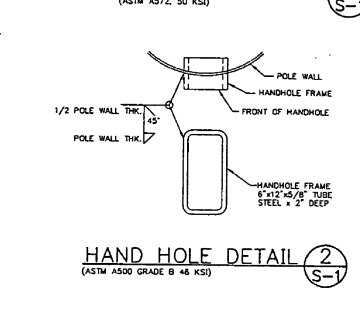
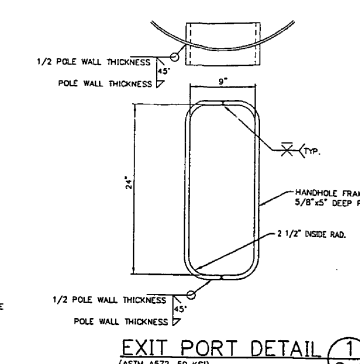
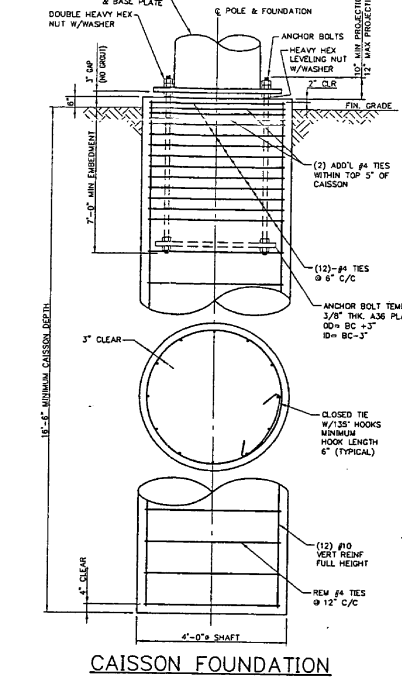


NOTES:
TESTING OF PALM TREE BRANCHES WAS CONDUCTED BY SUPPLIERS OF THE BRANCHES, INNOVATIVE SITE SOLUTIONS, PAUL J. FORD AND COMPANY HAS REVIEWED AND APPROVED THE TESTING METHODS. INNOVATIVE SITE SOLUTIONS HAS MONITORED THE STRENGTH OF THE BRANCHES THROUGH TESTING. THE AREA AND WEIGHT OF THE ARTIFICIAL PALM TREE ACCESSORIES HAS BEEN CALCULATED BASED ON THE WIND TEST RESULT DATA. THIS DESIGN ASSUMES THAT A MAXIMUM OF 68 BRANCHES ARE CLUSTERED AT THE TOP OF THE MONOPOLE.

