

CONSTRUCTION OF SPECIFIED ROADS

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Preface

Preface_wo_03_15_2004_m

Delete all but the first paragraph and add the following:

The Forest Service, US Department of Agriculture has adopted FP-03 for construction of National Forest System Roads.

STANDARD SPECIFICATIONS FOR CONSTRUCTION OF ROADS AND BRIDGES ON FEDERAL HIGHWAYS PROJECTS
FP03

WRANGLE STWD		ROAD NUMBER					
		5220	5130	5130	5130	5130	5130
SECTION NO. & TITLE	REV DATE	000	100-I	100-II	105-I	105-II	105-III
101 - Terms, Format, and Definitions	2003	X	X	X	X	X	X
101 01 Meaning of Terms	1/22/2009	X	X	X	X	X	X
101 01 Meaning of Terms	1/22/2009	X	X	X	X	X	X
101 03 Abbreviations and Symbols	6/16/2006	X	X	X	X	X	X
101 04 Definitions	3/29/2007	X	X	X	X	X	X
101 04 Definitions	11/6/2007	X	X	X	X	X	X
102 - Bid, Award, and Execution of Contract	2003	X	X	X	X	X	X
102 00 Delete 102 in its entirety	2/16/2005	X	X	X	X	X	X
103 - Scope of Work	2003	X	X	X	X	X	X
103 00 Intent of Contract	2/16/2005	X	X	X	X	X	X
104 - Control of Work	2003	X	X	X	X	X	X
104 00 Deletions to 104	6/16/2006	X	X	X	X	X	X
104 03 Specifications and Drawings.	1/22/2009	X	X	X	X	X	X
104 03 Specifications and Drawings	2/22/2005	X	X	X	X	X	X
104 06 Use of Roads by Contractor	2/17/2005	X	X	X	X	X	X
105 - Control of Material	2003	X	X	X	X	X	X
105 02 Material Sources	1/18/2007	X	X	X	X	X	X
105 02 Contractor provided material sources	3/8/2007	X	X	X	X	X	X
105 05 Use of Material Found in the Work	5/12/2004	X	X	X	X	X	X
106 - Acceptance of Work	2003	X	X	X	X	X	X
106 01 Conformity with Contract Requirements	7/31/2007	X	X	X	X	X	X
106 07 Partial and Final Acceptance	5/11/2004	X	X	X	X	X	X
107 - Legal Relations and Responsibility To the Public	2003	X	X	X	X	X	X
107 05 Responsibility for Damage Claims	5/11/2004	X	X	X	X	X	X
107 06 Contractor Responsibility for Work	6/16/2006	X	X	X	X	X	X
107 08 Sanitation, Health & Safety	3/29/2005	X	X	X	X	X	X
107 09 Legal Relationship of the Parties	6/16/2006	X	X	X	X	X	X
107 10 Environmental Protection	6/16/2006	X	X	X	X	X	X
108 - Prosecution and Progress	2003	X	X	X	X	X	X
108 00 Delete Section 108 in entirety	2/16/2005	X	X	X	X	X	X
109 - Measurement and Payment	2003						
109 00 Deletions	2/17/2005	X	X	X	X	X	X
109 02 Measurement Terms and Definitions	6/16/2006	X	X	X	X	X	X
151 - Mobilization	2003						
155 - Schedules for Construction Contracts	6/25/1905	X	X	X	X	X	X
155 00 Contractor Quality Control Plan, Records	5/11/2004	X	X	X	X	X	X
201 - Clearing and Grubbing	2003						
201 01 Description	2/18/2005						
201 04 Clearing	2/18/2005						
201 04 Clearing	2/22/2005						
201 06 Disposal	2/18/2005	X	X	X	X	X	X

STANDARD SPECIFICATIONS FOR CONSTRUCTION OF ROADS AND BRIDGES ON FEDERAL HIGHWAYS PROJECTS
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WRANGLE STWD		ROAD NUMBER					
		5220	5130	5130	5130	5130	5130
SECTION NO. & TITLE	REV DATE	000	100-I	100-II	105-I	105-II	105-III
204 - Excavation and Embankment	2003	X	X	X	X		
211 - Roadway Obliteration	2003						
211 01 Description	3/30/2005						
211 02 Construction Requirements	2/25/2005						
251 - Riprap	2003			X			
301 - Untreated Aggregate Courses	2003	X	X	X	X	X	X
301 00 Title Change	3/3/2005	X	X	X	X	X	X
301 01 Work	3/3/2005	X	X	X	X	X	X
301 02 Material	5/16/2005	X	X	X	X	X	X
301 03 General	9/14/2005	X	X	X	X	X	X
301 04 Mixing and Spreading	3/3/2005	X	X	X	X	X	X
301 05 Compacting	5/17/2005	X	X	X	X	X	X
301 06 Surface Tolerance	3/3/2005	X	X	X	X	X	X
301 08 Acceptance	2/7/2007	X	X	X	X	X	X
301 10 Payment	3/3/2005	X	X	X	X	X	X
303 - Road Reconditioning	2003						
303 01 Description	3/2/2005						
Aggregate & Asphalt Surface							
303 06 Reconditioning	8/5/2008						
303 07 Roadway Reconditioning	3/2/2005						
303 11 Measurement	3/29/2005						
602 - Culverts and Drains	2003						
602 03 General	9/6/2005						
625 - Turf Establishment	2003						
625 03 General	2/25/2005						
625 03 General	7/2/2007						
625 04 Preparing Seedbed	2/25/2005						
625 05 Watering	3/30/2005						
625 07 Seeding	2/25/2005						
703 - Aggregate	6/25/1905	X	X	X	X	X	X
Subbase, Base, & Surface							
703 05 Course Aggregate	8/14/2009	X	X	X	X	X	X
FLH FP-03 Correction metric							
703 07 uscu	3/2/2005	X	X	X	X	X	X
Flakiness Index and Adherent							
703 10 Coatings	4/11/2011	X	X	X	X	X	X
713 - Roadside Improvement Material	2003						
713 05 Mulch	3/2/2005						
718 - Traffic Signing and Marking Material	2003	X	X	X	X	X	X
718 05 Aluminum Panels	8/5/2009	X	X	X	X	X	X

STANDARD SPECIFICATIONS FOR CONSTRUCTION OF ROADS AND BRIDGES ON FEDERAL HIGHWAYS PROJECTS
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WRANGLE STWD		ROAD NUMBER					
		5130	5130	5130	5130	5130	5130
SECTION NO. & TITLE	REV DATE	105-IV	120	140	144	155-I	155-II
101 - Terms, Format, and Definitions	2003	X	X	X	X	X	X
101 01 Meaning of Terms	1/22/2009	X	X	X	X	X	X
101 01 Meaning of Terms	1/22/2009	X	X	X	X	X	X
101 03 Abbreviations and Symbols	6/16/2006	X	X	X	X	X	X
101 04 Definitions	3/29/2007	X	X	X	X	X	X
101 04 Definitions	11/6/2007	X	X	X	X	X	X
102 - Bid, Award, and Execution of Contract	2003	X	X	X	X	X	X
102 00 Delete 102 in its entirety	2/16/2005	X	X	X	X	X	X
103 - Scope of Work	2003	X	X	X	X	X	X
103 00 Intent of Contract	2/16/2005	X	X	X	X	X	X
104 - Control of Work	2003	X	X	X	X	X	X
104 00 Deletions to 104	6/16/2006	X	X	X	X	X	X
104 03 Specifications and Drawings.	1/22/2009	X	X	X	X	X	X
104 03 Specifications and Drawings	2/22/2005	X	X	X	X	X	X
104 06 Use of Roads by Contractor	2/17/2005	X	X	X	X	X	X
105 - Control of Material	2003	X	X	X	X	X	X
105 02 Material Sources	1/18/2007	X	X	X	X	X	X
105 02 Contractor provided material sources	3/8/2007	X	X	X	X	X	X
105 05 Use of Material Found in the Work	5/12/2004	X	X	X	X	X	X
106 - Acceptance of Work	2003	X	X	X	X	X	X
106 01 Conformity with Contract Requirements	7/31/2007	X	X	X	X	X	X
106 07 Partial and Final Acceptance	5/11/2004	X	X	X	X	X	X
107 - Legal Relations and Responsibility To the Public	2003	X	X	X	X	X	X
107 05 Responsibility for Damage Claims	5/11/2004	X	X	X	X	X	X
107 06 Contractor Responsibility for Work	6/16/2006	X	X	X	X	X	X
107 08 Sanitation, Health & Safety	3/29/2005	X	X	X	X	X	X
107 09 Legal Relationship of the Parties	6/16/2006	X	X	X	X	X	X
107 10 Environmental Protection	6/16/2006	X	X	X	X	X	X
108 - Prosecution and Progress	2003	X	X	X	X	X	X
108 00 Delete Section 108 in entirety	2/16/2005	X	X	X	X	X	X
109 - Measurement and Payment	2003						
109 00 Deletions	2/17/2005	X	X	X	X	X	X
109 02 Measurement Terms and Definitions	6/16/2006	X	X	X	X	X	X
151 - Mobilization	2003						
155 - Schedules for Construction Contracts	6/25/1905	X	X	X	X	X	X
155 00 Contractor Quality Control Plan, Records	5/11/2004	X	X	X	X	X	X
201 - Clearing and Grubbing	2003		X	X	X		
201 01 Description	2/18/2005		X	X	X		
201 04 Clearing	2/18/2005						
201 04 Clearing	2/22/2005		X	X	X		
201 06 Disposal	2/18/2005		X	X	X	X	X

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WRANGLE STWD		ROAD NUMBER					
		5130 105-IV	5130 120	5130 140	5130 144	5130 155-I	5130 155-II
SECTION NO. & TITLE	REV DATE						
204 - Excavation and Embankment	2003	X	X				
211 - Roadway Obliteration	2003						
211 01 Description	3/30/2005						
211 02 Construction Requirements	2/25/2005						
251 - Riprap	2003	X					
301 - Untreated Aggregate Courses	2003					X	X
301 00 Title Change	3/3/2005					X	X
301 01 Work	3/3/2005					X	X
301 02 Material	5/16/2005					X	X
301 03 General	9/14/2005					X	X
301 04 Mixing and Spreading	3/3/2005					X	X
301 05 Compacting	5/17/2005					X	X
301 06 Surface Tolerance	3/3/2005					X	X
301 08 Acceptance	2/7/2007					X	X
301 10 Payment	3/3/2005					X	X
303 - Road Reconditioning	2003	X		X	X	X	X
303 01 Description	3/2/2005	X		X	X	X	X
Aggregate & Asphalt Surface							
303 06 Reconditioning	8/5/2008	X		X	X	X	X
303 07 Roadway Reconditioning	3/2/2005	X		X	X	X	X
303 11 Measurement	3/29/2005	X		X	X	X	X
602 - Culverts and Drains	2003						
602 03 General	9/6/2005						
625 - Turf Establishment	2003						
625 03 General	2/25/2005						
625 03 General	7/2/2007						
625 04 Preparing Seedbed	2/25/2005						
625 05 Watering	3/30/2005						
625 07 Seeding	2/25/2005						
703 - Aggregate	6/25/1905					X	X
Subbase, Base, & Surface							
703 05 Course Aggregate	8/14/2009					X	X
FLH FP-03 Correction metric							
703 07 uscu	3/2/2005					X	X
Flakiness Index and Adherent							
703 10 Coatings	4/11/2011					X	X
713 - Roadside Improvement Material	2003						
713 05 Mulch	3/2/2005						
718 - Traffic Signing and Marking Material	2003	X	X	X	X	X	X
718 05 Aluminum Panels	8/5/2009	X	X	X	X	X	X

STANDARD SPECIFICATIONS FOR CONSTRUCTION OF ROADS AND BRIDGES ON FEDERAL HIGHWAYS PROJECTS
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WRANGLE STWD		ROAD NUMBER					
		5130	5130	5130	5130		
SECTION NO. & TITLE	REV DATE	157	165	177-I	180		
101 - Terms, Format, and Definitions	2003	X	X	X	X		
101 01 Meaning of Terms	1/22/2009	X	X	X	X		
101 01 Meaning of Terms	1/22/2009	X	X	X	X		
101 03 Abbreviations and Symbols	6/16/2006	X	X	X	X		
101 04 Definitions	3/29/2007	X	X	X	X		
101 04 Definitions	11/6/2007	X	X	X	X		
102 - Bid, Award, and Execution of Contract	2003	X	X	X	X		
102 00 Delete 102 in its entirety	2/16/2005	X	X	X	X		
103 - Scope of Work	2003	X	X	X	X		
103 00 Intent of Contract	2/16/2005	X	X	X	X		
104 - Control of Work	2003	X	X	X	X		
104 00 Deletions to 104	6/16/2006	X	X	X	X		
104 03 Specifications and Drawings.	1/22/2009	X	X	X	X		
104 03 Specifications and Drawings	2/22/2005	X	X	X	X		
104 06 Use of Roads by Contractor	2/17/2005	X	X	X	X		
105 - Control of Material	2003	X	X	X	X		
105 02 Material Sources	1/18/2007	X	X	X	X		
105 02 Contractor provided material sources	3/8/2007	X	X	X	X		
105 05 Use of Material Found in the Work	5/12/2004	X	X	X	X		
106 - Acceptance of Work	2003	X	X	X	X		
106 01 Conformity with Contract Requirements	7/31/2007	X	X	X	X		
106 07 Partial and Final Acceptance	5/11/2004	X	X	X	X		
107 - Legal Relations and Responsibility To the Public	2003	X	X	X	X		
107 05 Responsibility for Damage Claims	5/11/2004	X	X	X	X		
107 06 Contractor Responsibility for Work	6/16/2006	X	X	X	X		
107 08 Sanitation, Health & Safety	3/29/2005	X	X	X	X		
107 09 Legal Relationship of the Parties	6/16/2006	X	X	X	X		
107 10 Environmental Protection	6/16/2006	X	X	X	X		
108 - Prosecution and Progress	2003	X	X	X	X		
108 00 Delete Section 108 in entirety	2/16/2005	X	X	X	X		
109 - Measurement and Payment	2003						
109 00 Deletions	2/17/2005	X	X	X	X		
109 02 Measurement Terms and Definitions	6/16/2006	X	X	X	X		
151 - Mobilization	2003			X			
155 - Schedules for Construction Contracts	6/25/1905	X	X	X	X		
155 00 Contractor Quality Control Plan, Records	5/11/2004	X	X	X	X		
201 - Clearing and Grubbing	2003						
201 01 Description	2/18/2005						
201 04 Clearing	2/18/2005						
201 04 Clearing	2/22/2005						
201 06 Disposal	2/18/2005	X	X	X	X		

