

Oversight / NHS

FHWA OVERSIGHT? NO YES
 NATIONAL HIGHWAY SYSTEM? NO YES

DEPARTMENT OF TRANSPORTATION STATE OF COLORADO

Related Projects:	
P. E. UNDER PROJECT:	XXXXXXXXXX
Project Number	XXXXX
Project Code:	XXXXX
R.O.W. Projects:	
R.O.W. Project Description	XXXXXXXXXXXXXXXXXX

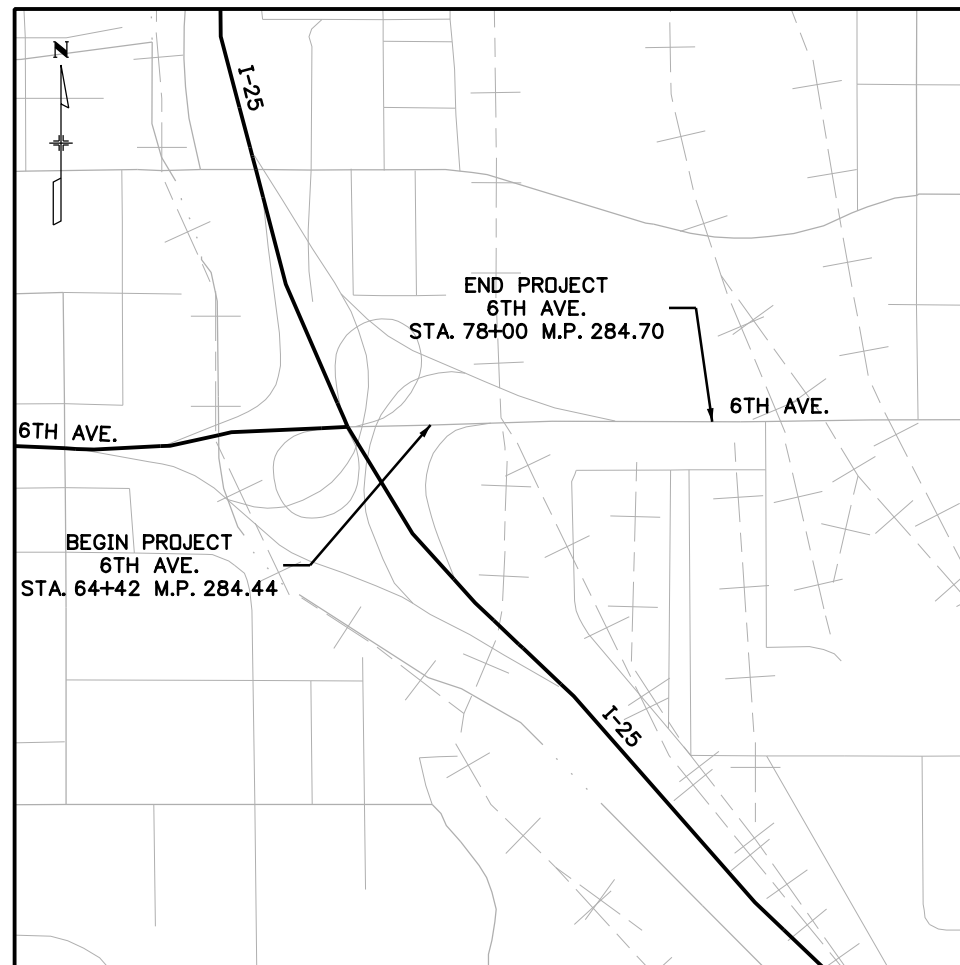
FIELD INSPECTION REVIEW PLANS OF PROPOSED FEDERAL AID PROJECT NO. FBR 0062-026 STATE HIGHWAY NO. 6 OVER BNSF RAILWAY DENVER COUNTY CONSTRUCTION PROJECT CODE NO. 18202



**Know what's below.
Call before you dig.**

TABULATION OF LENGTH & DESIGN DATA

STATION	FEET	
	ROADWAY	STRUCTURE
BEGIN CONSTRUCTION FBR 0062-026 US 6 STA. 64+42.21 M.P. 284.44 BEGIN STRUCTURE F-16-YJ STA 68+82.91 END STRUCTURE F-16-YJ STA 70+42.40	440.7	159.49
END CONSTRUCTION FBR 0062-026 US 6 STA. 78+00 M.P. 284.70	757.6	
BEGIN CONSTRUCTION FBR 0062-026 RAMP D STA. 200+00 M.P. END PROJECT FBR 0062-026 RAMP STA. 204+83 M.P. XX	483	
TOTAL	1681.3	159.49
SUMMARY OF PROJECT LENGTH		
ROADWAY (NET LENGTH)	1681.3	0.318
STRUCTURE (NET LENGTH)	159.49	0.031
PROJECT GROSS LENGTH	1840.79	0.349
DESIGN DATA		
	US6	RAMP
MINIMUM RADIUS OF CURVE	3819.89	167
MAXIMUM GRADE	6%	6%
MINIMUM S.S.D. HORIZONTAL	>360	
MINIMUM S.S.D. VERTICAL	363	286
MAXIMUM DESIGN SPEED	45 MPH	45 MPH
2035 DESIGN TRAFFIC	DHV = TBD	ADT = TBD
DHV TRUCKS %	TBD	
CLEAR ZONE DISTANCE	RAMP US 6	10'-12' 20'-26'



PROJECT LOCATION MAP

SHEET NO.	INDEX OF SHEETS
1	TITLE SHEET
2	STANDARD PLANS LIST
3	GENERAL NOTES
4	PAVEMENT DESIGN
5-6	TYPICAL SECTIONS
7-10	UTILITY PLANS
11-14	ROADWAY PLANS
15-17	ROADWAY PROFILES
18-20	DRAINAGE PLANS
21-26	STORM WATER MANAGEMENT PLAN
27-32	BRIDGE PLANS
33	SIGNING PLAN
34-37	TRAFFIC CONTROL PLANS
38-40	LAND SURVEY CONTROL DIAGRAM
41-43	OWNERSHIP MAP

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3/30/2012

Print Date: 3/29/2012	<table border="1"> <thead> <tr> <th colspan="3">Sheet Revisions</th> </tr> <tr> <th>Date:</th> <th>Comments</th> <th>Init.</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Sheet Revisions			Date:	Comments	Init.							Colorado Department of Transportation 8833 South Wadsworth Court Littleton, CO 80128 Phone: 303-972-9112 FAX: 303-972-9114 Region 6 MP	As Constructed No Revisions: Revised: Void:	Contract Information		Project No./Code
Sheet Revisions																		
Date:		Comments	Init.															
File Name: 18202_DES_TitleSht.dgn	Contractor:		FBR 0062-026															
Horiz. Scale: 1:1 Vert. Scale: As Noted	Resident Engineer:		18202															
Unit Information Unit Leader Initials	Project Engineer:		18202															
					PROJECT STARTED: / / ACCEPTED: / /		Sheet Number 1											
					Comments:													

