



Weber County Planning Division

Site Plan Administrative Approval

Project Number: DR2012-06
Site Plan Name: Westinghouse (Western Z) Communication Tower/Mono Pole
Date Submitted: April 23, 2012
Land Serial Number: 10-039-0004
Approximate Address: 10000 West 900 South
Planning Division Staff Review: Scott Mendoza

Background

Westinghouse Electric Company (Western Zirconium), on behalf of Centurylink™, is requesting approval of a one hundred (100) foot tall communication tower intended to provide internet service. The tower will be constructed on Westinghouse property (10000 West and 900 South); however, it is better described as being located within the SE ¼ of the NW ¼ of Section 18, Township 6 North, and Range 3 West. It will lie within the Manufacturing-3 (M-3) Zone which lists a communication or transmitting tower as a permitted use. The parcel on which the structure will be constructed consists of approximately 1152 acres, covering land located in portions of Sections 7, 8, 17, and 18. See Exhibit A for location map.

As stated above the communication tower, according to the application, will stand one hundred (100) feet tall and will be constructed of galvanized tubular steel, assembled in three sections. Section A (ground section) is 24 inches in diameter and measures forty (40) feet in length. Section B (middle section) is 18 inches in diameter and measures forty (40) feet in length. Section C (top section) is 12.75 inches in diameter and measures twenty (20) feet in length. See Exhibit B for tower details. It will be supported by a large underground footing and a 4.5 foot diameter concrete pier with six inches remaining exposed above ground. See Exhibit C for footing and foundation details.

A six (6) foot solid dish will be installed at the top of the tower along with a safety climbing cable that will extend ninety (90) feet in length toward the ground. See Exhibit B for dish and cable details.

Planning Division Review

▪ **Applicable requirements of the Weber County Zoning Ordinance?**

The Planning Division Staff has determined that Chapter 22A (Manufacturing-3 Zone) and Chapter 36 (Design Review) apply to this site plan approval request. These ordinances have been complied with in the following ways:

- The Manufacturing-3 Zone lists a communication tower as a permitted use which allows the use and further allows the Planning Staff to administratively approve Westinghouse's proposed site plan due to its limited scale and scope. Improvements shown on the site plan cover an area that is less than one (1) acre as prescribed by Chapter 36.
 - All other design and site plan requirements from Chapter 36 are in compliance as demonstrated by the proposed site plan.
 - **Review agency conditions and requirements?**
 - The Weber County Building Inspection Division will require a Building Permit prior to construction.
 - The remaining review agencies have responded with no concerns and have approved the project.
-

Planning Division Findings

- The application was submitted and deemed complete on April 23, 2012.
- The requirements of Chapters 22A and 36 have been complied with as described above.
- This proposed project falls within the requirements for an administrative approval by the Planning Director.

Based upon the findings listed above, the site plan for the Westinghouse communication tower is hereby approved.