STANDARD SPECIFICATIONS FOR CONSTRUCTION OF ROADS AND BRIDGES ON FEDERAL HIGHWAYS PROJECTS
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WRANGLE STWD		ROAD NUMBER					
		5130 157	5130 165	5130 177-I	5130 180		
SECTION NO. & TITLE	REV DATE						
204 - Excavation and Embankment	2003						
211 - Roadway Obliteration	2003						
211 01 Description	3/30/2005						
211 02 Construction Requirements	2/25/2005						
251 - Riprap	2003						
301 - Untreated Aggregate Courses	2003		X	X			
301 00 Title Change	3/3/2005		X	X			
301 01 Work	3/3/2005		X	X			
301 02 Material	5/16/2005		X	X			
301 03 General	9/14/2005		X	X			
301 04 Mixing and Spreading	3/3/2005		X	X			
301 05 Compacting	5/17/2005		X	X			
301 06 Surface Tolerance	3/3/2005		X	X			
301 08 Acceptance	2/7/2007		X	X			
301 10 Payment	3/3/2005		X	X			
303 - Road Reconditioning	2003	X					
303 01 Description	3/2/2005	X					
Aggregate & Asphalt Surface							
303 06 Reconditioning	8/5/2008	X					
303 07 Roadway Reconditioning	3/2/2005	X					
303 11 Measurement	3/29/2005	X					
602 - Culverts and Drains	2003			X	X		
602 03 General	9/6/2005			X	X		
625 - Turf Establishment	2003						
625 03 General	2/25/2005						
625 03 General	7/2/2007						
625 04 Preparing Seedbed	2/25/2005						
625 05 Watering	3/30/2005						
625 07 Seeding	2/25/2005						
703 - Aggregate	6/25/1905		X	X			
Subbase, Base, & Surface							
703 05 Course Aggregate	8/14/2009		X	X			
FLH FP-03 Correction metric							
703 07 uscu	3/2/2005		X	X			
Flakiness Index and Adherent							
703 10 Coatings	4/11/2011		X	X			
713 - Roadside Improvement Material	2003						
713 05 Mulch	3/2/2005						
718 - Traffic Signing and Marking Material	2003	X	X	X	X		
718 05 Aluminum Panels	8/5/2009	X	X	X	X		

STANDARD SPECIFICATIONS FOR CONSTRUCTION OF ROADS AND BRIDGES ON FEDERAL HIGHWAYS PROJECTS
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WRANGLE STWD		ROAD NUMBER (OPTIONAL ROADS)					
		5130 100- 4.63R-1	5130 105	5130 105- 2.25L-1	5130 125	5130 140- 0.02L-1	5130 140- 1.28R-1
SECTION NO. & TITLE	REV DATE						
101 - Terms, Format, and Definitions	2003	X	X	X	X	X	X
101 01 Meaning of Terms	1/22/2009	X	X	X	X	X	X
101 01 Meaning of Terms	1/22/2009	X	X	X	X	X	X
101 03 Abbreviations and Symbols	6/16/2006	X	X	X	X	X	X
101 04 Definitions	3/29/2007	X	X	X	X	X	X
101 04 Definitions	11/6/2007	X	X	X	X	X	X
102 - Bid, Award, and Execution of Contract	2003	X	X	X	X	X	X
102 00 Delete 102 in its entirety	2/16/2005	X	X	X	X	X	X
103 - Scope of Work	2003	X	X	X	X	X	X
103 00 Intent of Contract	2/16/2005	X	X	X	X	X	X
104 - Control of Work	2003	X	X	X	X	X	X
104 00 Deletions to 104	6/16/2006	X	X	X	X	X	X
104 03 Specifications and Drawings.	1/22/2009	X	X	X	X	X	X
104 03 Specifications and Drawings	2/22/2005	X	X	X	X	X	X
104 06 Use of Roads by Contractor	2/17/2005	X	X	X	X	X	X
105 - Control of Material	2003	X	X	X	X	X	X
105 02 Material Sources	1/18/2007	X	X	X	X	X	X
105 02 Contractor provided material sources	3/8/2007	X	X	X	X	X	X
105 05 Use of Material Found in the Work	5/12/2004	X	X	X	X	X	X
106 - Acceptance of Work	2003	X	X	X	X	X	X
106 01 Conformity with Contract Requirements	7/31/2007	X	X	X	X	X	X
106 07 Partial and Final Acceptance	5/11/2004	X	X	X	X	X	X
107 - Legal Relations and Responsibility To the Public	2003	X	X	X	X	X	X
107 05 Responsibility for Damage Claims	5/11/2004	X	X	X	X	X	X
107 06 Contractor Responsibility for Work	6/16/2006	X	X	X	X	X	X
107 08 Sanitation, Health & Safety	3/29/2005	X	X	X	X	X	X
107 09 Legal Relationship of the Parties	6/16/2006	X	X	X	X	X	X
107 10 Environmental Protection	6/16/2006	X	X	X	X	X	X
108 - Prosecution and Progress	2003	X	X	X	X	X	X
108 00 Delete Section 108 in entirety	2/16/2005	X	X	X	X	X	X
109 - Measurement and Payment	2003	X	X	X	X	X	X
109 00 Deletions	2/17/2005	X	X	X	X	X	X
109 02 Measurement Terms and Definitions	6/16/2006	X	X	X	X	X	X
151 - Mobilization	2003	X					
155 - Schedules for Construction Contracts	6/25/1905	X	X	X	X	X	X
155 00 Contractor Quality Control Plan, Records	5/11/2004	X	X	X	X	X	X
201 - Clearing and Grubbing	2003						
201 01 Description	2/18/2005						
201 04 Clearing	2/18/2005						
201 04 Clearing	2/22/2005						
201 06 Disposal	2/18/2005						

STANDARD SPECIFICATIONS FOR CONSTRUCTION OF ROADS AND BRIDGES ON FEDERAL HIGHWAYS PROJECTS
FP03

WRANGLE STWD		ROAD NUMBER (OPTIONAL ROADS)					
		5130 100- 4.63R-1	5130 105	5130 105- 2.25L-1	5130 125	5130 140- 0.02L-1	5130 140- 1.28R-1
SECTION NO. & TITLE	REV DATE						
204 - Excavation and Embankment	2003						
211 - Roadway Obliteration	2003	X	X	X	X	X	X
211 01 Description	3/30/2005	X	X	X	X	X	X
211 02 Construction Requirements	2/25/2005	X	X	X	X	X	X
251 - Riprap	2003						
301 - Untreated Aggregate Courses	2003						
301 00 Title Change	3/3/2005						
301 01 Work	3/3/2005						
301 02 Material	5/16/2005						
301 03 General	9/14/2005						
301 04 Mixing and Spreading	3/3/2005						
301 05 Compacting	5/17/2005						
301 06 Surface Tolerance	3/3/2005						
301 08 Acceptance	2/7/2007						
301 10 Payment	3/3/2005						
303 - Road Reconditioning	2003						
303 01 Description	3/2/2005						
Aggregate & Asphalt Surface							
303 06 Reconditioning	8/5/2008						
303 07 Roadway Reconditioning	3/2/2005						
303 11 Measurement	3/29/2005						
602 - Culverts and Drains	2003						
602 03 General	9/6/2005						
625 - Turf Establishment	2003	X	X	X	X	X	X
625 03 General	2/25/2005	X	X	X	X	X	X
625 03 General	7/2/2007	X	X	X	X	X	X
625 04 Preparing Seedbed	2/25/2005	X	X	X	X	X	X
625 05 Watering	3/30/2005	X	X	X	X	X	X
625 07 Seeding	2/25/2005	X	X	X	X	X	X
703 - Aggregate	6/25/1905						
Subbase, Base, & Surface							
703 05 Course Aggregate	8/14/2009						
FLH FP-03 Correction metric							
703 07 uscu	3/2/2005						
Flakiness Index and Adherent							
703 10 Coatings	4/11/2011						
713 - Roadside Improvement Material	2003	X	X	X	X	X	X
713 05 Mulch	3/2/2005	X	X	X	X	X	X
718 - Traffic Signing and Marking Material	2003	X	X	X	X	X	X
718 05 Aluminum Panels	8/5/2009	X	X	X	X	X	X

STANDARD SPECIFICATIONS FOR CONSTRUCTION OF ROADS AND BRIDGES ON FEDERAL HIGHWAYS PROJECTS
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WRANGLE STWD		ROAD NUMBER (OPTIONAL ROADS)					
		5130 150- 0.30R-1	5130 155-I	5130 155-II	5130 155- 1.36L-1	5130 157- 0.35L-1	5130 160
SECTION NO. & TITLE	REV DATE						
101 - Terms, Format, and Definitions	2003	X	X	X	X	X	X
101 01 Meaning of Terms	1/22/2009	X	X	X	X	X	X
101 01 Meaning of Terms	1/22/2009	X	X	X	X	X	X
101 03 Abbreviations and Symbols	6/16/2006	X	X	X	X	X	X
101 04 Definitions	3/29/2007	X	X	X	X	X	X
101 04 Definitions	11/6/2007	X	X	X	X	X	X
102 - Bid, Award, and Execution of Contract	2003	X	X	X	X	X	X
102 00 Delete 102 in its entirety	2/16/2005	X	X	X	X	X	X
103 - Scope of Work	2003	X	X	X	X	X	X
103 00 Intent of Contract	2/16/2005	X	X	X	X	X	X
104 - Control of Work	2003	X	X	X	X	X	X
104 00 Deletions to 104	6/16/2006	X	X	X	X	X	X
104 03 Specifications and Drawings.	1/22/2009	X	X	X	X	X	X
104 03 Specifications and Drawings	2/22/2005	X	X	X	X	X	X
104 06 Use of Roads by Contractor	2/17/2005	X	X	X	X	X	X
105 - Control of Material	2003	X	X	X	X	X	X
105 02 Material Sources	1/18/2007	X	X	X	X	X	X
105 02 Contractor provided material sources	3/8/2007	X	X	X	X	X	X
105 05 Use of Material Found in the Work	5/12/2004	X	X	X	X	X	X
106 - Acceptance of Work	2003	X	X	X	X	X	X
106 01 Conformity with Contract Requirements	7/31/2007	X	X	X	X	X	X
106 07 Partial and Final Acceptance	5/11/2004	X	X	X	X	X	X
107 - Legal Relations and Responsibility To the Public	2003	X	X	X	X	X	X
107 05 Responsibility for Damage Claims	5/11/2004	X	X	X	X	X	X
107 06 Contractor Responsibility for Work	6/16/2006	X	X	X	X	X	X
107 08 Sanitation, Health & Safety	3/29/2005	X	X	X	X	X	X
107 09 Legal Relationship of the Parties	6/16/2006	X	X	X	X	X	X
107 10 Environmental Protection	6/16/2006	X	X	X	X	X	X
108 - Prosecution and Progress	2003	X	X	X	X	X	X
108 00 Delete Section 108 in entirety	2/16/2005	X	X	X	X	X	X
109 - Measurement and Payment	2003	X	X	X	X	X	X
109 00 Deletions	2/17/2005	X	X	X	X	X	X
109 02 Measurement Terms and Definitions	6/16/2006	X	X	X	X	X	X
151 - Mobilization	2003						
155 - Schedules for Construction Contracts	6/25/1905	X	X	X	X	X	X
155 00 Contractor Quality Control Plan, Records	5/11/2004	X	X	X	X	X	X
201 - Clearing and Grubbing	2003						
201 01 Description	2/18/2005						
201 04 Clearing	2/18/2005						
201 04 Clearing	2/22/2005						
201 06 Disposal	2/18/2005						

STANDARD SPECIFICATIONS FOR CONSTRUCTION OF ROADS AND BRIDGES ON FEDERAL HIGHWAYS PROJECTS
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WRANGLE STWD		ROAD NUMBER (OPTIONAL ROADS)					
		5130 150- 0.30R-1	5130 155-I	5130 155-II	5130 155- 1.36L-1	5130 157- 0.35L-1	5130 160
SECTION NO. & TITLE	REV DATE						
204 - Excavation and Embankment	2003						
211 - Roadway Obliteration	2003	X	X	X	X	X	X
211 01 Description	3/30/2005	X	X	X	X	X	X
211 02 Construction Requirements	2/25/2005	X	X	X	X	X	X
251 - Riprap	2003						
301 - Untreated Aggregate Courses	2003						
301 00 Title Change	3/3/2005						
301 01 Work	3/3/2005						
301 02 Material	5/16/2005						
301 03 General	9/14/2005						
301 04 Mixing and Spreading	3/3/2005						
301 05 Compacting	5/17/2005						
301 06 Surface Tolerance	3/3/2005						
301 08 Acceptance	2/7/2007						
301 10 Payment	3/3/2005						
303 - Road Reconditioning	2003						
303 01 Description	3/2/2005						
Aggregate & Asphalt Surface							
303 06 Reconditioning	8/5/2008						
303 07 Roadway Reconditioning	3/2/2005						
303 11 Measurement	3/29/2005						
602 - Culverts and Drains	2003						
602 03 General	9/6/2005						
625 - Turf Establishment	2003	X	X	X	X	X	X
625 03 General	2/25/2005	X	X	X	X	X	X
625 03 General	7/2/2007	X	X	X	X	X	X
625 04 Preparing Seedbed	2/25/2005	X	X	X	X	X	X
625 05 Watering	3/30/2005	X	X	X	X	X	X
625 07 Seeding	2/25/2005	X	X	X	X	X	X
703 - Aggregate	6/25/1905						
Subbase, Base, & Surface							
703 05 Course Aggregate	8/14/2009						
FLH FP-03 Correction metric							
703 07 uscu	3/2/2005						
Flakiness Index and Adherent							
703 10 Coatings	4/11/2011						
713 - Roadside Improvement Material	2003	X	X	X	X	X	X
713 05 Mulch	3/2/2005	X	X	X	X	X	X
718 - Traffic Signing and Marking Material	2003	X	X	X	X	X	X
718 05 Aluminum Panels	8/5/2009	X	X	X	X	X	X

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WRANGLE STWD		ROAD NUMBER (OPTIONAL ROADS)					
		5130 165	5130 165- 0.28L-1	5130 170	5130 176	5130 178	5130 180
SECTION NO. & TITLE	REV DATE						
101 - Terms, Format, and Definitions	2003	X	X	X	X	X	X
101 01 Meaning of Terms	1/22/2009	X	X	X	X	X	X
101 01 Meaning of Terms	1/22/2009	X	X	X	X	X	X
101 03 Abbreviations and Symbols	6/16/2006	X	X	X	X	X	X
101 04 Definitions	3/29/2007	X	X	X	X	X	X
101 04 Definitions	11/6/2007	X	X	X	X	X	X
102 - Bid, Award, and Execution of Contract	2003	X	X	X	X	X	X
102 00 Delete 102 in its entirety	2/16/2005	X	X	X	X	X	X
103 - Scope of Work	2003	X	X	X	X	X	X
103 00 Intent of Contract	2/16/2005	X	X	X	X	X	X
104 - Control of Work	2003	X	X	X	X	X	X
104 00 Deletions to 104	6/16/2006	X	X	X	X	X	X
104 03 Specifications and Drawings.	1/22/2009	X	X	X	X	X	X
104 03 Specifications and Drawings	2/22/2005	X	X	X	X	X	X
104 06 Use of Roads by Contractor	2/17/2005	X	X	X	X	X	X
105 - Control of Material	2003	X	X	X	X	X	X
105 02 Material Sources	1/18/2007	X	X	X	X	X	X
105 02 Contractor provided material sources	3/8/2007	X	X	X	X	X	X
105 05 Use of Material Found in the Work	5/12/2004	X	X	X	X	X	X
106 - Acceptance of Work	2003	X	X	X	X	X	X
106 01 Conformity with Contract Requirements	7/31/2007	X	X	X	X	X	X
106 07 Partial and Final Acceptance	5/11/2004	X	X	X	X	X	X
107 - Legal Relations and Responsibility To the Public	2003	X	X	X	X	X	X
107 05 Responsibility for Damage Claims	5/11/2004	X	X	X	X	X	X
107 06 Contractor Responsibility for Work	6/16/2006	X	X	X	X	X	X
107 08 Sanitation, Health & Safety	3/29/2005	X	X	X	X	X	X
107 09 Legal Relationship of the Parties	6/16/2006	X	X	X	X	X	X
107 10 Environmental Protection	6/16/2006	X	X	X	X	X	X
108 - Prosecution and Progress	2003	X	X	X	X	X	X
108 00 Delete Section 108 in entirety	2/16/2005	X	X	X	X	X	X
109 - Measurement and Payment	2003	X	X	X	X	X	X
109 00 Deletions	2/17/2005	X	X	X	X	X	X
109 02 Measurement Terms and Definitions	6/16/2006	X	X	X	X	X	X
151 - Mobilization	2003						
155 - Schedules for Construction Contracts	6/25/1905	X	X	X	X	X	X
155 00 Contractor Quality Control Plan, Records	5/11/2004	X	X	X	X	X	X
201 - Clearing and Grubbing	2003						
201 01 Description	2/18/2005						
201 04 Clearing	2/18/2005						
201 04 Clearing	2/22/2005						
201 06 Disposal	2/18/2005						

