

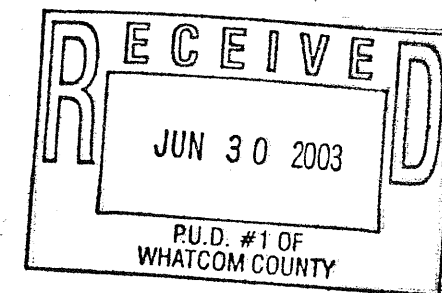


JAB & Associates, Inc.

PROPRIETARY INFORMATION

THE INFORMATION CONTAINED IN THIS SET OF CONSTRUCTION DOCUMENTS IS PROPRIETARY BY NATURE. ANY USE OR DISCLOSURE OTHER THAN THAT WHICH RELATES TO CINGULAR WIRELESS, LLC. SERVICES IS STRICTLY PROHIBITED.

JAB & Associates, Inc.



NE FERNDAL  
PARCEL #390124392440  
FERNDAL, WA 98248  
WA-322-02

REVISED FINAL CONSTRUCTION DOCUMENTS

6-24-03  
NOT FOT CINGULAR ROUTING

VICINITY MAP

GENERAL LOCATION MAP

PROJECT INFORMATION

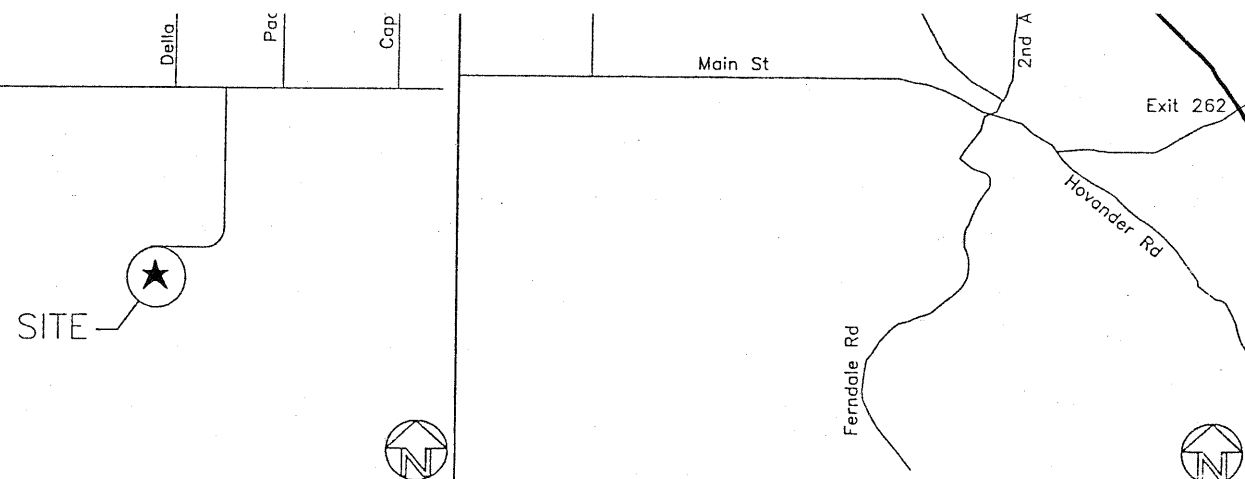
SHEET INDEX

Thorton Road

APPLICANT:  
CINGULAR WIRELESS, LLC.

PROPERTY ~~OWNER~~ OWNER:  
PUBLIC WORKS DEPARTMENT

4-1 TITLE SHEET



SEATTLE, WA 98040  
TEL: (206) 230 6648  
FAX: (206) 230 6647  
CONTACT: ALLEN WYTENBACH

STRUCTURAL ENGINEER:  
N/A

CODE INFORMATION:

ZONING CLASSIFICATION: RS 10.5  
BUILDING CODE: UBC  
CONSTRUCTION TYPE: N/A  
OCCUPANCY: N/A  
JURISDICTION: FERNDAL, WA.  
PROPOSED BUILDING USE: TELECOMMUNICATIONS

SITE LOCATION: (GARMIN GPS)  
LATITUDE: 48° 51' 39.2" N  
LONGITUDE: 122° 37' 22.09" W  
TOP OF STRUCTURE AGL: 116' EXISTING  
BASE OF STRUCTURE AMSL: 196

PROJECT AREA:

GENERAL INFORMATION:

1. PARKING REQUIREMENTS ARE UNCHANGED.
2. TRAFFIC IS UNAFFECTED.
3. NO SIGNAGE IS PROPOSED.

PROJECT DESCRIPTION:

CINGULAR WIRELESS LLC. PROPOSES TO CONSTRUCT AN UNSTAFFED RADIO TELECOMMUNICATIONS FACILITY CONSISTING OF CINGULAR PCS ANTENNA ARRAY MOUNTED ON [E] SELF-SUPPORTING 80' MONOPOLE. (TYP. 3 SECTORS). PROPOSED CINGULAR RADIO BASE STATION (RBS) ON ACCESSORY EQUIPMENT SLAB-ON-GRADE IN 9'x18' LEASE AREA WITHIN FENCED 25'x25' UTILITY DISTRICT UTILITY AREA.

PROJECT CONSULTANTS:

JAB & ASSOCIATES  
2445 140TH AVENUE NE, S.202  
BELLEVUE, WA 98005  
PH: (425) 753 6404  
FAX: (425) 895 7099

TEAM LEAD:

MARC LAMOREUX  
PH: (425) 753 6404

SITE ACQUISITION

JIM POLLOCK  
PH: (206) 427 4059

ZONING AGENT:

TED MCLEAN  
PH: (425) 753 6409

CONSTRUCTION MANAGER:

ROLLA PUTNAM  
PH: (425) 753 6406

CINGULAR

CONSTRUCTION COORDINATOR:

SITE MANAGER

KELLY SWENSEN  
(503) 306 7812

PARCEL NUMBER(S):

390124392440

AREA OF PARCEL:

±625 S.F.

NEW IMPERVIOUS AREA

91 S.F.

- a-6 RADIO PLAN
- a-7 ANTENNA SWEEP TEST & COAX COLOR CODING
- e-1 ELECTRICAL & TELEPHONE DETAILS
- e-2 GROUNDING PLAN
- e-3 GROUNDING DETAILS & NOTES
- q-1 QUALITY CONTROL CHECKLIST

LEGAL DESCRIPTION

A subdivision of the northwest quarter of the northeast quarter of Section 24, Township 39 North, Range 1 east of W.M., described as follows:

Commencing at the northeast corner of said Section 24; thence south 89°29'11" west along the north line of said section a distance of 1325.07 feet to the northeast corner of this subdivision; thence south 00°02'37" west along the east line of said subdivision a distance of 20.00 feet to the true point of beginning on the south line of Thornton Road (County Road No. 239); thence continue 00°02'37" west along said east line a distance of 1288.51 feet to the southeast corner of said subdivision; thence south 89°50'10" west along the south line of said subdivision a distance of 331.48 feet to the southwest corner of the east half of the southeast quarter of said subdivision a distance of 753.72; thence north 89°44'41" east parallel with the north line of the southeast quarter of said subdivision a distance of 301.36 feet; thence north 00°02'37" east; parallel with the east line of said subdivision a distance of 534.20 feet to the south line of said county road; thence north 89°39'11" east along the south line of said county road a distance of 30.00 feet to the true point of beginning. Except that right-of-way lying along the northerly line thereof, commonly referred to as Thornton Road.

Situate in Whatcom County, Washington

APPROVAL/SIGN OFF OF PLANNING/ZONING DRAWINGS

CONSULTANT GROUP SIGNOFF	DATE	SIGNATURE	CINGULAR SIGNOFF	DATE	SIGNATURE
LANDLORD'S REP	04/01/03	[Signature]	RF ENGINEER		
ZONING			RF ENGINEER MANAGER		
SITE ACQUISITION			INTERCONNECT		
CONSTRUCTION MANAGER			EQUIPMENT ENGINEER		
CONSULTANT PM			OPERATIONS		
			CONSTRUCTION MANAGER		
CINGULAR SITE ACQUISITION MANAGER			DEPLOYMENT MANAGER		
CINGULAR COMPLIANCE COORD.			A&E COORDINATOR		



ROYCE A. BERG, PRINCIPAL  
3003 BETH AVE. SOUTHEAST  
MERCER ISLAND, WA. 98040  
(206)230-6648 FAX 230-6647

DATE: 03-24-03

DRAWN BY: SAM

CHECKED BY: WYTT

REVISIONS

DATE	DESCRIPTION	INITIAL
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4/16	FCD SET	
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6/24	P.U.D. REVISION	2

SITE NUMBER

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NE FERNDAL  
PARCEL #390124392440  
FERNDAL, WA. 98248

LPN #03051

t-1

Public

GENERAL NOTES

- 1.DRAWINGS ARE NOT TO BE SCALED, WRITTEN DIMENSIONS TAKE PRECEDENCE, THIS SET OF DOCUMENTS IS INTENDED TO BE USED FOR DIAGRAMMATIC PURPOSES ONLY, UNLESS NOTED OTHERWISE. THE GENERAL CONTRACTOR'S SCOPE OF WORK SHALL INCLUDE FURNISHING ALL MATERIALS, EQUIPMENT, LABOR, AND ANY REQUIREMENTS DEEMED NECESSARY TO COMPLETE INSTALLATION AS DESCRIBED IN THE DRAWINGS AND OWNER'S PROJECT MANUAL.

