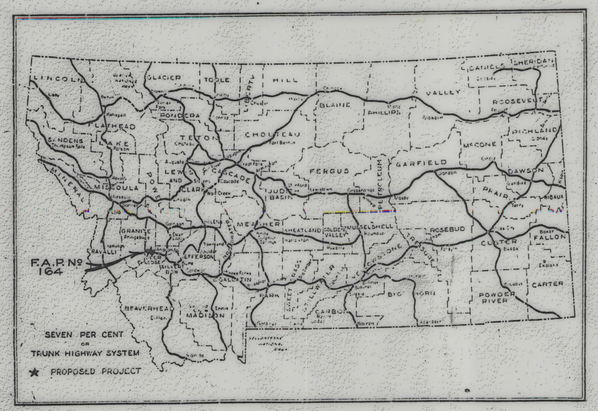
PLANS NOT TO SCALE

FAP 164-A SHT 1 OF (1,4,5,6,7,8,9,10)
DRAWING NUMBER

## INDEX OF SHEETS

SEC. A


| | |
|---|---|
| TITLE PAGE . . . . . | SHEET No. 1 |
| TYPICAL CROSS-SECTION OF IMPROVEMENT . . . | SHEET No. 2 |
| SUMMARY SHEET . . . . | SHEET No. 2-3 |
| PLAN AND PROFILE . . . | SHEET No. 4-10 |
| CROSS-SECTIONS . . . . | SHEET No. 11-53 |
| MASS DIAGRAM . . . . | SHEET No. 54-60 |


## CONVENTIONAL SIGNS

- State and National Line
- County Line
- City, Village or Borough Line
- Township Line
- Section Line
- Reservation Line
- Fence Line
- Guard Rail
- Unfenced Property
- Right of Way Line
- " " " " Fenced
- Traveled Way
- Railroads
- Retaining Walls
- Base or Survey Line
- Levee
- Culverts (Metal)
- Drain Inlet
- Trolley Pole
- Power Pole
- Telephone or Telegraph Pole
- Marsh
- Ditch
- Rip Rap
- Bridge
- Proposed New Culvert (Profile)

STATE OF MONTANA

STATE HIGHWAY COMMISSION

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR |
|---|---|---|---|
| 1 | MONT. | 164 | |