Date of Administrative Approval: May 1, 2012



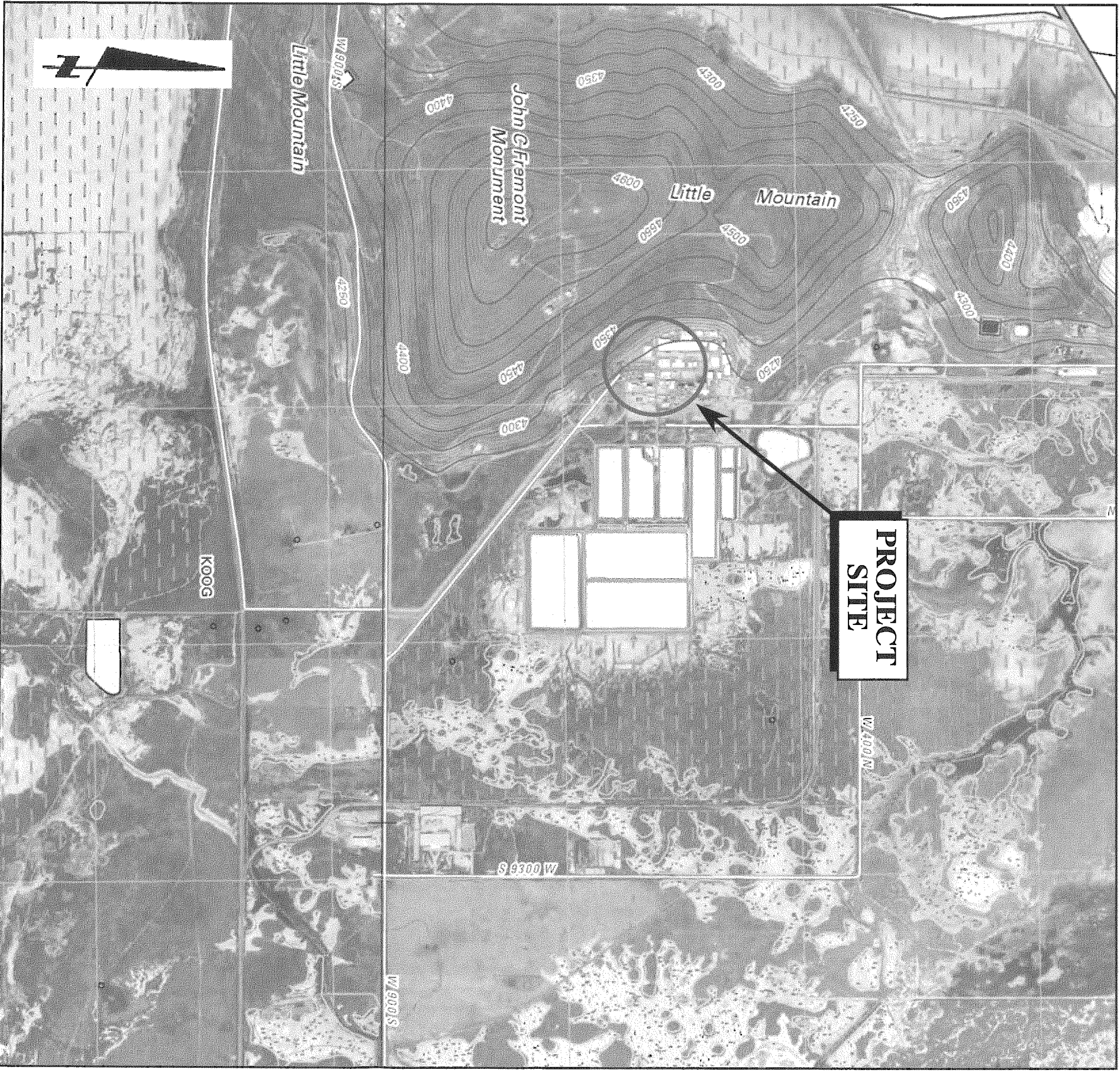
Robert O. Scott
Weber County Planning Director

Exhibits

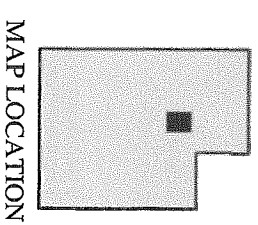
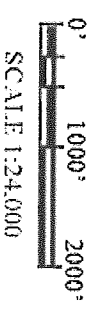
- A. Location Map.
- B. Proposed tower and dish details.
- C. Proposed foundation details.

The exhibits are considered the approved documents associated with this Design Review.