2.DRAWINGS WERE PREPARED FROM STANDARDIZED DETAILS DEVELOPED AND PROVIDED BY W. KNOX FITZPATRICK III AND ASSOCIATES, AND CINGULAR WIRELESS, LLC.. STANDARDIZED DETAILS ARE TO BE CONFIRMED AND CORRELATED AT THE SITE BY THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR ALL DIMENSIONS. STANDARDIZED DETAILS THAT REQUIRE MODIFICATIONS DUE TO ACTUAL FIELD CONDITIONS AND REQUIREMENTS MUST BE SUBMITTED TO, AND APPROVED BY, CINGULAR WIRELESS, LLC. PRIOR TO START OF WORK.

3.PRIOR TO THE SUBMISSION OF BIDS, CONTRACTORS INVOLVED SHALL VISIT THE JOB SITE TO FAMILIARIZE THEMSELVES WITH ALL CONDITIONS AFFECTING THE PROPOSED PROJECT. CONTRACTORS SHALL VISIT THE CONSTRUCTION SITE WITH THE CONSTRUCTION/CONTRACT DOCUMENTS TO VERIFY FIELD CONDITIONS AND CONFIRM THAT THE PROJECT WILL BE ACCOMPLISHED AS SHOWN. PRIOR TO PROCEEDING WITH CONSTRUCTION, ANY ERRORS, OMISSIONS, OR DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER VERBALLY AND IN WRITING.

4. THE GENERAL CONTRACTOR SHALL RECEIVE WRITTEN AUTHORIZATION TO PROCEED WITH CONSTRUCTION PRIOR TO STARTING WORK ON ANY ITEM NOT CLEARLY DEFINED BY THE CONSTRUCTION DRAWINGS/CONTRACT DOCUMENTS.

5. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE PROJECT DESCRIBED IN THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.
- 14.THE ARCHITECTS/ENGINEERS HAVE MADE EVERY EFFORT TO SET FORTH IN THE CONSTRUCTION AND CONTRACT DOCUMENTS THE COMPLETE SCOPE OF WORK. CONTRACTORS BIDDING THE JOB ARE NEVERTHELESS CAUTIONED THAT MINOR OMISSIONS OR ERRORS IN THE DRAWINGS AND OR SPECIFICATIONS SHALL NOT EXCUSE SAID CONTRACTOR FROM COMPLETING THE PROJECT AND IMPROVEMENTS IN ACCORDANCE WITH THE INTENT OF THESE DOCUMENTS. THE BIDDER SHALL BEAR THE RESPONSIBILITY OF NOTIFYING (IN WRITING) THE ARCHITECT/ENGINEER OF ANY CONFLICTS, ERRORS, OR OMISSIONS PRIOR TO SUBMISSION OF CONTRACTOR'S PROPOSAL. IN THE EVENT OF DISCREPANCIES THE CONTRACTOR SHALL PRICE THE MORE COSTLY OR EXTENSIVE WORK, UNLESS DIRECTED OTHERWISE.

15.THE CONTRACTOR SHALL PERFORM WORK DURING OWNER'S PREFERRED HOURS TO AVOID DISTURBING NORMAL BUSINESS.

16.THE CONTRACTOR SHALL PROVIDE CINGULAR WIRELESS, LLC. PROPER INSURANCE CERTIFICATES NAMING CINGULAR WIRELESS, LLC., P.U.D. NO.1 OF WHATCOM COUNTY AND CITY IF FERNDAL AS ADDITIONAL INSURED, AND CINGULAR WIRELESS, LLC. PROOF OF LICENSE(S) AND PE & PD INSURANCE.

17.CONTRACTOR SHALL BE RESPONSIBLE FOR SCHEDULING AND COORDINATING ALL INSPECTIONS.

18.CAUTION! CALL BEFORE YOU DIG! BURIED UTILITIES EXIST IN THE AREA AND UTILITY INFORMATION SHOWN MAY NOT BE COMPLETE. CONTACT THE ONE-CALL UTILITY LOCATE SERVICE A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION. 1-800-424-5555

19.CONTRACTOR TO DOCUMENT ALL WORK PERFORMED WITH PHOTOGRAPHS AND SUBMIT TO CINGULAR WIRELESS, LLC. AND P.U.D. NO.1 OF WHATCOM COUNTY ALONG WITH REDLINED CONSTRUCTION SET.

20.CONTRACTOR TO DOCUMENT ALL CHANGES MADE IN THE FIELD BY MARKING UP (REDLINING) THE APPROVED CONSTRUCTION SET AND SUBMITTING THE REDLINED SET TO CINGULAR WIRELESS, LLC. & P.U.D. NO.1 OF WHATCOM COUNTY UPON COMPLETION.

SYMBOLS & ABBREVIATIONS


- \_\_\_\_\_

POWER & TELCO LINE
- \_\_\_\_\_ T \_\_\_\_\_


TELEPHONE
- \_\_\_\_\_ E \_\_\_\_\_

POWER
- \_\_\_\_\_ X \_\_\_\_\_

CHAINLINK FENCE
- \_\_\_\_\_ □ \_\_\_\_\_

WOOD FENCE
- 

ANTENNA
- A1


ANTENNA MARK NO.
- 


CENTERLINE
- [E]

EXISTING
- [N]

NEW
- W/

WITH
- PBO

PROVIDED BY OWNER
- 

DETAIL NUMBER
- 

SHEET NUMBER
- V.I.F.

VERIFY IN FIELD

OK ✓


- 8.GENERAL CONTRACTOR SHALL PROVIDE, AT THE PROJECT SITE, A FULL SET OF CONSTRUCTION DOCUMENTS UPDATED WITH THE LATEST REVISIONS AND ADDENDA OR CLARIFICATIONS FOR USE BY ALL PERSONNEL INVOLVED WITH THE PROJECT. THIS SET IS A VALID CONTRACT DOCUMENT ONLY IF THE TITLE SHEET IS STAMPED "FOR CONSTRUCTION" AND EACH SUCCESSIVE SHEET BEARS THE ARCHITECT'S SIGNED WET STAMP.
- 9.THE STRUCTURAL COMPONENTS OF ADJACENT CONSTRUCTION OR FACILITIES ARE NOT TO BE ALTERED BY THIS CONSTRUCTION PROJECT UNLESS NOTED OTHERWISE.
- 10.SEAL ALL PENETRATIONS THROUGH FIRE-RATED AREAS WITH U.L. LISTED OR FIRE MARSHALL APPROVED MATERIALS IF APPLICABLE TO THIS FACILITY AND OR PROJECT SITE.
- 11.CONTRACTOR TO PROVIDE A PORTABLE FIRE EXTINGUISHER WITH A RATING OF NOT LESS THAN 2-A OR 2-A10BC WITHIN 75 FEET TRAVEL DISTANCE TO ALL PORTIONS OF PROJECT AREA DURING CONSTRUCTION.
- 12.CONTRACTOR SHALL MAKE NECESSARY PROVISIONS TO PROTECT EXISTING IMPROVEMENTS, EASEMENTS, PAVING, CURBING, ETC. DURING CONSTRUCTION. UPON COMPLETION OF WORK, CONTRACTOR SHALL REPAIR ANY DAMAGE THAT MAY HAVE OCCURRED DUE TO CONSTRUCTION ON OR ABOUT THE PROPERTY.
- 13.CONTRACTOR SHALL KEEP GENERAL WORK AREA CLEAN AND HAZARD FREE DURING CONSTRUCTION AND DISPOSE OF ALL DIRT, DEBRIS, AND RUBBISH. CONTRACTOR SHALL REMOVE EQUIPMENT NOT SPECIFIED AS REMAINING ON THE PROPERTY OR PREMISES. SITE SHALL BE LEFT IN CLEAN CONDITION AND FREE FROM PAINT SPOTS, DUST, OR SMUDGES OF ANY NATURE.
- 23.ANY SUBSTITUTIONS OF MATERIALS AND/OR EQUIPMENT, MUST BE APPROVED BY CINGULAR CONSTRUCTION MANAGER.
- 24.IN THE CASE OF ROOFTOP SOLUTIONS FOR EQUIPMENT AND/OR ANTENNA FRAMES WHERE PENETRATION OF EXISTING ROOFING MATERIALS OCCURE, THE GENERAL CONTRACTOR SHALL COORDINATE WITH BUILDING OWNER AND BUILDING ROOFING CONTRACTOR OF RECORD FOR INSTALLATION, PATCH, REPAIR OR ANY AUGMENTATION TO THE ROOF, AND HAVE THE WORK GUARANTEED UNDER ROOFING CONTRACTORS WARRANTY FOR MOISTURE PENETRATION OR AND OTHER FUTURE BREACH OF ROOFING INTEGRITY.
- 25.ELECTRICAL SERVICE TO EXISTING EQUIPMENT SHALL NOT BE INTERUPED. IN THE EVENT OF SERVICE INTERUPTION NOTIFY P.U.D. NO.1 OF WHATCOM COUNTY IMMEDIATLEY (DOUG LISSER (360) 384 4288 EXT.17)