PLANS COMPLETED

# PLAN AND PROFILE OF PROPOSED

# FEDERAL AID PROJECT NO. 164.A

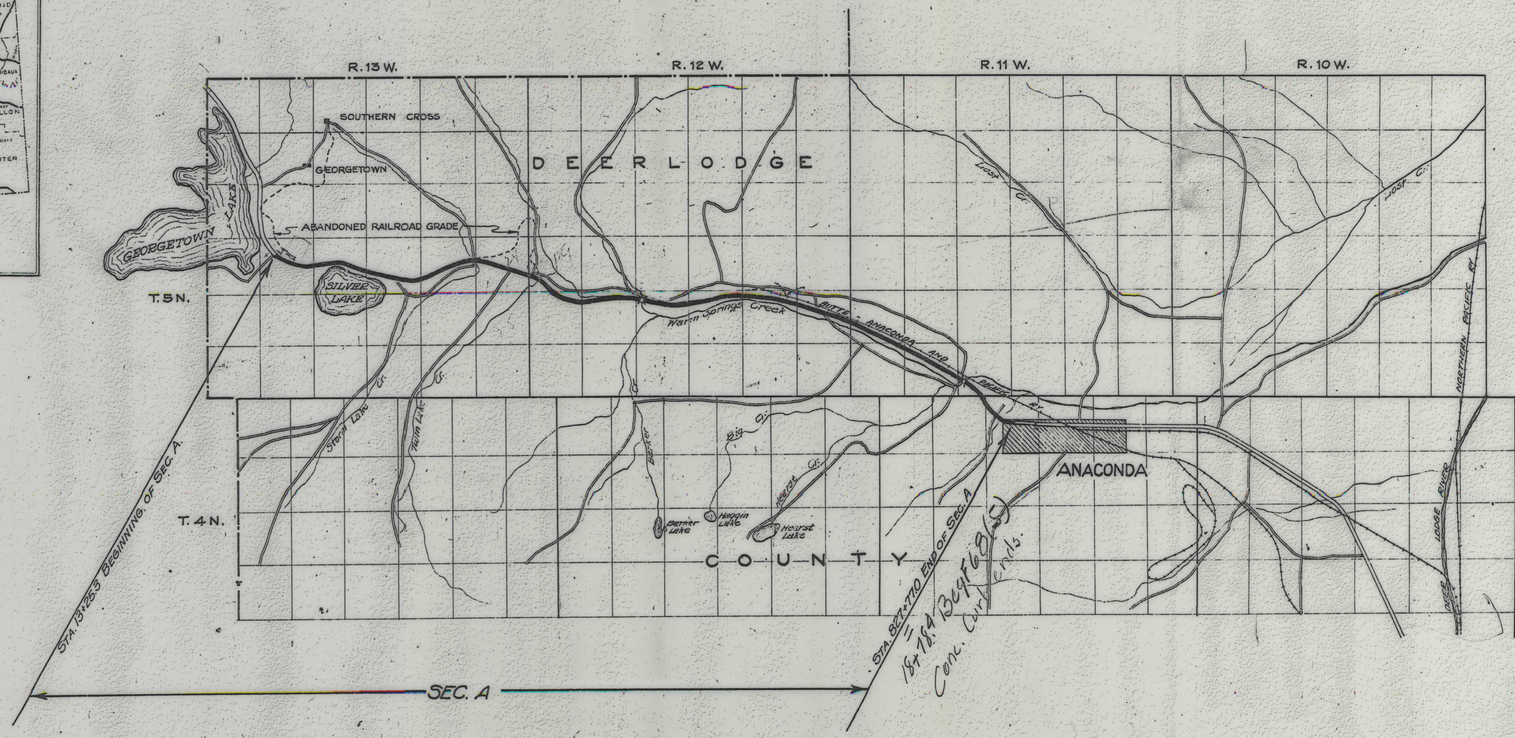
## GEORGETOWN LAKE ROAD

## DEER LODGE COUNTY

## LENGTH SEC.A 15.481 MILES

**SCALES**

HORIZONTAL: 1 Inch = 200 Feet
VERTICAL: 1 Inch = 20 Feet
CROSS SECTIONS-HOR. & VERT.: 1 Inch = 10 Feet