STANDARD SPECIFICATIONS FOR CONSTRUCTION OF ROADS AND BRIDGES ON FEDERAL HIGHWAYS PROJECTS
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WRANGLE STWD		ROAD NUMBER (OPTIONAL ROADS)					
		5130 165	5130 165- 0.28L-1	5130 170	5130 176	5130 178	5130 180
SECTION NO. & TITLE	REV DATE						
204 - Excavation and Embankment	2003						
211 - Roadway Obliteration	2003	X	X	X	X	X	X
211 01 Description	3/30/2005	X	X	X	X	X	X
211 02 Construction Requirements	2/25/2005	X	X	X	X	X	X
251 - Riprap	2003						
301 - Untreated Aggregate Courses	2003						
301 00 Title Change	3/3/2005						
301 01 Work	3/3/2005						
301 02 Material	5/16/2005						
301 03 General	9/14/2005						
301 04 Mixing and Spreading	3/3/2005						
301 05 Compacting	5/17/2005						
301 06 Surface Tolerance	3/3/2005						
301 08 Acceptance	2/7/2007						
301 10 Payment	3/3/2005						
303 - Road Reconditioning	2003						
303 01 Description	3/2/2005						
Aggregate & Asphalt Surface							
303 06 Reconditioning	8/5/2008						
303 07 Roadway Reconditioning	3/2/2005						
303 11 Measurement	3/29/2005						
602 - Culverts and Drains	2003						
602 03 General	9/6/2005						
625 - Turf Establishment	2003	X	X	X	X	X	X
625 03 General	2/25/2005	X	X	X	X	X	X
625 03 General	7/2/2007	X	X	X	X	X	X
625 04 Preparing Seedbed	2/25/2005	X	X	X	X	X	X
625 05 Watering	3/30/2005	X	X	X	X	X	X
625 07 Seeding	2/25/2005	X	X	X	X	X	X
703 - Aggregate	6/25/1905						
Subbase, Base, & Surface							
703 05 Course Aggregate	8/14/2009						
FLH FP-03 Correction metric							
703 07 uscu	3/2/2005						
Flakiness Index and Adherent							
703 10 Coatings	4/11/2011						
713 - Roadside Improvement Material	2003	X	X	X	X	X	X
713 05 Mulch	3/2/2005	X	X	X	X	X	X
718 - Traffic Signing and Marking Material	2003	X	X	X	X	X	X
718 05 Aluminum Panels	8/5/2009	X	X	X	X	X	X

STANDARD SPECIFICATIONS FOR CONSTRUCTION OF ROADS AND BRIDGES ON FEDERAL HIGHWAYS PROJECTS
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WRANGLE STWD		ROAD NUMBER (OPTIONAL ROADS)					
		5130 201	5130 407	5200 030- 1.26L-1	5200 030- 1.26L-2	5200 030- 1.26L-3	5200 035
SECTION NO. & TITLE	REV DATE						
101 - Terms, Format, and Definitions	2003	X	X	X	X	X	X
101 01 Meaning of Terms	1/22/2009	X	X	X	X	X	X
101 01 Meaning of Terms	1/22/2009	X	X	X	X	X	X
101 03 Abbreviations and Symbols	6/16/2006	X	X	X	X	X	X
101 04 Definitions	3/29/2007	X	X	X	X	X	X
101 04 Definitions	11/6/2007	X	X	X	X	X	X
102 - Bid, Award, and Execution of Contract	2003	X	X	X	X	X	X
102 00 Delete 102 in its entirety	2/16/2005	X	X	X	X	X	X
103 - Scope of Work	2003	X	X	X	X	X	X
103 00 Intent of Contract	2/16/2005	X	X	X	X	X	X
104 - Control of Work	2003	X	X	X	X	X	X
104 00 Deletions to 104	6/16/2006	X	X	X	X	X	X
104 03 Specifications and Drawings.	1/22/2009	X	X	X	X	X	X
104 03 Specifications and Drawings	2/22/2005	X	X	X	X	X	X
104 06 Use of Roads by Contractor	2/17/2005	X	X	X	X	X	X
105 - Control of Material	2003	X	X	X	X	X	X
105 02 Material Sources	1/18/2007	X	X	X	X	X	X
105 02 Contractor provided material sources	3/8/2007	X	X	X	X	X	X
105 05 Use of Material Found in the Work	5/12/2004	X	X	X	X	X	X
106 - Acceptance of Work	2003	X	X	X	X	X	X
106 01 Conformity with Contract Requirements	7/31/2007	X	X	X	X	X	X
106 07 Partial and Final Acceptance	5/11/2004	X	X	X	X	X	X
107 - Legal Relations and Responsibility To the Public	2003	X	X	X	X	X	X
107 05 Responsibility for Damage Claims	5/11/2004	X	X	X	X	X	X
107 06 Contractor Responsibility for Work	6/16/2006	X	X	X	X	X	X
107 08 Sanitation, Health & Safety	3/29/2005	X	X	X	X	X	X
107 09 Legal Relationship of the Parties	6/16/2006	X	X	X	X	X	X
107 10 Environmental Protection	6/16/2006	X	X	X	X	X	X
108 - Prosecution and Progress	2003	X	X	X	X	X	X
108 00 Delete Section 108 in entirety	2/16/2005	X	X	X	X	X	X
109 - Measurement and Payment	2003	X	X	X	X	X	X
109 00 Deletions	2/17/2005	X	X	X	X	X	X
109 02 Measurement Terms and Definitions	6/16/2006	X	X	X	X	X	X
151 - Mobilization	2003						
155 - Schedules for Construction Contracts	6/25/1905	X	X	X	X	X	X
155 00 Contractor Quality Control Plan, Records	5/11/2004	X	X	X	X	X	X
201 - Clearing and Grubbing	2003						
201 01 Description	2/18/2005						
201 04 Clearing	2/18/2005						
201 04 Clearing	2/22/2005						
201 06 Disposal	2/18/2005						

STANDARD SPECIFICATIONS FOR CONSTRUCTION OF ROADS AND BRIDGES ON FEDERAL HIGHWAYS PROJECTS
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WRANGLE STWD		ROAD NUMBER (OPTIONAL ROADS)					
		5130 201	5130 407	5200 030- 1.26L-1	5200 030- 1.26L-2	5200 030- 1.26L-3	5200 035
SECTION NO. & TITLE	REV DATE						
204 - Excavation and Embankment	2003						
211 - Roadway Obliteration	2003	X	X	X	X	X	X
211 01 Description	3/30/2005	X	X	X	X	X	X
211 02 Construction Requirements	2/25/2005	X	X	X	X	X	X
251 - Riprap	2003						
301 - Untreated Aggregate Courses	2003						
301 00 Title Change	3/3/2005						
301 01 Work	3/3/2005						
301 02 Material	5/16/2005						
301 03 General	9/14/2005						
301 04 Mixing and Spreading	3/3/2005						
301 05 Compacting	5/17/2005						
301 06 Surface Tolerance	3/3/2005						
301 08 Acceptance	2/7/2007						
301 10 Payment	3/3/2005						
303 - Road Reconditioning	2003						
303 01 Description	3/2/2005						
Aggregate & Asphalt Surface							
303 06 Reconditioning	8/5/2008						
303 07 Roadway Reconditioning	3/2/2005						
303 11 Measurement	3/29/2005						
602 - Culverts and Drains	2003						
602 03 General	9/6/2005						
625 - Turf Establishment	2003	X	X	X	X	X	X
625 03 General	2/25/2005	X	X	X	X	X	X
625 03 General	7/2/2007	X	X	X	X	X	X
625 04 Preparing Seedbed	2/25/2005	X	X	X	X	X	X
625 05 Watering	3/30/2005	X	X	X	X	X	X
625 07 Seeding	2/25/2005	X	X	X	X	X	X
703 - Aggregate	6/25/1905						
Subbase, Base, & Surface							
703 05 Course Aggregate	8/14/2009						
FLH FP-03 Correction metric							
703 07 uscu	3/2/2005						
Flakiness Index and Adherent							
703 10 Coatings	4/11/2011						
713 - Roadside Improvement Material	2003	X	X	X	X	X	X
713 05 Mulch	3/2/2005	X	X	X	X	X	X
718 - Traffic Signing and Marking Material	2003	X	X	X	X	X	X
718 05 Aluminum Panels	8/5/2009	X	X	X	X	X	X

STANDARD SPECIFICATIONS FOR CONSTRUCTION OF ROADS AND BRIDGES ON FEDERAL HIGHWAYS PROJECTS
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WRANGLE STWD		ROAD NUMBER (OPTIONAL ROADS)					
		5220 000- 5.10L-1	5220 000- 6.70R-1	5220 000- 7.20L-1	5220 150	5220 155	5220 160
SECTION NO. & TITLE	REV DATE						
101 - Terms, Format, and Definitions	2003	X	X	X	X	X	X
101 01 Meaning of Terms	1/22/2009	X	X	X	X	X	X
101 01 Meaning of Terms	1/22/2009	X	X	X	X	X	X
101 03 Abbreviations and Symbols	6/16/2006	X	X	X	X	X	X
101 04 Definitions	3/29/2007	X	X	X	X	X	X
101 04 Definitions	11/6/2007	X	X	X	X	X	X
102 - Bid, Award, and Execution of Contract	2003	X	X	X	X	X	X
102 00 Delete 102 in its entirety	2/16/2005	X	X	X	X	X	X
103 - Scope of Work	2003	X	X	X	X	X	X
103 00 Intent of Contract	2/16/2005	X	X	X	X	X	X
104 - Control of Work	2003	X	X	X	X	X	X
104 00 Deletions to 104	6/16/2006	X	X	X	X	X	X
104 03 Specifications and Drawings.	1/22/2009	X	X	X	X	X	X
104 03 Specifications and Drawings	2/22/2005	X	X	X	X	X	X
104 06 Use of Roads by Contractor	2/17/2005	X	X	X	X	X	X
105 - Control of Material	2003	X	X	X	X	X	X
105 02 Material Sources	1/18/2007	X	X	X	X	X	X
105 02 Contractor provided material sources	3/8/2007	X	X	X	X	X	X
105 05 Use of Material Found in the Work	5/12/2004	X	X	X	X	X	X
106 - Acceptance of Work	2003	X	X	X	X	X	X
106 01 Conformity with Contract Requirements	7/31/2007	X	X	X	X	X	X
106 07 Partial and Final Acceptance	5/11/2004	X	X	X	X	X	X
107 - Legal Relations and Responsibility To the Public	2003	X	X	X	X	X	X
107 05 Responsibility for Damage Claims	5/11/2004	X	X	X	X	X	X
107 06 Contractor Responsibility for Work	6/16/2006	X	X	X	X	X	X
107 08 Sanitation, Health & Safety	3/29/2005	X	X	X	X	X	X
107 09 Legal Relationship of the Parties	6/16/2006	X	X	X	X	X	X
107 10 Environmental Protection	6/16/2006	X	X	X	X	X	X
108 - Prosecution and Progress	2003	X	X	X	X	X	X
108 00 Delete Section 108 in entirety	2/16/2005	X	X	X	X	X	X
109 - Measurement and Payment	2003	X	X	X	X	X	X
109 00 Deletions	2/17/2005	X	X	X	X	X	X
109 02 Measurement Terms and Definitions	6/16/2006	X	X	X	X	X	X
151 - Mobilization	2003						
155 - Schedules for Construction Contracts	6/25/1905	X	X	X	X	X	X
155 00 Contractor Quality Control Plan, Records	5/11/2004	X	X	X	X	X	X
201 - Clearing and Grubbing	2003						
201 01 Description	2/18/2005						
201 04 Clearing	2/18/2005						
201 04 Clearing	2/22/2005						
201 06 Disposal	2/18/2005						

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WRANGLE STWD		ROAD NUMBER (OPTIONAL ROADS)					
		5220 000- 5.10L-1	5220 000- 6.70R-1	5220 000- 7.20L-1	5220 150	5220 155	5220 160
SECTION NO. & TITLE	REV DATE						
204 - Excavation and Embankment	2003						
211 - Roadway Obliteration	2003	X	X	X	X	X	X
211 01 Description	3/30/2005	X	X	X	X	X	X
211 02 Construction Requirements	2/25/2005	X	X	X	X	X	X
251 - Riprap	2003						
301 - Untreated Aggregate Courses	2003						
301 00 Title Change	3/3/2005						
301 01 Work	3/3/2005						
301 02 Material	5/16/2005						
301 03 General	9/14/2005						
301 04 Mixing and Spreading	3/3/2005						
301 05 Compacting	5/17/2005						
301 06 Surface Tolerance	3/3/2005						
301 08 Acceptance	2/7/2007						
301 10 Payment	3/3/2005						
303 - Road Reconditioning	2003						
303 01 Description	3/2/2005						
Aggregate & Asphalt Surface							
303 06 Reconditioning	8/5/2008						
303 07 Roadway Reconditioning	3/2/2005						
303 11 Measurement	3/29/2005						
602 - Culverts and Drains	2003						
602 03 General	9/6/2005						
625 - Turf Establishment	2003	X	X	X	X	X	X
625 03 General	2/25/2005	X	X	X	X	X	X
625 03 General	7/2/2007	X	X	X	X	X	X
625 04 Preparing Seedbed	2/25/2005	X	X	X	X	X	X
625 05 Watering	3/30/2005	X	X	X	X	X	X
625 07 Seeding	2/25/2005	X	X	X	X	X	X
703 - Aggregate	6/25/1905						
Subbase, Base, & Surface							
703 05 Course Aggregate	8/14/2009						
FLH FP-03 Correction metric							
703 07 uscu	3/2/2005						
Flakiness Index and Adherent							
703 10 Coatings	4/11/2011						
713 - Roadside Improvement Material	2003	X	X	X	X	X	X
713 05 Mulch	3/2/2005	X	X	X	X	X	X
718 - Traffic Signing and Marking Material	2003	X	X	X	X	X	X
718 05 Aluminum Panels	8/5/2009	X	X	X	X	X	X

