EXHIBIT A
as of 11/16/06

SITE NUMBER: WI-1011
CHERRY COURT APARTMENTS

cingular WIRELESS

PROJECT INFORMATION

SCOPE OF WORK: UNMANNED TELECOMMUNICATIONS FACILITY WITH NEW ANTENNAS, NEW MONOPOLE AND NEW EQUIPMENT SHELTER ON GRADE
SITE ADDRESS: 1525 N. 24th STREET MILWAUKEE, WI 53208
PROPERTY OWNER: HOUSING AUTHORITY XXX
LATITUDE: 43°-03'-02.55"
LONGITUDE: 87°-56'-38.04"
JURISDICTION: TOWN OF MILWAUKEE
NEW USE: TELECOMMUNICATIONS FACILITY

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WI-1011-19	SECTOR C & ANTENNA CONFIGURATION	0
WI-1011-20	BOTTOM JUMPER DETAIL	0
WI-1011-21	COAX COLOR CODING	0
A- WI-1011	SITE SURVEY	

2

NOTES

HANDICAPPED REQUIREMENTS
FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. HANDICAP ACCESS REQUIREMENTS NOT REQUIRED

PLUMBING REQUIREMENTS
FACILITY HAS NO PLUMBING

A/E DOCUMENT REVIEW STATUS

STATUS CODE
1 Accepted-With or no comments, construction may proceed
2 Not Accepted resolve comments and resubmit

Acceptance does not constitute approval of design details, calculations analyses, test methods or materials developed or selected by the subcontractor and does not relieve subcontractor from full compliance with contractual obligations.

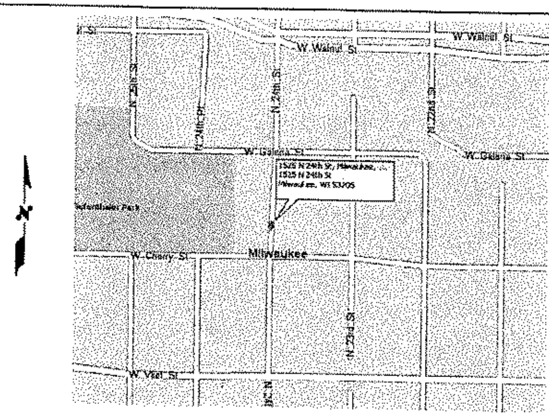
	ENG	CONST			
Reviewed					
By				Date	

CINGULAR WIRELESS APPROVAL

Real Estate__________ Date ______
RF__________ Date ______
Operation__________ Date ______

VICINITY MAP

DIRECTION TO SITE: FROM MILWAUKEE
START OUT GOING WEST ON E. WISCONSIN AVENUE TOWARD BROADWAY. TURN RIGHT ONTO N. 24th STREET. END AT 1525 N. 24th STREET.



APPLICABLE BUILDING CODES AND STANDARDS

SUBCONTRACTOR'S WORK SHALL COMPLY WITH ALL APPLICABLE NATIONAL, STATE, AND LOCAL CODES AS ADOPTED BY THE LOCAL AUTHORITY HAVING JURISDICTION (AHJ) FOR THE LOCATION. THE EDITION OF THE AHJ ADOPTED CODES AND STANDARDS IN EFFECT ON THE DATE OF CONTRACT AWARD SHALL GOVERN THE DESIGN.

BUILDING CODE:
[INTERNATIONAL BUILDING CODE (IBC), 2003 AS ADOPTED BY LOCAL BUILDING AUTHORITY]

ELECTRICAL CODE:
[NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) 70 - 2002, NATIONAL ELECTRICAL CODE, AS ADOPTED BY LOCAL BUILDING ATHORITY]
LIGHTNING PROTECTION CODE:
[NFPA 780 - 2000, LIGHTNING PROTECTION CODE]

SUBCONTRACTOR'S WORK SHALL COMPLY WITH THE LATEST EDITION OF THE FOLLOWING STANDARDS.
AMERICAN CONCRETE INSTITUTE (ACI) 318, BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE
AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC), MANUAL OF STEEL CONSTRUCTION, ASD, NINTH EDITION
TELECOMMUNICATIONS INDUSTRY ASSOCIATION (TIA) 222-F, STRUCTURAL STANDARDS FOR STEEL ANTENNA TOWER AND ANTENNA SUPPORTING STRUCTURES:
TIA 607, COMMERCIAL BUILDING GROUNDING AND BONDING REQUIREMENTS FOR TELECOMMUNICATIONS

INSTITUTE FOR ELECTRICAL AND ELECTRONICS ENGINEERS (IEEE) 81, GUIDE FOR MEASURING EARTH RESISTIVITY, GROUND IMPEDANCE, AND EARTH SURFACE POTENTIALS OF A GROUND SYSTEM
IEEE 1100 (1999) RECOMMENDED PRACTICE FOR POWERING AND GROUNDING OF ELECTRONIC EQUIPMENT

IEEE C62.41, RECOMMENDED PRACTICES ON SURGE VOLTAGES IN LOW VOLTAGE AC POWER CIRCUITS (FOR LOCATION CATEGORY "C3" AND "HIGH SYSTEM EXPOSURE")

TELCORDIA GR-1275, GENERAL INSTALLATION REQUIREMENTS

TELCORDIA GR-1503, COAXIAL CABLE CONNECTIONS

ANSI T1.311, FOR TELECOM - DC POWER SYSTEMS - TELECOM, ENVIRONMENTAL PROTECTION

FOR ANY CONFLICTS BETWEEN SECTIONS OF LISTED CODES AND STANDARDS REGARDING MATERIAL, METHODS OF CONSTRUCTION, OR OTHER REQUIREMENTS, THE MOST RESTRICTIVE REQUIREMENT SHALL GOVERN. WHERE THERE IS CONFLICT BETWEEN A GENERAL REQUIREMENT AND A SPECIFIC REQUIREMENT, THE SPECIFIC REQUIREMENT SHALL GOVERN.

DETAIL 103/-

SITE QUALIFICATION PARTICIPANTS

	NAME	COMPANY	NUMBER
A/E	RAJESH GOYAL	APEX ENGINEERS, INC.	(630) 627-1800
SAC	JIM KAYSING	SITE ACQUS. CONSULTANTS, INC.	(847) 991-2100
RF	JAMES KOMMER	CINGULAR	(414) 831-6242
CON	XXXXX	XXXXXXXX	XXXXXXX
LANDLORD	XXXXXX	XXXXXXX	XXXXXXX
SURVEYOR	ANTHONY LOLLOFF	AERO-METRIC	(920) 849-7708

Apex Engineers, Inc.
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500 East 22nd Street, Suite B
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Fax. (630) 627-1165
APEX JOB No. CI05-016

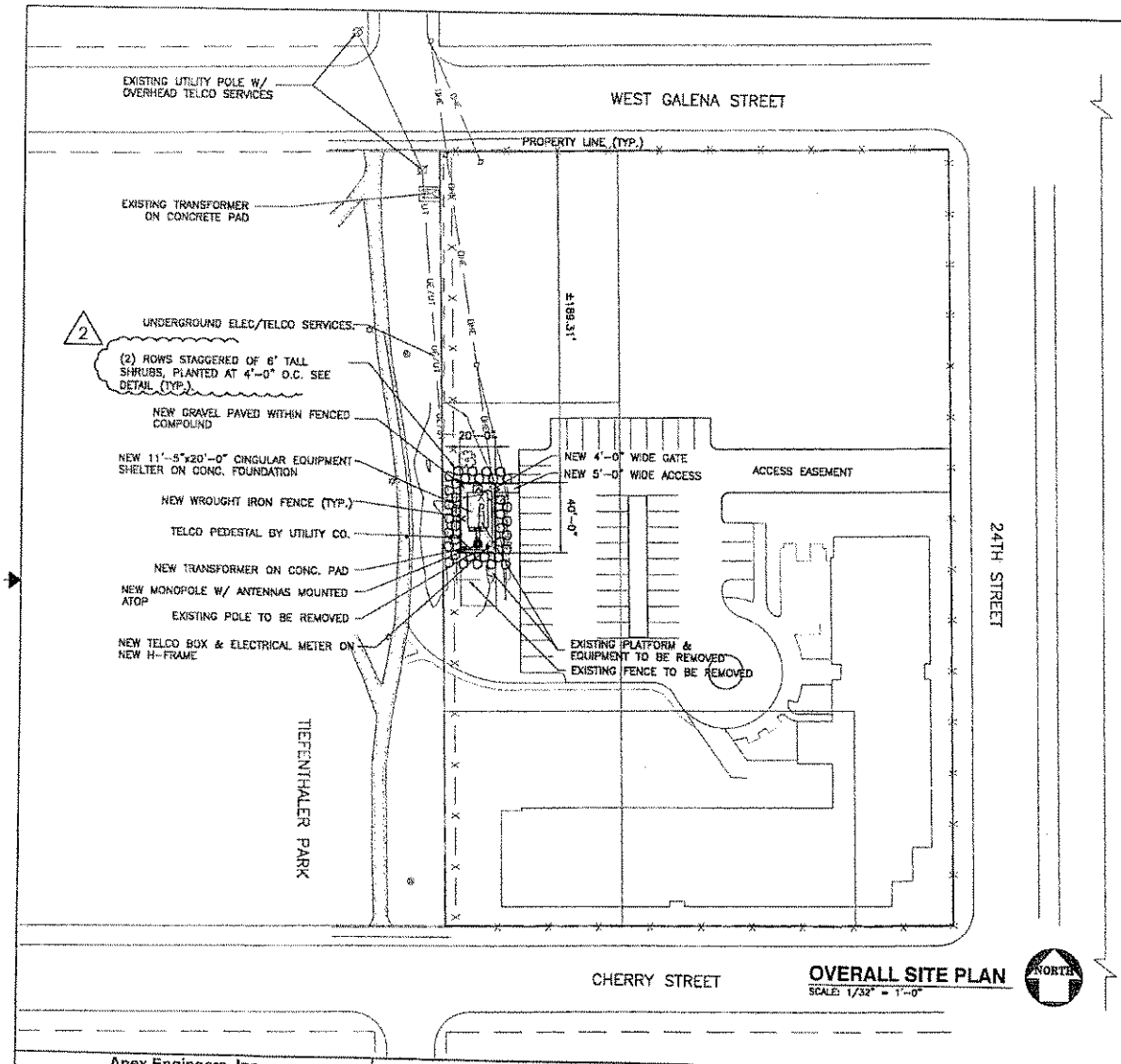
CHERRY COURT APARTMENTS
SITE NO. WI-1011
1525 N. 24th STREET
MILWAUKEE, WISCONSIN 53208

cingular WIRELESS

NO.	DATE	REVISIONS	BY	CHK	APP'D
2	10-16-06	REVISED PER CLIENT COMMENTS	JJ	RG	RG
1	09-28-06	REVISED PER CLIENT COMMENTS	JJ	RG	RG
0	03-02-06	ISSUED FOR CONSTRUCTION	TB	RG	RG

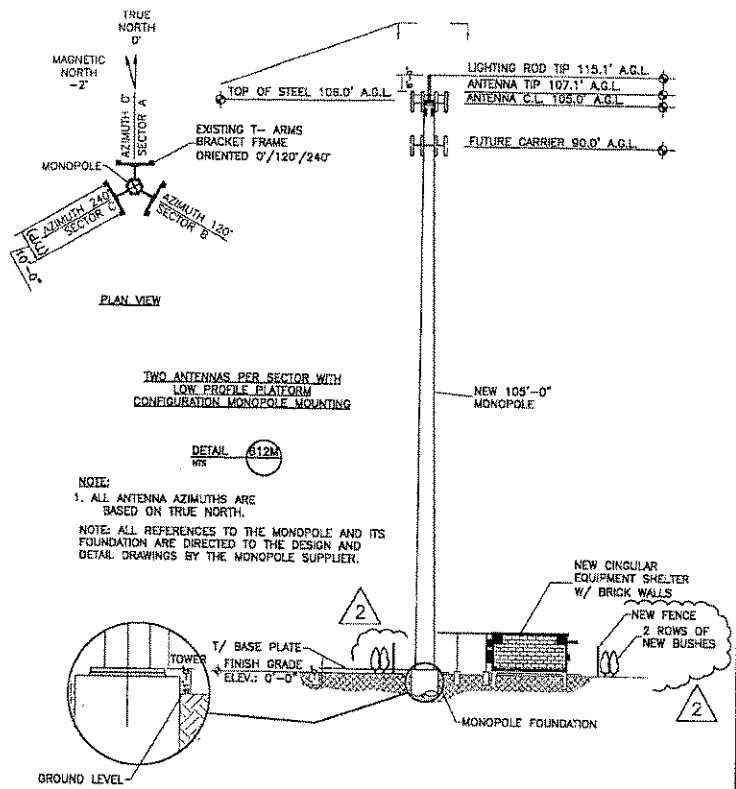
SCALE: AS SHOWN | DESIGNED BY: TB | DRAWN BY: TB

CINGULAR WIRELESS
TITLE SHEET
DRAWING NUMBER: WI-1011-01 REV 2
11 x 17



OVERALL SITE PLAN

SCALE: 1/32" = 1'-0"



TOWER ELEVATION

SCALE: N.T.S.

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CHERRY COURT APARTMENTS
SITE NO. WI-1011
1525 N. 24th STREET
MILWAUKEE, WISCONSIN 53208

cingular WIRELESS

NO.	DATE	REVISIONS	BY	CHK	APP'D
2	10-16-06	REVISED PER CLIENT COMMENTS	LJ	RG	RG
0	03-02-06	ISSUED FOR CONSTRUCTION	TB	RG	RG

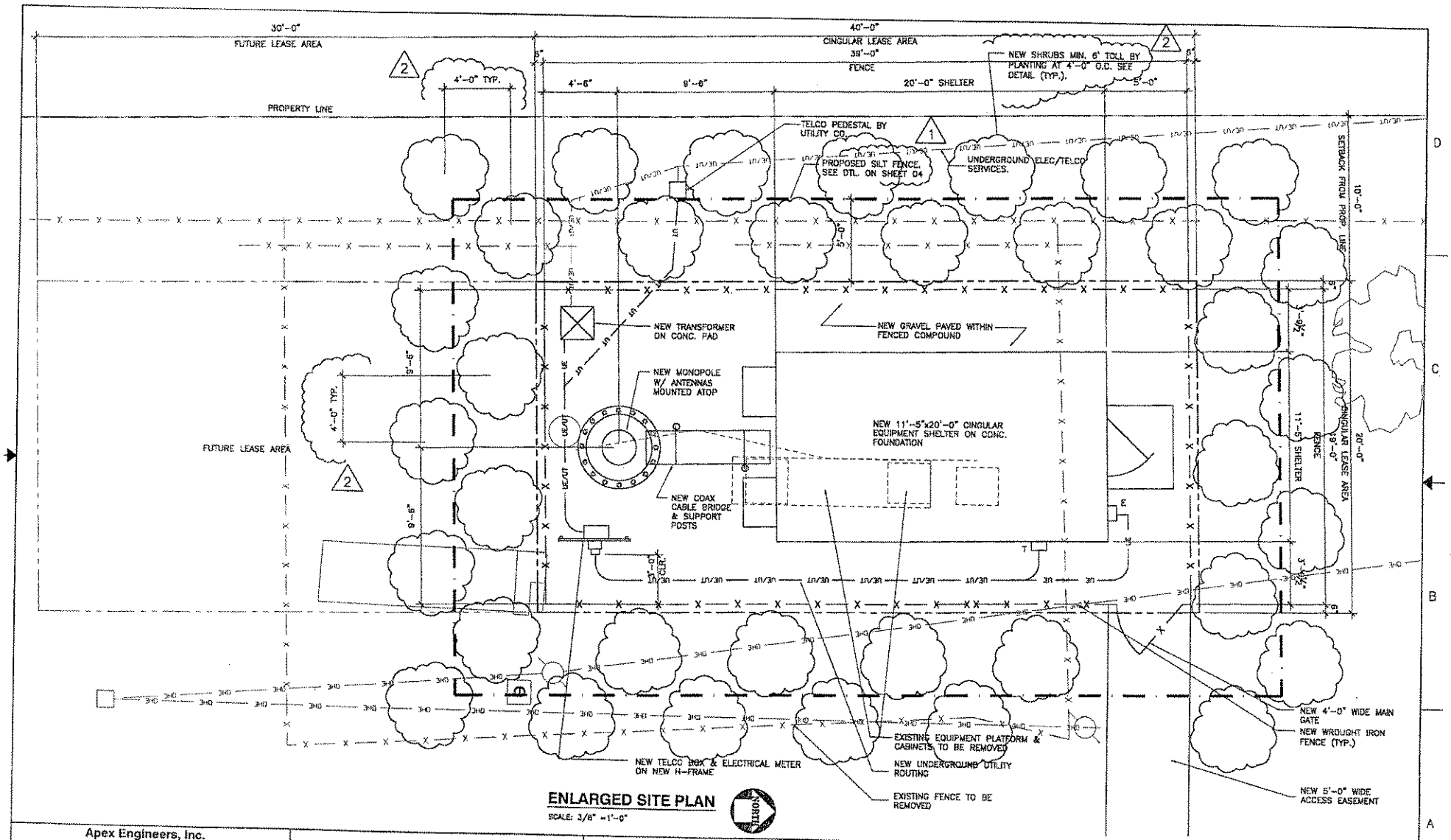
SCALE: AS SHOWN | DESIGNED BY: TB | DRAWN BY: TB

CINGULAR WIRELESS

OVERALL SITE PLAN & ELEVATION

DRAWING NUMBER: WI-1011-02 | REV: 2

11 X 17 SIZE



ENLARGED SITE PLAN

SCALE: 3/8" =1'-0"