EXHIBIT A
1/2



BASE MAPS:
USGS Plain City and Ogden Bay 7.5-Minute Quadrangle Topographic Maps (2011)



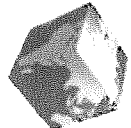
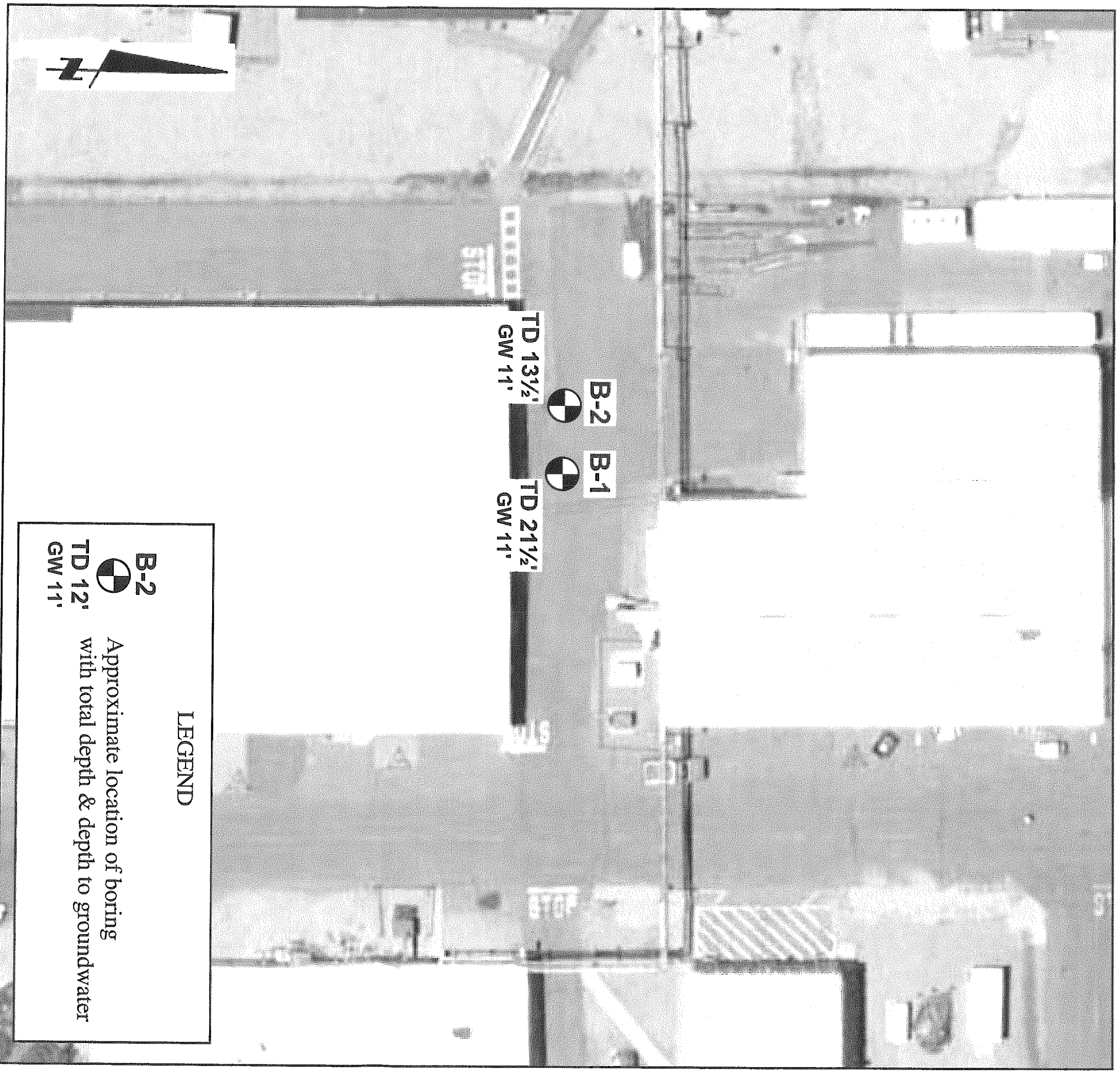
IGES[®]
Project No. 01289-004