STANDARD SPECIFICATIONS FOR CONSTRUCTION OF ROADS AND BRIDGES ON FEDERAL HIGHWAYS PROJECTS
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WRANGLE STWD		ROAD NUMBER (OPTIONAL ROADS)					
		5220 162	5220 162- 0.93L-1	5220 166	5220 200- 0.44L	5220 200- 2.50R-1	5220 200- 2.85L
SECTION NO. & TITLE	REV DATE						
101 - Terms, Format, and Definitions	2003	X	X	X	X	X	X
101 01 Meaning of Terms	1/22/2009	X	X	X	X	X	X
101 01 Meaning of Terms	1/22/2009	X	X	X	X	X	X
101 03 Abbreviations and Symbols	6/16/2006	X	X	X	X	X	X
101 04 Definitions	3/29/2007	X	X	X	X	X	X
101 04 Definitions	11/6/2007	X	X	X	X	X	X
102 - Bid, Award, and Execution of Contract	2003	X	X	X	X	X	X
102 00 Delete 102 in its entirety	2/16/2005	X	X	X	X	X	X
103 - Scope of Work	2003	X	X	X	X	X	X
103 00 Intent of Contract	2/16/2005	X	X	X	X	X	X
104 - Control of Work	2003	X	X	X	X	X	X
104 00 Deletions to 104	6/16/2006	X	X	X	X	X	X
104 03 Specifications and Drawings.	1/22/2009	X	X	X	X	X	X
104 03 Specifications and Drawings	2/22/2005	X	X	X	X	X	X
104 06 Use of Roads by Contractor	2/17/2005	X	X	X	X	X	X
105 - Control of Material	2003	X	X	X	X	X	X
105 02 Material Sources	1/18/2007	X	X	X	X	X	X
105 02 Contractor provided material sources	3/8/2007	X	X	X	X	X	X
105 05 Use of Material Found in the Work	5/12/2004	X	X	X	X	X	X
106 - Acceptance of Work	2003	X	X	X	X	X	X
106 01 Conformity with Contract Requirements	7/31/2007	X	X	X	X	X	X
106 07 Partial and Final Acceptance	5/11/2004	X	X	X	X	X	X
107 - Legal Relations and Responsibility To the Public	2003	X	X	X	X	X	X
107 05 Responsibility for Damage Claims	5/11/2004	X	X	X	X	X	X
107 06 Contractor Responsibility for Work	6/16/2006	X	X	X	X	X	X
107 08 Sanitation, Health & Safety	3/29/2005	X	X	X	X	X	X
107 09 Legal Relationship of the Parties	6/16/2006	X	X	X	X	X	X
107 10 Environmental Protection	6/16/2006	X	X	X	X	X	X
108 - Prosecution and Progress	2003	X	X	X	X	X	X
108 00 Delete Section 108 in entirety	2/16/2005	X	X	X	X	X	X
109 - Measurement and Payment	2003	X	X	X	X	X	X
109 00 Deletions	2/17/2005	X	X	X	X	X	X
109 02 Measurement Terms and Definitions	6/16/2006	X	X	X	X	X	X
151 - Mobilization	2003						
155 - Schedules for Construction Contracts	6/25/1905	X	X	X	X	X	X
155 00 Contractor Quality Control Plan, Records	5/11/2004	X	X	X	X	X	X
201 - Clearing and Grubbing	2003						
201 01 Description	2/18/2005						
201 04 Clearing	2/18/2005						
201 04 Clearing	2/22/2005						
201 06 Disposal	2/18/2005						

STANDARD SPECIFICATIONS FOR CONSTRUCTION OF ROADS AND BRIDGES ON FEDERAL HIGHWAYS PROJECTS
FP03

WRANGLE STWD		ROAD NUMBER (OPTIONAL ROADS)					
		5220 162	5220 162- 0.93L-1	5220 166	5220 200- 0.44L	5220 200- 2.50R-1	5220 200- 2.85L
SECTION NO. & TITLE	REV DATE						
204 - Excavation and Embankment	2003						
211 - Roadway Obliteration	2003	X	X	X	X	X	X
211 01 Description	3/30/2005	X	X	X	X	X	X
211 02 Construction Requirements	2/25/2005	X	X	X	X	X	X
251 - Riprap	2003						
301 - Untreated Aggregate Courses	2003						
301 00 Title Change	3/3/2005						
301 01 Work	3/3/2005						
301 02 Material	5/16/2005						
301 03 General	9/14/2005						
301 04 Mixing and Spreading	3/3/2005						
301 05 Compacting	5/17/2005						
301 06 Surface Tolerance	3/3/2005						
301 08 Acceptance	2/7/2007						
301 10 Payment	3/3/2005						
303 - Road Reconditioning	2003						
303 01 Description	3/2/2005						
Aggregate & Asphalt Surface							
303 06 Reconditioning	8/5/2008						
303 07 Roadway Reconditioning	3/2/2005						
303 11 Measurement	3/29/2005						
602 - Culverts and Drains	2003						
602 03 General	9/6/2005						
625 - Turf Establishment	2003	X	X	X	X	X	X
625 03 General	2/25/2005	X	X	X	X	X	X
625 03 General	7/2/2007	X	X	X	X	X	X
625 04 Preparing Seedbed	2/25/2005	X	X	X	X	X	X
625 05 Watering	3/30/2005	X	X	X	X	X	X
625 07 Seeding	2/25/2005	X	X	X	X	X	X
703 - Aggregate	6/25/1905						
Subbase, Base, & Surface							
703 05 Course Aggregate	8/14/2009						
FLH FP-03 Correction metric							
703 07 uscu	3/2/2005						
Flakiness Index and Adherent							
703 10 Coatings	4/11/2011						
713 - Roadside Improvement Material	2003	X	X	X	X	X	X
713 05 Mulch	3/2/2005	X	X	X	X	X	X
718 - Traffic Signing and Marking Material	2003	X	X	X	X	X	X
718 05 Aluminum Panels	8/5/2009	X	X	X	X	X	X

STANDARD SPECIFICATIONS FOR CONSTRUCTION OF ROADS AND BRIDGES ON FEDERAL HIGHWAYS PROJECTS
FP03

WRANGLE STWD		ROAD NUMBER (OPTIONAL ROADS)					
		5220 200- 3.42L-1	5220 210	5220 250- 0.13R	5220 400	5220 400- 2.31L-1	5220 400- 2.40R-1
SECTION NO. & TITLE	REV DATE						
101 - Terms, Format, and Definitions	2003	X	X	X	X	X	X
101 01 Meaning of Terms	1/22/2009	X	X	X	X	X	X
101 01 Meaning of Terms	1/22/2009	X	X	X	X	X	X
101 03 Abbreviations and Symbols	6/16/2006	X	X	X	X	X	X
101 04 Definitions	3/29/2007	X	X	X	X	X	X
101 04 Definitions	11/6/2007	X	X	X	X	X	X
102 - Bid, Award, and Execution of Contract	2003	X	X	X	X	X	X
102 00 Delete 102 in its entirety	2/16/2005	X	X	X	X	X	X
103 - Scope of Work	2003	X	X	X	X	X	X
103 00 Intent of Contract	2/16/2005	X	X	X	X	X	X
104 - Control of Work	2003	X	X	X	X	X	X
104 00 Deletions to 104	6/16/2006	X	X	X	X	X	X
104 03 Specifications and Drawings.	1/22/2009	X	X	X	X	X	X
104 03 Specifications and Drawings	2/22/2005	X	X	X	X	X	X
104 06 Use of Roads by Contractor	2/17/2005	X	X	X	X	X	X
105 - Control of Material	2003	X	X	X	X	X	X
105 02 Material Sources	1/18/2007	X	X	X	X	X	X
105 02 Contractor provided material sources	3/8/2007	X	X	X	X	X	X
105 05 Use of Material Found in the Work	5/12/2004	X	X	X	X	X	X
106 - Acceptance of Work	2003	X	X	X	X	X	X
106 01 Conformity with Contract Requirements	7/31/2007	X	X	X	X	X	X
106 07 Partial and Final Acceptance	5/11/2004	X	X	X	X	X	X
107 - Legal Relations and Responsibility To the Public	2003	X	X	X	X	X	X
107 05 Responsibility for Damage Claims	5/11/2004	X	X	X	X	X	X
107 06 Contractor Responsibility for Work	6/16/2006	X	X	X	X	X	X
107 08 Sanitation, Health & Safety	3/29/2005	X	X	X	X	X	X
107 09 Legal Relationship of the Parties	6/16/2006	X	X	X	X	X	X
107 10 Environmental Protection	6/16/2006	X	X	X	X	X	X
108 - Prosecution and Progress	2003	X	X	X	X	X	X
108 00 Delete Section 108 in entirety	2/16/2005	X	X	X	X	X	X
109 - Measurement and Payment	2003	X	X	X	X	X	X
109 00 Deletions	2/17/2005	X	X	X	X	X	X
109 02 Measurement Terms and Definitions	6/16/2006	X	X	X	X	X	X
151 - Mobilization	2003						
155 - Schedules for Construction Contracts	6/25/1905	X	X	X	X	X	X
155 00 Contractor Quality Control Plan, Records	5/11/2004	X	X	X	X	X	X
201 - Clearing and Grubbing	2003						
201 01 Description	2/18/2005						
201 04 Clearing	2/18/2005						
201 04 Clearing	2/22/2005						
201 06 Disposal	2/18/2005						

STANDARD SPECIFICATIONS FOR CONSTRUCTION OF ROADS AND BRIDGES ON FEDERAL HIGHWAYS PROJECTS
FP03

WRANGLE STWD		ROAD NUMBER (OPTIONAL ROADS)					
		5220 200- 3.42L-1	5220 210	5220 250- 0.13R	5220 400	5220 400- 2.31L-1	5220 400- 2.40R-1
SECTION NO. & TITLE	REV DATE						
204 - Excavation and Embankment	2003						
211 - Roadway Obliteration	2003	X	X	X	X	X	X
211 01 Description	3/30/2005	X	X	X	X	X	X
211 02 Construction Requirements	2/25/2005	X	X	X	X	X	X
251 - Riprap	2003						
301 - Untreated Aggregate Courses	2003						
301 00 Title Change	3/3/2005						
301 01 Work	3/3/2005						
301 02 Material	5/16/2005						
301 03 General	9/14/2005						
301 04 Mixing and Spreading	3/3/2005						
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301 06 Surface Tolerance	3/3/2005						
301 08 Acceptance	2/7/2007						
301 10 Payment	3/3/2005						
303 - Road Reconditioning	2003						
303 01 Description	3/2/2005						
Aggregate & Asphalt Surface							
303 06 Reconditioning	8/5/2008						
303 07 Roadway Reconditioning	3/2/2005						
303 11 Measurement	3/29/2005						
602 - Culverts and Drains	2003						
602 03 General	9/6/2005						
625 - Turf Establishment	2003	X	X	X	X	X	X
625 03 General	2/25/2005	X	X	X	X	X	X
625 03 General	7/2/2007	X	X	X	X	X	X
625 04 Preparing Seedbed	2/25/2005	X	X	X	X	X	X
625 05 Watering	3/30/2005	X	X	X	X	X	X
625 07 Seeding	2/25/2005	X	X	X	X	X	X
703 - Aggregate	6/25/1905						
Subbase, Base, & Surface							
703 05 Course Aggregate	8/14/2009						
FLH FP-03 Correction metric							
703 07 uscu	3/2/2005						
Flakiness Index and Adherent							
703 10 Coatings	4/11/2011						
713 - Roadside Improvement Material	2003	X	X	X	X	X	X
713 05 Mulch	3/2/2005	X	X	X	X	X	X
718 - Traffic Signing and Marking Material	2003	X	X	X	X	X	X
718 05 Aluminum Panels	8/5/2009	X	X	X	X	X	X

101 - Terms, Format, and Definitions

101.00_nat_us_07_25_2005

101.01_nat_us_01_22_2009

101.01 Meaning of Terms

Delete all references to the TAR (Transportation Acquisition Regulations) in the specifications.

101.01_nat_us_01_22_2009

101.01 Meaning of Terms

Delete all references to the FAR (Federal Acquisition Regulations) in the specifications.

101.03_nat_us_06_16_2006

101.03 Abbreviations.

Add the following to (a) Acronyms:

AFPA	American Forest and Paper Association
MSHA	Mine Safety and Health Administration
NIST	<u>National Institute of Standards and Technology</u>
NESC	National Electrical Safety Code
WCLIB	West Coast Lumber Inspection Bureau

.

Add the following to (b) SI symbols:

mp	Milepost
ppm	Part Per Million

101.04_nat_us_03_29_2007

101.04 Definitions.

Delete the following definitions and substitute the following:

Bid Schedule--The Schedule of Items.

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Bridge--No definition.

Contractor--The individual or legal entity contracting with the Government for performance of prescribed work.

Culvert--No definition.

Right-of-Way--A general term denoting (1) the privilege to pass over land in some particular line (including easement, lease, permit, or license to occupy, use, or traverse public or private lands), or (2) Real property necessary for the project, including roadway, buffer areas, access, and drainage areas.

Add the following:

Adjustment in Contract Price--“Equitable adjustment,” as used in the Federal Acquisition Regulations, or “construction cost adjustment,” as used in the Stewardship Contract, as applicable.

Change--“Change” means “change order” as used in the Federal Acquisition Regulations, or “design change” as used in the Stewardship Contract.

Design Quantity--“Design quantity” is a Forest Service method of measurement from the FS-96 *Forest Service Specifications for the Construction of Roads and Bridges*. Under these FP specifications this term is replaced by the term “Contract Quantities”.

Forest Service--The United States of America, acting through the Forest Service, U.S. Department of Agriculture.

Neat Line--A line defining the proposed or specified limits of an excavation or structure.

Pioneer Road--Temporary construction access built along the route of the project.

Protected Streamcourse--A drainage shown on the plans or contract area map that requires designated mitigation measures.

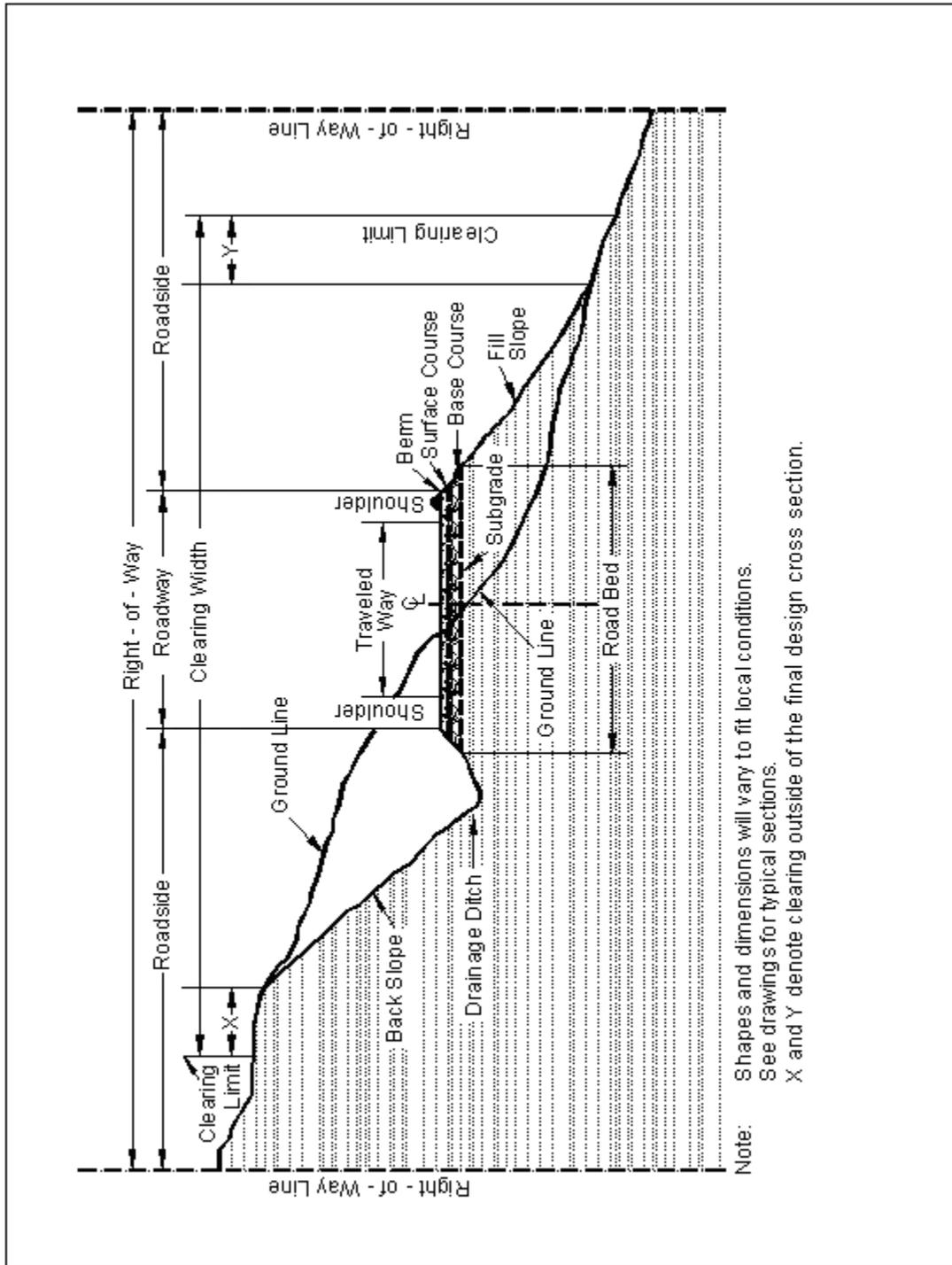
Road Order--An order affecting and controlling traffic on roads under Forest Service jurisdiction. Road Orders are issued by a designated Forest Officer under the authorities of 36 CFR, part 260.

