500



Detail D4: Exit Ramp 3
Scale 1 to 1500

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General Director
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Lead Engineer Huan Ngo

Designed by Huan Ngo

Drawn by Huan Ngo

Checked by Steve Thesuis

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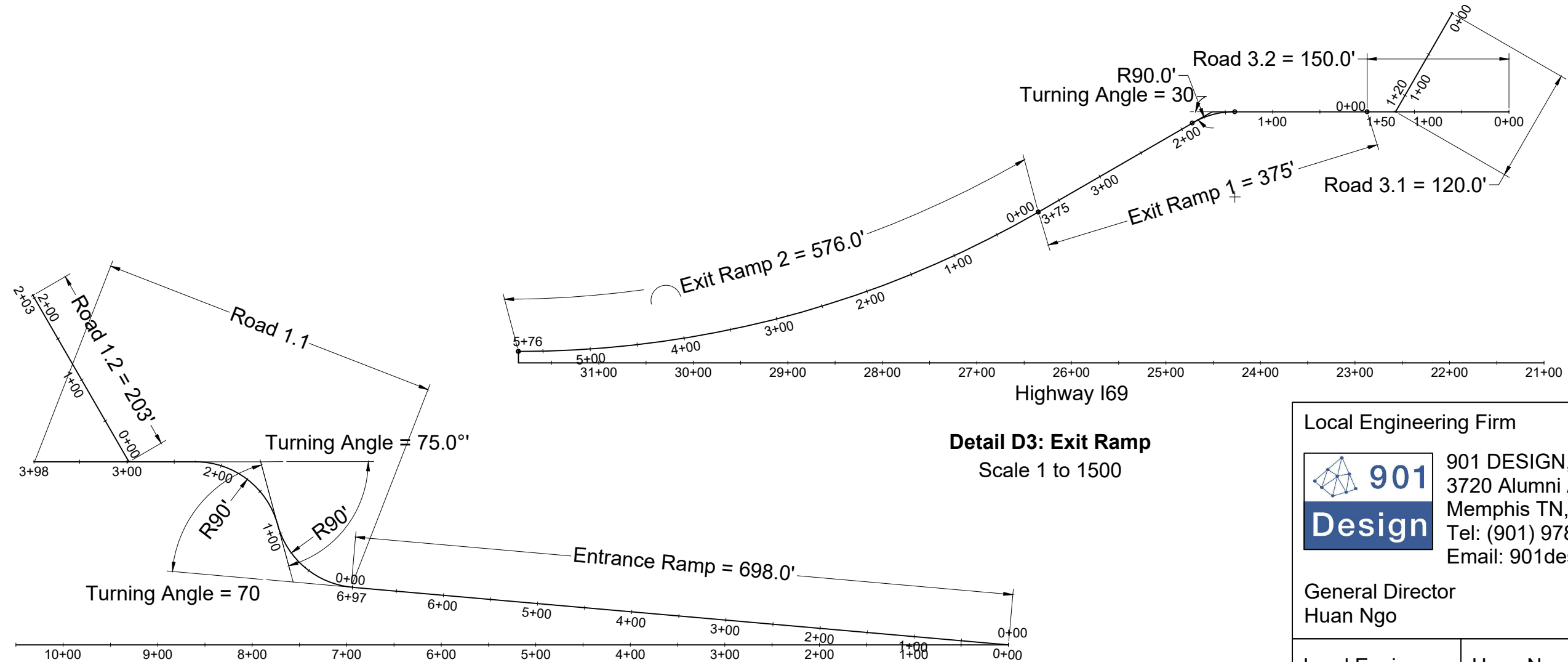
Drawing Title

ROAD ALIGNMENT 1

File Name S.D.1 Road Alignment 1

Drawing No. S.D.1

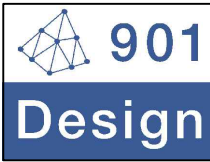
Paper Size 11" x 17" Issued Date 11/28/18

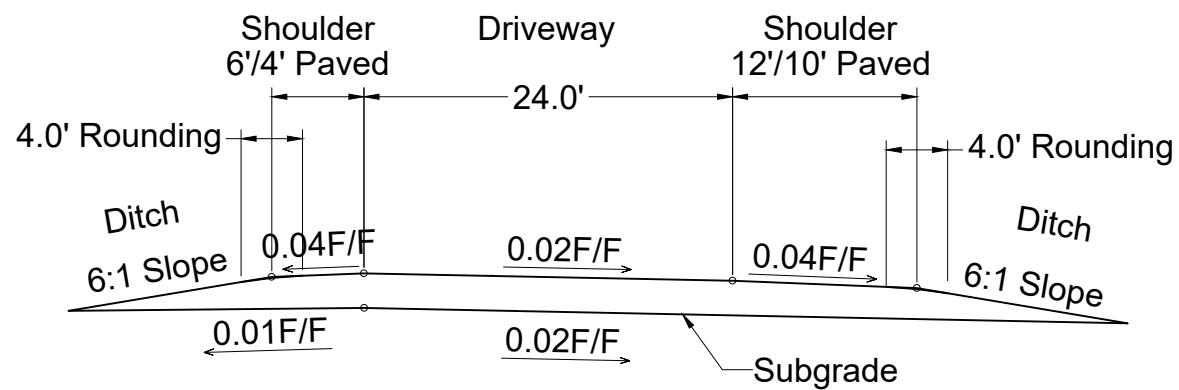
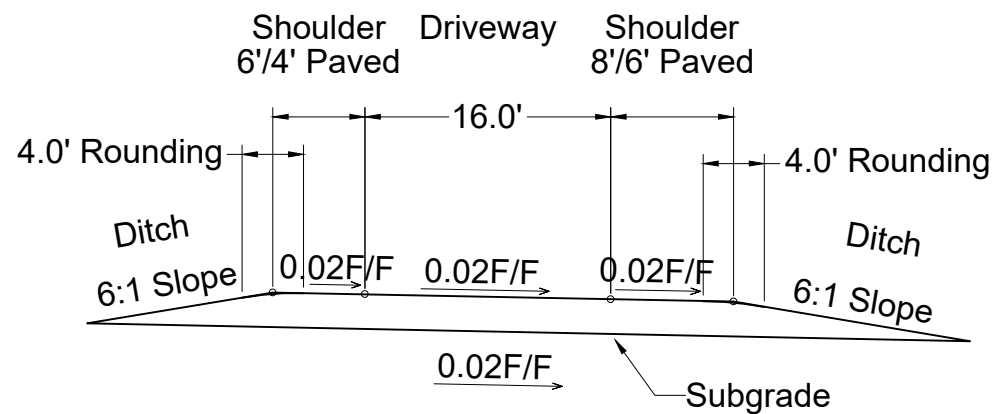
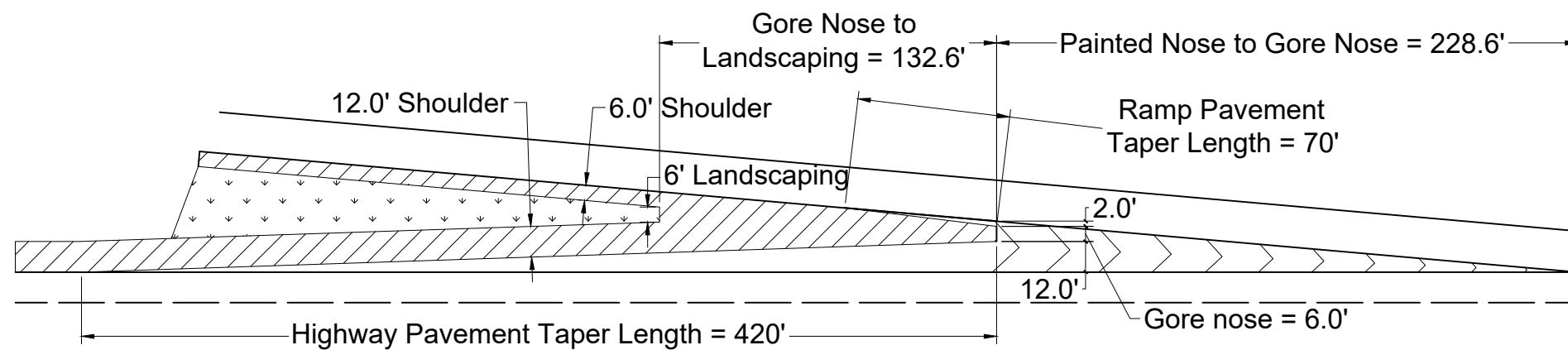
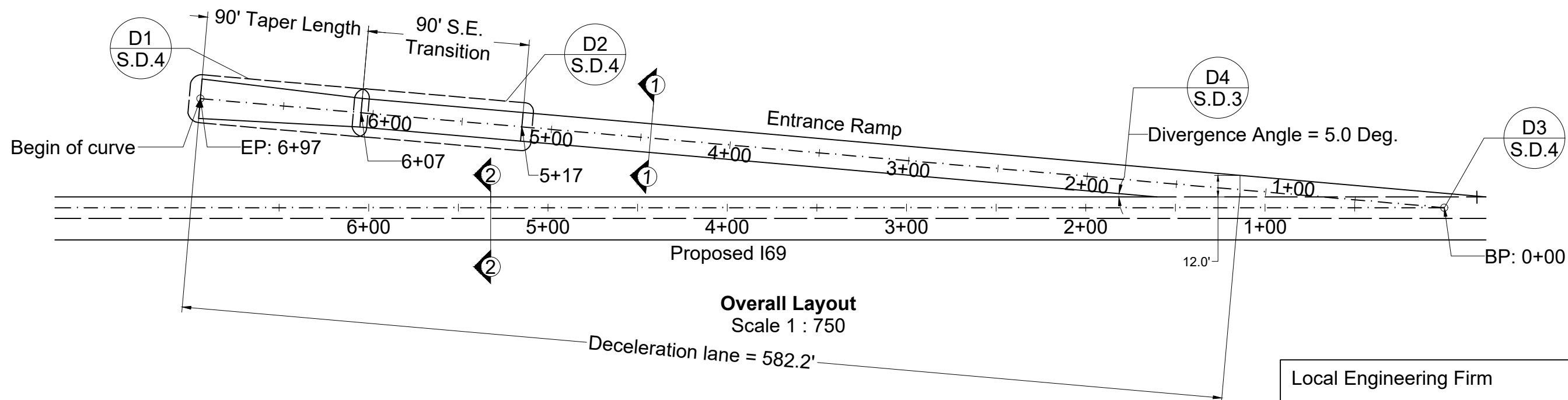


Detail D1: Entrance Ramp
Scale 1 to 1500

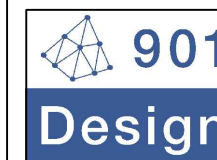
Detail D3: Exit Ramp
Scale 1 to 1500

List of Sheets		
Elements	Overall Layout	Detailing
Entrance Ramp	S.D.3	S.D.4
Exit Ramp 1	S.D.5	S.D.6
Exit Ramp 2	S.D.7	S.D.8
Exit Ramp 3	S.D.9	S.D.10
Car Parking	S.D.11	S.D.14, S.D.19
Truck Parking	S.D.12	S.D.14
Inner Roadway	S.D.13	S.D.14
Road Signage	S.D.16; S.D.17	S.D.18

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General Director Huan Ngo			
Lead Engineer		Huan Ngo	
Designed by		Huan Ngo	
Drawn by		Huan Ngo	
Checked by		Steve Thesuis	
Project REST AREA ADJACENT TO PROPOSED I69			
Drawing Title ROAD ALIGNMENT 2			
File Name		S.D.2 Road Alignment 2	
Drawing No.		S.D.2	
Paper Size	11" x 17"	Issued Date	11/28/18



Local Engineering Firm



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Email: 901design@memphis.edu

General Director
Huan Ngo

Lead Engineer Huan Ngo

Designed by Huan Ngo

Drawn by Huan Ngo

Checked by Steve Thesuis

Project

**REST AREA ADJACENT
TO PROPOSED I69**

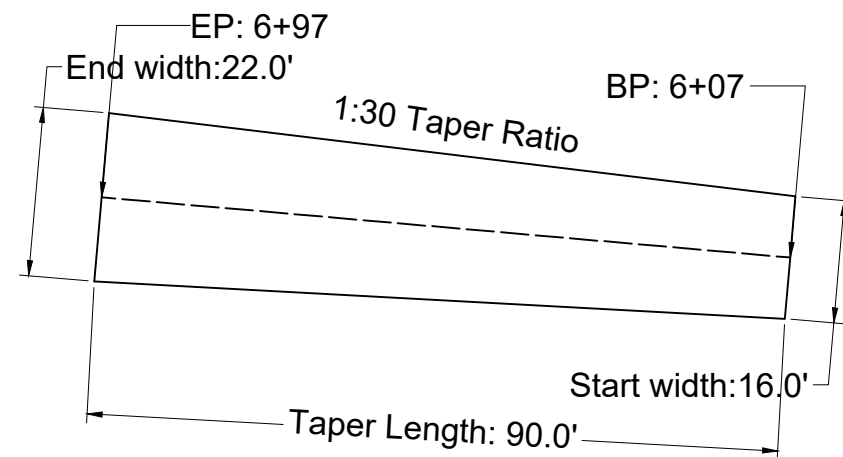
Drawing Title

ENTRANCE RAMP

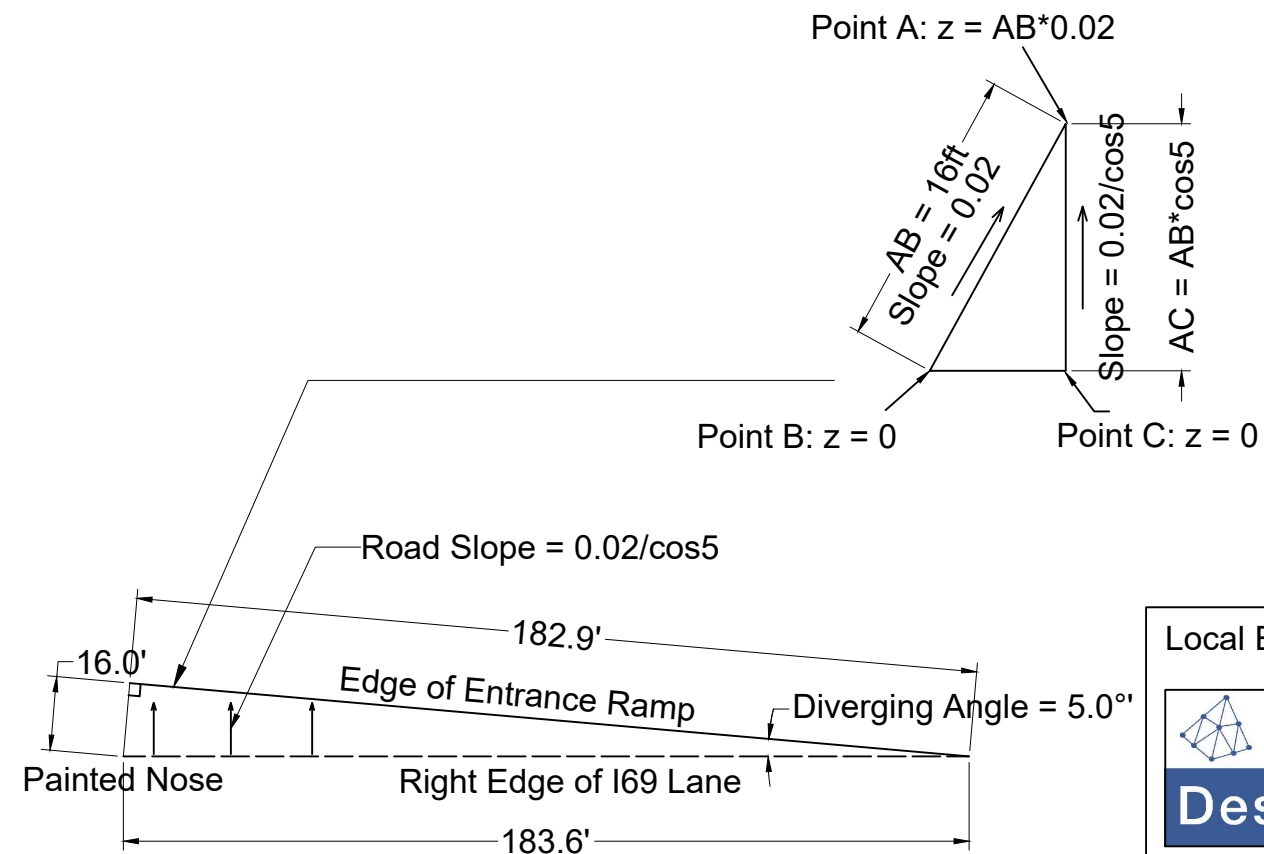
File Name S.D.3 Entrance Ramp

Drawing No. S.D.3

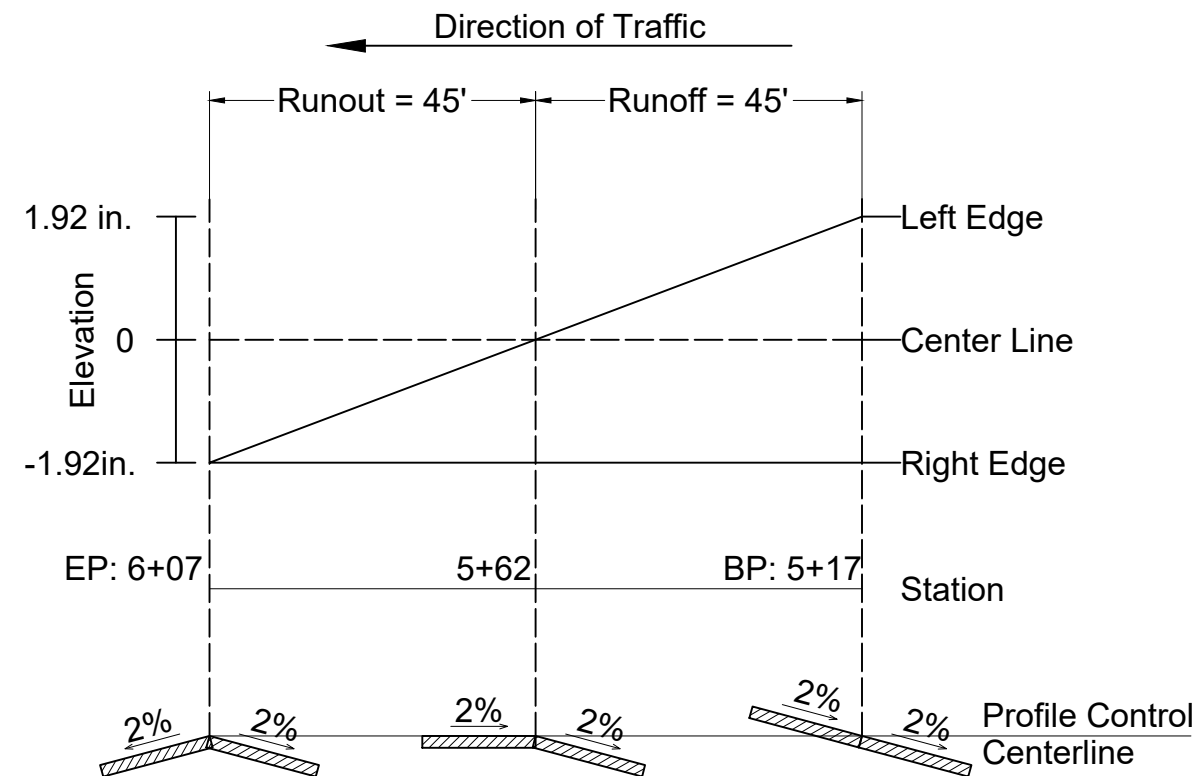
Paper Size 11" x 17" Issued Date 11/28/18