JAB & Associates, Inc.

cingular<sup>SM</sup>  
WIRELESS

2445 140th NE #202  
BELLEVUE, WA 98005

00245.002 7.17.07 R2



ARCHITECTURE  
and PLANNING

ROYCE A. BERG, PRINCIPAL  
3003 80TH AVE. SOUTHEAST  
MERCER ISLAND, WA. 98040  
(206)230-6648 FAX 230-6647

DATE: 03--24--03

DRAWN BY: SAM

CHECKED BY: WYTT

REVISIONS

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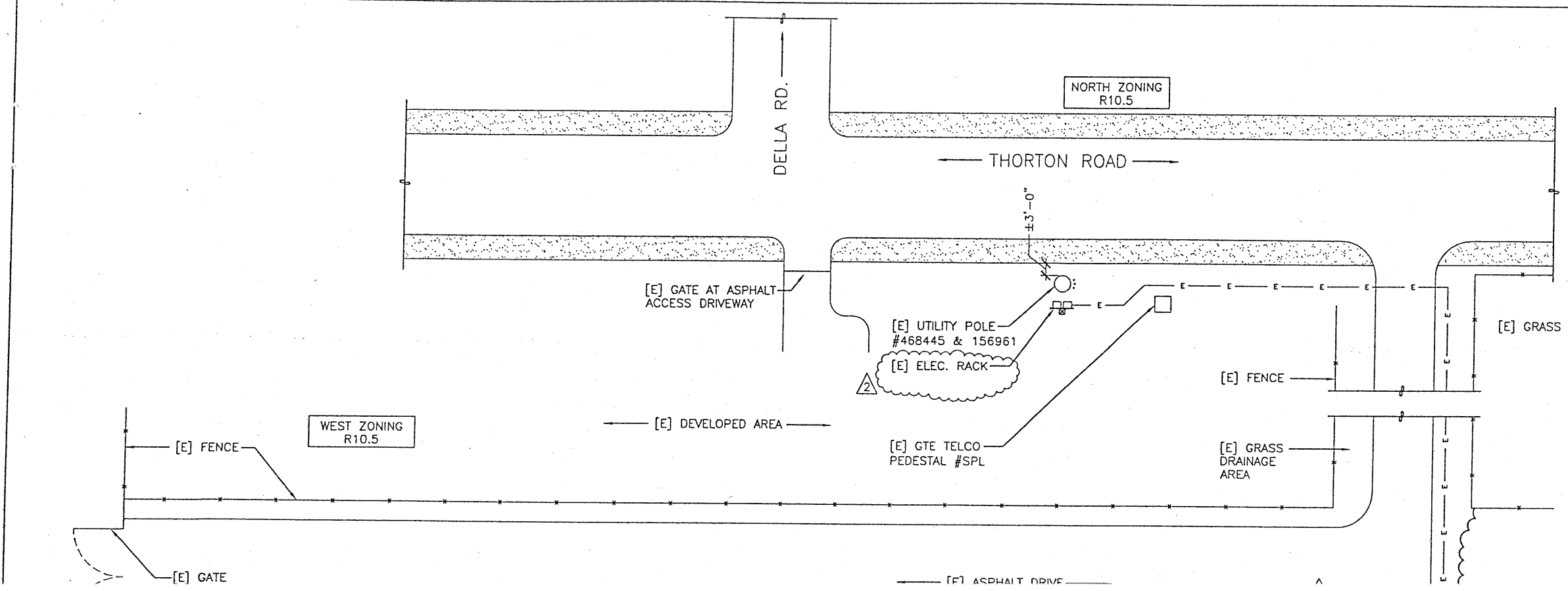
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NE FERNDAL  
PARCEL #390124392440  
FERNDAL, WA. 98248

LPN #03051

g-1



### EXISTING LEGEND

- BURIED GAS LINE
- OVERHEAD POWER
- BURIED POWER LINE
- WATER LINE
- SANITARY SEWER
- STORM DRAIN
- CHAIN LINK FENCE
- WOOD FENCE
- BARBED WIRE/WIRE FENCE
- CATCH BASIN
- FIRE HYDRANT
- GATE VALVE
- WATER METER
- PAD MOUNTED TRANSFORMER
- TELEPHONE RISER
- LIGHT STANDARD
- UTILITY POLE
- POLE GUY WIRE
- EXISTING SPOT ELEVATION

NOTE:  
 1) ALL ELEVATIONS SHOWN ARE ABOVE MEAN SEA LEVEL (AMSL) ELEVATIONS REFERENCED TO THE NAVD 88 DATUM.  
 2) ALL TOWER, TREE AND APPURTENANCE HEIGHTS ARE ABOVE GROUND LEVEL (AGL).  
 3) ALL HEIGHTS REPRESENTED ARE ACCURATE TO ± 3 FEET OR ± 1% OF TOTAL HEIGHT, WHICHEVER IS GREATER.

### EXISTING TREE LEGEND

DECIDUOUS TREE  
 AL12 — TRUNK DIAMETER (IN)  
 TYPE

EVERGREEN TREE

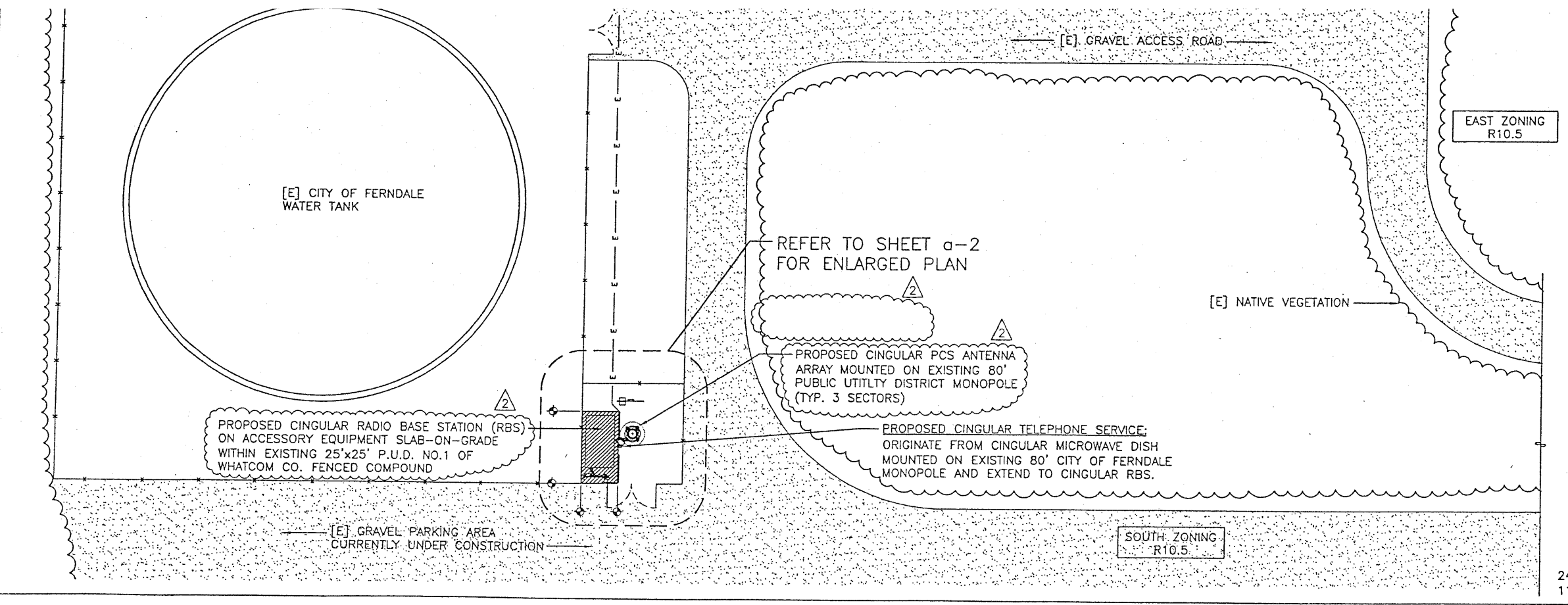
AL=ALDER  
 MP=MAPLE  
 DS=DECIDUOUS  
 MA=MADRONA  
 OK=OAK  
 CH=CHERRY  
 CE=CEDAR  
 DF=DOUGLAS FIR

