

GENERAL NOTES

Design Specifications: AISC 9th EDITION; ACI 318-95

Governing Building Code: International Building Code 2000

Design Loading:

Waterside
Dead Load = 140 pcf (Including Water)
Live Load = 400 lbs. (Moving)
Stairs and Landings
Dead Load = 15 psf
Live Load = 100 psf
Snow Loading = (N.A.)
Seismic Zone = S1 = 0.06
Ss = 0.13
Wind Load: = Indoor 10 psf

Foundations:

1. Foundations for this project have been designed in accordance with requirements set forth in the Geotechnical Engineering Report by Terra-Mor, Inc. No. FE02-157 for the Proposed Keller Recreation Center - Keller, Texas. The Contractor shall refer to the Geotechnical report for all requirements and recommendations pertinent to this project.

2. Anchor bolts shall conform to ASTM A307 and shall be located by means of a template. Provide a nut above and below template to assure proper vertical alignment. Template not provided by Splashtacular.

3. All foundations shall be square and level.

4. Grout below column base plates. Grout shall be dry and stiff to prevent shrinkage, with a minimum compressive strength of 4000 psi. Thoroughly compact grout beneath base plate. (Not by Splashtacular Crews)

Concrete and Reinforcing Steel:

1. Concrete mix designs shall meet the following requirements:
(Taken from ACI Manual of Concrete-1990, 211.1)

Location	Minimum Compressive Strength (PSI)	Maximum Aggregate Size	Cement Lbs.	Sack Mix (Per C.Y.)	Max. Water/Cement Ratio	Max. Slump	Air Entrainment Percent (%)
Foundations	4000	1"	600	6 1/2	.48	4"	6 ± 1

2. Reinforcing bars #4 and larger (except ties and stirrups) shall meet ASTM A615 with Supplementary Requirements (S1), Grade 60, smaller bars shall be Grade 40.

3. Concrete coverage of reinforcement shall have the following clear distance unless noted otherwise on the drawings:
Cast against earth _____ 3"
Formed concrete exposed to earth or weather _____ 2"

4. Bars marked continuous and all vertical steel shall be lapped or embedded to develop the full tensile capacity of the bar. Laps shall be as specified below or as noted on design drawings.

#4	2'-0" LAP	8" HOOK
#5	2'-6" LAP	10" HOOK
#6	3'-0" LAP	12" HOOK
#7	3'-6" LAP	14" HOOK

5. All bars are to be supported in forms and spaced with wire bar supports per ACI "Manual of Standard Practice for Detailing Concrete Structures" (latest edition). Bars shall be securely wired per latest edition of CRSI "Recommended Practice for Placing Reinforcing Bars". Accessories for exposed concrete shall be plastic or have plastic-tipped feet.

6. Concrete placed during cold weather shall conform to the requirements of ACI 306R-88. Cold weather is defined as a period when for more than 3 successive days the mean daily temperature drops below 40°F.

7. Concrete placed during hot weather shall conform to the requirements of ACI 305R-89. Hot weather is defined as that combination of air temperature, concrete temperature, relative humidity and wind speed that will cause a rate of evaporation of 0.2 lb/sq.ft./hr. or more as defined by Figure 2.1.5 of ACI 305R-89.

Structural Steel:

1. All structural steel shall conform to the following:

Structural Steel - ASTM A36
Miscellaneous Steel - ASTM A36
Structural Tubing - ASTM A500, Grade B (Fy = 46ksi)
Steel Pipe - ASTM A53, Grade B, (Fy = 35 ksi)

2. Bolts, steel to steel : A325N (Snug Tight) or A325 SC (Fully Pretensioned) where noted

Anchor Bolts: ASTM A307
Bolt holes shall be 1/16" greater than bolt size, unless otherwise noted (UNO). All bolts, nuts and washers shall be hot dip galvanized except bolts in contact with fiberglass shall be stainless steel.

3. Welding shall conform to the latest publication of applicable codes set forth by the American Welding Society. Welding electrodes shall be E70XX.