Detail D2: Widening Section
Scale 1 to 300



Detail D3: Diverging Area
Scale 1 to 500



Detail D1: Superelevation Profile
Scale 1 to 300

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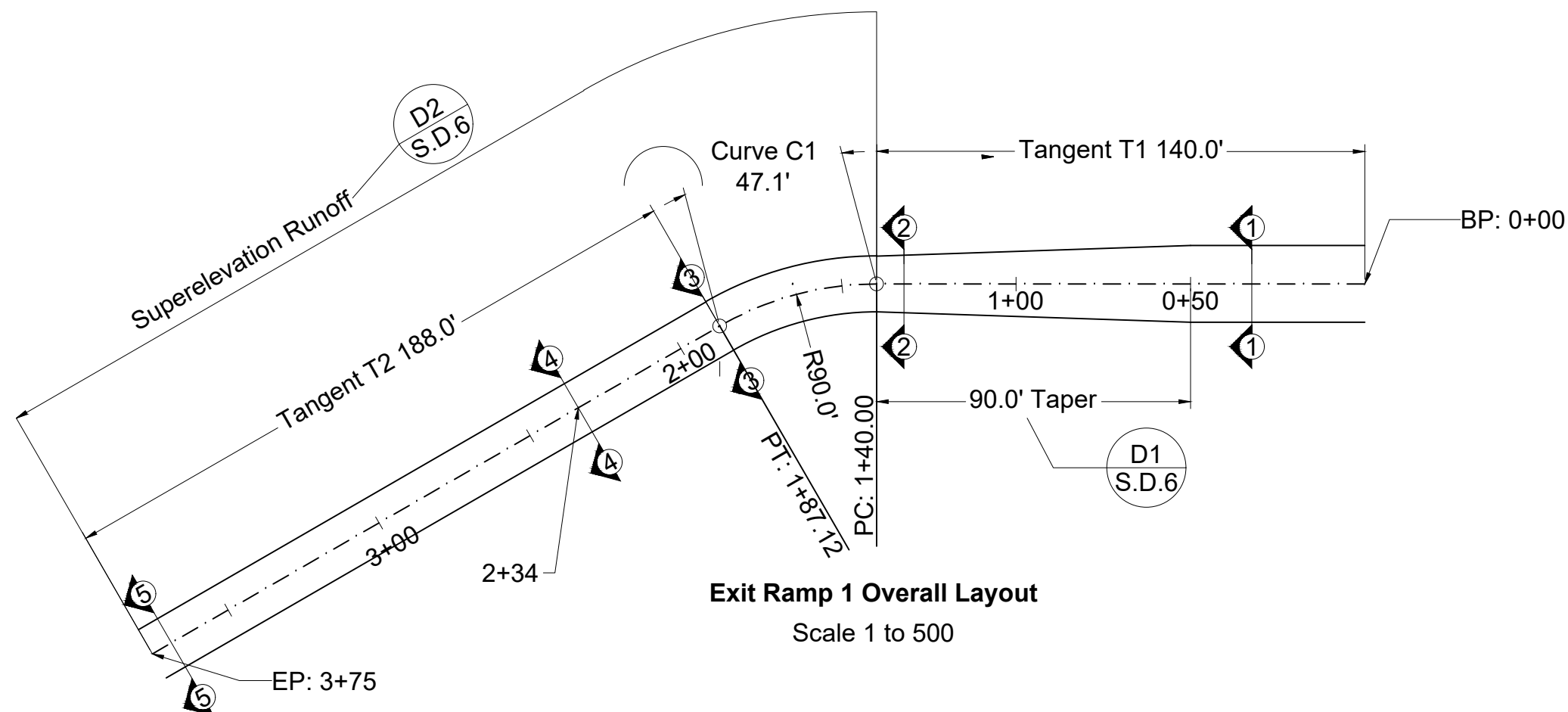
Drawing Title

ENTRANCE RAMP DETAILS

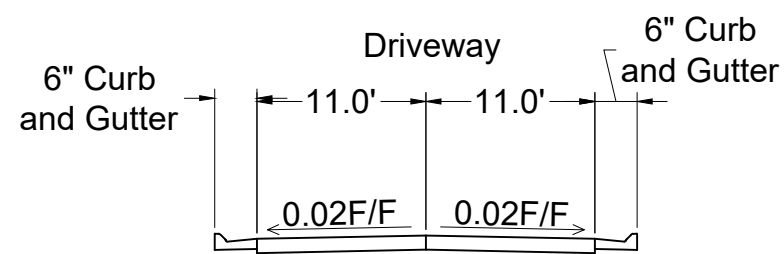
File Name S.D.4 Entrance Ramp Details

Drawing No. S.D.4

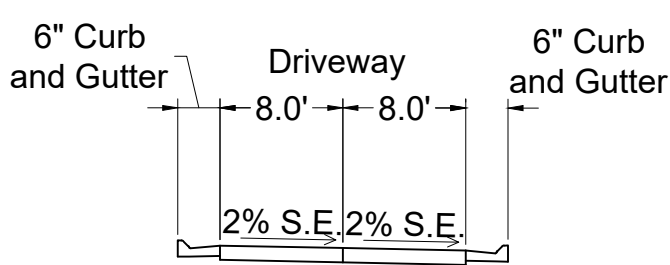
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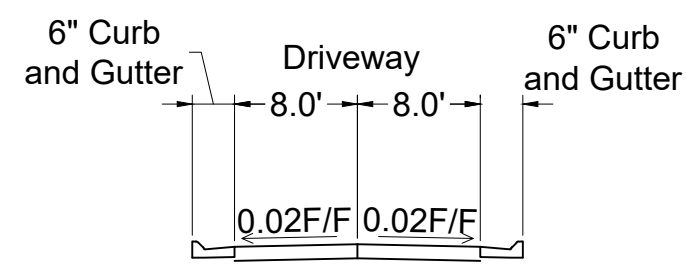
Exit Ramp 1 Overall Layout
Scale 1 to 500



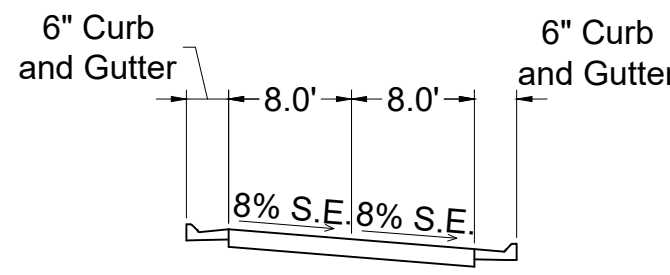
Cross Section 1-1: Inner Road
Scale 1 to 150



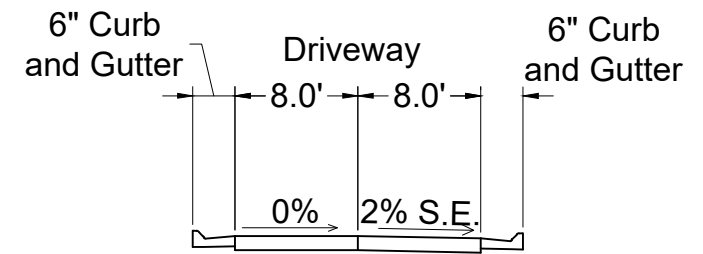
Cross Section 3-3: Superelevated Section
Scale 1 to 150



Cross Section 2-2: Tapered Section
Scale 1 to 150



Cross Section 5-5: Superelevated to P.C.
Scale 1 to 150



Cross Section 4-4: End of Runout
Scale 1 to 150

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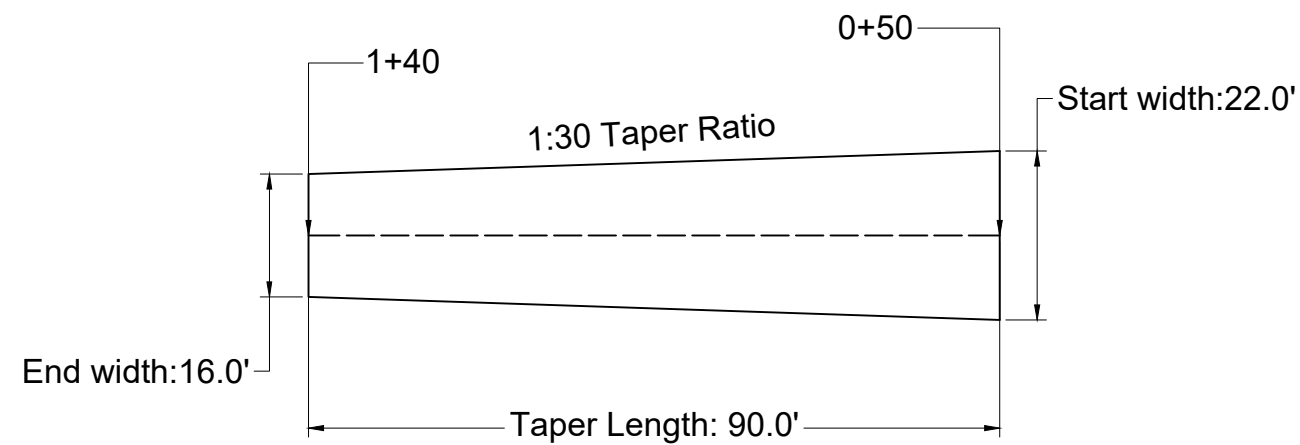
General Director
Huan Ngo

Lead Engineer	Huan Ngo
Designed by	Huan Ngo
Drawn by	Huan Ngo
Checked by	Steve Thesuis

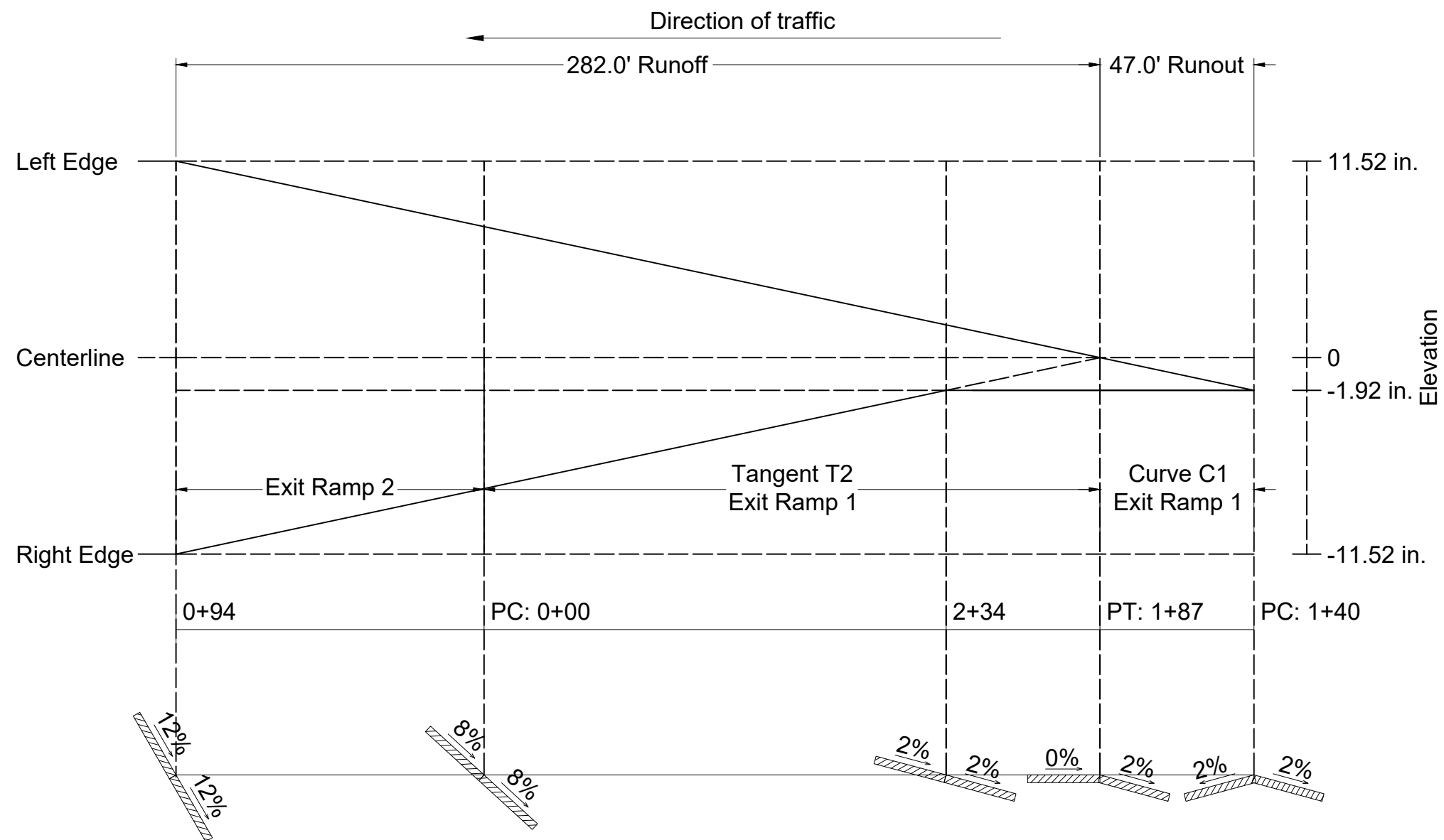
Project
**REST AREA ADJACENT
TO PROPOSED I69**

Drawing Title
EXIT RAMP 1

File Name	S.D.5 Exit Ramp 1		
Drawing No.	S.D.5		
Paper Size	11" x 17"	Issued Date	11/28/18

