



Carson City Planning Division

108 E. Proctor Street
Carson City, Nevada 89701
(775) 887-2180 – Hearing Impaired: 711
planning@carson.org
www.carson.org/planning

MEMORANDUM

Historic Resource Commission meeting of May 14, 2020

TO: Historic Resource Commission

Item E-1

FROM: Hope Sullivan, AICP
Planning Manager

DATE: May 5, 2020

SUBJECT: HRC-2020-0013: For Possible Action: Discussion and possible action regarding providing input for a Section 106 review being conducted by the United States Forest Service relative to the reconstruction of Kings Canyon Road beginning at the Kings Canyon Trailhead, and going westerly for 2.2 miles, on property zoned Conservation Reserve, and owned by the United States of America< APNs 007-061-26, -41, 007-051-87, and -02. (Hope Sullivan, hsullivan@carson.org)

As the reconstruction of Kings Canyon Road beginning at the Kings Canyon Trailhead and extending westerly for 2.2 miles is a federal project, a Section 106 review is required. A Section 106 review process is a component of the National Historic Preservation Act (NHPA) of 1966. Section 106 of NHPA requires each federal agency to identify and assess the effects their actions will have on historic resources. The federal agency will consider public views and concerns about historic preservation issues when making final project decisions.

The first step in a Section 106 review is to consult with parties, including Certified Local Governments, to identify property that may be affected by the project and determine if the property or properties are eligible for or listed on the National Register of Historic Places. If eligible or listed properties will be adversely impacted, these impacts should be resolved by avoiding, minimizing, or mitigating the impacts on the historic resource.

The Carson Ranger District of the Humboldt-Toiyabe National Forest plans on reconstructing 2.2 miles of Kings Canyon Road beginning at the Kings Canyon Trailhead and extending westerly for 2.2 miles. Over the years, this roadway has been damaged by winter runoff, vehicular traffic in muddy conditions, and a lack of maintenance. The proposed undertaking includes cleaning out the inside ditch for nearly the entire 2.2 miles, repairing drainage features like culverts and rolling dips where necessary, as well as bringing in base fill where the road incised. A majority of the roadwork will be confined to the road prism. There are several historic sites that will be evaluated for listing in the National Register of Historic Places and/or effects determinations.

The HRC, as a consulting party, is asked to:

- (1) Identify any historic resources that may be impacted by the project;
- (2) Determine if the impact is adverse; and

(3) Suggest mitigation to address the adverse impacts.

Note that HRC is a consulting agency. The applicant will be consulting with other agencies as part of the Section 106 review and assembling additional input.

The District Archeologist for the Forest Service will present an overview of the project to the HRC, and answer questions. But, primarily, the District Archeologist will be in attendance to understand the impacts of the project to historic resources.

Attachments

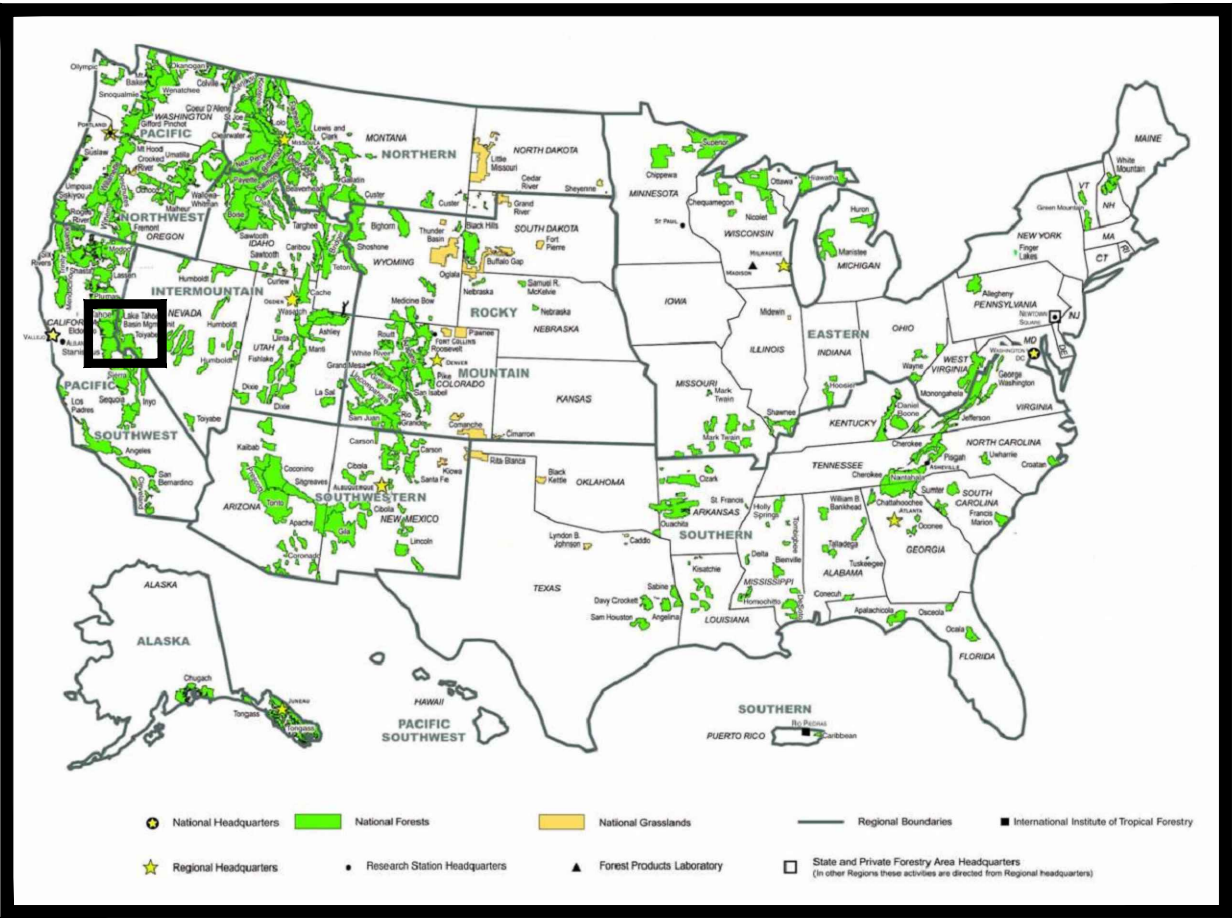
1. Project plans



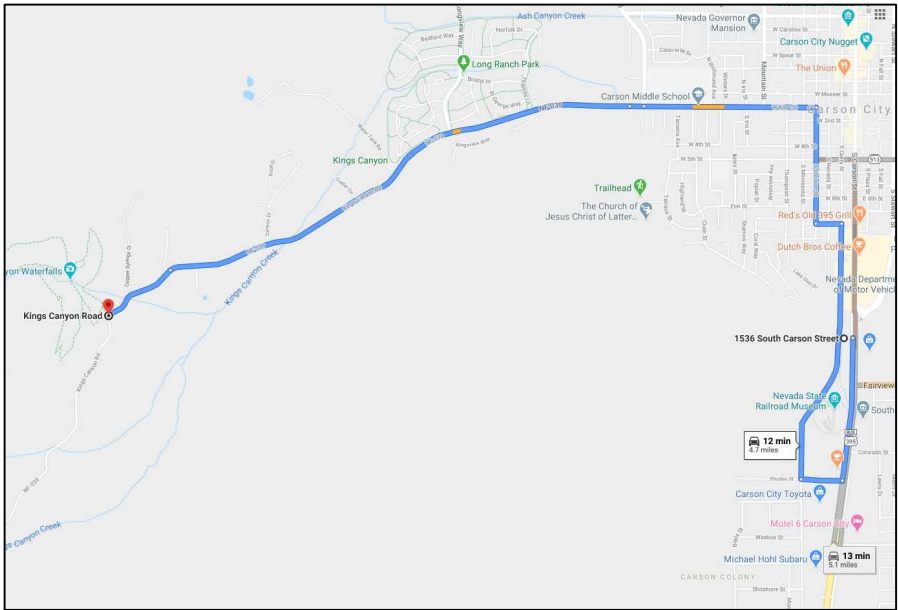
United States Department of Agriculture
Forest Service

NEVADA
CARSON CITY
(R04) INTERMOUNTAIN REGION
HUMBOLDT-TOIYABE NATIONAL FOREST
CARSON RANGER DISTRICT

KING'S CANYON ROAD



FOREST LOCATION



VICINITY MAP

TRAVEL DIRECTIONS:

FROM CARSON RANGER DISTRICT OFFICE AT 1536 SOUTH CARSON STREET, DRIVE SOUTH ON SOUTH CARSON STREET FOR APPROXIMATELY 0.5 MILES. TURN RIGHT ON RHODES STREET, THEN TURN RIGHT ON SOUTH CURRY STREET. DRIVE NORTH ON SOUTH CURRY STREET FOR APPROXIMATELY 0.9 MILES. TURN LEFT ON WEST 10TH STREET. DRIVE TWO BLOCKS, THEN TURN RIGHT ON SOUTH DIVISION STREET. DRIVE NORTH ON SOUTH DIVISION STREET FOR APPROXIMATELY 0.4 MILES, THEN TURN LEFT ON KING'S CANYON ROAD. DRIVE WEST ON KING'S CANYON ROAD FOR APPROXIMATELY 2.6 MILES TO REACH PROJECT.
LATITUDE: 39° 09' 12" N LONGITUDE: 119° 48' 56".

INDEX OF SHEETS

SHEET	SHEET TITLE	DATE
1	COVERSHEET	
2	PROJECT OVERVIEW	
3	GENERAL NOTES	
4	PLAN SHEET 01	
5	PLAN SHEET 02	
6	PLAN SHEET 03	
7	PLAN SHEET 04	
8	PLAN SHEET 05	
9	PLAN SHEET 06	
10	PLAN SHEET 07	
11	PLAN SHEET 08	
12	PLAN SHEET 09	
13	PLAN SHEET 10	
14	PLAN SHEET 11	
15	PLAN SHEET 12	
16	PLAN SHEET 13	
17	PLAN SHEET 14	
18	PLAN SHEET 15	
19	PLAN SHEET 16	
20	PLAN SHEET 17	
21	CROSS-SECTION SHEET	
22	DETAIL SHEET 01	
23	DETAIL SHEET 02	
24	DETAIL SHEET 03	
25	DETAIL SHEET 04	
26		
27		
28		
29		
30		
31		
32		
33		
34		
35		
36		
37		
38		
39		
40		

RECOMMENDED BY:

DISTRICT RANGER

DATE

FOREST SUPERVISOR

DATE

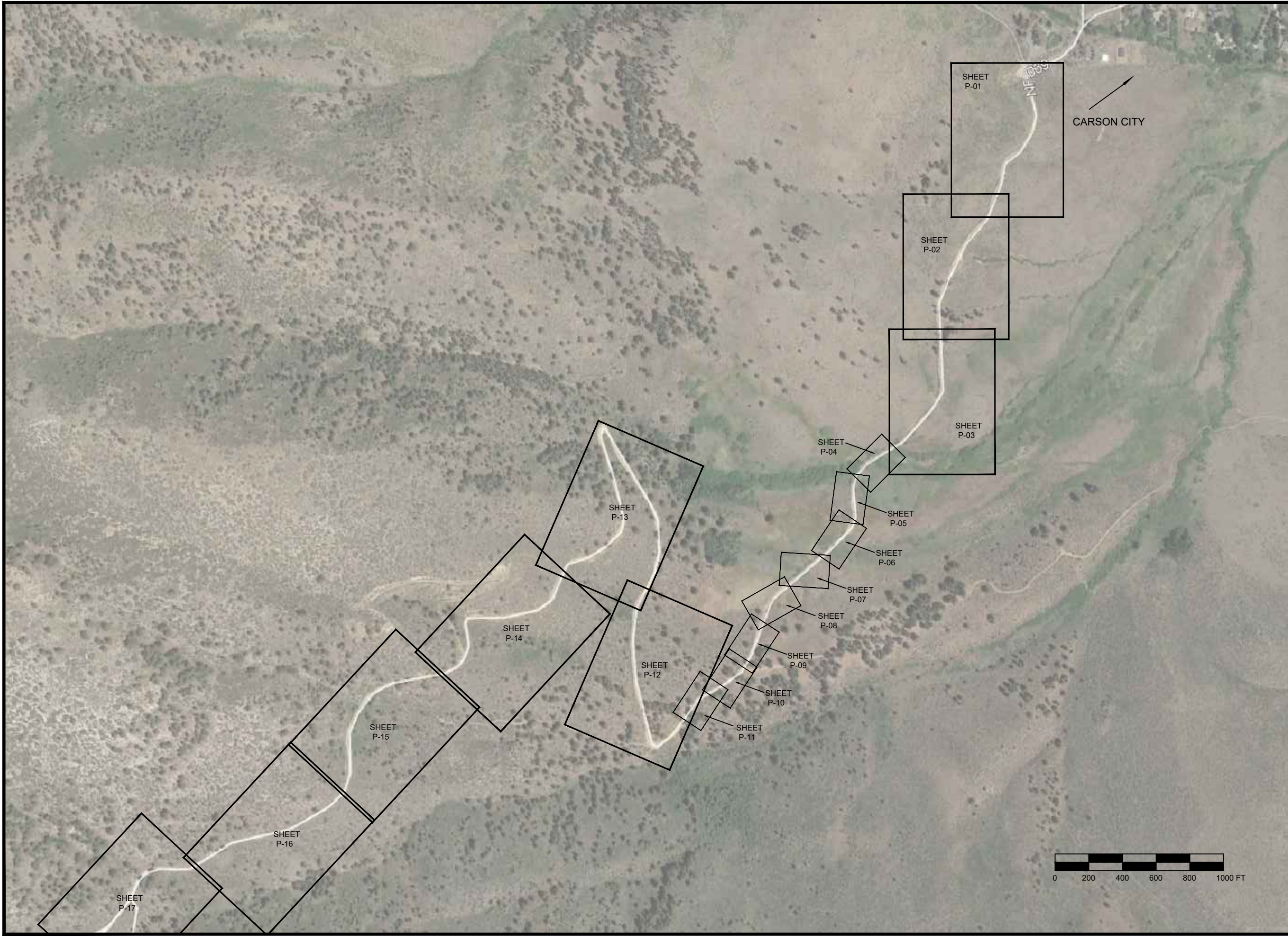
APPROVED:

FOREST ENGINEER

DATE

GENERAL NOTES		ITEMS OF WORK		
1. CONTRACTOR'S SCOPE OF WORK SHALL INCLUDE FURNISHING ALL MATERIALS, EQUIPMENT, AND LABOR NECESSARY TO COMPLETE PROJECT. 2. PRIOR TO SUBMISSION OF BIDS, CONTRACTORS SHALL VISIT THE JOB SITE AND FAMILIARIZE THEMSELVES WITH ALL CONDITIONS AFFECTING THE PROPOSED PROJECT WITH THE CONSTRUCTION AND CONTRACT DOCUMENTS. CONTRACTOR SHALL CONFIRM THAT THE PROJECT MAY BE ACCOMPLISHED AS SHOWN PRIOR TO PROCEEDING WITH CONSTRUCTION. ANY ERRORS, OMISSIONS, OR DISCREPANCIES ARE TO BE BROUGHT TO THE ATTENTION OF THE ENGINEER AND/OR PROJECT MANAGER. 3. ALL DIMENSIONS ARE IN FEET UNLESS OTHERWISE SPECIFIED. 4. DETAILS INCLUDED HEREIN ARE INTENDED TO SHOW END RESULT OF DESIGN. MINOR MODIFICATIONS MAY BE REQUIRED TO SUITE EXISTING CONDITIONS OR SITUATIONS, AND SUCH MODIFICATIONS SHALL BE INCLUDED AS PART OF THE SCOPE OF WORK. 5. CONTRACTOR SHALL ENSURE THAT WORK AREA IS KEPT CLEAN AND HAZARD FREE DURING CONSTRUCTION AND DISPOSE OF ALL REMOVED MATERIAL THAT IS NOT TO BE INCORPORATED INTO THE WORK. REMOVED MATERIAL SHALL BE DISPOSED OF LEGALLY OFF OF FOREST. 6. COMPACTION: PLACE MATERIAL TO THE MINIMUM DEPTH NEEDED FOR OPERATION OF SPREADING EQUIPMENT. ADJUST THE MOISTURE CONTENT OF THE MATERIAL TO OBTAIN A MASS THAT WILL NOT VISIBLY DEFLECT UNDER THE LOAD OF THE HAULING AND SPREADING EQUIPMENT. OPERATE COMPACTION EQUIPMENT OVER THE FULL WIDTH OF EACH LAYER UNTIL THERE IS NO VISIBLE EVIDENCE OF FURTHER CONSOLIDATION. 7. ITEMS OF WORK FOR WHICH THERE IS NOT A SPECIFIC PAY ITEM SHALL BE INCIDENTAL TO OTHER ITEMS OF WORK, AND NO DIRECT PAYMENT SHALL BE MADE THEREFORE. 8. DO NOT DISTURB OR DAMAGE EXISTING CULVERTS. 9. CONTRACTOR SHALL SUBMIT COMMERCIAL SOURCES FOR ALL AGGREGATE AND ROCK MATERIALS FOR APPROVAL TWO WEEKS PRIOR TO WORK BEGINNING. COMMERCIAL SOURCES SHALL BE CERTIFIED WEED FREE. 10. ALL EQUIPMENT SHALL BE THOROUGHLY CLEANED PRIOR TO TRANSPORT TO PROJECT TO REDUCE RISK OF SPREAD OF INVASIVE WEEDS. 11. ALL MATERIALS PAID FOR BY ACTUAL QUANTITY SHALL HAVE SCALE TICKETS FROM THE COMMERCIAL SOURCE. 12. ALL SUITABLE MATERIAL EXCAVATED SHALL BE INCORPORATED INTO THE ROAD FOR THE PURPOSE OF FILLING RUTS OR ROADWAY RECONSTRUCTION. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO OTHER ITEMS OF WORK AND NO PAYMENT SHALL BE MADE THEREFORE. UNSUITABLE MATERIAL SHALL BE DISPOSED OF LEGALLY OFF OF FOREST. 13. CONTRACTOR TO CONFORM TO FIRE PROTECTION PLAN, SEE ATTACHMENT. 14. CONTRACTOR IS RESPONSIBLE FOR EROSION CONTROL, AND SHALL CONFORM TO THE FOREST SERVICE BMP MANUAL. 15. CONTRACTOR TO PROVIDE ADEQUATE SIGNAGE AND TRAFFIC CONTROL. ROADWAY MAY BE CLOSED TO VEHICULAR TRAFFIC DURING WORKING HOURS. ROADWAY SHALL BE OPEN TO VEHICULAR TRAFFIC DURING NON-WORK HOURS AND ON WEEKENDS. SUBMIT TRAFFIC CONTROL PLAN AT LEAST TWO WEEKS PRIOR TO BEGINNING CONSTRUCTION. 16. ROADWAY SHALL BE OPEN TO PEDESTRIAN AND BICYCLE TRAFFIC DURING WORKING HOURS, EXCEPT DURING CONSTRUCTION OF ITEMS WHICH WOULD PROHIBIT SUCH TRAFFIC. COORDINATE THESE CLOSURES WITH CARSON CITY AND THE U.S. FOREST SERVICE. 17. ENSURE THAT ALL CULVERTS HAVE 1' OF COVER (MIN) 18. ALL WORK SHALL CONFORM TO THE STANDARD SPECIFICATION FOR CONSTRUCTION OF ROADS AND BRIDGES ON FEDERAL HIGHWAY PROJECTS (FP-14). 19. CONTRACTOR IS TO ENDEAVOR TO UTILIZE ROAD WIDENINGS FOR STAGING AREAS. AN ADDITIONAL STAGING AREA IS IDENTIFIED AT THE BEGINNING OF THE PROJECT, LIMITS TO BE MARKED OUT BY U.S. FOREST SERVICE OR CATSON CITY. USE OF THIS STAGING AREA SHALL BE MINIMIZED, AND SHALL ONLY OCCUR WHEN WIDENINGS ARE NOT ADEQUATE. 20. STATIONING IS BASED ON A WHEEL LINE SURVEY, AND IS APPROXIMATE. CONTRACTOR TO ESTABLISH STATIONING BASED ON 6 STAKES THROUGHOUT PROJECT PROVIDED PRIOR TO BEGINNING OF CONSTRUCTION.		1. RECONSTRUCT DRIVEABLE DIP - SHAPE ROADWAY ACCORDING TO DETAIL, SEE SHEET D-04. ADD MOISTURE AS NECESSARY. COMPACT. SOME LOCATIONS MAY ALREADY HAVE A DRIVEABLE DIP, RECONSTRUCT AT THESE LOCATIONS. 2. RECONSTRUCT ROADWAY - RESHAPE EXISTING ROAD SURFACE, INCORPORATING MATERIAL EXCAVATED FROM DITCH CONSTRUCTION AND RECONSTRUCTION. IMPORT AGGREGATE BASE MATERIAL WHERE NEEDED. GRADE AND COMPACT TO 4% CROSS SLOPE. USE COMPRESSION TYPE OR VIBRATORY ROLLER. COMPACT EACH LAYER OF MATERIAL FULL WIDTH UNTIL NO VISIBLE DEFLECTION OCCURS. ROAD WIDTH VARIES BASED ON EXISTING ROADWAY PRISM, MINIMUM WIDTH WILL BE 10'. PLACE IMPORTED AGGREGATE BASE FOR ROADWAY SURFACE MATERIAL ONLY IF INSUFFICIENT QUANTITIES ARE GENERATED ON-SITE. 3. REPAIR SLOPE FAILURE (MEDIUM) - AT LOCATION INDICATED ON PLAN SHEETS, PARTIALLY FILL CHANNEL WITH AGGREGATE BASE, COMPACT, PLACE GEOFABRIC, FILL CHANNEL WITH 8-INCH RIP RAP ACCORDING TO DETAIL. 4. REPAIR SLOPE FAILURE (LARGE) - AT LOCATIONS INDICATED ON PLAN SHEETS, PLACE TWO (2) 36-INCH BOULDERS AS ANCHORS, PLACE GEOFABRIC, FILL CHANNEL WITH 8-INCH RIP RAP ACCORDING TO DETAIL. 5. INSTALL 24" CMP - PERFORM EXCAVATION, SET GRADE WITH MATERIAL SUITABLE AS PIPE BEDDING. PIPE BEDDING AND BACKFILL CAN BE AGGREGATE BASE OR NATIVE MATERIAL FROM EXCAVATION THAT HAS HAD ROCKS LARGER THAN 3" REMOVED. PLACE PIPE (16-GA) TO GRADE, BACKFILL AND COMPACT. PIPE BACKFILL SHALL EXTEND 6-INCHES ABOVE TOP OF PIPE. PLACE 8-INCH RIP RAP AT INLET AND OUTLET. 6. INSTALL SIGN - DIG HOLE TO A DEPTH OF 3' MINIMUM, PLACE 4x4 TREATED WOOD POST, PLUMB. BACKFILL AND COMPACT, MOUNT SIGN ACCORDING TO DETAILS. 7. PLACE 36-INCH BOUDERS - PLACE BOULDERS AS BARRIERS TO CLOSE UNAUTHORIZED ROUTES AT LOCATIONS INDICATED IN THE PLANS. BURY APPROXIMATELY 8-INCHES OF THE BOULDER TO SEAT FIRMLY. 8. REPAIR DITCH - REMOVE APPROXIMATELY FOUR SMALL TREES (OR LARGE WILLOWS) INCLUDING ROOT STRUCTURE. REGRADE APPROXIMATELY 20 LF OF DITCH, RE-ESTABLISH LOWER DITCH BANK. REINFORCE IF NECESSARY.		USDA FOREST SERVICE U.S. DEPARTMENT OF AGRICULTURE United States Department of Agriculture Forest Service (R04) INTERMOUNTAIN REGION STAMPS, LOGOS, AND SEALS 4 3 2 1 NO. REVISION / ISSUE DATE PROJECT NAME KING'S CANYON ROAD FOREST NAME HUMBOLDT-TOIYABE NATIONAL FOREST DISTRICT NAME CARSON R.D. DRAWING TITLE DRAWING TITLE PROJECT OVERVIEW DATE 03/09/2020 DESIGNER T.JORGENSEN DRAWN T.JORGENSEN CHECKED J.BURGE PROJECT NO. ARCHIVE NO. DRAWING SHEET NO. PO-01 SHEET 002 OF 025
ABBREVIATIONS				
LT - LEFT RT - RIGHT CY - CUBIC YARD FT-FOOT (OR FEET) IN - INCH (OR INCHES) GA - GAUGE LF - LINEAR FOOT (OR FEET) LINFT - LINEAR FOOT (OR FEET) CMP - CORRUGATED METAL PIPE LS - LUMP SUM				

4/2/20 15:42 T.JORGENSEN C:\USER\T.JORGENSEN\BOX\HT ENGINEERING ACTIVE PROJECTS\2019 CARSON KING CANYON\ON PLANS\KING CANYON\PLANS\KING CANYON\PLANS.DWG;



United States Department of Agriculture
Forest Service

(R04)
INTERMOUNTAIN REGION

STAMPS, LOGOS, AND SEALS

4		
3		
2		
1		
NO.	REVISION / ISSUE	DATE

PROJECT NAME

PROJECT NAME

KING'S CANYON
ROAD

FOREST NAME

HUMBOLDT-
TOIYABE
NATIONAL
FOREST

DISTRICT NAME

CARSON R.D.

DRAWING TITLE

DRAWING TITLE

PROJECT
OVERVIEW

DATE 03/09/2020	ARCHIVE NO.
DESIGNER T.JORGENSEN	DRAWING SHEET NO. PO-01
DRAWN T.JORGENSEN	
CHECKED J.BURGE	
PROJECT NO.	SHEET 003 OF 025

4/2/20 15:42 T.JORGENSEN C:\USER\T.JORGENSEN\BOX\HT ENGINEERING ACTIVE PROJECTS\2019 CARSON KING\KINGSCANYON\PLANS\KINGSCANYON\PLANS.DWG;

ITEMS OF WORK

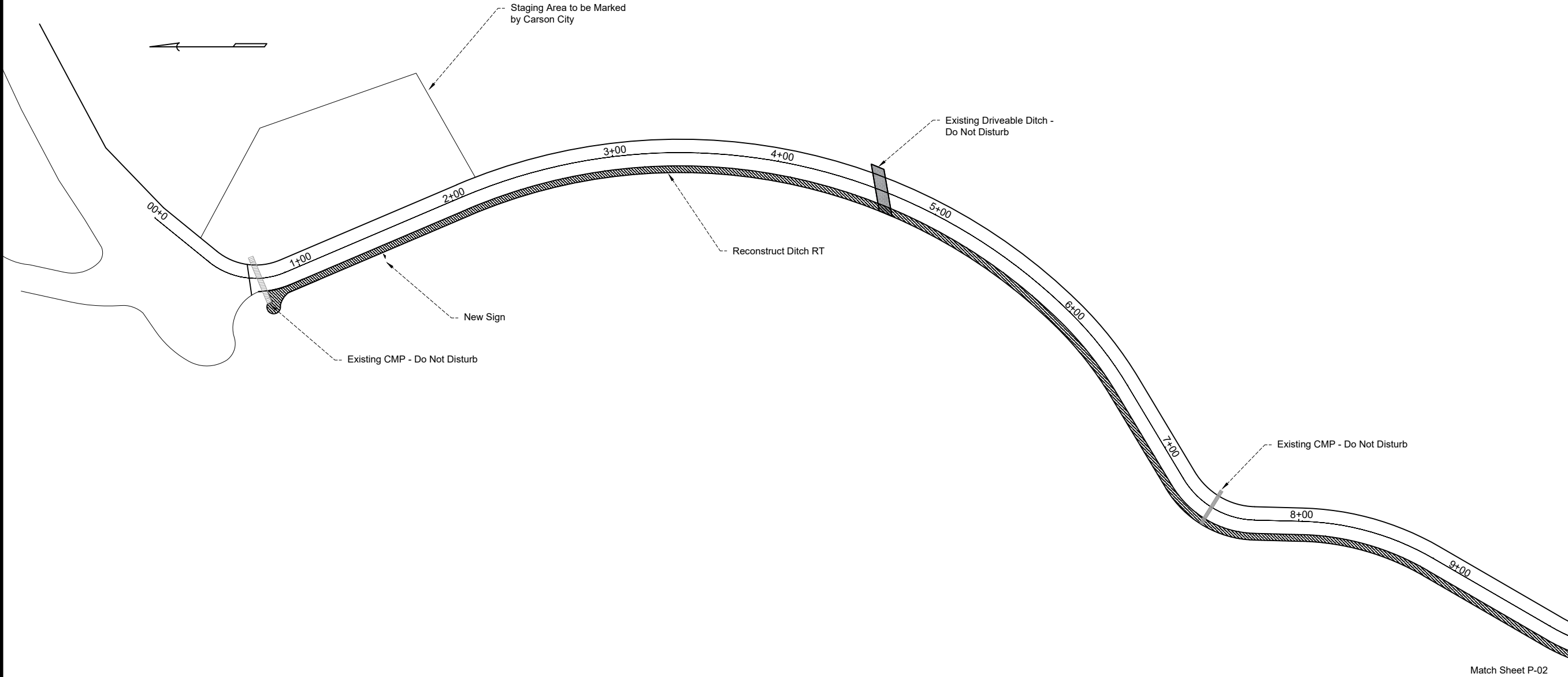
- 1

0+80 TO 27+35

Reconstruct Ditch RT (Option 1)
- 2

1+50

Install Sign (See Sheet D2) (Option 1)



United States Department of Agriculture
Forest Service

(R04)
INTERMOUNTAIN REGION

STAMPS, LOGOS, AND SEALS

4		
3		
2		
1		
NO.	REVISION / ISSUE	DATE

PROJECT NAME

PROJECT NAME

KING'S CANYON
ROAD

FOREST NAME

HUMBOLDT-
TOIYABE
NATIONAL
FOREST

DISTRICT NAME

CARSON R.D.