4. Expansion Anchors: Hilti Kwik-Bolt 11 or Hilti Sleeve Anchors

5. Epoxy : Hilti Hit C-100

6. Hot dip galvanized all steel and bolts exposed to weather.

7. Erector and Fabricator shall follow all AISC standards and practices which pertain to the work herein.

Structural Steel Coatings:

1. All structural steel shall be shop painted after galvanizing.

COLOR- reviewer please specify-

Treads, landings, and platform decking:

1. Decking for treads, landings and platforms shall be 1 1/2" deep "Royal Deck"

COLOR- reviewer please specify-

Fiberglass Flumes:

COLOR-
FLUME SLIDE- INSIDE:
OUTSIDE:

FLUME COMPONENT	DROP (FT.)	LENGTH ALONG SLOPE (FT.)	ANGLE FROM HORZ (DEGREES)	LENGTH HORZ. PROJECTION (FT.)	FLUME SURFACE ELEV.	TOP OF STEEL (FT.)
1 Starter Tub						
Edge of Platform						118.533
1 Starter Tube OverHang						
Start Point					118.710	118.533
2 TR60.00RH	0.608	5.000	-7.000	4.963		
Arm-A1					118.101	117.546
3 ST36.00	0.366	3.000	-7.000	2.978		
					117.735	
4 06.00CL45.00	0.579	4.748	-7.000	4.677		
Arm-A2					117.156	116.602
5 06.00CL45.00	0.579	4.748	-7.000	4.677		
					116.578	
6 06.00CL45.00	0.579	4.748	-7.000	4.677		
Arm-A3					115.999	115.445
7 TR60.00LH	0.609	5.000	-7.000	4.963		
					115.390	
8 TR60.00LH	0.609	5.000	-7.000	4.963		
					114.781	
9 ST25.00	0.254	2.083	-7.000	2.068		
Arm-A4					114.527	113.972
10 06.00CR45.00	0.579	4.748	-7.000	4.677		
					113.948	
11 06.00CR45.00	0.579	4.748	-7.000	4.677		
Arm-A5					113.369	112.815
12 06.00CR45.00	0.579	4.748	-7.000	4.677		
					112.791	
13 06.00CR45.00	0.579	4.748	-7.000	4.677		
Arm-A6					112.212	111.658
14 06.00CR45.00	0.579	4.748	-7.000	4.677		
					111.634	
15 06.00CR45.00	0.579	4.748	-7.000	4.677		
Arm-A7					111.055	110.501
16 TR60.00RH	0.609	5.000	-7.000	4.963		
					110.446	
17 TR60.00RH	0.609	5.000	-7.000	4.963		
Arm-A8					109.836	109.282
18 ST25.00	0.254	2.083	-7.000	2.068		
					109.582	
19 06.00CL45.00	0.579	4.748	-7.000	4.677		
Arm-A9					109.004	108.450
20 06.00CL45.00	0.579	4.748	-7.000	4.677		
					108.425	
21 06.00CL45.00	0.579	4.748	-7.000	4.677		
Arm-A10					107.847	107.292
22 TR60.00LH	0.609	5.000	-7.000	4.963		
					107.237	
23 TR60.00LH	0.609	5.000	-7.000	4.963		
Arm-SA-A11					106.628	106.074
24 06.00CR45.00	0.579	4.748	-7.000	4.677		
					106.049	
25 06.00CR45.00	0.579	4.748	-7.000	4.677		
Arm-SA-A12					105.471	104.916
26 06.00CR45.00	0.579	4.748	-7.000	4.677		
					104.892	
27 06.00CR45.00	0.579	4.748	-7.000	4.677		
Arm-A13					104.313	103.759
28 06.00CR45.00	0.579	4.748	-7.000	4.677		
					103.735	
29 06.00CR45.00	0.579	4.748	-7.000	4.677		
Arm-A14					103.156	102.602
30 06.00CR45.00	0.579	4.748	-7.000	4.677		
					102.578	
31 06.00CR45.00	0.579	4.748	-7.000	4.677		
Arm-A15					101.999	101.445
32 06.00CR45.00	0.579	4.748	-7.000	4.677		
					101.420	
33 06.00CR45.00	0.579	4.748	-7.000	4.677		
BRACKET ON CONC.					100.842	100.121
34 TR60.00RH	0.609	5.000	-7.000	4.963		
BRACKET ON CONC.					100.152	99.511
35 SKIM-OUT TRANSITION	0.399	3.298	-5.710	3.188		
					99.833	
36 SKIM-OUT TRANSITION	0.656	6.594	-5.710	6.563		
					99.177	
37 SKIM-OUT	0.000	6.562	0.000	6.563		
					99.177	
38 SKIM-OUT	0.000	6.562	0.000	6.563		
					99.177	
39 SKIM-OUT	0.000	6.562	0.000	6.563		
					99.177	
Pool Water					100.000	
Length of Slide		185.252				
Height of Slide	19.538					

Open Flume Schedule

No. Date Description
08/14/03 ISSUED FOR APPROVAL
NOT FOR CONSTRUCTION

12/04/03 APPROVED
12/10/03 REVISED SLIDE
SCHEDULE

KEY PLAN

SPLASHTACULAR, INC.