Geotechnical Investigation
Westinghouse Monopole
10000 West 900 South
Ogden, Utah

SITE VICINITY MAP

Figure
A-1

01:1:10



IGES[®]
Project No. 01289-004

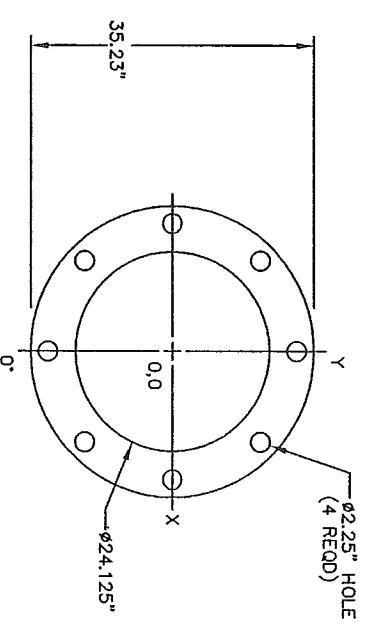
Geotechnical Investigation
Westinghouse Monopole
10000 West 900 South
Ogden, Utah

GEOTECHNICAL MAP

Figure
A-2

ITEM NO.	FEATURES	UNIT WEIGHT(LBS)	WEIGHT (LBS)
1	SECTION A - PIPE 24" OD x 0.375" WALL (A53 GR. B)	3,787	3,787
2	SECTION B - PIPE 18" OD x 0.250" WALL (A53 GR. B)	1,897	1,897
3	SECTION C - 12.75" OD x 0.375" WALL (A53 GR. B)	992	992
4	BOTTOM CAGE PLATE	64	64
5	2.00" ANCHOR BOLT, LENGTH=5.00' F1554 GR55	62	496
6	BASE PLATE 2.00" THK (A572 GR50)	551	551
7	6" SOLID DISH		
1	TOP CAGE PLATE (REMOVE BEFORE SETTING POLE)	84	84
1	SAFETY CLIMBING CABLE (LENGTH = 90.00')	84	84
2	GROUNDING LUG	2	4
	GALVANIZING	145	145
80	STEP AND CLIP (VALMONT STANDARD)		
8	HAND HOLE UR (5" x 8") @ 0'. 180"	1	80
9	2 HAND HOLE UR (5" x 8") @ 0'. 180"		
1	POLE CAP	14	14
10	2 FLANGE PL 1.50"THK (A572 GR50) W/(12) 7/8"Ø A325 BOLTS	192	384
11	2 FLANGE PL 1.00"THK (A572 GR50) W/(8) 3/4"Ø A325 BOLTS	72	144