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PLAN NUMBER	NEW OR REVISED	M STANDARD TITLE	PAGE NUMBER	PLAN NUMBER	NEW OR REVISED	M STANDARD TITLE	PAGE NUMBER	PLAN NUMBER	NEW OR REVISED	S STANDARD TITLE	PAGE NUMBER	
<input type="checkbox"/>		M-100-1 STANDARD SYMBOLS (3 SHEETS).....	1-3	<input type="checkbox"/>		M-607-1 WIRE FENCES AND GATES (3 SHEETS).....	84-86	S-612-1	<input checked="" type="checkbox"/>	DELINEATOR INSTALLATIONS (6 SHEETS) (REVISED, JULY 01, 2010)...	131-135	
<input type="checkbox"/>		M-203-1 APPROACH ROADS	4	<input type="checkbox"/>		M-607-2 CHAIN LINK FENCE (3 SHEETS).....	87-89	<input checked="" type="checkbox"/>	S-614-1	GROUND SIGN PLACEMENT (2 SHEETS).....	136-137	
<input type="checkbox"/>		M-203-2 DITCH TYPES.....	5	<input type="checkbox"/>		M-607-3 BARRIER FENCE.....	90	<input checked="" type="checkbox"/>	S-614-2	CLASS I SIGNS.....	138	
<input checked="" type="checkbox"/>		M-203-11 SUPERELEVATION CROWNED AND DIVIDED HIGHWAYS (3 SHEETS)	6-8	<input type="checkbox"/>		M-607-4 DEER FENCE AND GATES (2 SHEETS).....	91-92	<input type="checkbox"/>	S-614-3	CLASS II SIGNS.....	139	
<input type="checkbox"/>		M-203-12 SUPERELEVATION STREETS (2 SHEETS).....	9-10	<input type="checkbox"/>		M-607-10 PICKET SNOW FENCE	93	S-614-4	<input type="checkbox"/>	CLASS III SIGNS (3 SHEETS) (REVISED, DECEMBER 29, 2009)	140-142	
<input checked="" type="checkbox"/>		M-206-1 EXCAVATION AND BACKFILL FOR STRUCTURES (2 SHEETS)	11-12	<input type="checkbox"/>		M-607-15 ROAD CLOSURE GATE (9 SHEETS).....	94-102	<input type="checkbox"/>	S-614-5	BREAK-AWAY SIGN SUPPORT DETAILS FOR GROUND SIGNS (2 SHEETS)	143-144	
<input checked="" type="checkbox"/>		M-206-2 EXCAVATION AND BACKFILL FOR BRIDGES (2 SHEETS).....	13-14			M-608-1 <input type="checkbox"/>	CURB RAMPS (6 SHEETS) (REVISED ON MAY 05, 2011)	103-106	<input type="checkbox"/>	S-614-6	CONCRETE FOOTINGS AND SIGN ISLANDS FOR CLASS III SIGNS (2 SHEETS)	145-146
		M-208-1 <input checked="" type="checkbox"/>	TEMPORARY EROSION CONTROL (12 SHEETS) (REVISED ON JULY 29, 2011)	15-21		M-609-1 <input checked="" type="checkbox"/>	CURBS, GUTTERS, AND SIDEWALKS (4 SHEETS) (REVISED ON JULY 09, 2009)	107-109	S-614-8	<input type="checkbox"/>	TUBULAR STEEL SIGN SUPPORT DETAILS (5 SHEETS) (REVISED ON SEPT. 01, 2010)	147-151
<input type="checkbox"/>		M-210-1 MAILBOX SUPPORTS (2 SHEETS).....	22-23	<input checked="" type="checkbox"/>		M-611-1 CATTLE GUARD (2 SHEETS).....	110-111	<input type="checkbox"/>	S-614-10	MARKER ASSEMBLY INSTALLATIONS	152	
<input type="checkbox"/>		M-214-1 PLANTING DETAILS.....	24	<input type="checkbox"/>		M-613-1 ROADWAY LIGHTING (4 SHEETS).....	112-115	S-614-11	<input type="checkbox"/>	MILEPOST SIGN DETAIL FOR HIGH SNOW AREAS (NEW, JUNE 22, 2009)		
		M-412-1 <input type="checkbox"/>	CONCRETE PAVEMENT JOINTS (5 SHEETS) (REVISED ON JULY 29, 2011)	25-29	<input type="checkbox"/>	M-614-1 RUMBLE STRIPS (3 SHEETS).....	116-118	<input checked="" type="checkbox"/>	S-614-12	STRUCTURE NUMBER INSTALLATION	153	
<input type="checkbox"/>		M-510-1 STRUCTURAL PLATE PIPE H-20 LOADING.....	30	<input type="checkbox"/>		M-614-2 SAND BARREL ARRAYS (2 SHEETS).....	119-120	<input type="checkbox"/>	S-614-14	FLASHING BEACON AND SIGN INSTALLATIONS (3 SHEETS).	154-156	
<input type="checkbox"/>		M-601-1 SINGLE CONCRETE BOX CULVERT (2 SHEETS).....	31-32	<input type="checkbox"/>		M-615-1 EMBANKMENT PROTECTOR TYPE 3.....	121	<input type="checkbox"/>	S-614-15	TYPICAL POLE MOUNT SIGN INSTALLATIONS.....	157	
<input type="checkbox"/>		M-601-2 DOUBLE CONCRETE BOX CULVERT (2 SHEETS).....	33-34	<input type="checkbox"/>		M-615-2 EMBANKMENT PROTECTOR TYPE 5.....	122	<input type="checkbox"/>	S-614-20	<input type="checkbox"/>	CONCRETE BARRIER SIGN POST INSTALLATIONS (REVISED ON JUNE 24, 2011)	158
<input type="checkbox"/>		M-601-3 TRIPLE CONCRETE BOX CULVERT (2 SHEETS).....	35-36	<input type="checkbox"/>		M-616-1 INVERTED SIPHON.....	123	S-614-21	<input type="checkbox"/>	TYPICAL MULTI-SIGN INSTALLATIONS.....	159	
<input type="checkbox"/>		M-601-10 HEADWALL FOR PIPES.....	37	<input type="checkbox"/>		M-620-1 FIELD LABORATORY CLASS 1.....	124	<input type="checkbox"/>	S-614-40	TYPICAL TRAFFIC SIGNAL INSTALLATION DETAILS.....	160-166	
<input type="checkbox"/>		M-601-11 TYPE "S" SADDLE HEADWALLS FOR PIPE.....	38	<input type="checkbox"/>		M-620-2 FIELD LABORATORY CLASS 2	125	<input type="checkbox"/>	S-614-40A	ALTERNATIVE TRAFFIC SIGNAL INSTALLATION DETAILS....	167-171	
<input type="checkbox"/>		M-601-12 HEADWALLS AND PIPE OUTLET PAVING	39	<input type="checkbox"/>		M-620-11 FIELD OFFICE CLASS 1.....	126	<input type="checkbox"/>	S-614-50	MONOTUBE OVERHEAD SIGNS (14 SHEETS).....	172-185	
<input type="checkbox"/>		M-601-20 WINGWALLS FOR PIPE OR BOX CULVERTS.....	40	<input type="checkbox"/>		M-620-12 FIELD OFFICE CLASS 2.....	127	S-627-1	<input checked="" type="checkbox"/>	PAVEMENT MARKINGS (5 SHEETS) (REVISED ON OCTOBER 01, 2010)	186-190	
		M-603-1 <input type="checkbox"/>	METAL PIPE (4 SHEETS) (REVISED ON FEBRUARY 25, 2010)	41-42	<input type="checkbox"/>	M-629-1 SURVEY MONUMENTS (2 SHEETS).....	128-129	S-630-1	<input checked="" type="checkbox"/>	TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION (REVISED ON FEB. 16, 2012)	191-202	
<input checked="" type="checkbox"/>		M-603-2 REINFORCED CONCRETE PIPE.....	43					<input checked="" type="checkbox"/>	S-630-2	BARRICADES, DRUMS, CONCRETE BARRIERS (TEMP.).....	203	
		M-603-3 <input type="checkbox"/>	PRECAST CONCRETE BOX CULVERT (REVISED ON JULY 29, 2011)	44				S-630-3	<input checked="" type="checkbox"/>	FLASHING BEACON (PORTABLE) DETAILS (REVISED ON JUNE 27, 2011)	204	
		M-603-4 <input type="checkbox"/>	CORRUGATED POLYETHYLENE PIPE (AASHTO M294) (REV. ON FEB. 25, 2010)					S-630-4	<input type="checkbox"/>	STEEL SIGN SUPPORT (TEMPORARY) INSTALLATION DETAILS. (NEW, MARCH 22, 2010)		
		M-603-5 <input type="checkbox"/>	POLYVINYL CHLORIDE (PVC) PIPE (AASHTO M304) (NEW ON FEB. 25, 2010)					S-630-5	<input type="checkbox"/>	PORTABLE RUMBLE STRIPS (TEMPORARY).....	(NEW, MAY 05, 2011)	
<input checked="" type="checkbox"/>		M-603-10 CONCRETE AND METAL END SECTIONS (2 SHEETS).....	45-46					S-630-6	<input type="checkbox"/>	EMERGENCY PULL-OFF AREA (TEMPORARY).....	(NEW, MAY 05, 2011)	
<input checked="" type="checkbox"/>		M-604-10 INLET, TYPE C.....	47					S-630-7	<input type="checkbox"/>	ROLLING ROADBLOCKS FOR TRAFFIC CONTROL	(NEW, MAY 05, 2011)	
<input type="checkbox"/>		M-604-11 INLET, TYPE D.....	48									
<input checked="" type="checkbox"/>		M-604-12 CURB INLET TYPE R (2 SHEETS).....	49-50									
<input type="checkbox"/>		M-604-13 CONCRETE INLET TYPE 13.....	51									
<input checked="" type="checkbox"/>		M-604-20 MANHOLES (3 SHEETS).....	52-54									
<input checked="" type="checkbox"/>		M-604-25 VANE GRATE INLET (5 SHEETS).....	55-59									
		M-605-1 <input type="checkbox"/>	SUBSURFACE DRAINS (REVISED ON JULY 09, 2009)	60								
		M-606-1 <input checked="" type="checkbox"/>	GUARDRAIL TYPE 3 W-BEAM (18 SHEETS) (REVISED ON MAY 05, 2011)	61-76								
<input checked="" type="checkbox"/>		M-606-13 GUARDRAIL TYPE 7 F-SHAPE BARRIER (4 SHEETS).....	77-80									
<input type="checkbox"/>		M-606-14 PRECAST TYPE 7 CONCRETE BARRIER (3 SHEETS).....	81-83									