NORTH

Apex Engineers, Inc.
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Fax. (630) 627-1165
APEX JOB No. C05-015

CHERRY COURT APARTMENTS
SITE NO. WI-1011
1525 N. 24th STREET
MILWAUKEE, WISCONSIN 53208

cingular WIRELESS

NO.	DATE	REVISIONS	BY	CHK	APP'D
2	10-16-06	REVISED PER CLIENT COMMENTS	LI	RG	RG
1	09-28-06	REVISED PER CLIENT COMMENTS	LI	RG	RG
0	03-02-06	ISSUED FOR CONSTRUCTION	TB	RG	RG

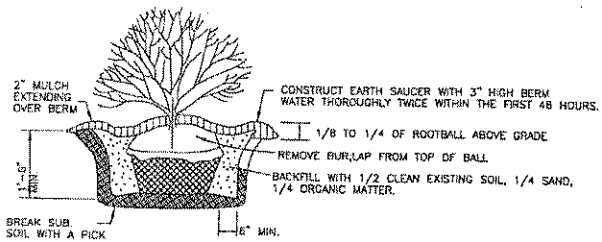
SCALE: AS SHOWN | DESIGNED BY: TB | DRAWN BY: TB

CINGULAR WIRELESS

ENLARGED SITE PLAN

DRAWING NUMBER: WI-1011-03 | REV: 2

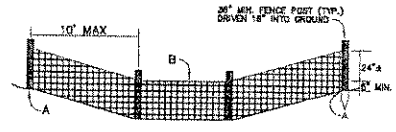
11 x 17 @ 50%

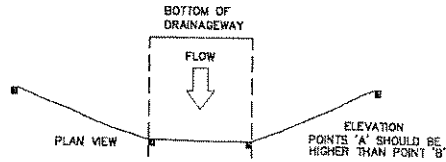


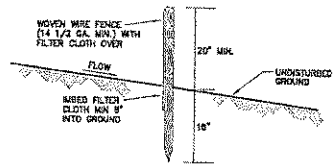
SHRUB PLANTING DETAIL

GENERAL NOTES:

1. EXISTING PROPERTY INFORMATION WAS TAKEN FROM SITE SURVEY.
2. THIS PROPOSAL IS FOR THE PLACEMENT OF TELECOMMUNICATIONS EQUIPMENT SHELTER ON GRADE AND PANEL ANTENNAS ON EXISTING MONOPOLE
3. THE NEW FACILITY IS UNMANNED AND IS NOT FOR HUMAN HABITAT. (NO HANDICAP ACCESS IS REQUIRED)
4. OCCUPANCY IS LIMITED TO PERIODIC MAINTENANCE AND INSPECTION, APPROXIMATELY 2 TIMES PER MONTH, BY CINGULAR TECHNICIANS.
5. NO NOISE, SMOKE, DUST OR ODOR WILL RESULT FROM THIS PROPOSAL.
6. ALL MATERIALS SHALL BE FURNISHED AND WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.
7. SUBCONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTIONS REQUIRED FOR CONSTRUCTION.
8. SUBCONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY DAMAGE CAUSED BY THE CONSTRUCTION OPERATION.
9. SUBCONTRACTOR SHALL REMOVE ALL TRASH AND DEBRIS FROM THE SITE ON A DAILY BASIS.
10. INFORMATION SHOWN ON THESE DRAWINGS WAS OBTAINED FROM SITE VISITS AND SITE SURVEY. SUBCONTRACTOR SHALL NOTIFY BECHTEL OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIALS OR PROCEEDING WITH CONSTRUCTION.
11. SUBCONTRACTOR SHALL CALL DIGGERS HOTLINE, INC. FOR UNDERGROUND UTILITY THREE DAYS PRIOR TO CONSTRUCTION







CONSTRUCTION NOTES FOR SILT FENCE

1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
2. FILTER CLOTH TO BE FASTENED SECURELY TO WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID-SECTION.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED BY A MIN. OF 6" AND FOLDED.
4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.
5. FENCES TO BE INSPECTED FOLLOWING EACH RAINFALL AND PRIOR TO THE ONSET OF FORCASTED STORMS.

SILT FENCE SPECIFICATIONS

POSTS = STEEL TYPE "T" OR "U" OR 2" HARDWOOD.

FENCE = WOVEN WIRE 14.5 GAUGE.

FILTER CLOTH = FILTER X, MIRAFI 100X STABILINKA T140N

PREFAB UNIT = GEOFAB, ENVIROFENCE.

NOTES:

1. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE FUNCTIONAL BEFORE LAND IS DISTURBED ON THE SITE.
2. THE SURFACE OF STRIPPED AREAS SHALL PERMANENTLY OR TEMPORARILY PROTECTED FROM SOIL EROSION WITHIN 15 DAYS AFTER FINAL GRADE IS REACHED. STRIPPED AREAS NOT AT FINAL GRADE THAT WILL REMAIN UNDISTURBED FOR MORE THAN 15 DAYS AFTER INITIAL DISTURBANCE SHALL BE PROTECTED FROM EROSION.
3. IF A STOCKPILE IS TO REMAIN IN PLACE FOR MORE THAN THREE DAYS, EROSION AND SEDIMENT CONTROL MEASURES SHALL BE PROVIDED FOR SUCH STOCKPILE.
4. WATER PUMPED OR DISCHARGED FROM THE SITE DURING CONSTRUCTION SHALL BE FILTERED.

1

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APEX JOB No. C05-016

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MILWAUKEE, WISCONSIN 53208

cingular WIRELESS

NO.	DATE	REVISIONS	BY	CHK	APP'D
1	09-28-05	REVISED PER CLIENT COMMENTS	LJ	RG	RG
0	03-02-05	ISSUED FOR CONSTRUCTION	TB	RG	RG

SCALE: AS SHOWN | DESIGNED BY: TB | DRAWN BY: TB

CINGULAR WIRELESS

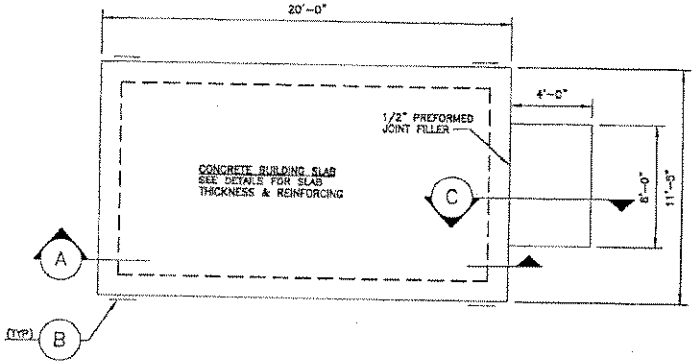
LANDSCAPE DETAIL, SILT FENCE & GENERAL NOTES

DRAWING NUMBER: WI-1011-04 | REV: 1

11 x 17 SIZE

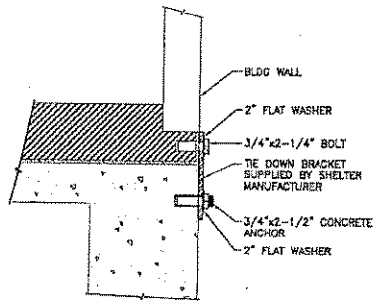
6 5 4 3 2 1

D C B A



SHELTER FOUNDATION PLAN

N.T.S.



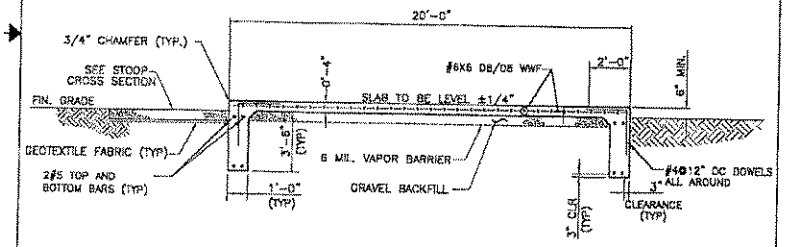
BLDG/FND ATTACHMENT DETAIL B

N.T.S.

FOUNDATION GENERAL NOTES:

1. THE SITE SHALL BE STRIPPED OF ALL VEGETATION PRIOR TO FILL OR CONSTRUCTION OF THE FOUNDATION PAD.
2. ALL FILL SAND SHALL BE C-15 P.I. WITH A COMPACTION TEST RUN ON EACH 6" LIFT - COMPACTED TO 80% MODIFIED PROCTOR.
3. ANY SOFT AREAS (TREE STUMP HOLES, ETC.) SHALL BE CUT OUT AND RECOMPACTED TO SAID PROCTOR.
4. THE CONTRACTOR SHALL KEEP THE SITE SO IT WILL HAVE POSITIVE DRAINAGE AT ALL TIMES.
5. ALL EXCAVATIONS SHALL BE FREE OF WATER BEFORE POURING CONCRETE.
6. MINIMUM SOIL BEARING CAPACITY OF 2,500 PSF IN ALL FOUNDATION AND SLAB AREAS.

NOTES

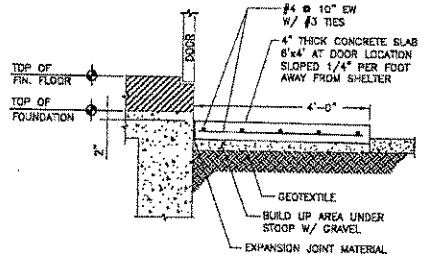


NOTES:

1. CONCRETE FINISH TO BE CLASS A TOLERANCE.
2. BOTTOM OF FOUNDATION SHALL BE 6" BELOW FROST LINE AND BEAR ON UNDESTURBED SOIL.
3. TEST FOR 3000 PSI AT 7, 14, & 28 DAYS PER POUR BY INDEPENDENT LAB.
4. ALL CONCRETE TO BE SIX SACK MIX.
5. PERFORM CONCRETE SLUMP TEST (4" MAX). NO WATER TO BE ADDED TO CONCRETE MIX AFTER 4" SLUMP HAS BEEN ESTABLISHED BY INDEPENDENT LAB.

BLDG/FND ATTACHMENT SECTION A-A

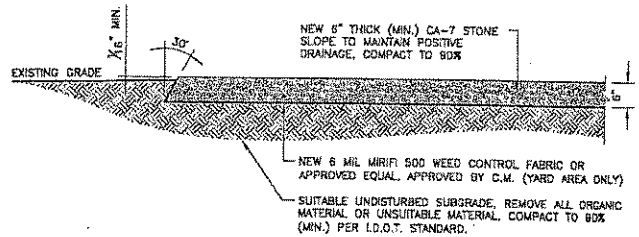
N.T.S.



STOOP DETAIL C-C

N.T.S.

NOTE:
WEED CONTROL FABRIC SHALL BE USED UNDER ALL AREAS OF THE YARD, AS NOTED ON SITE PLAN.



YARD PAVEMENT DETAIL

N.T.S.

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Lombard, Illinois 60
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Fax. (630) 627-1165
APEX JOB No. C05-016

CHERRY COURT APARTMENTS
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1525 N. 24th STREET
MILWAUKEE, WISCONSIN 53208

cingular WIRELESS

NO.	DATE	REVISIONS	BY	CHK	APP'D
0	03-02-06	ISSUED FOR CONSTRUCTION	TB	RS	RC

SCALE: AS SHOWN | DESIGNED BY: VY | DRAWN BY: VY

CINGULAR WIRELESS

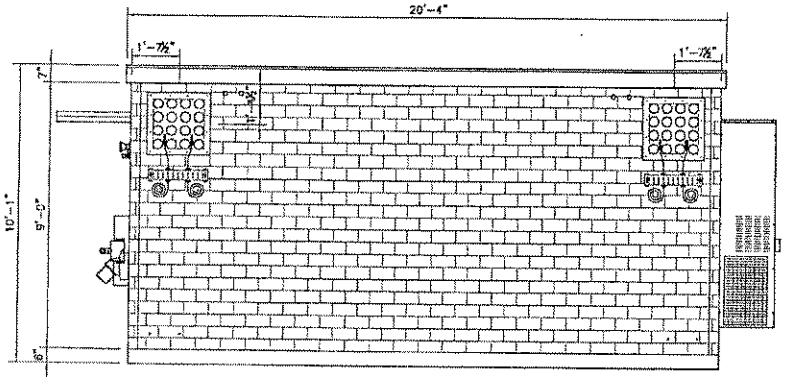
SLAB DETAILS

DRAWING NUMBER: WI-1011-05 | REV: 0

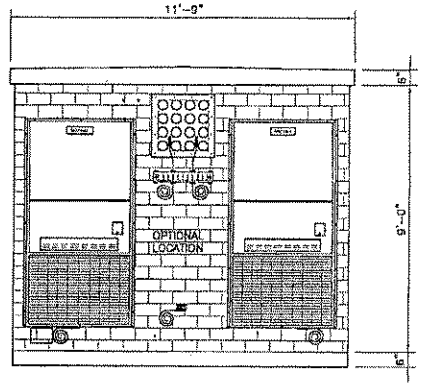
11 x 17 "D" SIZE

6 5 4 3 2

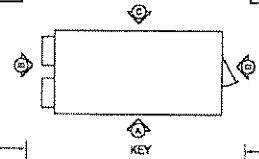
D C B A



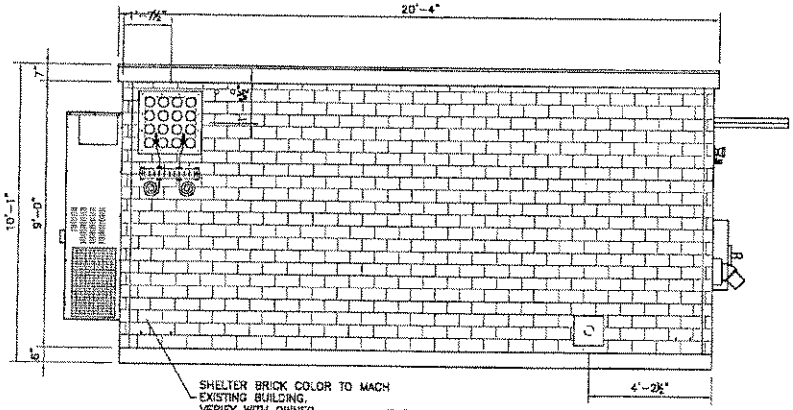
ELEVATION C



ELEVATION B

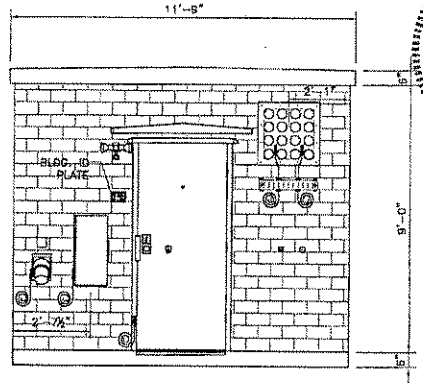


KEY



SHELTER BRICK COLOR TO MACH EXISTING BUILDING. VERIFY WITH OWNER.

ELEVATION A



ELEVATION D

WISCONSIN
RAJESH K. GOYAL
34411-006
DOWNERS GROVE, IL
PROFESSIONAL ENGINEER

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D	03-02-06	ISSUED FOR CONSTRUCTION	TB	RG	RG

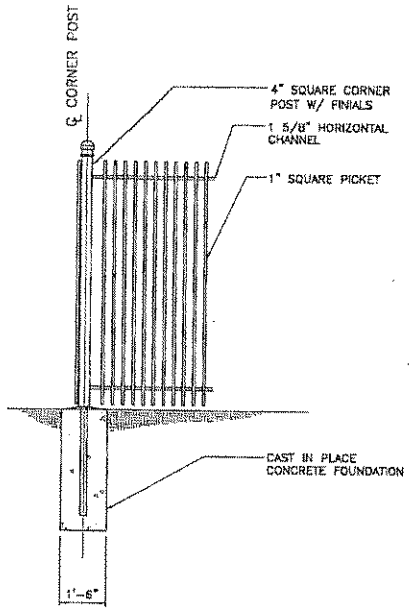
SCALE: AS SHOWN | DESIGNED BY: TB | DRAWN BY: TB

CINGULAR WIRELESS

SHELTER ELEVATIONS

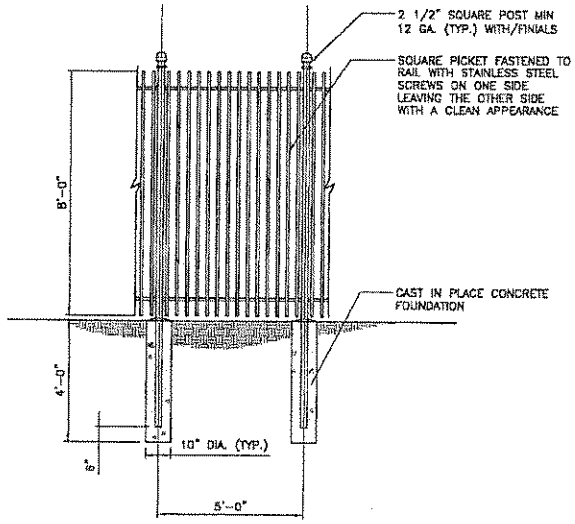
DRAWING NUMBER: WI-1011-06 | REV: D

11 x 17 SIZE



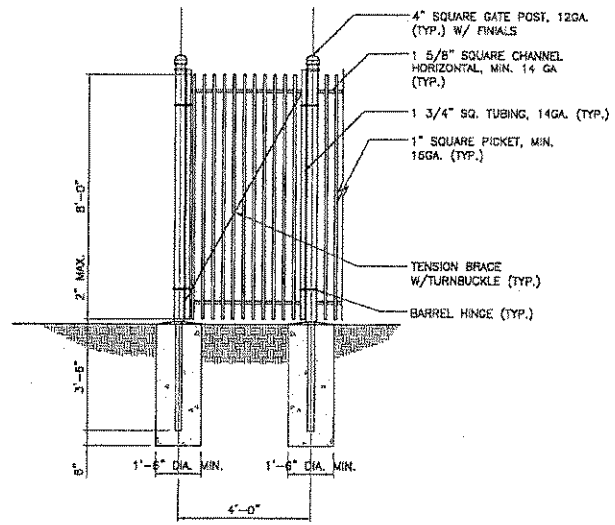
1/07 DETAIL–STEEL CORNER, GATE, TERMINAL OR PULL POST

SCALE: NOT TO SCALE



2/07 DETAIL–STEEL POST

SCALE: NOT TO SCALE

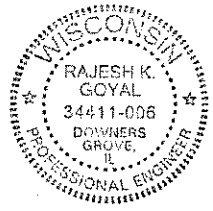


3/07 DETAIL–TYPICAL GATE

SCALE: NOT TO SCALE

FENCE NOTES:

1. THE ORNAMENTAL METAL FENCING SHALL BE MANUFACTURED FROM COIL STEEL WITH YIELD STRENGHT OF 50,000 PSI, THE STEEL SHALL BE GALVANIZED TO MEET REQUIREMENTS OF ASTM A653 WITH A MIN. ZINC COATING OF 0.9 OZ. PER SQ.FT
2. THE FINISH COATING SHALL CONSIST OF BASE COAT OF THERMOSETTING EPOXY POWER COATING WITH MIN. THINKNESS OF 2–4 MILS AND A TOP–COAT OF "NO–MAR" POLYESTER POWDER COATING WITH MIN. THINKNESS OF 2–4 MILS. FINAL COLOR TO MATCH EXISTING (V.I.F.).
3. G.C. TO VERIFY IN FIELD AND TO MATCH EXISTING FENCE.