HOLE COORDS (INCHES)	
X-COORD	Y-COORD
10.94	10.94

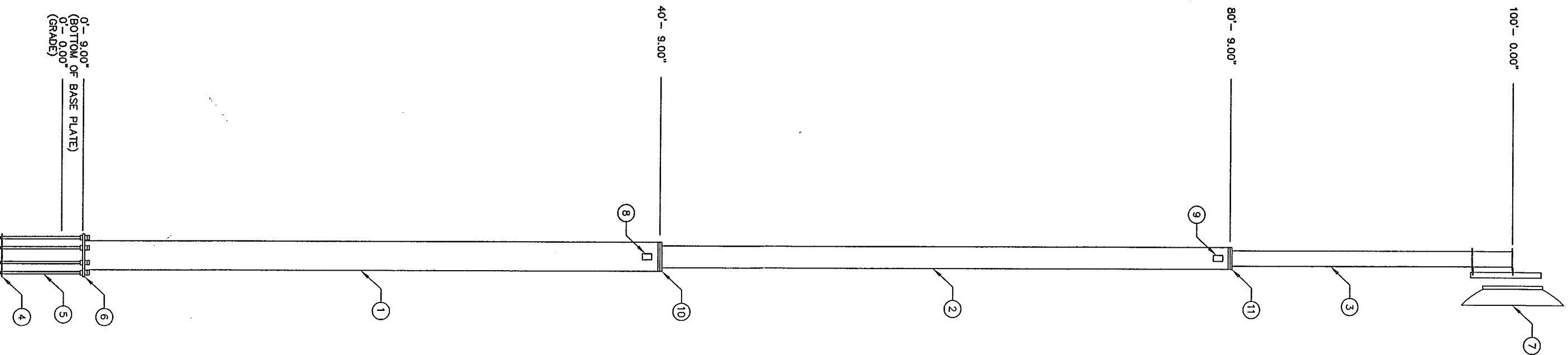


BASE PLATE / ANCHORAGE CHARACTERISTICS

NOTES:

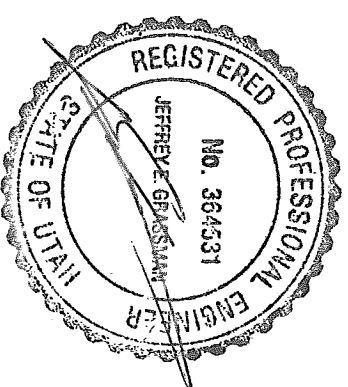
- FACTORED REACTIONS FOR FOUNDATION DESIGN.
 - MOMENT = 4,484 IN-KIPS
 - SHEAR = 5,484 #
 - VERTICAL = 8,724 #
- GALVANIZED PER ASTM A-123.
- DESIGN CRITERIA: ANSI/TLA 222-G APPENDUM 2
- THIS STRUCTURE HAS BEEN DESIGNED FOR THE FOLLOWING LOADING:
 - EXPOSURE CATEGORY = C
 - STRUCTURE CLASSIFICATION = 2
 - TOPOGRAPHY CATEGORY = 1
 - EARTHQUAKE SPECTRAL RESPONSE ACCELERATION AT SHORT PERIODS $S_s = 1.78$
 - EARTHQUAKE SPECTRAL RESPONSE ACCELERATION AT ONE SECOND $S_1 = 0.76$
 - EARTHQUAKE SITE CLASS = D
 - WIND LOAD CASES ARE BASED ON 3 SECOND GUST AND 50 YEAR WIND RETURN PERIOD
 - A. CASE 1: WIND = 90 MPH WIND SPEED
 - B. CASE 2: WIND = 50 MPH ICE AND WIND SPEED
 - C. CASE 3: WIND = 60 MPH WIND SPEED
 - D. EQUIPMENT
- FEEDLINES ARE PLACED INTERIOR TO POLE SHAFT (UNLESS NOTED OTHERWISE).

DESCRIPTION	MTG H.T. (FT)	CENTROID H.T. (FT)	WITHOUT ICE WT (LBS)	WITH ICE WT (LBS)
1-6' SOLID DISH	99.00	99.00	45,73	187
			47,41	352