Schedule of Items--A schedule in the contract that contains a listing and description of construction items, quantities, units of measure, unit price, and amount.

Utilization Standards--The minimum size and percent soundness of trees described in the specifications to determine merchantable timber.

Add Figure 101-1—Illustration of road structure terms:

Figure 101-1—Illustration of road structure terms.



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101.04 Definitions.

Delete the following definitions:

Contract Modification

Day

Notice to Proceed

Solicitation

102 - Bid, Award, and Execution of Contract

102.00_nat_us_02_16_2005

102 Bid, Award, and Execution of Contract

Delete Section 102 in its entirety.

103 - Scope of Work

103.00_nat_us_02_16_2005

Deletions

Delete all but subsection 103.01 Intent of Contract.

104 - Control of Work

104.00_nat_us_06_16_2006

Deletions

Delete Sections 104.01, 104.02, and 104.04.

104.03_nat_us_02_22_2005

104.03 Drawings and Specifications

Delete subsection 104.03

104.03_nat_us_01_22_2009

104.03 Specifications and Drawings.

Delete 104.03.

104.06_nat_us_02_17_2005

Add the following subsection:

104.06 Use of Roads by Contractor

The Contractor is authorized to use roads under the jurisdiction of the Forest Service for all activities necessary to complete this contract, subject to the limitations and authorizations designated in the Road Order(s) or described in the contract, when such use will not damage the roads or national forest resources, and when traffic can be accommodated safely.

105 - Control of Material

105.02_nat_us_01_18_2007

105.02 Material Sources.

105.02(a) Government-provided sources.

Add the following:

Comply with the requirements of 30 CFR 56, subparts B and H. Use all suitable material for aggregate regardless of size unless otherwise designated. When required, re-establish vegetation in disturbed areas according to section 625.

105.02_nat_us_03_08_2007

105.02 Material Sources.

105.02(a) Contractor-provided sources.

Add the following:

All material (e.g., soil, gravel, sand, borrow, aggregate, etc.) transported onto National Forest System land or incorporated into the work will be weed-free. The Contracting Officer may request written documentation of methods used to determine the weed-free status of any and all materials furnished by the contractor. Contractor-provided expertise and methods to establish weed-free status must be appropriate for the weeds of concern in the local area. The following applies to this contract:

A Forest Service weed specialist will inspect proposed sources to determine weed-free status. Provide the Contracting Officer written notification of proposed material sources 30 days prior to use. Written approval of the specific source will be provided to the contractor. If weed species are present in the proposed source, appropriate mitigation measures may allow conditional use of the source as required by the Contracting Officer.

105.05_nat_us_05_12_2004

105.05 Use of Material Found in the Work.

Delete 105.05 (a) and (b) and the last sentence of the second paragraph and substitute the following:

Materials produced or processed from Government lands in excess of the quantities required for performance of this contract are the property of the Government. The Government is not obligated to make reimbursement for the cost of producing these materials.

106 - Acceptance of Work

106.01_nat_us_07_31_2007

106.01 Conformity with Contract Requirements.

Delete Subsection 106.01 and substitute the following:

References to standard test methods of AASHTO, ASTM, GSA, and other recognized standard authorities refer to the methods in effect on the date of solicitation for bids.

Perform all work to the lines, grades, cross-sections, dimensions, and processes or material requirements shown on the plans or specified in the contract.

Incorporate manufactured materials into the work according to the manufacturer's recommendations or to these specifications, whichever is more strict.

Plan dimensions and contract specification values are the values to be strived for and complied with as the design values from which any deviations are allowed. Perform work and provide material that is uniform in character and reasonably close to the prescribed value or within the specified tolerance range. The purpose of a tolerance range is to accommodate occasional minor variations from the median zone that are unavoidable for practical reasons.

When standard manufactured items are specified (such as fence, wire, plates, rolled shapes, pipe conduits, etc., that are identified by gauge, unit mass, section dimensions, etc.), the identification will be considered to be nominal masses or dimensions. Unless specific contract tolerances are noted, established manufacturing tolerances will be accepted.

The Government may inspect, sample, or test all work at any time before final acceptance of the project. When the Government tests work, copies of test reports are furnished to the Contractor upon request. Government tests may or may not be performed at the work site. If Contractor testing and inspection is verified by the Government, the Contractor's results may be used by the Government to evaluate work for acceptance. Do not rely on the availability of Government test results for process control.

Acceptable work conforming to the contract will be paid for at the contract unit bid price. Four methods of determining conformity and accepting work are described in Subsections 106.02 to 106.05 inclusive. The primary method of acceptance is specified in each Section of work. However, work may be rejected at any time it is found by any of the methods not to comply with the contract.

Remove and replace work that does not conform to the contract, or to prevailing industry standards where no specific contract requirements are noted, at no cost to the Government.

(a) Disputing Government test results. **If the accuracy of Government test results is disputed, promptly inform the CO. If the dispute is unresolved after reasonable steps are taken to resolve the dispute, further evaluation may be obtained by written request. Include a narrative describing the dispute and a proposed resolution protocol that addresses the following:**

- (1) Sampling method;
- (2) Number of samples;
- (3) Sample transport;
- (4) Test procedures;
- (5) Testing laboratories;
- (6) Reporting;
- (7) Estimated time and costs; and
- (8) Validation process.

If the evaluation requires additional sampling or testing be performed, mutually agree with the Government on witnessing procedures and on sampling and testing by a third party laboratory. Use a third party laboratory accredited by the AASHTO accreditation program. Provide proof of the laboratory's accreditation for the test procedures to be used. Do not use the same laboratory that produced the disputed Government test results or that produced the test results used as a basis for the dispute.

The CO will review the proposed resolution protocol and may modify it before final approval and execution.

The Government will use the approved resolution protocol test results to determine the validity of the disputed testing. If the Government test results are validated, the Contractor will be responsible for all costs associated with developing and performing the resolution protocol. If the Government test results are not validated, the Government will be responsible for all costs associated with developing and performing the resolution protocol. If the validity of the Government test results cannot be determined, the Contractor and Government will equally share all costs associated with developing and carrying out the resolution protocol.

(b) Alternatives to removing and replacing non-conforming work. As an alternative to removal and replacement, the Contractor may submit a written request to:

- (1) Have the work accepted at a reduced price; or
- (2) Be given permission to perform corrective measures to bring the work into conformity.

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The request must contain supporting rationale and documentation. Include references or data justifying the proposal based on an evaluation of test results, effect on service life, value of material or work, quality, aesthetics, and other tangible engineering basis. The CO will determine disposition of the nonconforming work.

106.07_nat_us_05_11_2004

106.07 Delete

Delete subsection 106.07.

107 - Legal Relations and Responsibility to the Public

107.05_nat_us_05_11_2004

107.05 Responsibility for Damage Claims.

Delete the entire subsection.

107.06_nat_us_06_16_2006

107.06 Contractor's Responsibility for Work.

Delete the following from the first paragraph.

“except as provided in Subsection 106.07”.

107.08_nat_us_03_29_2005

107.08 Sanitation, Health, and Safety

Delete the entire subsection.

107.09_nat_us_06_16_2006

107.09 Legal Relationship of the Parties.

Delete the entire subsection.

107.10_nat_us_06_16_2006

107.10 Environmental Protection.

Add the following:

Design and locate equipment repair shops, stationary refueling sites, or other facilities to minimize the potential and impacts of hazardous material spills on Government land.

Before beginning any work, submit a Hazardous Spill Plan. List actions to be taken in the event of a spill. Incorporate preventive measures to be taken, such as the location of mobile refueling facilities, storage and handling of hazardous materials, and similar information. Immediately notify the CO of all hazardous material spills. Provide a written narrative report form no later than 24 hours after the initial report and include the following:

- Description of the item spilled (including identity, quantity, manifest number, and other identifying information).
- Whether amount spilled is EPA or state reportable, and if so whether it was reported, and to whom.

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- Exact time and location of spill including a description of the area involved.
- Containment procedures.
- Summary of any communications the Contractor had with news media, Federal, state and local regulatory agencies and officials, or Forest Service officials.
- Description of clean-up procedures employed or to be employed at the site including final disposition and disposal location of spill residue.

When available provide copies of all spill related clean up and closure documentation and correspondence from regulatory agencies.

The Contractor is solely responsible for all spills or leaks that occur during the performance of this contract. Clean up spills or leaks to the satisfaction of the CO and in a manner that complies with Federal, state, and local laws and regulations.

108 - Prosecution and Progress

108.00_nat_us_02_16_2005

108 Delete.

Delete Section 108 in its entirety.

109 - Measurement and Payment

109.00_nat_us_02_17_2005

109 Deletions

Delete the following entire subsections:

109.06 Pricing of Adjustments.

109.07 Eliminated Work.

109.08 Progress Payments.

109.09 Final Payment.

109.02_nat_us_06_16_2006

109.02 Measurement Terms and Definitions.

(b) Contract quantity.

Add the following:

Contract quantities will be adjusted only when there are errors in the original design of 15% or more.

Change the following:

“(b) Cubic yard” to “(c) Cubic yard”.

Add the following definition:

(p) Thousand Board Feet (Mbf). 1,000 board feet based on nominal widths, thickness, and extreme usable length of each piece of lumber or timber actually incorporated in the job. For glued laminated timber, 1,000 board feet based on actual width, thickness, and length of each piece actually incorporated in the job.

109.03_nat_us_03_29_2005

109.03 Weighing Procedures and Devices.

(c) Project weighing system.

Add the following:

For aggregates weighed for payment, adjust scale weights of material to deduct the daily average moisture content in excess of 2 percentage points over optimum moisture as determined by AASHTO T 99 or the designated compaction method. If moisture determination is necessary, determine the daily average moisture content in accordance with AASHTO T 255, from not less than three representative samples of aggregate taken at random intervals each day that aggregate is being weighed.

155 - Schedules for Construction Contracts

155.00_nat_us_05_11_2004

155 Delete.

Delete Section 155 in its entirety.

201 - Clearing and Grubbing

201.01_nat_us_02_18_2005

201.01 Description

Replace with the following

This work consists of clearing and grubbing within clearing limits and other designated areas.

201.04_nat_us_02_18_2005

201.04 Clearing.

Add the following:

When marked in advance, remove dead trees over 6 inches in diameter measured at 12 inches above the ground that lean toward the road and are tall enough to reach the roadbed.

201.04_nat_us_02_22_2005

201.04 Clearing. (c)

Delete paragraph (c) and replace with the following:

(c) In areas outside the excavation, embankment, and slope rounding limits, cut stumps to within 12 inches or one-third of the stump diameter of the ground, whichever is higher, measured on the side adjacent to the highest ground. For stewardship, stump heights will meet the requirements of the Stewardship contract.

201.04 Clearing.

Delete subsection (d) and replace with the following:

(d) Do not cut vegetation less than 3 feet tall and less than 3 inches in diameter, that is within the clearing limits but beyond the roadway and not in a decking area, and that does not interfere with sight distance along the road.

Add the following:

(e) Trim branches of remaining trees or shrubs to give a clear height of 14 feet above the roadbed unless otherwise indicated. Trim tree limbs as near flush with the trunk as practicable.

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(f) Remove brush from log decks. Deck logs so that logs are piled parallel to one another; can be removed by standard log loading equipment; will not damage standing trees; will not interfere with drainage, and will not roll. Keep logs in log decks free of brush and soil.

201.04_nat_us_03_03_2005

201.06 Disposal.

Delete the first sentence of this subsection and substitute the following:

Dispose of merchantable timber designated for removal according to the provisions of the stewardship contract.

211 - Roadway Obliteration

211.01_nat_us_03_30_2005

211.01 Description.

Add the following to (a) Method 1:

Remove all pipes, bridges, and other structures.

Add the following to (b) Method 2:

Remove only designated pipes, bridges, and other structures. Cultivate the roadbeds and slopes according to Subsection 625.04.

211.02_nat_us_02_25_2005

211.02 Construction Requirements.

Add the following:

Limit disturbance to soils and vegetation. Slope all areas to drain and return water to natural watercourses. After removing pipes and bridges, obtain approval from CO before continuing work. Remove all fill material to the natural channel. Treat slash and clearing debris according to Subsection 203.05.

211.02 (a) Rigid material.

Add the following:

(3) Pipes and Bridges. Remove structures such as pipes and bridge components according to Subsection 203.05(a), or as approved.

251 - Riprap

251.03_nat_us_08_05_2009

Construction Requirements

251.03 General.

Add the following:

Place riprap under or adjacent to structures before placing prefabricated superstructure units or constructing superstructure falsework unless otherwise approved by the CO.

251.08 Measurement.

Add the following:

Payment for excavation and embankment required for placement of riprap is indirectly included in the pay item for riprap.

301 - Untreated Aggregate Courses

301.00_nat_us_03_03_2005

301 Title Change.

Change the title to: **Section 301 Aggregate Courses**

301.01_nat_us_03_03_2005

301.01 Work.

Add the following:

Work includes producing aggregate by pit-run, grid rolling, screening, or crushing methods, or placing Government-furnished aggregate. Work may include additive mineral filler, or binder.

301.02_nat_us_05_16_2005

301.02 Material.

Add the following:

Bentonite	725.30
Calcium Chloride Flake	725.02
Lignon Sulfonate	725.20
Magnesium Chloride Brine or Calcium Chloride Liquid	725.02

301.03_nat_us_09_14_2005

301.03 General.

Add the following:

Written approval of the roadbed is required before placing aggregate.

For pit run or grid-rolled material, furnish material smaller than the maximum size. No gradation other than maximum size will be required for pit-run or grid-rolled material. For grid rolling, use all suitable material that can be reduced to maximum size. After processing on the road, remove all oversize material from the road and dispose of it as directed by the CO.

Provide additives or binder, if required, at the proportions specified.

Develop and use Government furnished sources according to Section 105.

If the aggregate is produced and stockpiled before placement, handle and stockpiled according to Section 320. Establish stockpile sites at locations approved. Clear and grub stockpile sites according to Section 201.

301.04 Mixing and Spreading.

Delete the first sentence of the first paragraph and add the following:

Ensure that aggregate and any required additives, water, mineral filler, and binder are mixed by the specified method except, if crushed aggregate products are being produced and mineral filler, binder, or additives are required, uniformly blend following crushing. Control additive proportions to 0.5 percent dry weight.

(a) Stationary Plant Method. Mix the aggregate with other required materials in an approved mixer. Add water during the mixing operation in the amount necessary to provide the moisture content for compacting to the specified density. After mixing, transport the aggregate to the jobsite while it contains the proper moisture content, and place it on the roadbed or base course using an aggregate spreader.

(b) Travel Plant Method. After placing the aggregate for each layer with an aggregate spreader or windrow-sizing device, uniformly mix it with other required materials using a traveling mixing plant. During mixing, add water to provide the necessary moisture content for compacting.