BASE REACTIONS FOR FOUNDATION DESIGN

MOMENT = 400 ft-kips
SHEAR = 7.0 kips
AXIAL = 6.0 kips



SUMMARY OF SPECIAL INSPECTION

NO.	DESCRIPTION OF TYPE OF INSPECTION REQUIRED, LOCATION, REMARKS, ETC.	DESIGN STRENGTH
1.	FOUNDATION CONSTRUCTION	INSPECT AND REPORT
A.	GEOTECHNICAL ENGINEER OF RECORD MAY SERVE AS THE SPECIAL INSPECTOR FOR THE FOUNDATION CONSTRUCTION.	
B.	VERIFY THE DIAMETER, DEPTH AND QUALITY OF THE EXCAVATION BEFORE THE CONCRETE IS PLACED.	
C.	VERIFY THAT THE ON-SITE SOIL TESTS ARE AS DETERMINED IN THE SOIL REPORT.	
2.	CAST IN PLACE CONCRETE (FOUNDATION)	50 KSI (40 KSI TIES)
A.	REINFORCING BARS SHOULD BE INSPECTED TO ENSURE THAT THE PROPER GEOMETRY, SIZE, LENGTH, QUANTITY AND GRADE MATERIAL ARE USED.	
B.	ALL CONCRETE SHALL BE TESTED AS SPECIFIED BY ACI-308, LATEST EDITION TO ENSURE THE COMPRESSIVE STRENGTH IS ATTAINED AS DESCRIBED IN THE FOUNDATION NOTES.	3000 PSI @ 28 DAYS
C.	CONTINUOUS INSPECTION DURING THE CONCRETE PLACEMENT	INSPECT AND REPORT
3.	ANCHOR BOLTS INSTALLED IN CONCRETE	INSPECT AND REPORT
A.	PLACEMENT SHALL BE ORIENTED ON PROPER BOLT CIRCLE AS SHOWN ON THE STRUCTURAL PLANS	
B.	SHALL BE PLUMB	INSPECT AND REPORT
C.	SHALL HAVE MINIMUM EMBEDMENT OF 7'-0" INTO FOUNDATION	INSPECT AND REPORT
D.	SHALL BE TIGHTENED TO A SNUG TIGHT CONDITION PER AISC TABLE 10. MAXIMUM OF SIX CORROSION TESTS	INSPECT AND REPORT
4.	HIGH STRENGTH WELDING	ASTM A335
A.	ALL A335 BOLTS SHALL BE TIGHTENED ACCORDING TO THE TURN OF THE NUT METHOD AS PER ASTM A335 AND AISC TABLE B.2.	
B.	NO FIELD WELDING SHALL BE PERMITTED	NOT PERMITTED
C.	NO SHOP WELDING OF STRUCTURAL STEEL SHALL BE DONE BY AWS	PROVIDER CERTS.
D.	WELDED CONNECTIONS SHALL CONFORM TO THE LATEST VERSION OF THE AMERICAN WELDING SOCIETY A.W.S. D1.1 WELD ELECTRODES SHALL CONFORM TO E70X	E-70XX
E.	CONTINUOUS INSPECTION OF WELDING NOT REQUIRED. VISUAL INSPECTION OF ALL WELDS SHALL BE PERFORMED BEFORE BEING SHIPPED TO THE SITE.	INSPECT AND REPORT
F.	IF A WELD IS IN QUESTION THEN THE VISUAL INSPECTION THEN IT SHALL BE TESTED USING AN APPROPRIATE TEST, USE PENETRATOR OR MAGNETIC PARTICLE, U.V. ETC.	

LOAD CASES

CASE 1	80 MPH WITH NO ICE	TIA/EIA DESIGN WIND
CASE 2	50 MPH WITH NO ICE	OPERATIONAL WIND

POLE SPECIFICATIONS

Pole Shape Type:	(18) SIDED POLYGON
Top:	0.00000 IN/FT
Shall Steel:	ASTM A572, GRADE 65 (65 KSI)
Base PL Steel:	ASTM A572 (50 KSI)
Anchor Bolts:	2.25" Ø X 8'-0" LONG #18J ASTM A515, GRADE 75

ANTENNA LIST

No.	Elev.	Description
1	TOP	5/8 LIGHTNING ROD
1-12	58.00	TOP (68) PALM FRONDS (FROND LENGTH = 8')
1-12	58.00	(12) Ø8 BRANDED-FRONT PANEL ANTENNA STD. 10 COBRA ANM MOUNT

NOTE: PALM BARK CLADDING TO FULL HEIGHT OF MONOPOLE

60 MPH WIND

Elevation	Lateral Deflection (inches)	Rotation (sway) (degrees)
58'-6"	27.9	3.589

50 MPH WIND

Elevation	Lateral Deflection (inches)	Rotation (sway) (degrees)
58'-6"	10.9	1.394

SHAFT SECTION DATA

Shaft Section	Section Length (feet)	Plate Thickness (in.)	Internal Splice (in.)	Diameter (inches)	
				@ Top	@ Bottom
1	29.50	0.1875		20.000	20.000
2	29.00	0.3125		20.000	20.000