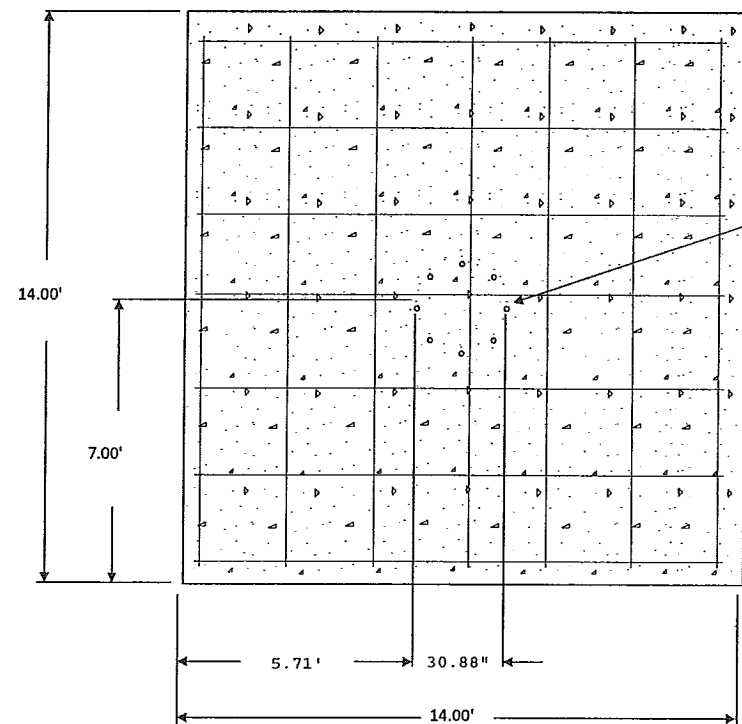
SECTION INFORMATION					
ITEM ID	LENGTH	BASE OD	TOP OD	THK	MATL
1	40'- 0.00"	24.00"	24.00"	0.375"	A53 GR. B
2	40'- 0.00"	18.00"	18.00"	0.250"	A53 GR. B
3	20'- 0.00"	12.75"	12.75"	0.375"	A53 GR. B

ORDER	PROJECT	FILE ID	SCALE	DATE	ENGR
	CENTURYLINK 100' POLE, SITE: WESTINGHOUSE--OGDEN NORTH, UT	173392R2	NONE	02/13/12	AH12M