(c) Road Mix Method. After placing the aggregate for each layer, mix it with other required materials at the required moisture content until the mixture is uniform throughout. Mix aggregate, water, and all other materials until a uniform distribution is obtained.

Spread the aggregate in a uniform layer, with no segregation of size, and to a loose depth that will provide the required compacted thickness.

When placing aggregate over geotextile, place aggregate in a single lift to the full depth specified.

Route and distribute hauling and leveling equipment over the width and length of each layer.

301.05 Compacting

Delete and replace with the following:

Compact each layer full width. Roll from the sides to the center, parallel to the centerline of the road. Along curbs, headers, walls, and all places not accessible to the roller, compact the material with approved tampers or compactors.

Compact the aggregate using one of the following methods as specified:

Compaction A. Operating spreading and hauling equipment over the full width of the travelway.

Compaction B. Operate rollers and compact as specified in Subsection 204.11(a)(1).

Compaction C. Moisten or dry the aggregate to a uniform moisture content between 5 and 7 percent based on total dry weight of the mixture. Operate rollers and compact as specified in Subsection 204.11(a)(1).

Compaction D. Compact to a density of at least 95 percent of the maximum density, as determined by AASHTO T 99, method C or D.

Compaction E. Compact to a density of at least 96 percent of the maximum density, as determined by the Modified Marshall Hammer Compaction Method (available upon request from USDA Forest Service, Regional Materials Engineering Center, P.O. Box 7669, Missoula, MT 59807).

Compaction F. Compact to a density of at least 95 per-cent of the maximum density, as determined by AASHTO T 180, method C or D.

Compaction G. Compact to a density of at least 100 percent of the maximum density as determined by the Modified Marshall Hammer Compaction Method (available upon request from USDA Forest Service, Regional Materials Engineering Center, P.O. Box 7669, Missoula, MT 59807).

For all compaction methods, blade the surface of each layer during the compaction operations to remove irregularities and produce a smooth, even surface. When a density requirement is specified, determine the in place density and moisture content according to AASHTO T 310 or other approved test procedures.

301.06_nat_us_03_03_2005

301.06 Surface Tolerance.

Add the following:

Thickness and Width requirements:

The maximum variation from the compacted specified thickness is $\frac{1}{2}$ inch. The compacted thickness is not consistently above or below the specified thickness and the average thickness of 4 random measurements for any $\frac{1}{2}$ mile of road segment is within $+\frac{1}{4}$ inch of the specified thickness.

The maximum variation from the specified width will not exceed +12 inches at any point. The compacted width is not consistently above the specified width and the average of any four random measurements along any $\frac{1}{2}$ mile of road segment is within +4 inches of the specified width.

Table 301-1 Field Density Requirements.

Table 301-1: Delete laboratory and field density requirements for base, subbase, and surfacing and replace with the following:

Material or Product	Type of Acceptance (Subsection)	Characteristics	Category	Test Methods Specifications	Sampling Frequency	Point of Sampling	Split Sample	Reporting Time
Base and Subbase	Measured and tested conformance (Subsection 106.04)	Moisture Density	---					
		Method C	---	AASHTO T 99	1 per type and source of material	Source of material	Yes	Before using in work
			---		“	“	“	“
		Method D	---	AASHTO T 180	“	“	“	“
			---		“	“	“	“
		Compaction	---					
		Method C, D	---	AASHTO T 310 or other approved procedures	1 per 500 t	In-place	---	Before placing the next layer
Surfacing	Measured and tested conformance (Subsection 106.04)	Moisture Density						
			---		“	“	“	Before using in work
		Method D	---	AASHTO T 180	“	“	“	“
			---		“	“	“	“
		Compaction						
				Method C, D	---	AASHTO T 310 or other approved procedures	1 per 500 t	In-place

301.10 Payment

Delete the following:

adjusted according to Subsection 106.05

303 - Road Reconditioning

303.01_nat_us_03_02_2005

303.01 Work.

Delete and add the following:

This work consists of reconditioning ditches, shoulders, roadbeds, cattleguards, asphalt surfaces, and aggregate surfaces.

303.06_nat_us_08_05_2008

303.06 Aggregate Surface Reconditioning.

Delete and replace with the following:

303.06 Asphalt and Aggregate Surface Reconditioning.

Repair soft and unstable areas to the full depth of the aggregate surface and according to Subsection 204.07. Scarify to the depth of the aggregate surface or to a depth of 6 inches, whichever is less, and remove surface irregularities. Reshape, finish, and compact the entire aggregate surface according to Subsection 301.05, Subsection 321.05, or Subsection 322.05 as applicable.

For asphalt surfaces, clean the existing surface of all loose material, dirt, or other deleterious substances by approved methods. Remove and dispose of unsuitable material that shows evidence of distress, excess asphalt material, or settlement in the roadbed. Patch the areas with approved material that conforms to and is compatible with the adjacent pavement structure. Perform the patch work according to Section 301, 404, 430, or other sections as applicable for the layer or courses being repaired. Clean and seal cracks in the existing asphalt surface according to Subsection 414.05. Correct surface irregularities exceeding 6 inches in depth with a specified aggregate. Place and compact the aggregate according to Subsections 301.04 and 301.05. Prelevel other dips, depressions, sags, excessive or nonexistent crown, or other surface irregularities with asphalt concrete according to Section 404. Spread and compact the asphalt concrete in layers parallel to the grade line not to exceed 2 inches in compacted depth.

Delete Table 303-1 and replace with the following:

**Table 303-1
Sampling and Testing Requirements**

Material or Product	Type of Acceptance (Subsection)	Characteristic	Category	Test Methods Specifications	Sampling Frequency	Point of Sampling	Split Sample	Reporting Time	
Existing Roadway	Measured and tested for conformance (106.04)	Moisture-density Method D	—	AASHTO T 99 (1)	1 per each mixture or change in material	Processed material before incorporating in work	Yes, when requested	Before using in work	
		Moisture-density Method E	—	R-1 Marshall	“	“	“	“	
		Moisture-density Method F	—	AASHTO T 180(1)	“	“	“	“	“
		Moisture-density Method G	—	R-1 Marshall	“	“	“	“	“
		In-place density & moisture content	—	AASHTO T 310 or other approved procedures	1 per 3000 yd ²	In-place	—	Before placing next layer	

(1) Minimum of 5 points per proctor.

303.07 Roadway Reconditioning.

Add the following:

Remove cattleguard decks. Clean the deck and the area beneath the cattleguard of soil and other material to the bottom of the original foundation over the entire width of the installation.
Reinstall the cattleguard deck.

303.11_nat_us_03_29_2005

303.10 Measurement

Modify the second paragraph as follows:

Measure ditch reconditioning and shoulder reconditioning by the mile, station, or foot horizontally along the centerline of the roadway for each side of the roadway.

602 - Culverts and Drains

602.03_nat_us_09_06_2005

602.03 General.

Add the following:

Ensure that the final installed alignment of all pipe allows no reverse grades, and does not permit horizontal and vertical alignments to vary from a straight line drawn from center of inlet to center of outlet by more than 2 percent of pipe center length or 1.0 feet, whichever is less.

625 - Turf Establishment

625.03_nat_us_07_02_2007

625.03 General.

Delete this subsection and replace with the following:

Apply turf establishment to prepared ground or any disturbed area between October 1 and June 1. Apply turf establishment to the areas shown on the plans or worklists within 15 days after completion of ground disturbing activities. Seeded areas damaged by construction activities shall be reseeded within 10 days of the damage. Do not seed during windy weather or when the ground is excessively wet, frozen, or snow covered.

Assure that all seed and mulch used in the work conforms to the weed free requirements of Section 713.

625.04 Preparing Seedbed.

Delete entire subsection and replace with the following:

Ensure that the surface soil is in a roughened condition favorable for germination and growth.

625.04_nat_us_02_25_2005

625.04 Preparing Seedbed.

Delete “2 inches in diameter and larger,” from the second sentence.

625.05 Watering

Delete entire subsection.

625.07 Seeding.

Delete the first sentence and add the following.

Apply seed mix by the following methods:

(a) **Dry method.** Delete the third sentence.

Remove the last sentence “Lightly compact the seedbed within 24 hours after seeding.”

625.09 Protecting and Caring for Seeded Areas

Delete the first sentence and add the following:

Protect and care for seeded areas until final acceptance.

625.11 Measurement.

Delete the entire Subsection and replace with the following:

Measure the Section 625 items listed in the bid schedule according to Subsection 109.02.

703 - Aggregate

703.05_nat_us_08_14_2009

Delete 703.05 and replace with the following:

703.05 Subbase, Base, Surface Course, and Screened Aggregate.

(a) Subbase or base aggregate. Furnish hard, durable particles or fragments of crushed stone, crushed slag, or crushed gravel conforming the following:

(1) Gradation	Table 703-2
(2) Liquid limit, AASHTO T 89	25 max.
(3) Plastic limit, AASHTO T 90	Nonplastic
(4) Los Angeles abrasion, AASHTO T 96	40% max.
(5) Sodium sulfate soundness loss (5 cycles), AASHTO T 104	12% max.
(6) Durability index (coarse), AASHTO T 210	35 min.
(7) Durability index (fine), AASHTO T 210	35 min.
(8) Fractured faces, ASTM D 5821	50% min.
(9) Free from organic matter and lumps or balls of clay	

Do not use material that breaks up when alternately frozen and thawed or wetted and dried.

Obtain the aggregate gradation by crushing, screening, and blending processes as necessary. Fine aggregate, material passing the No. 4 sieve, shall consist of natural or crushed sand and fine mineral particles.

(b) Surface course aggregate. Furnish hard, durable particles or fragments of crushed stone, crushed slag, or crushed gravel conforming the following:

(1) Gradation	Table 703-3
(2) Liquid limit, AASHTO T 89	35 max.
(3) Plastic Index, AASHTO T 90	
a) If the percent passing the No. 200 sieve is less than 12%	2 to 9
b) If the percent passing the No. 200 sieve is greater than 12%	Less than 2
(4) Los Angeles abrasion, AASHTO T 96	40% max.
(5) Sodium sulfate soundness loss (5 cycles), AASHTO T 104	12% max.
(6) Durability index (coarse), AASHTO T 210	35 min.
(7) Durability index (fine), AASHTO T 210	35 min.
(8) Fractured faces, ASTM D 5821	75% min.
(9) Free from organic matter and lumps or balls of clay	

Do not use material that breaks up when alternately frozen and thawed or wetted and dried.

Do not furnish material that contains asbestos fibers.

Wrangle STWD, Methow Valley Ranger District

Obtain the aggregate gradation by crushing, screening, and blending processes as necessary. Fine aggregate, material passing the No. 4 sieve, shall consist of natural or crushed sand and fine mineral particles.

(c) Screened aggregate – Furnish hard, durable particles or fragments of stone, slag, or gravel conforming the following:

- | | |
|---|--------------|
| (1) Gradation | Table 703-16 |
| (2) Plastic Index, AASHTO T 90 | Less than 9 |
| (3) Los Angeles abrasion, AASHTO T 96 | 55% max. |
| (4) Free from organic matter and lumps or balls of clay. | |

Do not use material that breaks up when alternately frozen and thawed or wetted and dried.

Obtain the aggregate gradation by crushing, screening, and blending processes as necessary.

Delete Table 703-2 and replace with the following:

**Table 703-2
Target Value Ranges for Subbase and Base Gradation
Percent by Mass Passing Designated Sieve (AASHTO T 27 and T 11)**

Sieve Size	Grading Designation				
	A (Subbase)	B (Subbase)	C (Base)	D (Base)	E (Base)
2½ inch	100				
2 inch	97 – 100	100			
1½ inch		97 – 100			
1 inch	65 – 79 (6)		80 – 100 (6)	100	
¾ inch			64 – 94 (6)	86 – 100 (6)	100
½ inch	45 – 59 (7)				
3/8 inch			40 – 69 (6)	51 – 82 (6)	62 – 90 (6)
No. 4	28 – 42 (6)	40 – 60 (8)	31 – 54 (6)	36 – 64 (6)	36 – 74 (6)
No. 40	9 – 17 (4)			12 – 26 (4)	12 – 26 (4)
No. 200	4.0 – 8.0 (3)	4.0 – 12.0 (4)	4.0 – 7.0 (3)	4.0 – 7.0 (3)	4.0 – 7.0 (3)

() The value in the parentheses is the allowable deviation (±) from the target values..

Delete Table 703-3 and replace with the following:

**Table 703-3
Target Value Ranges for Surface Gradation**

Sieve Size	Percent by Mass Passing Designated Sieve (AASHTO T 27 and T 11)										
	Grading Designation										
	F	G	H	S	T	U					
1 1/2 inch	100			100							
1 inch	97-100	100		72 - 92 (6)	100					100	
3/4 inch	76-89 (6)	97 - 100	97 - 100								100
1/2 inch					71 - 91 (6)						
3/8 inch	56-68 (6)	70 - 80 (6)	80 - 92 (6)	51 - 71 (6)						71 - 90 (6)	
No. 4	43-53 (7)	51 - 63 (7)	58 - 70 (7)	36 - 53 (7)	43 - 60 (7)					50 - 68 (7)	
No. 8				26 - 40 (6)	30 - 46 (6)					34 - 51 (6)	
No. 16	23-32 (6)	28 - 39 (6)	28 - 40 (6)								
No. 40	15-23 (5)	19 - 27 (5)	16 - 26 (5)	14 - 25 (5)	16 - 28 (5)					19 - 30 (5)	
No. 200	10.0-16.0 (4)	10.0 - 16.0 (4)	9.0 - 14.0 (4)	8.0 - 15.0 (4)	8.0 - 15.0 (4)					8.0 - 15.0 (4)	

() The value in the parentheses is the allowable deviation (±) from the target values. If the plasticity index (PI) is greater than 0, the TV range for the No. 200 sieve size is 8-12 (4).

Add Table 703-16:

Table 703-16

Gradation Requirements for Screened Aggregate

Sieve Size	Percent by Mass Passing Designated Sieve (AASHTO T 27 and T 11)						
	Grading Designation						
	L	M	N	O	P	Q	R
6 inch	100	100					
4 inch			100	100			
3 inch					100	100	
2 inch							100
No. 4		15-45		15-45		15-45	

703.07_nat_us_03_02_2005

Table 703-2 Correction

Include the following substitution

In Table 703-2, delete the “436 – 74 (6)” percent by mass passing for grading E (base) No. 4 sieve size and substitute “36 – 74 (6).”

Table 703-2 Correction

Include the following substitution

In Table 703-2, delete the “436 – 74 (6)” percent by mass passing for grading E (base) No. 4 sieve size and substitute “36 – 74 (6).”

703.10_nat_us_04_11_2011

703.10(e) Flakiness Index.

Delete and replace with the following:

Flakiness Index, FLH T 508 30% max.

703.10(i) Adherent Coating.

Add the following:

Adherent coating on the aggregate, FLH T 512 0.5% max.

713 - Roadside Improvement Material

713.05_nat_us_03_02_2005

713.05 Mulch.

Add the following:

Assure that mulch used on the project is certified noxious weed free by the appropriate authority in the jurisdiction of use.

718 - Traffic Signing and Marking Material

718.05_nat_us_08_05_2009

718.05 Aluminum Panels

Delete the third paragraph and replace with the following:

Clean, degrease and properly prepare the panels according to methods recommended by the sheeting manufacturer. Conversion coatings will conform to ASTM B-921 or ASTM B-449.