NOTE: DIMENSIONS SHOWN DO NOT INCLUDE GALVANIZING TOLERANCES

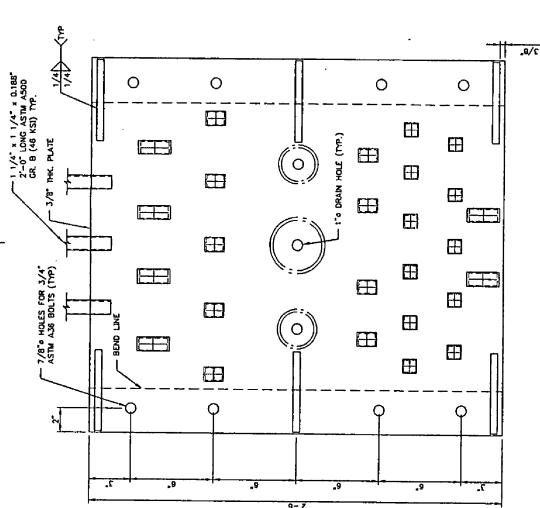
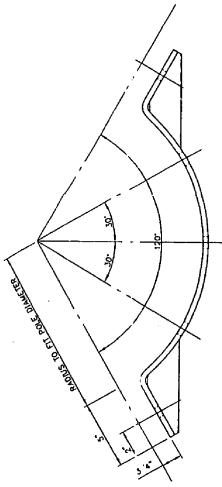
- GENERAL NOTES:**
- ALL STEEL SHALL CONFORM TO THE REQUIREMENTS OF THE "STANDARD SPECIFICATION FOR STRUCTURAL STEEL" ASTM A36 (36 KSI YIELD POINT MATERIAL), EXCEPT WHERE NOTED ON SHEETS 5-1, 5-2 OR AS NOTED BELOW.
 - ALL STEEL PIPE SHALL CONFORM TO THE REQUIREMENTS OF ASTM A53 TYPE E OR 5 GRADE B (35 KSI YIELD POINT MATERIAL) OR ASTM A501 (36 KSI YIELD POINT MATERIAL).
 - ALL STEEL SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A123.
 - WELDED CONNECTIONS SHALL CONFORM TO THE LATEST VERSION OF THE AMERICAN WELDING SOCIETY A.W.S. D1.1 WELD ELECTRODES SHALL CONFORM TO E70 ELECTRODES.
 - MONOPOLE SHALL BE FABRICATED BY CHAMELEON ENGINEERING.
 - ALL ANTENNA FEED LINES RUN INSIDE OF POLE SHAFT.
 - THE SPECIAL INSPECTION SHALL BE ACCORDING TO SECTION 1701 OF THE 2001 CBC (SEE TABLE ON 5-1).
 - IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE SPECIAL INSPECTOR OR INSPECTION AGENCY (AND OR THE INSPECTING GEOTECHNICAL ENGINEER) AT LEAST ONE WORKING DAY PRIOR TO PERFORMING ANY WORK THAT REQUIRES SPECIAL INSPECTION. WORK REQUIRING SPECIAL INSPECTION IS NOT A SUBSTITUTION FOR INSPECTION BY A CITY INSPECTOR. THE SPECIAL INSPECTOR IS SUBJECT TO REMOVAL.
 - THE SPECIAL INSPECTIONS LISTED ARE IN ADDITION TO THE CALLED INSPECTIONS REQUIRED BY SECTION 108 OF THE 2001 CBC. SPECIAL INSPECTION IS NOT A SUBSTITUTION FOR INSPECTION BY A CITY INSPECTOR.
 - THE SPECIAL INSPECTOR SHALL BE APPROVED BY THE LOCAL JURISDICTION TO PERFORM THE TYPES OF INSPECTION REQUIRED.
 - CONTINUOUS INSPECTION IS ALWAYS REQUIRED DURING THE PERFORMANCE OF THE WORK UNLESS OTHERWISE SPECIFIED.
 - ALL SUPPORT SERVICES PERFORMED BY THE ENGINEER DURING CONSTRUCTION SHALL BE DETERMINED FROM CONTINUOUS AND DETAILED INSPECTION SERVICES, WHICH ARE FURNISHED BY OTHERS. THESE SUPPORT SERVICES PERFORMED BY THE ENGINEER ARE SOLELY FOR THE PURPOSE OF ASSISTING IN QUALITY CONTROL AND IN ACHIEVING CONFORMANCE WITH CONTRACT DOCUMENTS. THEY DO NOT GUARANTEE CONTRACTOR'S PERFORMANCE AND SHALL NOT BE CONSTRUED AS SUPERVISION OF CONSTRUCTION.
- ERECTION NOTES:**
- THE CONTRACTOR SHALL ORIENT THE ANTENNA MOUNT AS REQUIRED BY THE OWNER.
 - GALVANIZED SURFACES DAMAGED DURING TRANSPORTATION OR ERECTION AND ASSEMBLY AS WELL AS ANY ABRASIONS, CUTS, FIELD DRILLING, AND FIELD WELDING SHALL BE TOUCHED UP WITH TWO COATS OF ZINC-BRAND (OR APPROVED EQUIVALENT) ZINC-RICH COOL GALVANIZING COMPOUND. FILM THICKNESS PER COAT SHALL BE: NET 3 MILS. DRY 1.5 MILS APPLY PER ZRC (MANUFACTURER'S RECOMMENDED PROCEDURES). CONTACT ZRC AT 1-800-831-3275 FOR PRODUCT INFORMATION.
 - TIGHTEN ALL ANCHOR BOLTS TO ASIC SNUG TIGHT REQUIREMENTS. THE SNUG TIGHT CONDITION IS DEFINED AS THE TIGHTNESS THAT EXISTS WHEN ALL PILES IN A JOINT ARE IN FIRM CONTACT. THIS MAY BE ATTAINED BY A FEW IMPACTS OF AN IMPACT WRENCH OR THE FULL EFFORT OF A MAN USING AN ORDINARY SPUD WRENCH.
- FOUNDATION NOTES:**
- ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF AT LEAST 3000 PSI AT 28 DAYS. CONCRETE SHALL BE AIR ENTRAINED (68.1 ± 2). CONCRETE SHALL HAVE A MAXIMUM WATER/CEMENT RATIO OF 0.46. ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE", ACI 318, LATEST EDITION. FOUNDATION INSTALLATION SHALL BE IN ACCORDANCE WITH ACI 308, "STANDARD SPECIFICATIONS FOR THE CONSTRUCTION OF DRESSED PIERS", LATEST EDITION.
 - REINFORCING STEEL SHALL CONFORM TO ASTM A615 (GRADE 60) EXCEPT THAT CAISSON TIES MAY BE ASTM A36 (GRADE 40). ALL REINFORCING DETAILS SHALL CONFORM TO "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES", ACI 315, LATEST EDITION, UNLESS DETAILED OTHERWISE ON THIS DRAWING.
 - SEE ELEVATION 5/S-1 FOR ANCHOR BOLT QUANTITY, SIZE, LENGTH, AND BOLT CIRCLE.
 - ESTIMATED CONCRETE VOLUME = 8 CUBIC YARDS.
 - FOUNDATION DESIGN BASED UPON GEOTECHNICAL EXPLORATION REPORT PREPARED BY: GEOTECHNICAL SOLUTIONS, INC. REPORT NO. N-2390-01 DATE: JUNE 15, 2004
 - CONTRACTOR SHALL READ THE GEOTECHNICAL REPORT AND CONSULT THE GEOTECHNICAL ENGINEER AS NECESSARY PRIOR TO CONSTRUCTION.
 - THE FOUNDATION WAS DESIGNED USING THE FOLLOWING SERVICE LOADS:
MOMENT: 400 FT-KIPS
SHEAR: 7.0 KIPS
AXIAL: 6.0 KIPS
 - GEOTECHNICAL ENGINEER MUST INSPECT THE EXCAVATION PRIOR TO PLACING REINFORCING STEEL OR FORMS. GEOTECHNICAL ENGINEER TO PROVIDE A NOTICE OF INSPECTION FOR THE BUILDING INSPECTOR FOR REVIEW AND RECORD PURPOSES.
 - CONTRACTOR SHALL DETERMINE THE MEANS AND METHODS TO SUPPORT THE DRILLED HOLE EXCAVATION. REFER TO THE GEOTECHNICAL REPORT FOR RECOMMENDATIONS.

