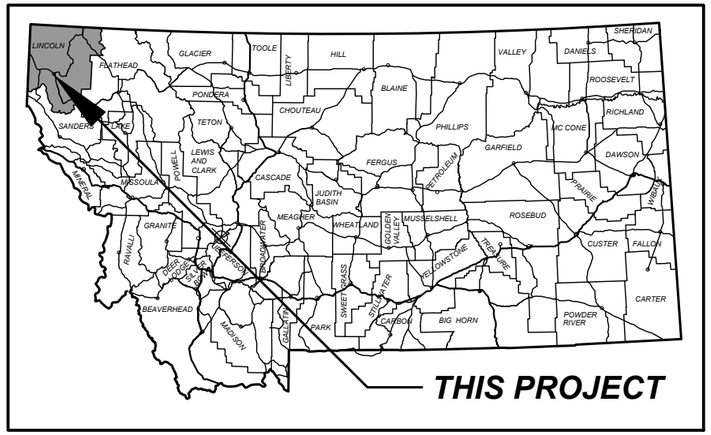
AWARD COPY




## PROJECT DESIGN DATA

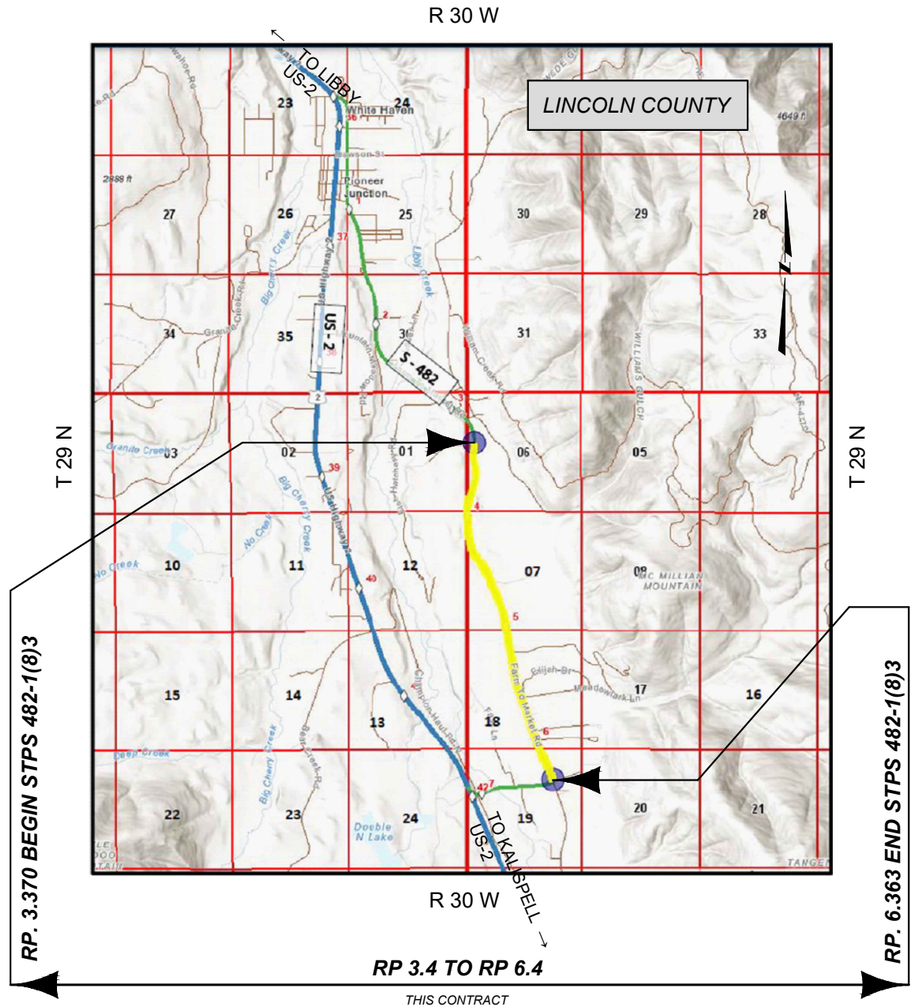
| | | RP 3.4 TO 5.2 | RP 5.2 TO 6.4 |
|---|---|---|---|
| PRESENT | 2023 | A.D.T. = 950 | A.D.T. = 290 |
| LETTING | 2024 | A.D.T. = 960 | A.D.T. = 290 |
| DESIGN | 2044 | A.D.T. = 1,170 | A.D.T. = 350 |
| | | D.H.V. = 180 | D.H.V. = 50 |
| | | TRUCKS = 3.4% | TRUCKS = 2.1% |
| | | V = 60 MPH | V = 60 MPH |
| | | ESAL'S = 15 DAILY | ESAL'S = 4 DAILY |
| | | ANNUAL GROWTH RATE = 1.0% | ANNUAL GROWTH RATE = 1.0% |

# MONTANA DEPARTMENT OF TRANSPORTATION

# FEDERAL AID PROJECT STPS 482-1(8)3
# COLD MILL, PL. MIX SURF., SEAL & COVER
# LIBBY AIRPORT - N & S (S-482)
# LINCOLN COUNTY

**LENGTH 3.0 MILES**

**SURFACING SOURCES - CONTRACTOR FURNISHED**




SHEET NO. 01

TITLE

PROJECT NAME: LIBBY AIRPORT - N & S (S-482)
COUNTY: LINCOLN
PROJECT ID: STPS 482-1(8)3
UPN: 10377000

| | | | |
|---|---|---|---|
| DESIGNED BY | 06/2024 | | |
| D. KRAUSE | | | |
| REVIEWED BY | ##### | | |
| ##### | | | |
| CHECKED BY | 06/2024 | | |
| J. SOLIDAY | | | |

MONTANA Department of Transportation

ROAD PLANS

8/7/2024 7:15 AM

10377000RDPLN005.DWG

# TABLE OF CONTENTS


| ROAD PLANS | SHEET NO. |
|---|---|
| TITLE SHEET | 1 |
| TABLE OF CONTENTS | 2 |
| NOTES | 2 |
| TYPICAL SECTIONS | 3 |
| SUMMARIES | 4 |
| SURFACING | 4 |
| COLD MILLING | 4 |
| RUMBLE STRIPS | 4 |
| PAVEMENT MARKINGS | 4 |

| SIGNING PLANS | |
|---|---|
| SUMMARY | S1 |
| SPECIFICATIONS | S2-S4 |
| PLANS | S5-S10 |


# NOTES

## BASIS OF PLAN QUANTITIES

(QUANTITIES FOR ESTIMATING PURPOSES ONLY)

| | |
|---|---|
| COMP. AGGREGATE WEIGHT | = 3700 LBS. PER CUBIC YARD |
| COMP. WEIGHT OF PL. MIX BIT. SURF. | = 3855 LBS. PER CUBIC YARD |
| ASPHALT CEMENT - GRADE S - 1/2" AGG. | = 6.0% OF PL.MIX BIT.SURF. |
| HYDRATED LIME | = 1.4% OF PL.MIX BIT.SURF. |
| ASPHALT CEMENT | = 3.0% OF RECYCLED PL.MIX (50% RAP) |
| BITUMINOUS MATERIAL | = 8.5 LBS. PER GAL. |
| EMULSIFIED ASPHALT - TACK (ALL OTHER SURFACES) | = 0.05 GAL. PER SQ.YARD (UNDILUTED) |
| EMULSIFIED ASPHALT - FOG SEAL (S & C) | = 0.075 GAL. PER SQ.YARD (UNDILUTED) |
| EMULSIFIED ASPHALT - FOG SEAL (RUMBLE STRIPS) | = 0.10 GAL. PER SQ.YARD (UNDILUTED) |
| SEAL | = 0.42 GAL. PER SQ.YARD |
| COVER | = 25 LBS. PER SQ.YARD |

## UTILITIES

CALL THE UTILITIES UNDERGROUND LOCATION CENTER (811) OR OTHER NOTIFICATION SYSTEM FOR THE MARKING AND LOCATION OF ALL LINES AND SERVICES BEFORE EXCAVATING. ALL CLEARANCES OR DEPTHS PROVIDED FOR UTILITIES ARE FROM EXISTING GROUND LINE.