JAB & Associates, Inc.

**cingular** WIRELESS

2445 140th NE #202  
 BELLEVUE, WA 98005

00345.003 7-17-07 RR



### PARCEL PLAN

24"x36" SCALE: 1/16"=1'-0"  
 11"x17" SCALE: 1/32"=1'-0"

For delineation of true and magnetic north — refer to site survey (if available).

**lpn** ARCHITECTURE and PLANNING

ROYCE A. BERG, PRINCIPAL  
 3003 80TH AVE. SOUTHEAST  
 MERCER ISLAND, WA. 98040  
 (206)230-6648 FAX 230-6647

DATE: 03-24-03  
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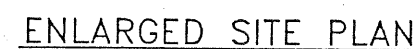


- JAB & Associates, Inc.

ngular<sup>SM</sup>  
WIRELESS

140th NE #202  
 SE, WA 98005

24 20.11.6 800 S



For delineation of true and magnetic north -- refer to site survey (if available).

## SITE NOTES

1. VERIFY ANTENNA RAD CENTER AND AZIMUTHS  
PER FINAL RADIO PLAN. SHEET FROM RF  
ENGINEER.
2. OPTIONAL MICROWAVE REQUIREMENT SHALL  
BE DETERMINED BY CINGULAR MICROWAVE  
ENGINEER.
- CONTACT: MR. JOHN HUNTER  
PH: (206) 240-9020  
THROUGH CINGULAR CONSTRUCTION MANAGER.

### COAX LENGTH SCHEDULE

SECTOR	LENGTH	DIAMETER
SECTOR "A"	±88'	7/8"
SECTOR "B"	±88'	7/8"
SECTOR "C"	±88'	7/8"

**lpn**  
ARCHITECTURE  
and PLANNING



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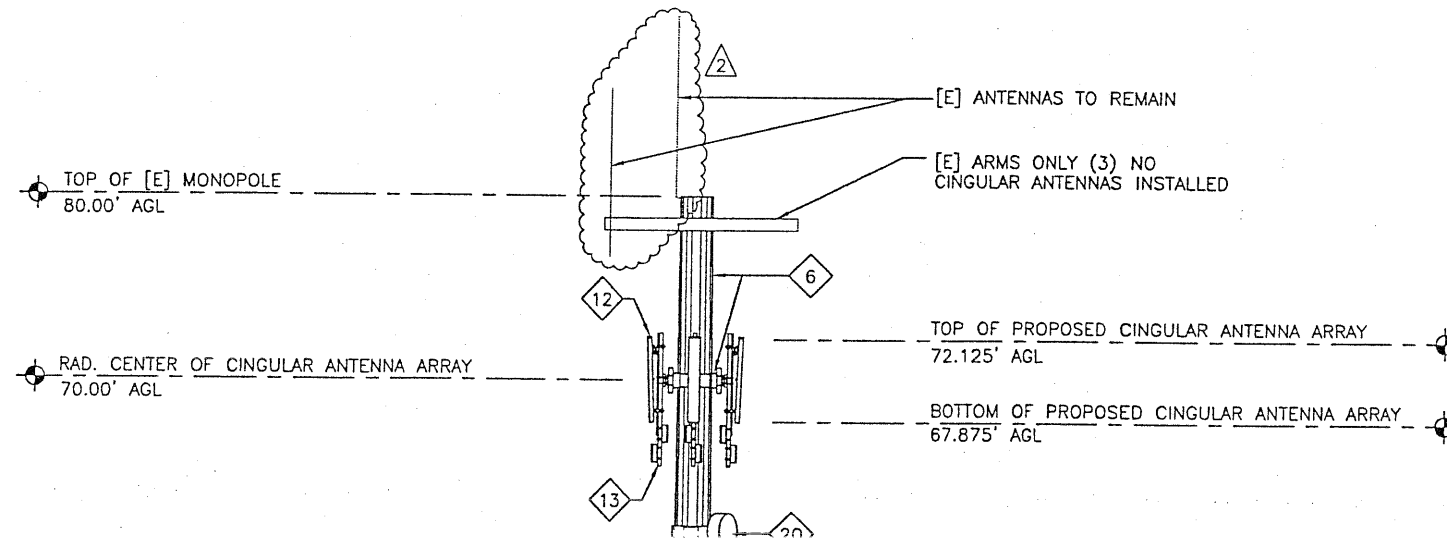
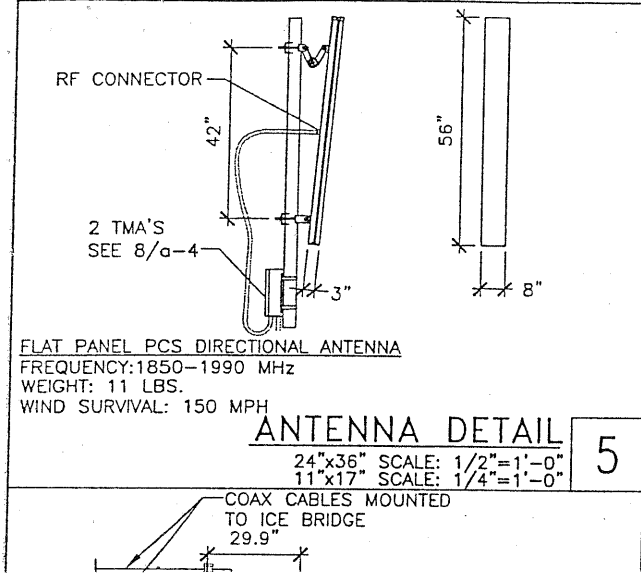
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**a-2**