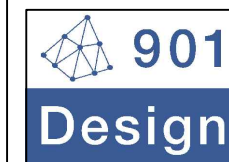


Detail D1: Tapering Section
Scale 1 to 300



Detail D2: Superelevation Profile
Scale 1 to 500

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Designed by Huan Ngo

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Project

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TO PROPOSED I69**

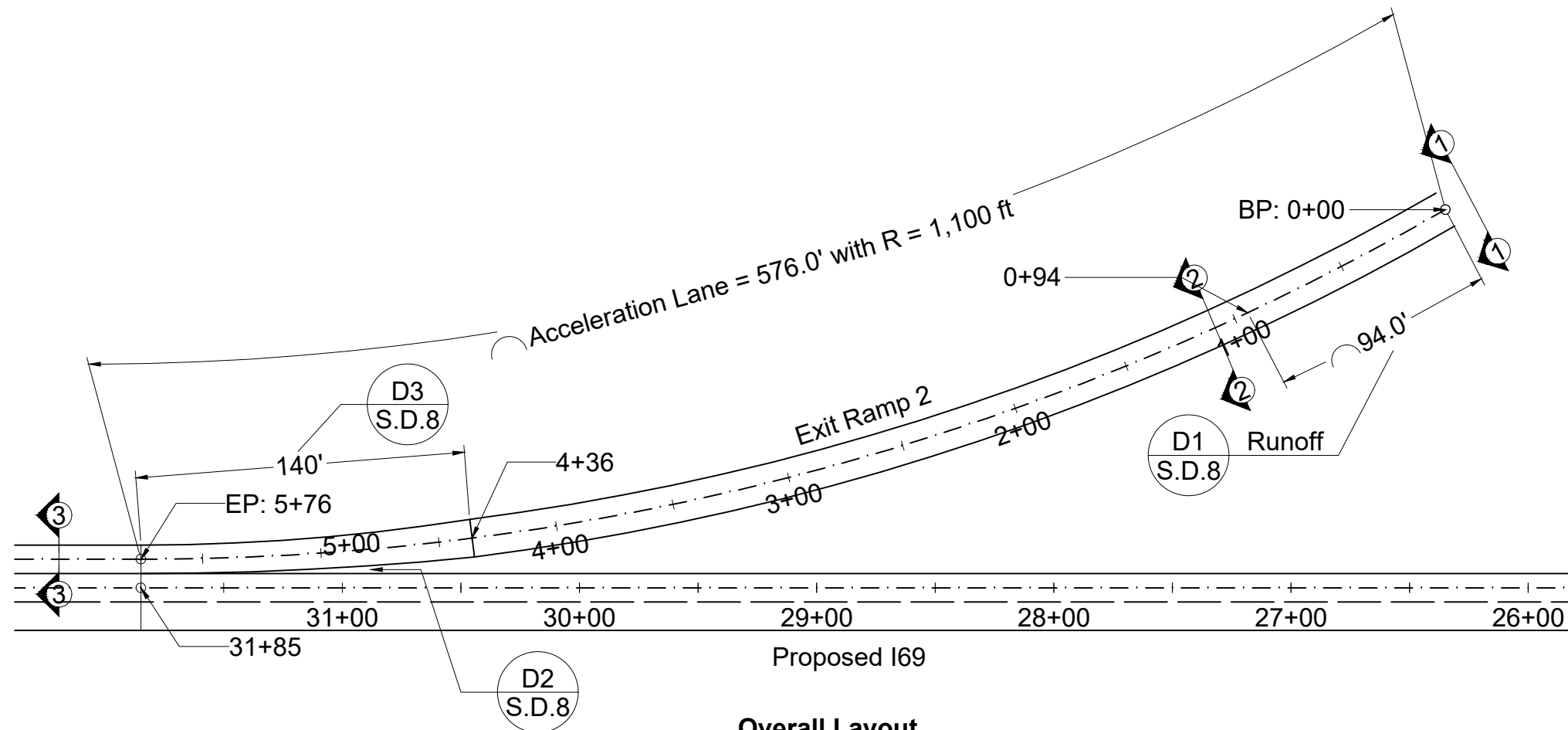
Drawing Title

EXIT RAMP 1 DETAILS

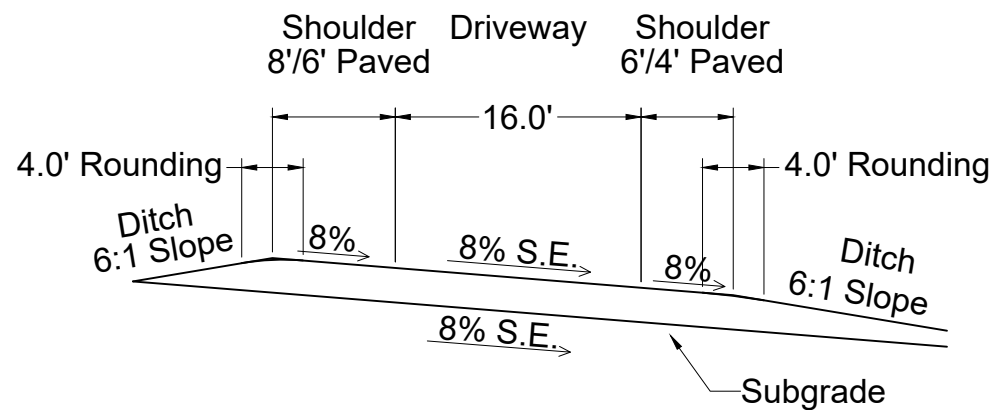
File Name S.D.6 Exit Ramp 1 Details

Drawing No. S.D.6

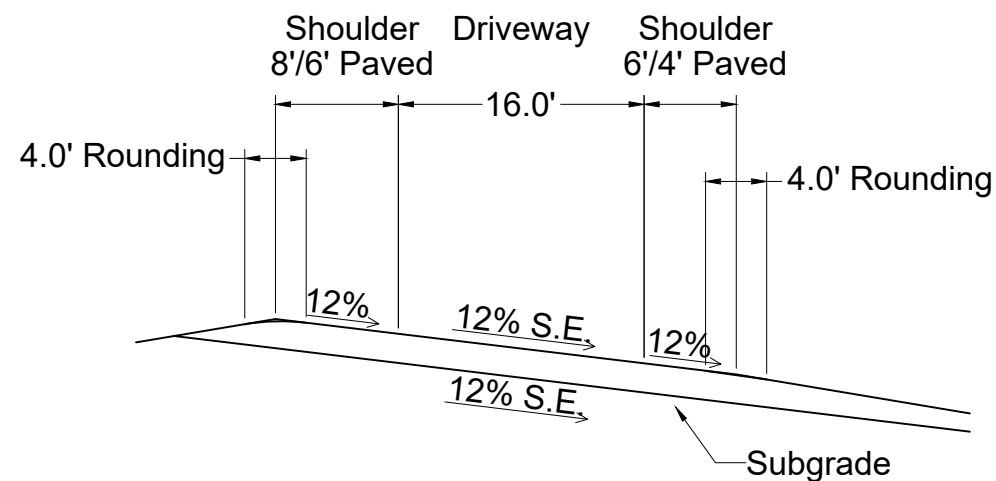
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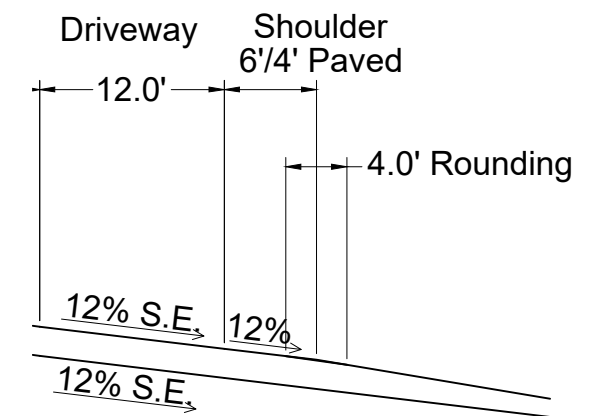
Overall Layout
Scale 1 : 750



Cross Section 1-1: Superelevation at P.C.
Scale 1 to 150



Cross Section 2-2: Fully Superelevated Exit Ramp
Scale 1 to 150



Cross Section 3-3: Acceleration Lane
Scale 1 to 150

Local Engineering Firm



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General Director
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Designed by Huan Ngo

Drawn by Huan Ngo

Checked by Steve Thesuis

Project

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TO PROPOSED I69**

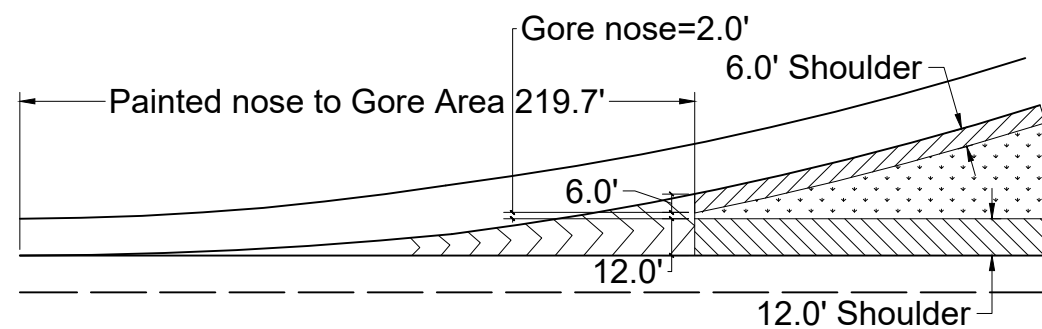
Drawing Title

EXIT RAMP 2

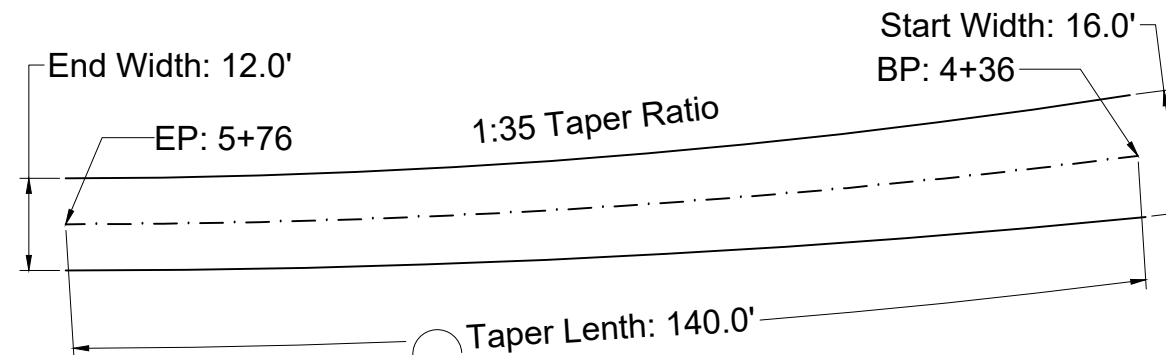
File Name S.D.7 Exit Ramp 2

Drawing No. S.D.7

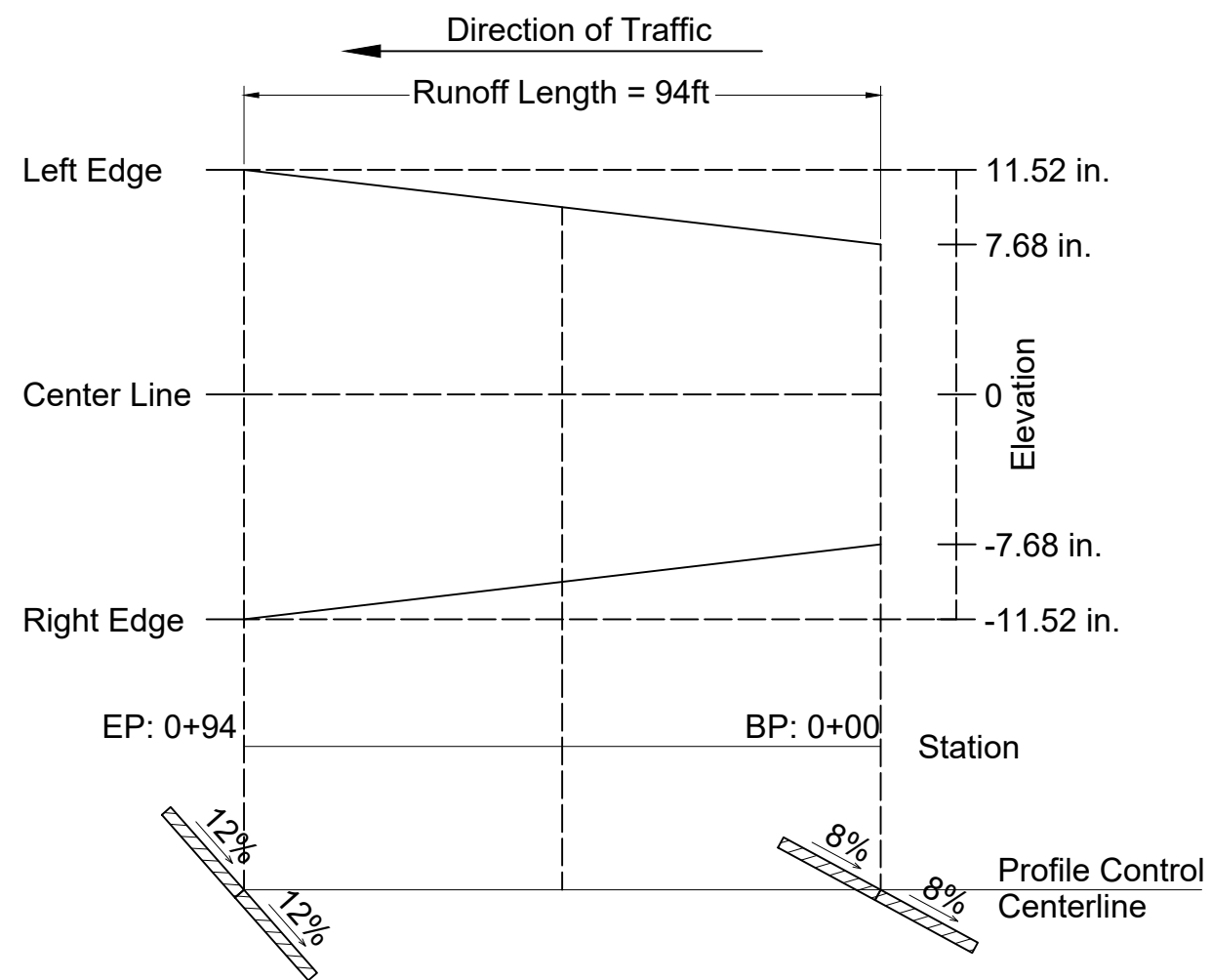
Paper Size 11" x 17" Issued Date 11/28/18



Details D2: Gore Detail
Scale 1 : 750



Detail D3: Tapering Section
Scale 1 to 300



Detail D1: Superelevation Profile
Scale 1 to 300

Local Engineering Firm



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Lead Engineer Huan Ngo

Designed by Huan Ngo

Drawn by Huan Ngo

Checked by Steve Thesuis

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**REST AREA ADJACENT
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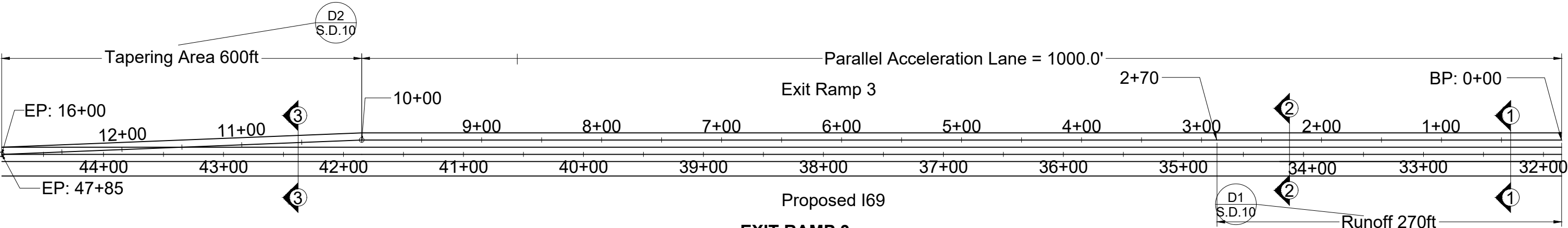
Drawing Title

EXIT RAMP 2 DETAILS

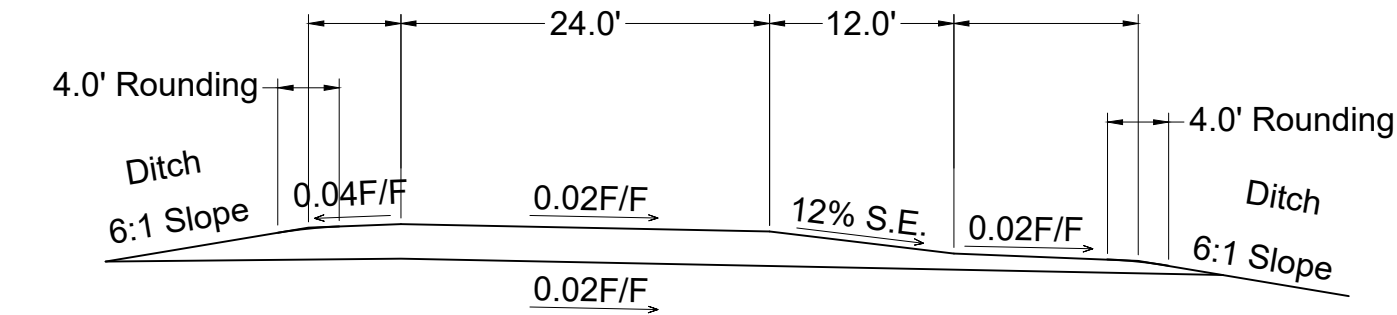
File Name S.D.8 Exit Ramp 2 Details

Drawing No. S.D.8

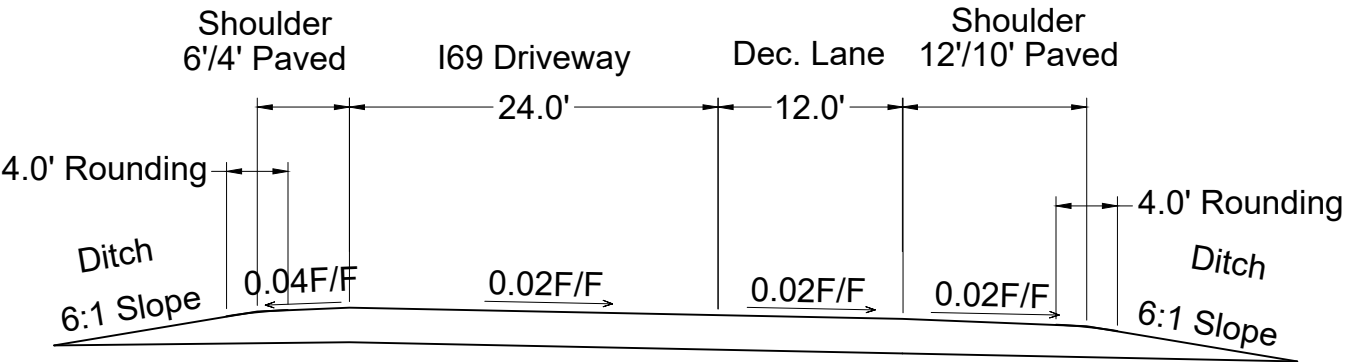
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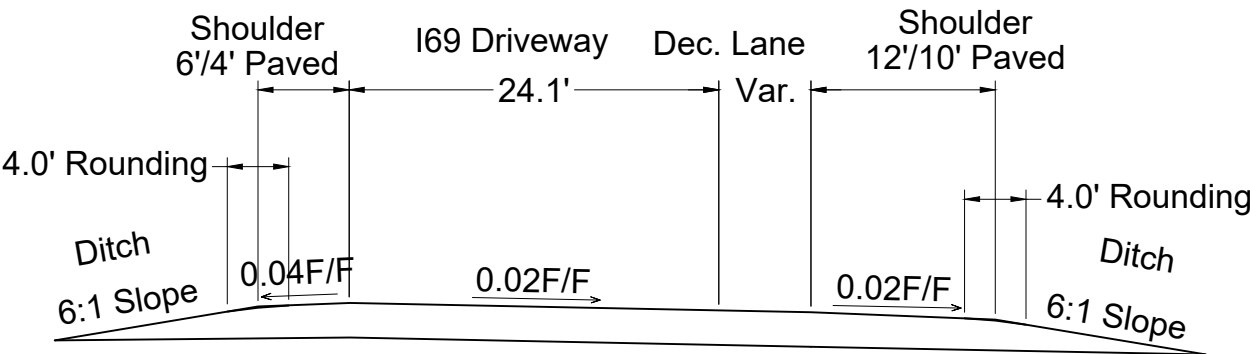
EXIT RAMP 3
Scale 1 to 1000



Cross Section 1-1: Superelevated in Acceleration Lane
Scale 1 to 150



Cross Section 2-2: Normal Slope
Scale 1 to 150



Cross Section 3-3: Ending of Acceleration Lane
Scale 1 to 150

Local Engineering Firm



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Drawn by Huan Ngo

Checked by Steve Thesuis

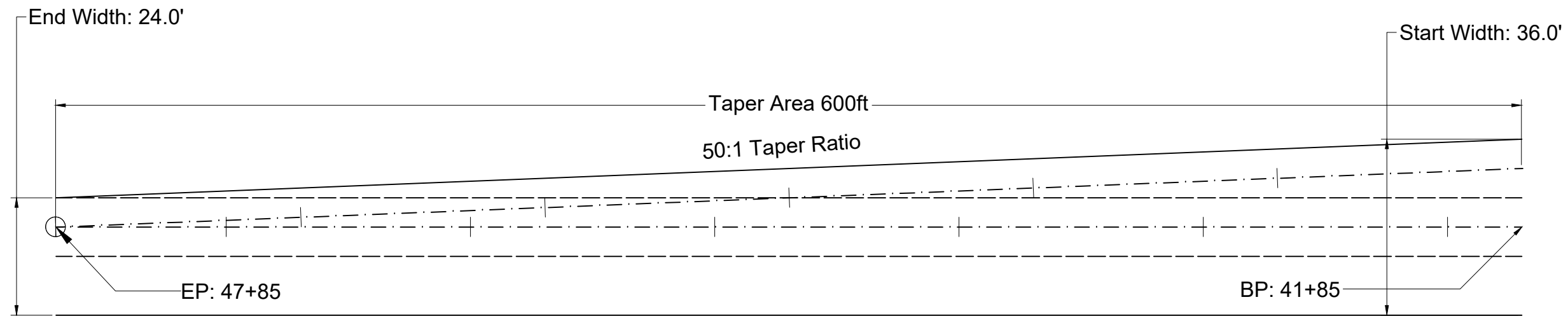
Project
**REST AREA ADJACENT
TO PROPOSED I69**