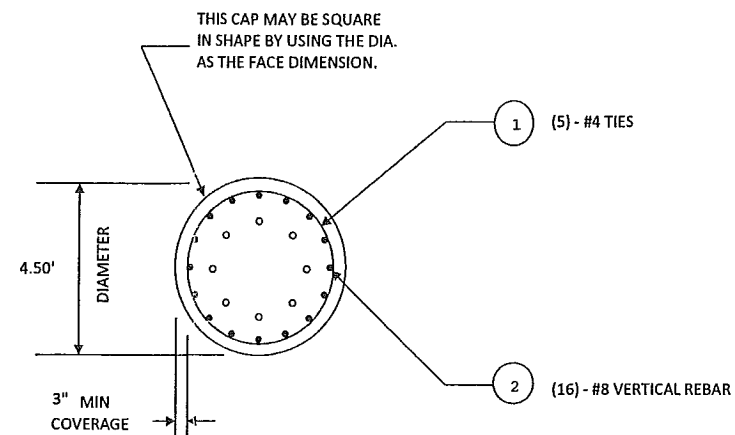


APR 18 2012

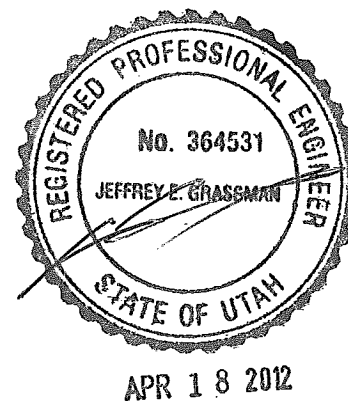




SECTION A-A
No Scale



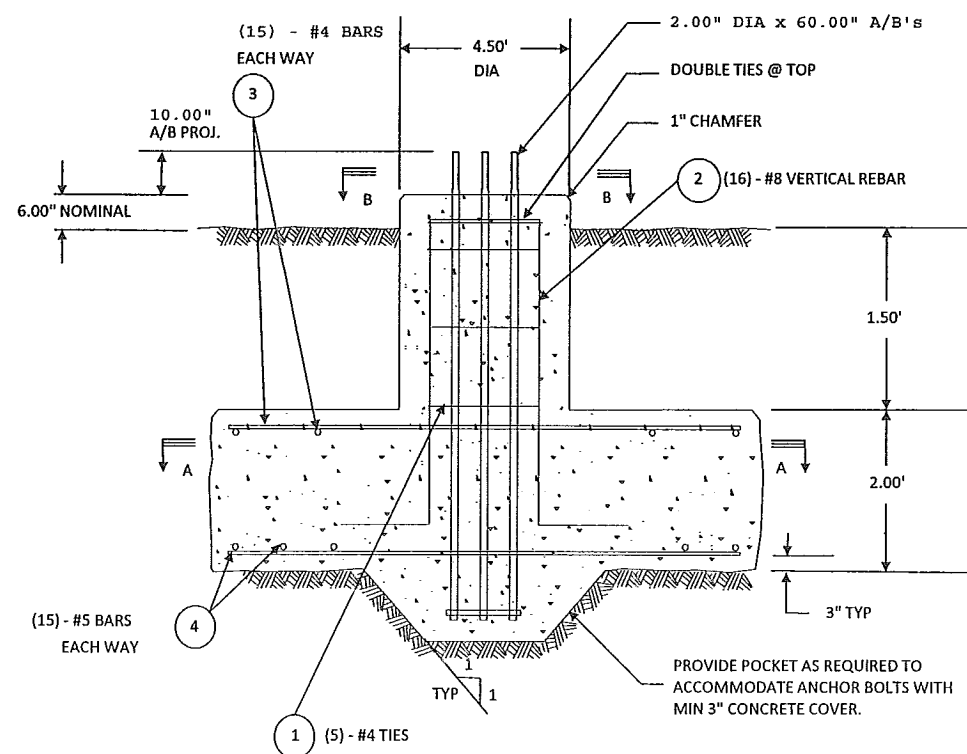
SECTION B-B
No Scale



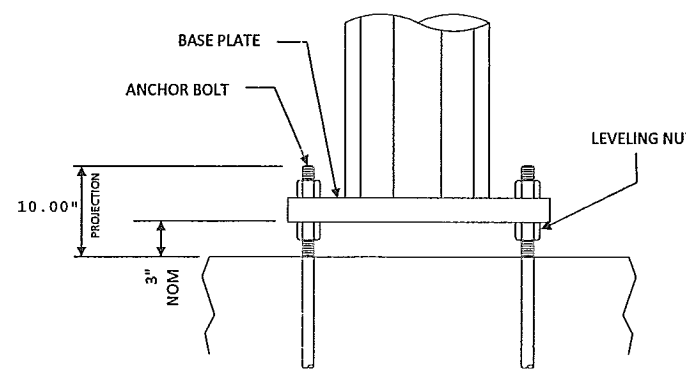
GENERAL NOTES: SLAB FOUNDATION

- Prior to excavation, check the area for underground facilities.
- All reinforcing shall be deformed bars conforming to ASTM A615 Grade 60 (60,000 psi min. yield) and shall be provided by the foundation contractor.
- All concrete shall have a minimum compressive strength of 3000 psi @ 28 days. The requirement for the concrete shall be as given in the ACI "Building Code Requirements for Reinforced Concrete", ACI 318, the latest edition.
- Trowel top of foundation smooth.
- Concrete shall be placed against undisturbed soil to the depth indicated on the foundation drawing. The portion above grade shall be formed. If an area is excavated beyond the limits shown, this volume shall be filled with concrete or formed. After the forms are removed, the excess excavation shall be replaced and compacted.
- The ground water was encountered at 11' below grade during boring.
- Foundation design based on vert. bearing pressure of 6000 psf.
- Concrete is assumed to weigh 150 pcf.
- Estimated concrete volume = **16.18 cubic yards total.**
- Design Based on the following loads from installation drawing for order No: 173392-1-1.

Factored Moment = 374 FT-KIPS	Overturning Safety Factor = 1.59
Factored Download = 7.8 KIPS	Max. Toe Bearing Pressure = 1.23 ksf
Factored Shear = 5.5 KIPS	
- Backfill should be compacted to a density of 100 pct.
- Anchor bolts to be ASTM F1554, Gr. 55 ksi.
- Reference: IGES Project No. 01289-004, dated 3/29/2012.
- Ref Soils Report for installation recommendations.