## WETLANDS

WETLANDS MAY EXIST ADJACENT TO THE ROADWAY AND BEYOND THE PROJECT LIMITS. A WETLAND DELINEATION HAS NOT BEEN COMPLETED FOR THIS PROJECT. IMPACTS TO WETLAND AREAS ARE NOT ANTICIPATED IN ASSOCIATION WITH THE PROPOSED WORK. NO PERMITS HAVE BEEN OBTAINED. ANY ACTION IMPACTING WETLAND AREAS WITHOUT THE APPROPRIATE PERMITTING IS THE RESPONSIBILITY OF THE CONTRACTOR.

SHEET NO.
02

NOTES

MONTANA
Department of Transportation

ROAD PLANS

| DESIGNED BY | | DATE |
|---|---|---|
| D. KRAUSE | | 07/2024 |
| REVIEWED BY | | |
| ##### | | ##### |
| CHECKED BY | | |
| ##### | | ##### |

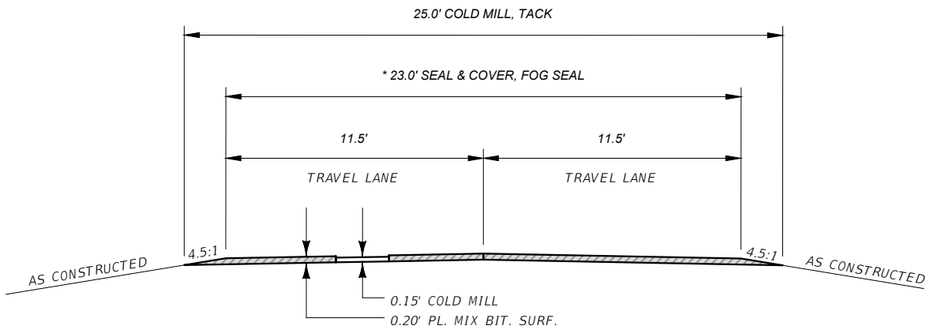
PROJECT NAME: LIBBY AIRPORT - N & S (S-482)
COUNTY: LINCOLN
PROJECT ID: STPS 482-1(8)3
UPN: 10377000

8/7/2024 7:15 AM
10377000RDPLN005.DWG

R.P. 3.389 TO 6.344 TYP. NO. 1
R.P. 6.344 TO 6.363 TRANS. TYP. NO. 1 TO TYP. NO. 2

# TYPICAL SECTION NO. 1

MAINLINE



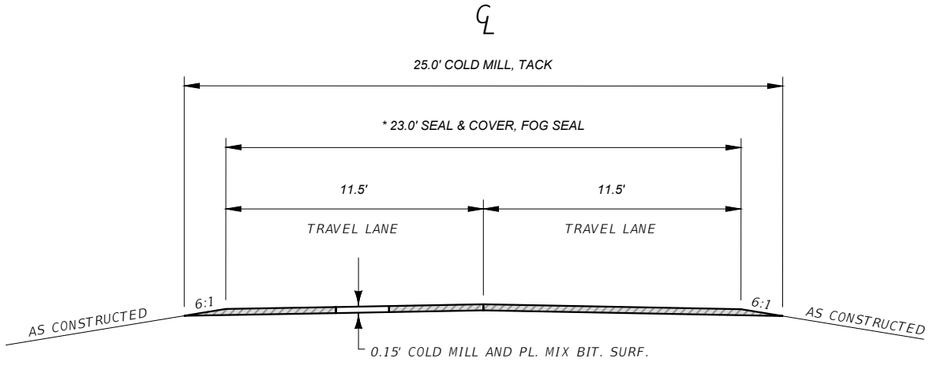

| QUANTITIES | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| UNIT | AGGREGATE | | UNIT | BITUMINOUS MATERIAL | | | | |
| | COVER | PLANT MIX | | ASPHALT CEMENT | SEAL | EMULSIFIED ASPHALT TACK # | EMULSIFIED ASPHALT FOG SEAL | COLD MILLING |
| AREA square feet | | 4.80 | square yards PER STATION | | 256 | 278 | 256 | 278 |
| cubic yards PER STATION | | 17.8 | tons PER STATION | 2.06 | 0.46 | | | |
| tons PER STATION | | 34.3 | gallons PER STATION | | | 14 | 19 | |
| square yards PER STATION | 256 | | | | | | | |

* NOTE: 23.0' IS THE AVERAGE OF FIELD MEASUREMENTS AND USED FOR QUANTITIES. MATCH EXISTING SURFACING WIDTHS.
# BASED ON 1 APPLICATION

R.P. 3.370 TYP. NO. 2 ONLY
R.P. 3.370 TO 3.389 TRANS. TYP. NO. 2 TO TYP. NO. 1
R.P. 6.363 TYP. NO. 2 ONLY

# TYPICAL SECTION NO. 2

MAINLINE TAPER MILL TRANSITION




| QUANTITIES | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| UNIT | AGGREGATE | | UNIT | BITUMINOUS MATERIAL | | | | |
| | COVER | PLANT MIX | | ASPHALT CEMENT | SEAL | EMULSIFIED ASPHALT TACK # | EMULSIFIED ASPHALT FOG SEAL | COLD MILLING |
| AREA square feet | | 3.60 | square yards PER STATION | | 256 | 278 | 256 | 278 |
| cubic yards PER STATION | | 13.3 | tons PER STATION | 1.54 | 0.46 | | | |
| tons PER STATION | | 25.6 | gallons PER STATION | | | 14 | 19 | |
| square yards PER STATION | 256 | | | | | | | |

* NOTE: 23.0' IS THE AVERAGE OF FIELD MEASUREMENTS AND USED FOR QUANTITIES. MATCH EXISTING SURFACING WIDTHS.
# BASED ON 1 APPLICATION

SHEET NO. 03

TYPICALS

PROJECT NAME LIBBY AIRPORT - N & S (S-482)
COUNTY LINCOLN
PROJECT ID STPS 482-1(8)3
UPN 10377000

DESIGNED BY D. KRAUSE 04/2024
REVIEWED BY ##### #####
CHECKED BY ##### #####

MONTANA Department of Transportation

ROAD PLANS

8/7/2024 7:15 AM 10377000RDPLN005.DWG

AWARD COPY

# SUMMARY

## SURFACING

| REFERENCE POSTS FROM | REFERENCE POSTS TO | linear feet GROSS | linear feet NET | linear feet + | linear feet - | FOR | tons HYDRATED LIME | AGGREGATE sq. yards COVER TYPE 1 | AGGREGATE tons PLANT MIX BIT. SURF. GRADE S 1/2" | BITUMINOUS MATERIAL tons ASPHALT CEMENT PG 58V-34 | BITUMINOUS MATERIAL tons SEAL CHFRS-2P | BITUMINOUS MATERIAL gals. EMULSIFIED ASPHALT FOG SEAL (OVER SEAL & COVER) | BITUMINOUS MATERIAL gals. EMULSIFIED ASPHALT TACK | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3.370 | 3.389 | 100.32 | 100.32 | | | | | 257 | 30 | 1.8 | 0.5 | 19 | 14 | TRANS. TYP. NO. 2 TO TYP. NO. 1, LENGTH BASED ON ACCUMULATED MILEAGE MEASUREMENTS |
| 3.389 | 6.344 | 15,649.92 | 15,649.92 | | | | | 40,064 | 5,368 | 322.4 | 72.0 | 2973 | 2,191 | TYP. NO. 1, LENGTH BASED ON ACCUMULATED MILEAGE MEASUREMENTS |
| 6.344 | 6.363 | 100.32 | 100.32 | | | | | 257 | 30 | 1.8 | 0.5 | 19 | 14 | TRANS. TYP. NO. 1 TO TYP. NO. 2, LENGTH BASED ON ACCUMULATED MILEAGE MEASUREMENTS |
| TOTAL | | 15,850.56 | 15,850.56 | | | | 76 | 40,578 | 5,428 | 326.0 | 73.0 | 3,011 | 2,219 | |

NOTE: APPROACHES WILL NOT RECEIVE ANY TREATMENT WITH THIS PROJECT.