DRAWING TITLE

DRAWING TITLE

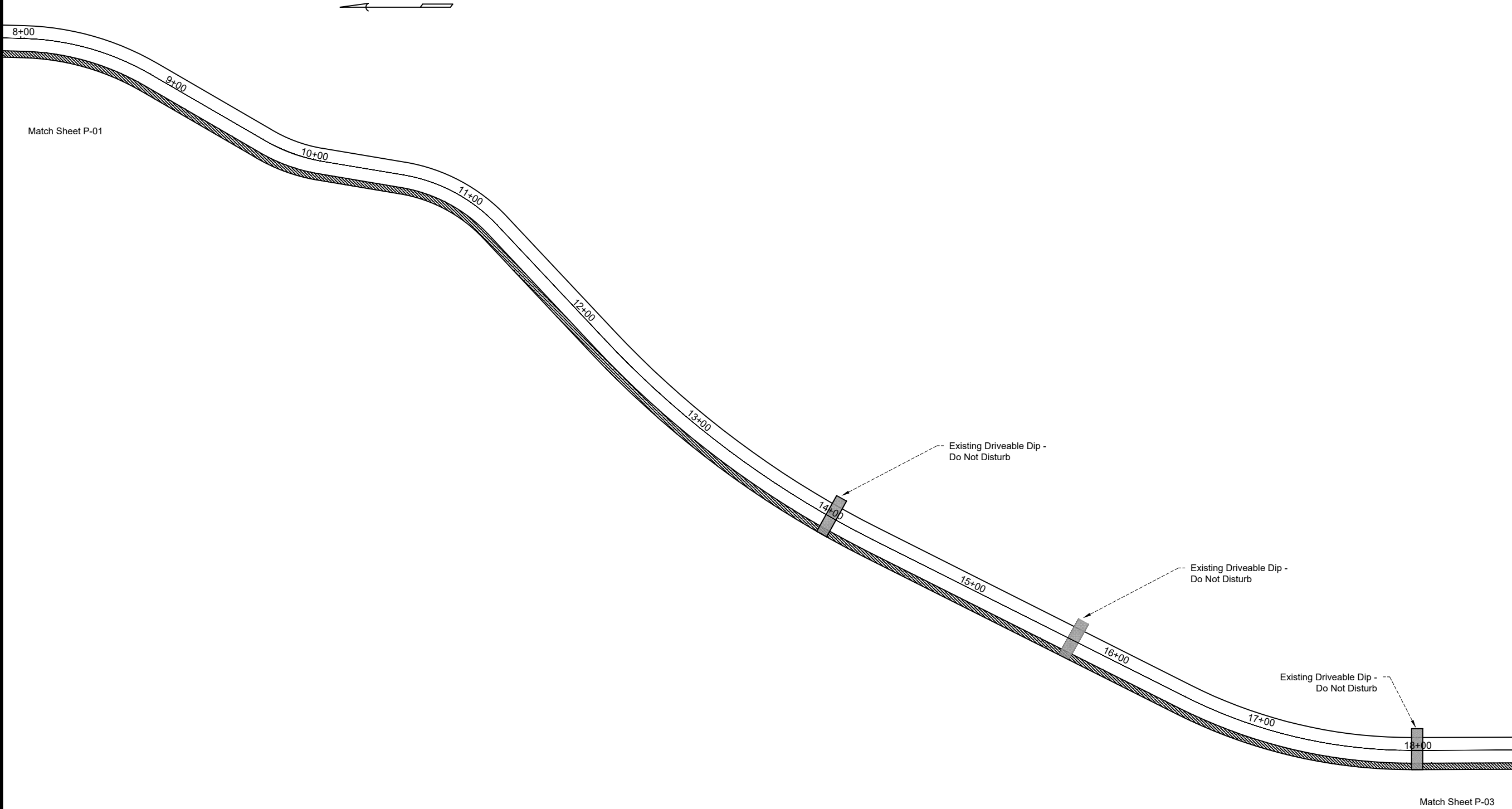
PLAN VIEW

DATE 03/09/2020	ARCHIVE NO.
DESIGNER T.JORGENSEN	DRAWING SHEET NO.
DRAWN T.JORGENSEN	P-01
CHECKED J.BURGE	
PROJECT NO.	SHEET 004 OF 025

4/2/20 15:42 T.JORGENSEN C:\USER\T.JORGENSEN\BOX\HT ENGINEERING ACTIVE PROJECTS\2019 CARSON KING\KINGSCANYON\PLANS\KINGSCANYON\PLANS.DWG;

ITEMS OF WORK

- 1
- 0+80 TO 27+35
- Reconstruct Ditch RT (Option 1)



United States Department of Agriculture
Forest Service

(R04)
INTERMOUNTAIN REGION

STAMPS, LOGOS, AND SEALS

4		
3		
2		
1		
NO.	REVISION / ISSUE	DATE

PROJECT NAME

PROJECT NAME

KING'S CANYON
ROAD

FOREST NAME

HUMBOLDT-
TOIYABE
NATIONAL
FOREST

DISTRICT NAME

CARSON R.D.

DRAWING TITLE

DRAWING TITLE

PLAN VIEW

DATE 03/09/2020	ARCHIVE NO.
DESIGNER T.JORGENSEN	DRAWING SHEET NO.
DRAWN T.JORGENSEN	P-02
CHECKED J.BURGE	
PROJECT NO.	SHEET 005 OF 025

4/2/20 15:42 T.JORGENSEN C:\USER\T.JORGENSEN\BOX\HT ENGINEERING ACTIVE PROJECTS\2019 CARSON KING\SCANYON\PLANS\KINGSCANYON\PLANS.DWG;

ITEMS OF WORK

- 1

0+80 TO 27+35

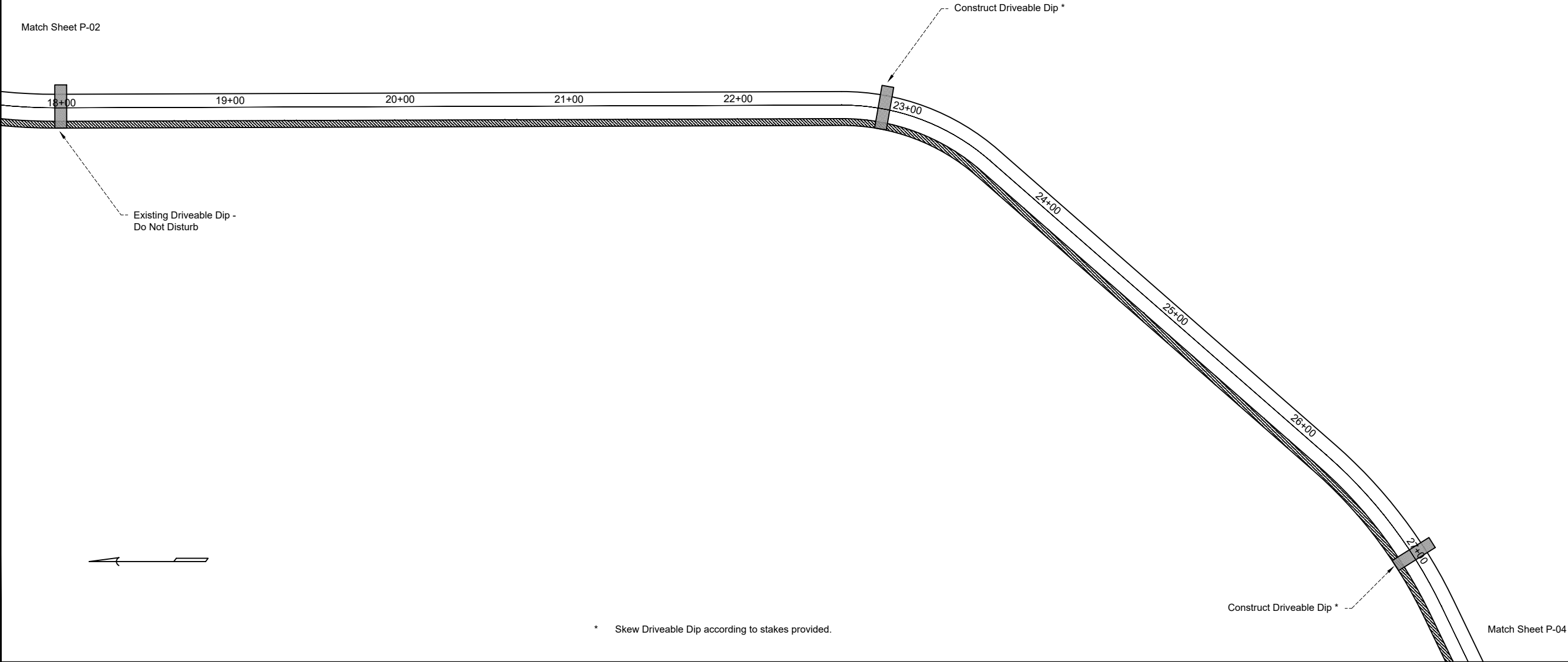
Reconstruct Ditch RT (Option 1)
- 3

22+90

Construct Driveable Dip * (Option 1)
- 4

27+00

Construct Driveable Dip * (Base)



USDA

FOREST SERVICE

United States Department of Agriculture
Forest Service

(R04)
INTERMOUNTAIN REGION

STAMPS, LOGOS, AND SEALS		
4		
3		
2		
1		
NO.	REVISION / ISSUE	DATE

PROJECT NAME

KING'S CANYON
ROAD

FOREST NAME

HUMBOLDT-
TOIYABE
NATIONAL
FOREST

DISTRICT NAME

CARSON R.D.

DRAWING TITLE

DRAWING TITLE

PLAN VIEW

DATE	ARCHIVE NO.
03/09/2020	
DESIGNER	DRAWING SHEET NO.
T.JORGENSEN	P-03
DRAWN	
T.JORGENSEN	
CHECKED	
J.BURGE	
PROJECT NO.	SHEET 006 OF 025

4/2/20 15:42 TJORGENSEN C:\USER\TJORGENSEN\BOX\HT ENGINEERING ACTIVE PROJECTS\2019 CARSON KING\KINGSCANYON\PLANS\KINGSCANYON\PLANS.DWG;

ITEMS OF WORK

- 1

0+80 TO 27+35

Reconstruct Ditch RT (Option 1)
- 4

27+00

Construct Driveable Dip * (Base)
- 5

27+35 TO 28+75

Reconstruct Ditch RT (Base)
- 6

28+75 TO 30+00

Construct New Ditch RT (Base)
- 7

28+75 TO 36+00

Reconstruct Road w/ 4% Cross-Slope RT (Base)



United States Department of Agriculture
Forest Service

(R04)
INTERMOUNTAIN REGION

STAMPS, LOGOS, AND SEALS

4		
3		
2		
1		
NO.	REVISION / ISSUE	DATE

PROJECT NAME

PROJECT NAME

KING'S CANYON
ROAD

FOREST NAME

HUMBOLDT-
TOIYABE
NATIONAL
FOREST

DISTRICT NAME

CARSON R.D.

DRAWING TITLE

DRAWING TITLE

PLAN VIEW

DATE 03/09/2020	ARCHIVE NO.
DESIGNER T.JORGENSEN	DRAWING SHEET NO. P-04
DRAWN T.JORGENSEN	
CHECKED J.BURGE	
PROJECT NO.	SHEET 007 OF 025

* Skew Driveable Dip according to stakes provided.

4/2/20 15:42 TJORGENSEN C:\USER\TJORGENSEN\BOX\HT ENGINEERING ACTIVE PROJECTS\2019 CARSON KING\KINGSCANYON\PLANS\KINGSCANYON\PLANS.DWG;

ITEMS OF WORK

- 6

28+75 TO 30+00

Construct New Ditch RT (Base)
- 7

28+75 TO 36+00

Reconstruct Road w/ 4% Cross-Slope RT (Base)
- 8

30+00

Repair Ditch RT (Base)
- 9

30+00 TO 37+05

Reconstruct Ditch RT (Base)

Match Sheet P-04

Match Sheet P-06

Construct New Ditch RT

Ditch Repair

Edge of existing road

Reconstruct Existing Ditch



United States Department of Agriculture
Forest Service

(R04)
INTERMOUNTAIN REGION

STAMPS, LOGOS, AND SEALS

4		
3		
2		
1		
NO.	REVISION / ISSUE	DATE

PROJECT NAME

PROJECT NAME

KING'S CANYON
ROAD

FOREST NAME

HUMBOLDT-
TOIYABE
NATIONAL
FOREST

DISTRICT NAME

CARSON R.D.

DRAWING TITLE

DRAWING TITLE

PLAN VIEW

DATE 03/09/2020	ARCHIVE NO.
DESIGNER T.JORGENSEN	DRAWING SHEET NO. P-05
DRAWN T.JORGENSEN	
CHECKED J.BURGE	
PROJECT NO.	SHEET 008 OF 025

4/2/20 15:42 TJORGENSEN C:\USER\TJORGENSEN\BOX\HT ENGINEERING ACTIVE PROJECTS\2019 CARSON KINGSCANYON\PLANS\KINGSCANYON\PLANS.DWG;

ITEMS OF WORK

- 7

28+75 TO 36+00

Reconstruct Road w/ 4% Cross-Slope RT (Base)
- 9

30+00 TO 37+05

Reconstruct Ditch RT (Base)



USDA

FOREST SERVICE

U.S. DEPARTMENT OF AGRICULTURE

United States Department of Agriculture
Forest Service

(R04)
REGION NAME

STAMPS, LOGOS, AND SEALS

4		
3		
2		
1		
NO.	REVISION / ISSUE	DATE

PROJECT NAME

KING'S CANYON ROAD

FOREST NAME

HUMBOLDT-TOIYABE NATIONAL FOREST

DISTRICT NAME

CARSON R.D.

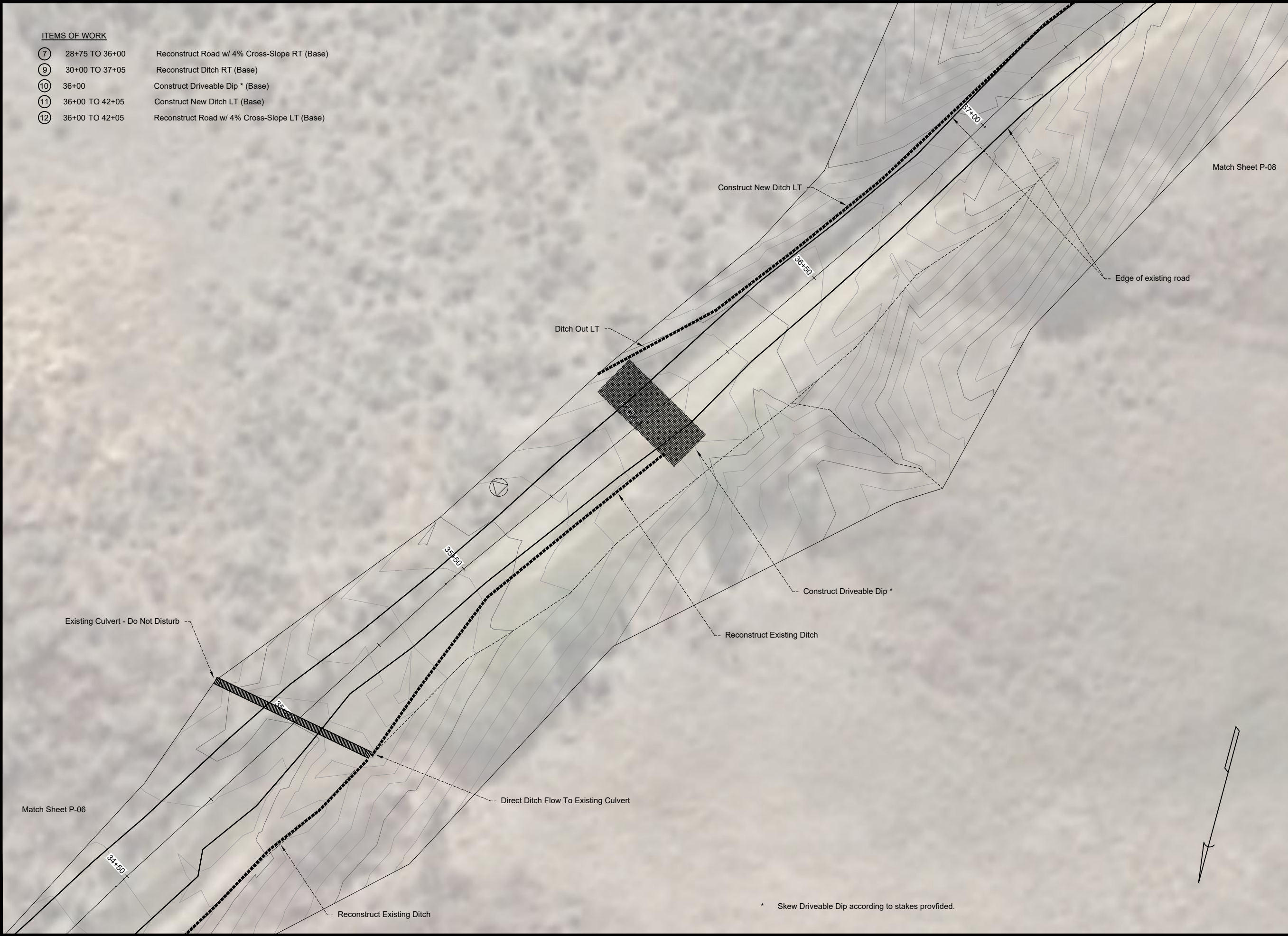
DRAWING TITLE

DRAWING TITLE

PLAN VIEW

DATE	ARCHIVE NO.
03/09/2020	
DESIGNER	DRAWING SHEET NO.
T.JORGENSEN	P-06
DRAWN	
T.JORGENSEN	
CHECKED	
J.BURGE	
PROJECT NO.	SHEET 009 OF 025

4/2/20 15:42 TJORGENSEN C:\USER\TJORGENSEN\BOX\HT ENGINEERING ACTIVE PROJECTS\2019 CARSON KING\KINGCANYON\PLANS\KINGCANYON\PLANS.DWG;



ITEMS OF WORK

- | | | |
|----|----------------|--|
| 7 | 28+75 TO 36+00 | Reconstruct Road w/ 4% Cross-Slope RT (Base) |
| 9 | 30+00 TO 37+05 | Reconstruct Ditch RT (Base) |
| 10 | 36+00 | Construct Driveable Dip * (Base) |
| 11 | 36+00 TO 42+05 | Construct New Ditch LT (Base) |
| 12 | 36+00 TO 42+05 | Reconstruct Road w/ 4% Cross-Slope LT (Base) |



United States Department of Agriculture
Forest Service

(R04)
INTERMOUNTAIN REGION

STAMPS, LOGOS, AND SEALS

4		
3		
2		
1		
NO.	REVISION / ISSUE	DATE

PROJECT NAME

PROJECT NAME

KING'S CANYON
ROAD

FOREST NAME

HUMBOLDT-
TOIYABE
NATIONAL
FOREST

DISTRICT NAME

CARSON R.D.