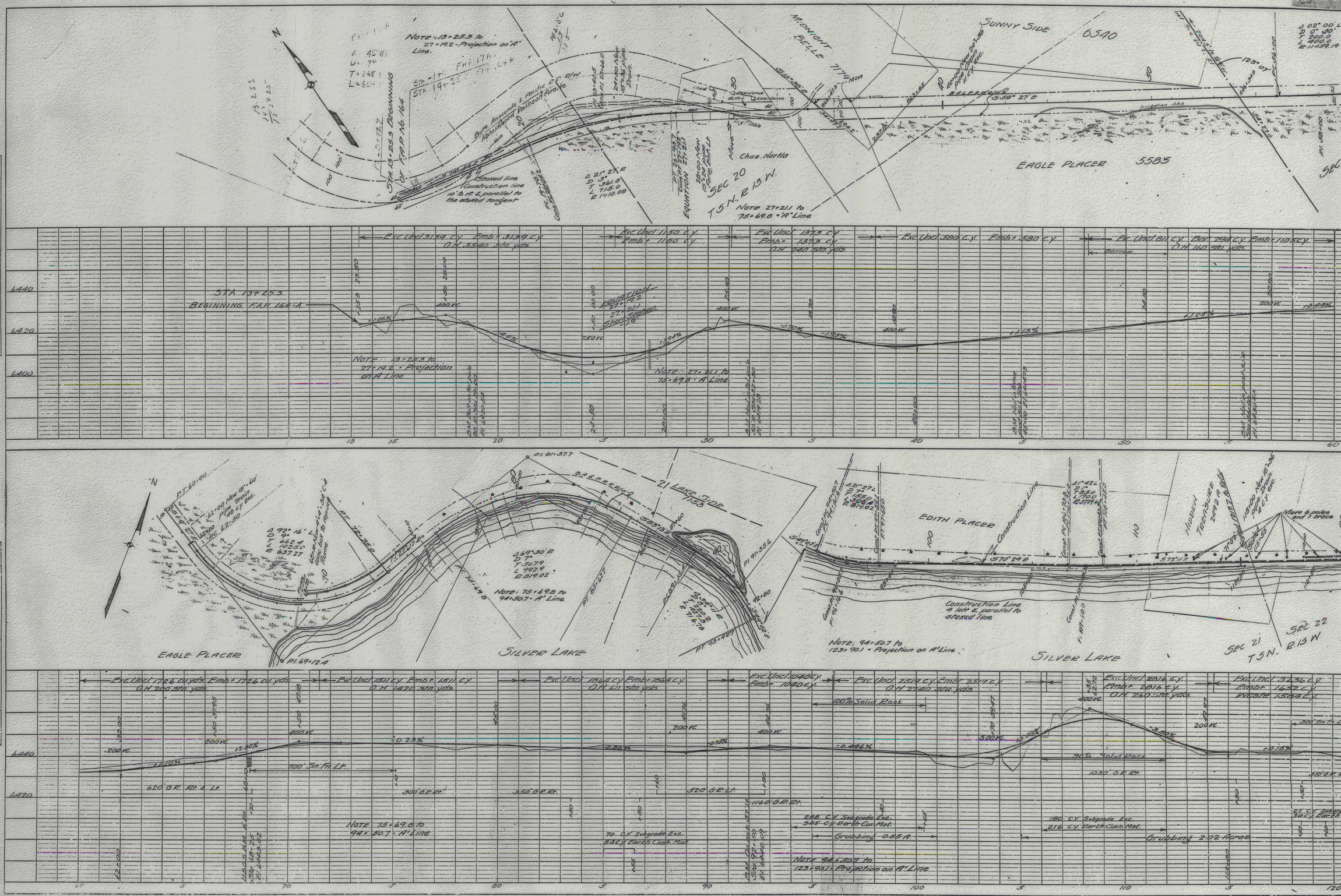

RECOMMENDED FOR APPROVAL
DISTRICT ENGINEER, DISTRICT
BUREAU OF PUBLIC ROADS

RECOMMENDED FOR APPROVAL
DEPUTY CHIEF ENGINEER
BUREAU OF PUBLIC ROADS

APPROVED
STATE HIGHWAY ENGINEER

APPROVED
CHIEF ENGINEER
BUREAU OF PUBLIC ROADS

FAP 164-A SHT 4 OF (1,4,5,6,7,8,9,10)




PLAN — SURVEYED, PLOTTED, NOTE BOOK, CHECKED, ALIGNMENT CHECKED, R/L OF WAY CHECKED, NO., BY, DATE

PROFILE — SURVEYED, PLOTTED, NOTE BOOK, CHECKED, B. M.'S NOTED, NO., STRUCTURE NOTATIONS CHKD., BY, DATE

DRAWING NUMBER

FAP 164-A SHT 5 OF (1,4,5,6,7,8,9,10)

DRAWING NUMBER

PLAN
SURVEYED
PLOTTED
NOTE BOOK
NO.
LAST NOT CHECKED
RT. OF WAY CHECKED
BY
DATE

PROFILE
SURVEYED
PLOTTED
NOTE BOOK
NO.
LAST NOT CHECKED
CORRECTED
R.L.S. NOTED
STRUCTURE NOTATIONS CHKD.
BY
DATE



Note: 123+92.4 to 130+30.3 "A" Line

Equation 130+30.3 "A" Back = 211+88.0 "A" Ahead

Note: 130+30.3 to 211+88.0 "A" Line

Equation 150+361 = 150+30.3 Short Station -14.2

Equation 123+00.1 = 122+92.4 Short Station 7.7

Equation 210+00 = 210+12.1 Long Station -12.1

Note: 211+88.0 to 222+86.6 "B" Line
222+86.6 to 234+54.5 Projection on B Line
234+54.5 to 244+22.4 " " " A "
241+80 to 245+81.9 "A" Line

Note: 211+88.0 to 222+86.6 "B" Line

Equation 210+00 = 210+12.1 Long Station -12.1

Frances Placer 6864

Storm Placer 6866

Ella Placer 6867

Eva Placer 6868

Hobson Placer * 6776

Arrastra Creek

T. 5 N., R. 13 W.

Sec. 23 T. 5 N., R. 13 W.