THE STANDARD PLAN SHEETS INDICATED HEREON BY A MARKED BOX ARE TO BE USED TO CONSTRUCT THIS PROJECT.

ALL OF THE M&S STANDARD PLANS, AS SUPPLEMENTED AND REVISED, APPLY TO THIS PROJECT WHEN USED BY DESIGNATED PAY ITEM OR SUBSIDIARY ITEM.

FIR
3/30/2012

COLORADO
DEPARTMENT OF TRANSPORTATION
STANDARD PLANS LIST
M&S STANDARDS
July 04, 2006
Revised on February 16, 2012

Print Date: 3/29/2012	Sheet Revisions			Colorado Department of Transportation		As Constructed		STANDARD PLANS LIST		Project No./Code	
File Name: 18202_M&S Standard Plans List Index Sheet.dgn	Date:	Comments	Init.	8833 South Wadsworth Court Littleton, CO 80128 Phone: 303-972-9112 FAX: 303-972-9114		No Revisions:		TITLE		FBR 0062-026	
Horiz. Scale: 1:1				Region 6		Revised:		Designer: JBK		18202	
Unit Information				MP		Void:		Detailer: JBK		Sheet Number 2	
 WILSON & COMPANY 999 18TH STREET, SUITE 2600 DENVER, CO 80202 PHONE: 303-297-2976 FAX: 303-297-2693			 DEPARTMENT OF TRANSPORTATION		Sheet Subset: STD PLANS		Structure Numbers:		Subset Sheets: 1 of 1		

1. All staging areas shall be approved by the Project Engineer. Parking or staging of construction equipment, vehicles or material will not be permitted in existing prairie dog colonies, waterways, or wetland areas. Contractor shall not allow debris or construction material to fall into these areas. If any debris falls into the waterways or wetlands, it shall be removed immediately.
2. The following clear zone criteria shall be used during this project:
 20'-26' feet from edge of traveled way on US 6
 10'-12' from edge of traveled way on Ramps
3. The Contractor shall limit construction activities to those areas within the limits of disturbance (as shown on the plans). Any disturbance beyond these limits shall be restored to the original condition by the Contractor at no cost to the project. Construction activities in addition to normal construction procedures shall include parking of vehicles or equipment, and disposing of litter and any other action which alters existing conditions. Any off road staging areas must be pre-approved by the CDOT Project Engineer.
4. Any curb and gutter or asphalt or concrete pavement which is to remain and is damaged as a result of the Contractor's operation shall be replaced at the Contractor's expense.
5. All permits required by state and local agencies to perform the Contract work (not acquired by CDOT) are to be obtained by the Contractor and copies shall be provided to the Project Engineer when requested.
6. The Contractor shall obtain all applicable air quality construction and/or demolition permits for this project through the CDPHE-Air Pollution Control Division prior to commencing construction work. Activities that have the potential to effect air quality during construction (and all associated air quality mitigations) during the project will be coordinated through CDPHE and compliant with state/federal air quality regulations. Adherence to permits such as the bridge demolition permit, Air Pollution Emissions Notification, and fugitive dust control plan are the responsibility of the contractor for obtaining, maintaining, and complying with throughout the project.
7. During all subsurface activities, workers shall be alert for visual and olfactory signs of contamination. If contamination is encountered, work shall stop and procedures established in CDOT 250 spec shall be followed. Any contaminated soils shall be properly handled, sampled, and disposed.
8. Water shall be used as a dust palliative where required. Locations shall be as directed by the Engineer. This work shall not be measured and paid for separately, but shall be included in the cost of the work.
9. All removals including delineator posts, concrete curb and gutter, sidewalk, damaged type 3 guardrail (rails and posts) and end anchors unless noted on the plans, shall become the property of the contractor and shall be disposed of outside the project limits. Undamaged type 3 guardrail (rails and posts), signs and sign posts shall remain the property of the Department and shall be delivered to Region 6 at 2000 South Holly Street. Contacts are:

 Traffic Signals - Other Devices -
10. Where it is required to cut existing pavement, the cutting shall be done to a neat work line full depth with a pavement cutting saw or other method as approved by the CDOT Project Engineer. This will not be paid for separately but shall be included in the cost of the work.
11. Millings shall become the property of the State. The Contractor shall supply all necessary equipment to haul this material to a site within the limits of the project as direct by the Engineer.
12. Depth of moisture-density control for this project:
 Full depth of all embankments
 Bases of cuts under roadways and structures, and fills 12 inches
13. Embankment shall be placed and compacted in maximum 8 inch individual lifts.
14. Excavation required for compaction of bases of cuts and fills will be considered as subsidiary to that operation and will not be paid for separately.
15. Type of compaction for this project will be either AASHTO T-99 or T-180 as per section 203.07 of the CDOT Standard Specifications.
16. The minimum thickness of topsoil shall be 4 inches.

17. For preliminary plan quantities of pavement materials, the following rates of application were used:

 Hot Mix Asphalt.....@ 110 Lbs./Sq. Yd./Inch
18. A tack coat is required between layers of bituminous pavement. Rate of application shall be 0.10 gals/sq. yd. (diluted) or as determined by the Engineer at the time of application. Diluted emulsified asphalt for tack coat shall consist of 1 part emulsified asphalt and 1 part water.
19. Patching shall be to the depth of the surrounding existing pavement as directed by the Engineer.
20. The following shall be furnished with each bituminous paver:

 A ski type device at least 30 Feet in length.
 Short ski or shoe.
 1500 Feet of control line and stakes. The control line will be required for all layers or as directed by the Engineer.
21. Any layer of bituminous pavement that is to have a succeeding layer placed thereon shall be completed full width before succeeding layer is placed.
22. Prior to placing bituminous pavement on existing pavement, planed pavement, or lower lifts of new pavement, the paved surface shall be swept and cleaned. This will not be paid for separately, but shall be included in the cost of the work.
23. Asphalt joints shall fall on lines, shoulder lines or median lines, except where stated in the plans.
24. Overlay of planed areas shall commence within 5 working days following the planing unless otherwise approved by the Engineer.
25. To provide for adequate sulfate resistance in all concrete supplied, Severity of Potential Exposure shall be Class 1 for this Project.
26. Concrete pipe joint fasteners as shown on M-603-10 are required on all concrete culvert installations excluding side drains.
27. It is estimated that Construction Surveying 1 Lump Sum will be required on this project.
28. It is estimated that 80 hours will be required for potholing. The Contractor shall be responsible for contacting and coordinating with the appropriate utility representatives to be onsite during potholing and shall likewise be responsible for determining the type and location of underground utilities as maybe necessary to avoid damage thereto. The Contractor shall refer to the utility specification for additional requirements.
29. It is suggested that the Contractor call Xcel Energy at 1-800-895-1999 for an electric emergency.
30. It is suggested that the Contractor call Xcel Energy at 1-800-895-2999 for a gas emergency.
31. The Contractor shall protect all existing survey monumentation designated to remain from damage during construction operations. Any monuments disturbed by the Contractor that are not designated for relocation, shall be reset at the Contractor's expense. The Contractor and Engineer shall note those monuments in the field prior to construction. See Survey Tabulation.
32. The Contractor shall not work within the railroad right of way without permits and right of entry.
33. The elevation of the existing top of rail profile shall be verified before beginning construction. All discrepancies shall be brought to the attention of the Railroad and CDOT prior to construction.
34. All permanent railroad clearances shall be verified before project closeout.

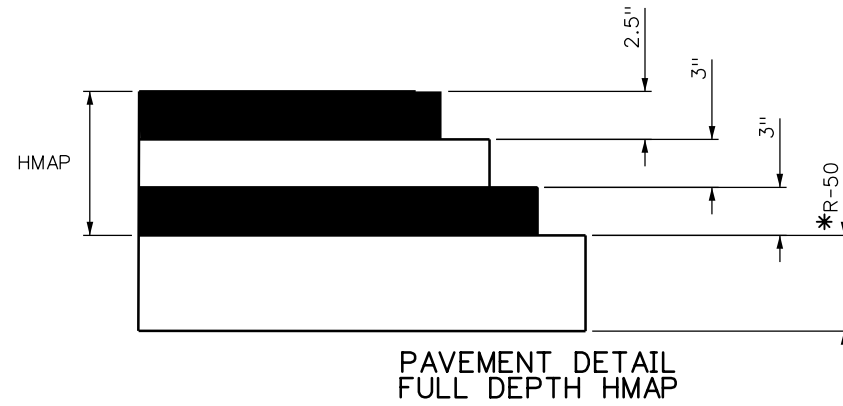
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Print Date: 3/29/2012		Sheet Revisions			Colorado Department of Transportation 8833 South Wadsworth Court Littleton, CO 80128 Phone: 303-972-9112 FAX: 303-972-9114 Region 6 MP	As Constructed		GENERAL NOTES		Project No./Code
File Name: 18202_DES_General_Notes.dgn		Date:	Comments	Init.		No Revisions:			FBR 0062-026	
Horiz. Scale: 1:1 Vert. Scale: As Noted						Revised:	Designer: JBK	Structure Numbers	18202	
Unit Information Unit Leader Initials						Void:	Detailer: JBK	Sheet Subset: Gen Notes	Subset Sheets: 1 of 1	Sheet Number 3

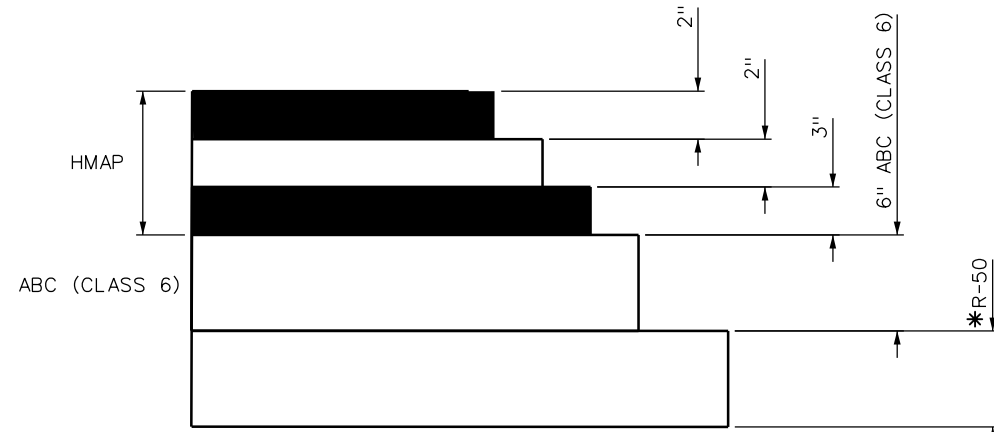
WILSON & COMPANY
 999 18TH STREET, SUITE 2600
 DENVER, CO 80202
 PHONE: 303-297-2976
 FAX: 303-297-2693