78-835 DESCANSO LANE
LA QUINTA, CA 92253
OFFICE: (800) 844-5334
FAX: (760) 771-9809

BSE

BUSEY SCHMIDTBERGER
ENGINEERING, LLC
9911 PFLUMM
LENEXA, KS 66215
OFFICE: (913) 492-7400
FAX: (913) 438-3773

REGISTRATION

SPLASHTACULAR JOB NO. 8303
BSE JOB NO. 03-148

INDOOR OPEN FLUME WATERSLIDE
FOR THE
KELLER RECREATION CENTER
KELLER, TEXAS

SHEET TITLE

SLIDE SCHEDULES AND
GENERAL NOTES

SHEET NUMBER

REVISIONS

No. Date Description
08/14/03 ISSUED FOR APPROVAL
NOT FOR CONSTRUCTION
12/04/03 APPROVED

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SPLASHTACULAR, INC.

78-835 DESCANSO LANE
LA QUINTA, CA 92253
OFFICE: (800) 844-5334
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SHEET TITLE

SLIDE SCHEDULES AND
GENERAL NOTES

SHEET NUMBER

S1A

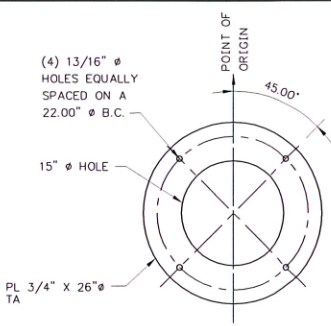
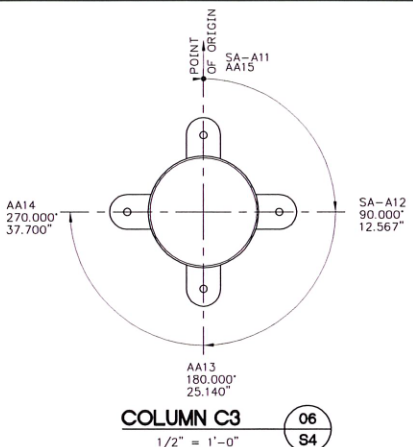
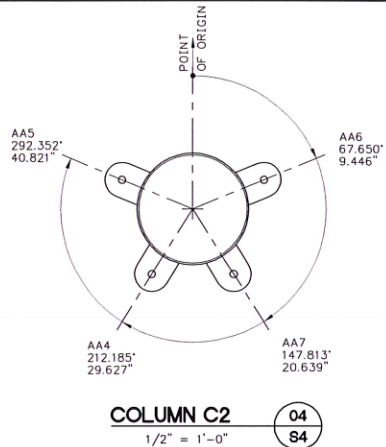
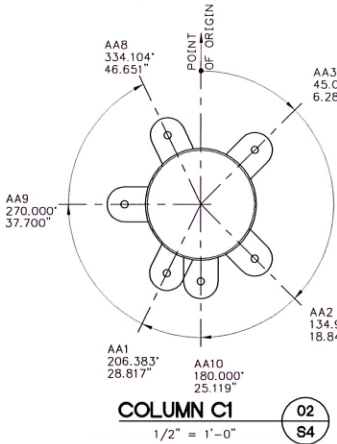
SPECIFICATIONS