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cingular WIRELESS

NO.	DATE	REVISIONS	BY	CHK	APP'D
0	03-02-05	ISSUED FOR CONSTRUCTION	TB	RG	RG

SCALE: AS SHOWN | DESIGNED BY: TB | DRAWN BY: TB

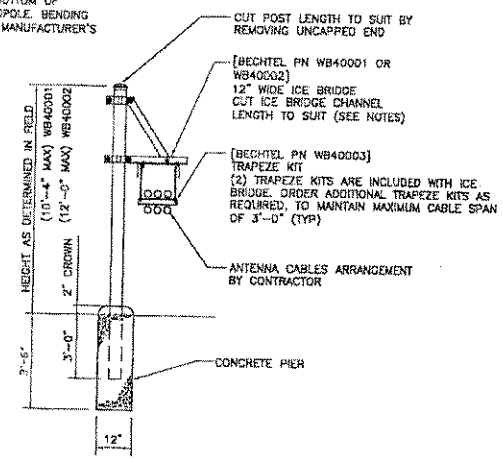
CINGULAR WIRELESS

DETAILS

DRAWING NUMBER: WI-1011-07 | REV: 0

11 x 17 B SIZE

* INSTALL DRIP LOOP ON ANTENNA CABLES AT BOTTOM OF TOWER/MONOPOLE. BENDING RADIUS PER MANUFACTURER'S STANDARDS

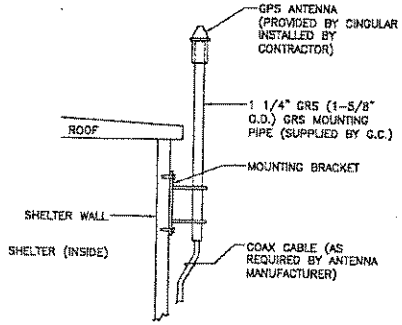


BECHTEL SO:	ROHN PN:	MTS PN:
WB40001	RN-WB-KS110-138	WB-KS110-138
WB40002	RN-WB-KS110-158	MT-C8266
WB40003	WBBA008	MT-357-12

NOTES:

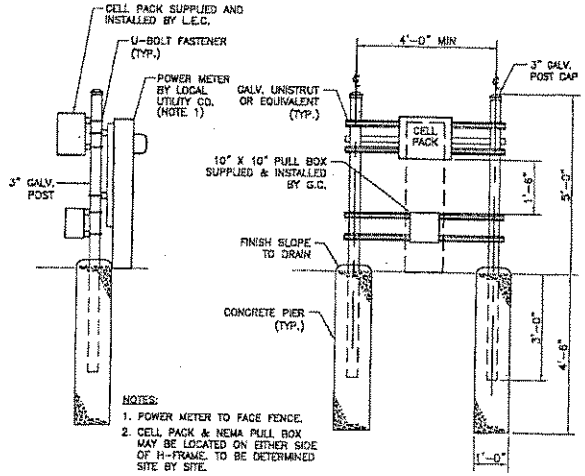
1. WHEN USING COMPONENTS AS SHOWN IN STANDARD DETAILS, MAXIMUM ALLOWABLE SPAN BETWEEN SUPPORTS ON A CONTINUOUS SINGLE SECTION OF BRIDGE CHANNEL SHALL BE 8 FEET FOR 10 FEET BRIDGE CHANNEL.
2. WHEN USING COMPONENTS FOR SPLICING BRIDGE CHANNEL SECTIONS, THE SPLICE SHOULD BE PROVIDED AT THE SUPPORT, IF POSSIBLE, OR AT A MAXIMUM OF 2 FEET FROM THE SUPPORT.
3. WHEN USING COMPONENTS, SUPPORT SHOULD BE PROVIDED AS CLOSE AS POSSIBLE TO THE ENDS OF ICE BRIDGES, WITH A MAXIMUM CANTILEVER DISTANCE OF 2 FEET FROM THE SUPPORT TO THE FREE END OF THE ICE BRIDGE.
4. CUT BRIDGE CHANNEL SECTIONS SHALL HAVE RAW EDGES TREATED WITH A MATERIAL TO RESTORE THESE EDGES TO THE ORIGINAL CHANNEL, OR EQUIVALENT, FINISH.
5. ICE BRIDGES MAY BE CONSTRUCTED WITH COMPONENTS FROM OTHER MANUFACTURERS, PROVIDED THE MANUFACTURER'S INSTALLATION GUIDELINES ARE FOLLOWED.
6. DEVIATIONS FROM STANDARDS FOR COMPONENT INSTALLATIONS ARE PERMITTED WITH THE RESPECTIVE MANUFACTURER'S APPROVAL.
7. DEVIATIONS FROM ICE BRIDGE FOUNDATIONS REQUIRE ENGINEERING APPROVAL.

ICE BRIDGE DETAIL 155 — NTS



ELEVATION

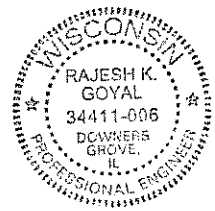
GPS ANTENNA MOUNTING DETAIL
N.T.S.



NOTES:

1. POWER METER TO FACE FENCE.
2. CELL PACK & NEMA PULL BOX MAY BE LOCATED ON EITHER SIDE OF H-FRAME, TO BE DETERMINED SITE BY SITE.

1010 H-FRAME DETAIL — NTS



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CHERRY COURT APARTMENTS
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1525 N. 24th STREET
MILWAUKEE, WISCONSIN 53208

cingular WIRELESS

NO.	DATE	REVISIONS	BY	CHK	APP'D
C	03-02-06	ISSUED FOR CONSTRUCTION	TB	RG	RG

SCALE: AS SHOWN | DESIGNED BY: TB | DRAWN BY: TB

CINGULAR WIRELESS

DETAILS

DRAWING NUMBER: WI-1011-06 | REV: C

11 x 17 SIZE

NOTES:

1. THE SUBCONTRACTOR SHALL CONTACT UTILITY LOCATING SERVICES PRIOR TO THE START OF CONSTRUCTION.

2. ALL EXISTING ACTIVE SEWER, WATER, GAS, ELECTRIC, AND OTHER UTILITIES WHERE ENCOUNTERED IN THE WORK, SHALL BE PROTECTED AT ALL TIMES, AND WHERE REQUIRED FOR THE PROPER EXECUTION OF THE WORK, SHALL BE RELOCATED AS DIRECTED BY CONTRACTOR. EXTREME CAUTION SHOULD BE USED BY THE SUBCONTRACTOR WHEN EXCAVATING OR DRILLING PIERS AROUND OR NEAR UTILITIES. SUBCONTRACTOR SHALL PROVIDE SAFETY TRAINING FOR THE WORKING CREW. THIS WILL INCLUDE BUT NOT BE LIMITED TO A) FALL PROTECTION B) CONFINED SPACE C) ELECTRICAL SAFETY D) TRENCHING & EXCAVATION.

3. ALL SITE WORK SHALL BE AS INDICATED ON THE DRAWINGS AND PROJECT SPECIFICATIONS.

4. IF NECESSARY, RUBBISH, STUMPS, DEBRIS, STICKS, STONES AND OTHER REFUSE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF LEGALLY.

5. ALL EXISTING INACTIVE SEWER, WATER, GAS, ELECTRIC AND OTHER UTILITIES, WHICH INTERFERE WITH THE EXECUTION OF THE WORK, SHALL BE REMOVED AND/OR CAPPED, PLUGGED OR OTHERWISE DISCONTINUED AT POINTS WHICH WILL NOT INTERFERE WITH THE EXECUTION OF THE WORK, SUBJECT TO THE APPROVAL OF CONTRACTOR, OWNER AND/OR LOCAL UTILITIES.

6. SUBCONTRACTOR SHALL MINIMIZE DISTURBANCE TO EXISTING SITE DURING CONSTRUCTION.

7. THE SUBCONTRACTOR SHALL PROVIDE SITE SIGNAGE IN ACCORDANCE WITH THE TECHNICAL SPECIFICATION FOR SITE SIGNAGE.

8. THE SITE SHALL BE GRADED TO CAUSE SURFACE WATER TO FLOW AWAY FROM THE BTS EQUIPMENT AND TOWER AREAS.

9. NO FILL OR EMBANKMENT MATERIAL SHALL BE PLACED ON FROZEN GROUND. FROZEN MATERIALS, SNOW OR ICE SHALL NOT BE PLACED IN ANY FILL OR EMBANKMENT.

10. THE SUB GRADE SHALL BE COMPACTED AND BROUGHT TO A SMOOTH UNIFORM GRADE PRIOR TO FINISHED SURFACE APPLICATION.

11. THE AREAS OF THE OWNERS PROPERTY DISTURBED BY THE WORK AND NOT COVERED BY THE TOWER, EQUIPMENT OR DRIVEWAY, SHALL BE GRADED TO A UNIFORM SLOPE, AND STABALIZED TO PREVENT EROSION AS SPECIFIED IN THE PROJECT SPECIFICATIONS.

12. SUBCONTRACTOR SHALL MINIMIZE DISTURBANCE TO EXISTING SITE DURING CONSTRUCTION. EROSION CONTROL MEASURES, IF REQUIRED DURING CONSTRUCTION, SHALL BE IN CONFORMANCE WITH THE LOCAL GUIDELINES FOR EROSION AND SEDIMENT CONTROL.

SITE WORK GENERAL NOTES:

DETAIL 619 / –

NOTES:

1. ALL STEEL WORK SHALL BE PAINTED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS AND IN ACCORDANCE WITH ASTM A36 UNLESS OTHERWISE NOTED.

2. ALL WELDING SHALL BE PERFORMED USING E70XX ELECTRODES AND WELDING SHALL CONFORM TO AISC. WHERE FILLET WELD SIZES ARE NOT SHOWN, PROVIDE THE MINIMUM SIZE PER TABLE J2.4 IN THE AISC "MANUAL OF STEEL CONSTRUCTION". PAINTED SURFACES SHALL BE TOUCHED UP.

3. BOLTED CONNECTIONS SHALL BE ASTM A325 BEARING TYPE (3/4"ø) CONNECTIONS AND SHALL HAVE MINIMUM OF TWO BOLTS UNLESS NOTED OTHERWISE.

4. NON-STRUCTURAL CONNECTIONS FOR STEEL GRATING MAY USE 5/8" DIA. ASTM A 307 BOLTS UNLESS NOTED OTHERWISE.

5. INSTALLATION OF CONCRETE EXPANSION/WEDGE ANCHOR, SHALL BE PER MANUFACTURER'S WRITTEN RECOMMENDED PROCEDURE. THE ANCHOR BOLT, DOWEL OR ROD SHALL CONFORM TO MANUFACTURER'S RECOMMENDATION FOR EMBEDMENT DEPTH OR AS SHOWN ON THE DRAWINGS. NO REBAR SHALL BE CUT WITHOUT PRIOR CONTRACTOR APPROVAL WHEN DRILLING HOLES IN CONCRETE. SPECIAL INSPECTIONS, REQUIRED BY GOVERNING CODES, SHALL BE PERFORMED IN ORDER TO MAINTAIN MANUFACTURER'S MAXIMUM ALLOWABLE LOADS.

STRUCTURAL STEEL NOTES:

DETAILS 620 / –

CONCRETE AND REINFORCING STEEL NOTES:

1. ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE ACI 301, ACI 318, ACI 336, ASTM A184, ASTM A185 AND THE DESIGN AND CONSTRUCTION SPECIFICATION FOR CAST-IN-PLACE CONCRETE.

2. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS, UNLESS NOTED OTHERWISE.

3. REINFORCING STEEL SHALL CONFORM TO ASTM A 615, GRADE 60, DEFORMED UNLESS NOTED OTHERWISE. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A 185 WELDED STEEL WIRE FABRIC UNLESS NOTED OTHERWISE. SPLICES SHALL BE CLASS "B" AND ALL HOOKS SHALL BE STANDARD, UNO.

4. THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCING STEEL UNLESS SHOWN OTHERWISE ON DRAWINGS:

   CONCRETE CAST AGAINST EARTH.....3 IN.
   CONCRETE EXPOSED TO EARTH OR WEATHER:
   #6 AND LARGER .....2 IN.
   #5 AND SMALLER & WWF.....1 1/2 IN.
   CONCRETE NOT EXPOSED TO EARTH OR WEATHER OR NOT CAST AGAINST THE GROUND:
   SLAB AND WALL .....3/4 IN.
   BEAMS AND COLUMNS.....1 1/2 IN.

5. A CHAMFER 3/4" SHALL BE PROVIDED AT ALL EXPOSED EDGES OF CONCRETE, UNO, IN ACCORDANCE WITH ACI 301 SECTION 4.2.4.

6. INSTALLATION OF CONCRETE EXPANSION/WEDGE ANCHOR, SHALL BE PER MANUFACTURER'S WRITTEN RECOMMENDED PROCEDURE. THE ANCHOR BOLT, DOWEL OR ROD SHALL CONFORM TO MANUFACTURER'S RECOMMENDATION FOR EMBEDMENT DEPTH OR AS SHOWN ON THE DRAWINGS. NO REBAR SHALL BE CUT WITHOUT PRIOR ENGINEERING APPROVAL WHEN DRILLING HOLES IN CONCRETE. EXPANSION BOLTS SHALL BE PROVIDED BY RAMSET/REDHEAD OR APPROVED EQUAL.

CONCRETE AND REINFORCING STEEL NOTES 102 / –

GENERAL NOTES

1. FOR THE PURPOSE OF CONSTRUCTION DRAWING, THE FOLLOWING DEFINITIONS SHALL APPLY:
   CONTRACTOR – BECHTEL
   SUBCONTRACTOR – GENERAL CONTRACTOR (CONSTRUCTION)
   OWNER – CINGULAR
   OEM – ORIGINAL EQUIPMENT MANUFACTURE

2. PRIOR TO THE SUBMISSION OF BIDS, THE BIDDING SUBCONTRACTOR SHALL VISIT THE CELL SITE TO FAMILIARIZE WITH THE EXISTING CONDITIONS AND TO CONFIRM THAT THE WORK CAN BE ACCOMPLISHED AS SHOWN ON THE CONSTRUCTION DRAWINGS. ANY DISCREPANCY FOUND SHALL BE BROUGHT TO THE ATTENTION OF CONTRACTOR.

3. ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES. SUBCONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS, AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK.

   ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.

4. DRAWINGS PROVIDED HERE ARE NOT TO SCALE AND ARE INTENDED TO SHOW OUTLINE ONLY.

5. UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES, AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.

6. THE SUBCONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.

7. IF THE SPECIFIED EQUIPMENT CANNOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE SUBCONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION FOR APPROVAL BY THE CONTRACTOR.

8. SUBCONTRACTOR SHALL DETERMINE ACTUAL ROUTING OF CONDUIT, POWER AND T1 CABLES, GROUNDING CABLES AS SHOWN ON THE POWER, GROUNDING AND TELCO PLAN DRAWINGS.

9. THE SUBCONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT SUBCONTRACTOR'S EXPENSE TO THE SATISFACTION OF OWNER.

10. SUBCONTRACTOR SHALL LEGALLY AND PROPERLY DISPOSE OF ALL SCRAP MATERIALS SUCH AS COAXIAL CABLES AND OTHER ITEMS REMOVED FROM THE EXISTING FACILITY. ANTENNAS REMOVED SHALL BE RETURNED TO THE OWNER'S DESIGNATED LOCATION.

11. SUBCONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION.

12. CONSTRUCTION SHALL COMPLY WITH SPECIFICATION 24782-000-3APS-A00Z-00002, "GENERAL CONSTRUCTION SERVICES FOR CONSTRUCTION OF CINGULAR GSM SITES."

DETAIL 623 / –

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ABBREVIATIONS

AGL	ABOVE GRADE LEVEL
BTS	BASE TRANSCEIVER STATION
(E)	EXISTING
MIN	MINIMUM
N.T.S.	NOT TO SCALE
REF	REFERENCE
RF	RADIO FREQUENCY
T.B.D.	TO BE DETERMINED
T.B.R.	TO BE RESOLVED
TYP	TYPICAL
REQ	REQUIRED
EGR	EQUIPMENT GROUND RING
AWG	AMERICAN WIRE GAUGE
MGB	MASTER GROUND BUS
EG	EQUIPMENT GROUND
BCW	BARE COPPER WIRE
SIAD	SMART INTEGRATED ACCESS DEVICE
GEN	GENERATOR
IGR	INTERIOR GROUND RING (HALO)
RBS	RADIO BASE STATION

SYMBOLS

- S/G — SOLID GROUND BUS BAR
- S/N — SOLID NEUTRAL BUS BAR
- SUPPLEMENTAL GROUND CONDUCTOR
- 2-POLE THERMAL-MAGNETIC CIRCUIT BREAKER
- SINGLE-POLE THERMAL-MAGNETIC CIRCUIT BREAKER
- CHEMICAL GROUND ROD
- GROUND ROD
- DISCONNECT SWITCH
- (M) METER
- EXOTHERMIC WELD (CADWELD) (UNLESS OTHERWISE NOTED)
- 5/8" x 10' COPPER CLAD STEEL GROUND
- 5/8" x 10' COPPER CLAD STEEL GROUND ROD WITH INSPECTION SLEEVE
- EXOTHERMIC WELD (CADWELD) WITH INSPECTION SLEEVE
- GROUNDING WIRE

ABBREVIATIONS & SYMBOLS 112M / –

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cingular WIRELESS

NO.	DATE	REVISIONS	BY	CHK	APP'D
0	03-02-09	ISSUED FOR CONSTRUCTION	TB	RG	RD

SCALE: AS SHOWN | DESIGNED BY: TB | DRAWN BY: TB

CINGULAR WIRELESS

CONSTRUCTION NOTES

DRAWING NUMBER	REV
WI-1011-09	0

SIZE: 11 x 17 B

6 5 4 3 2 1

ELECTRICAL INSTALLATION NOTES:

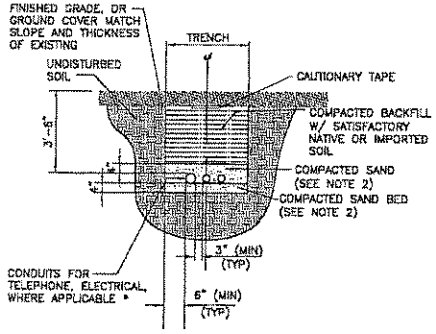
1. ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, NEC AND ALL APPLICABLE LOCAL CODES. 2. CONDUIT ROUTINGS ARE SCHEMATIC. SUBCONTRACTOR SHALL INSTALL CONDUITS SO THAT ACCESS TO EQUIPMENT IS NOT BLOCKED.
3. WIRING, RACEWAY AND SUPPORT METHODS AND MATERIALS SHALL COMPLY WITH THE REQUIREMENTS OF THE NEC AND TELCORDIA.
4. ALL CIRCUITS SHALL BE SEGREGATED AND MAINTAIN MINIMUM CABLE SEPARATION AS REQUIRED BY THE NEC AND TELCORDIA.
5. CABLES SHALL NOT BE ROUTED THROUGH LADDER-STYLE CABLE TRAY RUNGS.
6. EACH END OF EVERY POWER, POWER PHASE CONDUCTOR (I.E., HOTS), GROUNDING, AND T1 CONDUCTOR AND CABLE SHALL BE LABELED WITH COLOR-CODED INSULATION OR ELECTRICAL TAPE (3M BRAND, 1/2" PLASTIC ELECTRICAL TAPE WITH UV PROTECTION, OR EQUAL). THE IDENTIFICATION METHOD SHALL CONFORM WITH NEC & OSHA.
7. ALL ELECTRICAL COMPONENTS SHALL BE CLEARLY LABELED WITH ENGRAVED LAMACOID PLASTIC LABELS. ALL EQUIPMENT SHALL BE LABELED WITH THEIR VOLTAGE RATING, PHASE CONFIGURATION, WIRE CONFIGURATION, POWER OR AMPACITY RATING, AND BRANCH CIRCUIT ID NUMBERS (I.E., PANELBOARD AND CIRCUIT ID'S).
8. PANELBOARDS (ID NUMBERS) AND INTERNAL CIRCUIT BREAKERS (CIRCUIT ID NUMBERS) SHALL BE CLEARLY LABELED WITH ENGRAVED LAMACOID PLASTIC LABELS.
9. ALL TIE WRAPS SHALL BE CUT FLUSH WITH APPROVED CUTTING TOOL TO REMOVE SHARP EDGES.
10. POWER, CONTROL, AND EQUIPMENT GROUND WIRING IN TUBING OR CONDUIT SHALL BE SINGLE CONDUCTOR (#14 AWG OR LARGER), 600 V, OIL RESISTANT THHN OR THWN-2, CLASS B STRANDED COPPER CABLE RATED FOR 90 °C (WET AND DRY) OPERATION; LISTED OR LABELED FOR THE LOCATION AND RACEWAY SYSTEM USED, UNLESS OTHERWISE SPECIFIED.
11. SUPPLEMENTAL EQUIPMENT GROUND WIRING LOCATED INDOORS SHALL BE SINGLE CONDUCTOR (#6 AWG OR LARGER), 600 V, OIL RESISTANT THHN OR THWN-2 GREEN INSULATION, CLASS B STRANDED COPPER CABLE RATED FOR 90 °C (WET AND DRY) OPERATION; LISTED OR LABELED FOR THE LOCATION AND RACEWAY SYSTEM USED, UNLESS OTHERWISE SPECIFIED.
12. POWER AND CONTROL WIRING, NOT IN TUBING OR CONDUIT, SHALL BE MULTI-CONDUCTOR, TYPE TC CABLE (#14 AWG OR LARGER), 600 V, OIL RESISTANT THHN OR THWN-2, CLASS B STRANDED COPPER CABLE RATED FOR 90 °C (WET AND DRY) OPERATION; WITH OUTER JACKET; LISTED OR LABELED FOR THE LOCATION USED, UNLESS OTHERWISE SPECIFIED.
13. ALL POWER AND GROUNDING CONNECTIONS SHALL BE CRIMP-STYLE, COMPRESSION WIRE LUGS AND WIRENUTS BY THOMAS AND BETTS (OR EQUAL). LUGS AND WIRENUTS SHALL BE RATED FOR OPERATION AT NO LESS THAN 75°C (90°C IF AVAILABLE).
14. RACEWAY AND CABLE TRAY SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEE, AND NEC.
15. ELECTRICAL METALLIC TUBING (EMT) OR RIGID NONMETALLIC CONDUIT (I.E., RIGID PVC SCHEDULE 40, OR RIGID PVC SCHEDULE 80 FOR LOCATIONS SUBJECT TO PHYSICAL DAMAGE) SHALL BE USED FOR EXPOSED INDOOR LOCATIONS.
16. ELECTRICAL METALLIC TUBING (EMT), ELECTRICAL NONMETALLIC TUBING (ENT), OR RIGID NONMETALLIC CONDUIT (RIGID PVC, SCHEDULE 40) SHALL BE USED FOR CONCEALED INDOOR LOCATIONS.
17. GALVANIZED STEEL INTERMEDIATE METALLIC CONDUIT (IMC) SHALL BE USED FOR OUTDOOR LOCATIONS ABOVE GRADE.
18. RIGID NONMETALLIC CONDUIT (I.E., RIGID PVC SCHEDULE 40 OR RIGID PVC SCHEDULE 80) SHALL BE USED UNDERGROUND; DIRECT BURIED, IN AREAS OF OCCASIONAL LIGHT VEHICLE TRAFFIC OR ENCASED IN REINFORCED CONCRETE IN AREAS OF HEAVY VEHICLE TRAFFIC.
19. LIQUID-TIGHT FLEXIBLE METALLIC CONDUIT (LIQUID-TITE FLEX) SHALL BE USED INDOORS AND OUTDOORS, WHERE VIBRATION OCCURS OR FLEXIBILITY IS NEEDED.
20. CONDUIT AND TUBING FITTINGS SHALL BE THREADED OR COMPRESSION-TYPE AND APPROVED FOR THE LOCATION USED. SETSCREW FITTINGS ARE NOT ACCEPTABLE.
21. CABINETS, BOXES, AND WIREWAYS SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEE, AND NEC.
22. WIREWAYS SHALL BE EPOXY-COATED (GRAY) AND INCLUDE A HINGED COVER, DESIGNED TO SWING OPEN DOWNWARD; SHALL BE PANDUIT TYPE E (OR EQUAL); AND RATED NEMA 1 (OR BETTER)

ELECTRICAL INSTALLATION NOTES (cont.):

23. EQUIPMENT CABINETS, TERMINAL BOXES, JUNCTION BOXES, AND PULL BOXES SHALL BE GALVANIZED OR OR EPOXY-COATED SHEET STEEL, SHALL MEET OR EXCEED UL 50, AND RATED NEMA 1 (OR BETTER) INDOORS OR NEMA 3R (OR BETTER) OUTDOORS
24. METAL RECEPTACLE, SWITCH, AND DEVICE BOXES SHALL BE GALVANIZED, EPOXY-COATED, OR NON-CORRODING; SHALL MEET OR EXCEED UL 514A AND NEMA OS 1; AND RATED NEMA 1 (OR BETTER) BETTER INDOORS, OR WEATHER PROTECTED (WP OR BETTER) OUTDOORS.
25. NONMETALLIC RECEPTACLE, SWITCH, AND DEVICE BOXES SHALL MEET OR EXCEED NEMA OS 2; AND RATED NEMA 1 (OR BETTER) INDOORS, OR WEATHER PROTECTED (WP OR BETTER) OUTDOORS.
26. THE SUBCONTRACTOR SHALL NOTIFY AND OBTAIN NECESSARY AUTHORIZATION FROM THE CONTRACTOR BEFORE COMMENCING WORK ON THE AC POWER DISTRIBUTION PANELS.
27. THE SUBCONTRACTOR SHALL PROVIDE NECESSARY TAGGING ON THE BREAKERS, CABLES AND DISTRIBUTION PANELS IN ACCORDANCE WITH THE APPLICABLE CODES AND STANDARDS TO SAFEGUARD AGAINST LIFE AND PROPERTY.

DETAIL 622

NOTES: 1. ENGINEER SHALL DETERMINE DEPTH "D" BASED UPON NATIONAL ELECTRICAL CODE, UTILITY REQUIREMENTS OR STATE AND LOCAL CODES.
2. LEAN CONCRETE, RED-COLORED TOP, MAY BE USED IN PLACE OF COMPACTED SAND.



* CONDUIT SIZE, TYPE, QUANTITY AND SEPARATION DIMENSION TO BE VERIFIED WITH LOCAL UTILITY COMPANY REQUIREMENTS

DIRECT BURIED CONDUIT

DETAIL 105 NTS

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PROFESSIONAL ENGINEER

GREENFIELD GROUNDING NOTES:

1. ALL GROUND ELECTRODE SYSTEMS (INCLUDING TELECOMMUNICATION, RADIO, LIGHTNING PROTECTION, AND AC POWER GES'S) SHALL BE BONDED TOGETHER, AT OR BELOW GRADE, BY TWO OR MORE COPPER BONDING CONDUCTORS IN ACCORDANCE WITH THE NEC.
2. THE SUBCONTRACTOR SHALL PERFORM IEEE FALL-OF-POTENTIAL RESISTANCE TO EARTH TESTING (PER IEEE 1100 AND 81) FOR GROUND ELECTRODE SYSTEMS. THE SUB-CONTRACTOR SHALL FURNISH AND INSTALL SUPPLEMENTAL GROUND ELECTRODES AS NEEDED TO ACHIEVE A TEST RESULT OF 5 OHMS OR LESS.
3. THE SUBCONTRACTOR IS RESPONSIBLE FOR PROPERLY SEQUENCING GROUNDING AND UNDERGROUND CONDUIT INSTALLATION AS TO PREVENT ANY LOSS OF CONTINUITY IN THE GROUNDING SYSTEM OR DAMAGE TO THE CONDUIT.
4. METAL CONDUIT AND TRAY SHALL BE GROUNDED AND MADE ELECTRICALLY CONTINUOUS WITH LISTED BONDING FITTINGS OR BY BONDING ACROSS THE DISCONTINUITY WITH #6 AWG COPPER WIRE UL APPROVED GROUNDING TYPE CONDUIT CLAMPS.
5. METAL RACEWAY SHALL NOT BE USED AS THE NEC REQUIRED EQUIPMENT GROUND CONDUCTOR. STRANDED COPPER CONDUCTORS WITH GREEN INSULATION, SIZED IN ACCORDANCE WITH THE NEC, SHALL BE FURNISHED AND INSTALLED WITH THE POWER CIRCUITS TO BTS EQUIPMENT.
6. EACH BTS CABINET FRAME SHALL BE DIRECTLY CONNECTED TO THE MASTER GROUND BAR WITH GREEN INSULATED SUPPLEMENTAL EQUIPMENT GROUND WIRES. 6 AWG STRANDED COPPER OR LARGER FOR INDOOR BTS; 2 AWG STRANDED COPPER FOR OUTDOOR BTS.
7. CONNECTIONS TO THE GROUND BUS SHALL NOT BE DOUBLED UP OR STACKED BACK TO BACK CONNECTIONS ON OPPOSITE SIDES OF THE GROUND BUS ARE PERMITTED.
8. ALL EXTERIOR GROUND CONDUCTORS BETWEEN EQUIPMENT/GROUND BARS AND THE GROUND RING, SHALL BE #2 AWG SOLID TINNED COPPER UNLESS OTHERWISE INDICATED.
9. ALUMINUM CONDUCTOR OR COPPER CLAD STEEL CONDUCTOR SHALL NOT BE USED FOR GROUNDING CONNECTIONS.
10. USE OF 90° BENDS IN THE PROTECTION GROUNDING CONDUCTORS SHALL BE AVOIDED WHEN 45° BENDS CAN BE ADEQUATELY SUPPORTED.
11. EXOTHERMIC WELDS SHALL BE USED FOR ALL GROUNDING CONNECTIONS BELOW GRADE.
12. ALL GROUND CONNECTIONS ABOVE GRADE (INTERIOR & EXTERIOR) SHALL BE FORMED USING HIGH PRESS CRIMPS.
13. COMPRESSION GROUND CONNECTIONS MAY BE REPLACED BY EXOTHERMIC WELD CONNECTIONS.
14. ICE BRIDGE BONDING CONDUCTORS SHALL BE EXOTHERMICALLY BONDED OR BOLTED TO THE BRIDGE AND THE TOWER GROUND BAR.
15. APPROVED ANTIOXIDANT COATINGS (I.E., CONDUCTIVE GEL OR PASTE) SHALL BE USED ON ALL COMPRESSION AND BOLTED GROUND CONNECTIONS.
16. ALL EXTERIOR GROUND CONNECTIONS SHALL BE COATED WITH A CORROSION RESISTANT MATERIAL.
17. MISCELLANEOUS ELECTRICAL AND NON-ELECTRICAL METAL BOXES, FRAMES AND SUPPORTS SHALL BE BONDED TO THE GROUND RING, IN ACCORDANCE WITH THE NEC.
18. BOND ALL METALLIC OBJECTS WITHIN 6 FT OF MAIN GROUND WIRES WITH 1-#2 AWG TIN-PLATED COPPER GROUND CONDUCTOR.
19. GROUND CONDUCTORS USED IN THE FACILITY GROUND AND LIGHTNING PROTECTION SYSTEMS SHALL NOT BE ROUTED THROUGH METALLIC OBJECTS THAT FORM A RING AROUND THE CONDUCTOR, SUCH AS METALLIC CONDUITS, METAL SUPPORT CLIPS OR SLEEVES THROUGH WALLS OR FLOORS. WHEN IT IS REQUIRED TO BE HOUSED IN CONDUIT TO MEET CODE REQUIREMENTS OR LOCAL CONDITIONS, NON-METALLIC MATERIAL SUCH AS PVC PLASTIC CONDUIT SHALL BE USED. WHERE USE OF METAL CONDUIT IS UNAVOIDABLE (E.G., NON-METALLIC CONDUIT PROHIBITED BY LOCAL CODE) THE GROUND CONDUCTOR SHALL BE BONDED TO EACH END OF THE METAL CONDUIT.