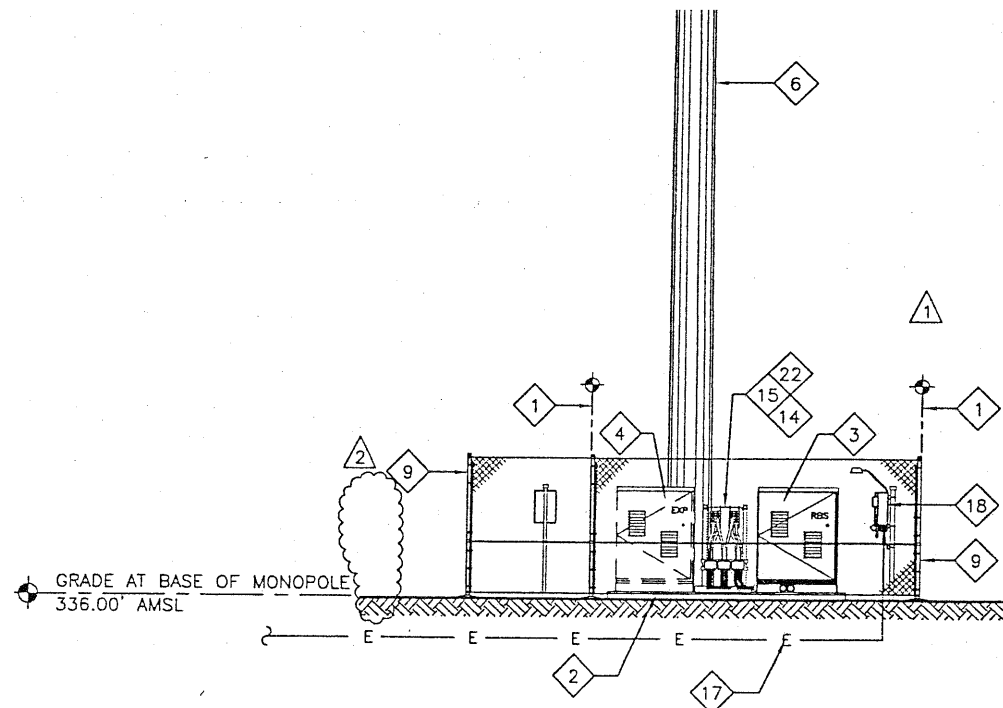
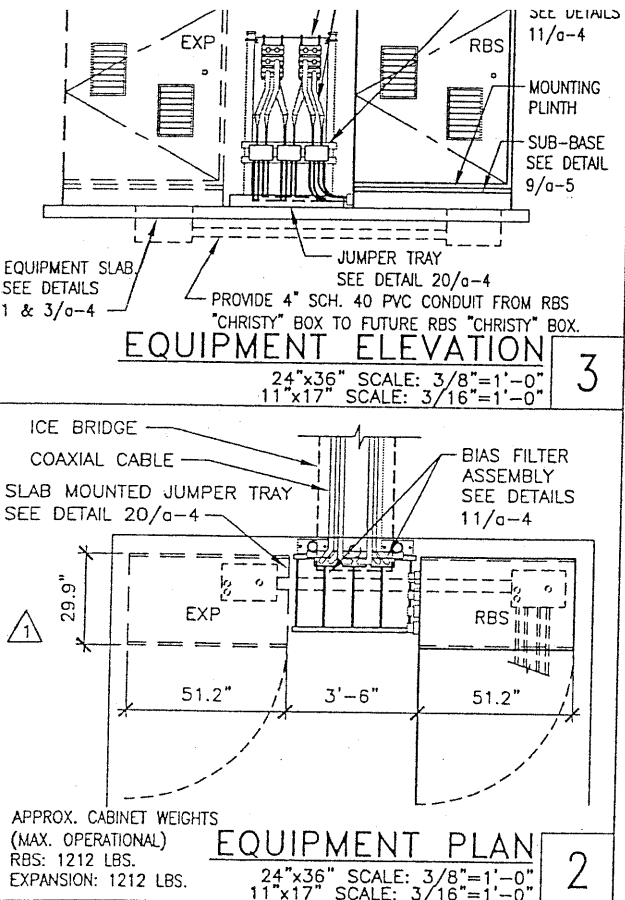
## CONSTRUCTION PLAN KEYED NOTES

- 1 CINGULAR LEASE AREA LINE.
- 2 ACCESSORY EQUIPMENT CONCRETE SLAB ON GRADE (PROVIDED BY CONTRACTOR). SEE DETAILS 1 & 3/a-4.
- 3 PRIMARY RADIO BASE STATION (PROVIDED BY CINGULAR) SEE DETAILS 2, 3, & 4/a-3.
- 4 EXPANSION CABINET (PROVIDED BY CINGULAR).
- 5 NEW ANTENNA SUPPORT STRUCTURE (PROVIDED BY CONTRACTOR) MOUNTED ON EXISTING 80' MONOPOLE. SEE DETAILS 16/a-5.
- 6 EXISTING 7'-4" GALVANIZED CHAINLINK FABRIC FENCE.
- 7 PCS ANTENNAS (MOUNTING HARDWARE PROVIDED WITH ANTENNAS) (PROVIDED BY CINGULAR) SEE SCHEDULE ON SHEET.

JAB & Associates, Inc.

ilar<sup>SM</sup>  
RELESS

7-17-07 RLR



## SITE NOTES

1. VERIFY ANTENNA RAD CENTER AND AZIMUTHS PER FINAL RADIO PLAN. SHEET FROM RF ENGINEER.
2. OPTIONAL MICROWAVE REQUIREMENT SHALL BE DETERMINED BY CINGULAR MICROWAVE ENGINEER.  
CONTACT: MR. JOHN HUNTER  
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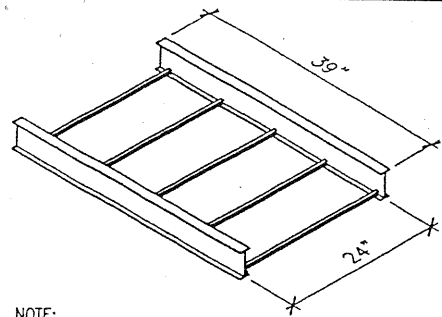
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a-3



- NOTE:
1. DIMENSIONS ARE FOR B-LINE CABLE TRAY OR EQUAL
  2. B-LINE HORIZONTAL REDUCING TEE (HT) TO BE ANCHORED TO CONC. SLAB W/ ANCHOR CLIPS/BOLTS

### JUMPER CABLE TRAY

20

**CAUTION**



Beyond this point:  
Radio frequency fields at this site  
may exceed FCC rules for human  
exposure.

For your safety, obey all posted signs  
and site guidelines for working in  
radio frequency environments.

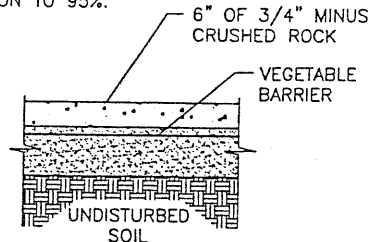
In accordance with Federal Communications Commission rules on  
radio frequency emissions 47 CFR 1.1307(h).

LOCATION:  
VERIFY WITH  
JURISTITION  
AND  
CONSTRUCTION  
MANAGER.

RF  
SIGNAGE  
NOT TO SCALE

19

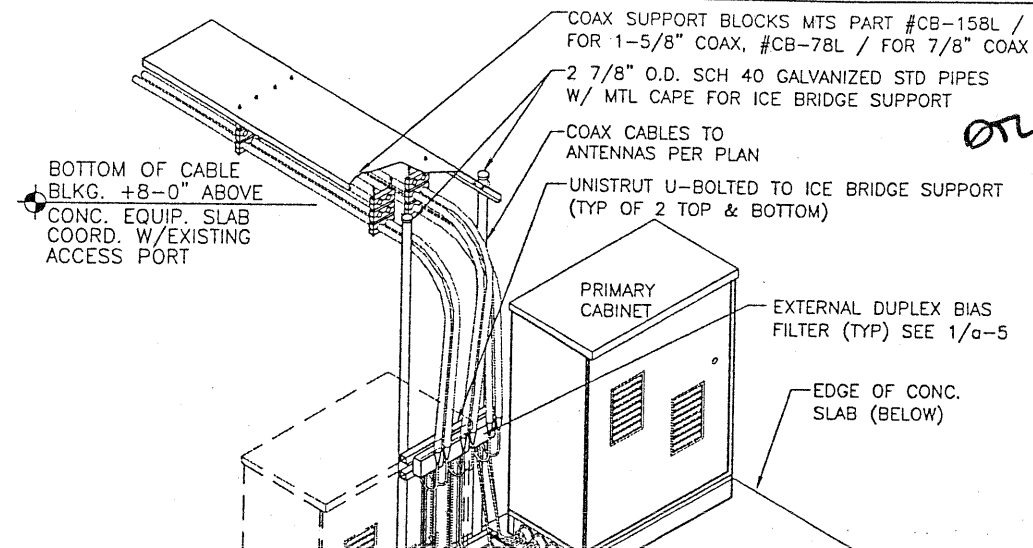
NOTE: GRUB AND REMOVE  
TOPSOIL FROM SITE FENCE  
LINE. REPLACE TO ORIGINAL  
GRADE +3" AFTER  
COMPACTION TO 95%.