## COLD MILLING

| REFERENCE POSTS FROM | REFERENCE POSTS TO | sq. yards COLD MILLING 0.15 ft | REMARKS |
|---|---|---|---|
| 3.370 | 3.389 | 279 | |
| 3.389 | 6.344 | 43,507 | |
| 6.344 | 6.363 | 279 | |
| SUBTOTAL | | 44,065 | |
| TOTAL | | 44,065 | |

## RUMBLE STRIPS

| REFERENCE POSTS FROM | REFERENCE POSTS TO | miles RUMBLE STRIPS CONTIN-UOUS | miles RUMBLE STRIPS INTER-MITTENT | miles RUMBLE STRIPS SINUSOIDAL CENTERLINE | gals EMULSIFIED ASPHALT FOG SEAL # | REMARKS |
|---|---|---|---|---|---|---|
| 3.370 | 6.363 | | | 3.0 | 176 | |
| SUBTOTAL | | | | 3.0 | | |
| TOTAL | | ~ | | 3.0 | ~ | |

# FOR INFORMATION ONLY, INCLUDE IN THE COST OF RUMBLE STRIPS

## PAVEMENT MARKINGS

| ITEM | UNIT | INTERIM APPLICATION # | FINAL APPLICATION | TOTAL |
|---|---|---|---|---|
| STRIPING - WHITE PAINT | gallon | 108 | | 108 |
| STRIPING - YELLOW PAINT | gallon | 93 | | 93 |
| STRIPING - WHITE EPOXY | gallon | | 144 | 144 |
| STRIPING - YELLOW EPOXY | gallon | | 124 | 124 |
| TEMPORARY STRIPING | lnft | | | 31,701 |

# BASED ON 2 APPLICATIONS

SHEET NO. 04

SUMMARIES

PROJECT NAME: LIBBY AIRPORT - N & S (S-482)
COUNTY: LINCOLN
PROJECT ID: STPS 482-1(8)3
UPN: 10377000

| | | |
|---|---|---|
| DESIGNED BY | D. KRAUSE | 07/2024 |
| REVIEWED BY | ##### | ##### |
| CHECKED BY | ##### | ##### |

10377000RDPLN005.DWG

MONTANA Department of Transportation

ROAD PLANS

8/7/2024 7:15 AM

# NOTES AND ABBREVIATIONS:

MOUNTING HEIGHT REQUIREMENTS:
MOUNTING HEIGHTS SHOWN REFER TO THE BOTTOM OF THE MAJOR PANEL. SEE DETAILED DRAWINGS 619-00 & 619-08

ALL MARKINGS ARE PAINT, EXCEPT AS NOTED. WHERE SPECIFIED ON THE PLANS AS PLASTIC, INSTALL INLAID HOT EXTRUDED HYDRO-CARBON THERMOPLASTIC PAVEMENT MARKINGS.

SEE LOCATION AND SPECIFICATION SHEETS FOR PORTIONS OF PROJECT NOT INCLUDED WITHIN SIGNING PLAN SHEETS.

SIGN POSTS SYMBOLS SHOWN ARE FOR REFERENCE ONLY TO SHOW EXISTING SIGNS THAT REQUIRE NO ACTION.

SIGNING LOCATIONS ARE APPROXIMATE. ENGINEERING PROJECT MANAGER TO FIELD ADJUST AS NECESSARY.

ADOPT A HIGHWAY:
IF SIGNS N7-1/N7-1P EXIST, CONTRACTOR WILL CONFIRM THAT THE GROUP NAME ON THE SIGN(S) EXISTING AT THE TIME OF CONSTRUCTION CORRESPONDS TO THE GROUP NAME ON THE SIGN(S) SHOWN IN PLANS. IF NAME IS DIFFERENT, ENGINEERING PROJECT MANAGER WILL CONTACT TRAFFIC & SAFETY BUREAU SIGNING SECTION WITH THE CORRECT NAME AND A NEW SIGN DESIGN WILL BE PROVIDED.

✕ = STANDARD BREAKAWAY DEVICE:
- FOR WOOD POST SEE DETAILED DRAWING 619-20.
- FOR STRUCTURAL STEEL SEE DETAILED DRAWING 619-13.

▲ = SINGLE SQUARE TUBE REQUIRED. MOUNTED IN HEAVY DUTY STUB.

★ = TELESCOPED SQUARE TUBES (2-1/4" & 2-1/2") WITH SLIP BASE BREAKAWAY REQUIRED. MOUNTED IN HEAVY DUTY STUB.

▮ = FRANGIBLE SIGN POST. BREAKAWAY DEVICE REQUIRED.

AIR = ANGLE IRON REQUIRED 2 1/2" x 2 1/2" x 3/8" x 6'-4" (37 lbs.)

BBR = BACKBRACING REQUIRED:
- -FOR WOOD POST 2" X 4" REQ'D.
- - FOR STRUCTURAL STEEL 2" X 2" X 1/4" ANGLE IRON REQ'D.

BGR = BEHIND GUARDRAIL

FY = FLUORESCENT YELLOW SHEETING REQUIRED.

FYG = FLUORESCENT YELLOW - GREEN SHEETING REQUIRED.

MBB = MOUNT BACK TO BACK

RSFO = REPLACE SIGN FACE ONLY.

## SUMMARY
## SIGNING & DELINEATION QUANTITIES

| MATERIAL | TOTALS | UNIT |
|---|---|---|
| SIGNS-ALUM REFL SHEET XI | 158.0 | SQFT |
| REMOVE SIGN | 19 | EACH |
| POSTS-STEEL U SIGN | 60 | LB |
| POLES-TREATED WOOD 4 IN | 158 | LNFT |
| POLES-TREATED WOOD 5 IN | 82 | LNFT |
| DELINEATOR TYPE 1 | 148 | EACH |

**DELINEATION SPECIFICATIONS**

| SYMBOL | DESIGN | TOTALS |
|---|---|---|
| ⊣ | A | 120 |
| ⊣⊢ | D | 8 |
| ⊢ | F | 20 |

SHEET NO. S1

SIGNING SUMMARY
FRAMES AND NOTES

PROJECT NAME: LIBBY AIRPORT - N & S (S-482)
COUNTY: LINCOLN
PROJECT ID: STPS 482-1(8)3
UPN: 10377000

| DESIGNED BY | REVIEWED BY | CHECKED BY |
|---|---|---|
| L MOREY 02/2024 | N THOLT 02/2024 | R SCHROEDER 02/2024 |

MONTANA Department of Transportation
TRAFFIC SIGNING
10377000SIPLN001.DWG
8/6/2024 1:42 PM