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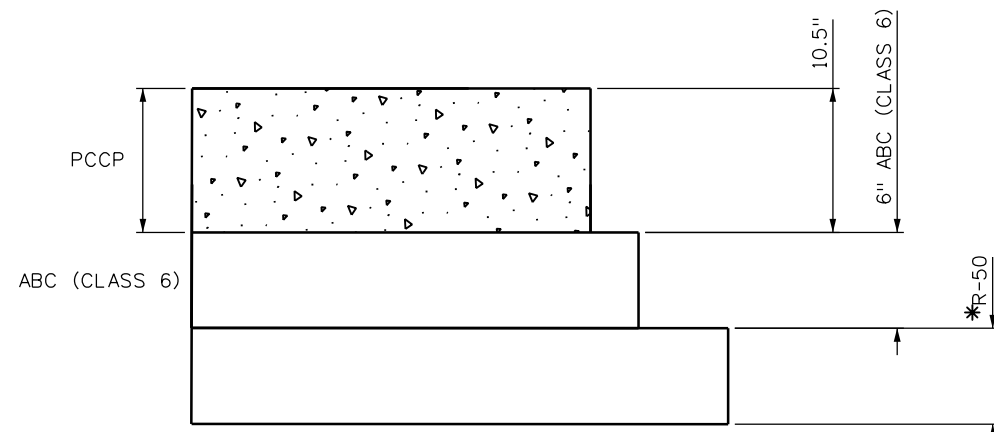
THE PAVEMENT DESIGN SECTIONS SHOWN ON THIS PAGE ARE OPTIONS TO CONSIDER AT FIR. THE FINAL PAVEMENT DESIGN SECTION WILL BE INCLUDED WITH THE DESIGN-BUILD DOCUMENTS.



PAVEMENT DETAIL
FULL DEPTH HMAP



PAVEMENT DETAIL
HMAP OVER ABC



PAVEMENT DETAIL
FULL DEPTH PCCP

PAVEMENT DESIGN PARAMTERS

Initial Serviceability	4.5
Terminal Serivceability	2.5
Str. Layer Coeff. - HMA	0.44
Design Subgrade R-value	50
Reliability Level, %	95
Overall Standard Deviation (PCCP)	0.34
Str. Layer Coeff.- HMAP	0.44
Str. Layer Coeff.- ABC	0.12
ESAL ₂₀ (HMAP)	4,825,027
ESAL ₃₀ (PCCP)	11,011,767

*SUBGRADE WITH AN R-VALUE LESS THAN 50 WITHIN THE PAVEMENT AREAS WILL NEED TO BE SUBEXCAVATED A MINIMUM OF 3' AND REPLACED WITH R-VALUE 50 OR BETTER MATERIAL


FIR
3/30/2012

Print Date: 3/29/2012
 File Name: 18202_Pavement.dgn
 Horiz. Scale: 1:10 Vert. Scale: As Noted
 Unit Information Unit Leader Initials



999 18TH STREET, SUITE 2600
 DENVER, CO 80202
 PHONE: 303-297-2976
 FAX: 303-297-2693

Sheet Revisions		
Date:	Comments	Init.

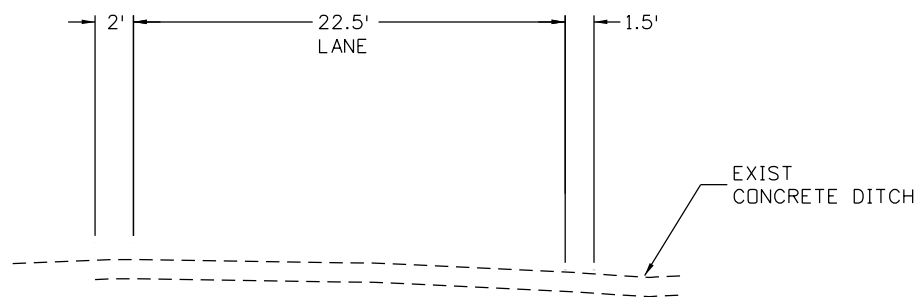
Colorado Department of Transportation

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 Littleton, CO 80128
 Phone: 303-972-9112 FAX: 303-972-9114
 Region 6 MP

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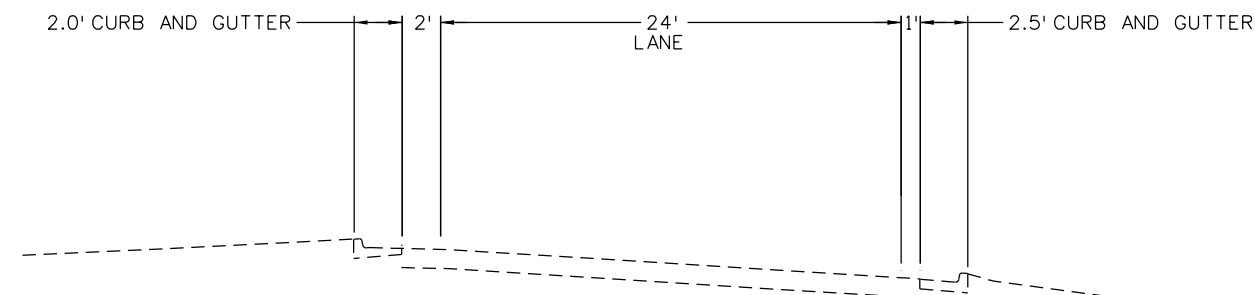
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Detailer: MAB	
Sheet Subset: PAVEMENT	Subset Sheets: 1 of 1