DETAIL 621

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APEX JOB No. CIDS-016

CHERRY COURT APARTMENTS
SITE NO. WI-1011
1525 N. 24th STREET
MILWAUKEE, WISCONSIN 53208

cingular WIRELESS

NO.	DATE	REVISIONS	BY	CHK	APP'D
0	03-02-06	ISSUED FOR CONSTRUCTION	TB	RG	RG

SCALE: AS SHOWN | DESIGNED BY: TB | DRAWN BY: TB

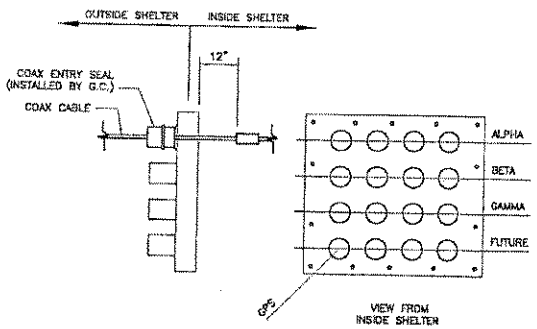
CINGULAR WIRELESS

ELECTRICAL NOTES & DETAIL

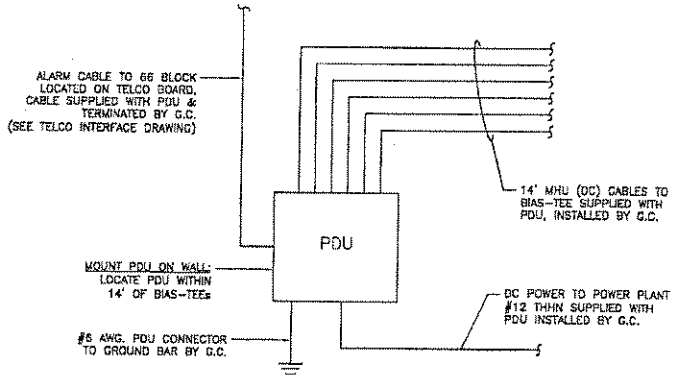
DRAWING NUMBER: WI-1011-10 | REV: 0

11 x 17 SIZE

6 5 4 3 2

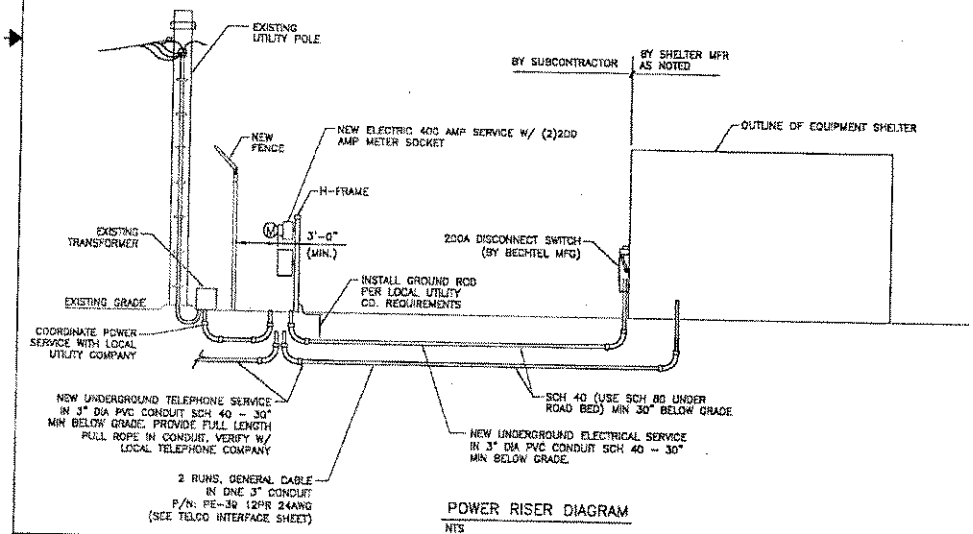


HATCH PLATE LAYOUT
NTS

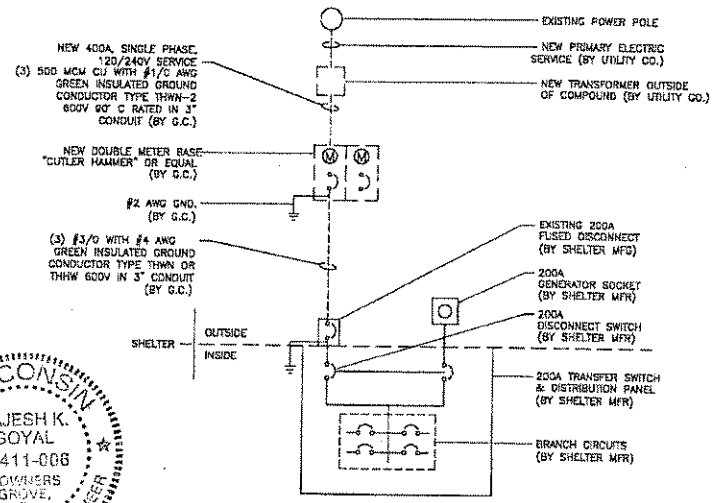


NOTE:
PDU TO BE INSTALLED ONLY WHEN APPLICABLE

PDU SCHEMATIC
NTS



POWER RISER DIAGRAM
NTS



1005 ONE-LINE DIAGRAM
NTS

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APEX JOB No. C105-016

CHERRY COURT APARTMENTS
SITE NO. WI-1011
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cingular WIRELESS

NO.	DATE	REVISIONS	BY	CHK	APP'D
0	03-07-06	ISSUED FOR CONSTRUCTION	TB	RC	RC

SCALE: AS SHOWN | DESIGNED BY: TB | DRAWN BY: TB

CINGULAR WIRELESS

SINGLE LINE DIAGRAM & DETAILS

DRAWING NUMBER: WI-1011-11 | REV: 0

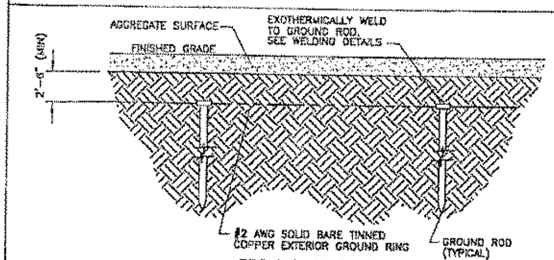
11 x 17

6 5 4 3 2

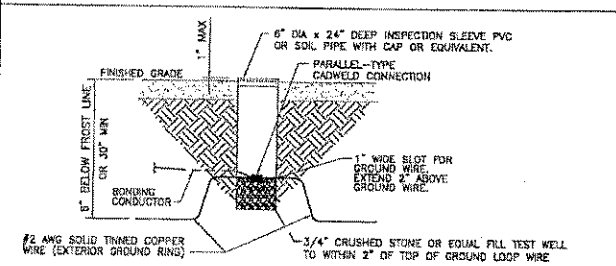
A B C D

GENERAL NOTES:

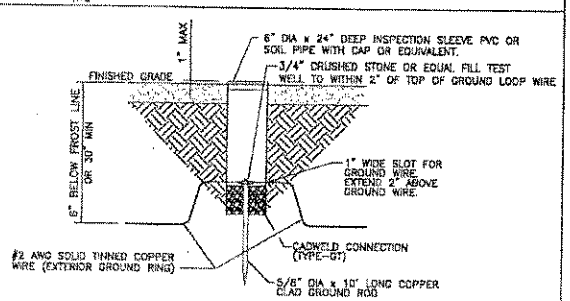
1. ALL DETAILS ARE SHOWN IN GENERAL TERMS. ACTUAL GROUNDING INSTALLATION AND CONSTRUCTION MAY VARY DUE TO SPECIFIC SITE CONDITIONS.
2. ALL EXTERIOR GROUNDING CABLE AND TOP OF GROUNDING RODS SHALL BE BURIED A MINIMUM DEPTH OF 2'-6" BELOW FINISHED GRADE, OR 6" BELOW FROST LINE, WHICHEVER IS DEEPER.
3. ALL GROUNDING CONDUCTORS SHALL BE #2 SOLID TINNED COPPER CABLE.
4. GROUND SYSTEM SHALL BE TESTED PER SPECIFICATIONS AND SHALL HAVE A RESISTANCE OF 5 OHMS OR LESS.
5. NOTIFY ENGINEER IF THERE ARE ANY DIFFICULTIES INSTALLING GROUNDING SYSTEM DUE TO SITE SOIL CONDITIONS.



GROUND RING DETAIL
NTS



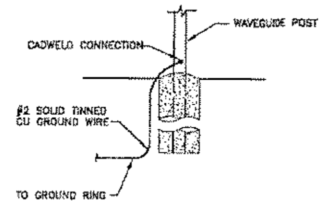
EXOTHERMIC WELD W/ INSPECTION SLEEVE
NTS



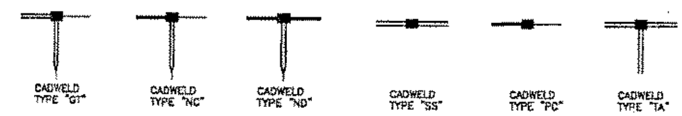
GROUND ROD W/ INSPECTION SLEEVE
NTS

KEYED NOTES:

1. TOWER GROUNDING: EXTEND #2 TINNED CU WIRE FROM BURIED GROUND RING TO EXISTING TOWER AND MAKE EXOTHERMIC CONNECTION.
2. HATCHPLATE GROUND BAR: EXTEND #2 TINNED CU WIRE FROM BURIED GROUND RING UP TO THE HATCHPLATE GROUND BAR AND MAKE A MECHANICAL CONNECTION.
3. GROUNDING OF INTERNAL GROUND RING: EXTEND #2 TINNED CU WIRE FROM BURIED GROUND RING THROUGH 1/2" DIA. PVC SLEEVE INTO EQUIPMENT SHELTER FOR CONNECTION TO INTERIOR HALO GROUND RING. TYPICAL AT 4 BUILDING CORNERS.
4. GROUND ROD: COPPERCLAD STEEL, 5/8" DIA. TEN (10) FEET LONG.
5. ICE BRIDGE SUPPORT POST GROUNDING: EXTEND #2 TINNED CU WIRE FROM BURIED GROUND RING TO ALL ICE BRIDGE SUPPORT POSTS AND EXOTHERMICALLY WELD.
6. FENCE GROUNDING: IF FENCE IS WITHIN 6' OF GROUND RING, EXTEND #2 TINNED CU WIRE FROM BURIED GROUND RING TO FENCE CORNER POSTS AND EXOTHERMICALLY WELD. BOND INTERMEDIATE POST IF REQUIRED TO MAINTAIN 25' MAX SPACING.
7. HVAC GROUNDING: EXTEND #2 TINNED CU WIRE FROM BURIED GROUND RING TO THE HVAC UNIT AND MAKE A MECHANICAL CONNECTION.
8. TOWER GROUND BAR: EXTEND #2 TINNED CU WIRE FROM BURIED GROUND RING UP TO THE TOWER GROUND BAR AND MAKE A MECHANICAL CONNECTION. SECURE GROUND BAR DIRECTLY TO TOWER WITH STAINLESS STEEL MOUNTING MATERIAL.
9. CELL REFERENCE GROUND BAR: EXTEND #2 TINNED CU WIRE FROM BURIED GROUND RING UP TO THE CELL REFERENCE GROUND BAR (INSIDE SHELTER) AND MAKE A MECHANICAL CONNECTION.
10. TELCO GROUND BAR: EXTEND #2 TINNED CU WIRE FROM BURIED GROUND RING UP TO TELCO GROUND BAR (INSIDE SHELTER) AND MAKE A MECHANICAL CONNECTION.
11. ANTENNA GROUND BAR: MOUNT GROUND BAR DIRECTLY TO TOWER AT TOP OF COAX RUNS. SECURE TO TOWER WITH STAINLESS STEEL MOUNT.
12. GATE GROUNDING: EXTEND #2 TINNED CU WIRE FROM BURIED GROUND RING TO GATE POSTS AND EXOTHERMICALLY WELD.



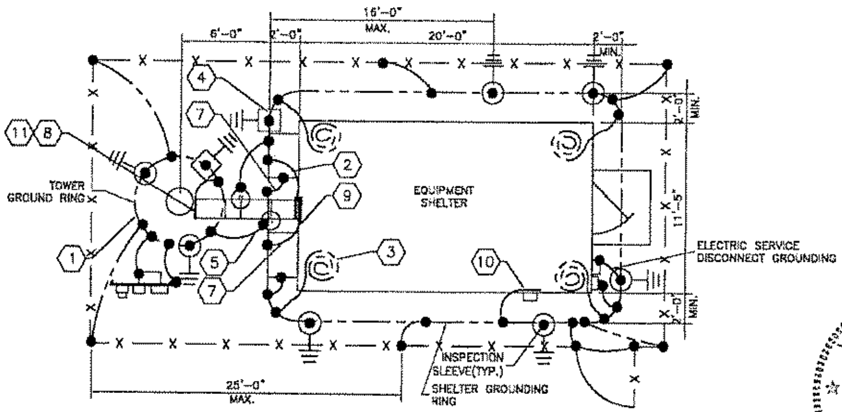
WAVEGUIDE POST GROUNDING DETAIL
NTS



CABLE TO GROUND ROD COMBINATIONS

CABLE TO CABLE COMBINATIONS

EXOTHERMIC WELDING DETAILS
NTS



GROUNDING PLAN
(EXAGGERATED FOR CLARITY)

NORTH

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APEX JOB No. C105-016

CHERRY COURT APARTMENTS
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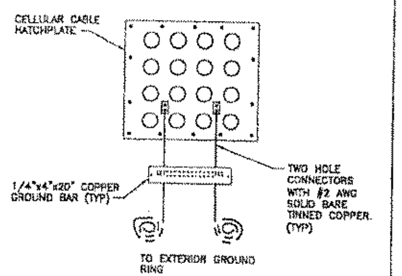
cingular WIRELESS

NO.	DATE	REVISIONS	BY	CHK	APP'D
0	03-02-06	ISSUED FOR CONSTRUCTION	TB	RC	RG

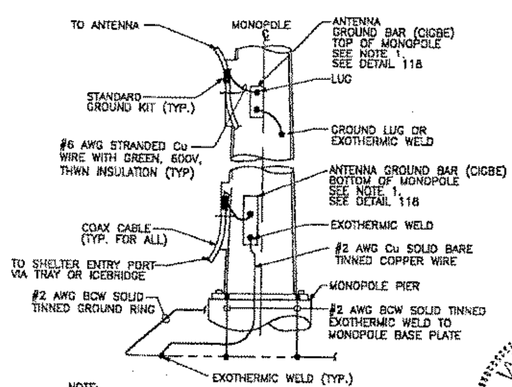
SCALE: AS SHOWN | DESIGNED BY: TB | DRAWN BY: TB

CINGULAR WIRELESS
GROUNDING DETAILS
DRAWING NUMBER: WI-1011-12
REV: 0

11 x 17 'B' SIZE



HATCH PLATE GROUNDING AT BUILDING
NTS



NOTE:
1. NUMBER OF GROUND BARS MAY VARY DEPENDING ON THE TYPE OF MONOPOLE, ANTENNA LOCATION AND CONNECTION ORIENTATION. PROVIDE AS REQUIRED.

ANTENNA CABLE GROUNDING - MONOPOLE

DETAIL 123

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DOWNERS GROVE, IL
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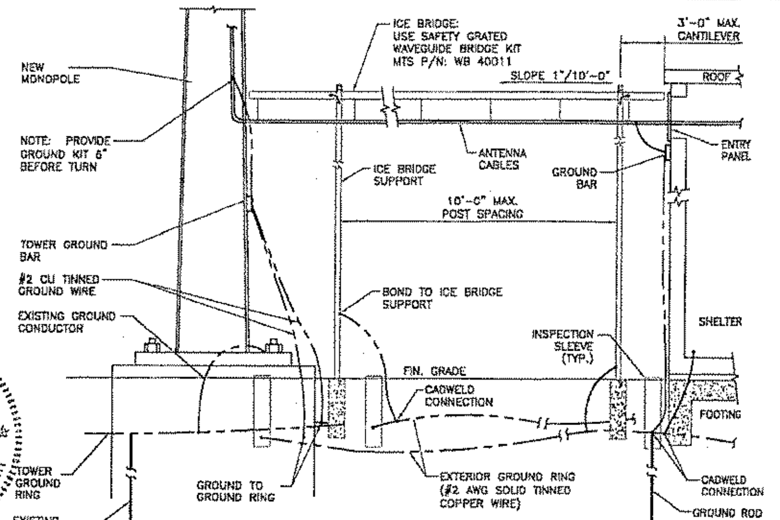
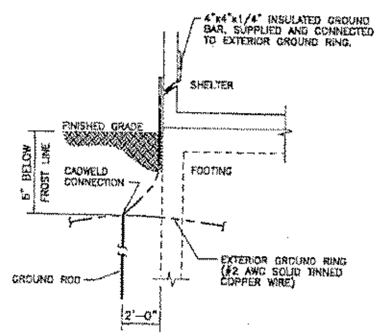
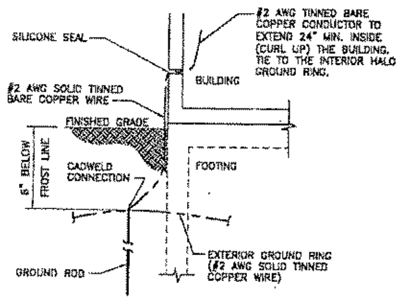


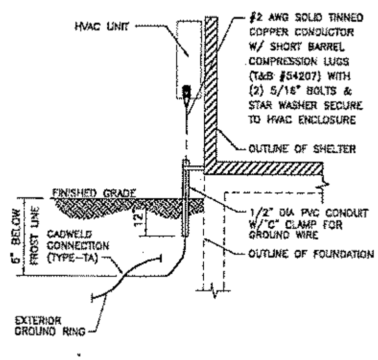
ICE BRIDGE AND ANTENNA CABLE DETAIL
NTS



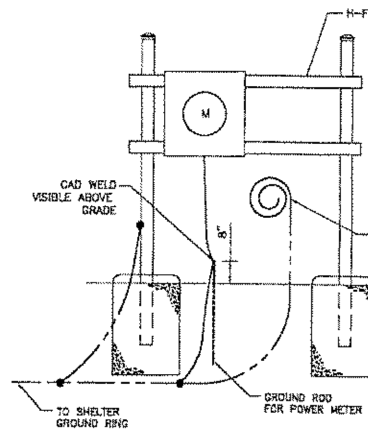
TELEPHONE GROUND DETAIL
NTS



BUILDING GROUND DETAIL
NTS



HVAC GROUND DETAIL
NTS



H-FRAME GROUND DETAIL
NTS

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CHERRY COURT APARTMENTS
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cingular WIRELESS

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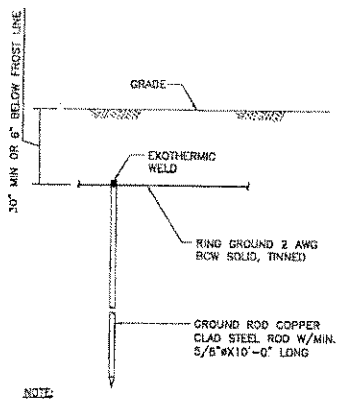
SCALE: AS SHOWN | DESIGNED BY:TB | DRAWN BY:TB

CINGULAR WIRELESS

GROUNDING DETAILS

DRAWING NUMBER: WI-1011-13 | REV: 0

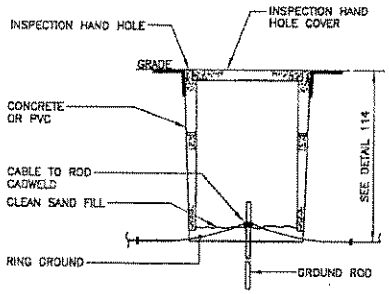
11 x 17 B SIZE



NOTE:
GROUND ROD SHALL BE DRIVEN VERTICALLY, NOT TO EXCEED 45 DEGREES FROM THE VERTICAL.