AWARD COPY

| SIGN LOCATION | | | | SIGN PANEL SPECIFICATIONS | | | | | | SIGN ASSEMBLY SPECIFICATIONS | | | | | | | | | | | | SIGN ASSEMBLY QUANTITIES | | | | | | | | | | | | ADDITIONAL SIGN INFORMATION | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| R.P. | | DIRECTION | RAMP NO. | SIGN NO. (MUTCD) | PANEL SIZE (INCHES) | | | FY OR FYG | BACK BRACING REQ'D ANGLE IRON REQ'D | MOUNT BACK TO BACK | REPLACE SIGN FACE ONLY | FEET | | FEET | | | | | | CANTILEVER | BREAKAWAY TYPE | BEHIND GUARDRAIL | PANEL (SQ. FT.) | | WOOD POLE (LNR. FT.) | | STEEL POST (LBS.) | | | | BREAKAWAY | REMV | | RESET | | SIGN IMAGE | SIGN TEXT & REMARKS |
| LFT | MDN | RGT | | | W | X | H | | | | | CLEARANCE/OFFSET (SHOULDER TO EDGE OF SIGN) | TYPE OF SUPPORT | SIGN SUPPORT SPACING | MOUNTING HEIGHT | SIGN HEIGHT + GAPS | FOUNDATION DEPTH | SUPPORT LENGTH (ESTIMATED) X | Y | Z | | | | SHEET ALUMINUM | SHEET ALUMINUM INCREMENT | 4" TOP DIA. | 5" TOP DIA. | ROUND TUBULAR | SQUARE TUBULAR | STRUCTURAL STEEL | "U" POST | | SIGN | GUIDE | SIGN | GUIDE | | |
| 3.408 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | X | | D3 (2x) | 42 | X | 10 | | | MBB | | 12.0 | 5" Treated Wood Pole | | 5.0 | 3.4 | 3.5 | 14.2 | | | | | X | 5.8 | | | 16 | | | | | 1 | | | | FARMERS FLAT RD | FARMERS FLAT RD |
| | | | | R1-1 | 30 | X | 30 | | | | | | | | | | | | | | | | | 5.2 | | | | | | | | | | | STOP | STOP |
| 3.438 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | X | | W1-4L | 30 | X | 30 | | | | | 12.0 | 4" Treated Wood Pole | | 5.0 | 4.1 | 3.0 | 14.3 | | | | | | 6.3 | | 16 | | | | | | 1 | | | | S CURVE ARROW-LT |
| | | | | W13-1 | 18 | X | 18 | | | | | | | | | | | | | | | | | 2.3 | | | | | | | | | | | 45 MPH | 45 MPH |
| 3.518 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| X | | | | W8-6A | 30 | X | 30 | | | | | 12.0 | 4" Treated Wood Pole | | 5.0 | 2.5 | 3.0 | 12.7 | | | | | | 6.3 | | 14 | | | | | | 1 | | | | TRUCKS ENTERING | TRUCKS ENTERING, **REMOVE ORANGE CONSTRUCTION SIGN AND REPLACE WITH YELLOW** |
| 3.705 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | X | | BY OTHERS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | BY OTHERS (USFS, BLM, OR LANDOWNER), **USE AS IS** |
| 3.840 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| X | | | | W1-4L | 30 | X | 30 | | | | | 12.0 | 4" Treated Wood Pole | | 5.0 | 4.1 | 3.0 | 14.3 | | | | | | 6.3 | | 16 | | | | | | 1 | | | | S CURVE ARROW-LT |
| | | | | W13-1 | 18 | X | 18 | | | | | | | | | | | | | | | | | 2.3 | | | | | | | | | | | 45 MPH | 45 MPH |
| 3.851 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | X | | BY OTHERS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | BY OTHERS (USFS, BLM, OR LANDOWNER), **USE AS IS** |
| 4.000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | X | | D10-1 (2x) | 10 | X | 18 | | | MBB | | 4.0 | 2.0lb Steel U Post | | 4.0 | 1.5 | 3.0 | 9.2 | | | | | | 2.5 | | | | | | 20 | | 1 | | | | MILE 4 | MILE 4 |
| 4.000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | X | | N7-1 | 36 | X | 48 | | | | | 12.0 | 5" Treated Wood Pole | | 5.0 | 5.1 | 3.5 | 15.9 | | | | | X | 12.0 | | | 16 | | | | | 1 | | | | ADOPT A HIGHWAY | ADOPT A HIGHWAY |
| | | | | N7-1P | 36 | X | 12 | | | | | | | | | | | | | | | | | 3.0 | | | | | | | | | | | CABINET LODGE 68 ODD FELLOWS | CABINET LODGE 68 ODD FELLOWS |
| 4.000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| X | | | | N7-1 | 36 | X | 48 | | | | | 12.0 | 5" Treated Wood Pole | | 5.0 | 5.1 | 3.5 | 15.9 | | | | | X | 12.0 | | | 16 | | | | | 1 | | | | ADOPT A HIGHWAY | ADOPT A HIGHWAY |
| | | | | N7-1P | 36 | X | 12 | | | | | | | | | | | | | | | | | 3.0 | | | | | | | | | | | IGNITERS CAR CLUB OF LIBBY | IGNITERS CAR CLUB OF LIBBY |

SHEET NO.
S2

SIGN LOCATIONS AND SPECIFICATIONS

PROJECT NAME: LIBBY AIRPORT - N & S (S-482)
COUNTY: LINCOLN
PROJECT ID: STPS 482-1(8)3
UPN: 10377000

| DESIGNED BY | | REVIEWED BY | | CHECKED BY | |
|---|---|---|---|---|---|
| L.MOREY | 02/2024 | N.THOLT | 02/2024 | R.SCHROEDER | 02/2024 |

10377000SIPLN001.DWG

MONTANA
Department of Transportation

TRAFFIC SIGNING

8/6/2024 1:42 PM

| SIGN LOCATION | | | | SIGN PANEL SPECIFICATIONS | | | | | | | SIGN ASSEMBLY SPECIFICATIONS | | | | | | | | | | SIGN ASSEMBLY QUANTITIES | | | | | | | | | | | | ADDITIONAL SIGN INFORMATION | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| R.P. | | DIRECTION | RAMP NO. | SIGN NO. (MUTCD) | PANEL SIZE (INCHES) | | | FY OR FYG | BACK BRACING REQ'D ANGLE IRON REQ'D | MOUNT BACK TO BACK | REPLACE SIGN FACE ONLY | FEET | TYPE OF SUPPORT | FEET | | | | | | | CANTILEVER | BREAKAWAY TYPE | BEHIND GUARDRAIL | PANEL (SQ. FT.) | | WOOD POLE (LNR. FT.) | | STEEL POST (LBS.) | | | | BREAKAWAY | REMV | | RESET | | SIGN IMAGE | SIGN TEXT & REMARKS |
| LFT | MDN | RGT | | | W | X | H | | | | | CLEARANCE/OFFSET (SHOULDER TO EDGE OF SIGN) | | SIGN SUPPORT SPACING | MOUNTING HEIGHT | SIGN HEIGHT + GAPS | FOUNDATION DEPTH | SUPPORT LENGTH (ESTIMATED) X | Y | Z | | | | SHEET ALUMINUM | SHEET ALUMINUM INCREMENT | 4" TOP DIA. | 5" TOP DIA. | ROUND TUBULAR | SQUARE TUBULAR | STRUCTURAL STEEL | "U" POST | | SIGN | GUIDE | SIGN | GUIDE | | |
| 4.675 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | X | | BY OTHERS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | LIBBY HELIBASE | LIBBY HELIBASE, USFS, **USE AS IS** |
| 4.804 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| X | | | | BY OTHERS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | LIBBY HELIBASE | LIBBY HELIBASE, USFS, **USE AS IS** |
| 4.859 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| X | | | | BY OTHERS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | LINCOLN COUNTY SHOOTING COMPLEX 1/4 MILE | LINCOLN COUNTY SHOOTING COMPLEX 1/4 MILE, **USE AS IS** |
| 4.901 | | NB | | | 48 X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | X | | W14-3 | 48 | X | 36 | FY | | | | 12.0 | 4" Treated Wood Pole | | 5.0 | 3.0 | 3.0 | 13.3 | | | | | | | 5.5 | | 14 | | | | | | 1 | | | NO PASSING ZONE | NO PASSING ZONE |
| 5.000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | X | | D10-1 (2x) | 10 | X | 18 | | | MBB | | 4.0 | 2.0lb Steel U Post | | 4.0 | 1.5 | 3.0 | 9.2 | | | | | | | 2.5 | | | | | | 20 | | 1 | | | MILE 5 | MILE 5 |
| 5.081 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | X | | W2-2L | 30 | X | 30 | | | | | 12.0 | 4" Treated Wood Pole | | 5.0 | 2.5 | 3.0 | 12.7 | | | | | | | 6.3 | | 14 | | | | | | 1 | | | SIDE ROAD-LT | SIDE ROAD-LT |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5.234 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| X | | | | D3 (2x) | 36 | X | 10 | | | MBB | | 12.0 | 4" Treated Wood Pole | | 5.0 | 3.4 | 3.0 | 13.7 | | | | | | | 5.0 | | 14 | | | | | | 1 | | | LUSCHER DR | LUSCHER DR |
| | | | | R1-1 | 30 | X | 30 | | | | | | | | | | | | | | | | | | | 5.2 | | | | | | | | | STOP | STOP |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5.374 | | SB | | | 48 X | | | | BBR | | | | | | | | | | | | | | | | | | | | | | | | | | |
| X | | | | W14-3 | 48 | X | 36 | FY | | | | 12.0 | 4" Treated Wood Pole | | 5.0 | 3.0 | 3.0 | 13.3 | | | | | | | 5.5 | | 14 | | | | | | 1 | | | NO PASSING ZONE | NO PASSING ZONE |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5.636 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| X | | | | D3 (2x) | 42 | X | 10 | | | MBB | | 12.0 | 4" Treated Wood Pole | | 5.0 | 3.4 | 3.0 | 13.7 | | | | | | | 5.8 | | 14 | | | | | | 1 | | | MEADOWLARK LN | MEADOWLARK LN |
| | | | | R1-1 | 30 | X | 30 | | | | | | | | | | | | | | | | | | | 5.2 | | | | | | | | | STOP | STOP |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6.000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | X | | D10-1 (2x) | 10 | X | 18 | | | MBB | | 4.0 | 2.0lb Steel U Post | | 4.0 | 1.5 | 3.0 | 9.2 | | | | | | | 2.5 | | | | | | 20 | | 1 | | | MILE 6 | MILE 6 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6.001 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| X | | | | D3 (2x) | 36 | X | 10 | | | MBB | | 12.0 | 4" Treated Wood Pole | | 5.0 | 3.4 | 3.0 | 13.7 | | | | | | | 5.0 | | 14 | | | | | | 1 | | | AIRPORT WAY | AIRPORT WAY |
| | | | | R1-1 | 30 | X | 30 | | | | | | | | | | | | | | | | | | | 5.2 | | | | | | | | | STOP | STOP |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