UNITED STATES DEPARTMENT OF AGRICULTURE
FOREST SERVICE

REGION 6

OKANOGAN - WENATCHEE NATIONAL FORESTS

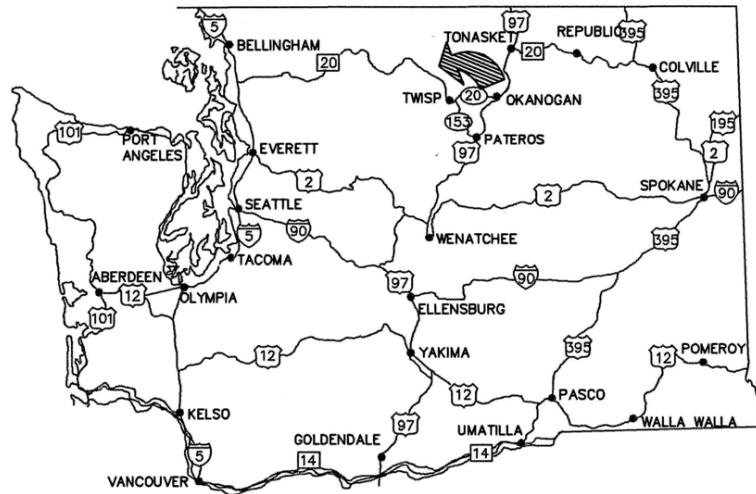
Methow Valley Ranger District

CONSTRUCTION DRAWINGS FOR

Wrangle STWD

INDEX TO SHEETS

SHEET NO.	DESCRIPTION
1	TITLE
2	VICINITY MAP
3-5	ESTIMATE OF QUANTITIES
6	NOTES, SYMBOLS, & TYPICAL DETAILS
7	ROAD STRUCTURE DETAILS
8	CLEARING FOR RECONSTRUCTION
9	CULVERT LISTING & CONST. DETAILS
10	DRAIN DIP DETAIL
11	WORK DESCRIPTION



KEY MAP OF WASHINGTON SHOWING LOCATION OF PROJECT

ROAD NO.	LENGTH MILES	RECONST./CONST.	SHEET NO.
5220000	0.14	RECONST	11
5130100-I	0.02	RECONST	11
5130100-II	0.07	RECONST	11
5130105-I	0.03	RECONST	11
5130105-II	0.02	RECONST	11
5130105-III	0.04	RECONST	11
5130105-IV	0.19	RECONST	11
5130120	0.52	RECONST	11
5130140	1.10	RECONST	11
5130144	1.00	RECONST	11
5130155-I	0.06	RECONST	11
5130155-II	0.05	RECONST	11
5130157	0.01	RECONST	11
5130165	0.02	RECONST	11
5130177-I	0.02	RECONST	11
5130180	0.01	RECONST	11

TOTAL CONSTRUCTION _____ MILES
TOTAL RECONSTRUCTION 3.30 MILES

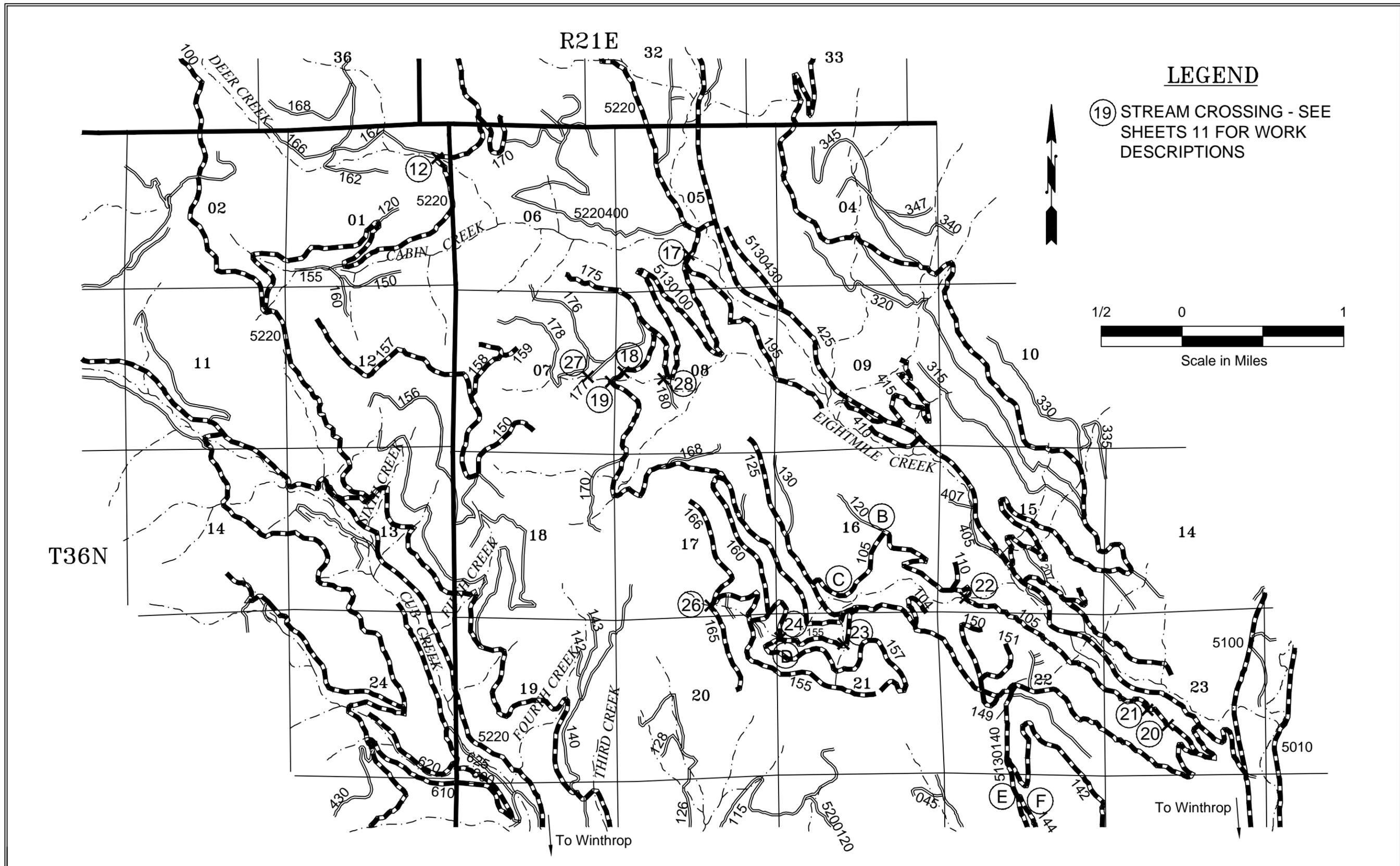
U.S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE
R-6
PACIFIC NORTHWEST REGION

Reviewed and Approved By
Michael C. Fin 3/7/2012
District Ranger Date
Arthur Burtman 3/12/2012
Forest Engineer Date

Recommended and Approved By
B. Key 3/12/12
Zone Engineer Date

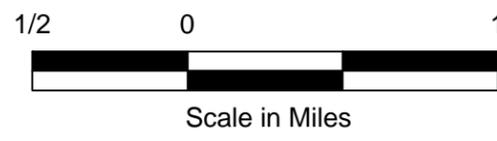
Designed By
Donna 4/14/12
Reviewed By
Sept Stigo 2/17/12
Date

Sheet
Title
Sheet
1



LEGEND

①9 STREAM CROSSING - SEE SHEETS 11 FOR WORK DESCRIPTIONS



U.S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE
R-6
 PACIFIC NORTHWEST REGION

District
METHOW VALLEY
RANGER DISTRICT

Forest **Okanogan-Wenatchee**
National Forests
 Project **WRANGLE STWD**

Sheet Title
Vicinity Map

Sheet
2

Notes, Symbols & Typical Details

DISPOSAL OF MERCHANTABLE TIMBER (TIMBER MEETING UTILIZATION STANDARDS):

Merchantable timber (timber Meeting Utilization Standards) will be decked in locations shown on drawings, within reach of standard loading equipment.

To meet minimum tree specifications, trees must be equal or exceed 5-inches DBH and contain at least one minimum piece. Such timber will be felled and bucked into log lengths not exceeding 52 ft. Pieces (logs) will also be considered as meeting Utilization Standards, and be required to be decked, when such pieces would have met Utilization Standards if bucking lengths were varied to include such material. Merchantable timber shall be limbed and bucked. Log decks shall be free of slash and debris. Material not meeting Utilization Standards, including any material remaining after deck removal, shall be disposed of as other construction slash pursuant to Specification 201.04.

MINIMUM UTILIZATION STANDARDS ARE:

LENGTH	DIAMETER (Inside bark at the small end)	OTHER
12 feet	4 inches	40 Net Scale in Percent Gross
	Lodgepole Pine - 4 inches	

STANDARD BUCKING LENGTHS

PONDEROSA PINE and LODGEPOLE PINE: Multiples of 16 feet plus trim. See footnotes 1/ and 2/.
DOUGLAS-FIR, WESTERN LARCH, and OTHER SPECIES: Multiples of 8 FEET plus trim.

1/ Unless otherwise agreed upon, logs shall be cut to the above specified log lengths wherever possible. Where other lengths are necessary to obtain maximum utilization due to breaks or to specified top diameters, logs should be bucked to multiples of 2 feet plus trim.

2/ Trim allowance is 6-inches for each 20 feet of log length as shown below:

8 to 20 foot lengths	- 6-inches of trim
21 to 40 foot lengths	- 12-inches of trim
+41 foot plus	- 18-inches of trim

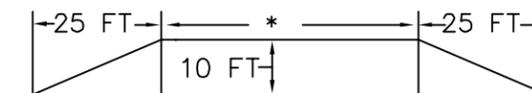
DISPOSAL OF UNMERCHANTABLE TIMBER: Logs not meeting Utilization Standards which are suitable for use as firewood, may be scattered or decked. Material not suitable for firewood shall be treated by other slash methods.

STAKES: All stakes shall have the following minimum nominal dimensions. Hubs shall be 2 in X 2 in X 8 in, Guard, reference, slope, and other stakes shall be 0.3 in X 1.5 in X 18 in. Lath shall be 0.4 in X 1.5 in X 3 ft. Other dimensions and materials may be used, such as steel reinforcing bars and metal pins, if approved by the Engineer. The color of paint or flagging, as well as the colors for use on stakes for clearing, reference, structures, slope staking, and shall be fluorescent orange. Other colors may be used if approved in writing by the Engineer.

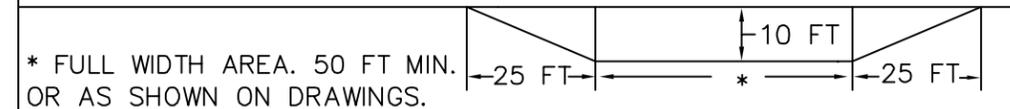
SYMBOLS

SYMBOLS	DESCRIPTION
BOP, EOP	BEGINNING OF PROJECT, END OF PROJECT
CW	CURVE WIDENING
FW	FULL WIDTH AREA*
TOL, TOR, TOS	TURNOUT LEFT/RIGHT/SPLIT
V	DRAIN DIP
LOD	LEAD-OUT DITCH
	CULVERT (EXISTING)
	CULVERT (INSTALL)

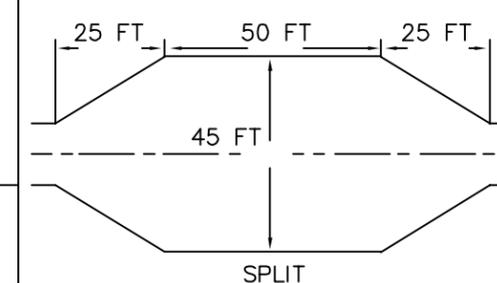
TURNOUT



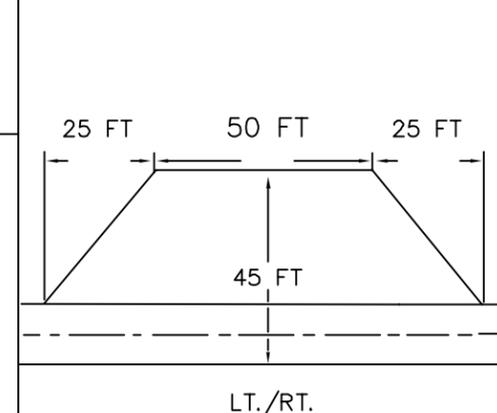
ROAD



TURNAROUND

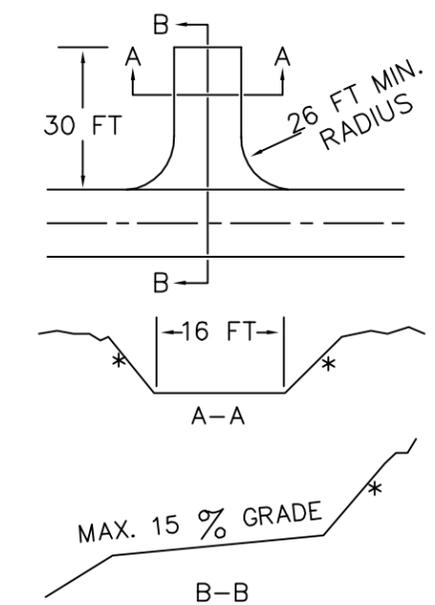


SPLIT

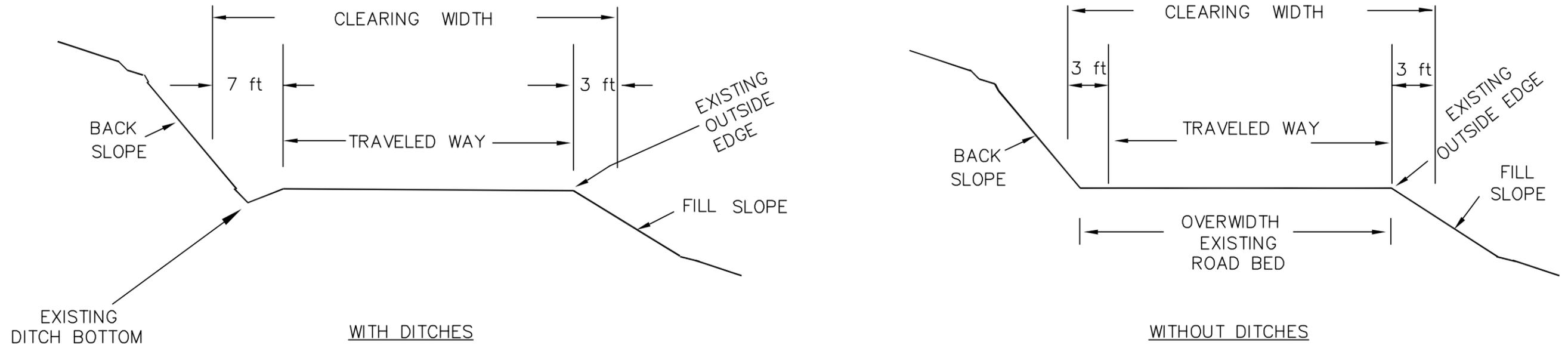


LT./RT.

"J" HOLE



TYPICAL CLEARING FOR RECONSTRUCTION ONLY



CROSS SECTIONAL VIEWS

WITHIN ROAD SEGMENTS WITH EXISTING DITCHES,
OR DITCHES TO BE CONSTRUCTED:

CLEARING WIDTH SHALL BE A MINIMUM OF THE TRAVELED WAY WIDTH PLUS 10 FEET.

CLEARING LIMIT ON DITCHED SIDE OF ROAD SHALL BE THE TRAVELED WAY WIDTH PLUS 7 FEET.

GENERAL NOTES:

1. REFER TO ROAD STRUCTURE DETAILS, SHEET 7 FOR TRAVELED WAY WIDTHS.
2. CLEARING LIMITS SHALL BE 3 FEET BEYOND THE EXISTING OUTSIDE EDGE OF ROAD.
3. ALL TREES WITHIN THE CLEARING LIMITS ON THE FILLSLOPE THAT ARE 7 INCHES AND LARGER AT DBH SHALL REMAIN. TRIM BRANCHES AND REMAINING TREES TO GIVE CLEAR HEIGHT OF 16 FEET ABOVE ROADBED.