Sec. 24 T. 5 N., R. 13 W.

B.A.&P.R.R.

T.B. Line (Construction Line)

Exc. Und. 812 cu yds Emb. 812 cu yds O.H. 140 cu yds

Exc. Und. 1084 C.Y. Emb. 1084 C.Y. O.H. 360 Sta yds

Exc. Und. 1245 C.Y. Emb. 1245 C.Y. O.H. 140 Sta yds

Exc. Und. 1441 C.Y. Emb. 1441 C.Y. O.H. 40 Sta yds

Exc. Und. 1380 C.Y. Emb. 1380 C.Y. O.H. 410 Sta yds

Clearing 1.95 Acres

Exc. Und. 306 C.Y. Emb. 306 C.Y.

600 C.Y. Random Riprap

1100 Guard Rail Ft.

Grubbing

500 Sta Ft. Ret.

150 S.F. Ft.

Exc. Und. 714 C.Y. Emb. 714 C.Y. O.H. 80 Sta yds

Exc. Und. 501 C.Y. Ex. 433 C.Y. Emb. 1034 C.Y.

Clearing

Exc. Und. 887 C.Y. Emb. 887 C.Y. O.H. 325 Sta yds

Exc. Und. 777 C.Y. Emb. 777 C.Y. O.H. 330 Sta yds

Exc. Und. 2320 C.Y. Emb. 2320 C.Y. O.H. 80 Sta yds

Exc. Und. 2014 C.Y. Emb. 2014 C.Y. O.H. 80 Sta yds

Exc. Und. 1834 C.Y. Emb. 1834 C.Y. O.H. 260 Sta yds

Borrow

150 S.F. Ft.

250 S.F. Ft.

Grades: -0.93% +0.25% -0.20% -0.95% -1.65% -1.37% -1.74% -2.37% -2.65% -1.00% -1.03% +1.15% -1.09% -2.28% -0.92% -1.74% -0.50% -0.86% -1.50% +0.65% -2.13%

Vertical Curves: 200' VC, 300' VC, 400' VC

Stations: 120 130 140 150 160 170 180 190 200 210 211 220 230 240

Elevations: 6400 6420 6400 6380 6360 6340 6320 6300

FAP 164-A SHT 6 OF (1,4,5,6,7,8,9,10)

1934

SAVERY PLACER #1676

Channel Change 335 C.Y. Est.

Arrastra

Cor #3-1676

Cor #2-1676

Const. Data Ac. 1.46 T. 203.3 L. 716.8 E. 28.6

Const. Data Ac. 2.46 T. 203.3 L. 716.8 E. 28.6

Const. Data Ac. 1.46 T. 203.3 L. 716.8 E. 28.6

Stream Line Construction Line

Cor #1-1676

Cor #4-1676

Cor #5-1676

Cor #6-1676

Cor #7-1676

Cor #8-1676

Cor #9-1676

Cor #10-1676

Cor #11-1676

Cor #12-1676

Cor #13-1676

Cor #14-1676

Cor #15-1676

Cor #16-1676

Cor #17-1676

Cor #18-1676

Cor #19-1676

Cor #20-1676

Cor #21-1676

Cor #22-1676

Cor #23-1676

Cor

1934

SAVERY PLACER #1676

Arrastra Cr.

Channel Change 335 C.Y. &c.