SHEET NO.
S3

SIGN LOCATIONS AND SPECIFICATIONS

PROJECT NAME: LIBBY AIRPORT - N & S (S-482)
COUNTY: LINCOLN
PROJECT ID: STPS 482-1(8)3
UPN: 10377000

DESIGNED BY: L MOREY 02/2024
REVIEWED BY: N THOLT 02/2024
CHECKED BY: R SCHROEDER 02/2024
10377000SIPLN001.DWG

MONTANA Department of Transportation

TRAFFIC SIGNING

8/6/2024 1:42 PM

| SIGN LOCATION | | | | SIGN PANEL SPECIFICATIONS | | | | | | | SIGN ASSEMBLY SPECIFICATIONS | | | | | | | | | | SIGN ASSEMBLY QUANTITIES | | | | | | | | | | | | ADDITIONAL SIGN INFORMATION | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| R.P. | | DIRECTION | RAMP NO. | SIGN NO. (MUTCD) | PANEL SIZE (INCHES) | | | FY OR FYG | BACK BRACING REQ'D ANGLE IRON REQ'D | MOUNT BACK TO BACK | REPLACE SIGN FACE ONLY | FEET | TYPE OF SUPPORT | FEET | | | | | | | CANTILEVER | BREAKAWAY TYPE | BEHIND GUARDRAIL | PANEL (SQ. FT.) | | WOOD POLE (LNR. FT.) | | STEEL POST (LBS.) | | | | BREAKAWAY | REMV | | RESET | | SIGN IMAGE | SIGN TEXT & REMARKS |
| LFT | MDN | RGT | | | W | X | H | | | | | CLEARANCE/OFFSET (SHOULDER TO EDGE OF SIGN) | | SIGN SUPPORT SPACING | MOUNTING HEIGHT | SIGN HEIGHT + GAPS | FOUNDATION DEPTH | SUPPORT LENGTH (ESTIMATED) X | Y | Z | | | | SHEET ALUMINUM | SHEET ALUMINUM INCREMENT | 4" TOP DIA. | 5" TOP DIA. | ROUND TUBULAR | SQUARE TUBULAR | STRUCTURAL STEEL | "U" POST | | SIGN | GUIDE | SIGN | GUIDE | | |
| 6.041 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| X | | | | N7-1 | 36 | X | 48 | | | | | 12.0 | 5" Treated Wood Pole | | 5.0 | 5.1 | 3.5 | 15.9 | | | | X | | 12.0 | | | 16 | | | | | 1 | | | |  | ADOPT A HIGHWAY |
| | | | | N7-1P | 36 | X | 12 | | | | | | | | | | | | | | | | | 3.0 | | | | | | | | | | | CABINET LODGE 68 ODD FELLOWS | CABINET LODGE 68 ODD FELLOWS |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6.293 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | X | | W2-2R | 30 | X | 30 | | | | | 12.0 | 4" Treated Wood Pole | | 5.0 | 2.6 | 3.0 | 12.8 | | | | | | 6.3 | | 14 | | | | | | 1 | | | |  | SIDE ROAD-RT |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6.348 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | X | | R2-1 | 24 | X | 30 | | | | | 12.0 | 5" Treated Wood Pole | | 5.0 | 5.7 | 3.5 | 16.4 | | | | X | | 5.0 | | | 18 | | | | | 1 | | | |  | SPEED LIMIT 45 |
| | | | | M1-12 | 24 | X | 24 | | | | | | | | | | | | | | | | | 4.0 | | | | | | | | | | |  | ROUTE 482 |
| | | | | M4-6 | 24 | X | 12 | | | | | | | | | | | | | | | | | 2.0 | | | | | | | | | | |  | END |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6.353 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| X | | | | R2-1 | 24 | X | 30 | | | | | 12.0 | 4" Treated Wood Pole | | 5.0 | 2.5 | 3.0 | 12.7 | | | | | | 5.0 | | 14 | | | | | | 1 | | | |  | SPEED LIMIT 55 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PROJECT TOTALS | | | | | | | | | | | | | | | | | | | | | | | | 158.0 | | 158 | 82 | | | | 60 | | 19 | | | | |

SHEET NO.
S4

SIGN LOCATIONS AND SPECIFICATIONS

PROJECT NAME: LIBBY AIRPORT - N & S (S-482)
COUNTY: LINCOLN
PROJECT ID: STPS 482-1(8)3
UPN: 10377000

| DESIGNED BY | 02/2024 |
|---|---|
| L.MOREY | |
| REVIEWED BY | 02/2024 |
| N THOLT | |
| CHECKED BY | 02/2024 |
| R.SCHROEDER | |