WITHIN ROAD SEGMENTS WITHOUT EXISTING DITCHES:

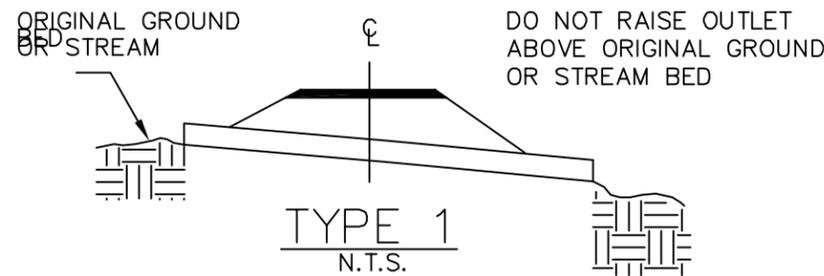
CLEARING WIDTH SHALL BE A MINIMUM OF THE TRAVELED WAY WIDTH PLUS 7 FEET.

CLEARING LIMIT ON INSIDE OF ROAD SHALL BE THE TRAVELED WAY WIDTH PLUS 3 FEET.

CULVERT LISTING

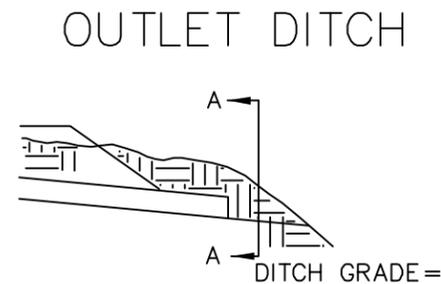
DESIGNED		AS BUILT		ALLOWABLE ALTERNATES						INSTALLATION DETAILS			MISCELLANEOUS ITEMS					REMARKS	
STATION OR MILE POST	LENGTH FT.	STATION OR MILE POST	LENGTH FT.	GALVANIZED STEEL 2-2/3" X 1/2"		ALUMINUM 2-2/3" X 1/2"		ALUMINUM STEEL 2-2/3" X 1/2"		TYPE	SKEW	GRADE	DITCH DAM	OUTLET APRON	OUTLET DITCH	LEFT OR RIGHT	GASKET		PIPE ELBOW
				DIA.	THICK-NESS	DIA.	THICK-NESS	DIA.	THICK-NESS										
RD. 5130177-1																			
sta 0+55	40			24"	.064	24	.052			1		*							
																			Locations will be staked by the ER
RD. 5130180																			*Grade and skew will match existing grade line
MP 0.2	33			24"	.064	24	.052			1		*							

CULVERT CONSTRUCTION DETAILS

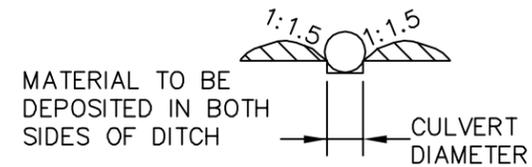


DO NOT RAISE OUTLET ABOVE ORIGINAL GROUND OR STREAM BED

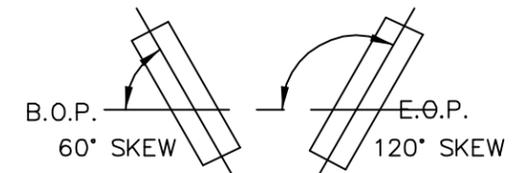
NOTE: MINIMUM COVER OVER CULVERT AT SHOULDER SHALL BE 1ft. BELOW SUBGRADE



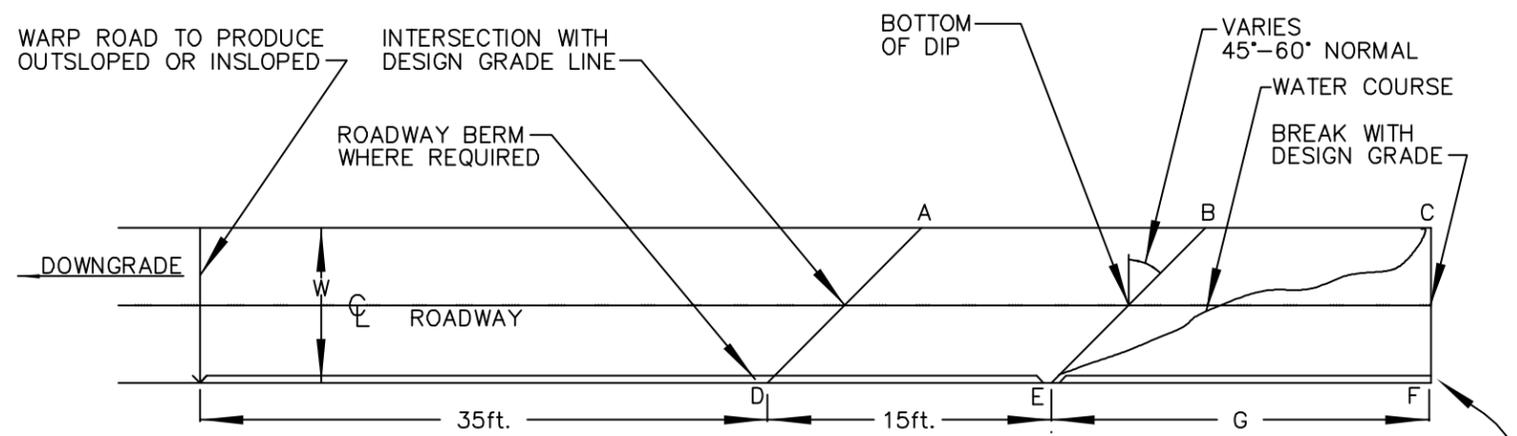
SECTION A-A



SKEW DIAGRAM



B.O.P. = BEGINNING OF PROJECT
E.O.P. = END OF PROJECT



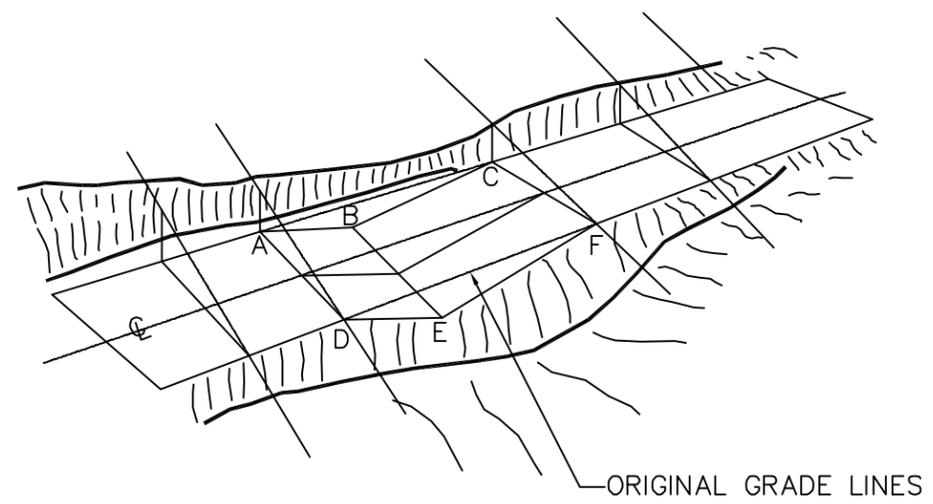
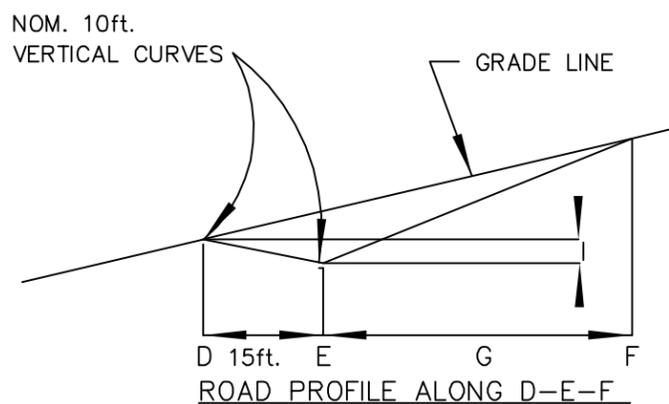
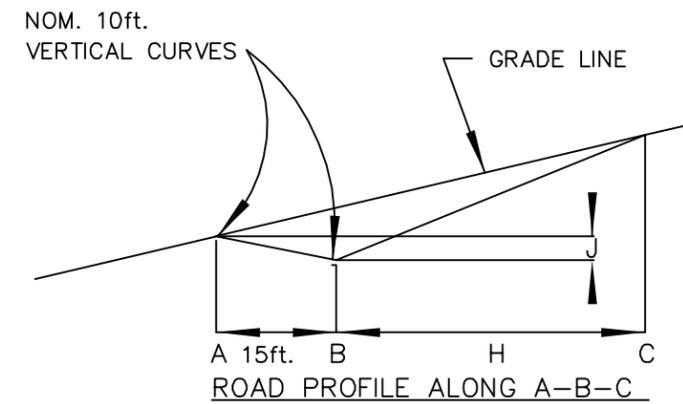
PLAN VIEW

REINSTALL EXISTING SPECIAL OUTLET STRUCTURE

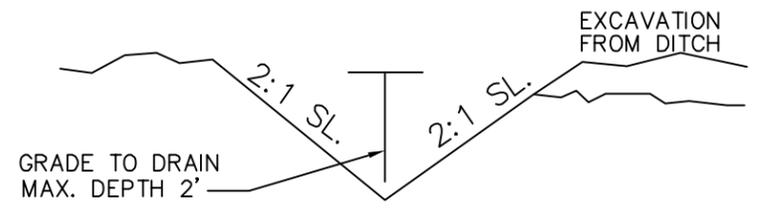
ROADWAY BERM WHERE REQUIRED

ALL NUMBERS ARE IN FEET UNLESS STATED OTHERWISE

%	W=12ft. TO 14ft.				W=24ft.				
	ROAD GRADE		LENGTH		DEPTH		LENGTH		DEPTH
	G	H	I	J	G	H	I	J	
UNDER 3	62	50	0.66	0.30	74	50	1.15	0.30	
7	72	60	0.66	0.20	84	60	1.25	0.20	
9	82	70	0.66	0.10	94	70	1.31	0.10	



PERSPECTIVE VIEW



TYPICAL SECTION LEAD-OFF DITCH

NOTE: PLAN SHOWN IS FOR OUTSLOPED ROLLING DIP. DIPS MAY BE EITHER INSLOPED OR OUTSLOPED. WHEN INSLOPED, DIPS SHALL DISCHARGE INTO A CULVERT, DROP INLET, OVERSIDE DRAIN OR ONTO NATURAL GROUND. THE MINIMUM CROSS GRADE FROM "B" TO "E" IS 4% GREATER THAN THE ORIGINAL ROAD GRADE.

MAP REFERENCE	FS RD NUMBER	MILE POST	STATION	WORK DESCRIPTION	MAP REFERENCE	FS RD NUMBER	MILE POST	STATION	WORK DESCRIPTION	MAP REFERENCE	FS RD NUMBER	MILE POST	STATION	WORK DESCRIPTION
12	5220 000	4.6	0+00 2+27 7+35 7+65	BEGIN 6" COMPACTED AGG, CONSTRUCT DRAIN DIP CONSTRUCT DRAIN DIP CONSTRUCT DRAIN DIP END AGGREGATE	C	5130105-IV	0.01	0+00 1+48 2+83 3+33 4+15 8+31 9+06 9+55 9+98	BEGIN DITCH LEFT CONSTRUCT DRAIN DIP WITH 20ft LEAD OFF DITCH RIGHT. BEGIN CLASS 1 RIPRAP. RIPRAP SHALL BE PLACED OVER ENTIRE ROAD WIDTH. CONSTRUCT DRAIN DIP WITH 15ft LEADOFF DITCH RIGHT CONSTRUCT DRAIN DIP WITH 20ft LEADOFF DITCH RIGHT CONSTRUCT DRAIN DIP CLEAN AND RESHAPE EXISTING DITCH END RIPRAP END DITCH LEFT BEGIN DITCH LEFT BEGIN CLASS I RIPRAP. RIPRAP SHALL BE PLACED OVER ENTIRE ROAD WIDTH CONSTRUCT DRAIN DIP WITH 15ft LEADOFF DITCH RIGHT END RIPRAP END DITCH END PROJECT	24	5130155-II	1.00	0+00 0+84 1+34 2+34 3+04	CONSTRUCT DRAIN DIP AND DITCH LEFT BEGIN 6" COMPACTED AGG EXISTING CMP END AGG CONSTRUCT DRAIN DIP
18	5130100-1	6.2	0+00 0+51 1+48	BEGIN 6" COMPACTED AGG EXISTING CMP CROSSING CONSTRUCT DRAIN DIP END AGG AT END OF DRAIN DIP						D	5130157 (FROM INT. OF 155/157)		0+00 1+00	BEGIN INSLOPE, CONSTRUCT DITCH END INSLOPE AND DITCH
19	5130100-II	6.1	0+00 2+48 4+09	BEGIN 6" COMPACTED AGG EXISTING CMP CROSSING, PLACE 10 CUBIC YARDS CLASS 1 RIPRAP AT OUTLET CONSTRUCT DRAIN DIP END AGG AT END OF DRAIN DIP						26	5130165	0.00	0+00 0+65 1+53	BEGIN 6" COMPACTED AGG EXISTING CMP END AGG
20	5130105-I	0.59	0+00 0+40 1+32	BEGIN 6" COMPACTED AGG EXISTING CMP CONSTRUCT DRAIN DIP END AGG	B	5130120	0.00	0+00 1+42 4+01 5+79 13+79 27+21	BEGIN CLEARING CONSTRUCT DRAIN DIP CONSTRUCT DRAIN DIP CONSTRUCT DRAIN DIP CONSTRUCT DRAIN DIP END CLEARING	27	5130177-I	0.20	0+00 0+55 1+25	BEGIN 6" COMPACTED AGG INSTALL 24"x40' CMP END AGG
21	5130105-II	0.60	0+00 0+43 1+28	BEGIN 6" COMPACTED AGG EXISTING CMP CROSSING END AGG	E	5130140	0.84	0+00 89+76	BEGIN CLEARING BEGIN ROAD RECONDITIONING END PROJECT	28	5130180	0.03	0+00	REMOVE EXISTING 8" CMP INSTALL 24" DIA. X 33' CMP. MATERIAL SHALL BE EXCAVATED FROM ADJACENT CUT SLOPE TO PLACE A MIN. 12" COVER OVER NEW CMP.
22	5130105-III	2.8	0+00 0+50 2+15	BEGIN 6" COMPACTED AGG EXISTING CMP CROSSING END AGG	F	5130144	0.00	0+00 55+93	BEGIN CLEARING BEGIN ROAD RECONDITIONING END PROJECT					
					23	5130155-I	0.42	0+00 1+38 2+18 2+32 3+28	CONSTRUCT DRAIN DIP AND DITCH LEFT, USE GENERATED MATERIAL TO FILL IN WHEEL RUTS. BEGIN 6" COMPACTED AGG END DITCH LEFT EXISTING CMP END AGG, CONSTRUCT DRAIN DIP					

*MATERIAL FROM DITCH AND DRAIN DIPS WILL BE USED TO FILL IN EXISTING WHEEL RUTS AND SMOOTH ROADWAY.

LOCATIONS FOR ALL PROJECTS WILL BE MARKED BY THE ER.

ABBREVIATIONS
AGG = AGGREGATE
CMP = CORRUGATED METAL PIPE