Sec. 24 T.5N. R13W

H.E.S. No.103
Joseph Forsman

DISCHARGE OF EASEMENT
DOC. NO.127569
3-10-86

H.E.S. #103
Joseph Forsman owner

SURVEYED
PLOTTED
NOTE BOOK
NO.
PLAN
ALIGNMENT CHECKED
PROFILE NOTATIONS CHECKED
ELEVATIONS NOTATIONS CHECKED
GRADES CHECKED
CROSS SECTIONS
QUANTITIES NOTATIONS CHECKED
DATE

FAP 164-A SHT 8 OF (1,4,5,6,7,8,9,10)

DRAWING NUMBER



PLAN
SURVEYED
PLOTTED
NOTE BOOK ALIGNMENT CHECKED
NO. PT OF TANY CHECKED

PROFILE
SURVEYED
PLOTTED
NOTE BOOK CURVES CHECKED
NO. STRUCTURE NOTES CHKD.

BY DATE

SEC 23
T 5 N. R 12 W.
SEC 26
SEC 25
T 5 N. R 12 W.

Proposed Relocation B.A.&P. Ry
B.A.&P. Ry
A Line
A3 Line
N. 73° 14' E.
N. 73° 21' E.
WARM SPRINGS
SPRINGS CREEK
Jeanette mining claim
Lucille Claim owner W.J. Garrity
Butte, Anaconda & Pacific Railroad
A.C.M.Co.
Move 11 poles
Move 4 poles
Despace 6 poles
Chicken Hse.
Corral
Blacksmith Shop
Engine Track
Channel Change 125 Cu. Yds.
Channel Change 35 Cu. Yds.
400 CY
Cor #1
Cor #2
Cor #3
Cor #4
Cor #5
Cor #6
Cor #7
Cor #8
Cor #9
Cor #10
Cor #11
Cor #12
Cor #13
Cor #14
Cor #15
Cor #16
Cor #17
Cor #18
Cor #19
Cor #20
Cor

FAP 164-A SHT 9 OF (1,4,5,6,7,8,9,10)

DRAWING NUMBER

164

PLAN

SURVEYED
PLOTTED
LAYOUT CHECKED
PLAN CHECKED
NOTE BOOK
NO.

PROFILE

SURVEYED
PLOTTED
GRADES CHECKED
STRUCTURE ROYALTIES COMPUTED
NOTE BOOK
NO.

New 24"x.36" Pipe Drain

SW¼ NE¼ A.C.M. Co

S2°24'L
DV=
T 720.0
L 2400
R 57297

New 18"x.36" Pipe 2 M-6 Inc. Ext 2 C.Y.

New 30"x40' Pipe Drain

SEC 25 T5N.R12W.

SEC 30 T5N, R11W.

New 18"x.36" Pipe Drain

New 18"x.40' Pipe Drain Exc 2 C.Y.

BUTTE ANACONDA & PACIFIC RAILROAD

S64°W P.I.

S66°43'E

602+95.5 Calc
S.60°50'E. Calc

Eugene Mc Carthy Gov. Lot #1

N 600-62

NE¼ SE¼ A.C.M. Co

T5SEC Cor 1931 B.C.

Kave Lyale

Gravel for pit ru

Exc Und 9 C.Y. Bor. 2337 C.Y. Emb.= 2346 C.Y.
944 C.Y. Pit Run Gravel

Bor. 3814 C.Y. Emb.= 3814 C.Y.
944 C.Y. Pit Run Gravel

Bor. 2796 C.Y. Emb.= 2796 C.Y.
944 C.Y. Pit Run Gravel

Bor. 2938 C.Y. Emb.= 2939 C.Y.
944 C.Y. Pit Run Gravel

Clearing 8.04 A.
Grubbing 8.04 A.

Exc Und 1 C.Y. Bor. 3452 C.Y. Emb.= 3453 C.Y.
1171 C.Y. Pit Run Gravel

Exc Und 1134 C.Y. Emb.= U
181 C.Y. Pit Run Gra

5580
5560
5540
5520

+1.10%
100'VC
-1.45%
200'VC
2.85%
200'VC
-0.36%
300'VC
2.59%
200'VC
-0.60%
200'VC
-1.79%
200'VC
-1.16%
1.50%
-1.76%
200'VC
-2.90%

600 610 620 630 640 650

SEC 30 SEC 29 SEC 31 SEC 32 T5N, R11W.