### SOIL SECTION

NOT TO SCALE

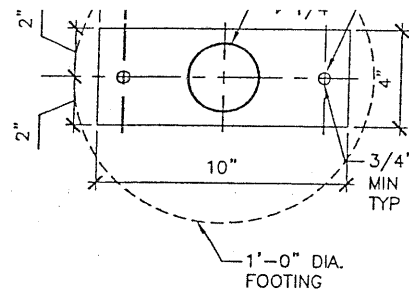
18



JAB & Associates, Inc.

ilar<sup>SM</sup>  
RELESS

07.07.07

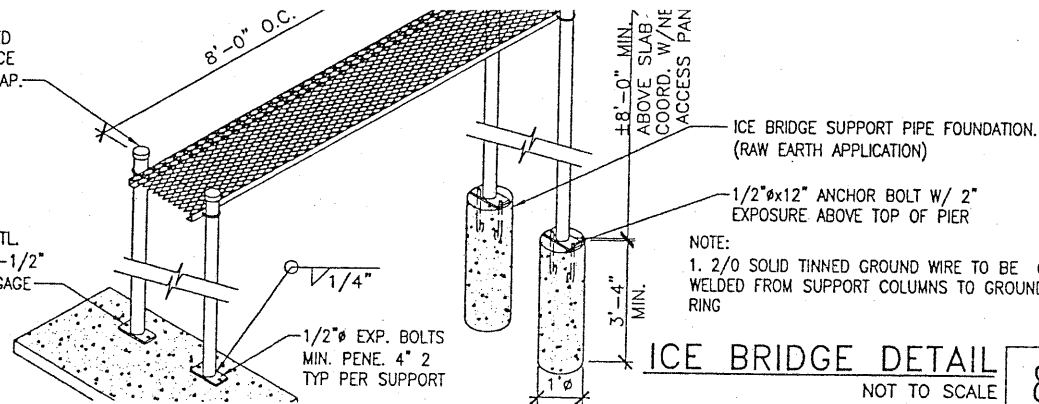


NOTE: GALVANIZE ASSEMBLY

2 7/8" O.D. HOT DIPPED  
GALVANIZED PIPE FOR ICE  
BRIDGE SUPPORT, W/ CAP.

3/4" EXP BOLTS  
MIN PENE. 4" 2  
TYP PER SUPPORT

3 1/2"x9"x1/4" GALV. STL.  
PLATE W/ HOLES FOR 2-1/2"  
EXP. BOLTS, 1 1/2" GAGE

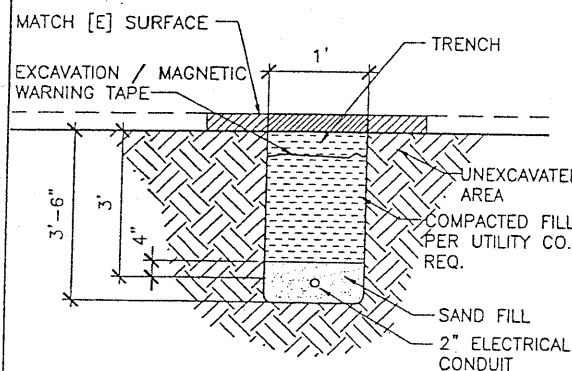


NOTE:  
1. 2/0 SOLID TINNED GROUND WIRE TO BE CAD  
WELDED FROM SUPPORT COLUMNS TO GROUND  
RING

### ICE BRIDGE DETAIL

NOT TO SCALE

8

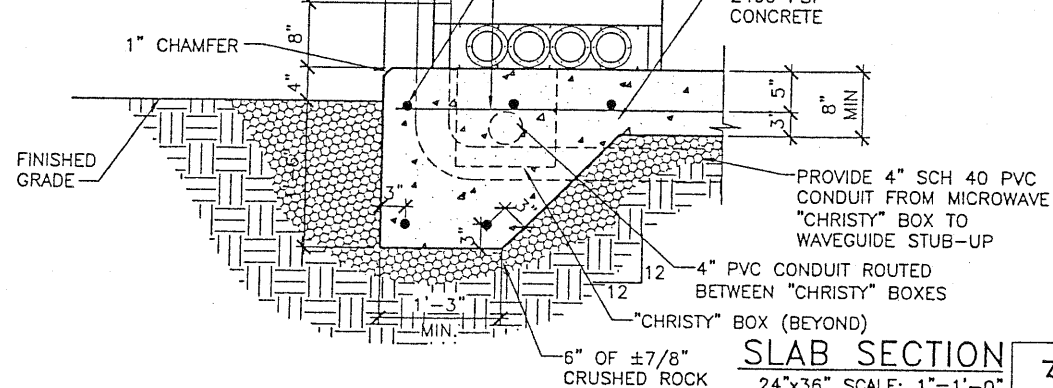


### ELECTRIC TRENCH

NOT TO SCALE

5

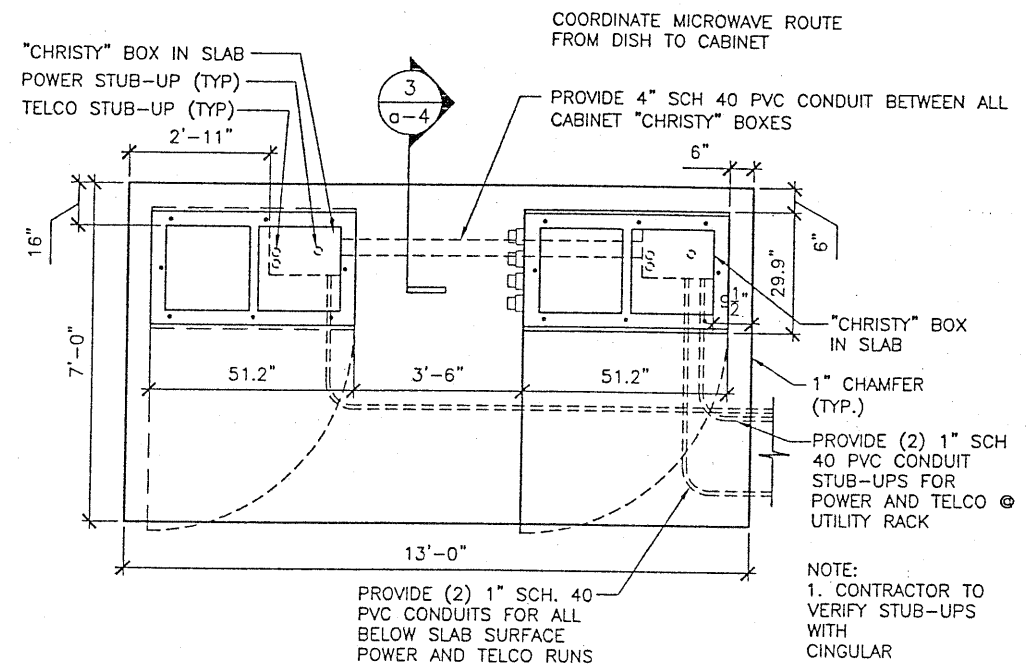
PROVIDE RUBBER BOOT (OR  
TEMPORARY CAP) FOR MICROWAVE  
CABLE EXIT FROM 4" PVC CONDUIT  
EXITING FROM SLAB



### SLAB SECTION

24"x36" SCALE: 1/2"=1'-0"  
11"x17" SCALE: 1/2"=1'-0"

3



### EQUIP. SUPPORT SLAB

24"x36" SCALE: 1/2"=1'-0"  
11"x17" SCALE: 1/4"=1'-0"

1

lpn  
ARCHITECTURE  
and PLANNING

ROYCE A. BERG, PRINCIPAL  
3003 80TH AVE. SOUTHEAST  
MERCER ISLAND, WA. 98040  
(206)230-6648 FAX 230-6647

DATE: 03-24-03

DRAWN BY: SAM

CHECKED BY: WYTT

REVISIONS

DATE	DESCRIPTION	INITIAL
4/03	PCD SET	
4/16	FCD SET	
5/3	P.U.D. REVISION	1
6/24	P.U.D. REVISION	2

SITE NUMBER

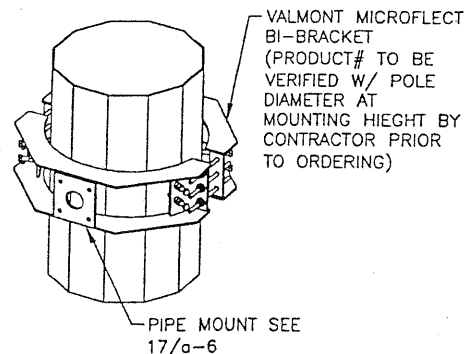
WA-322-02

NE FERNDAL  
PARCEL #390124392440  
FERNDAL, WA. 98248

LPN #03051

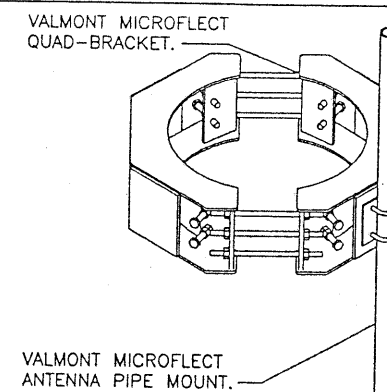
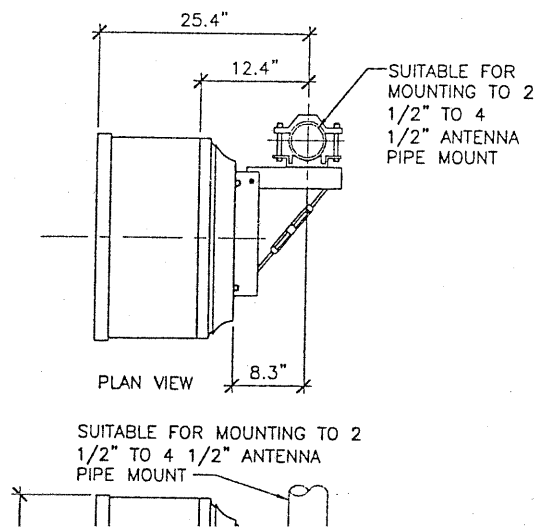
a-4