Drawing Title
EXIT RAMP 3

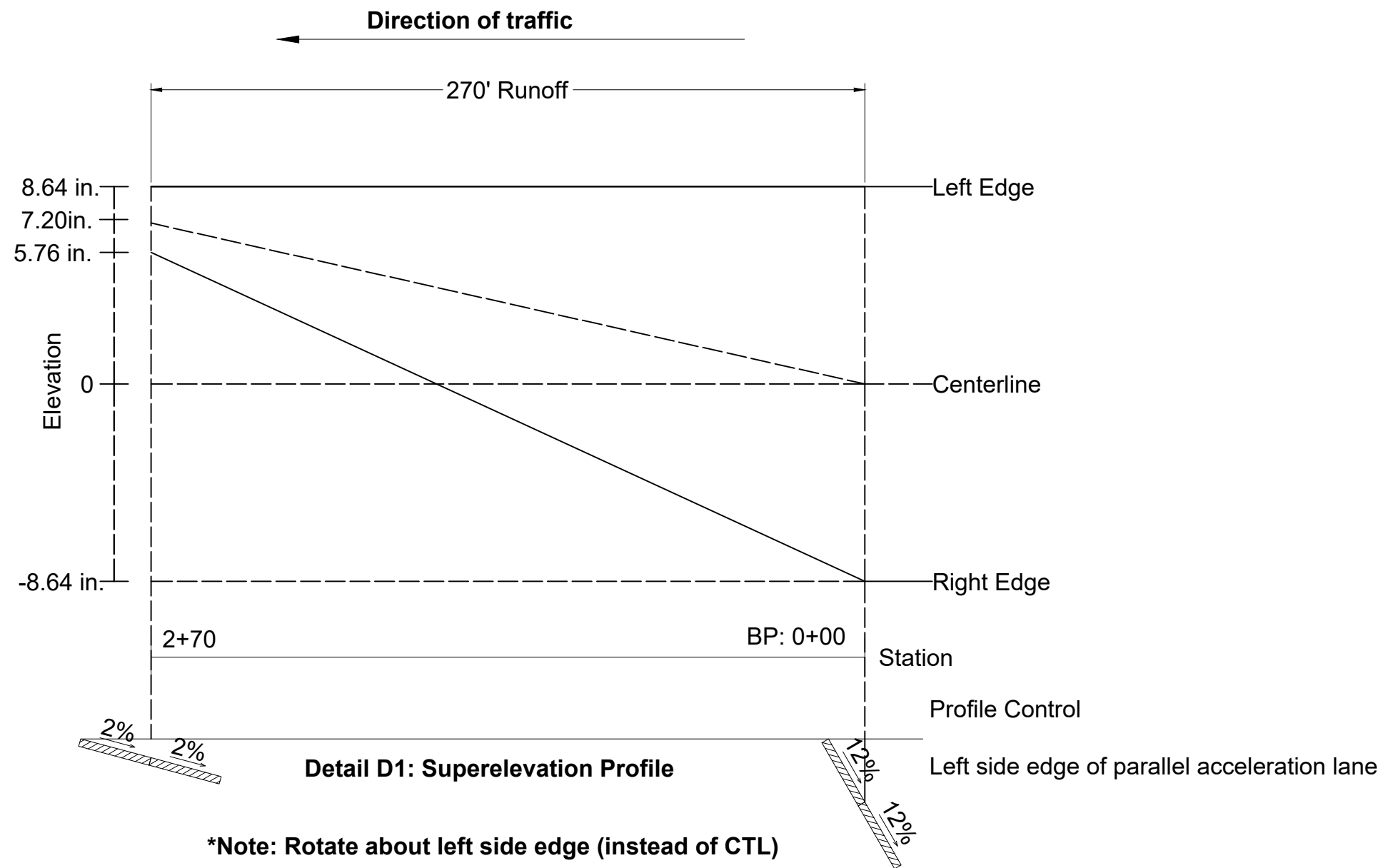
File Name S.D.9 Exit Ramp 3

Drawing No. S.D.9


Paper Size 11" x 17" Issued Date 11/28/18

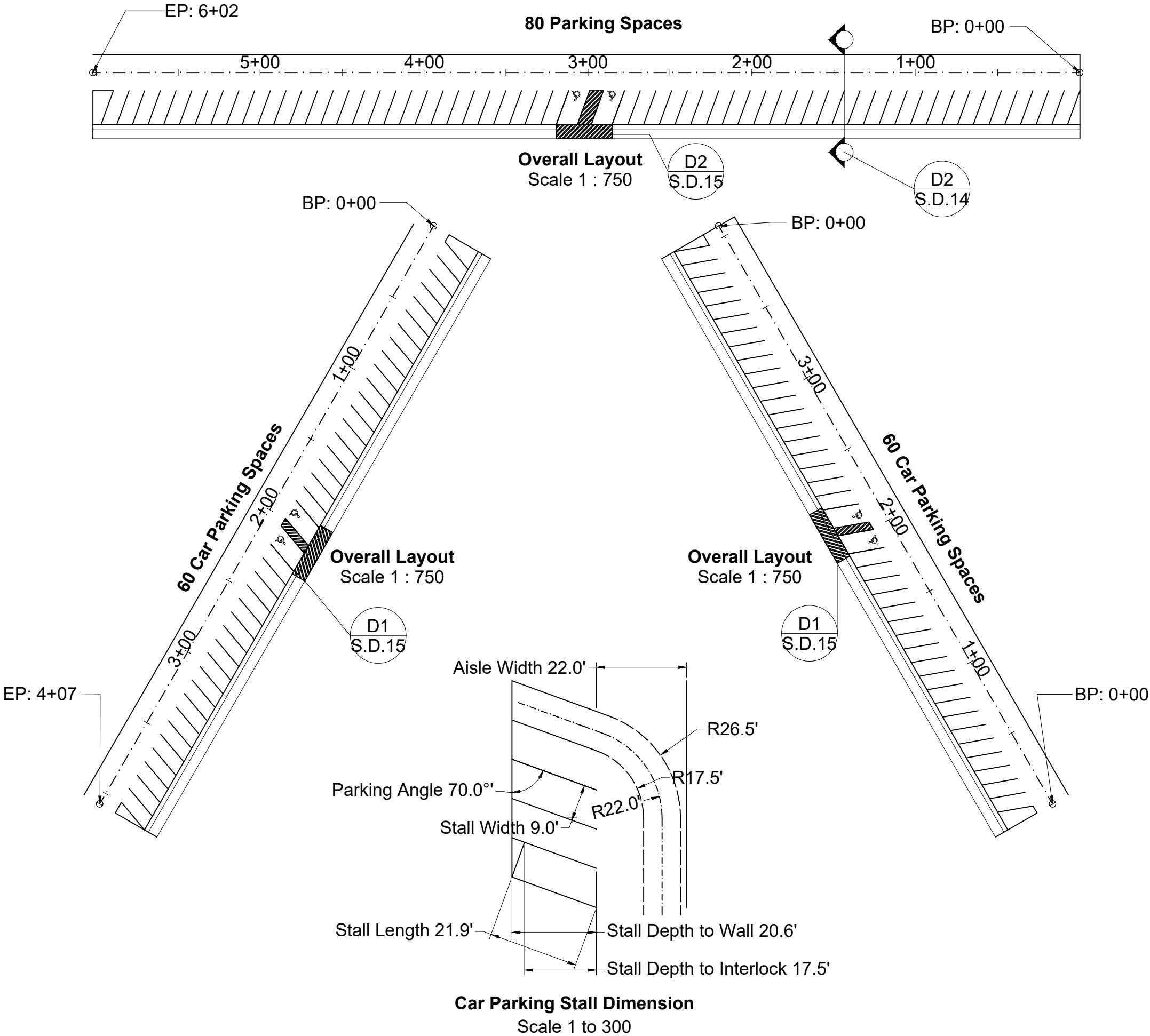


Detail D2: Tapering Section
Scale 1 to 300

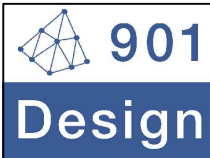


Detail D1: Superelevation Profile

Local Engineering Firm			
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General Director Huan Ngo			
Lead Engineer		Huan Ngo	
Designed by		Huan Ngo	
Drawn by		Huan Ngo	
Checked by		Steve Thesuis	
Project REST AREA ADJACENT TO PROPOSED I69			
Drawing Title EXIT RAMP 3 DETAILS			
File Name		S.D.10 Exit Ramp 3	
Drawing No.		S.D.10	
Paper Size	11" x 17"	Issued Date	11/28/18



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General Director
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Drawn by Huan Ngo

Checked by Steve Thesuis

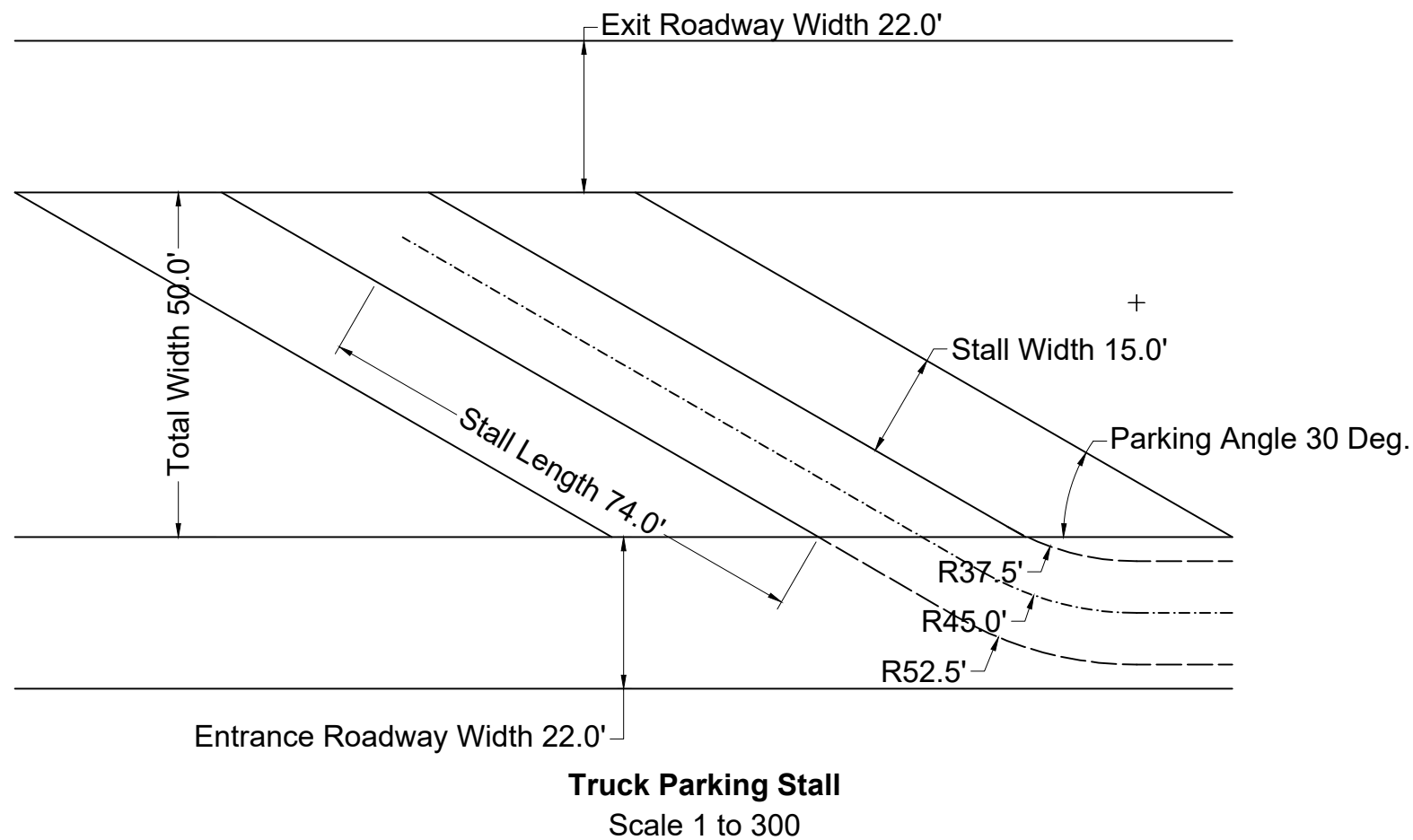
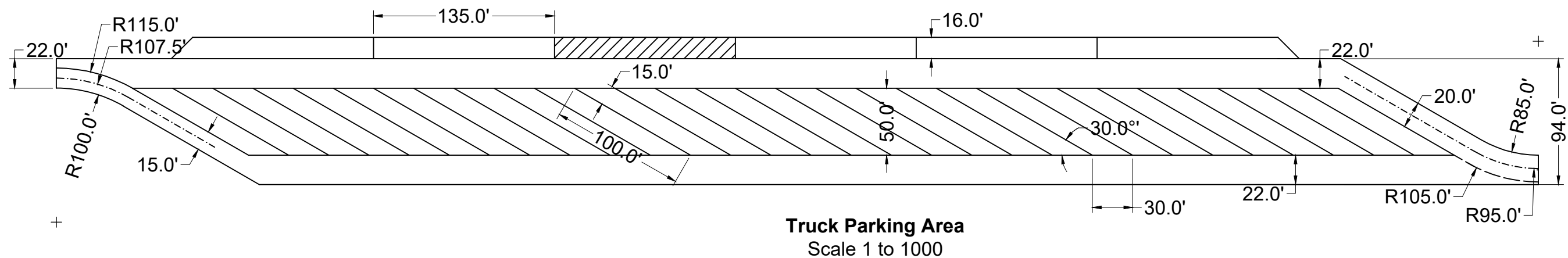
Project
**REST AREA ADJACENT
TO PROPOSED I69**

Drawing Title
Car Parking

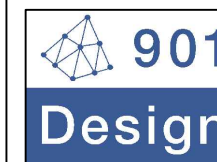
File Name S.D.11 Car Parking

Drawing No. S.D.11

Paper Size 11" x 17" Issued Date 11/28/18



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General Director
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Lead Engineer Huan Ngo

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Drawn by Huan Ngo

Checked by Steve Thesuis

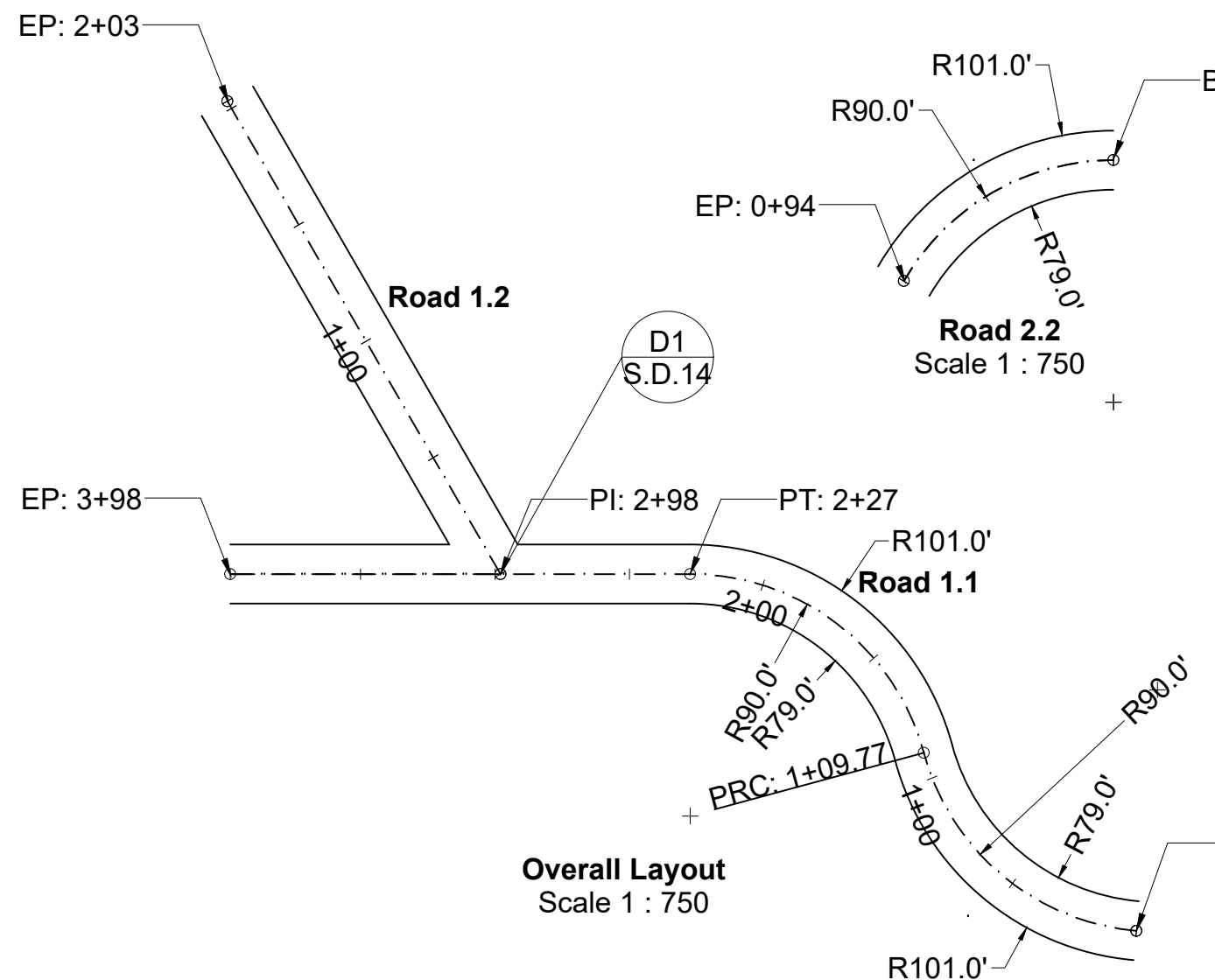
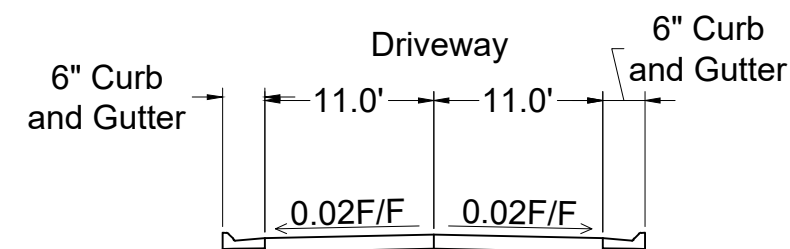
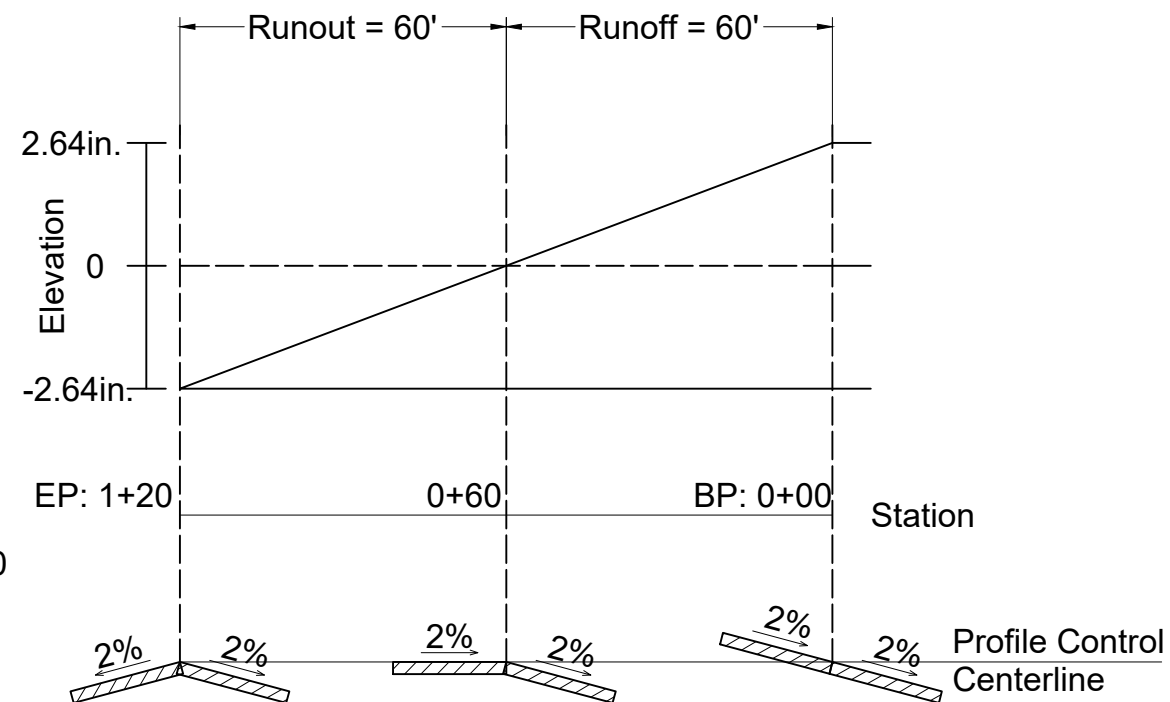
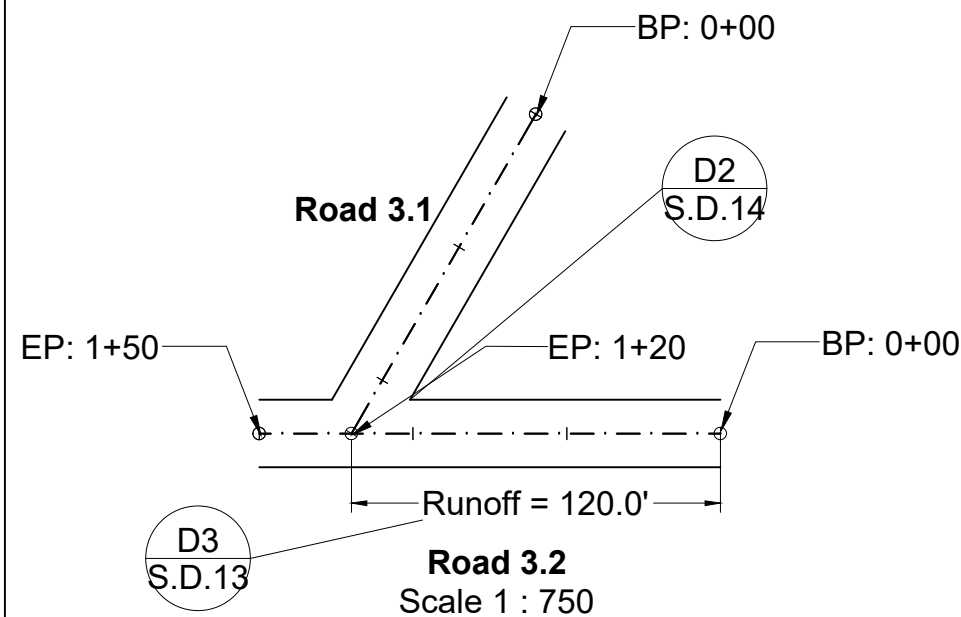
Project
**REST AREA ADJACENT
TO PROPOSED I69**