DRAWING TITLE

DRAWING TITLE

PLAN VIEW

DATE 03/09/2020	ARCHIVE NO.
DESIGNER T.JORGENSEN	DRAWING SHEET NO.
DRAWN T.JORGENSEN	P-07
CHECKED J.BURGE	
PROJECT NO.	SHEET 010 OF 025

* Skew Driveable Dip according to stakes provided.

4/2/20 15:42 TJORGENSEN C:\USER\TJORGENSEN\BOX\HT ENGINEERING ACTIVE PROJECTS\2019 CARSON KING\KINGSCANYON\PLANS\KINGSCANYON\PLANS.DWG;



ITEMS OF WORK

- 11

36+00 TO 42+05

Construct New Ditch LT (Base)
- 12

36+00 TO 42+05

Reconstruct Road w/ 4% Cross-Slope LT (Base)



United States Department of Agriculture
Forest Service

(R04)
INTERMOUNTAIN REGION

STAMPS, LOGOS, AND SEALS

4		
3		
2		
1		
NO.	REVISION / ISSUE	DATE

PROJECT NAME

PROJECT NAME

KING'S CANYON
ROAD

FOREST NAME

HUMBOLDT-
TOIYABE
NATIONAL
FOREST

DISTRICT NAME

CARSON R.D.

DRAWING TITLE

DRAWING TITLE

PLAN VIEW

DATE 03/09/2020	ARCHIVE NO.
DESIGNER T.JORGENSEN	DRAWING SHEET NO. P-08
DRAWN T.JORGENSEN	
CHECKED J.BURGE	
PROJECT NO.	SHEET 011 OF 025

4/2/20 15:42 TJORGENSEN C:\USER\STJ\JORGENSEN\BOX\HT ENGINEERING ACTIVE PROJECTS\2019 CARSON KING\KINGSCANYON\PLANS\KINGSCANYON\PLANS.DWG;

ITEMS OF WORK

- 11

36+00 TO 42+05

Construct New Ditch LT (Base)
- 12

36+00 TO 42+05

Reconstruct Road w/ 4% Cross-Slope LT (Base)
- 13

42+05

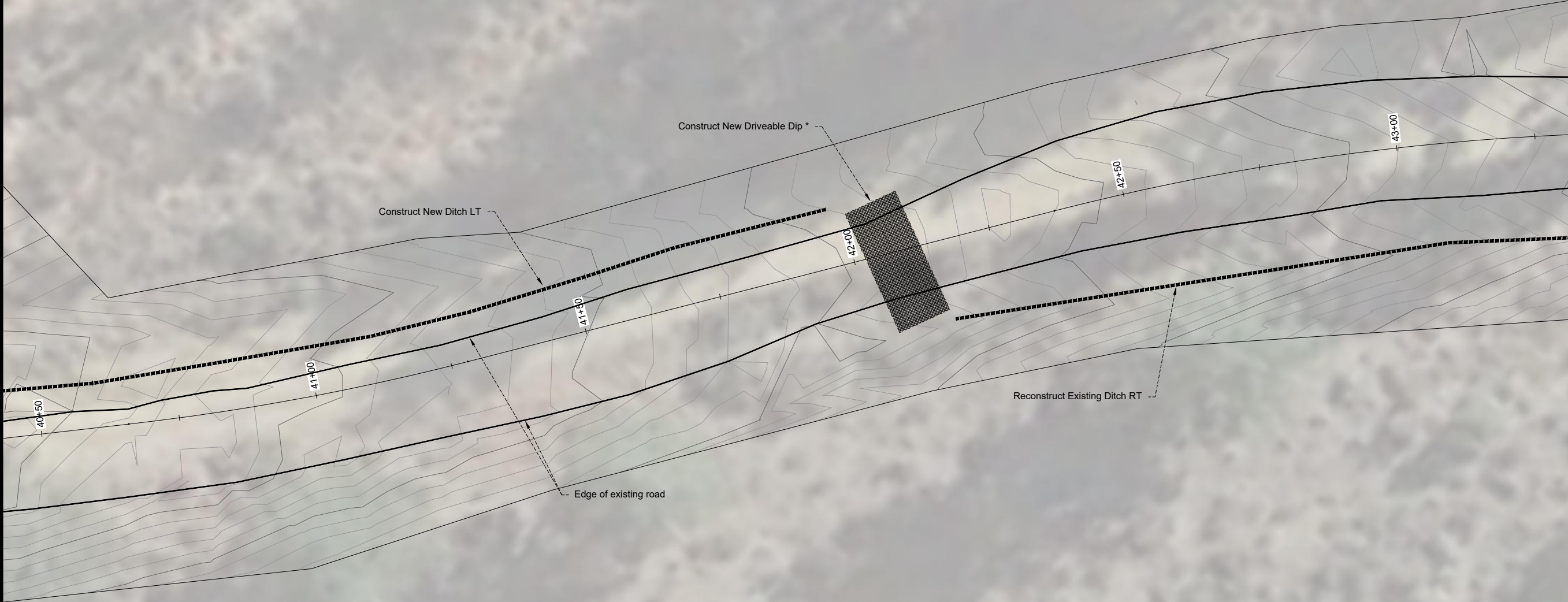
Construct Driveable Dip * (Base)
- 14

42+05 TO 46+50

Reconstruct Road w/ 4% Cross-Slope RT (Base)
- 15

42+05 TO 48+10

Reconstruct Ditch RT (Base)



Match Sheet P-08

Match Sheet P-10



* Skew Driveable Dip according to stakes provided.



United States Department of Agriculture
Forest Service

(R04)
REGION NAME

STAMPS, LOGOS, AND SEALS

4		
3		
2		
1		
NO.	REVISION / ISSUE	DATE

PROJECT NAME

PROJECT NAME

KING'S CANYON
ROAD

FOREST NAME

HUMBOLDT-
TOIYABE
NATIONAL
FOREST

DISTRICT NAME

CARSON R.D.

DRAWING TITLE

DRAWING TITLE

PLAN VIEW

DATE 03/09/2020	ARCHIVE NO.
DESIGNER T.JORGENSEN	DRAWING SHEET NO.
DRAWN T.JORGENSEN	P-09
CHECKED J.BURGE	
PROJECT NO.	SHEET 012 OF 025

4/2/20 15:42 TJORGENSEN C:\USER\STJ\JORGENSEN\BOX\HT ENGINEERING\ACTIVE PROJECTS\2019 CARSON KING\KINGSCANYON\PLANS\KINGSCANYON\PLANS.DWG;

ITEMS OF WORK

- 14

42+05 TO 46+50

Reconstruct Road w/ 4% Cross-Slope RT (Base)
- 15

42+05 TO 48+10

Reconstruct Ditch RT (Base)



USDA

FOREST SERVICE

U.S. DEPARTMENT OF AGRICULTURE

United States Department of Agriculture
Forest Service

(R04)
INTERMOUNTAIN REGION

STAMPS, LOGOS, AND SEALS		
4		
3		
2		
1		
NO.	REVISION / ISSUE	DATE

PROJECT NAME

KING'S CANYON ROAD

FOREST NAME

HUMBOLDT-TOIYABE NATIONAL FOREST

DISTRICT NAME

CARSON R.D.

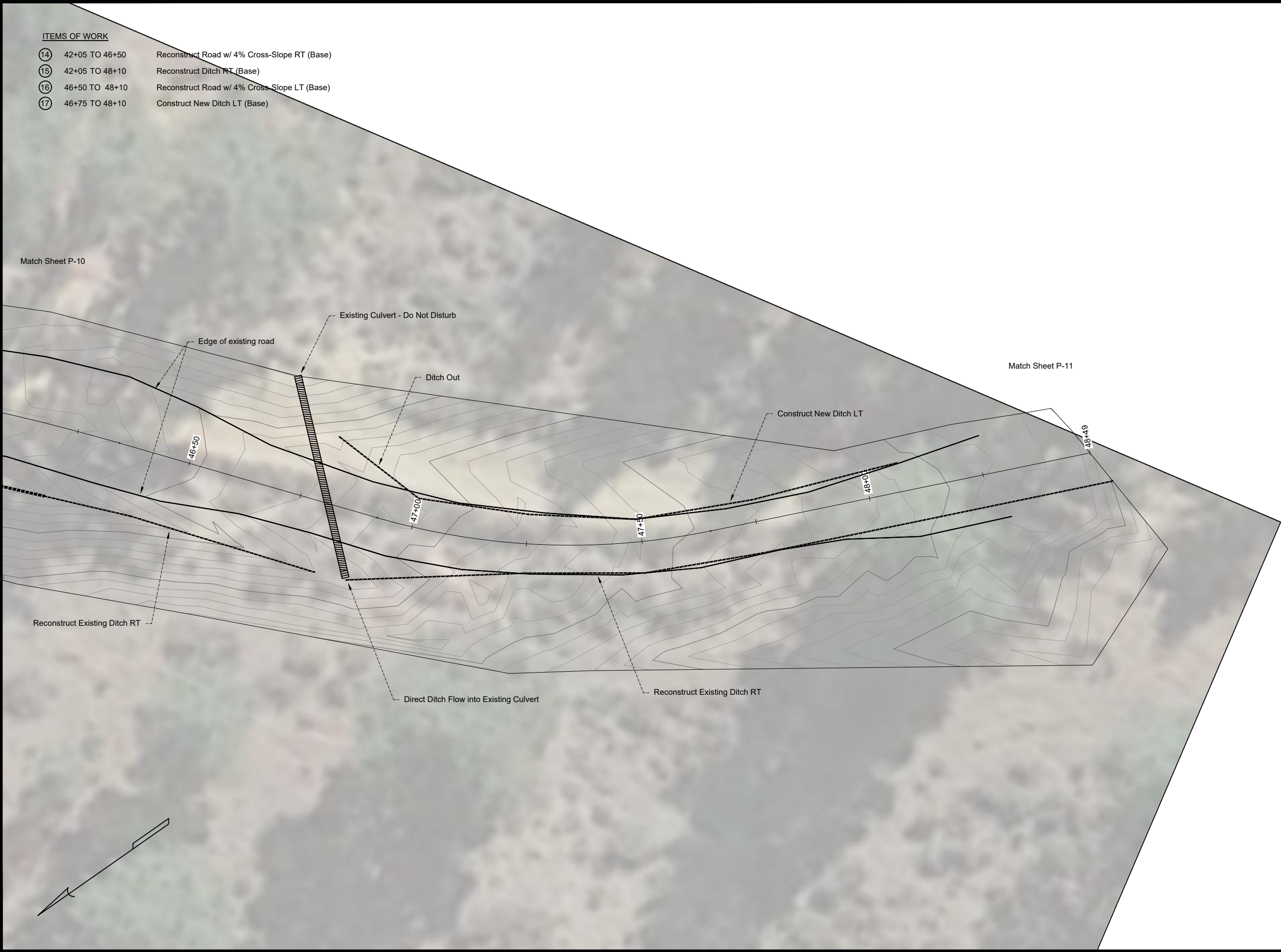
DRAWING TITLE

DRAWING TITLE

PLAN VIEW

DATE	ARCHIVE NO.
03/09/2020	
DESIGNER	DRAWING SHEET NO.
T.JORGENSEN	P-10
DRAWN	
T.JORGENSEN	
CHECKED	
J.BURGE	
PROJECT NO.	SHEET 013 OF 025

4/2/20 15:42 TJORGENSEN C:\USER\TJORGENSEN\BOX\HT ENGINEERING ACTIVE PROJECTS\2019 CARSON KING\KINGSCANYON\PLANS\KINGSCANYON\PLANS.DWG;



ITEMS OF WORK

- 14 42+05 TO 46+50 Reconstruct Road w/ 4% Cross-Slope RT (Base)
- 15 42+05 TO 48+10 Reconstruct Ditch RT (Base)
- 16 46+50 TO 48+10 Reconstruct Road w/ 4% Cross-Slope LT (Base)
- 17 46+75 TO 48+10 Construct New Ditch LT (Base)



United States Department of Agriculture
Forest Service

(R04)
INTERMOUNTAIN REGION

STAMPS, LOGOS, AND SEALS

4		
3		
2		
1		
NO.	REVISION / ISSUE	DATE

PROJECT NAME

PROJECT NAME

KING'S CANYON
ROAD

FOREST NAME

HUMBOLDT-
TOIYABE
NATIONAL
FOREST

DISTRICT NAME

CARSON R.D.