DESIGNED ACCORDING TO TIA/EIA-222-F, 1996
MEETS REQUIREMENTS OF 2001 CBC

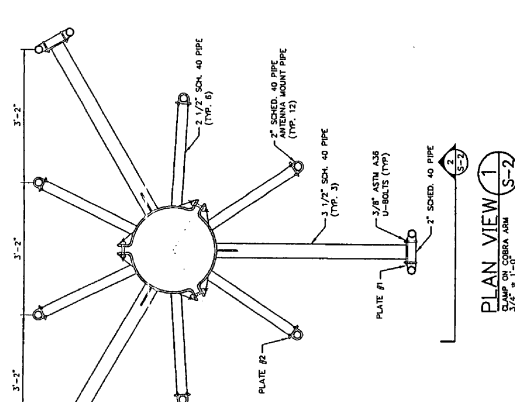
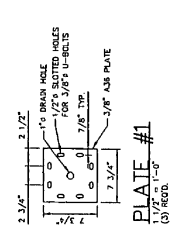
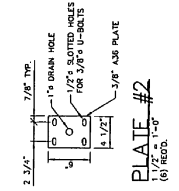
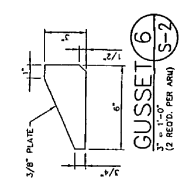
REVISION #2: FINAL FOUNDATION DESIGN.
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PAUL J. FORD AND COMPANY STRUCTURAL ENGINEERS 250 East Broad Street, Suite 1500, Columbus, Ohio 43215 (614) 231-6679 Fax: (614) 448-4105 www.PJFweb.com	CHAMELEON ENGINEERING 221 TOWN CENTER WEST, PUEBLO, SANTA MARIA, CALIFORNIA 95368 PH: (800) 479-4026 FAX: (800) 479-4036