Drawing Title
TRUCK PARKING

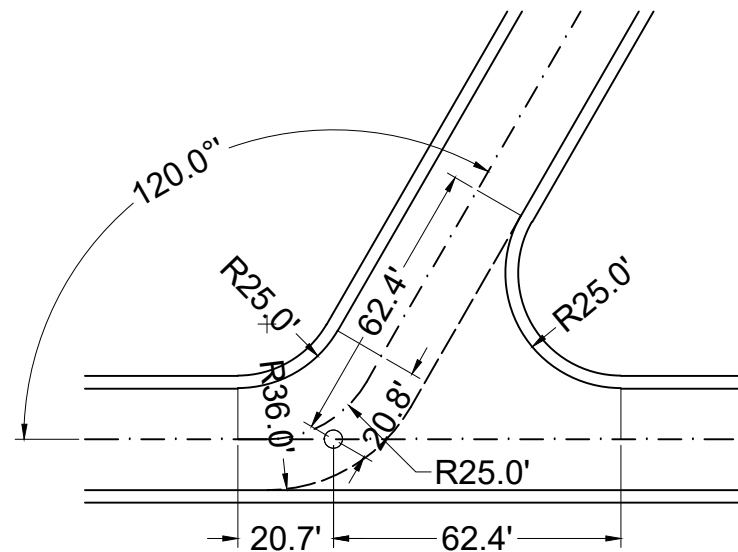
File Name S.D.12 Truck Parking

Drawing No. S.D.12

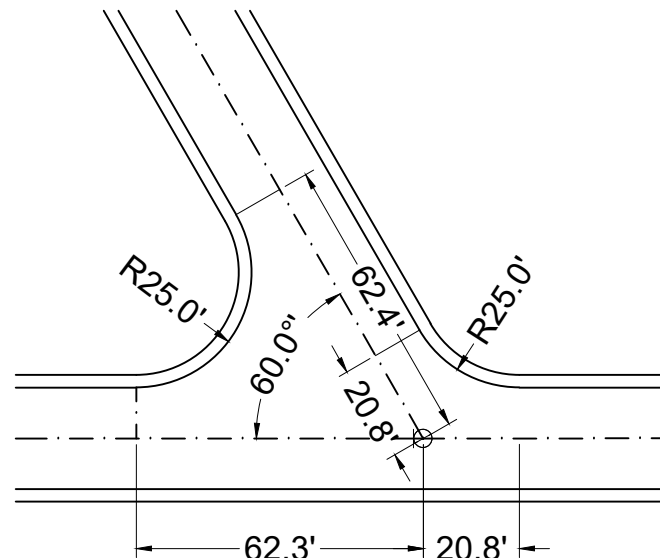
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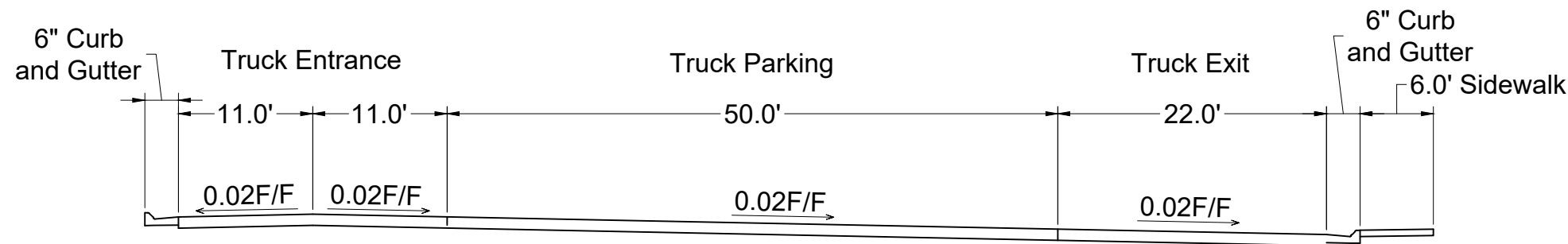
Local Engineering Firm			
	901 DESIGN, INCOPORATED		
	3720 Alumni Avenue,		
	Memphis TN, 38111		
	Tel: (901) 978-9000		
Email: 901design@memphis.edu			
General Director			
Huan Ngo			
Lead Engineer		Huan Ngo	
Designed by		Huan Ngo	
Drawn by		Huan Ngo	
Checked by		Steve Thesuis	
Project			
REST AREA ADJACENT TO PROPOSED I69			
Drawing Title			
INNER ROADWAYS			
File Name		S.D.13 Inner Roadways	
Drawing No.		S.D.13	
Paper Size		11" x 17"	Issued Date 11/28/18



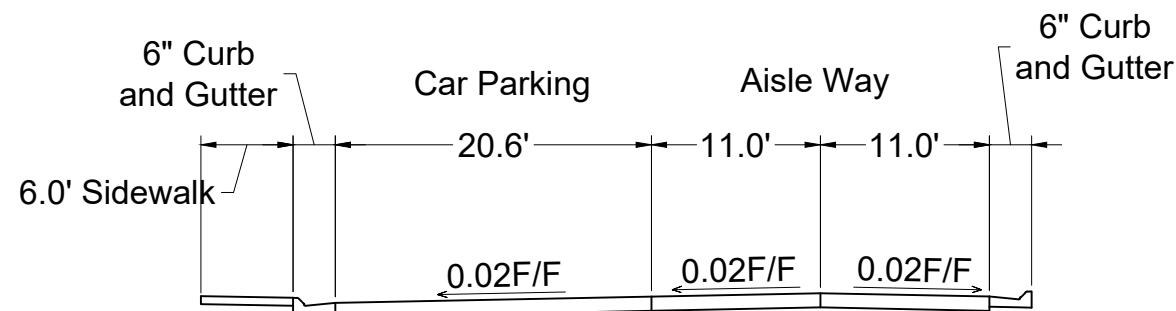
Detail D2: Intersection between Road 3.1 and 3.2
Scale 1 to 500



Detail D1: Intersection between Road 1.1 and 1.2
Scale 1 to 500

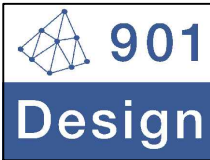


Cross Section of Truck Parking Area
Scale 1 to 150



Cross Section of Car Parking Area
Scale 1 to 150

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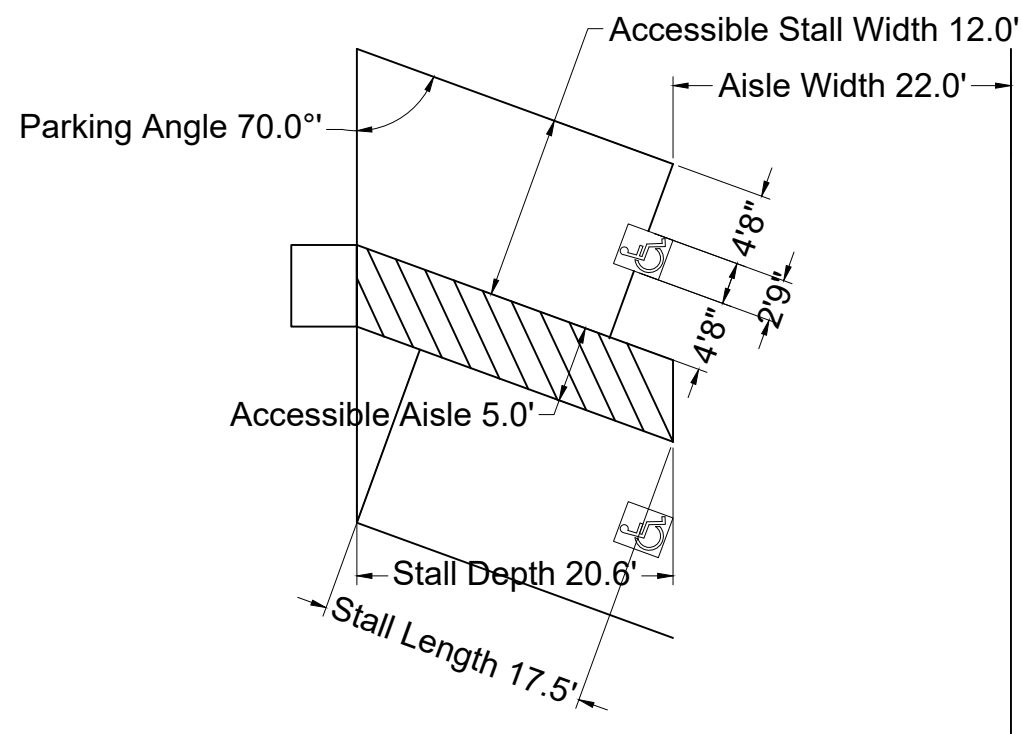
Project
**REST AREA ADJACENT
TO PROPOSED I69**

Drawing Title
OTHER DETAILS 1

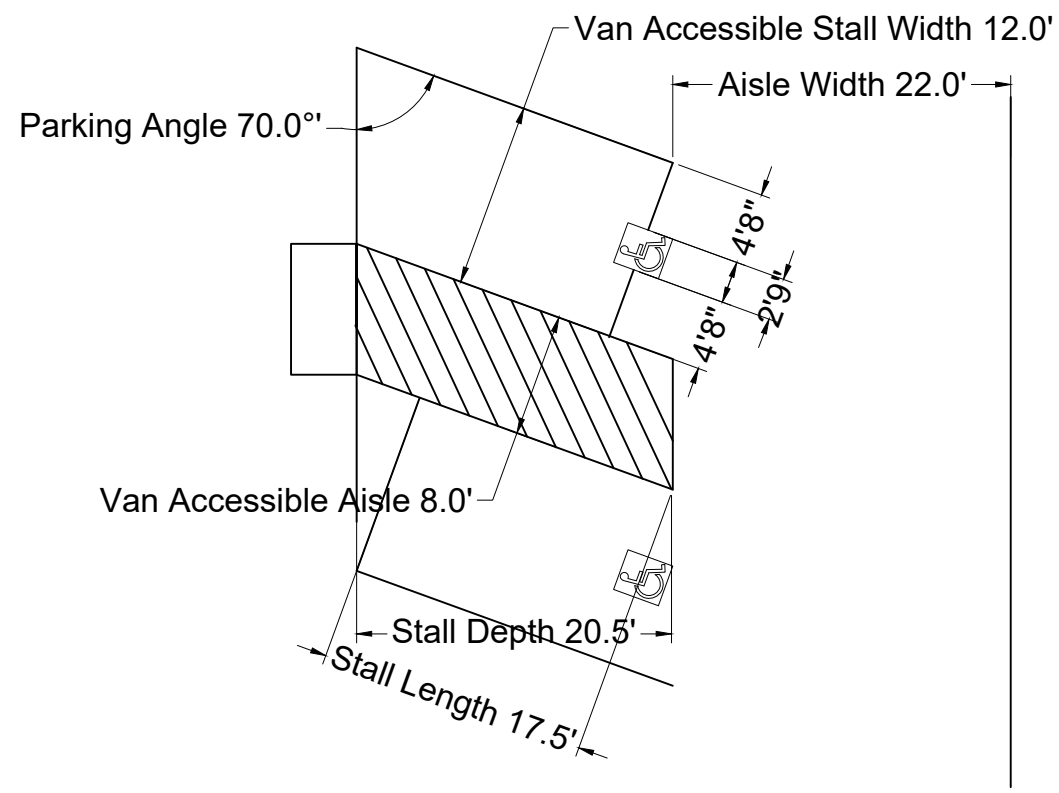
File Name S.D.14 Other Details 1

Drawing No. S.D.14

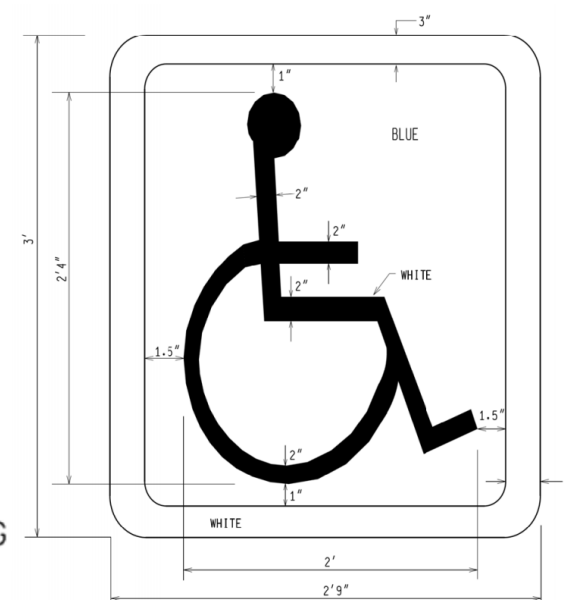
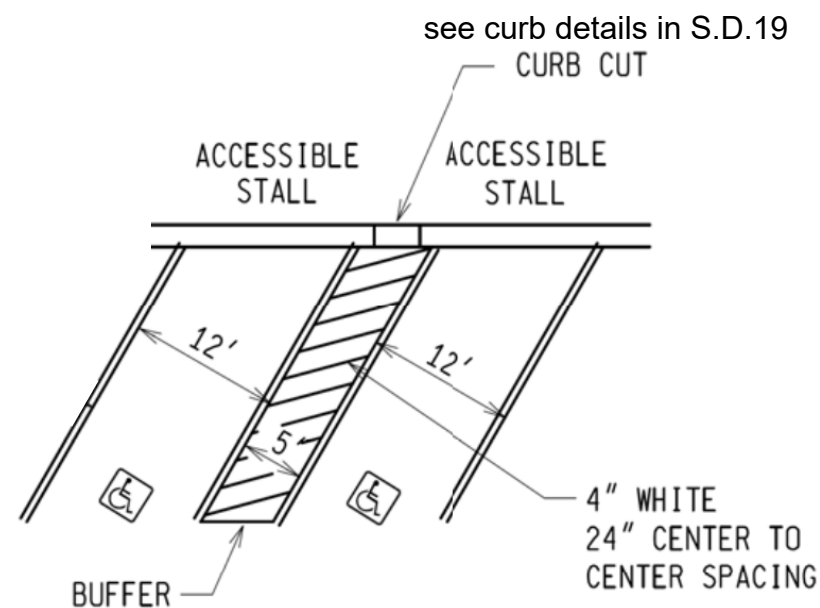
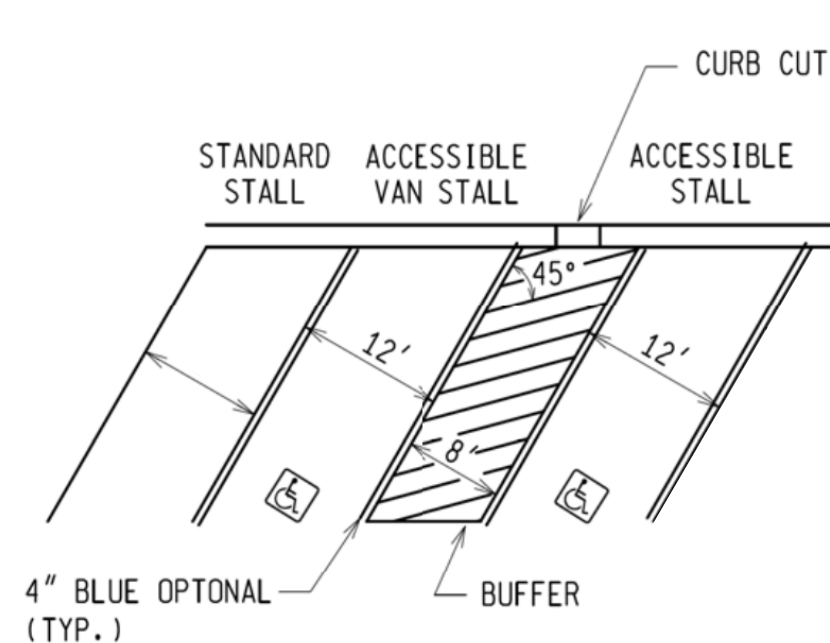
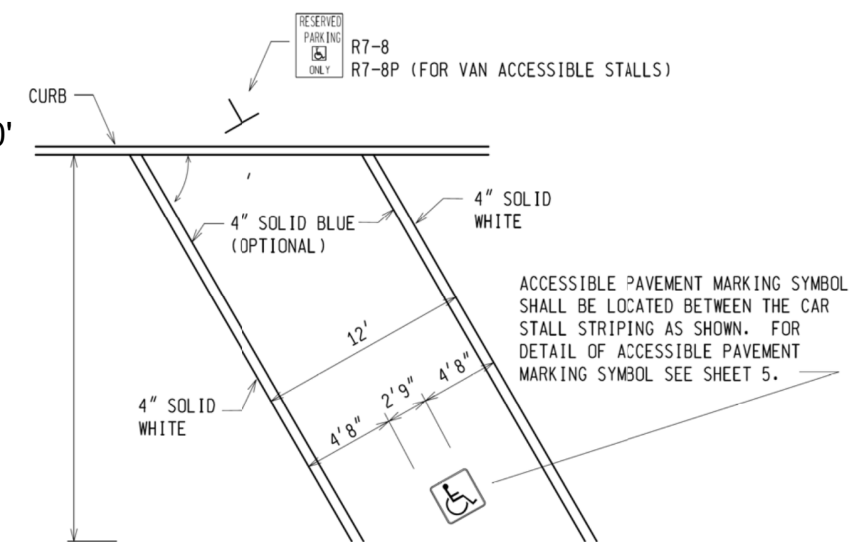
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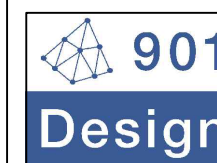
Pair of 2 car accessible parking
Scale 1 to 150