DRAWING TITLE

DRAWING TITLE

PLAN VIEW

DATE 03/09/2020	ARCHIVE NO.
DESIGNER T.JORGENSEN	DRAWING SHEET NO.
DRAWN T.JORGENSEN	P-11
CHECKED J.BURGE	
PROJECT NO.	SHEET 014 OF 025

4/2/20 15:42 T.JORGENSEN C:\USER\T.JORGENSEN\BOX\HT ENGINEERING ACTIVE PROJECTS\2019 CARSON KING\KINGSCANYON\PLANS\KINGSCANYON\PLANS.DWG;

ITEMS OF WORK

- 18

48+10 TO 52+00

Reconstruct Ditch RT (Option 2)
- 19

51+70 TO 51+90

Place Four 36" Boulders LT (Option 2)
- 20

52+00

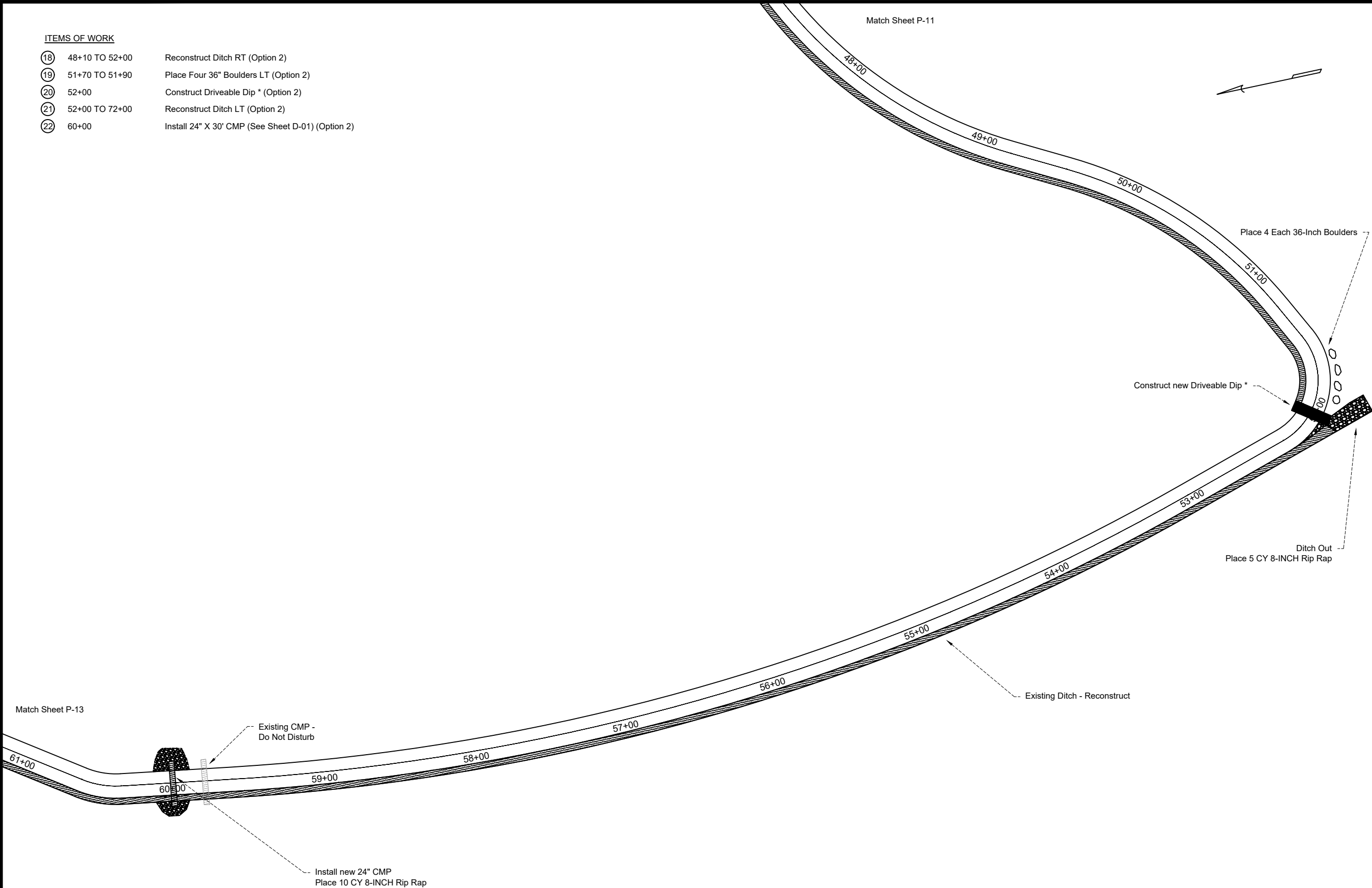
Construct Driveable Dip * (Option 2)
- 21

52+00 TO 72+00

Reconstruct Ditch LT (Option 2)
- 22

60+00

Install 24" X 30' CMP (See Sheet D-01) (Option 2)



* Skew Driveable Dip according to stakes provided.



United States Department of Agriculture
Forest Service

(R04)
INTERMOUNTAIN REGION

STAMPS, LOGOS, AND SEALS

4		
3		
2		
1		
NO.	REVISION / ISSUE	DATE

PROJECT NAME

PROJECT NAME

KING'S CANYON
ROAD

FOREST NAME

HUMBOLDT-
TOIYABE
NATIONAL
FOREST

DISTRICT NAME

CARSON R.D.

DRAWING TITLE

DRAWING TITLE

PLAN VIEW

DATE 03/09/2020	ARCHIVE NO.
DESIGNER T.JORGENSEN	DRAWING SHEET NO. P-12
DRAWN T.JORGENSEN	
CHECKED J.BURGE	
PROJECT NO.	SHEET 015 OF 025

4/2/20 15:42 T.JORGENSEN C:\USER\T.JORGENSEN\BOX\HT ENGINEERING ACTIVE PROJECTS\2019 CARSON KINGSCANYON\PLANS\KINGSCANYON\PLANS.DWG;

ITEMS OF WORK

- 21

52+00 TO 72+00

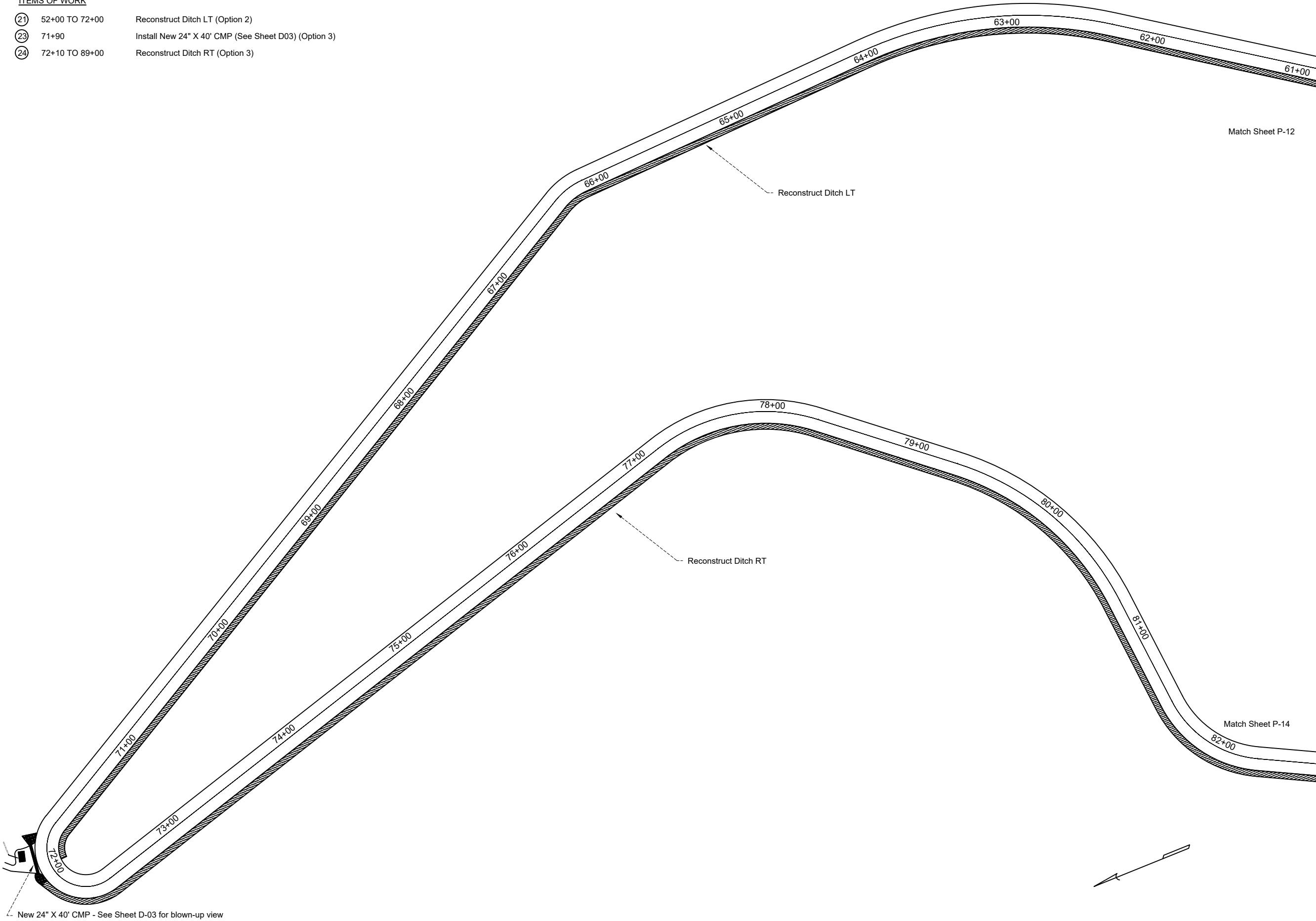
Reconstruct Ditch LT (Option 2)
- 23

71+90

Install New 24" X 40' CMP (See Sheet D03) (Option 3)
- 24

72+10 TO 89+00

Reconstruct Ditch RT (Option 3)



United States Department of Agriculture
Forest Service

(R04)
INTERMOUNTAIN REGION

STAMPS, LOGOS, AND SEALS

4		
3		
2		
1		
NO.	REVISION / ISSUE	DATE

PROJECT NAME

PROJECT NAME

KING'S CANYON
ROAD

FOREST NAME

HUMBOLDT-
TOIYABE
NATIONAL
FOREST

DISTRICT NAME

CARSON R.D.

DRAWING TITLE

DRAWING TITLE

PLAN VIEW

DATE

03/09/2020

ARCHIVE NO.

DESIGNER

T.JORGENSEN

DRAWN

T.JORGENSEN

CHECKED

J.BURGE

PROJECT NO.

DRAWING SHEET NO.

P-13

SHEET 016 OF 025

4/2/20 15:42 T.JORGENSEN C:\USER\T.JORGENSEN\BOX\HT ENGINEERING\ACTIVE PROJECTS\2019 CARSON KING CANYON\PLANS\KING CANYON\PLANS.DWG;

ITEMS OF WORK

- 24

72+10 TO 89+00

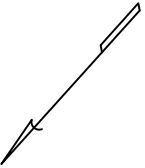
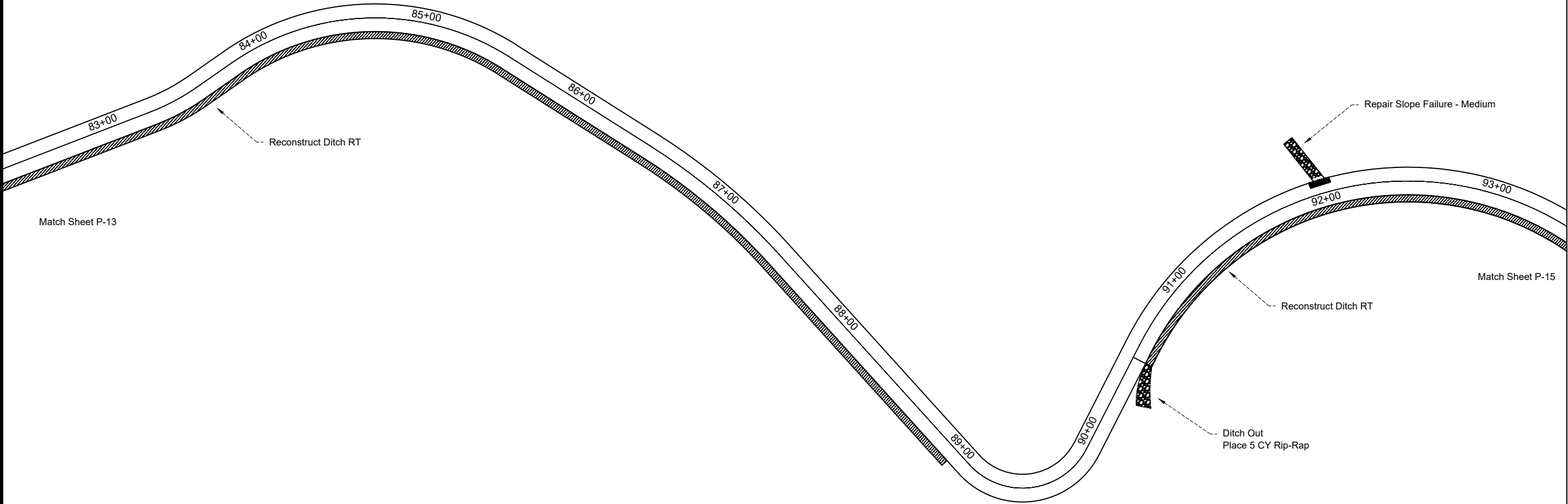
Reconstruct Ditch RT (Option 3)
- 25

90+50 TO 118+80

Reconstruct Ditch RT (Option 3)
- 26

92+00

Repair Slope Failure LT Medium (See Sheet D-02) (Option 4)



USDA

FOREST SERVICE

United States Department of Agriculture

Forest Service

(R04)

INTERMOUNTAIN REGION

STAMPS, LOGOS, AND SEALS		
4		
3		
2		
1		
NO.	REVISION / ISSUE	DATE

PROJECT NAME

KING'S CANYON ROAD

FOREST NAME

HUMBOLDT-TOIYABE NATIONAL FOREST

DISTRICT NAME

CARSON R.D.

DRAWING TITLE

DRAWING TITLE

PLAN VIEW

DATE	ARCHIVE NO.
03/09/2020	
DESIGNER	DRAWING SHEET NO.
T.JORGENSEN	P-14
DRAWN	
T.JORGENSEN	
CHECKED	
J.BURGE	
PROJECT NO.	SHEET 017 OF 025

4/2/20 15:42 T.JORGENSEN C:\USER\ST.JORGENSEN\BOX\HT ENGINEERING ACTIVE PROJECTS\2019 CARSON KING\KINGSCANYON\PLANS\KINGSCANYON\PLANS.DWG;

ITEMS OF WORK

- 25

90+50 TO 118+80

Reconstruct Ditch RT (Option 3)
- 27

94+50

Construct Driveable Dip * (Option 4)
- 28

94+50

Repair Slope Failure LT - Large (See Sheet D-02) (Option 4)



United States Department of Agriculture
Forest Service

(R04)
INTERMOUNTAIN REGION

STAMPS, LOGOS, AND SEALS

4		
3		
2		
1		
NO.	REVISION / ISSUE	DATE

PROJECT NAME

PROJECT NAME

KING'S CANYON
ROAD

FOREST NAME

HUMBOLDT-
TOIYABE
NATIONAL
FOREST

DISTRICT NAME

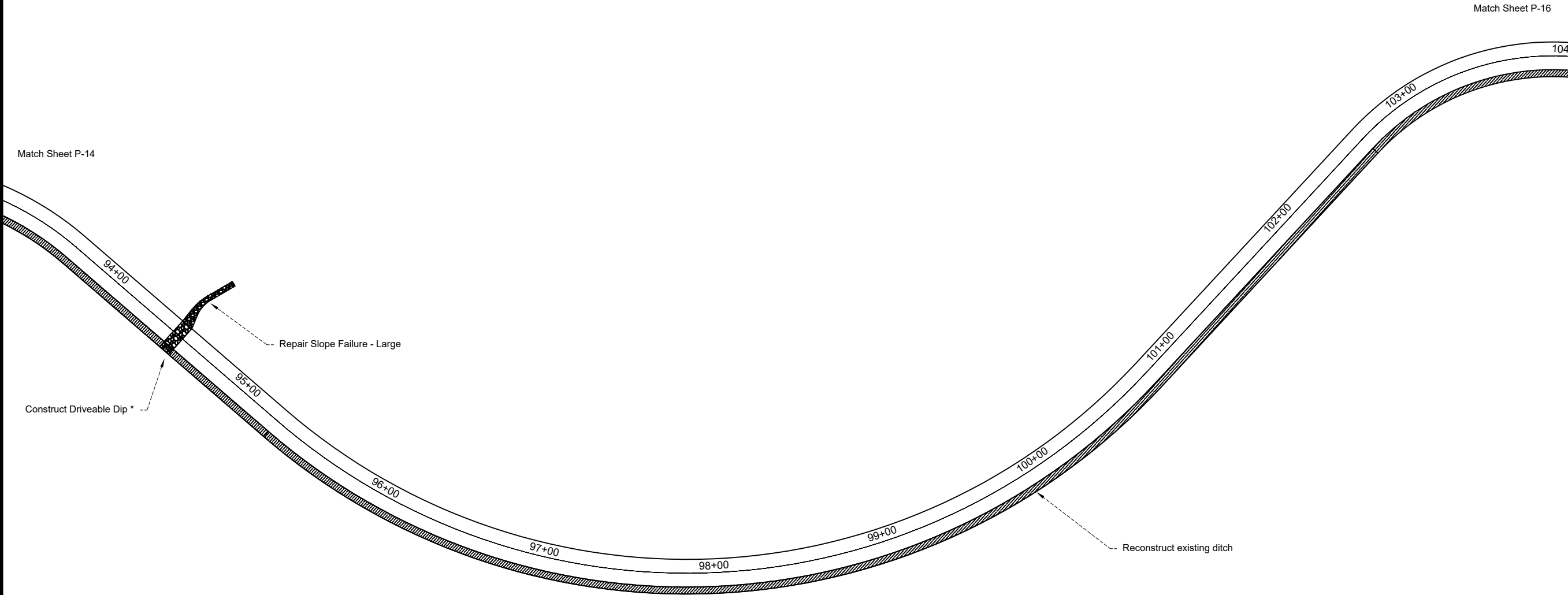
CARSON R.D.