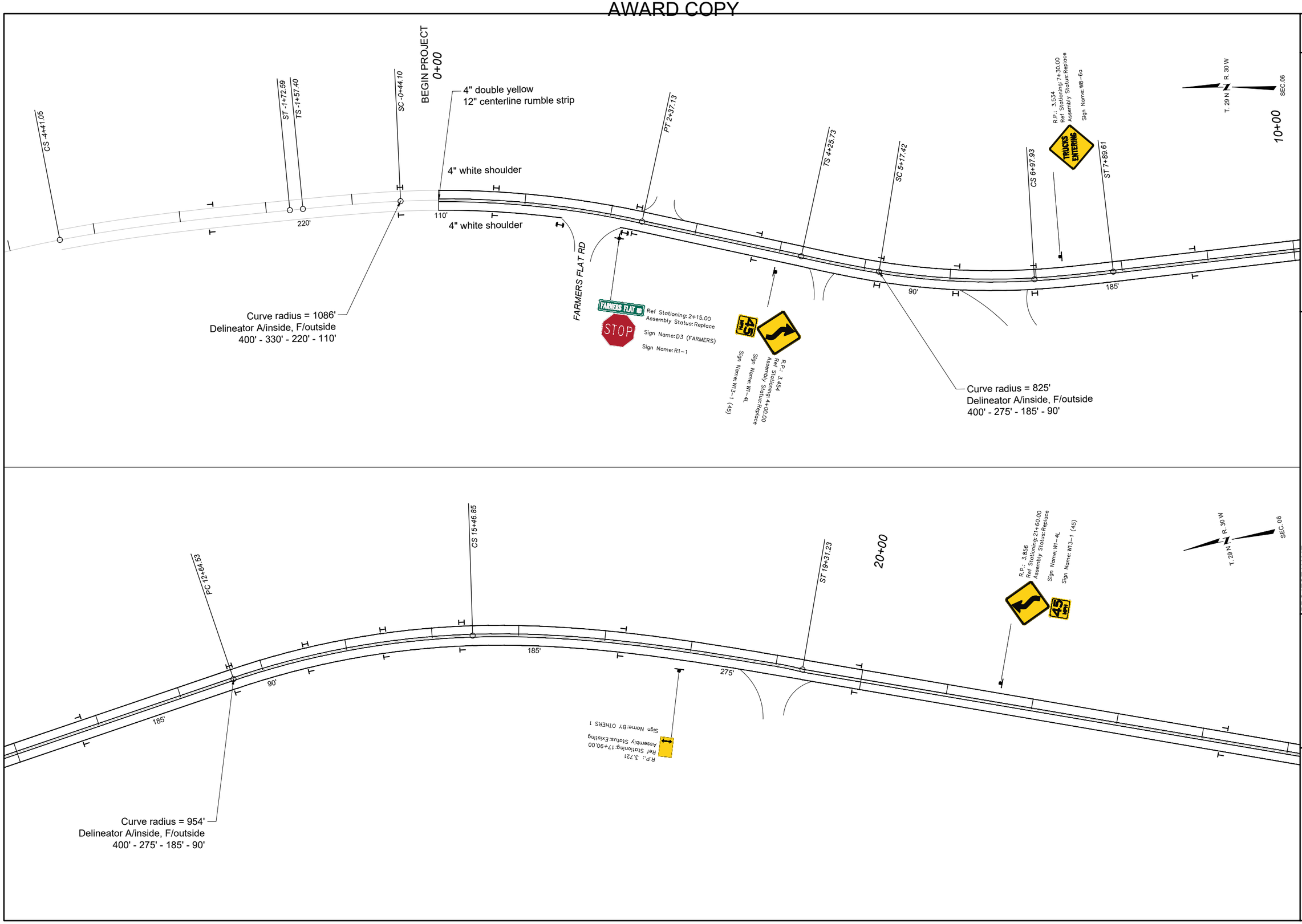
MONTANA
Department of Transportation

TRAFFIC SIGNING

10377000SIPLN001.DWG

8/6/2024 1:42 PM

AWARD COPY




SHEET NO.
S5

PLAN SHEET

MONTANA
Department of Transportation

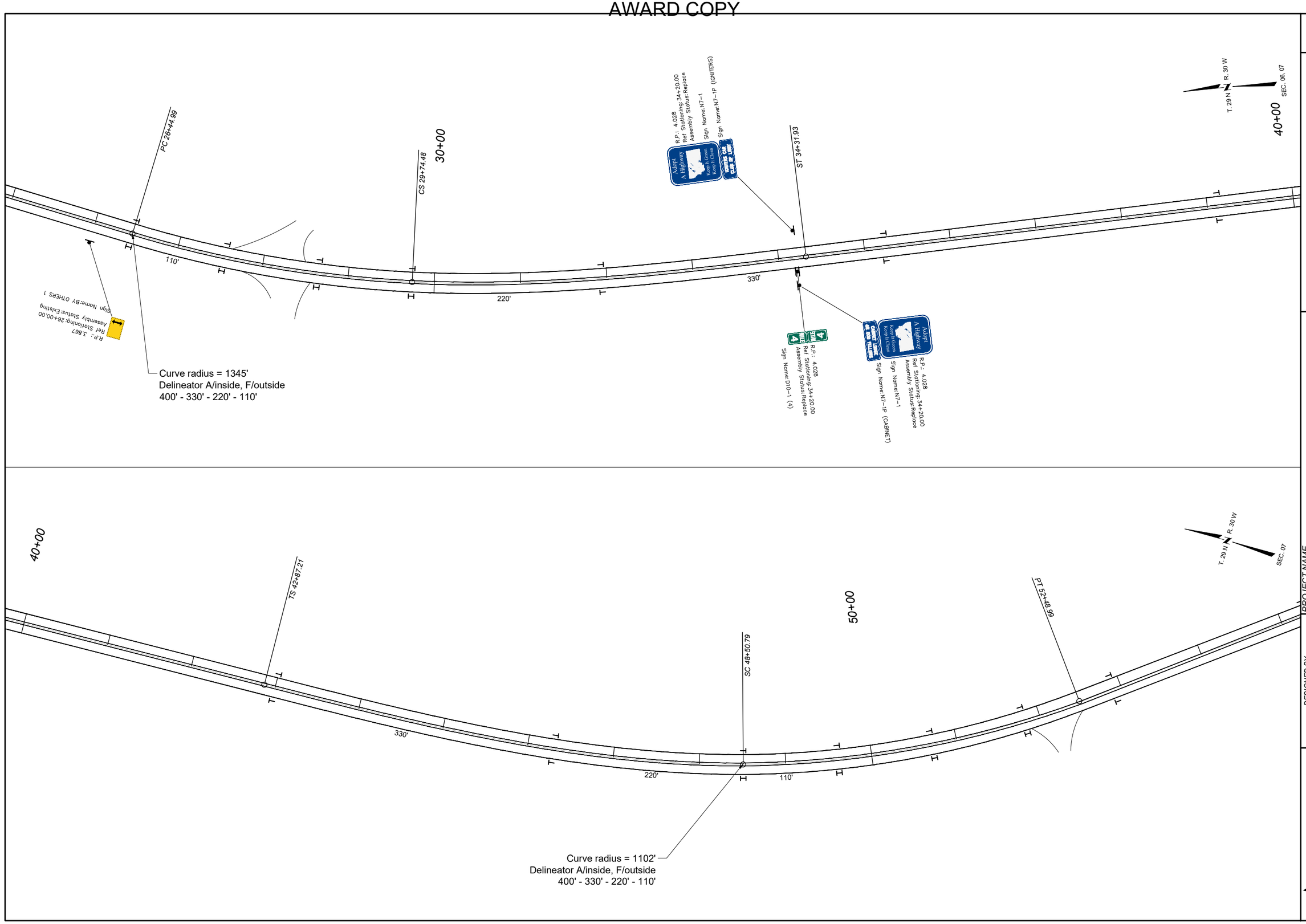
TRAFFIC SIGNING

| | | | |
|---|---|---|---|
| DESIGNED BY | 02/2024 | PROJECT NAME | LIBBY AIRPORT - N & S (S-482) |
| L.MOREY | | COUNTY | LINCOLN |
| REVIEWED BY | 02/2024 | PROJECT ID | STPS 482-1(8)3 |
| N.THOLT | | UPN | 10377000 |
| CHECKED BY | 02/2024 | | |
| R.SCHROEDER | | | |

10377000SIPLN001.DWG

8/6/2024 1:42 PM

AWARD COPY




**SHEET NO.** S6

**PLAN SHEET**

PROJECT NAME: **LIBBY AIRPORT - N & S (S-482)**

COUNTY: **LINCOLN**

PROJECT ID: **STPS 482-1(8)3**

UPN: **10377000**

| DESIGNED BY | DATE |
|---|---|
| L.MOREY | 02/2024 |
| REVIEWED BY | DATE |
| N.THOLT | 02/2024 |
| CHECKED BY | DATE |
| R.SCHROEDER | 02/2024 |