COLUMN SCHEDULE									
MARK	DETAIL	LENGTH (IN)	TOP OF CONC. PEDISTAL (FT)	ARM	TOS ELEV. (FT)	A (IN)	B (IN)	BEARING ANGLE (DEGREES)	DIST C (IN)
C1	01S3	203.000	101.000	A1	117.539	191.473	161.003	206.383	28.817
	01S3	203.000	101.000	A2	116.584	180.011	154.367	134.991	18.849
	01S3	203.000	101.000	A3	115.413	165.962	140.318	45.000	6.285
	01S3	203.000	101.000	A8	109.282	92.385	124.014	334.104	46.651
	01S3	203.000	101.000	A9	108.450	82.395	111.582	270.000	37.700
	01S3	203.000	101.000	A10	107.292	68.509	97.771	180.000	25.119
C2	01S3	172.000	100.000	A4	113.924	160.087	120.837	212.185	29.627
	01S3	172.000	100.000	A5	112.753	146.037	130.189	292.352	40.821
	01S3	172.000	100.000	A6	111.582	131.988	116.137	67.650	9.446
	01S3	172.000	100.000	A7	110.412	117.939	160.814	147.813	20.639
	03S5A	95.000	100.500	SA-A11	106.010	71.934	89.649	0.000	0.000
	03S5A	95.000	100.500	SA-A12	104.847	57.974	75.657	90.000	12.567
C3	01S3	95.000	100.500	A13	103.684	31.204	60.466	180.000	25.140
	01S3	95.000	100.500	A14	102.520	17.244	46.538	270.000	37.700
	11S3	95.000	100.500	A15	101.357	15.284	32.546	0.000	0.000

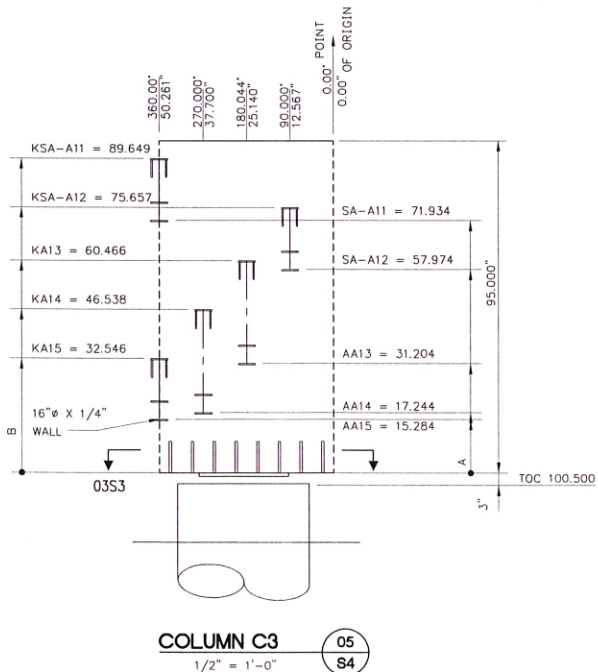
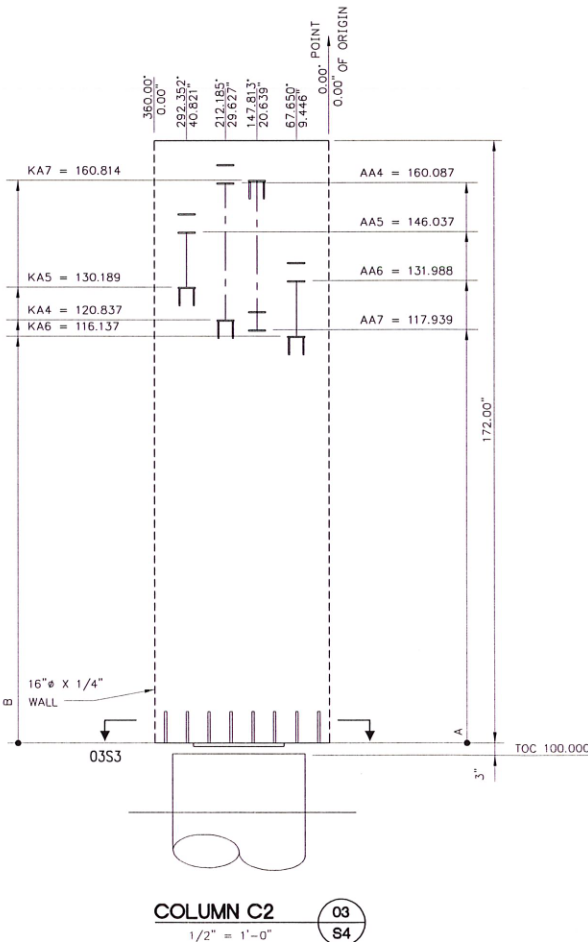
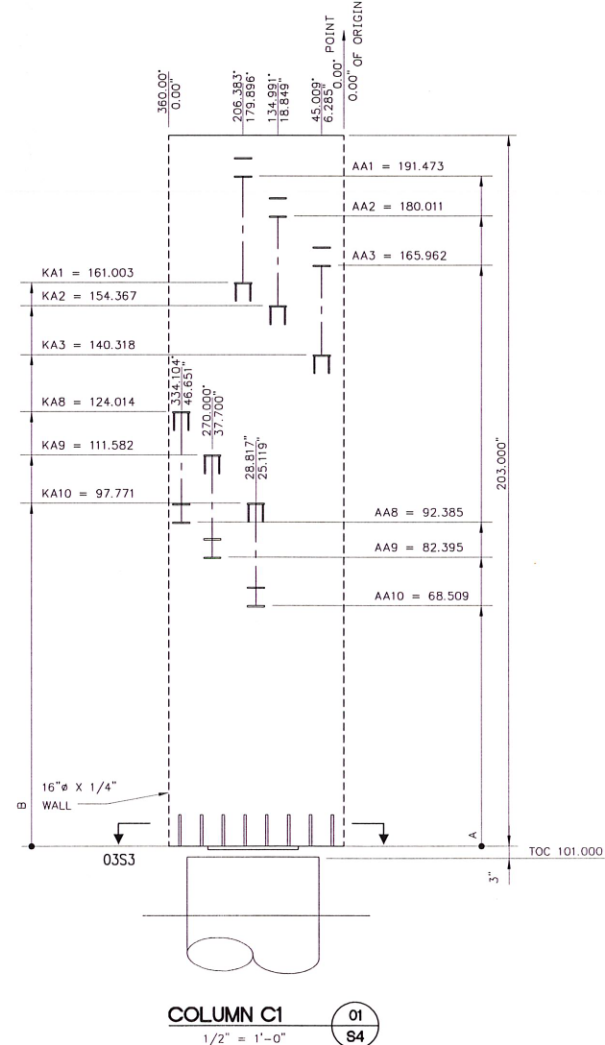
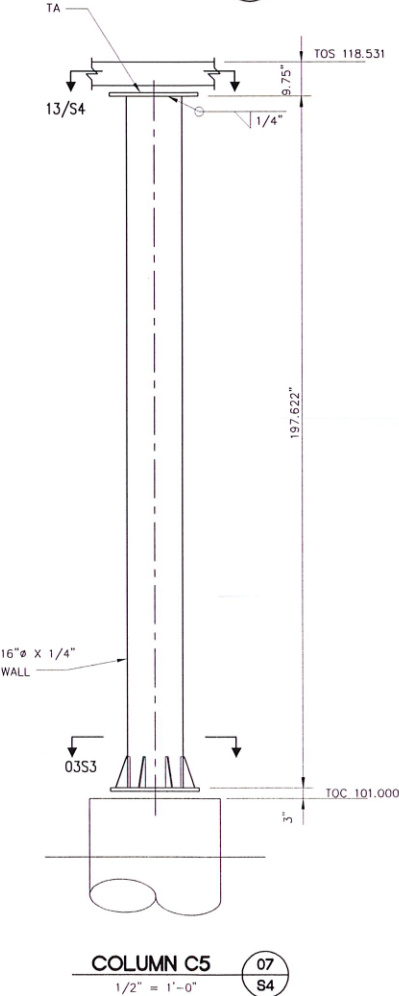
05S4A COLUMN, ARM, KICKER SCHEDULE