DRAWING TITLE

DRAWING TITLE

PLAN VIEW

DATE 03/09/2020	ARCHIVE NO.
DESIGNER T.JORGENSEN	DRAWING SHEET NO.
DRAWN T.JORGENSEN	P-15
CHECKED J.BURGE	
PROJECT NO.	SHEET 018 OF 025



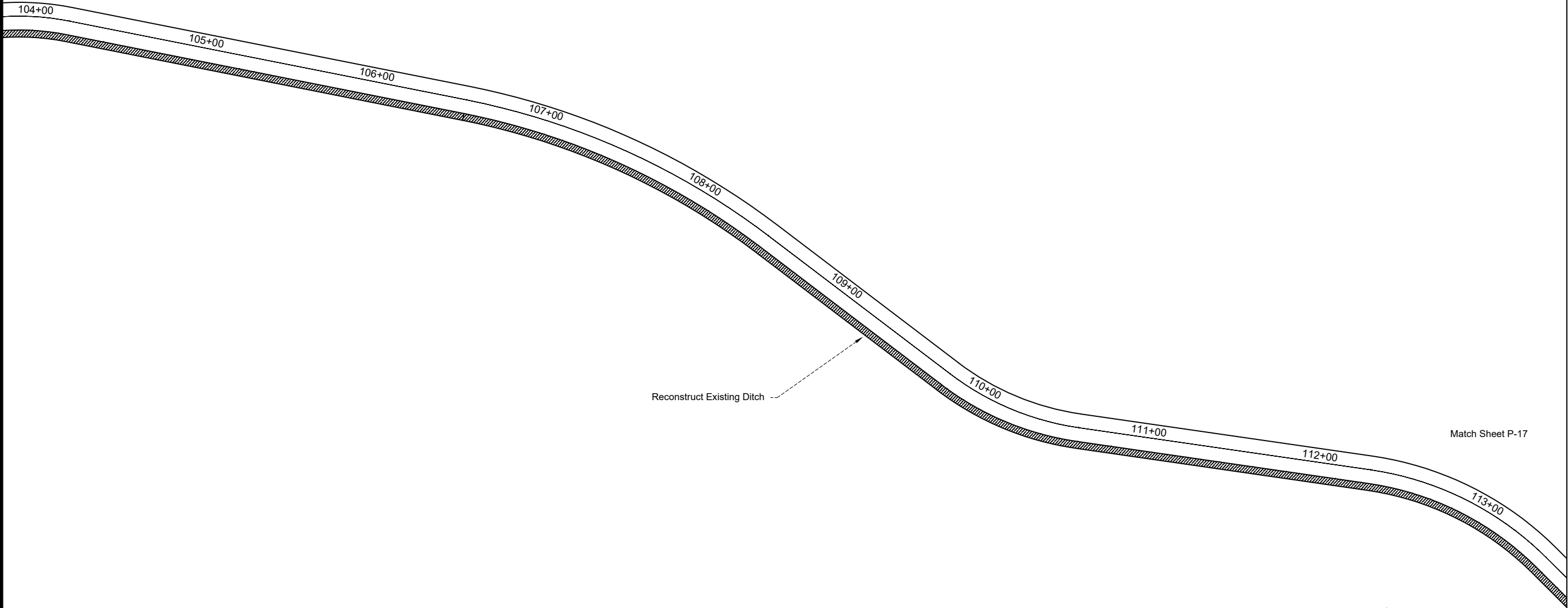
* Skew Driveable Dip according to stakes provided.

4/2/20 15:42 TJORGENSEN C:\USER\STJ\JORGENSEN\BOX\HT ENGINEERING\ACTIVE PROJECTS\2019 CARSON KING\KINGSCANYON\PLANS\KINGSCANYON\PLANS.DWG;

ITEMS OF WORK

25 90+50 TO 118+80 Reconstruct Ditch RT (Option 3)

Match Sheet P-15



Match Sheet P-17



United States Department of Agriculture
Forest Service

(R04)
INTERMOUNTAIN REGION

STAMPS, LOGOS, AND SEALS

4		
3		
2		
1		
NO.	REVISION / ISSUE	DATE

PROJECT NAME

PROJECT NAME

KING'S CANYON
ROAD

FOREST NAME

HUMBOLDT-
TOIYABE
NATIONAL
FOREST

DISTRICT NAME

CARSON R.D.

DRAWING TITLE

DRAWING TITLE

PLAN VIEW

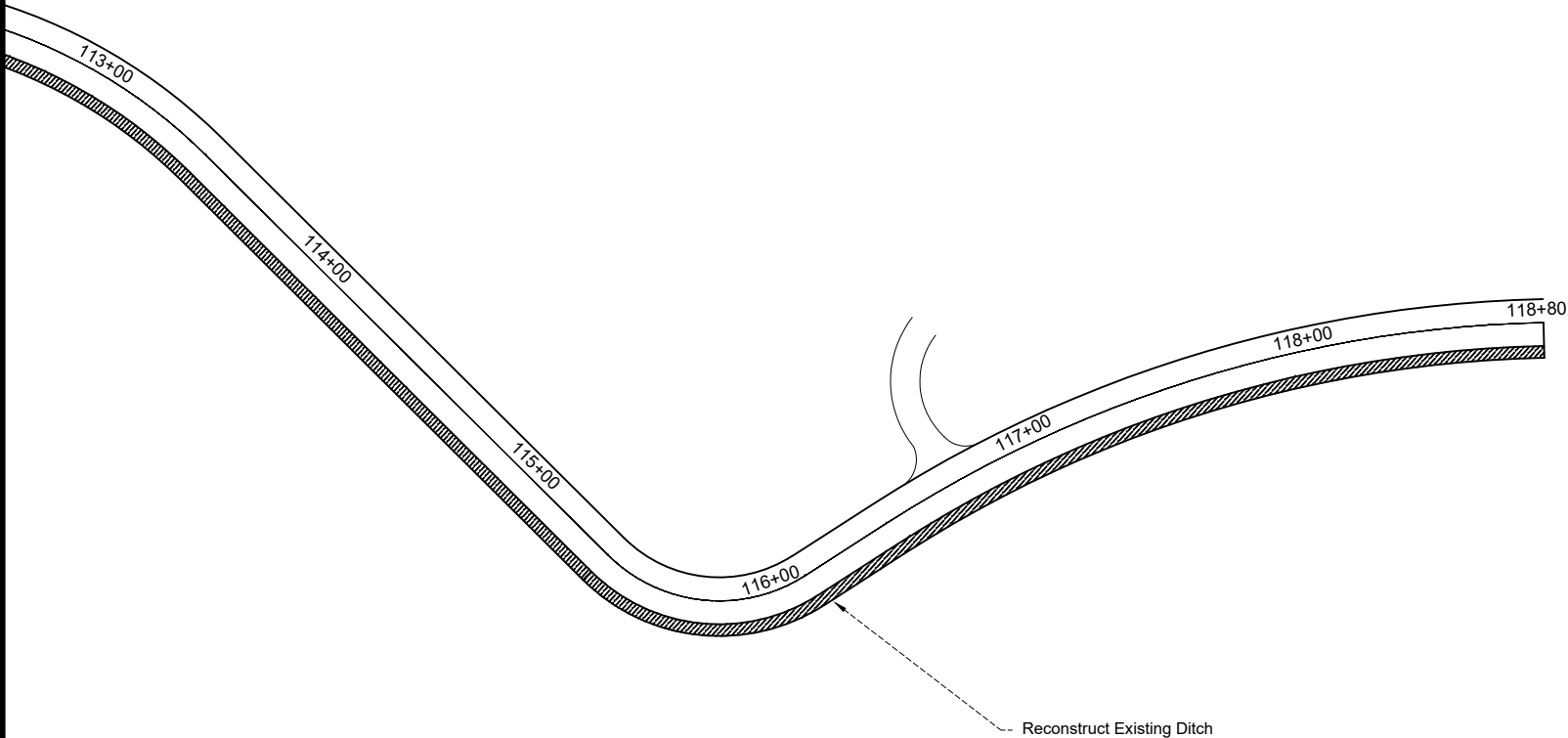
DATE 03/09/2020	ARCHIVE NO.
DESIGNER T.JORGENSEN	DRAWING SHEET NO. P-16
DRAWN T.JORGENSEN	
CHECKED J.BURGE	
PROJECT NO.	SHEET 019 OF 025

4/2/20 15:42 T.JORGENSEN C:\USER\T.JORGENSEN\BOX\HT ENGINEERING\ACTIVE PROJECTS\2019 CARSON KING\KINGSCANYON\PLANS\KINGSCANYON\PLANS.DWG;

ITEMS OF WORK

25 90+50 TO 118+80 Reconstruct Ditch RT (Option 3)

Match Sheet P-16



United States Department of Agriculture
Forest Service

(R04)
INTERMOUNTAIN REGION

STAMPS, LOGOS, AND SEALS

4		
3		
2		
1		
NO.	REVISION / ISSUE	DATE

PROJECT NAME

PROJECT NAME

KING'S CANYON
ROAD

FOREST NAME

HUMBOLDT-
TOIYABE
NATIONAL
FOREST

DISTRICT NAME

CARSON R.D.

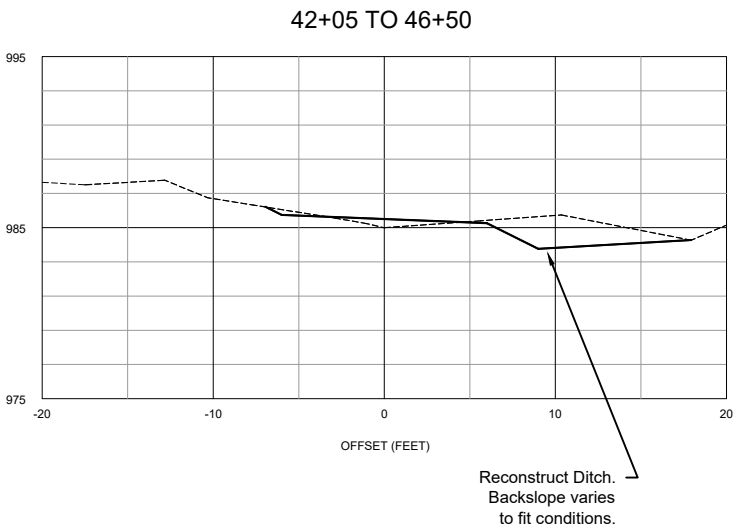
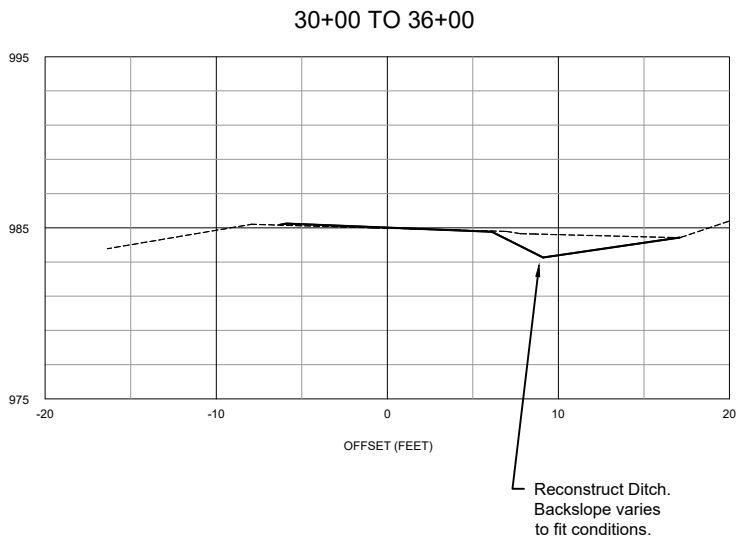
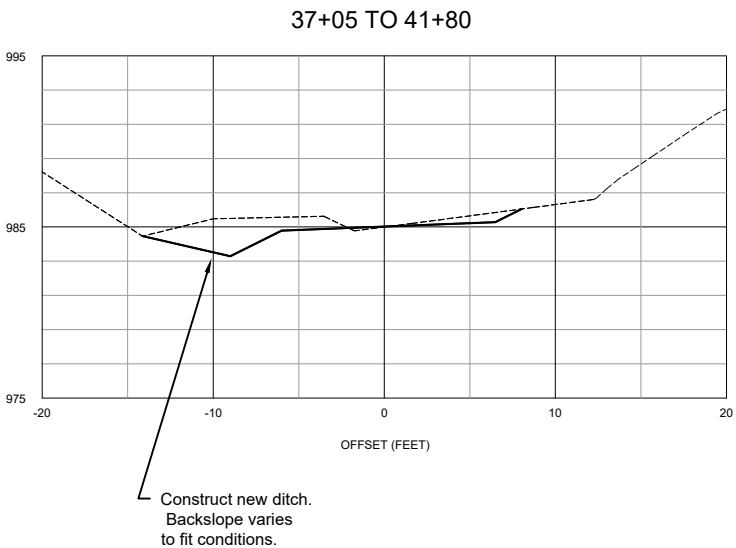
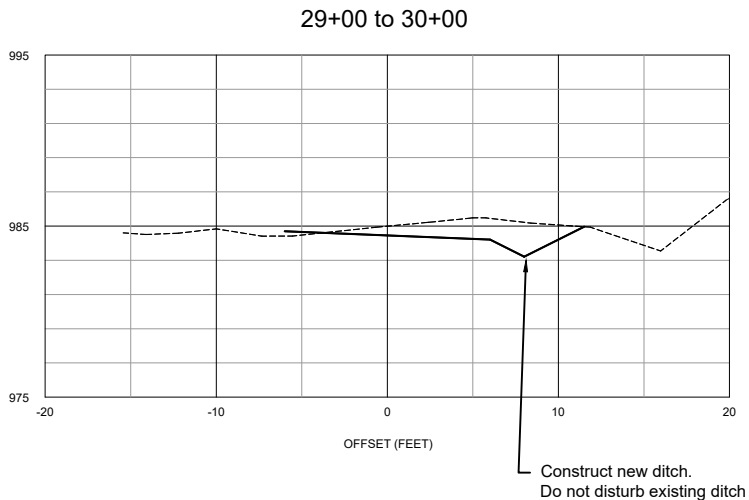
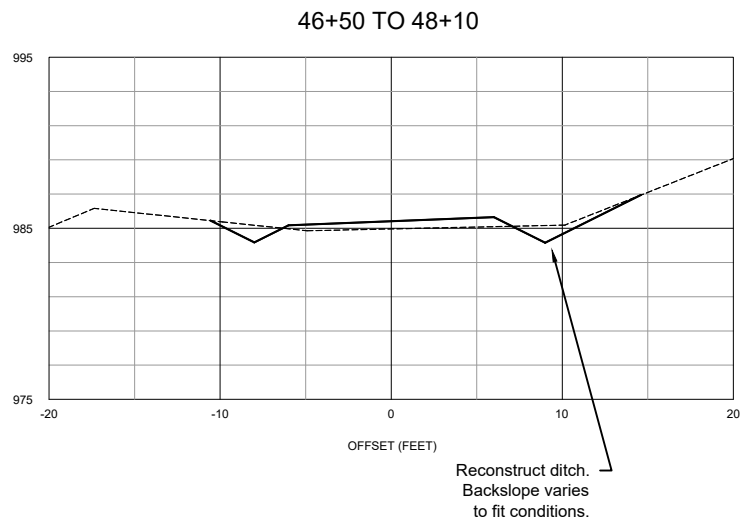
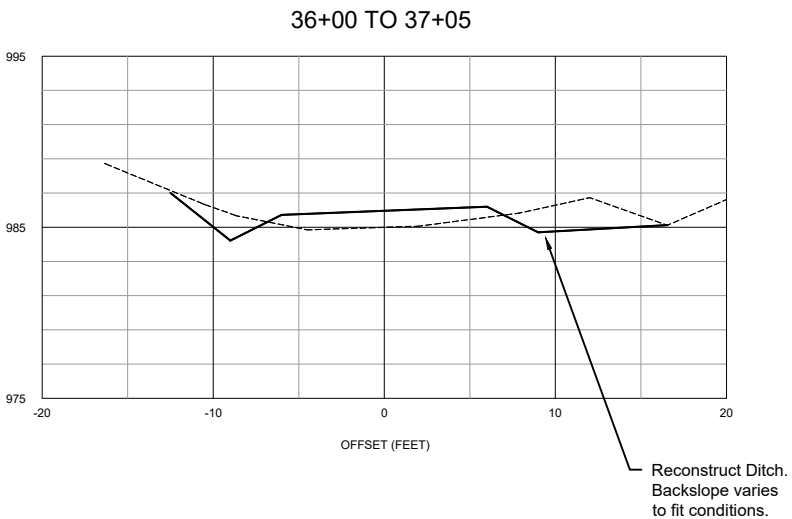
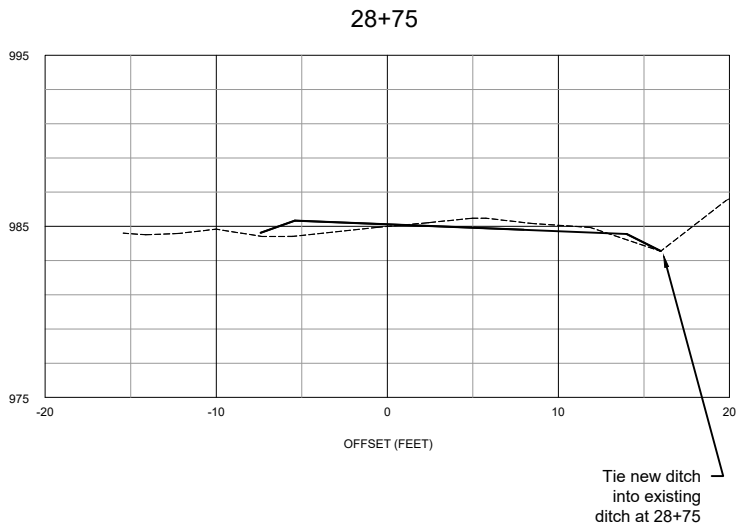
DRAWING TITLE