GROUND ROD

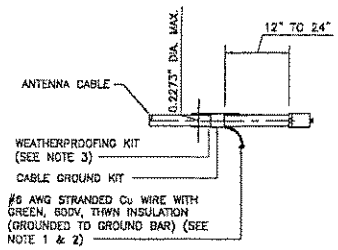
DETAIL 114 NTS



NOTE: INSPECTION HAND HOLE MAY BE CONCRETE OR PVC AND SHALL BE A MINIMUM OF 8" IN WIDTH/DIAMETER

GROUND ROD WITH ACCESS AREA

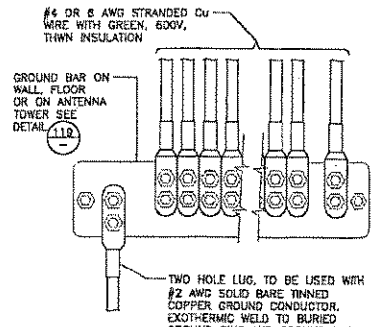
DETAIL 644



CONNECTION OF CABLE GROUND KIT TO ANTENNA CABLE

NOTES:
1. DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO GROUND BAR.
2. GROUNDING KIT SHALL BE TYPE AND PART NUMBER AS SUPPLIED OR RECOMMENDED BY CABLE MANUFACTURER.
3. WEATHER PROOFING SHALL BE (TYPE AND PART NUMBER AS SUPPLIED OR RECOMMENDED BY CABLE MANUFACTURER.)

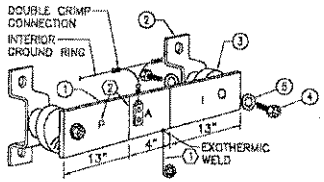
DETAIL 121



INSTALLATION OF GROUND WIRE TO GROUND BAR

DETAIL 118

NEWTON INSTRUMENT COMPANY, INC. BUTNER, N.C.			
NO.	REQ.	PART NO.	DESCRIPTION
①	1	1/4"x4"x30"	SOLID GND. BAR
②	2	A-5056	WALL MTG. BRKT.
③	2	3061-4	INSULATORS
④	4	3012-1	5/8"-11x1" H.H.C.S.
⑤	4	3015-8	5/8 LOCKWASHER



EACH GROUND CONDUCTOR TERMINATING ON ANY GROUND BAR SHALL HAVE AN IDENTIFICATION TAG ATTACHED AT EACH END THAT WILL IDENTIFY ITS ORIGIN AND DESTINATION.

SECTION "P" – SURGE PROTECTORS

CABLE ENTRY PORTS (HATCH PLATES) (#2)
GENERATOR FRAMEWORK (IF AVAILABLE) (#2)
TELCO GROUND BAR (#2)
COMMERCIAL POWER COMMON NEUTRAL/GROUND BOND (#2)
+24V POWER SUPPLY RETURN BAR (#2)
–48V POWER SUPPLY RETURN BAR (#2)
RECTIFIER FRAMES.
COAX SUPPRESSION

SECTION "A" – SURGE ABSORBERS

INTERIOR GROUND RING (#2)
EXTERNAL EARTH GROUND FIELD (BURIED GROUND RING) (#2)
METALLIC COLD WATER PIPE (IF AVAILABLE) (#2)
BUILDING STEEL (IF AVAILABLE) (#2)

SECTION "I" – ISOLATED GROUND ZONE

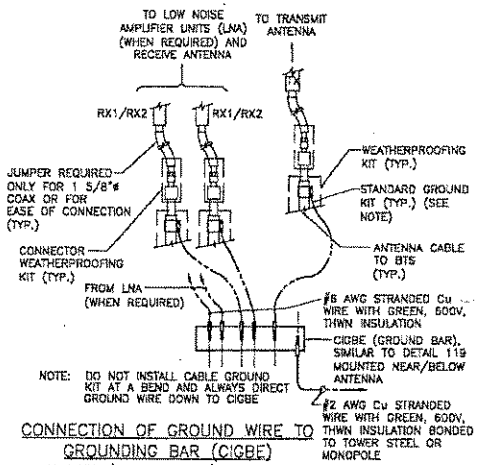
ALL COMMUNICATIONS EQUIPMENT FRAMES.
ISOLATED GROUND BAR – IGB (#2)

DETAIL NOTES:

1. EXOTHERMICALLY WELD #2 AWG BARE TINNED SOLID COPPER CONDUCTOR TO GROUND BAR. ROUTE CONDUCTOR TO BURIED GROUND RING AND PROVIDE PARALLEL EXOTHERMIC WELD.
2. USE PERMANENT MARKER TO DRAW THE LINES BETWEEN EACH SECTION AND LABEL EACH SECTION ("P", "A", "I") WITH 1" HIGH LETTERS.

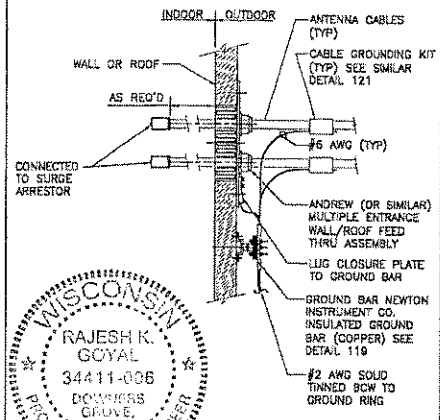
(RGB) REFERENCE GROUND BAR – DETAIL

DETAIL 119



CONNECTION OF GROUND WIRE TO GROUNDING BAR (CIGBE) TOWER/MONOPOLE/ROOFTOP

DETAIL 122



DETAIL 132 NTS

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cingular WIRELESS

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SCALE: AS SHOWN | DESIGNED BY: TB | DRAWN BY: TB

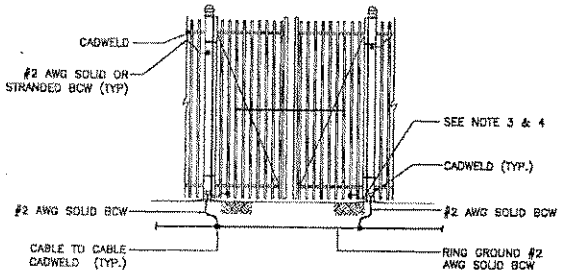
CINGULAR WIRELESS

GROUNDING DETAILS

DRAWING NUMBER: WI-1011-14 | REV: 0

SIZE: D

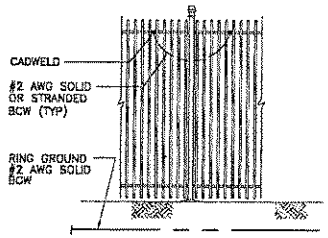
6 5 4 3 2



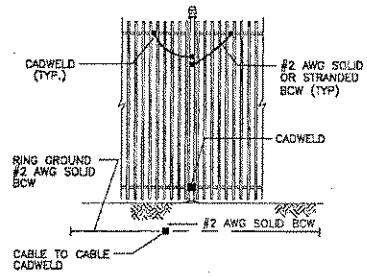
FENCE GATE GROUNDING

NOTES:

1. THE #2 AWG, BCW, FROM THE RING GROUND SHALL BE CADWELDED TO THE POST ABOVE GRADE.
2. BOND EACH HORIZONTAL POLE/BRACE TO EACH OTHER AND TO EACH VERTICAL POLE BONDED TO THE EXTERIOR GROUND RING
3. GATE JUMPER SHALL BE #4/0 AWG WELDING CABLE OR FLEXIBLE COPPER BRAID BURNDY TYPE B WITH SLEEVES ON EACH END DESIGNED FOR EXOTHERMIC WELDING.
4. GATE JUMPER SHALL BE INSTALLED SO THAT IT WILL NOT BE SUBJECTED TO DAMAGING STRAIN WHEN GATE IS FULLY OPEN IN EITHER DIRECTION.



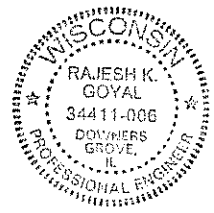
VERTICAL POST NOT CONNECTED TO RING



VERTICAL POST CONNECTED TO RING

NOTE:

1. VERTICAL POSTS SHALL BE BONDED TO THE RING AT EACH CORNER AND AT EACH GATE POST. AS A MINIMUM ONE VERTICAL POST SHALL BE BONDED TO THE GROUND RING IN EVERY 100 FOOT STRAIGHT RUN OF FENCE.
2. HORIZONTAL POLES SHALL BE BONDED TO EACH OTHER.
3. BOND EACH HORIZONTAL POLE / BRACE TO EACH OTHER AND TO EACH VERTICAL POST THAT IS BONDED TO THE EXTERIOR GROUND RING



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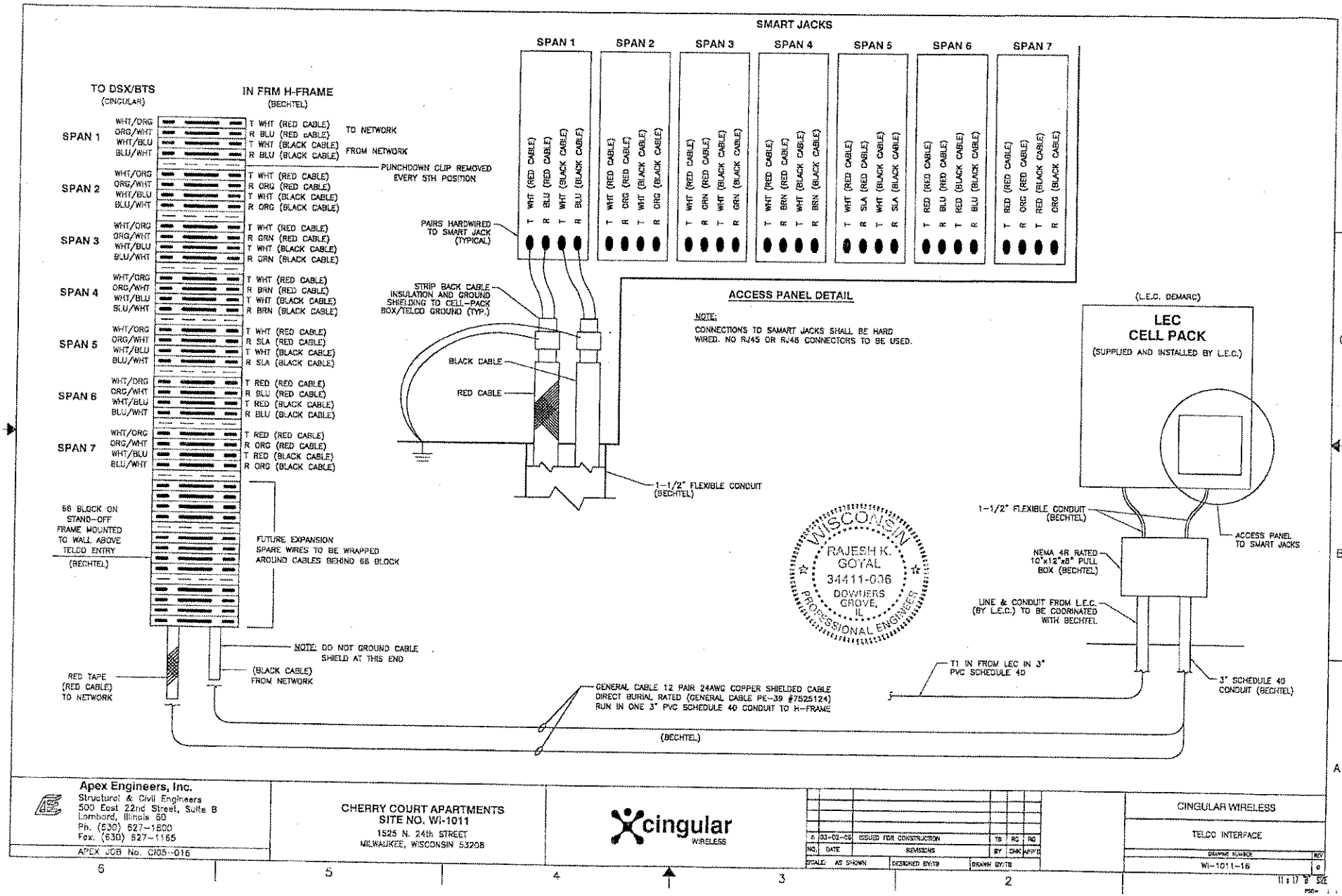
CINGULAR WIRELESS

FENCE GROUNDING DETAILS

DRAWING NUMBER: WI-1011-15 | REV: 0

6 5 4 3 2 1



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cingular WIRELESS

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6	03-02-05	ISSUED FOR CONSTRUCTION	TB	RC	RD

SCALE: AS SHOWN | DESIGNED BY: TB | DRAWN BY: TB

CINGULAR WIRELESS

TELCO INTERFACE

DRAWING NUMBER: WI-1011-16 | REV: 6

11 x 17 B SIZE

POS	ALARM #	BLOCK 1	
1	AL-00	CELL SITE INTRUSION	
2	AL-01	CINGULAR IN CELL SITE	
3	AL-02	EMERGENCY CALL	
4	AL-03	TWR. LIGHT A/C FAIL	*
5	AL-04	TWR. BEACON FAIL	*
6	AL-05	TWR. STROBE FAIL	*
7	AL-06	TWR. SIDE LIGHT FAIL	*
8	AL-07	TWR. PHOTO CELL FAIL	*
9	AL-08	FIRE SYSTEM TROUBLE	
10	AL-09	HALON DISCHARG	
11	AL-10	SMOKE	
12	AL-11	HIGH TEMP.	
13	AL-12	COMMERCIAL PWR FAIL	
14	AL-13	PP BATT. ON DISCHARGE	
15	AL-14	PP MAJOR	
16	AL-15	PP MINOR	
17	AL-16	(+24) PDU ALARM	
18	AL-17	(-48) RECT. CRITICAL	
19	AL-18	PP CONVERTER MAJOR	
20	AL-19	PP CONVERTER MINOR	
21	AL-20	(-48) PDU ALARM	**
22	AL-21	TMA FAIL	*
23	AL-22	HVAC LOCKOUT#1	
24	AL-23	HVAC LOCKOUT#2	

POS	ALARM #	BLOCK 2
1	AL-24	LOW TEMP.
2	AL-25	FIF FUSE ALARM
3	AL-26	FIF PARAGON ALARM
4	AL-27	HIGH HUMIDITY
5	AL-28	SURGE ARRESTOR
6	AL-29	HYDROGEN DETECTOR
7	AL-30	PP FUSE ALARM
8	AL-31	PP AUDIBLE ALARM
9	AL-32	PP HIGH VOLTAGE
10	AL-33	PP AC FAIL
11	AL-34	PP PCU FAIL ALARM MINOR
12	AL-35	PP PCU FAIL ALARM MAJOR
13	AL-36	
14	AL-37	
15	AL-38	
16	AL-39	
17	AL-40	
18	AL-41	
19	AL-42	
20	AL-43	
21	AL-44	
22	AL-45	
23	AL-46	
24	AL-47	

* DENOTES BECHTEL PUNCHDOWN RESPONSIBILITY.
** PDU ALARM TERMINATION WHEN APPLICABLE.