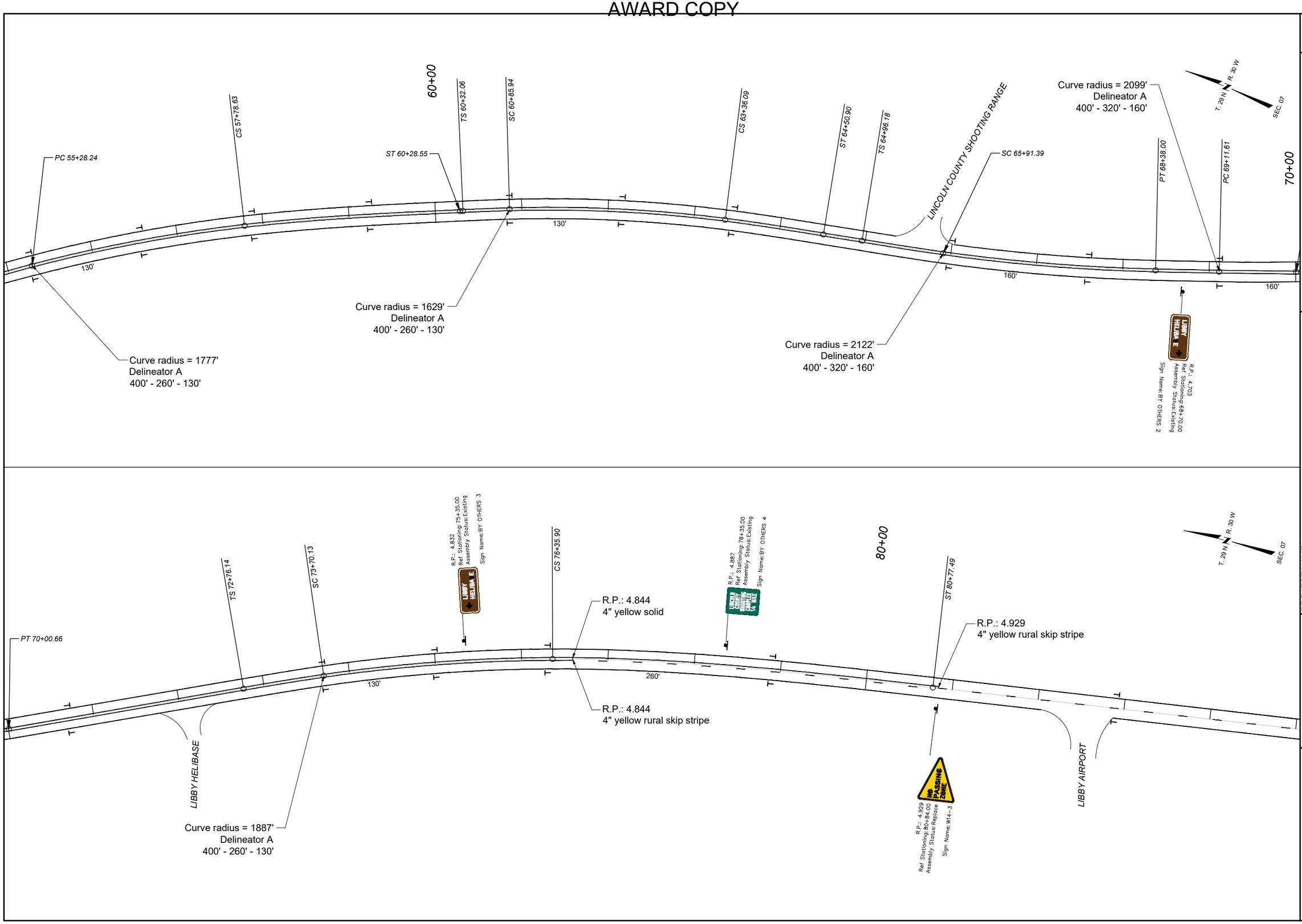
10377000SIPLN001.DWG

**MONTANA** Department of Transportation

**TRAFFIC SIGNING**

8/6/2024 1:42 PM

AWARD COPY




**SHEET NO.**
S7

**PLAN SHEET**

PROJECT NAME: **LIBBY AIRPORT - N & S (S-482)**
COUNTY: **LINCOLN**
PROJECT ID: **STPS 482-1(8)3**
UPN: **10377000**

| DESIGNED BY | | REVIEWED BY | | CHECKED BY | |
|---|---|---|---|---|---|
| L.MOREY | 02/2024 | N.THOLT | 02/2024 | R.SCHROEDER | 02/2024 |

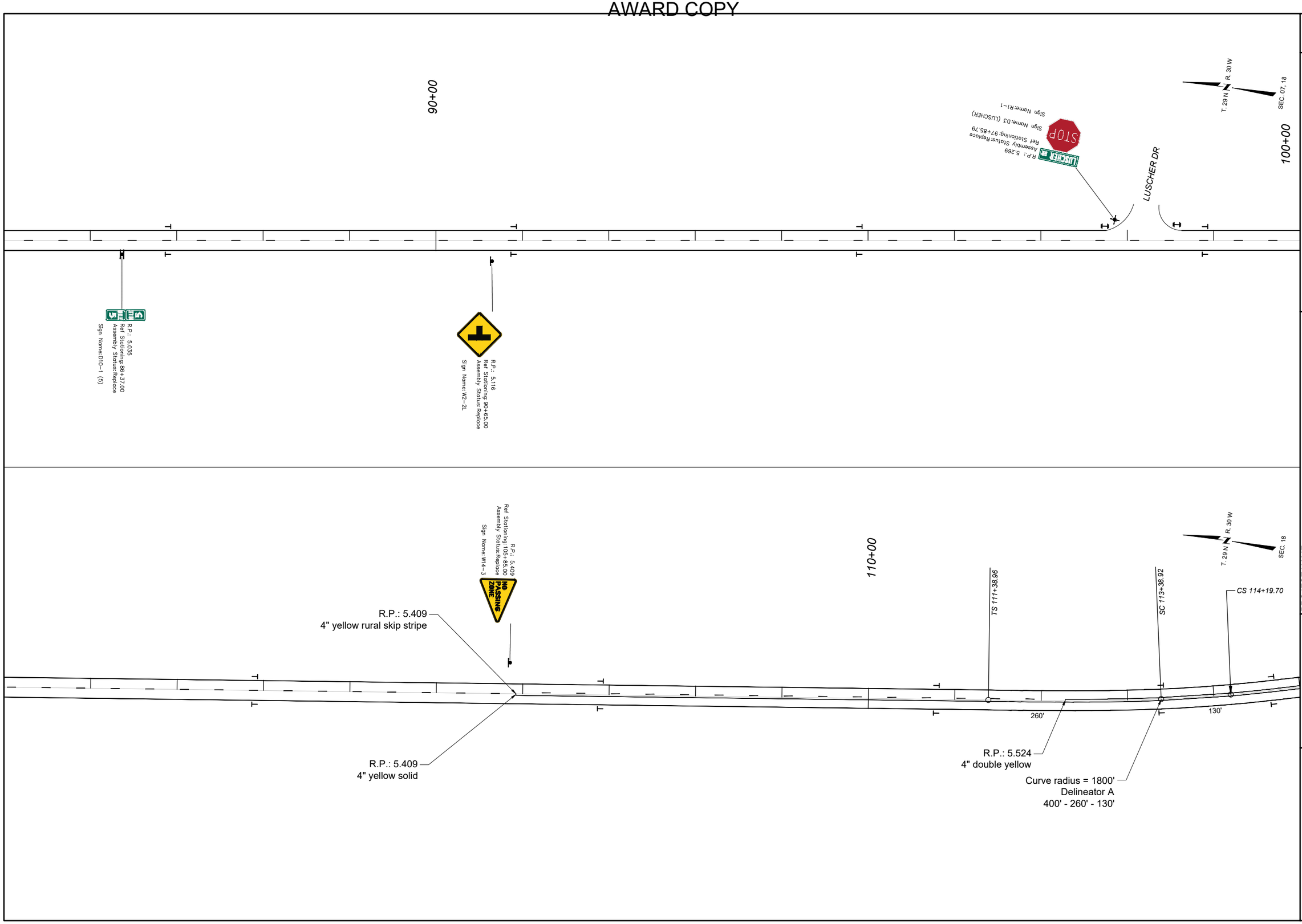
10377000SIPLN001.DWG

**MONTANA**
Department of Transportation

**TRAFFIC SIGNING**

8/6/2024 1:42 PM

AWARD COPY




SHEET NO.
S8

PLAN SHEET

PROJECT NAME: LIBBY AIRPORT - N & S (S-482)
COUNTY: LINCOLN
PROJECT ID: STPS 482-1(8)3
UPN: 10377000

| DESIGNED BY | | REVIEWED BY | | CHECKED BY | |
|---|---|---|---|---|---|
| L.MOREY | 02/2024 | N.THOLT | 02/2024 | R.SCHROEDER | 02/2024 |