DRAWING TITLE

PLAN VIEW

DATE 03/09/2020	ARCHIVE NO.
DESIGNER T.JORGENSEN	DRAWING SHEET NO. P-17
DRAWN T.JORGENSEN	
CHECKED J.BURGE	
PROJECT NO.	SHEET 020 OF 025

4/2/20 15:42 T.JORGENSEN C:\USER\T.JORGENSEN\BOX\HT ENGINEERING ACTIVE PROJECTS\2019 CARSON KING\SCANYON\PLANS\KINGSCANYON\PLANS.DWG;



NOTES

1. At RECONSTRUCT DITCH locations, ditch depth and width will vary to maintain flow, maximize material excavation for use on roadway reconstruction. Do not excavate past the existing outer catch point.
2. At CONSTRUCT NEW DITCH locations, maximize ditch depth and width for material excavation for use on roadway reconstruction. Maintain sufficient separation between new ditch and existing upper ditch to prevent upper ditch failure. Target ditch depth is 2'.
3. Maintain 4% Cross Slope in ROADWAY RECONSTRUCTION areas, except during transitions. Transition in 25 linear feet.
4. Cross-Sections on this page are approximate, and depict conditions that vary throughout station ranges. Contractor is to adjust as needed to maintain ditch flow, capacity, and to generate material for roadway reconstruction.
5. Do not excavate beyond existing top of cut slopes.



United States Department of Agriculture
Forest Service

(R04)
INTERMOUNTAIN REGION

STAMPS, LOGOS, AND SEALS

4		
3		
2		
1		
NO.	REVISION / ISSUE	DATE

PROJECT NAME

PROJECT NAME

**KING'S CANYON
ROAD**

FOREST NAME

**HUMBOLDT-
TOIYABE
NATIONAL
FOREST**

DISTRICT NAME

CARSON R.D.

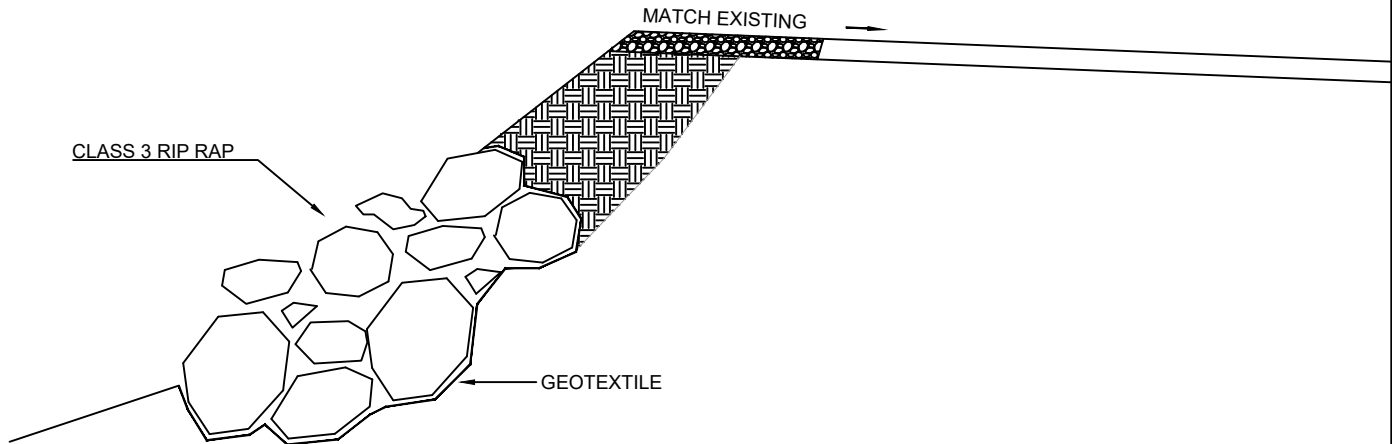
DRAWING TITLE

DRAWING TITLE

**CROSS -
SECTIONS**

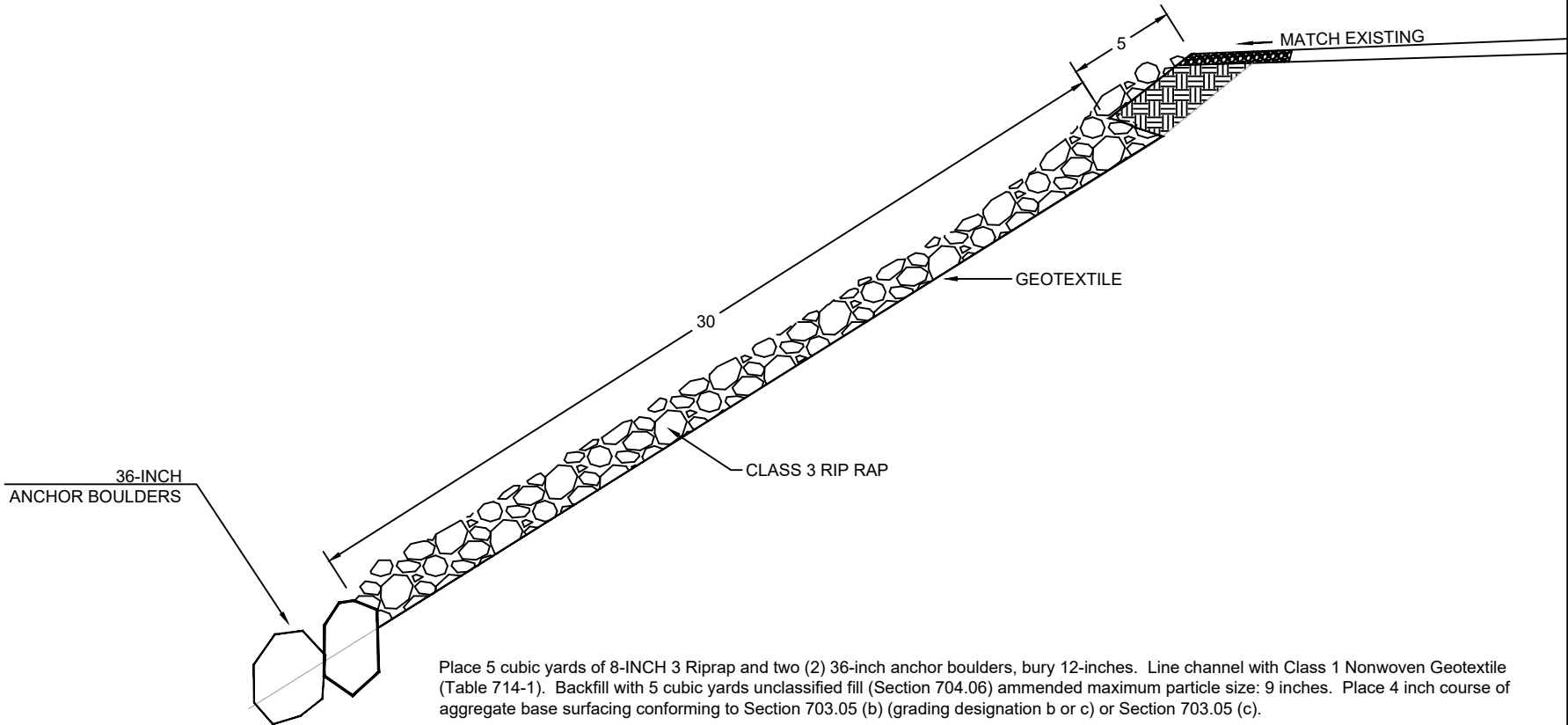
DATE 03/09/2020	ARCHIVE NO.
DESIGNER T.JORGENSEN	DRAWING SHEET NO.
DRAWN T.JORGENSEN	X-01
CHECKED J.BURGE	
PROJECT NO.	SHEET 021 OF 025

4/2/20 15:42 T.JORGENSEN C:\USER\T.JORGENSEN\BOX\HT ENGINEERING ACTIVE PROJECTS\2019 CARSON KING\KINGSCANYON\PLANS\KINGSCANYON\PLANS.DWG



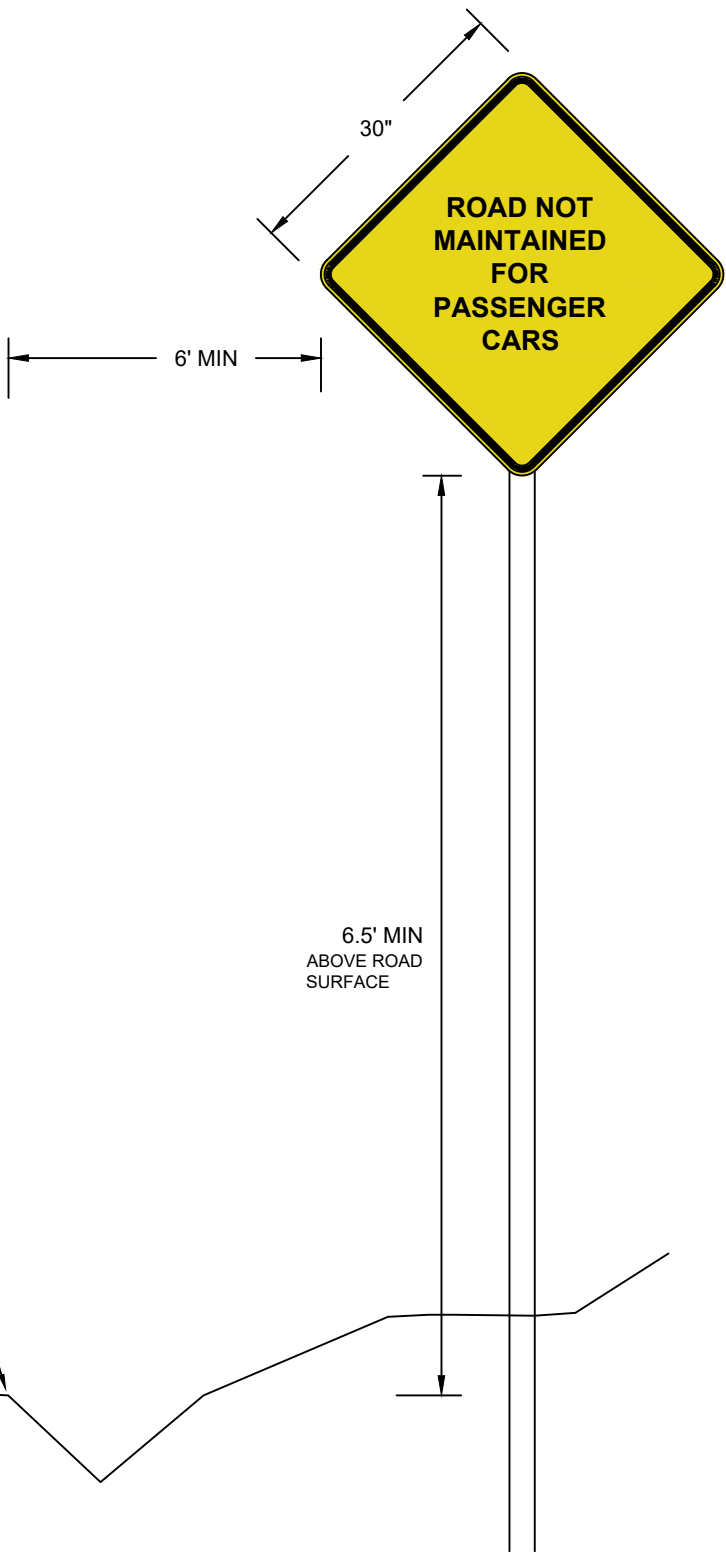
Place 3 cubic yards of 8-INCH Riprap, line with Class 1 Nonwoven Geotextile (Table 714-1). Backfill with 5 cubic yards unclassified fill (Section 704.06) ammended maximum particle size: 9 inches. Place 4 inch course of aggregate base surfacing conforming to Section 703.05 (b) (grading designation b or c) or Section 703.05 (c).

92+00 LT
SLOPE REPAIR - MEDIUM



Place 5 cubic yards of 8-INCH 3 Riprap and two (2) 36-inch anchor boulders, bury 12-inches. Line channel with Class 1 Nonwoven Geotextile (Table 714-1). Backfill with 5 cubic yards unclassified fill (Section 704.06) ammended maximum particle size: 9 inches. Place 4 inch course of aggregate base surfacing conforming to Section 703.05 (b) (grading designation b or c) or Section 703.05 (c).

94+50 LT
SLOPE REPAIR - LARGE



Sign panel shall be aluminum 30-inch by 30-inch, 0.080 inch thickness, prismatic retroreflective sheeting. Sign panel shall be mounted to pressure treated pine 4-inch by 4inch post, grade 2 or equivalent. Post shall be buried 3' minimum. Concrete is optional. If no concrete, compact post backfill.