DETAIL 1017 — 66 PUNCHDOWN BLOCK
NTS

WISCONSIN
RAJESH K. GOYAL
34411-006
DOWNERS GROVE, IL
PROFESSIONAL ENGINEER

Apex Engineers, Inc.
Structural & Civil Engineers
500 East 22nd Street, Suite B
Lombard, Illinois 60
Ph. (630) 627-1800
Fax. (630) 627-1165
APEX JOB No. CI05-016

CHERRY COURT APARTMENTS
SITE NO. WI-1011
1525 N. 24th STREET
MILWAUKEE, WISCONSIN 53208

cingular WIRELESS

NO.	DATE	REVISIONS	BY	CHK	APP'D
0	03-03-05	ISSUED FOR CONSTRUCTION	TB	RG	RC

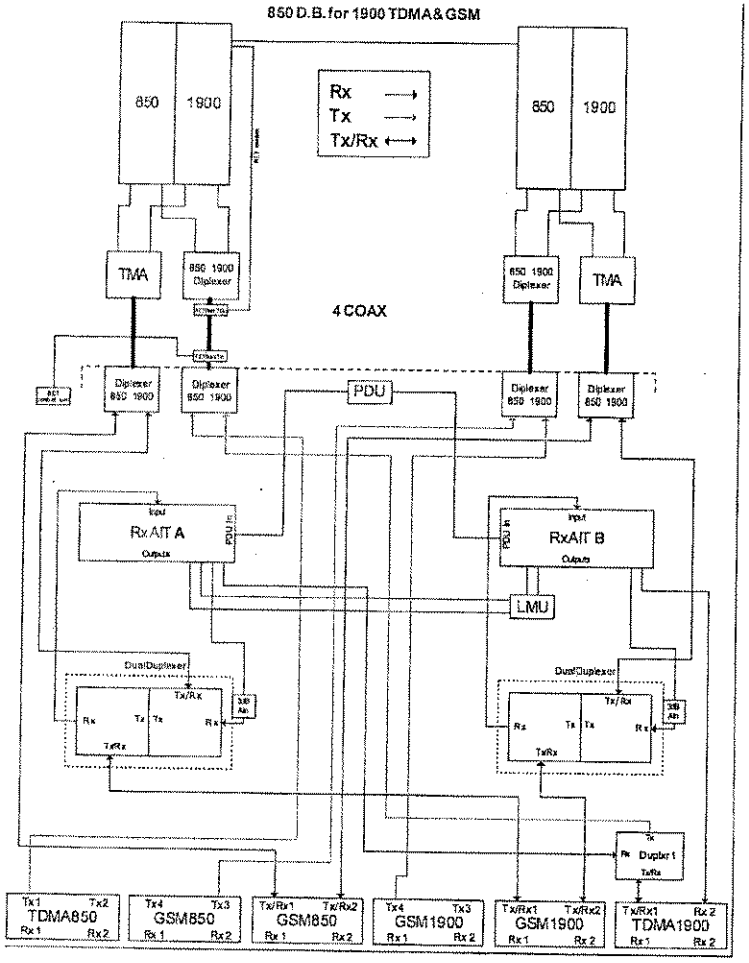
SCALE: AS SHOWN | DESIGNED BY: TB | DRAWN BY: TB

CINGULAR WIRELESS

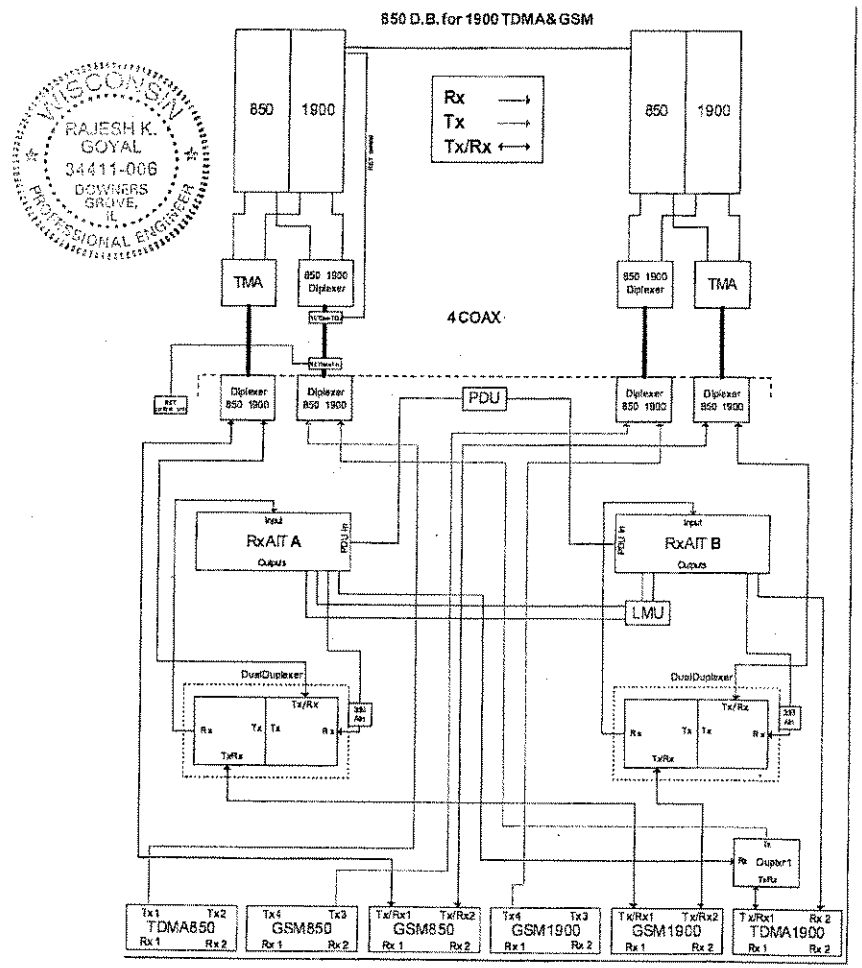
66 BLOCK TERMINATIONS

DRAWING NUMBER: WI-1011-17 | REV: 0

11 x 17 SIZE



SECTOR "A"



SECTOR "B"

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APEX JOB No. C05-016

CHERRY COURT APARTMENTS
SITE NO. WI-1011
1525 N. 24th STREET
MILWAUKEE, WISCONSIN 53208

cingular WIRELESS

NO.	DATE	REVISIONS	BY	CHK	APP'D
0	03-02-06	ISSUED FOR CONSTRUCTION	TB	RG	RG

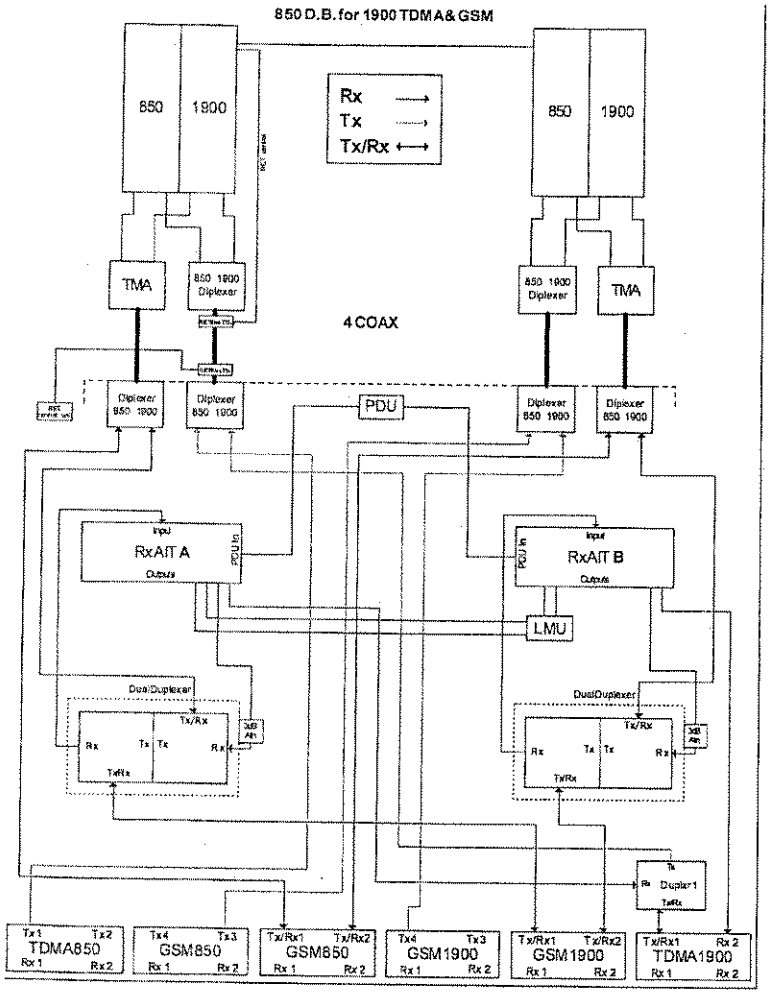
SCALE: AS SHOWN | DESIGNED BY: TB | DRAWN BY: TB

CINGULAR WIRELESS

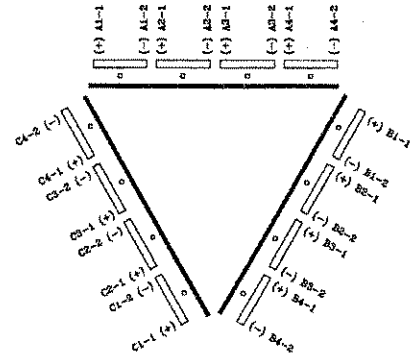
SECTORS A & B

DRAWING NUMBER: WI-1011-16 | REV: 0

11 x 17 'B' SIZE



SECTOR "C"



ANTENNA CONFIGURATION - PLAN VIEW

WISCONSIN
RAJESH K. GOYAL
044-11606
DOWNERS GROVE, IL
PROFESSIONAL ENGINEER

Apex Engineers, Inc. Structural & Civil Engineers 500 East 22nd Street, Suite B Lombard, Illinois 60 Ph. (630) 627-1800 Fax. (630) 627-1165 APEX JOB No. CIDS-016	CHERRY COURT APARTMENTS SITE NO. WI-1011 1525 N. 24th STREET MILWAUKEE, WISCONSIN 53208	cingular WIRELESS	CINGULAR WIRELESS SECTOR C & ANTENNA CONFIGURATION DRAWING NUMBER: WI-1011-19 REV: 0

NO.	DATE	REVISIONS	BY	CHK	APP'D
0	03-02-06	ISSUED FOR CONSTRUCTION	TS	RS	RG

SCALE: AS SHOWN | DESIGNED BY: TS | DRAWN BY: TS

11 x 17 SIZE

SECTOR	ANTENNA NUMBER	POLARITY	TOP AND BOTTOM JUMPER NUMBER	MAIN COAX NUMBER	ANTENNA MODEL	ANTENNA VENDOR	AZIMUTH	MECH. DOWNTILT	ELECT. DOWNTILT	ANTENNA CENTERLINE FROM GROUND	ANTENNA TIP HEIGHT	COAXIAL FEEDER SIZE	COAXIAL FEEDER LENGTH
A	A1-1	+45 CELL 850	# 1-850	#1	XDUO4-80-R	CSS	0	0	N/A	105'	107.1'	1-5/8"	125'
	A1-2	+45 PCS 1900	# 1-1900									1-5/8"	125'
		-45 CELL 850	# 2-850	#2									
		-45 PCS 1900	# 2-1900										
	A4-1	+45 CELL 850	# 3-850	#3	XDUO4-80-R	CSS	0	0	N/A	105'	107.1'	1-5/8"	125'
	A4-2	+45 PCS 1900	# 3-1900									1-5/8"	125'
		-45 CELL 850	# 4-850	#4									
		-45 PCS 1900	# 4-1900										
B	B1-1	+45 CELL 850	# 9-850	#5	XDUO4-80-R	CSS	120	0	N/A	105'	107.1'	1-5/8"	125'
	B1-2	+45 PCS 1900	# 9-1900									1-5/8"	125'
		-45 CELL 850	# 10-850	#6									
		-45 PCS 1900	# 10-1900										
	B4-1	+45 CELL 850	# 11-850	#7	XDUO4-80-R	CSS	120	0	N/A	105'	107.1'	1-5/8"	125'
	B4-2	+45 PCS 1900	# 11-1900									1-5/8"	125'
		-45 CELL 850	# 12-850	#8									
		-45 PCS 1900	# 12-1900										
C	C1-1	+45 CELL 850	# 17-850	#9	XDUO4-80-R	CSS	240	0	N/A	105'	107.1'	1-5/8"	125'
	C1-2	+45 PCS 1900	# 17-1900									1-5/8"	125'
		-45 CELL 850	# 18-850	#10									
		-45 PCS 1900	# 18-1900										
	C4-1	+45 CELL 850	# 19-850	#11	XDUO4-80-R	CSS	240	0	N/A	105'	107.1'	1-5/8"	125'
	C4-2	+45 PCS 1900	# 19-1900									1-5/8"	125'
		-45 CELL 850	# 20-850	#12									
		-45 PCS 1900	# 20-1900										

ITEM:	DESCRIPTION:
TMA MODEL ALL SECTORS (6 TOTAL)	RFS ATM 19201Z-D
DIPLEXER MODEL ALL SECTORS (6 TOTAL)	RFS FDGW5504/2C-3

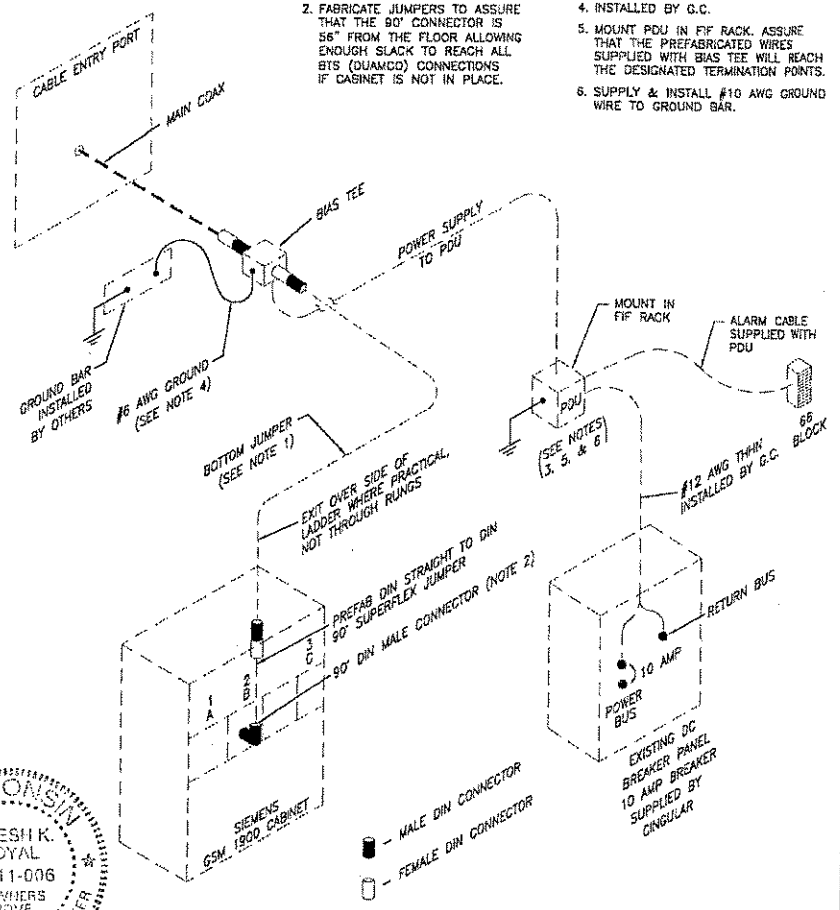
* SEE RF INFO

ANTENNA INFORMATION CHART

WIS-1 CONFIGURATION

NOTES:

1. FOR BOTTOM JUMPERS USE 1/2" LDF4 OR EQUIVALENT.
2. FABRICATE JUMPERS TO ASSURE THAT THE 90° CONNECTOR IS 56" FROM THE FLOOR ALLOWING ENOUGH SLACK TO REACH ALL BTS (DUAMCD) CONNECTIONS IF CABINET IS NOT IN PLACE.
3. SUPPLIED BY BECHTEL/CINGULAR INSTALLED BY G.C.
4. INSTALLED BY G.C.
5. MOUNT PDU IN FIF RACK. ASSURE THAT THE PREFABRICATED WIRES SUPPLIED WITH BIAS TEE WILL REACH THE DESIGNATED TERMINATION POINTS.
6. SUPPLY & INSTALL #10 AWG GROUND WIRE TO GROUND BAR.



WISCONSIN
RAJESH K. GOYAL
34411-006
DOWNERS GROVE, IL
PROFESSIONAL ENGINEER

BOTTOM JUMPER & BIAS TEE DETAIL

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APEX JOB No. CI05-016

CHERRY COURT APARTMENTS
SITE NO. WI-1011
1525 N. 24th STREET
MILWAUKEE, WISCONSIN 53208

cingular WIRELESS

NO.	DATE	REVISIONS	BY	CHK	APP'D
0	03-02-06	ISSUED FOR CONSTRUCTION	TB	RG	RG

SCALE: AS SHOWN | DESIGNED BY: TB | DRAWN BY: TB

CINGULAR WIRELESS

BOTTOM JUMPER DETAIL

DRAWING NUMBER: WI-1011-20 | REV: 0

11 x 17 B SIZE

GENERAL NOTES:

1. SECTOR ORIENTATION/AZIMUTH WILL VARY FROM REGION TO REGION AND IS SITE SPECIFIC. REFER TO RF REPORT FOR EACH SITE TO DETERMINE THE ANTENNA LOCATION AND FUNCTION OF EACH TOWER SECTOR FACE.
2. REFER TO THE ANTENNA INFORMATION TABLES ON THE BOTTOM JUMPER DETAIL SHEET AND THE RF CONFIGURATION SHEETS FOR TAG NUMBERS.