ARM SCHEDULE							KICKER SCHEDULE	
ARM	RADIUS LENGTH (FT)	LENGTH (IN)	KICKER ABOVE OR BELOW	DETAIL	ARM BOLT TO BOLT LENGTH (IN)	NOTES	KICKER	KICKER LENGTH (IN)
A1	6.698	84.621	BELOW	03S5	50.621		KS-A1	53.066
A2	6.000	76.262	BELOW	03S5	42.262		KS-A2	43.413
A3	6.000	76.262	BELOW	03S5	42.262		KS-A3	43.413
A8	6.342	80.349	ABOVE	03S5	46.349		KS-A8	48.132
A9	6.000	76.119	ABOVE	03S5	42.119		KS-A9	43.249
A10	6.000	76.250	ABOVE	03S5	42.250		KS-A10	43.400
A4	7.965	99.827	BELOW	03S5	65.827		KS-A4	70.625
A5	4.587	59.296	BELOW	03S5	25.296		KS-A5	23.823
A6	4.587	59.299	BELOW	03S5	25.299		KS-A6	23.826
A7	7.965	99.829	ABOVE	03S5	65.829		KS-A7	70.627
SA-A11	6.000	29.000	ABOVE	04S5A	22.250		KS-A11	20.306
SA-A12	6.000	28.944	ABOVE	04S5A	22.194		KS-A12	20.241
A13	6.000	76.250	ABOVE	03S5	42.250		KS-A13	43.400
A14	6.000	76.306	ABOVE	03S5	42.306		KS-A14	43.464
A15	6.000	76.250	ABOVE	04S5	42.250	1.	KS-A15	43.400