New 18"x.40' Pipe Drain Exc 2 C.Y.

New 18"x.36" Pipe Drain Exc 2 C.Y.

New 18"x32 Pipe 2 M-6 Inc.

New 18"x40' Pipe Drain Exc 2 C.Y.

New 18"x.32 Pipe Drain

R.R.M.S. 852 T 1.60+52.6

30°00'

S.B.R.R.P.M. Line

BUTTE ANACONDA & PACIFIC RAILROAD

S66°43'E

Gravel for pit run.

NW¼ NW¼

NE¼ NW¼

NW¼ SE¼

SE¼ NW¼ A.C.M. Co

578' Sc.

704+06 Sc.

WARM SPRINGS CREEK

Gravel for pit run 1000 C.Y.

Exc Und 242 C.Y. Bor. 848 C.Y. Emb.= 1090 C.Y.

Exc Und. 412 C.Y. Bor. 886 C.Y. Emb.= 1298 C.Y.

Exc Und. 34 C.Y. Bor. 2370 C.Y. Emb.= 2404 C.Y.
412 C.Y. Pit Run Gravel

Bor. 2606 C.Y. Emb.= 2606 C.Y.
944 C.Y. Pit Run Gravel

Exc Und 137 C.Y. Bor. 1786 C.Y. Emb.= 1923 C.Y.
283 C.Y. Pit Run Gravel

Bor. 1217 C.Y. Emb.= 1217 C.Y.
944 C.Y. Pit Run Gravel

Clearing 12.9 A.A.
Grubbing 12.9 A.

5500
5480
5460
5440

-0.44%
200'VC
1.50%
200'VC
-4.22%
200'VC
-2.91%
200'VC
1.40%
-1.09%
1.34%

660 670 680 690 700 710

PLAN
SURVEYED
PLOTTED
NOTE BOOK ALIGNMENT CHECKED
EXT. OF ...NT CHECKED
NO.

DATE | BY

SEC. 33 T.5N. R.11W.
SEC. 32 T.5N.
SEC. 4 T.4N. R.11W.
SE¼ NE¼
NE¼ SE¼ A.C.M.Co.
SW¼ NE¼
NW¼ SW¼
NE¼ SW¼ A.C.M.Co.
S½ SE¼ A.C.M.Co.
NW¼ SE¼ A.C.M.Co.
S½ SE¼ A.C.M.Co.
NE¼ NW¼ A.C.M.Co.
A.C.M.Co.
New 18"x36" Pipe Drain
New 18"x48" Pipe Drain
New 18"x40" Pipe Drain
New 24"x32" Pipe Drain
18"x36" Pipe Drain
18"x36" Pipe Drain
2-New 18"x32' Pipe Culverts
Steel Bridge
Gravel for pit run 1000' South
Gravel for pit run 1000' South
Ball Park
Steel Bridge
Sta. 827+77.0 END OF SEC. A F.A.P. 164
BEGINNING OF PAVEMENT.
ANACONDA
CITY LIMITS
COLTONWOOD ST.
PLAR ST.
SYCAMORE ST.
BEECH ST.
WILLOW ST.
SPRUCE ST.
WALNUT ST.
WEST PARK AVE.
20' Concrete Pavement
B.A.&P. Ry. Co. Repair Shops.
Gal. Iron Shed
Anaconda St. Ry. Co. Car Barns
Conc. Lined Drain Ditch. Liable to Badly Broken.
Steel Bridge
Steel Bridge
Sta. 778+18 = 736.98 = 41+26
Sta. 88+80.4 = 41+26 = 47+44.4 = 60+38 = 19+24
Sta. 778+18 = 717+60 = 60+38
Sta. 751+19
Sta. 762+22.4
Sta. 827+77.0
Sta. 809+11.8
Sta. 807+10
Sta. 827+77.0
Sta. 827+77.0
Sta. 827+77.0