ANTENNA BI-BRACKET  
NOT TO SCALE

20



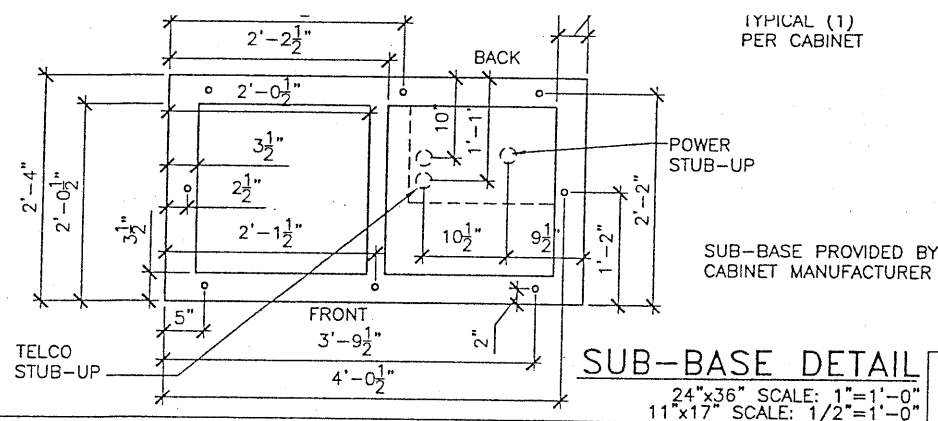
FLUSH MOUNT  
24"x36" SCALE: 1"=1'-0"  
11"x17" SCALE: 1/2"=1'-0"

16

JAB & Associates, Inc.

lar<sup>SM</sup>  
ARCHITECTURE  
and PLANNING  
RELESS

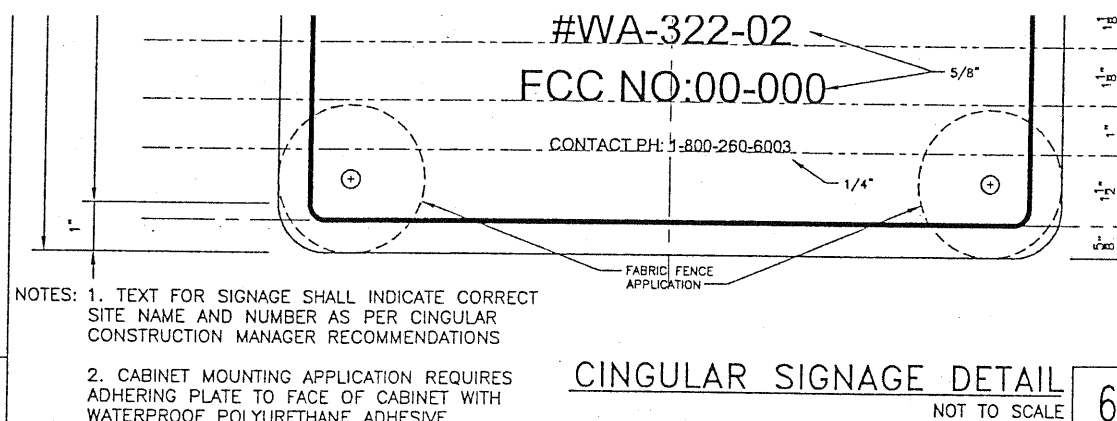
7-7-17-07



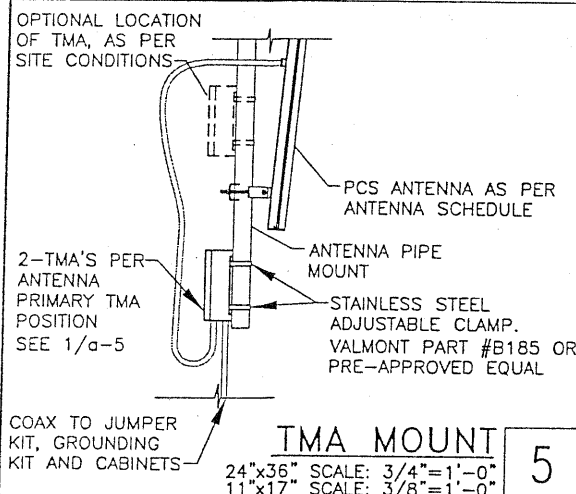
9

NOT USED

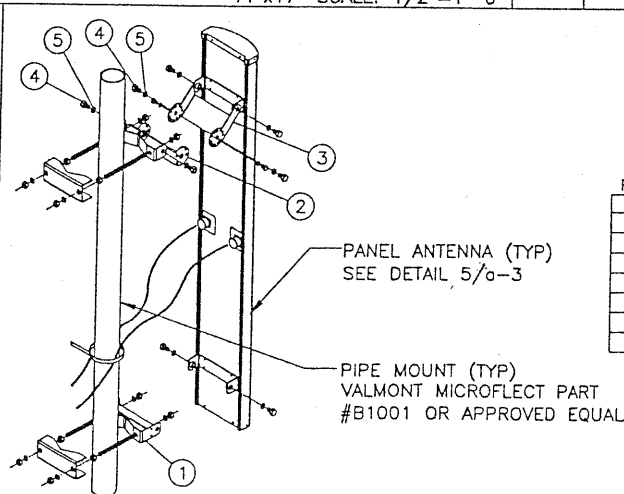
8



6



5



ANTENNA MOUNT (TYP)  
NOT TO SCALE

3

NOTES

1. INSERT SCISSOR BRACKETS BETWEEN THE UPPER ANTENNA MOUNTING BRACKET AND THE UPPER POLE ADAPTER BRACKET. SECURE USING 1/2 INCH HARDWARE PROVIDED.
2. TO SET THE DEGREE OF DOWNTILT, ALIGN THE DESIRED HOLES ON THE SCISSOR BRACKETS AND SECURE USING 5/16 INCH HARDWARE PROVIDED.
3. THE NUMBER OF CONNECTORS WILL VARY BASED ON ANTENNA TYPE.

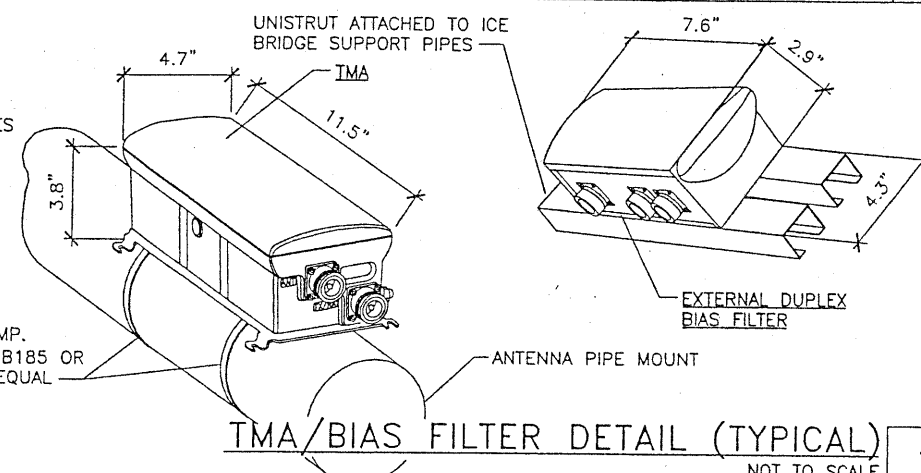
PARTS:

Item	QTY	PN	Description
①	1	602355-6	Adaptor, Pole, Lower
②	1	601542-2	Bracket, Downtilt, Pole
③	1	601543-1	Bracket, Downtilt, Antenna
④	4	571000HH2432SFP	1/2 X 1 Hex Head Bolt
⑤	4	572000S15SFP	1/2 Split Washer
⑥	2	571000HH2032SFP	5/16 X 1 Hex Head Bolt
⑦	2	572000S13SFP	5/16 Split Washer

TMA WEIGHT:  
11 LBS.