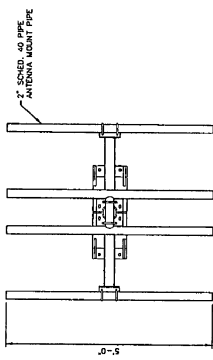
S-1



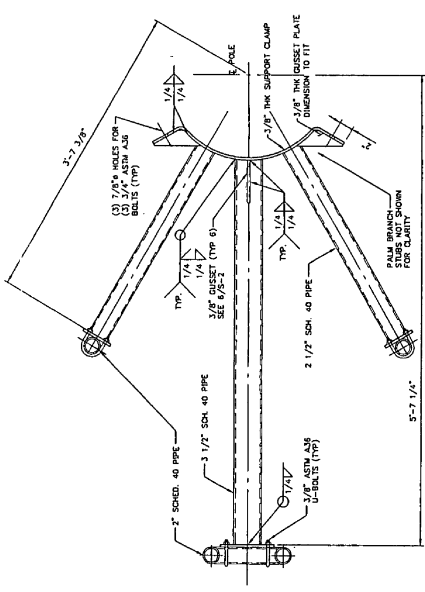
CLAMP PLATE
(3) RECD.



PLAN VIEW #1
(3) RECD.



ELEVATION VIEW #2
(3) RECD.



SUPPORT ARM DETAIL #3
(3) RECD.

GENERAL NOTES:

- ALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATION FOR STRUCTURAL STEEL, ASTM A36 (OR AS YIELD POINT MATERIAL), EXCEPT WHERE NOTED BELOW.
- ALL STEEL PIPE SHALL CONFORM TO THE REQUIREMENTS OF THE ASTM A53 TYPE E OR S GRADE 8 (35 KSI YIELD POINT MATERIAL).
- ALL STEEL SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A123.
- WELDED CONNECTIONS SHALL CONFORM TO LATEST VERSION OF THE AMERICAN WELDING SOCIETY A.W.S. D-1. WELD ELECTRODES SHALL CONFORM TO E70 ELECTRODES.
- THIS ANTENNA MOUNT WAS DESIGNED FOR (1) ANTENNA PER MOUNT PIPE WITH A MAXIMUM WIND LOAD OF 475 LBS AND A HEIGHT OF 30 LBS PER ANTENNA.
- HEIGHT OF STEEL CORNER ARM MOUNT (3 SECTIONS) WITH STANDARD 2" MOUNT PIPES EQUALS APPROXIMATELY 100 LBS.

DESIGN LIMITS:

- WORKERS SHALL OPERATE THE ANTENNA MOUNT AS REQUIRED BY THE OWNER.
- GALVANIZED SURFACES DAMAGED DURING TRANSPORTATION OR ERECTION AND ASSEMBLY SHALL BE TOUCHED UP USING A ZINC-RICH COLD GALVANIZING COMPOUND.
- ALL ASTM THREADER RODS AND U-BOLTS SHALL BE TIGHTENED TO A SNUG TIGHT CONDITION PER THE AISC MANUAL OF STEEL CONSTRUCTION.
- CORNER ARM MOUNT SHALL NOT BE USED AS A CLIMBING DEVICE. WORKERS SHALL ALWAYS TIE OFF TO A SPECIFIED CLIMBING POINT.

REVISION #2: FINAL FOUNDATION DESIGN.
Checked: [Signature] By: [Signature] Date: [Date]

<p>PAUL J. FORD AND COMPANY ENGINEERS, INC. 360 S. GATEWAY BLVD., SUITE 100 IRVINE, CA 92614 TEL: (949) 251-3211 FAX: (949) 251-3212</p>	<p>CHAMELEON ENGINEERING 7211 CHAMBERLAIN BLVD., SUITE 100 IRVINE, CA 92618 TEL: (949) 479-4028 FAX: (949) 479-4028</p>	
	<p>Project Number: 33204-0065 Revision: RCY #2 07-21-2004</p>	<p>Drawn By: SWL Checked By:</p>
<p>Client: NEXTEL COMMUNICATIONS Site Location: HONOR FARM CA-7848, IRVINE, CALIFORNIA</p>	<p>Date: 05-04-2004 Scale: AS NOTED</p>	<p>Drawing No: S-2</p>