EXAMPLE COAX TAG LOCATION (2)(3)

GSM LINE TAG

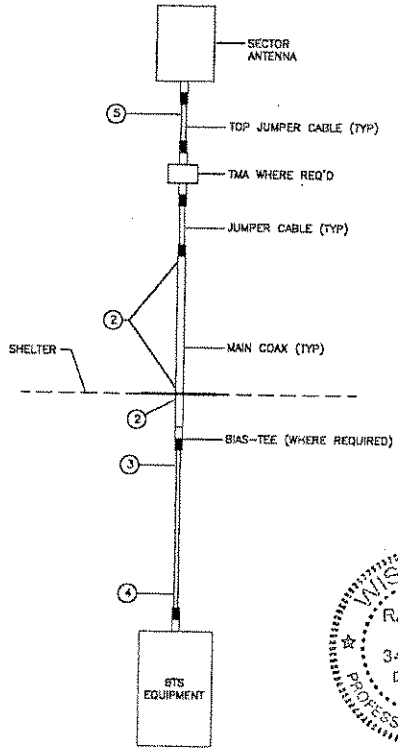
EXAMPLE JUMPER TAG LOCATION (1)(4)(5)

GSM LINE TAG

RF CABLES SHALL BE IDENTIFIED WITH A LAMACOID TAG MADE OF 1-1/2" DIAMETER, 1/8" THICK, UV RESISTANT PLASTIC, LABELED WITH THE CABLE NUMBER, ANTENNA POSITION, AND CABLE NUMBER. THE ID MARKING LOCATIONS SHOULD BE AS PER "CABLE TAG LOCATIONS TABLE". EXTERIOR TAGS SHALL BE MOUNTED WITH STAINLESS STEEL TIE WRAPS. INTERNAL TAGS SHALL BE MOUNTED WITH BLACK NYLON TIE WRAPS. THE TAGS SHALL BE AS SHOWN ON THE "GSM LINE TAG" DETAILS.

CABLE MARKING TAGS

CABLE TAG LOCATIONS TABLE	
NO.	LOCATIONS
1.	EACH MAIN COAX SHALL BE TAGGED NEAR THE TOP-JUMPER CONNECTION AND JUST PRIOR TO ENTERING THE BTS OR TRANSMITTER BUILDING.
2.	ON CABLE NEAR ENTRY PORT ON THE INTERIOR OF THE SHELTER. (IF SHELTER IS USED)
3.	TAG BOTTOM JUMPERS NEAR DIPLEXER, BIAS TEE, OR MAIN COAX.
4.	ALL BOTTOM JUMPERS SHALL BE TAGGED 1 FOOT FROM THE END CONNECTOR AT THE BTS
5.	ALL TOP JUMPERS SHALL BE TAGGED 1 FOOT FROM THE END CONNECTOR



CABLE MARKING LOCATIONS DIAGRAM

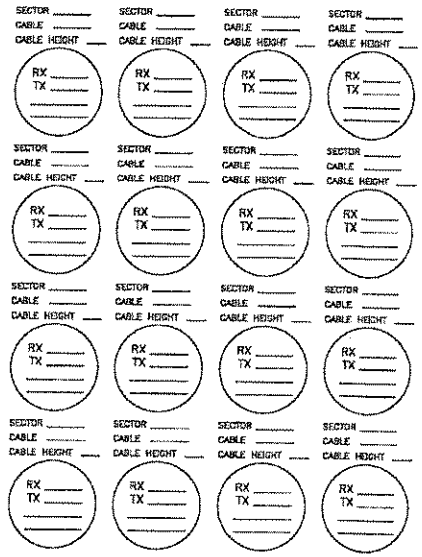
COAX TAG IDENTIFICATION DETAIL

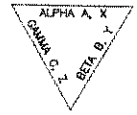
DETAIL NTS 636M

WISCONSIN
RAJESH K. GOYAL
34411-006
DOWNERS GROVE, IL
PROFESSIONAL ENGINEER

CABLE PORT DIAGRAM

CAUTION: HARMFUL RF ENERGY EXISTS ON THESE LINES





CABLE PORT NOTES:

TOWER PLAN VIEW

A. CONTRACTOR SHALL FILL OUT THE CABLE PORT DIAGRAM UPON COAX INSTALLATION. CABLE PORT DIAGRAM WILL BE AFFIXED TO THE INTERIOR SHELTER WALL NEAR THE CABLE ENTRY PORT TO AID IN CABLE IDENTIFICATION. THE CHART IS INTENDED TO BE USED TO RECORD THE LINE AND CORRESPONDING ANTENNA POSITION ON THE TOWER AT THE TIME OF INSTALLATION.

B. ONE COMPLETED COPY PLUS TWO BLANK COPIES OF THE CHART SHOULD BE POSTED IN THE SHELTER IN A PROTECTIVE PLASTIC SLEEVE.

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Structural & Civil Engineers
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Fax. (630) 627-1185
APEX JOB No. CI05-016

CHERRY COURT APARTMENTS
SITE NO. WI-1011
1525 N. 24th STREET
MILWAUKEE, WISCONSIN 53208

cingular WIRELESS

NO.	DATE	REVISIONS	BY	CHK	APP'D
0	03-02-06	ISSUED FOR CONSTRUCTION	TB	RG	RG

SCALE: AS SHOWN | DESIGNED BY: TB | DRAWN BY: TB

CINGULAR WIRELESS

COAX COLOR CODING

DRAWING NUMBER: WI-1011-21 | REV: 0

11 x 17 "B" SIZE

PROJECT: CHERRY COURT APARTMENTS WI-1011

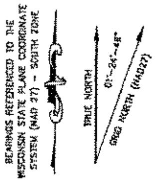
SURVEYED FOR:
APEX ENGINEERS, INC.
500 EAST 22ND STREET
LOMBARD, ILLINOIS 60148

PROPERTY OWNER:
HOUSING AUTHORITY OF MILWAUKEE
809 N. BROADWAY – P.O. BOX 324
MILWAUKEE, WI 53202

TAX KEY NUMBER:
3642000100

– TOWER BASE –
(EXISTING)
Latitude: 43°-03'-02.51"
Longitude: 87°-56'-36.05"
(Per North American Datum of 27)
Elevation: 672.6'
(Per National Geodetic Vertical Datum of 1929)

– TOWER BASE –
(PROPOSED)
Latitude: 43°-03'-02.55"
Longitude: 87°-56'-36.04"
(Per North American Datum of 27)
Elevation: 674.0'
(Per National Geodetic Vertical Datum of 1929)



LEASE PARCEL

A part of Block 1 in (Lynde's) Subdivision of 5 Acres located in the Northwest Quarter (NW1/4) of the Southwest Quarter (SW1/4) of Section Nineteen (19), Township Seven (7) North, Range Twenty-Two (22) East, City of Milwaukee, Milwaukee County, Wisconsin containing 800 square feet (0.018 acres) of land and being described by:

Commencing at the South Quarter Corner of said Section 19; thence N00°-48'-53"W along the East line of the SW1/4 of said Section 19, 1948.56 feet; thence S89°-11'-07"W 1378.87 feet to the intersection of the West line of North 24th Street and the South line of West Galena Street; thence S88°-57'-09"W along the South line of said West Galena Street, 288.52 feet (recorded as 288.12 feet) to a found 1 inch iron pipe; thence S01°-01'-45"E along the East line of Vacated North 24th Place, 188.43 feet; thence N88°-58'-15"E 10.00 feet to the point of beginning; thence continue N88°-58'-15"E 20.00 feet; thence S01°-01'-45"E 40.00 feet; thence S88°-58'-15"W 20.00 feet; thence N01°-01'-45"W 40.00 feet to the point of beginning being subject to any and all easements and restrictions of record.

20 FOOT WIDE ACCESS EASEMENT

A 20 foot wide Access Easement being a part of Block 1 in (Lynde's) Subdivision of 5 Acres and a part of Block 16 and vacated alley of R. K. Miller's Subdivision; located in the Northwest Quarter (NW1/4) of the Southwest Quarter (SW1/4) of Section Nineteen (19), Township Seven (7) North, Range Twenty-Two (22) East, City of Milwaukee, Milwaukee County, Wisconsin containing 525 square feet (0.120 acres) of land and being 10 feet each side of and parallel to a line described by:

Commencing at the South Quarter Corner of said Section 19; thence N00°-48'-53"W along the East line of the SW1/4 of said Section 19, 1948.56 feet; thence S89°-11'-07"W 1378.87 feet to the intersection of the West line of North 24th Street and the South line of West Galena Street; thence S88°-57'-09"W along the South line of said West Galena Street, 288.52 feet (recorded as 288.12 feet) to a found 1 inch iron pipe; thence S01°-01'-45"E along the East line of Vacated North 24th Place, 188.43 feet; thence N88°-58'-15"E 20.00 feet and a part of Block 16 and vacated alley in R. K. Miller's Subdivision; thence S01°-01'-45"E 12.00 feet to the point of beginning; thence N61°-37'-41"E 38.32 feet; thence N88°-57'-34"E 226.12 feet to the West line of North 24th Street and the point of termination. The side lot lines of said easement are to be shortened or lengthened to terminate at the West line of said North 24th Street and the East line of afore described LEASE PARCEL.

BENCHMARK INFORMATION:

SITE BENCHMARK: (BM A) RIM OF MANHOLE LOCATED ±40' WEST OF MONOPOLE TOWER
ELEVATION = 671.97'

SURVEYOR'S CERTIFICATE

I, Anthony P. Lulloff, Wisconsin Registered Land Surveyor of Aero-Metric Incorporated, certify that I have surveyed the above property and that the map shown to the left is a true and accurate representation thereof to the best of my knowledge and belief.

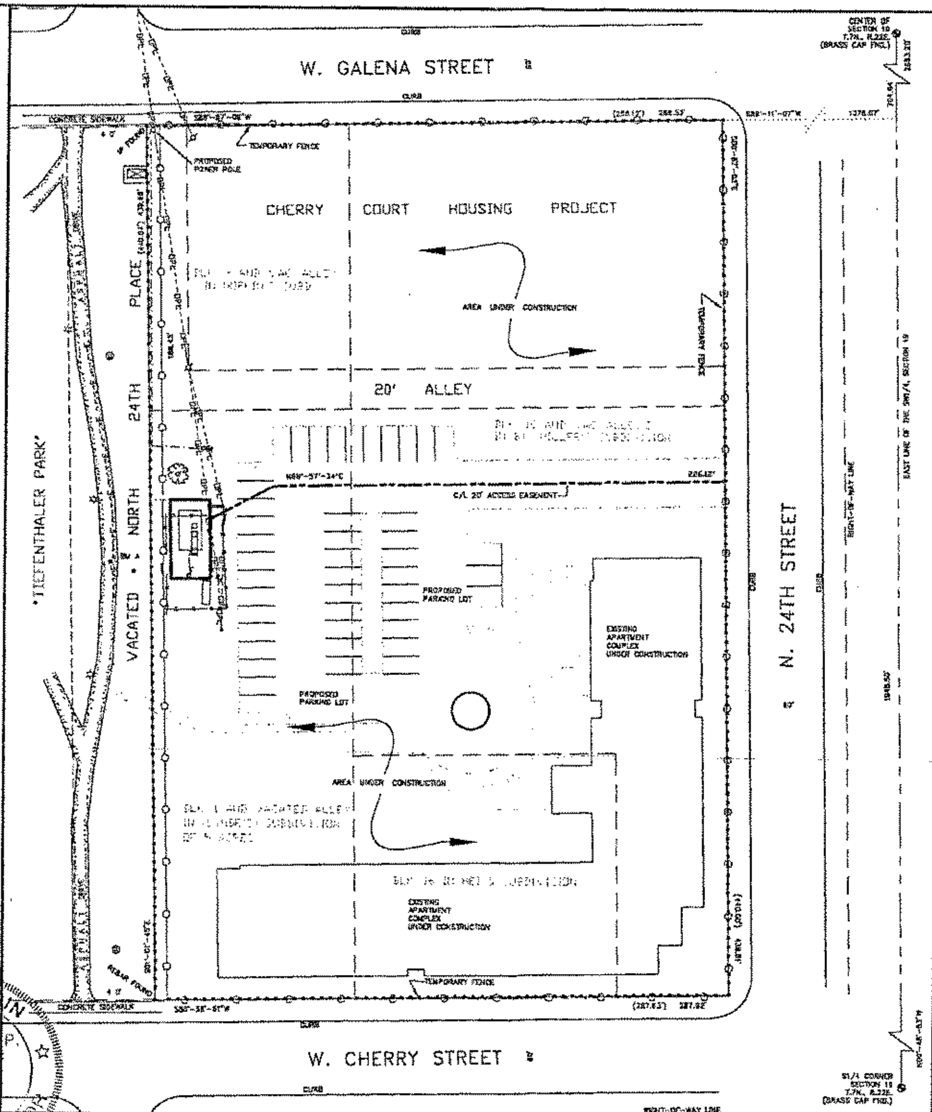
ALSO

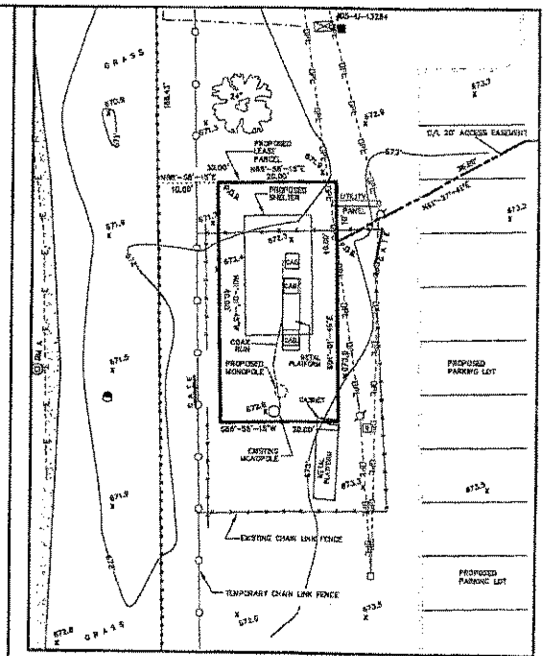
I, Anthony P. Lulloff, here by certify that upon review of the FEMA map, panel No. 55079C0012E, and the Wisconsin DNR wetlands inventory map as on file in the Milwaukee County Land Records Office, that the Lease Parcel and the easement thereto are not within the confines of a flood plain as defined by FEMA nor a wetland as defined by the Wisconsin DNR.

Dated this 1st day of March 2006.

Anthony P. Lulloff
WISCONSIN REGISTERED LAND SURVEYOR
Anthony P. Lulloff, S-1655

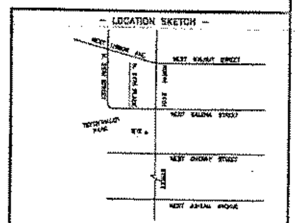
WISCONSIN ANTHONY P. LULLOFF S-1655 KIEL, WI LAND SURVEYOR





DETAIL SCALE:
11"x17" SHEET SCALE: 1" = 20'
22"x34" SHEET SCALE: 1" = 10'

– LEGEND –
- = 1"x24" IRON PIPE SET
- = 1" IRON PIPE FOUND
- = "PK" MASONRY NAIL FOUND/SET
- = 8" NAIL SET
- = LIGHT POLE
- = POWER POLE
- = POWER/LIGHT POLE
- = T.V. PEDESTAL
- = UNKNOWN MANHOLE
- = CATCH BASIN
- = ELECTRIC TRANSFORMER PAD
- = ELECTRIC METER
- -OPL- = OVERHEAD POWER LINE
- –E– = BURIED ELECTRIC
- –X– = EXISTING FENCE
- = PROPERTY LINE
- = TREE



11"x17" SHEET SCALE: 1" = 60'
22"x34" SHEET SCALE: 1" = 30'
SCALE: 1" = 30'
0 30 60

SITE SURVEY
FOR
CINGULAR WIRELESS
A PART OF THE NW1/4 OF THE SW1/4, SECTION 19, T.7N., R.22E., CITY OF MILWAUKEE, MILWAUKEE COUNTY, WISCONSIN

DWG. FILE: AP-1011 DATE: 02-06-06
DRAWN BY: J.D.D. CHECKED BY: A.P.L.
PROJECT NO.: 2060126
NOTEBOOK: P-307 PAGE: 47-48

Apex Engineers, Inc.
Structural & Civil Engineers
500 EAST 22ND STREET – SUITE B
LOMBARD, ILLINOIS 60148
Ph. (630) 627-1800
Fax. (630) 627-1165
APEX JOB No. WI-1011

CHERRY COURT APARTMENTS
SITE NO. WI-1011
1525 N. 24TH STREET
MILWAUKEE, WI, 53205

cingular WIRELESS

NO.	DATE	REVISIONS	BY	CHK	APP'D
	3-01-06	FINAL			
	2-06-06	PRELIMINARY			

SCALE: AS SHOWN | DESIGNED BY: - | DRAWN BY: -

SHEET NO. 1 OF 1
FILE NO. K-27897

SURVEYED BY:
AERO-METRIC
Aero-Metric, Incorporated
Land Planning & Design Division

DRAWING NUMBER
A-WI-1011
REV. A