Pair of 1 car and 1 van accessible parking
Scale 1 to 150



Local Engineering Firm



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General Director
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Lead Engineer Huan Ngo

Designed by Huan Ngo

Drawn by Huan Ngo

Checked by Steve Thesuis

Project

**REST AREA ADJACENT
TO PROPOSED I69**

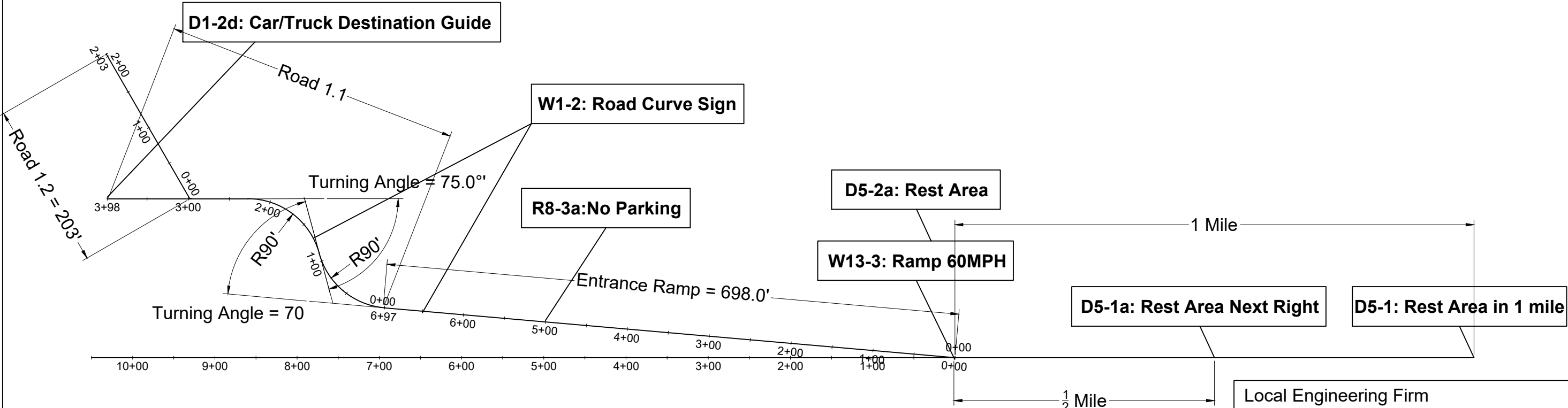
Drawing Title

ACCESSIBLE PARKING

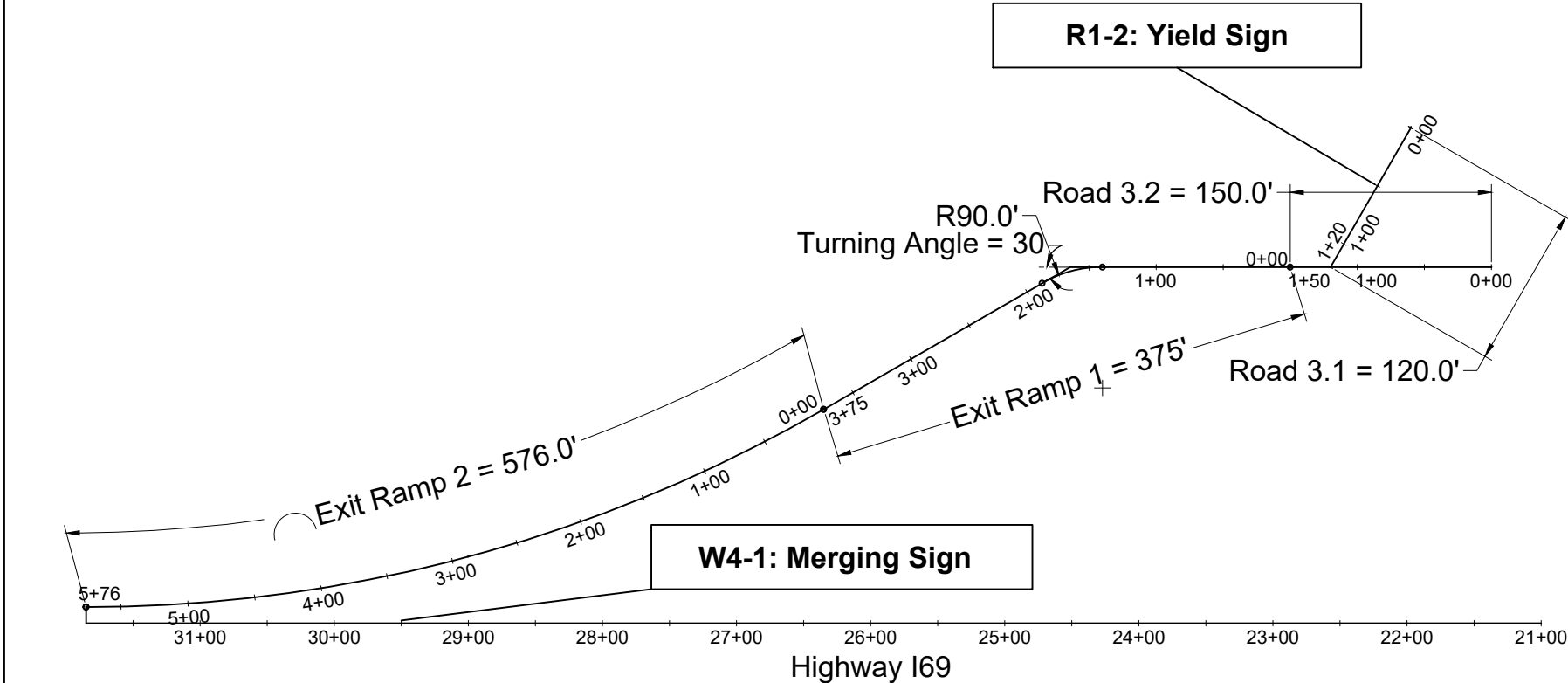
File Name S.D.15 Accessible Parking

Drawing No. S.D.15

Paper Size 11" x 17" Issued Date 11/28/18

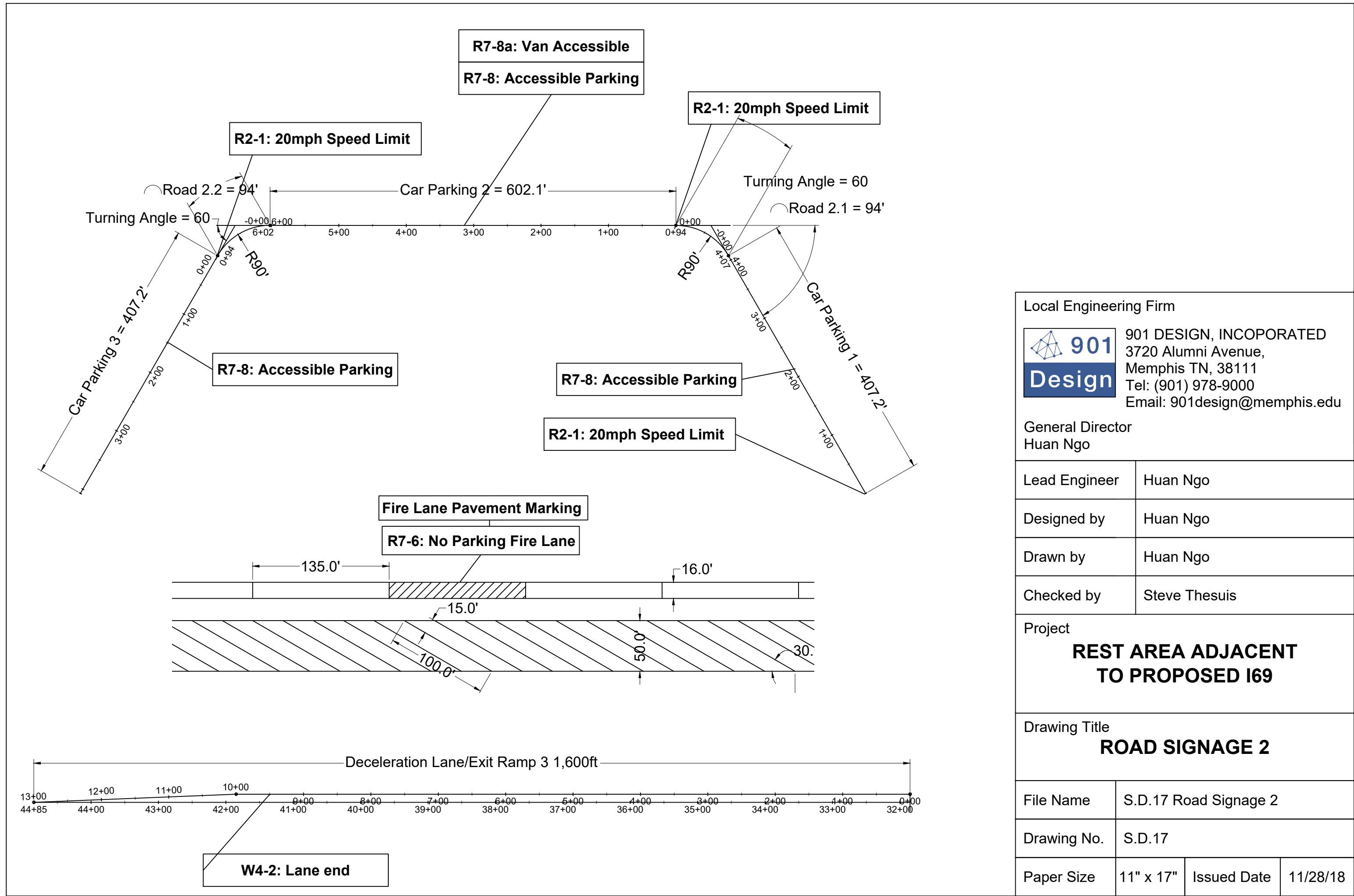


Detail D1: Entrance Ramp
Scale 1 to 1500

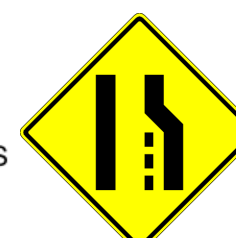
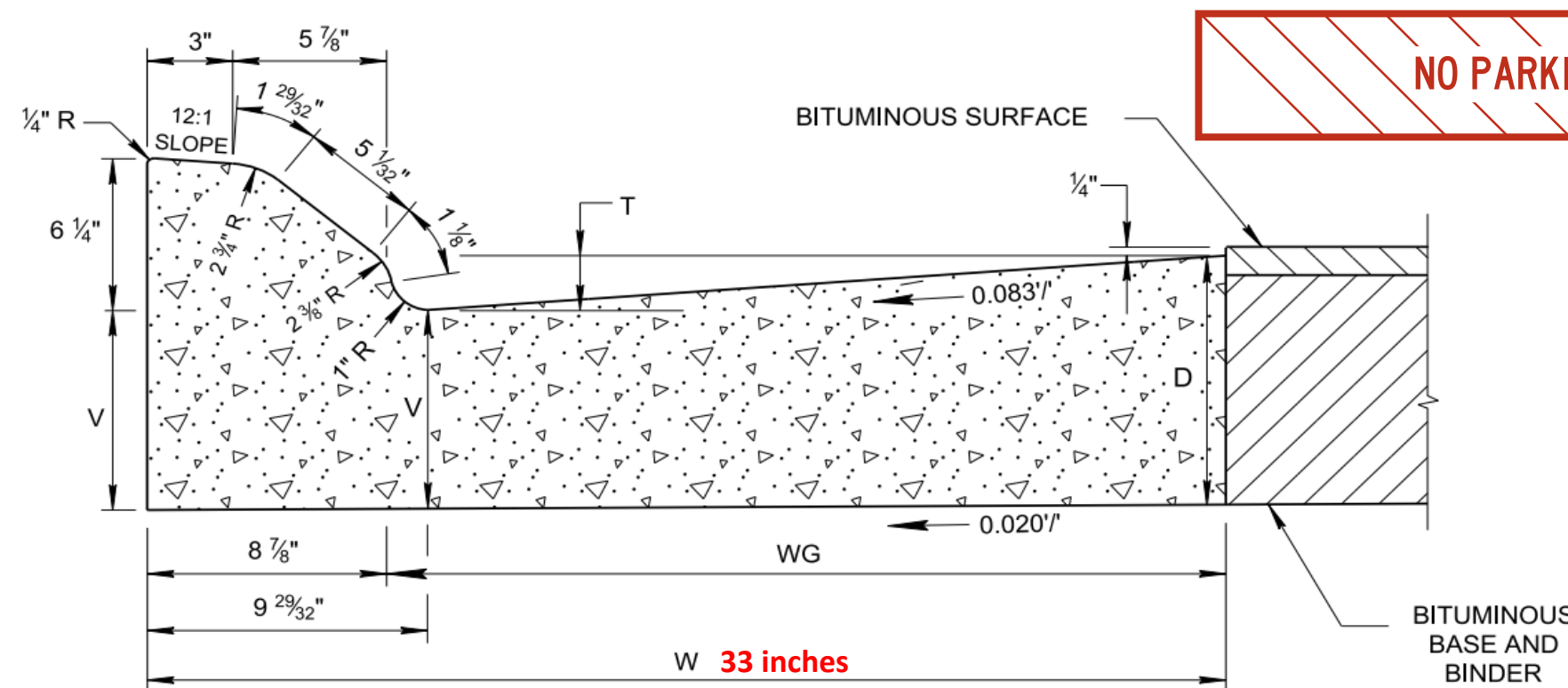
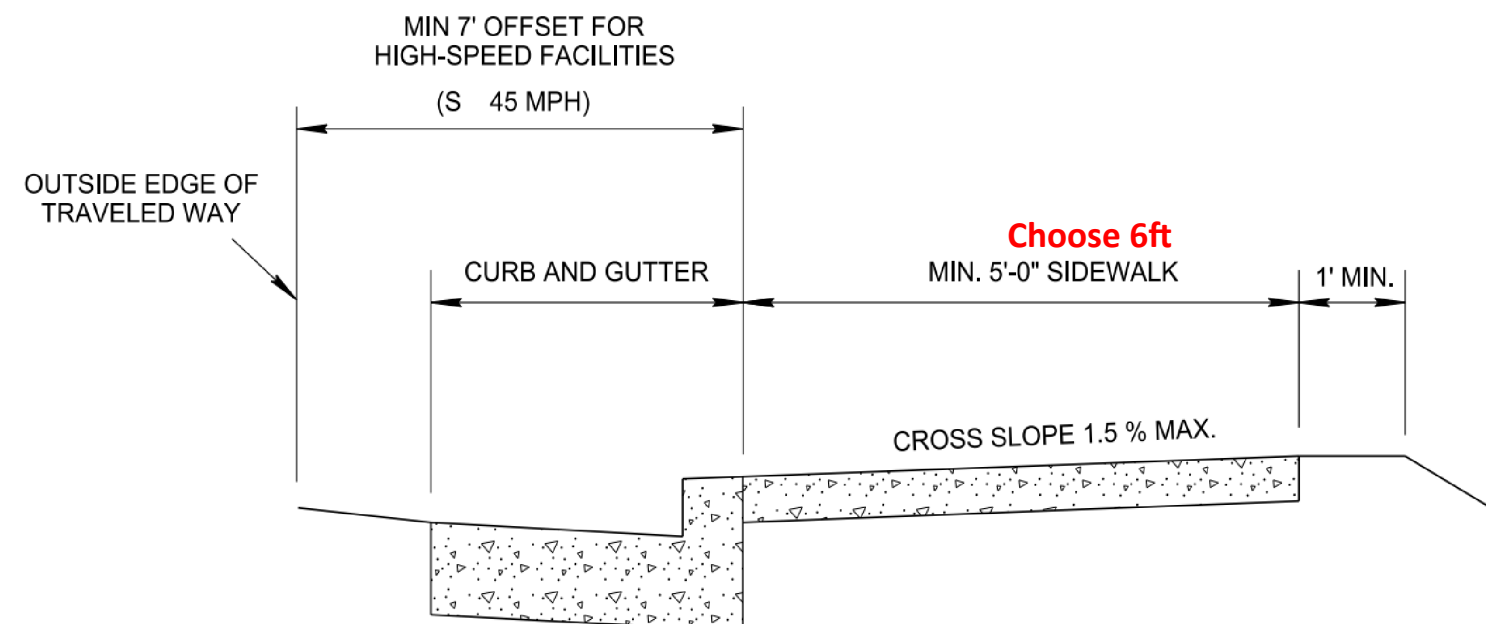
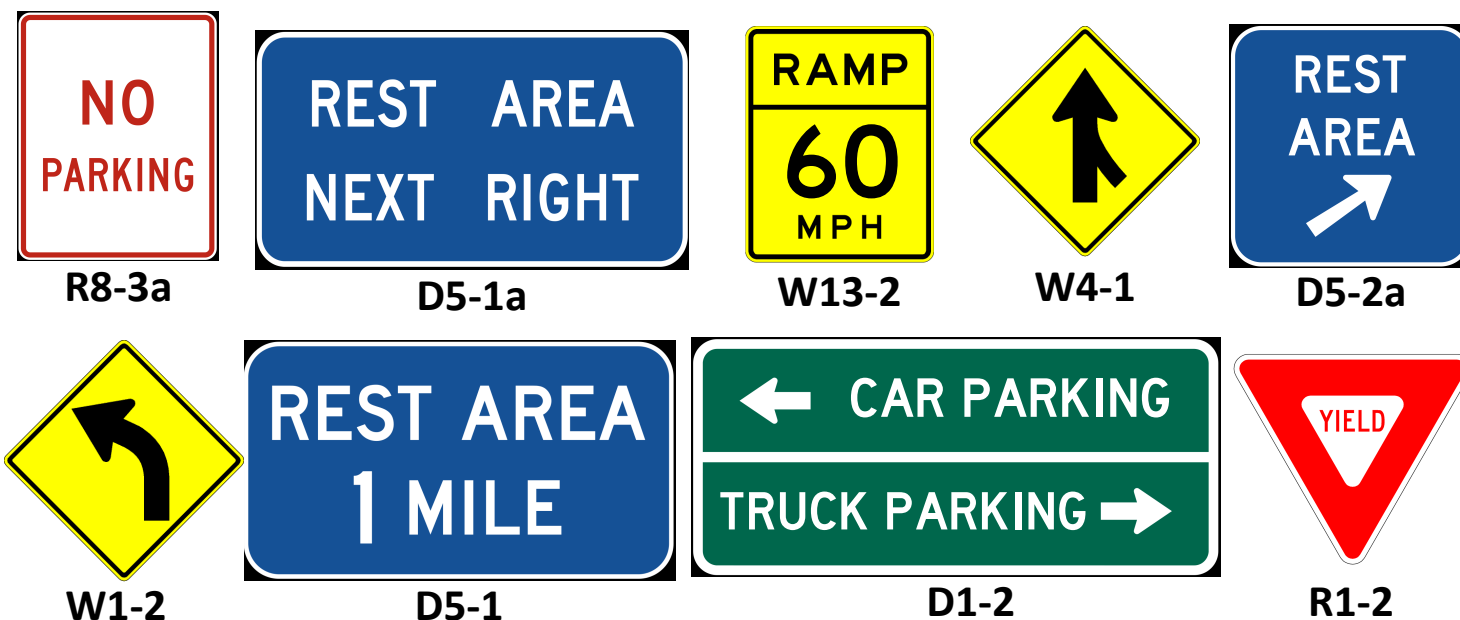