Project No./Code
FBR 0062-026
18202
Sheet Number 4

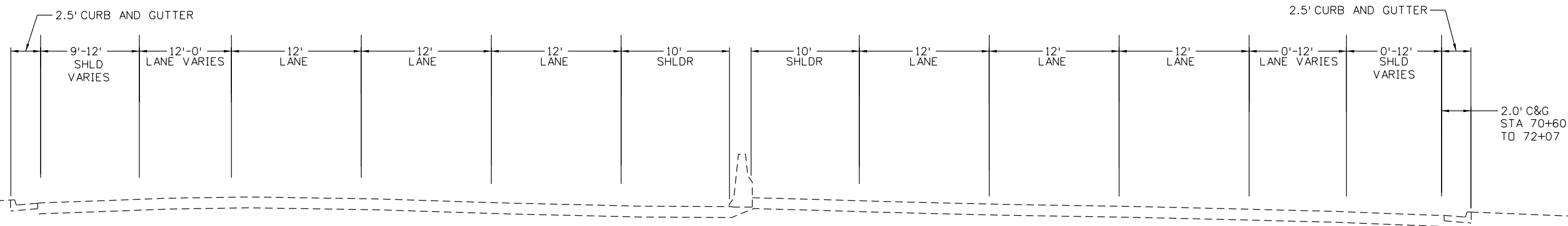
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EXISTING RAMP D
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US 6
Sta. 64+70 TO Sta. 72+15

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3/30/2012

Print Date: 3/29/2012	
File Name: 18202_DES_Typ1Sect.dgn	
Horiz. Scale: 1:10 Vert. Scale: As Noted	
Unit Information Unit Leader Initials	

Sheet Revisions		
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Colorado Department of Transportation

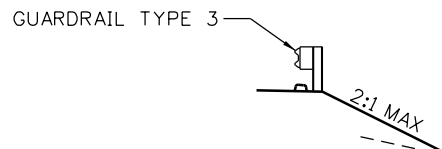
 8833 South Wadsworth Court
 Littleton, CO 80128
 Phone: 303-972-9112 FAX: 303-972-9114
Region 6 **MP**

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Revised:
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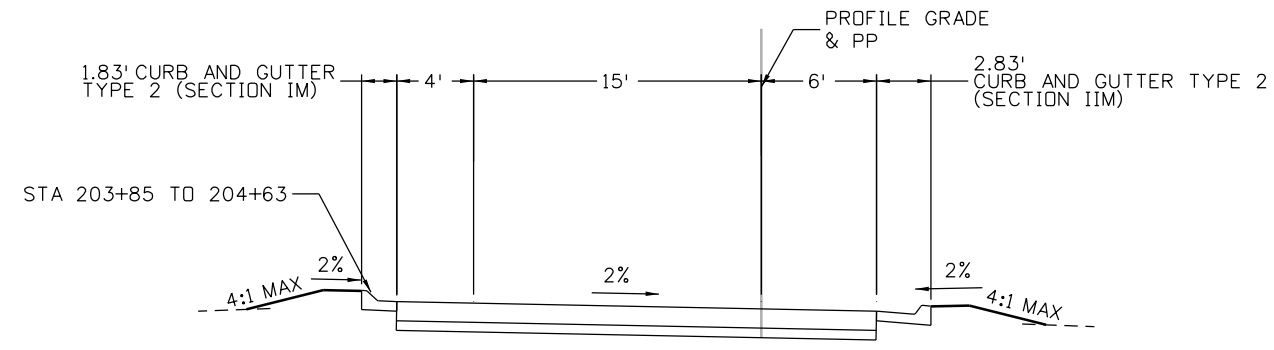
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Detailer:	JBK	Numbers	
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Project No./Code
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18202
Sheet Number 5

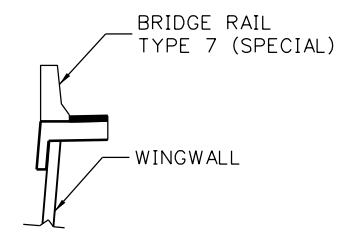
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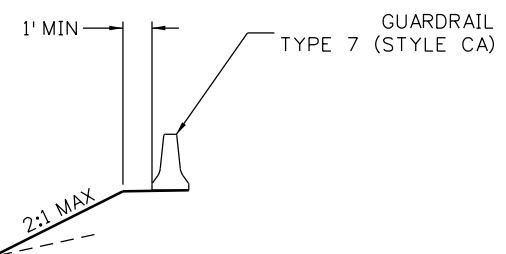
Sta. 202+79 TO Sta. 204+85



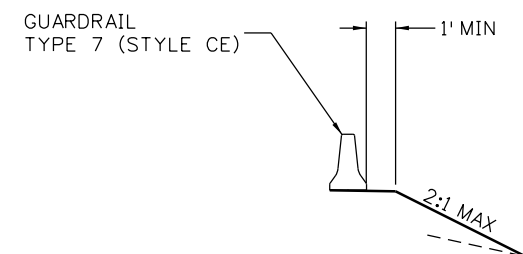
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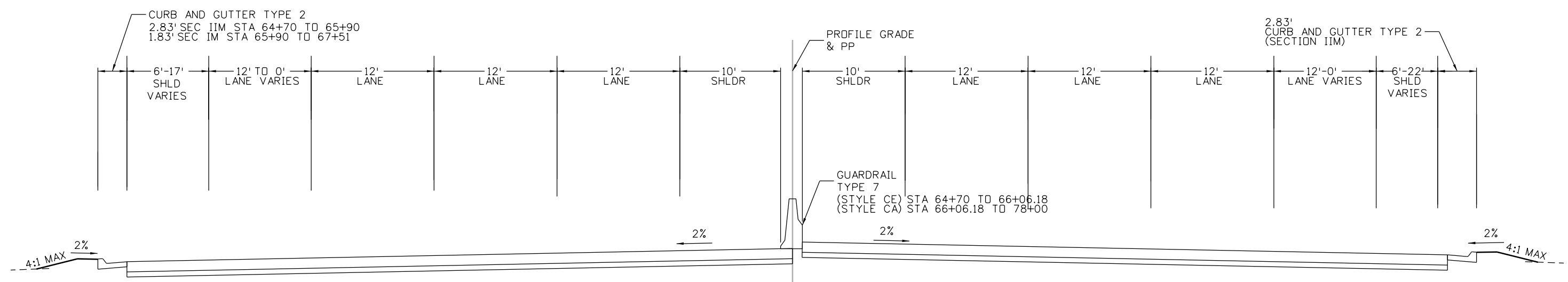
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Sta. 65+51 TO Sta. 68+53



Sta. 70+72 TO Sta. 72+15



US 6
Sta. 64+70 TO Sta. 72+15

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Colorado Department of Transportation

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 Region 6 MP

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TYPICAL SECTIONS			
US 6			
Designer:	JBK	Structure	
Detailer:	JBK	Numbers	
Sheet Subset:	TYPICALS	Subset Sheets:	2 of 2

Project No./Code
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18202
Sheet Number 6

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POTENTIAL UTILITY CONFLICT TABLE

Utility Page	Approx Begin	Approx End	Utility Owner	Existing Facility
2	64+29	64+30	Denver Water?	Potential 3" water line (from key maps)
2	64+66	64+67	Denver Water?	Potential 3" water line (from key maps)
2	64+75	64+81	Denver Water?	Potential 6" water line (from key maps)
2	64+74	64+80	Denver Water?	Potential 8" water line (from key maps)
2	68+50	73+60	Xcel Electric	Underground electric line
3	73+75	73+79	Xcel Gas	4" Gas Lines
3	73+97	73+98	Denver Water	8" Water line
3	74+37	74+38	Xcel Gas	4" Gas Line
3	74+37	74+38	Adesta	Underground Fiber Optic line
4	203+12	203+13	Denver Water?	Potential 3" water line (from key maps)
4	203+45	203+46	CDOT Traffic	Fiber Optic line
4	203+60	203+61	CDOT Traffic	CDOT Traffic electric