1. 12" OFFSET ARM



COLUMN CAP PL TA 13/84



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12/04/03	APPROVED

SPLASHTACULAR, INC.
78-835 DESCANSO LANE
LA QUINTA, CA 92253
OFFICE: (800) 844-5334
FAX: (760) 771-9809

BSE
BUSEY SCHMIDTBERGER
ENGINEERING, LLC
9911 PFLUM
LENEXA, KS 66215
OFFICE: (913) 492-7400
FAX: (913) 438-3773

INDOOR OPEN FLUME WATERSLIDE
FOR THE
KELLER RECREATION CENTER
KELLER, TEXAS

SHEET TITLE
COLUMN DETAILS
SHEET NUMBER

S4

SPLASHTACULAR, INC.
78-835 DESCANSO LANE
LA QUINTA, CA 92253
OFFICE: (800) 844-5334
FAX: (760) 771-9809

BSE

**BUSEY SCHMIDTBERGER
ENGINEERING, LLC**
9911 PFLUMM
LENEXA, KS 66215
OFFICE: (913) 492-7400
FAX: (913) 438-3773

REGISTRATION

SHEET TITLE

**SPIRAL STAIR
DETAILS**

SHEET NUMBER

SPLASHTACULAR, INC.
78-835 DESCANSO LANE
LA QUINTA, CA 92253
OFFICE: (800) 844-5334
FAX: (760) 771-9809

INDOOR OPEN FLUME WATERSLIDE
FOR THE
KELLER RECREATION CENTER
KELLER, TEXAS

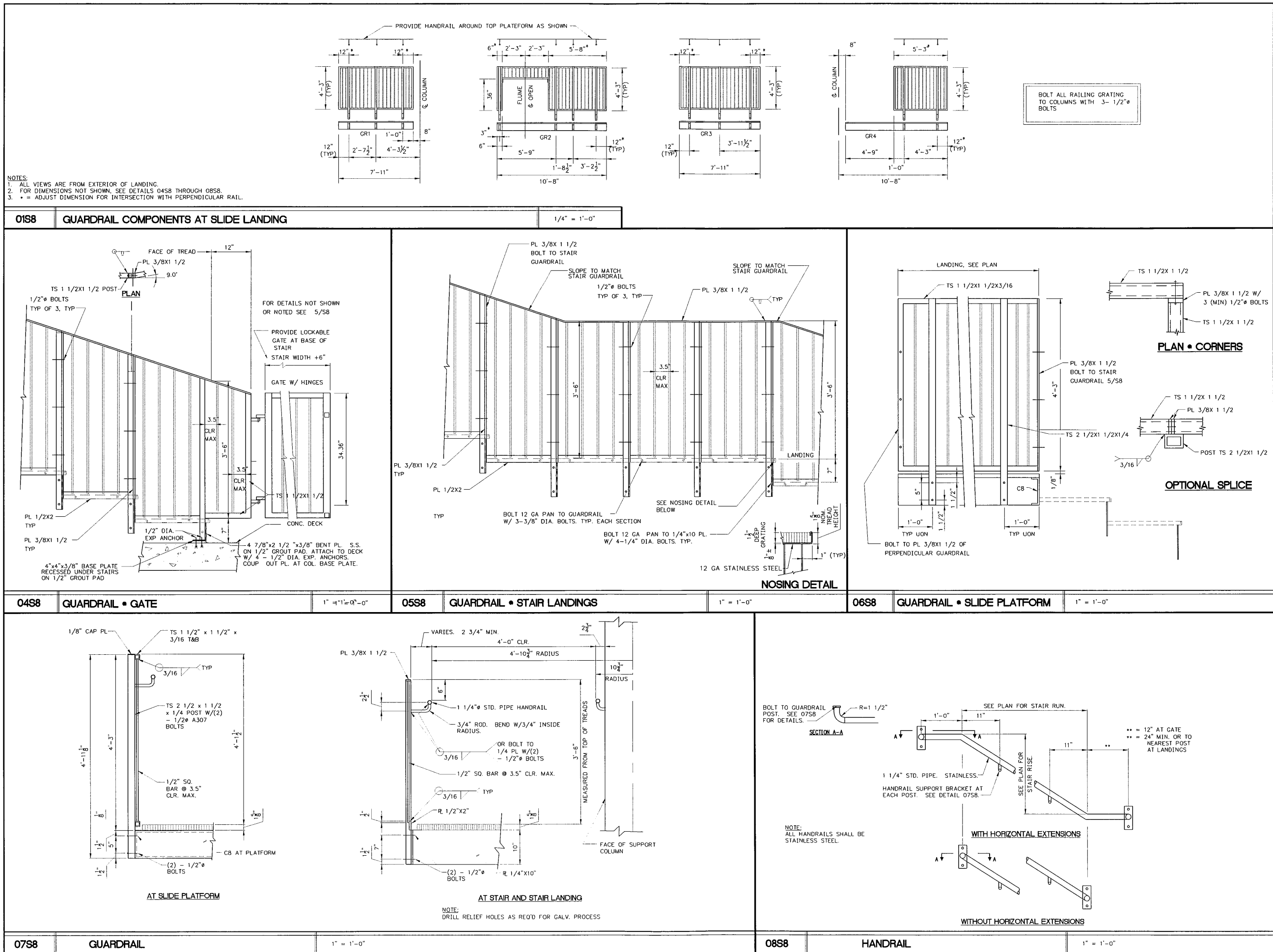
SPLASHTACULAR JOB NO. 8303
BSE JOB NO. 03-148