Detail D3: Exit Ramp
Scale 1 to 1500

Local Engineering Firm			
		901 DESIGN, INCOPORATED 3720 Alumni Avenue, Memphis TN, 38111 Tel: (901) 978-9000	
General Director Huan Ngo Email: 901design@memphis.edu			
Lead Engineer		Huan Ngo	
Designed by		Huan Ngo	
Drawn by		Huan Ngo	
Checked by		Steve Thesuis	
Project REST AREA ADJACENT TO PROPOSED I69			
Drawing Title ROAD SIGNAGE 1			
File Name		S.D.16 Road Signage 1	
Drawing No.		S.D.16	
Paper Size	11" x 17"	Issued Date	11/28/18



Local Engineering Firm			
		901 DESIGN, INCOPORATED 3720 Alumni Avenue, Memphis TN, 38111 Tel: (901) 978-9000 Email: 901design@memphis.edu	
General Director Huan Ngo			
Lead Engineer		Huan Ngo	
Designed by		Huan Ngo	
Drawn by		Huan Ngo	
Checked by		Steve Thesuis	
Project REST AREA ADJACENT TO PROPOSED I69			
Drawing Title ROAD SIGNAGE 2			
File Name		S.D.17 Road Signage 2	
Drawing No.		S.D.17	
Paper Size		11" x 17"	Issued Date 11/28/18



6" SLOPING CONCRETE COMBINED CURB AND GUTTER

6" SLOPING CONCRETE COMBINED CURB AND GUTTER TABLE					
TYPE	TOTAL WIDTH (W) IN INCHES	WIDTH OF GUTTER (WG) IN INCHES	VERTICAL DROP (T) IN INCHES	VERTICAL DEPTH (D) OF GUTTER	VERTICAL DEPTH (V) OF GUTTER AT FLOW LINE
6-33	33	24 1/8	2	AS NOTED	D - 1.52"
6-39	39	30 1/8	2 1/2	ON TYPICAL X-SECTIONS	D - 1.90"
6-45	45	36 1/8	3		D - 2.28"

VERTICAL DEPTH (V) MUST ALWAYS EXCEED SIX (6) INCHES.



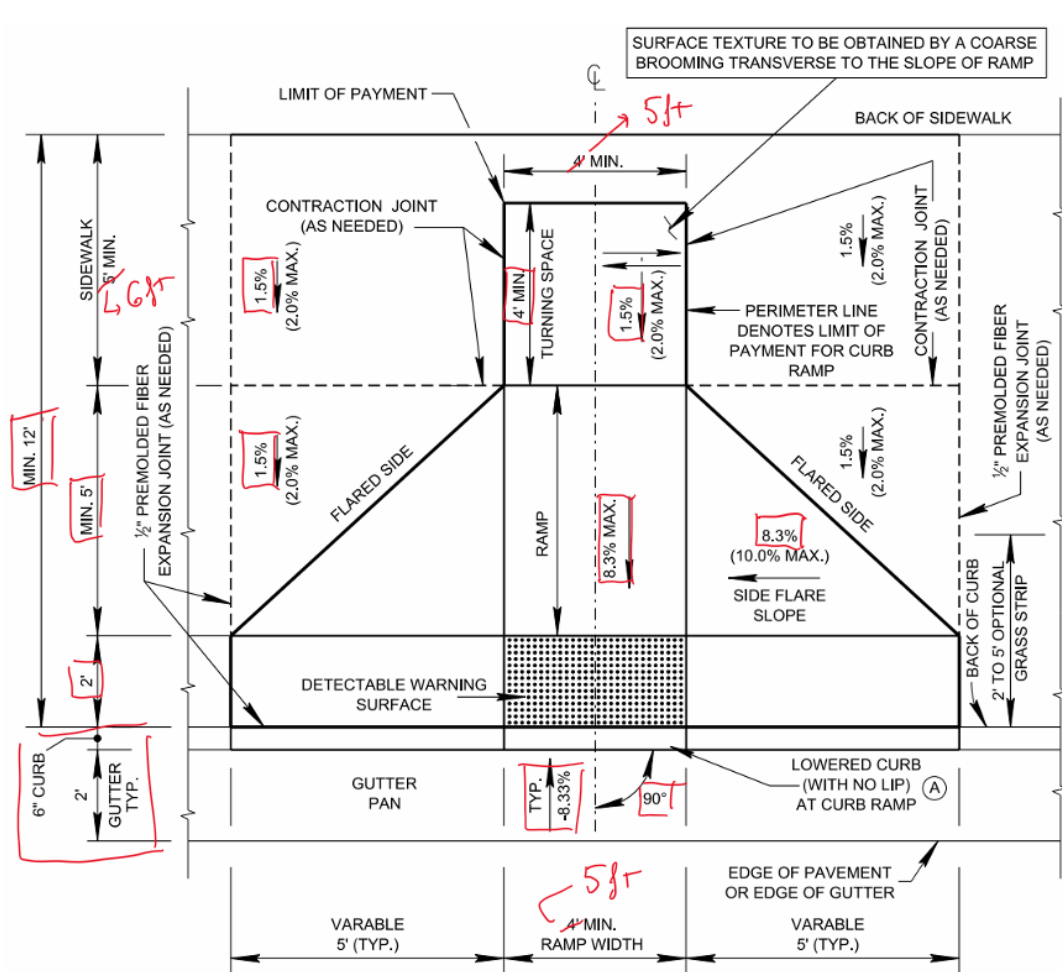
Local Engineering Firm
901 Design
901 DESIGN, INCORPORATED
3720 Alumni Avenue,
Memphis TN, 38111
Tel: (901) 978-9000
General Director
Huan Ngo Email: 901design@memphis.edu

Lead Engineer	Huan Ngo
Designed by	Huan Ngo
Drawn by	Huan Ngo
Checked by	Steve Thesuis

Project
REST AREA ADJACENT TO PROPOSED I69

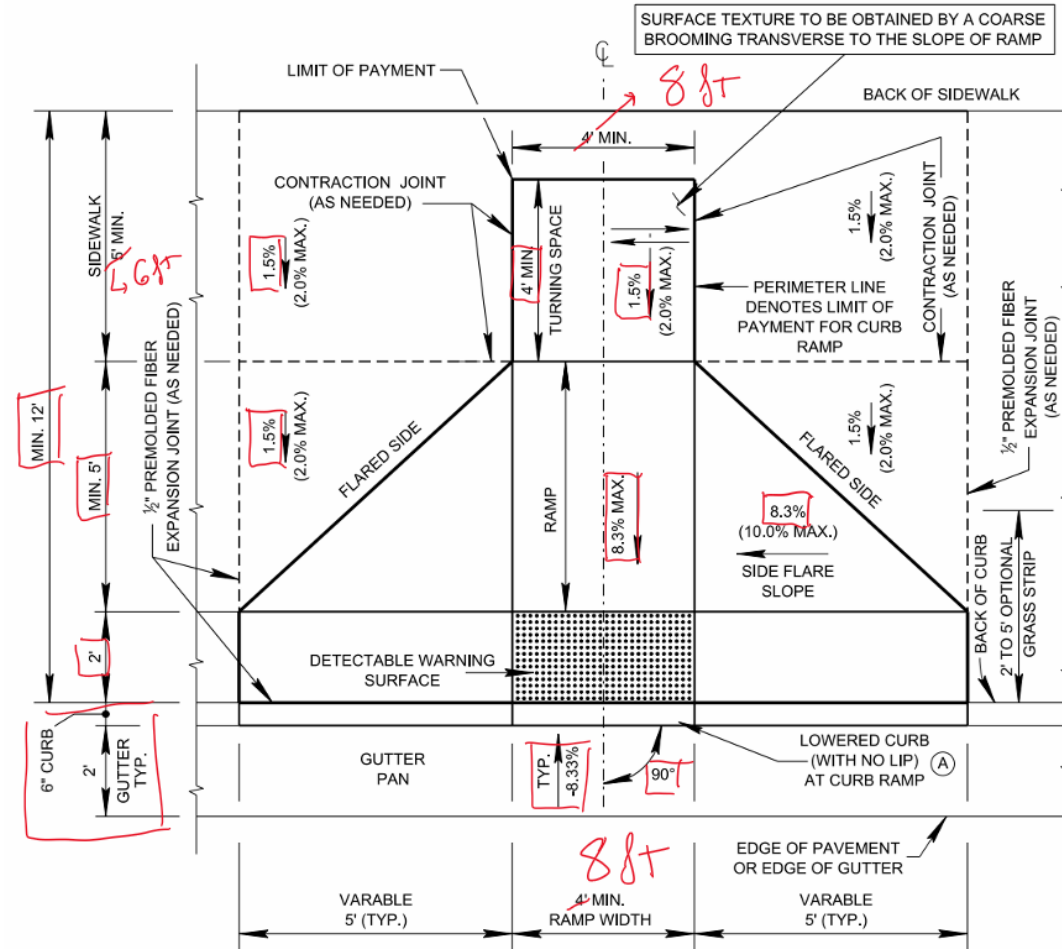
Drawing Title
Other Details 2

File Name	S.D.18 Other Details 2		
Drawing No.	S.D.18		
Paper Size	11" x 17"	Issued Date	11/28/18



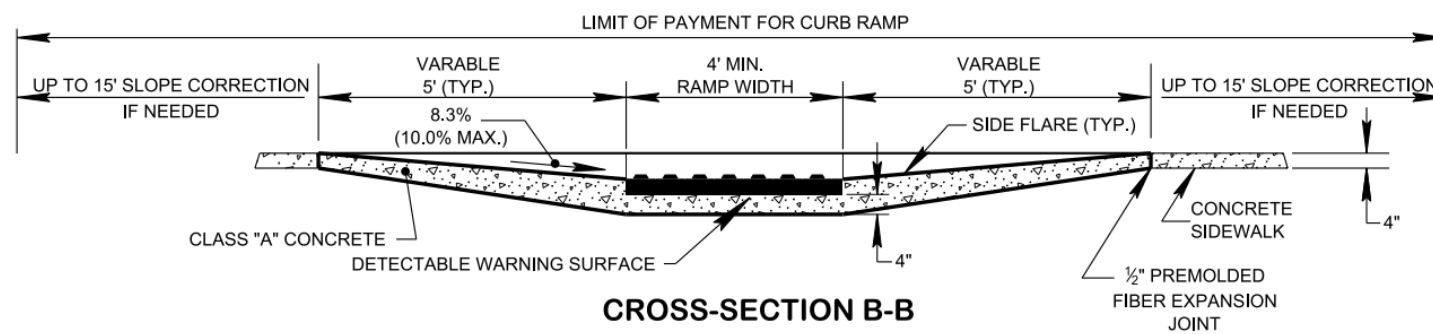
5ft Perpendicular Curb Ramp for Car Accessible

PLAN VIEW

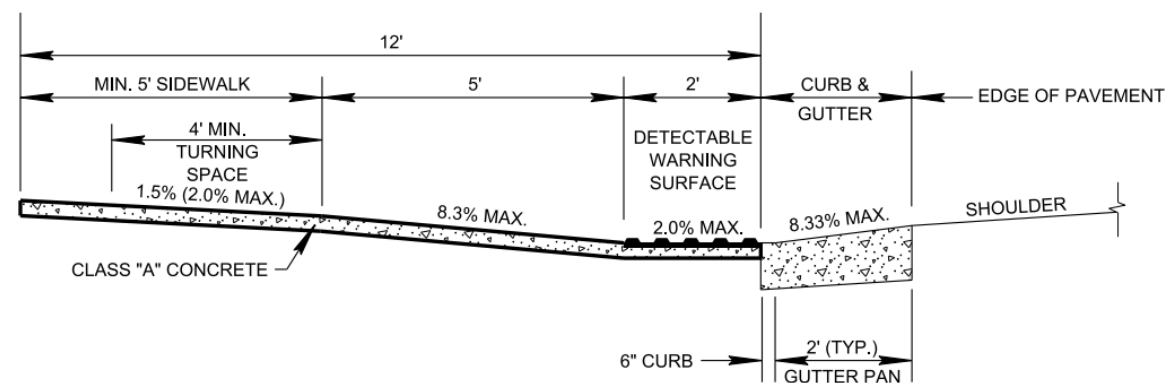


8ft Perpendicular Curb Ramp for Van Accessible

PLAN VIEW

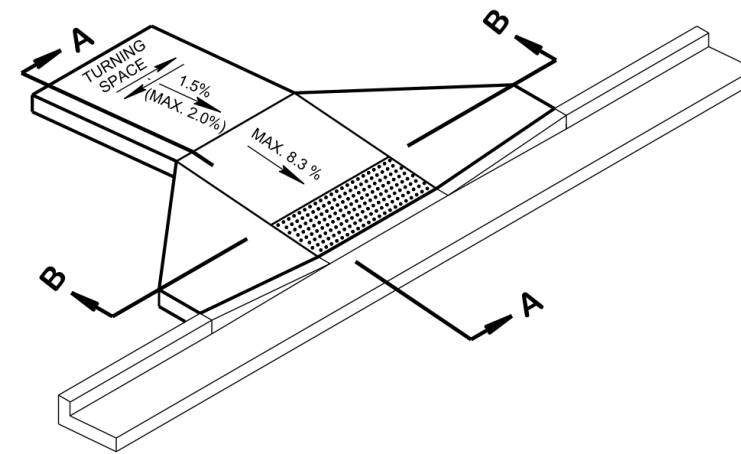


CROSS-SECTION B-B



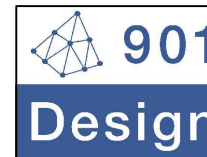
CROSS SECTION A-A

(SHOWN 30" CURB AND GUTTER TRANSITION)
AT LOCATIONS WHERE THE GUTTER PAN DOES NOT EXIST AND 2 FEET OF FLAT SURFACE MAY BE ELIMINATED.
THE ALGEBRAIC DIFFERENCE IN GRADE AT THE CURB RAMP/STREET INTERFACE SHALL NOT EXCEED 11%.



**ISOMETRIC VIEW
CURB RAMP WITH GUTTER DETAIL**

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Lead Engineer

Huan Ngo

Designed by

Huan Ngo

Drawn by

Huan Ngo

Checked by

Steve Thesuis

Project

**REST AREA ADJACENT
TO PROPOSED I69**

Drawing Title

PERPENDICULAR CURB RAMP

File Name

S.D.19 Perpendicular Curb Ramp

Drawing No.

