

F E D B A

GENERAL NOTES

DESIGN LOADS

Building Code	IBC 2006
Live Load	10 PSF
Wind Load	90 MPH (3 Sec. Gust)
	Exposure C
Soil Parameters	Table 1804.2, class 5
Soil Type	No. 4 according to soil reports provided by Ninyo and Moore Geotechnical, February 1, 2007.

STRUCTURAL STEEL

- All Galvanized Steel Tube products are manufactured per ASTM A-500. Typical Mechanical properties achieved for galvanized tube products:

Tube Ø2.197 (Gage 12)	50,000 psi yield / 55,000 psi tensile
Tube Ø2.50 (Gage 11)	50,000 psi yield / 55,000 psi tensile
Tube Ø2.75 (Gage 11)	50,000 psi yield / 55,000 psi tensile
Tube Ø3.00 (Gage 12)	50,000 psi yield / 55,000 psi tensile
Tube Ø3.50 (Gage 8)	45,000 psi yield / 48,000 psi tensile
Tube Ø4.00 (Gage 8)	45,000 psi yield / 48,000 psi tensile
Tube Ø4.50 (Gage 7)	45,000 psi yield / 48,000 psi tensile
Tube Ø5.00 (Gage 7)	45,000 psi yield / 48,000 psi tensile
- All Steel Pipe shall comply ASTM A-53 type E grade B, unless otherwise noted.
- All non Hollow Structural steel shapes shall comply with ASTM A-36, unless otherwise noted. All hollow structural steel shapes shall be cold formed HSS ASTM A-500 Grade C, unless otherwise noted. All plate products shall comply with ASTM A-572 Grade 50.
- All Galvanized Steel Tube products shall be triple coated for rust protection using the In-Line Electroplating Coat Process. Tubing shall be internally coated with zinc and organic coatings to prevent corrosion as manufactured by Allied Tube & Conduit.
- Structural Steel shall be detailed, fabricated and erected in accordance with American Institute of Steel Construction (A.I.S.C) Specifications.
- All shop welds shall be executed in accordance with the latest edition of the American Welding Society (AWS) D1.1 Specifications. All welds shall be continuous where length is not given, unless otherwise shown or noted on drawing. All welds shall develop the full strength of the weaker member. All welds shall be made using E70c-6M 0.045 wire.
- Shop connections shall be welded unless noted otherwise. Field connections shall be as indicated on the drawing (if required). All fillet welds shall be a minimum of 3/16" unless otherwise noted. Field welds shall not be allowed.
- All Stainless Steel Bolts shall comply with ASTM F-593, Alloy Group 1 or 2. All bolt fittings shall include Rubber Washer (if required) for a watertight seal at all joints. All nuts shall comply with ASTM F-594, Alloy Group 1 or 2.
- All High Strength Steel Bolts shall comply with SAE J249 Grade 8 or ASTM A354 Grade BD. All Nuts shall comply with ASTM F-594, Alloy Group 1 or 2. All Anchor Bolts shall be hot dipped galvanized per ASTM A-36.
- For All Galvanized Steel Tubing: Surface preparation prior to painting shall be executed in accordance to Solvent Cleaning SSPC-SP1. Solvent such as water, mineral spirits, xylol, toluol, etc., are used to remove foreign matter from the surface of galvanized steel structure. A mechanical method (if required) prior to a Solvent Cleaning of surface preparation shall be executed according to Power Tool Cleaning SSPC-SP-3 and involve using wire brushes, power chipping hammers, abrasive wheels, needle guns, etc.
- For All Carbon Structural Steel: Surface preparation prior to painting shall be executed in accordance to Commercial Blast Cleaning SSPC-SP6 or NACE #3. A commercial blast cleaned surface, when viewed without magnification, shall be free of all visible oil, grease, dirt, mill scale, rust, coating, oxides, corrosion products, and other foreign matter, except for staining as noted.