SHEET TITLE

STAIR DETAILS

SHEET NUMBER

S8



REVISIONS	
No.	Date Description
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KEY PLAN	

SPLASHTACULAR, INC.
78-835 DESCANSO LANE
LA QUINTA, CA 92253
OFFICE: (800) 844-5334
FAX: (760) 771-9809

BSE

BUSEY SCHMIDTBERGER
ENGINEERING, LLC
9911 PFLUMM
LENEXA, KS 66215
OFFICE: (913) 492-7400
FAX: (913) 438-3773

REGISTRATION

INDOOR OPEN FLUME WATERSLIDE
FOR THE
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KELLER, TEXAS

SPLASHTACULAR JOB NO. 8353

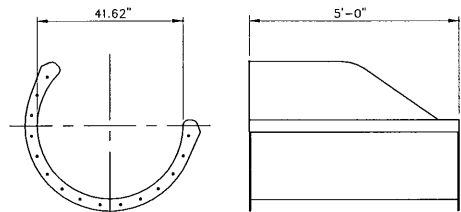
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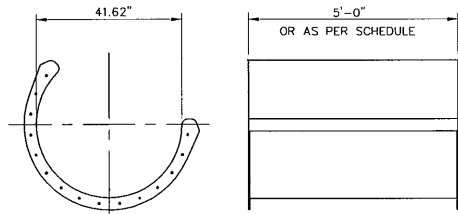
FLUME DETAILS

SHEET NUMBER

S9



TRANSITION FLUME SECTION



HIGHWALL FLUME SECTION

FASTENER SPECIFICATIONS

- (23) 3/8"x 1 1/2" SS FASTENERS AT ALL HIGHWALL FLUME SECTION JOINTS
- (3) 1/2"x2 3/4" SS FASTENERS AT FLUME ARM MOUNTING PLATES
- (12) 3/8"x1 1/2" SS FASTENERS AT STARTER TUB, TRANSITION, AND ENTRY POOL SECTION JOINTS