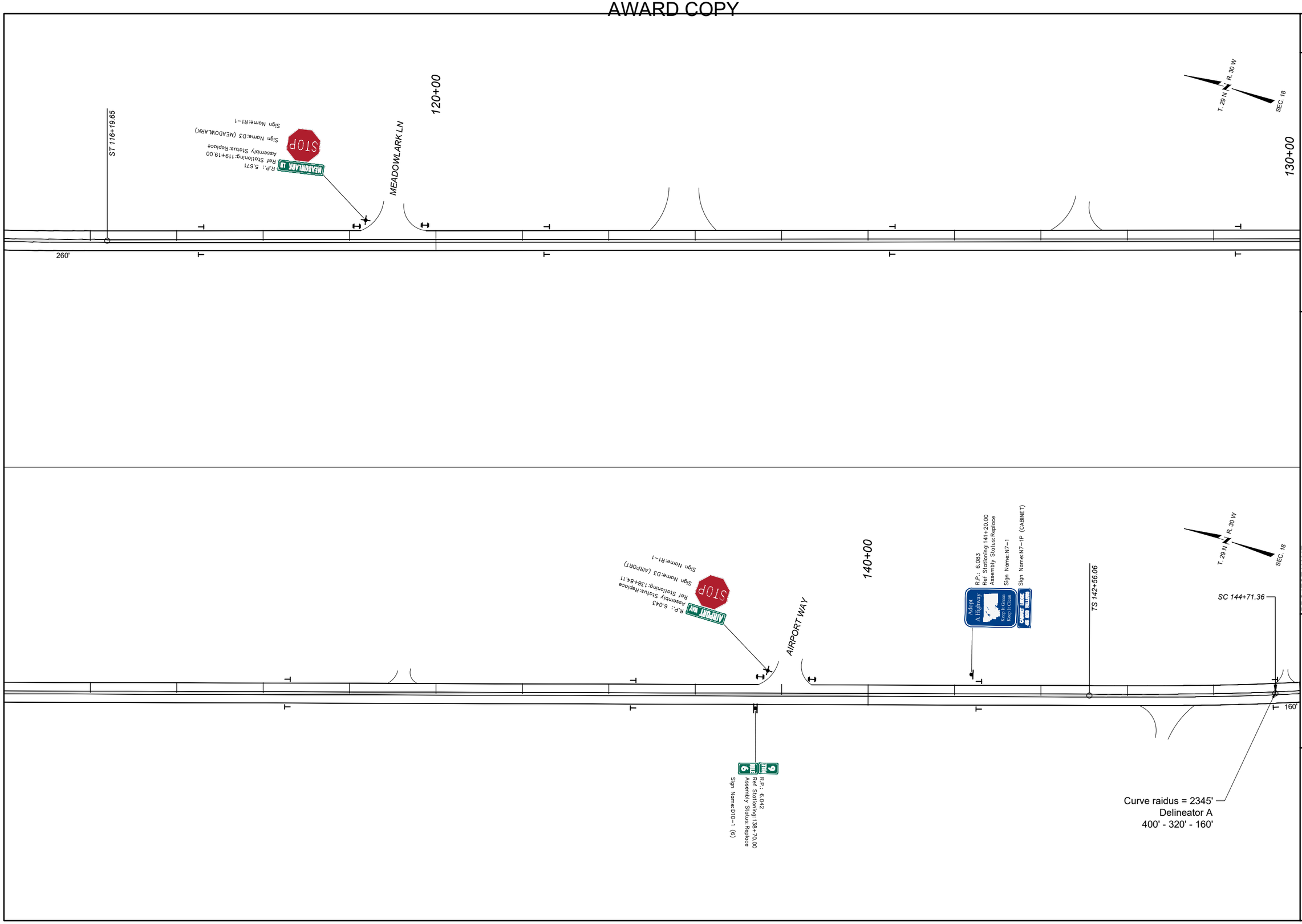
10377000SIPLN001.DWG

MONTANA
Department of Transportation

TRAFFIC SIGNING

8/6/2024 1:42 PM

AWARD COPY




SHEET NO.
S9

PLAN SHEET

PROJECT NAME: LIBBY AIRPORT - N & S (S-482)
COUNTY: LINCOLN
PROJECT ID: STPS 482-1(8)3
UPN: 10377000

| DESIGNED BY | | REVIEWED BY | | CHECKED BY | |
|---|---|---|---|---|---|
| L MOREY | 02/2024 | N THOLT | 02/2024 | R SCHROEDER | 02/2024 |

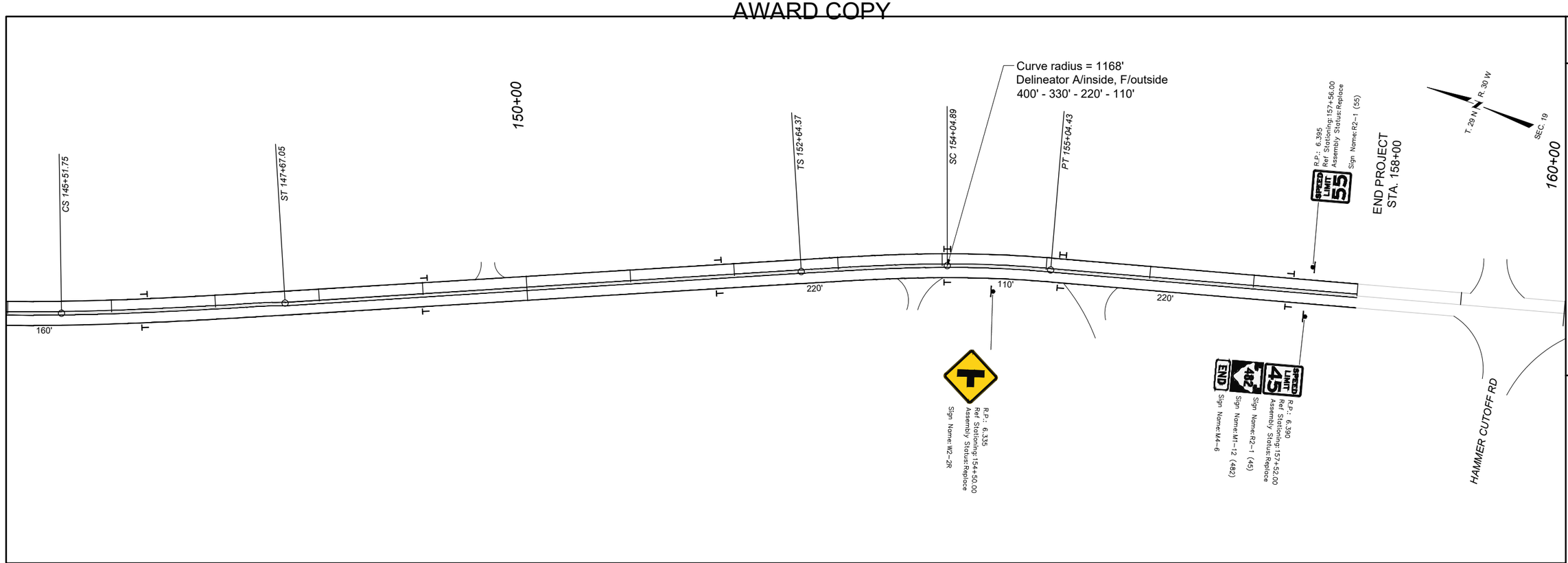
10377000SIPLN001.DWG

MONTANA
Department of Transportation

TRAFFIC SIGNING

8/6/2024 1:42 PM

AWARD COPY




**SHEET NO.**
S10

**PLAN SHEET**

PROJECT NAME
**LIBBY AIRPORT - N & S (S-482)**

COUNTY
**LINCOLN**

PROJECT ID
**STPS 482-1(8)3**

UPN
**10377000**

| DESIGNED BY | | DATE |
|---|---|---|
| L.MOREY | | 02/2024 |
| REVIEWED BY | | DATE |
| N.THOLT | | 02/2024 |
| CHECKED BY | | DATE |
| R.SCHROEDER | | 02/2024 |

**MONTANA**
Department of Transportation

**TRAFFIC SIGNING**

8/6/2024 1:42 PM

10377000SIPLN001.DWG