Abrasive Steel Grit G50 specifications shall be as follows:

 - Shape when new (angular)
 - sieve analysis (SAE J 444)
 - chemical analysis (SAE J1993)
 - Micro Hardness (54-61 HRC); (613-697 HV)
 - Standard deviation (+/- 3 Rc or +/- 60 HV)
- All Structural Steel except embedded items, shall be painted with one shop coat (3.0 mils thick, min.) of a weather resistant powder coating based on polyester TGIC (manufactured by Sherwin Williams or equivalent). To achieve optimum adhesion, it is recommended that the proper treatment and drying take place before coating. Polyester powder (TGIC) specifications shall be as follows:
 - Adhesion (ASTM D-3359).
 - Flexibility (ASTM D-522).
 - Pencil hardness (ASTM D-3363).
 - Impact Resistance (ASTM D-2794).
 - Humidity Resistance (ASTM D-2247 Polyester, ASTM D-4585 Epoxy primer).
 - Salt Spray Resistance (ASTM B-117).
- All Anchor Bolts set in new concrete shall comply ASTM F1554, Grade 55 (Galvanized).
- Bolts shall be tightened to a snug condition unless noted otherwise. Tolerances on holes for connecting plates and bolted elements in field shall be +1/8" larger than the nominal diameter of the bolt, for base plates shall be 1/4" larger. Bolts holes in metal parts may be burned using a flame cutting machine.
- Special attention shall be given to welds in areas in direct contact with shade fabric to ensure that these welds are ground smooth and do not have sharp edges or burrs.
- All Steel fabrication is required to be completed by an "Approved Steel Fabricator". Please note that the City of Las Vegas recognizes Approved Steel Fabricators that are listed and/or approved through the International Conference of Building Officials and/or National Evaluation Services and/or International Code Council and/or American Institute of Steel Construction and/or City of Los Angeles and/or other nationally recognized approval/listing agency".

CLOTH SPECIFICATION

- Fabric shall conform to a high density polyethylene with ultra violet additives. A monofilament and tape construction giving a stable material. Rachel knitted to ensure material will not unravel if cut.
- Threaded - PTFE (Teflon) used meet the following specifications: high strength, low shrinkage, wide temperature range, flex & abrasion resistant and UV radiation immunity, lock stitch -1200 denier, chain stitch thread - 2400 denier.
- Fabric used meet the following specifications:

	Solid Colors	Stripe Colors
-Burst Strength	37.7098 PSIA	33.0686 PSIA
-Fading	Minimum fading after 5 years.	
-Life expectancy	a minimum of 8 years continuous exposure to the sun.	

REINFORCED CONCRETE

- Concrete work shall be executed in accordance with the latest edition of the American Concrete Institute Building Code. Concrete Specification per Spec. section 03300, and detailed as per plans, shall be as follows:
 - 28 days strength : F'c = 4500 psi
 - High Strength concrete required for sulfates resistance only. No special inspection is required.
 - Aggregate: HR
 - Slump: 3-5
 - Portland cement shall conform to ASTM C-150.
 - Aggregate shall conform to ASTM C-33.
- All reinforcement shall conform to ASTM A-615 Grade 60. Reinforcing steel shall be detailed, fabricated and placed in accordance with the latest ACI Detailing Manual and CRSI Manual of Standard Practice.
- Top of piers are designed non constrained.

AIRCRAFT CABLE

- Wire-rope cable shall be 7x19 strand core galvanized wire rope with a breaking strength value of 14,000 lb. (Ø3/8"). Provide the necessary hot dipped galvanized fittings required for proper securing of the wire rope as produced by Crosby Group, Inc.
- Cables shall be fed trough the fabric sleeves around the perimeter of the canopy and tensioned until the fabric panels (designed purposely undersized) reach a taut appearance. Any long term cable sag shall be minimized during the maintenance retightens visits as required.



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Offices in: Dallas, TX Austin, TX
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Certifications :
IAS Certification No: FA-428
Clark Country Manufacturer Cert No: 355

Customer
Southwick Landscape Architects
Project
Lorenzi Park for the City of Las Vegas
Location
Las Vegas NV

Structure
Fabric Shade Structures

Size

BID No 07-15314.01
CLV Dwg. No 650.19-47
100% CD Document
Not for construction

Drawing Description
General Notes

Drawing No.
700-12093-01

FILE / DPIC :
700-12093-01.dwg

Date
May 7, 2007

Drawing by: J. Hernandez
Checked by: J. Margarito

Job No
29997

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