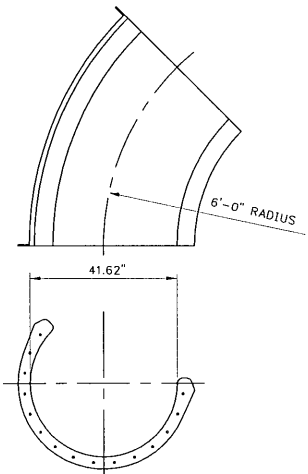
FLUME SPECIFICATIONS

- INTERIOR - 18-20 MILS OF SPRAY LAYUP "ISO-NPG" GEL COAT W/ UV INHIBITORS
- EXTERIOR - 20 MILS OF SPRAY LAYUP "ISO-NPG" GEL COAT W/ UV INHIBITORS
- LAMINATE THICKNESS OF 3/16" TO 1/4" SPRAY/CHOP LAYUP THRU OUT ENTIRE BODY
- GLASS TO RESIN RATIO OF APPROXIMATELY 35 TO 65
- FLANGE THICKNESS OF 3/8"
- ONE (1) LAYER OF 24 OZ. WOVEN ROVING THROUGH OUT THE BODY OF FLUME AND BETWEEN LAYERS OF CHOP
- REVERSE SIDES SANDED TO BE FREE OF BURRS AND SPRAYED TO A NON-POROUS FINISH WITH A "GP" GEL COAT CONTAINING A WAX SURFACING AGENT
- ALL EDGES WET TRIMED AND HAND SANDED TO DULL, ROUNDED EDGE
- NO FILLERS TO USED ANYWHERE IN THE PROCESS

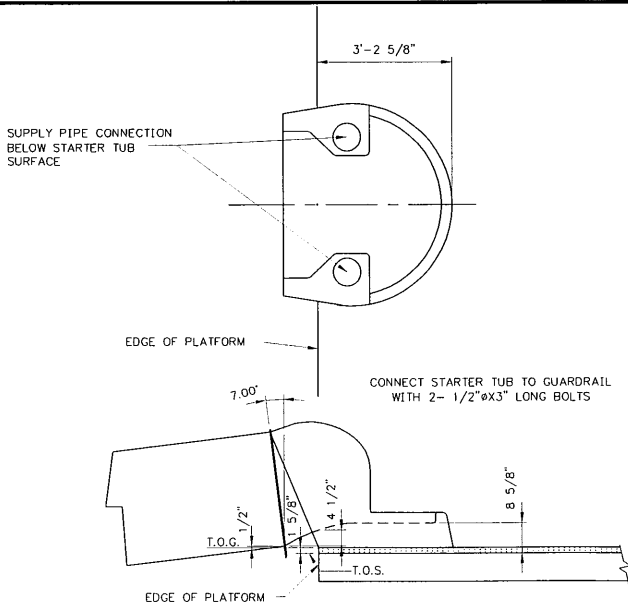
STARTER TUB SPECIFICATIONS

- ALL OF THE ABOVE FLUME SPECIFICATIONS APPLY EXCEPT AS NOTED
- STARTER TUB LAMINATE THICKNESS IS 1/4" TO 5/16" OF SPRAY/CHOP LAYUP THRU OUT THE ENTIRE BODY
- FLOOR AND RIDING SURFACE ONLY IS RE-INFORCED WITH A NON-COMPRESSING CORE MATERIAL, OF NOT LESS THAN 3/8" THICK TO WITHIN 4" OF THE ATTACHMENT FLANGE AND COVERED WITH NOT LESS THAN 1/8" SPRAY/CHOP LAMINATE

04S9 FLUME SECTIONS NOT TO SCALE

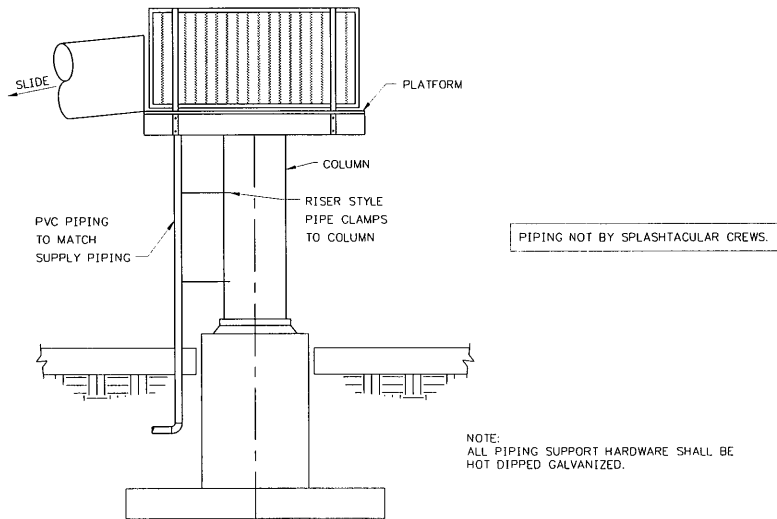


01S9 HIGHWALL 45° CURVE SECTION NOT TO SCALE



02S9 STARTER TUB SECTION NOT TO SCALE

07S9 FLUME SPECIFICATIONS NOT TO SCALE



06S9 MECHANICAL SCHEMATIC NOT TO SCALE