1+50 LT
ROAD SIGN



United States Department of Agriculture
Forest Service

(R04)
INTERMOUNTAIN REGION

STAMPS, LOGOS, AND SEALS

4		
3		
2		
1		
NO.	REVISION / ISSUE	DATE

PROJECT NAME

PROJECT NAME

KING'S CANYON
ROAD

FOREST NAME

HUMBOLDT-
TOIYABE
NATIONAL
FOREST

DISTRICT NAME

CARSON R.D.

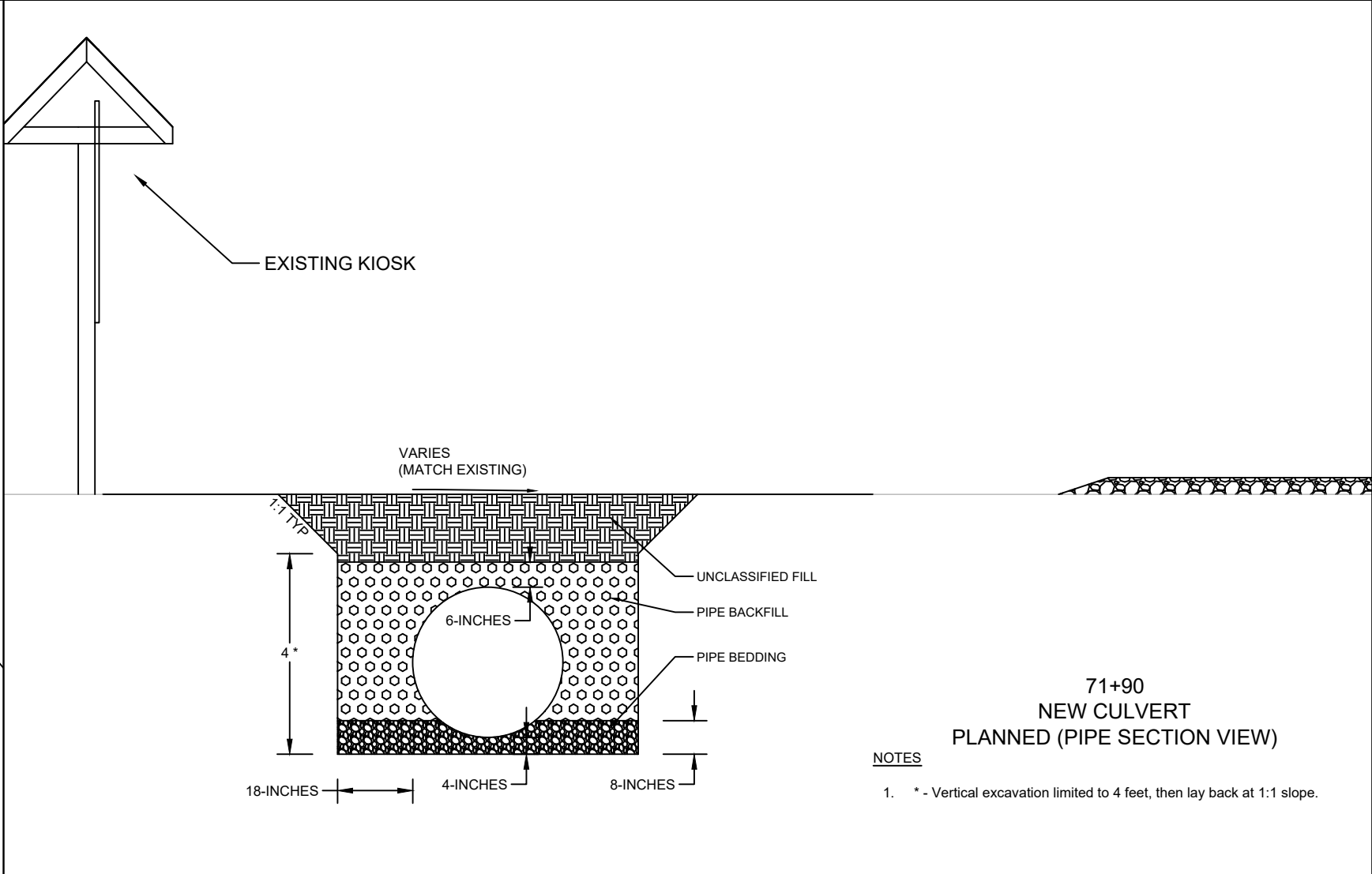
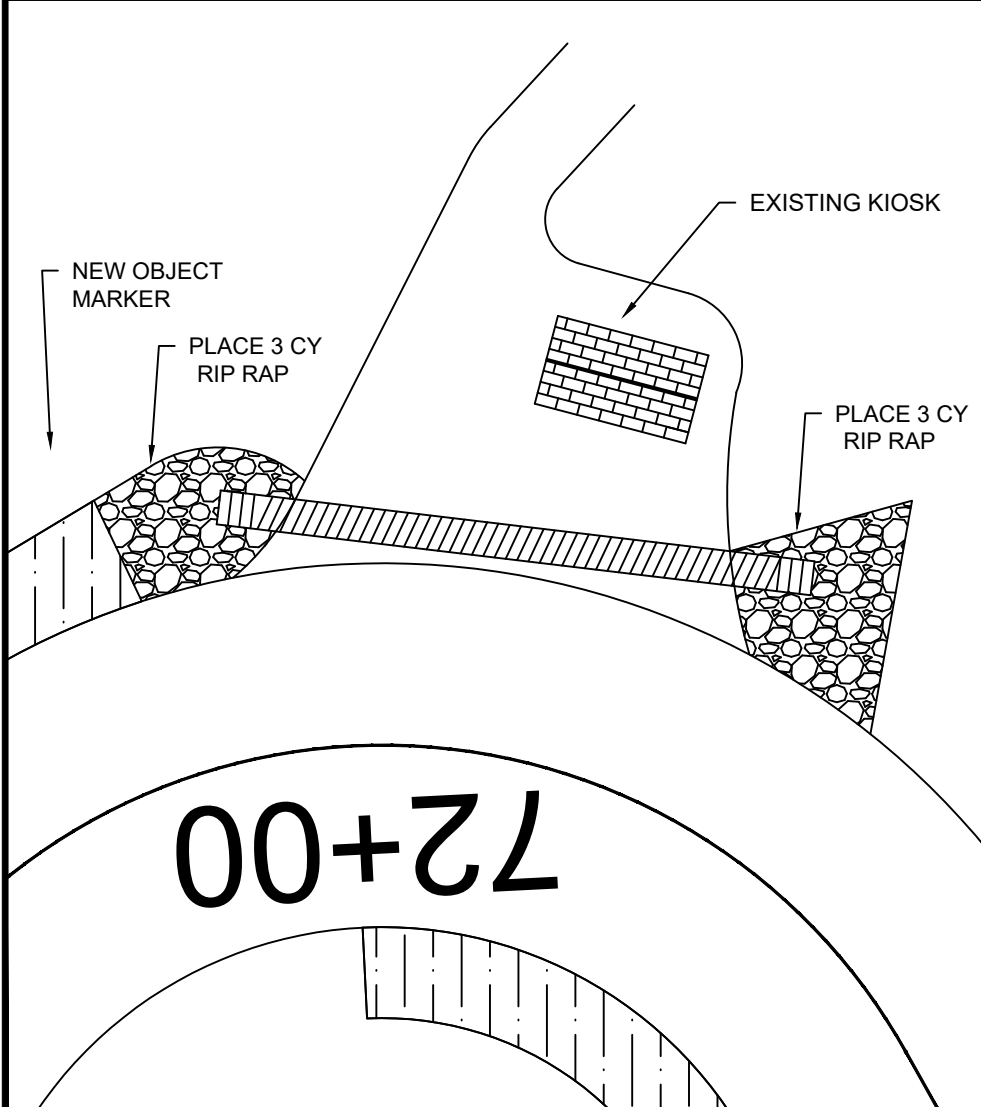
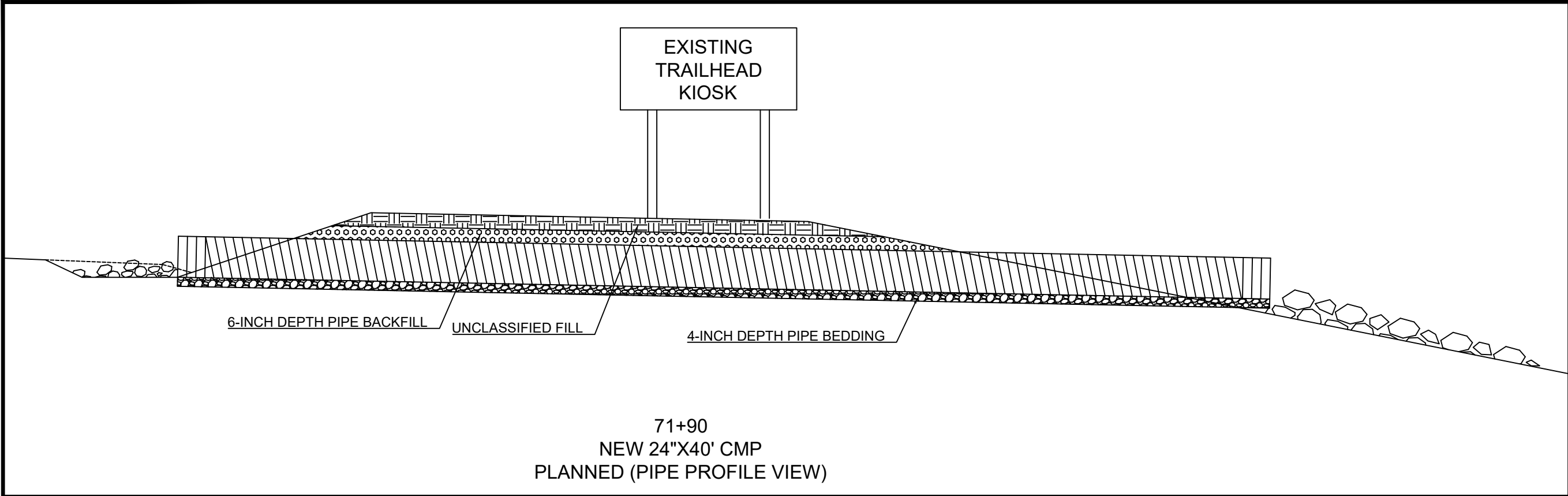
DRAWING TITLE

DRAWING TITLE

DETAILS

DATE 03/09/2020	ARCHIVE NO.
DESIGNER T.JORGENSEN	DRAWING SHEET NO. D-02
DRAWN T.JORGENSEN	
CHECKED J.BURGE	
PROJECT NO.	SHEET 023 OF 025

4/2/20 15:42 T.JORGENSEN C:\USER\STJ\JORGENSEN\BOX\HT ENGINEERING ACTIVE PROJECTS\2019 CARSON KING CANYON\PLANS\KINGSCANYON\PLANS.DWG;



NOTES

1. * - Vertical excavation limited to 4 feet, then lay back at 1:1 slope.



United States Department of Agriculture
Forest Service

(R04)
INTERMOUNTAIN REGION

STAMPS, LOGOS, AND SEALS

4		
3		
2		
1		
NO.	REVISION / ISSUE	DATE

PROJECT NAME
KING'S CANYON ROAD

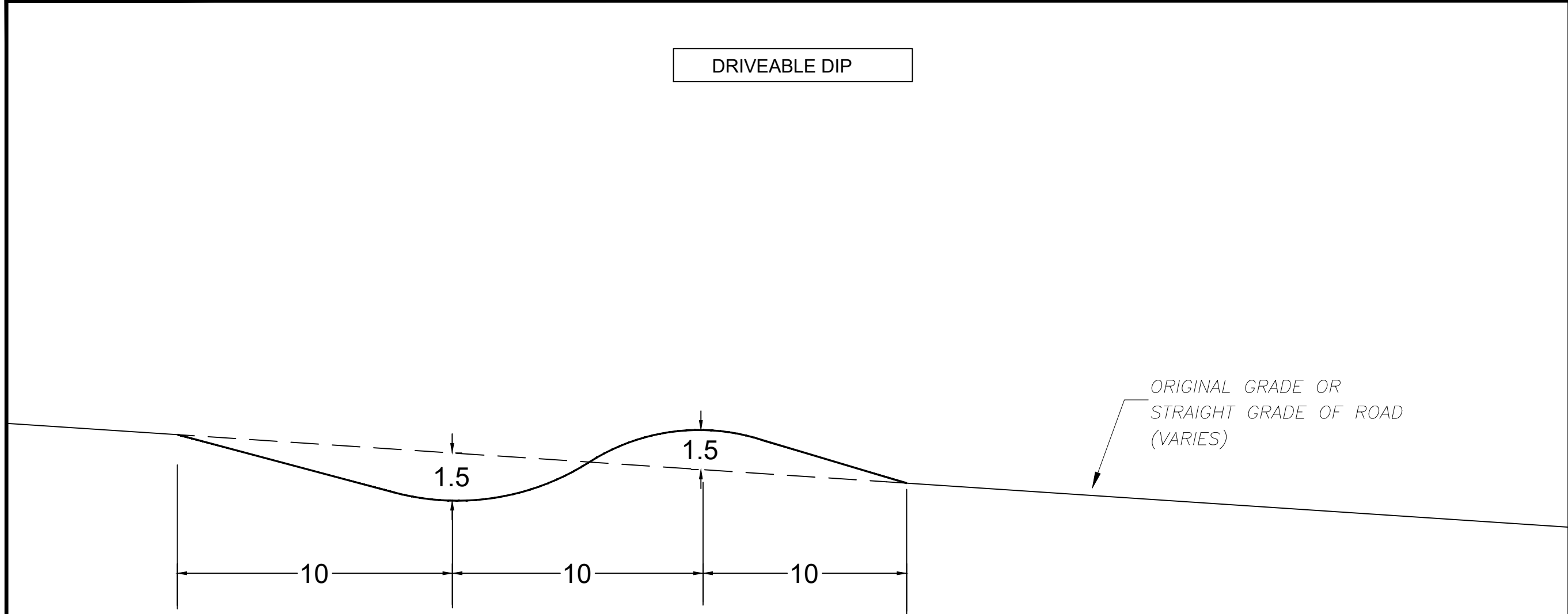
FOREST NAME
HUMBOLDT-TOIYABE NATIONAL FOREST

DISTRICT NAME
CARSON R.D.

DRAWING TITLE
DETAILS

DATE 03/09/2020	ARCHIVE NO.
DESIGNER T.JORGENSEN	DRAWING SHEET NO. D-03
DRAWN T.JORGENSEN	
CHECKED J.BURGE	
PROJECT NO.	SHEET 024 OF 025

4/2/20 15:42 T.JORGENSEN C:\USER\T.JORGENSEN\BOX\T ENGINEERING\ACTIVE PROJECTS\2019 CARSON KING\KINGSCANYON\PLANS\KINGSCANYON\PLANS.DWG;



DRIVEABLE DIP

PROFILE VIEW - GEOMETRY

SKEW DRIVEABLE DIP ACCORDING
TO STAKES PROVIDE IN FIELD



United States Department of Agriculture
Forest Service

(R04)
INTERMOUNTAIN REGION

STAMPS, LOGOS, AND SEALS		
4		
3		
2		
1		
NO.	REVISION / ISSUE	DATE

PROJECT NAME

KING'S CANYON
ROAD

FOREST NAME

HUMBOLDT-
TOIYABE
NATIONAL
FOREST

DISTRICT NAME

CARSON R.D.

DRAWING TITLE

DRAWING TITLE

DETAILS

DATE	ARCHIVE NO.	
03/09/2020		
DESIGNER	DRAWING SHEET NO.	
T.JORGENSEN	D-04	
DRAWN		
T.JORGENSEN		
CHECKED		
J.BURGE		
PROJECT NO.	SHEET 025 OF 025	