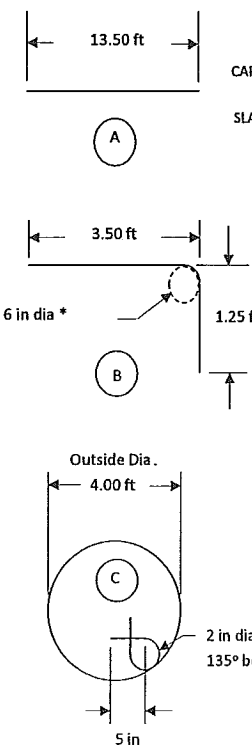
ELEVATION
No Scale



ANCHOR BOLT INSTALLATION
N.T.S.
EXTREME CARE SHOULD BE TAKEN TO ASSURE THAT ALL LEVELING NUTS ARE LEVEL WITH RESPECT TO EACH OTHER PRIOR TO ERECTION OF THE STRUCTURE

**SLAB FOUNDATION TO BEAR AT MINIMUM 3.5FT BELOW GRADE

**SLAB TO BEAR ON MINIMUM 18" OF STRUCTURAL FILL PER GEOTECH REPORT. STRUCTURAL FILL SHOULD EXTEND A MINIMUM OF 2FT BEYOND FOUNDATION EDGE.



REINFORCEMENT STEEL SCHEDULE					
Sym	Type	Rebar Size	Rebar Spacing	Weight (lbs)	Qty
1	C	#4	EQUAL	42	5
2	B	#8	---	203	16
3	A	#4	11.57 in	271	30
4	A	#5	11.57 in	422	30
TOTAL STEEL WEIGHT FOR COMPLETE FOUNDATION INSTALLATION =				938	

Grade 60 Rebar					
Size	Ask #	Wt/ft	10db (in)	d* (in)	d** (in)
#3	11-97203	0.38	3.75	2.25	1.50
#4	11-97204	0.67	5.00	3.00	2.00
#5	11-97205	1.04	6.25	3.75	2.50
#6	11-97200	1.50	7.50	4.50	4.50
#7	11-97207	2.04	8.75	5.25	4.25
#8	11-97208	2.67	10.00	6.00	6.00
#9	11-97209	3.40	11.28	9.50	-
#10	11-97210	4.30	12.70	10.75	-
#11	11-97211	5.31	14.10	12.00	-

* Refers to ACI standard hook detail chart
** Refers to ACI stirrup hook detail chart

Rebar Lap Splice					
Rebar Size	Rebar Grade	Specified Concrete Strength	Overlap (Inches)		
			Vert	Bottom Horiz	Top Horiz
#3	60	3000 psi	15	15	21
#4	60	3000 psi	20	20	29
#5	60	3000 psi	26	26	36
#6	60	3000 psi	33	33	46
#7	60	3000 psi	45	45	62
#8	60	3000 psi	59	59	82
#9	60	3000 psi	74	74	104
#10	60	3000 psi	95	95	132
#11	60	3000 psi	116	116	163

Splicing is an alternative to specified material listed in rebar schedule.

Rev	Description	Date	By/Ck	UNLESS OTHERWISE NOTED DIMENSIONS ARE IN INCHES TOLERANCES ARE:	valmont MICROFLECT	
				X'-X X/X" - ± 1/8" X X/X" - ± 1/16" X" - ± 1/16"	3575 25TH STREET SE SALEM, OR 97302 MAIN (503) 363-9267 FAX (503) 316-2040	SLAB FOUNDATION LAYOUT
					By: CWB	Customer CenturyLink
					Check: MF	Site Westinghouse, South Ogden, Utah
					Date: 04/17/12	
					S.O. 173392-1-1	SIZE - B Dwg No. B-134291
						Sheet 1 of 1

EXHIBIT C 1/1