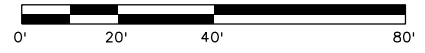
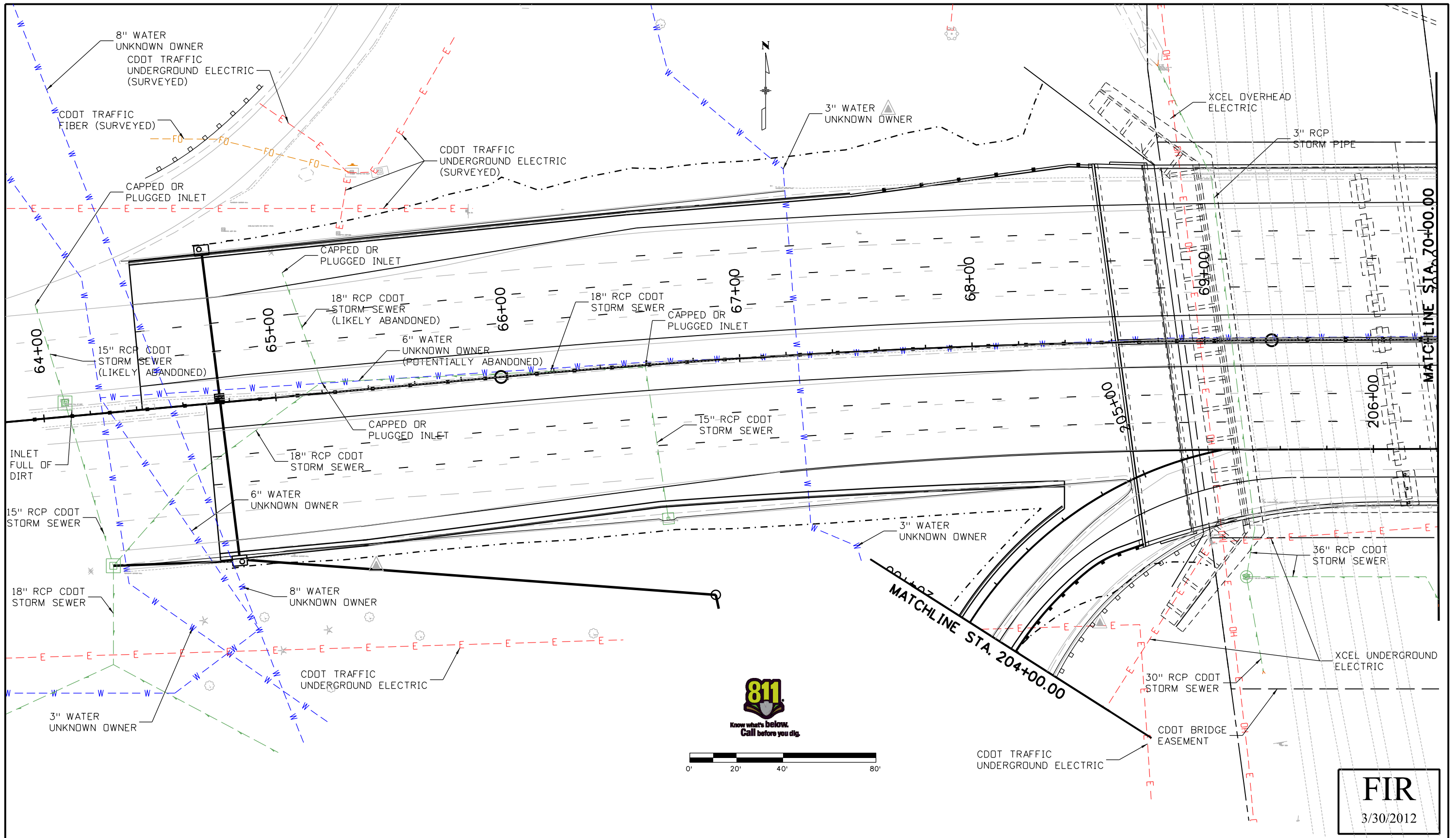
UTILITY PLAN LEGEND

EXISTING	PROPOSED
--- E --- E --- ELECTRIC	— E — E — ELECTRIC
--- T --- T --- TELEPHONE	— T — T — TELEPHONE
--- FO --- FO --- FIBER OPTIC	— FO — FO --- FIBER OPTIC
--- G --- HP --- HIGH PRESSURE GAS	— G — HP --- HIGH PRESSURE GAS
--- W --- W --- WATER	— W — W --- WATER
--->--->--- SANITARY SEWER	—>—>—> SANITARY SEWER
--->--->--- STORM SEWER	—>—>—> STORM SEWER

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Print Date: 3/29/2012		Sheet Revisions			Colorado Department of Transportation 8833 South Wadsworth Court Littleton, CO 80128 Phone: 303-972-9112 FAX: 303-972-9114 Region 6	As Constructed	UTILITY PLAN			Project No./Code
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Unit Information Unit Leader Initials						Void:	Detailer: RMC	Numbers		Sheet Number 7
999 18TH STREET, SUITE 2600 DENVER, CO 80202 PHONE: 303-297-2976 FAX: 303-297-2693					MP	Sheet Subset: UTILITY	Subset Sheets: 1	of 4		