S.D.19

Paper Size

11" x 17"

Issued Date

11/28/18

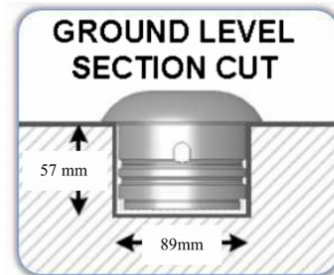
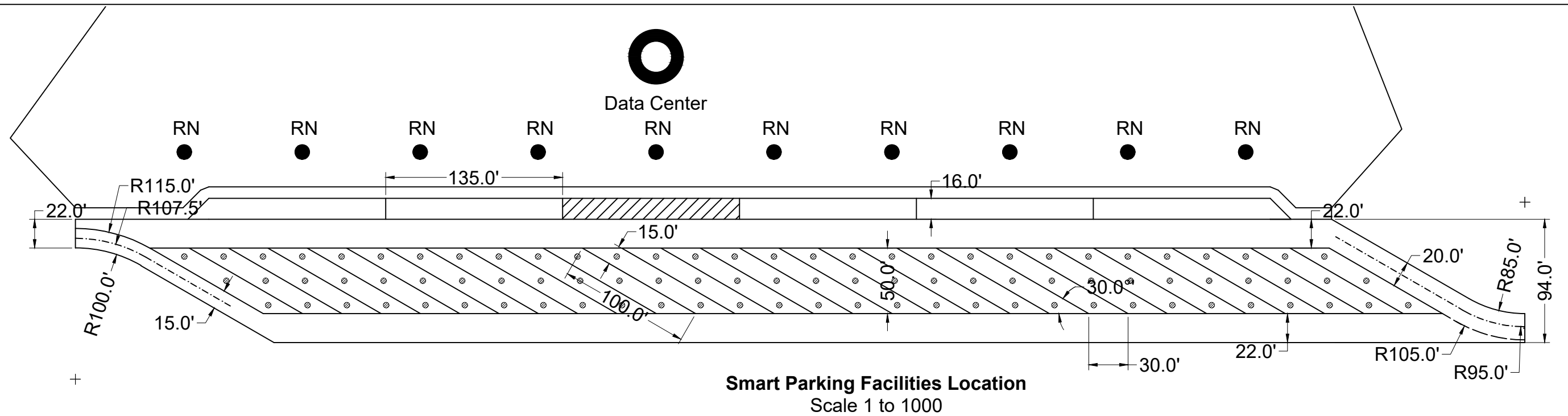


Figure 1. Sensor installation (images by Gorm Tuxen)



Figure 2. Relay node and data collector installation (images by Gorm Tuxen)

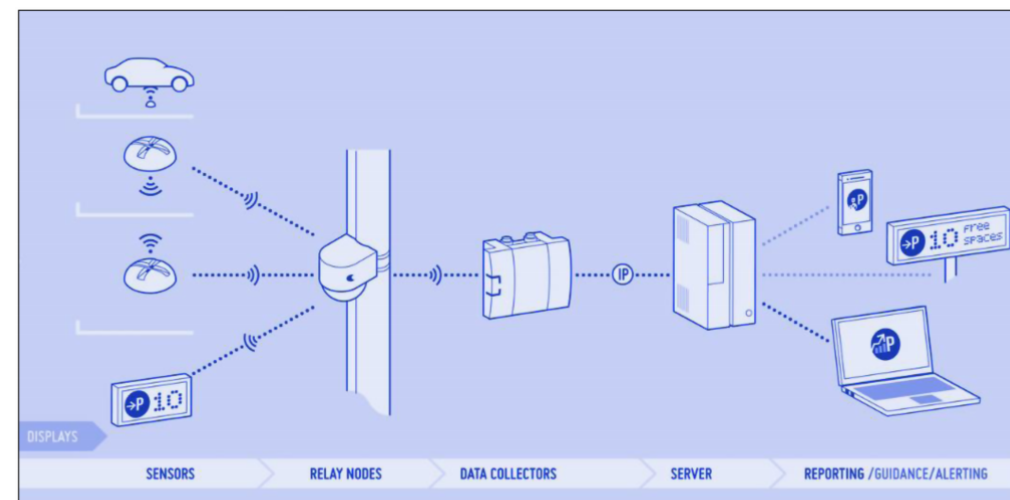


Figure 3. System components and hardware description (reprinted from NEDAP Identification Systems 2014a, with permission)

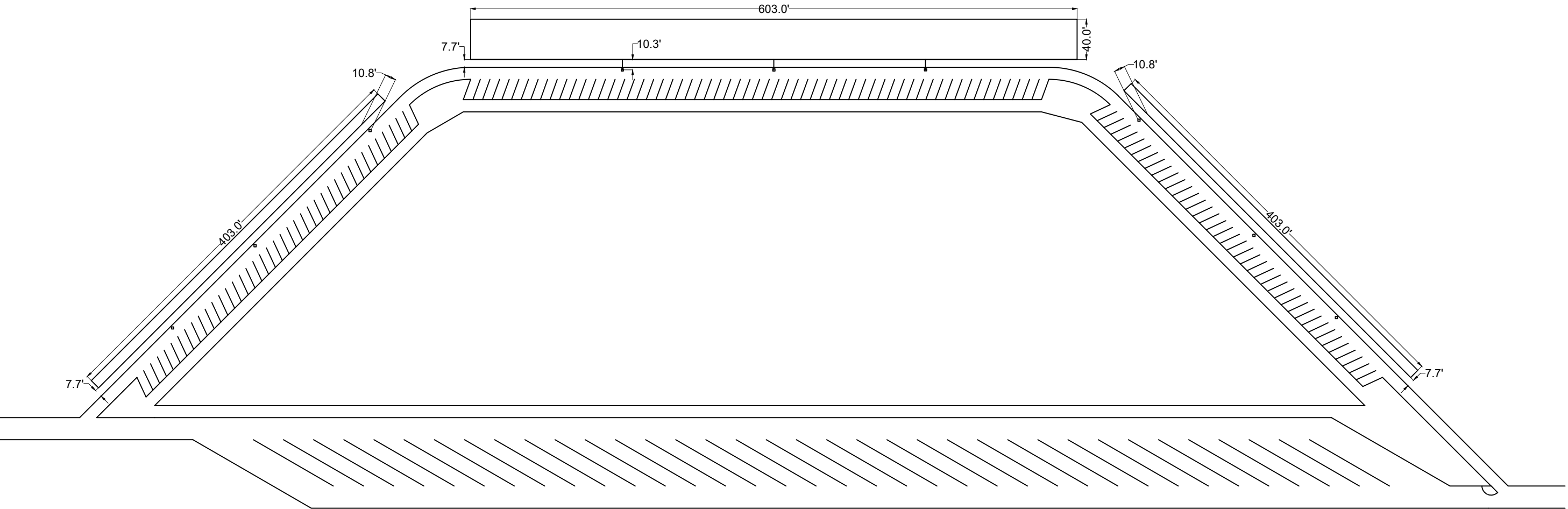
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Lead Engineer	Huan Ngo
Designed by	Huan Ngo
Drawn by	Huan Ngo
Checked by	Steve Thesuis

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**REST AREA ADJACENT
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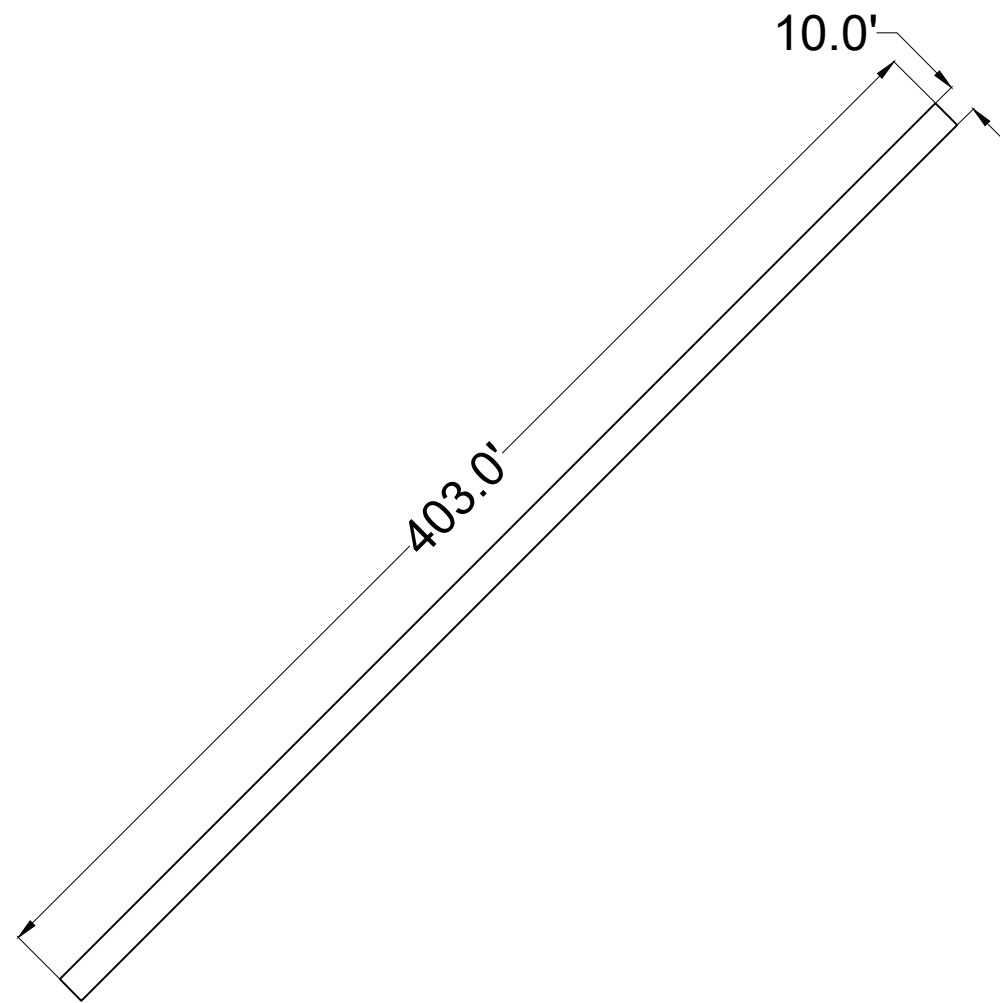
Drawing Title
SMART PARK FACILITIES

File Name	S.D.20 Smart Park Facilities		
Drawing No.	S.D.20		
Paper Size	11" x 17"	Issued Date	11/28/18

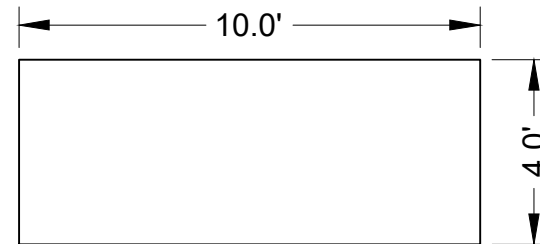


Not To Scale

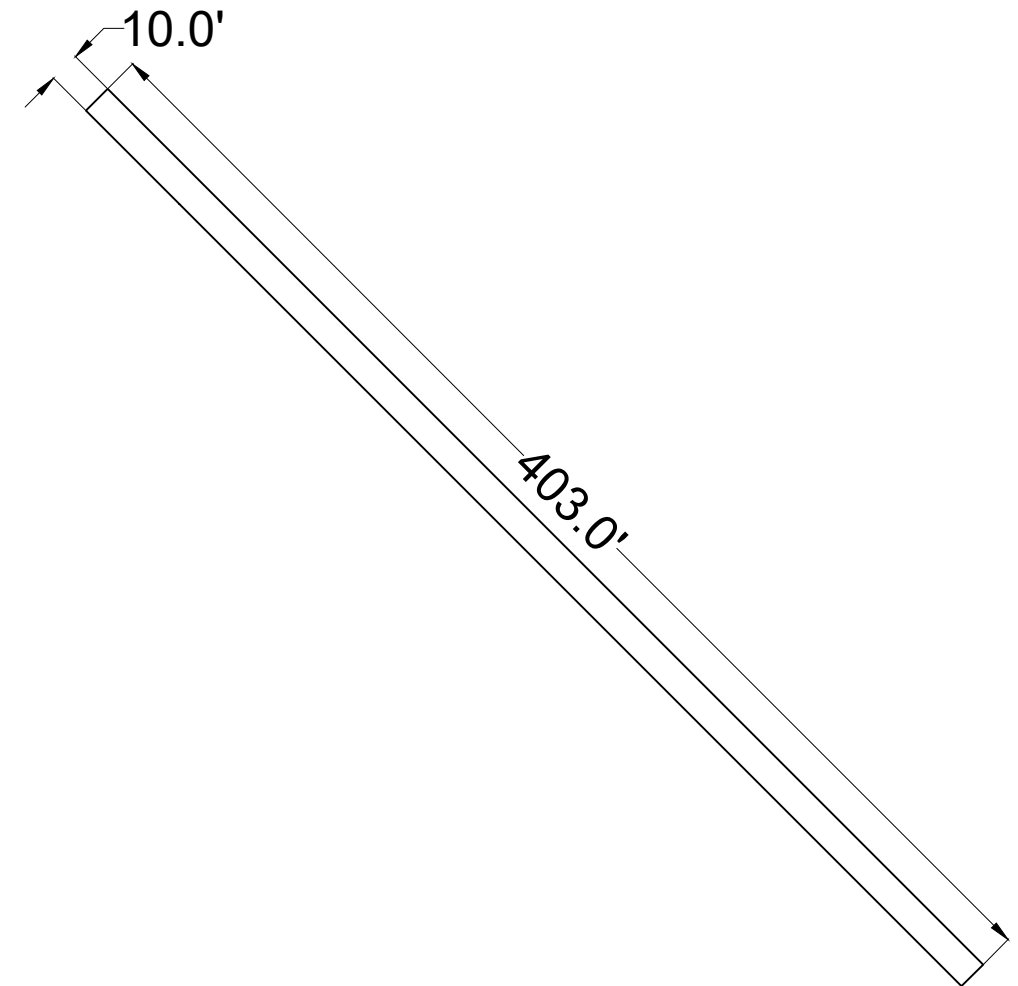
<div>Local Engineering Firm</div> <div><div><div><div><div><div></div></div></div><div><div>901</div><div>Design</div></div></div><div><div>901 DESIGN, INCOPORATED</div><div>3720 Alumni Avenue,</div><div>Memphis TN, 38111</div><div>Tel: (901) 978-9000</div><div>Email: 901design@memphis.edu</div></div></div><div><div>General Director</div><div>Huan Ngo</div></div></div>	Lead Engineer	Huan Ngo	Project <div>REST AREA ADJACENT TO PROPOSED I69</div>	File Name	S.E.1 Drainage Plan View
	Designed by	Jana Moss		Drawing No.	S.E.1
	Drawn by	Jana Moss	Drawing Title <div>Drainage Plan View</div>	Paper Size	11" x 17"
	Checked by	901 DESIGN		Issued Date	11/28/2018



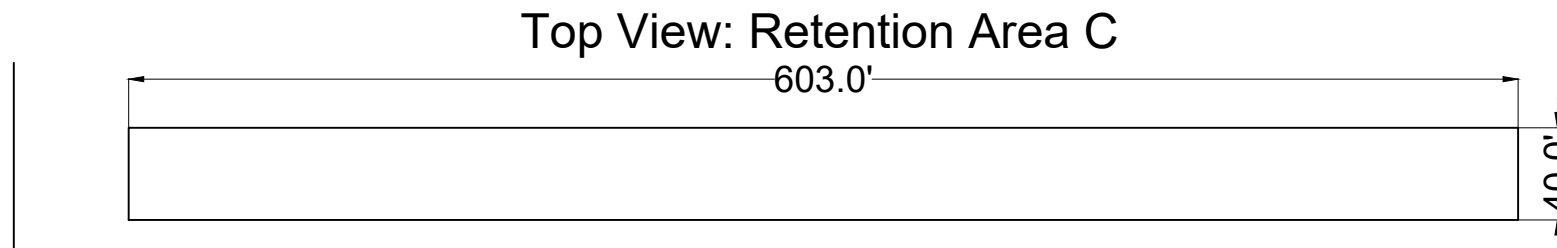
Top View: Retention Area A
Scale 1:750



Cross Section: Areas A & B
Scale 1:50

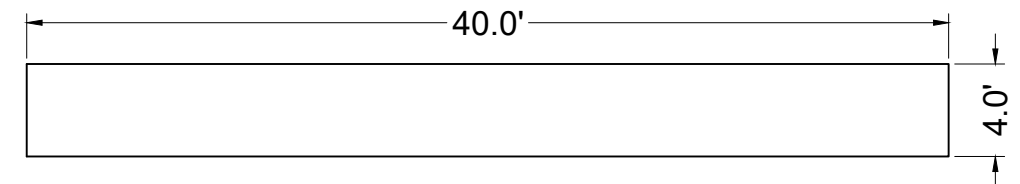


Top View: Retention Area A
Scale 1:750

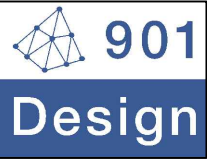


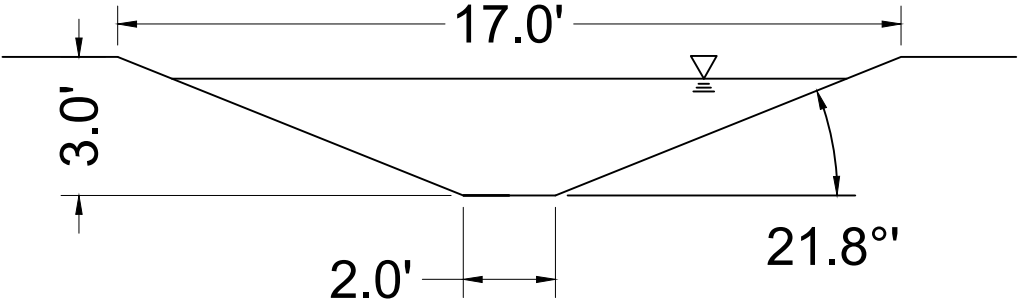
Top View: Retention Area C

Scale 1:1000



Cross Section: Area C
Scale 1:100

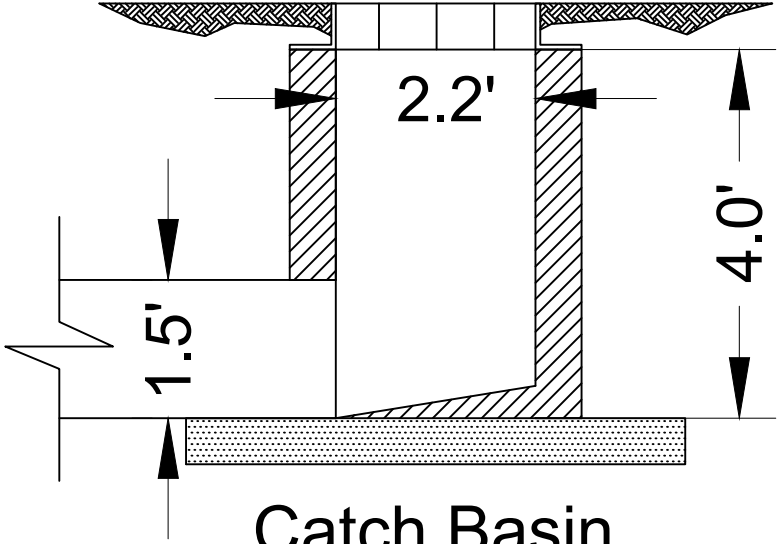
<div>Local Engineering Firm</div> <div><div>901 DESIGN, INCOPORATED 3720 Alumni Avenue, Memphis TN, 38111 Tel: (901) 978-9000 Email: 901design@memphis.edu</div><div>General Director Huan Ngo</div></div>	Lead Engineer	Huan Ngo	Project REST AREA ADJACENT TO PROPOSED I69	File Name	S.E.2 Retention Detail
	Designed by	Jana Moss		Drawing No.	S.E.2
	Drawn by	Jana Moss	Drawing Title Retention Detail	Paper Size	11" x 17"
	Checked by	901 DESIGN		Issued Date	11/28/2018



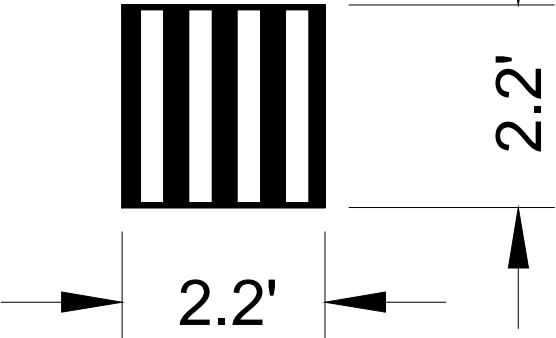
Trapezoidal Ditch Design	
Depth (ft)	3
Area (sqft)	28.5000
Length (ft)	4000
Top Width (ft)	17
Hydraulic Depth (ft)	1.7000
Wetted Perimeter (ft)	18.2000
Hydraulic Radius (ft)	1.6000

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	Designed by	Jana Moss		Drawing No.	S.E.3
	Drawn by	Jana Moss	Drawing Title Ditch Detail	Paper Size	11" x 17"
	Checked by	901 DESIGN		Issued Date	11/28/2018

Ground Level

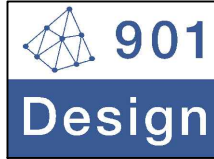


Top of Grate



Scale 1:25

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General Director
Huan Ngo

Lead Engineer

Huan Ngo

Designed by

901 DESIGN

Drawn by

Jana Moss

Checked by

901 DESIGN

Project

**REST AREA ADJACENT
TO PROPOSED I69**

Drawing Title

Pipe Inlet Detail

File Name

S.E.4 Pipe Inlet Detail

Drawing No.

S.E.4

Paper Size

11" x 17"

Issued Date

11/28/2018