

$\phi = -1^{\circ}08'21.23''$ 

JUL

1995

C1/4, SEC. 4  
CALC.**NARRATIVE:**

PURPOSE OF SURVEY IS TO LOCATE AND FIELD MONUMENT A BEAM PATH FROM AN ANTENNA SITE WITH A GIVEN LATITUDE AND LONGITUDE WITH A DIRECTION TOWARD ANOTHER ESTABLISHED RECEIVING SITE OF A GIVEN LATITUDE AND LONGITUDE. THE PROPOSED ANTENNA SITE IS SUBJECT TO A PRIOR SURVEY IN WHICH THE PROPERTY CORNERS WERE ESTABLISHED. THE SURROUNDING SECTION WAS TIED IN AND SUBDIVIDED AND A SET OF WASHINGTON STATE SOUTH ZONE GRID COORDINATES ESTABLISHED FOR ALL TRAVERSE POINTS UNDER TENNESON ENGINEERING WORK ORDER #5215. THE GIVEN LATITUDE AND LONGITUDE POINTS WERE CONVERTED TO WASHINGTON SOUTH ZONE GRID COORDINATES AND AN INVERSE CALCULATED TO DETERMINE THE GRID BEARING OF THE DESIRED BEAM PATH LINE. IN THE FIELD, CORNERS AROUND THE PERIMETER OF THE ANTENNA SITE WERE RECOVERED PER THE PRIOR SURVEY WITH KNOWN WASHINGTON SOUTH ZONE GRID COORDINATES ON THEM. USING THIS KNOWN COORDINATE POSITION AND BEARING SYSTEM ESTABLISHED BY THE PRIOR SURVEY, THE ANTENNA SITE COORDINATES WERE SET IN THE FIELD AND THE BEAM PATH LAID OUT ON THE CALCULATED INVERSE DIRECTION. IRON RODS SET AT THE ANTENNA SITE POINT, BOUNDARY OF THE MICROWAVE SITE AND AT EXTENDED DISTANCE TO THE SOUTHWEST OF THE ANTENNA SITE TO MARK THE BEAM PATH AS SHOWN ON THE ATTACHED PLAT.

N 88°49'34" W  
2495.49'E1/4, SEC. 4  
D.N.R. BRASS  
CAP MON.**NOTES:**

BEARINGS ARE GRID BASED ON PRIOR TENNESON ENGR. CORP. SURVEY, W.O. #7627, (BPA McNARY-ROSS LINE) WASHINGTON COORD. SYSTEM, SOUTH ZONE GRID,  $\phi = -1^{\circ}08'21.23''$  INCLUDING SUBDIVISION OF SECTION 4.

**REFERENCES:**

P.P. & L. CO. BEAM PATH SURVEY BY TENNESON ENGINEERING CORP. W.O. #7327, AUG. 26, 1991

WASHINGTON STATE PATROL SURVEY BY TENNESON ENGINEERING CORP. W.O. #5215, JULY 16, 1976.

**LEGEND:**

- SET 5/8" DIA. x 30" IRON ROD WITH YELLOW PLASTIC CAP, #11733.
- ⊙ FOUND MONUMENTS, AS NOTED.
- CALCULATED CORNERS, NOT SET.
- SET HUB & TACK.
- SET P.K. NAIL OR AS NOTED.
- X— EXISTING FENCE LINE.

0'  
100'  
200'  
400'  
SCALE IN FEET

S.W. 1/16

N 88°54'14" W  
1304.68'

S. E. 1 / 4

**DETAIL**  
SCALE: 1" = 30'W/O COR. SITE  
FD. 5/8" I.R.  
N 131°45'49"  
E 1,599,072.85N 37°07'40" E  
34.36'S 7°58'40" W  
241.00'S 20°37'32" E  
520°37'32" ES 6°58'29" W  
38.63'N 20°53'35" E  
39.98'N 88°38'35" E  
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