TMA WIND  
LOAD SURFACE:  
54.05 SQ. INCHES

STAINLESS STEEL  
ADJUSTABLE CLAMP.  
VALMONT PART #B185 OR  
PRE-APPROVED EQUAL



1

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(206)200-6648 FAX 200-6647

DATE: 03-24-03

DRAWN BY: SAM

CHECKED BY: WYTT

REVISIONS

DATE	DESCRIPTION	INITIAL
4/03	PCD SET	
4/16	FCD SET	
5/3	P.U.D. REVISION	①
6/24	P.U.D. REVISION	②

SITE NUMBER

WA-322-02

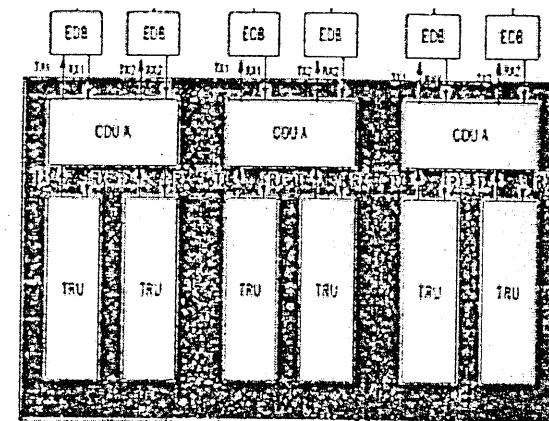
NE FERNDAL  
PARCEL #390124392440  
FERNDAL, WA. 98248

LPN #03051

a-5

Site Name	NE Ferndale	RF Engineer	Hasan, Md. Shamiul	Date	4/8/2003
Site Number	WA322 - 02	Phone Number	425-753-2515	Revision	QSM-02
Market	Seattle	Comments:	1. One BTS cabinet for now and additional one for future. 2. LDF 7 if Coax length is more than 125', otherwise LDF 5. 3. Implement variable electrical tilts as mentioned in the suffix of Antenna Models.		
Latitude (NAD 83) N	48 51 39.2"	Site Address	Water Tower / <del>BEAVER PARK</del>	Structure Owner	
Longitude (NAD 83) W	122 37' 22.09"		Ferndale / <del>Whatcom</del>	P.O. No. 1 of	Description
Ground Elevation (AMSL) (ft)	361		WA-98248	WHATCOM COUNTY	Description
Structure Type	Monopole			FERNDALUS	City

RF Antenna Gain (dBi)	17.8	17.8	17.8
RF Antenna (H+V Beamwidth) (deg)	65+7	65+7	65+7
RF Downtilt Mechanical	0	0	0
RF Antenna Dimensions (LXWXD) (in)	51X7X3	51X7X3	51X7X3
RF Antenna Weight (lbs.)	11	11	11
RF TMA (Number/Type/Location)	2 / 2 Port/ top	2 / 2 Port/ top	2 / 2 Port/ top
RF EDB (Number/Type/Location)	2 / 3 port/bottom	2 / 3 port/bottom	2 / 3 port/bottom
RF Number of TRUs	1	2	1
RF CDU Type	CDU-A	CDU-A	CDU-A
RF Feeder Cable Type	LDF 5 (7/8")	LDF 5 (7/8")	LDF 5 (7/8")
RF Number of Cables from BTS to Antenna	2	2	2
CC Specific Cable Length	88 Feet	88 Feet	88 Feet
RF Cabinet Type	Low Cap		
RF Number of Cabinets	1 Now + 1 Future		
RF Frequency Band	Downlink : 1930.2 - 1939.6 MHz Uplink : 1850.2 - 1859.6 MHz		



Authorization Signatures		
Equipment Engineer:	RF Engineer:	Real Estate and Construction Manager:
<i>[Signature]</i> 6/10/03	<i>[Signature]</i>	<i>[Signature]</i> 6/18/03

Proprietary and Confidential: Statements and representations contained herein are preliminary and/or tentative and should not be relied upon unless approved by an appropriate Cingular Wireless governing body. Proprietary information for use solely by Cingular Wireless employees and affiliate employees working on this project.

DATE: 03-24-03

DRAWN BY: SAM

CHECKED BY: WYT

## REVISIONS

DATE	DESCRIPTION	INITIAL
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SITE NUMBER

WA-322-02

NE FERNDALUS  
PARCEL #390124392440  
FERNDALUS, WA. 98248

LPN #03051



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CINGULAR CONSTRUCTION QUALITY CONTROL CHECKLIST

C = Complete  
NC = Not Complete  
NA = Not Applicable

ADMINISTRATION

Redlined Construction Drawings  
Warranties  
Ground Resistivity Test Report (5 OHMS or less)  
Concrete Cylinder Tests Report  
Certificate of Occupancy (or equivalency)  
Inspection Signoff Card  
Final Release of Lien (conditional)  
Building Permit (original)  
Other:

SITE WORK

Access Road  
Site Grading & drainage  
Finish Grade  
Vegetation Control  
Landscaping  
Irrigation System

Fencing:  
Gate, Stile & Padlock

C / NC / NA

COMMENTS

C / NC / NA

COMMENTS

Rooftop Doghouse:  
Galvanized  
Grounded  
Weatherproof / Flashing

ANTENNA & HELIAX

Antennas:  
Installation  
Make / Model #  
Quantity  
Azimuth  
Same Horizontal Plane (per sector)  
Plumbness of Mount  
Downtilt Bracket (confirm ea. panel antenna has one)  
Measure of Downtilt (if applicable)

Coax:  
Size  
Support @ 3'-0" Max.  
Bend Radius (20")  
Jumper Flows Directly into Antenna  
Hangers @ 3'-0" O.C. (no plastic devices)  
Weatherproofing (Connectors & Grounding Kits)  
Color Coding (3 Places Minimum)  
Drip Loop  
Grounding (3 Ground Kits)  
Tight Connection (At Bus Bars)

C / NC / NA

COMMENTS

JAB & Associates, Inc.

ular<sup>SM</sup>  
RELESS

29 7.17.07 xk

Antenna Mounting Structure  
Orientation  
Step Bolts  
Safety Climbs  
Coax Ladder  
Paint  
FAA Tower Lighting  
Grounding - Bend Radius / Locations  
Bus Bars  
Cadweld Quality

Antenna Mounts:  
Antennas Located per Drawings  
Hot Dip Galvanization  
Orientation  
Pitch Pocket / Flashing  
Roof Leak Tested  
Grounding - Bend Radius / Locations  
Cadweld (mounts / bus bar)  
Hardware Secure

Exterior Cable Tray:  
Installation  
Cover  
Horizontal / Vertical Protection  
Hot Dip Galvanization  
Grounded to Ground Bus

Coax Bridge / Ladder:  
Bridge Protectects Coax Adequately  
Hot Dip Galvanization (all Materials)  
Grounding / Cadweld Quality  
Weather Seal Where Attached to Building

Grounding:  
Materials  
Bend Radius  
Tight Connections  
Double Lug Mechanical Connections  
Cadweld Quality  
Coldgalv. Cadwelds  
No OX Grease Bus Bar Connections

Mates with Female:  
Weather Sealed / Caulked

Master Ground Bus (MGB):  
Installation  
Size (4" x 20" x 1/4" x with (27)-7/16" holes)  
Insulated Standoffs  
Bonding Jumpers  
Bend Radius  
Tight Connections (two bolt connections)  
Down Lead (two bolt through or cadweld)  
Down Lead through wall properly sealed

Telco:  
Backboard  
Conduit Grounded (Bushing)  
Painted White

Cable Ladder:  
Installation Quality  
Bonding Jumpers (two bolt connections)  
Touch-up Paint  
All Threads Capped  
Cable Ladder End Caps  
Height (7'-6" above finish floor to bottom of tray)

Cleanliness:  
Building Interior  
Interior Walls  
Electrical Boxes and Panels  
Base Board  
Clean, Wax (Anti-Static) & Buff Floors  
Construction Debris Removed

Other:

ADDITIONAL COMMENTS:

lpn  
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and PLANNING

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