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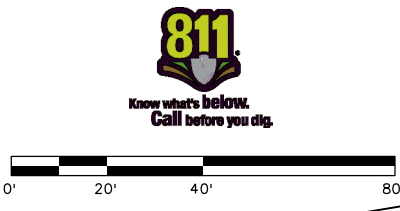
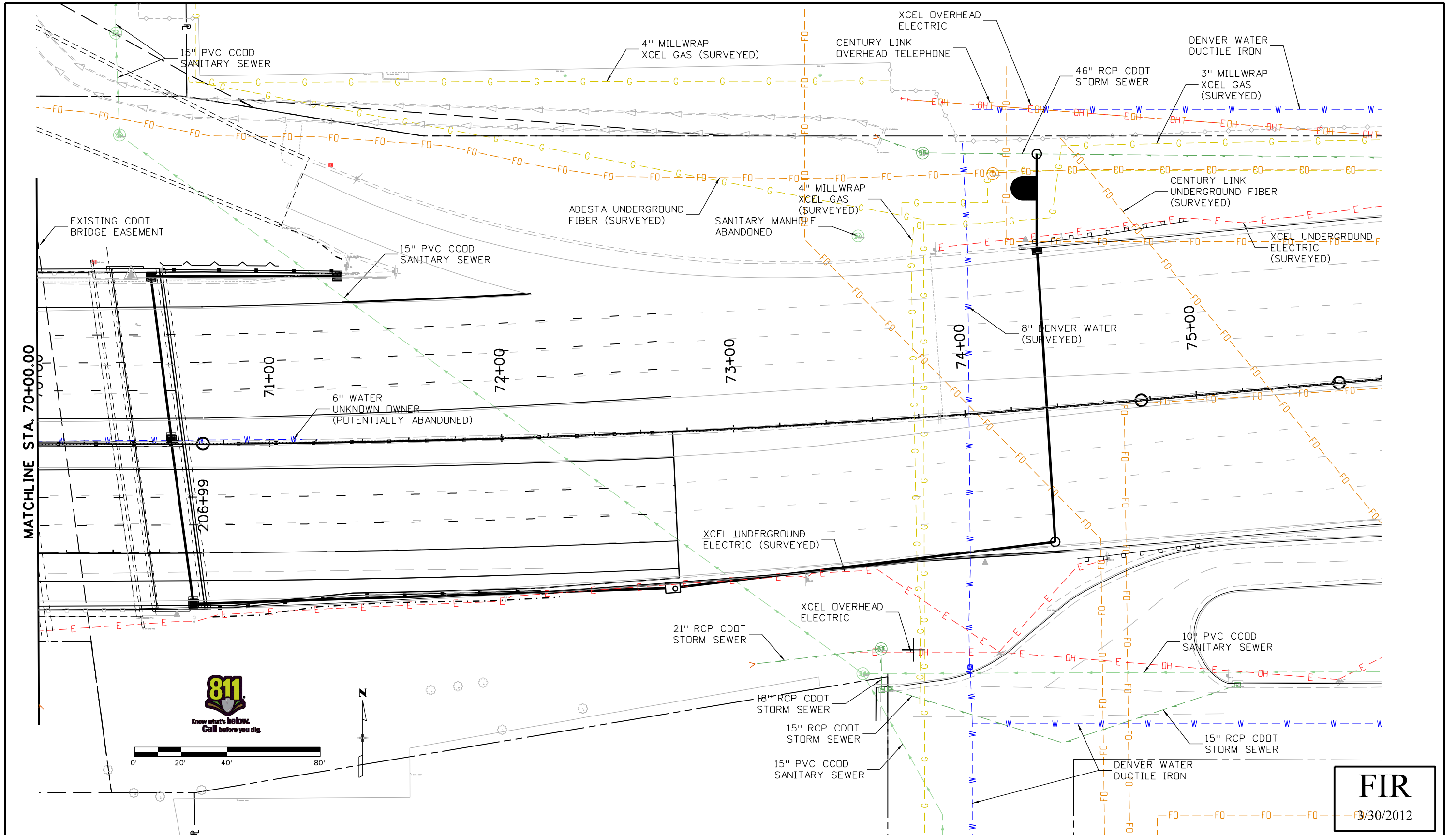


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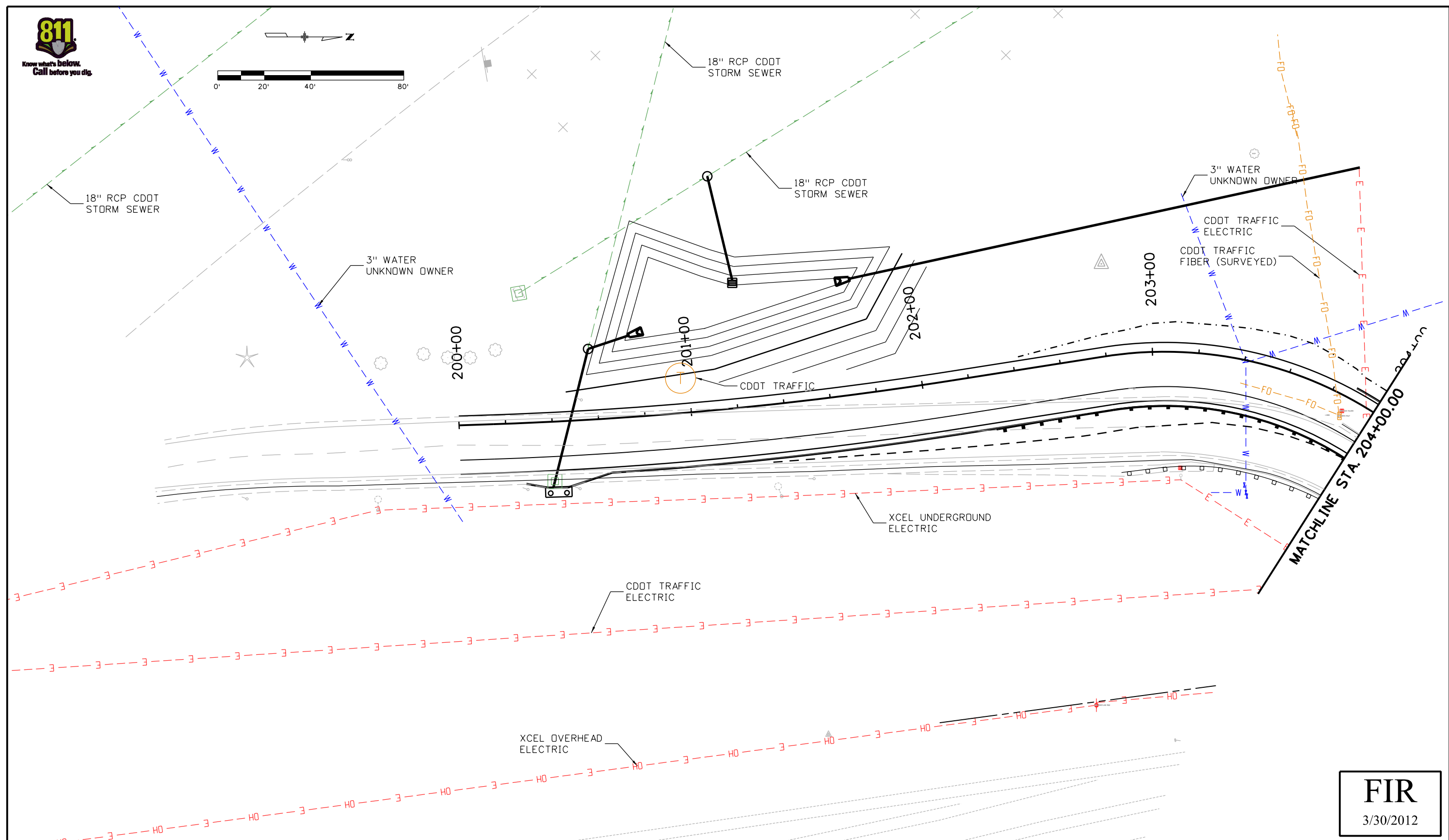
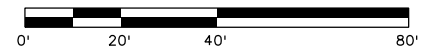
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STA 70+00 TO 75+00			
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Detailer:	RMC	Numbers	
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FBR 0062-026
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Sheet Number 9



Know what's below.
Call before you dig.



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Colorado Department of Transportation

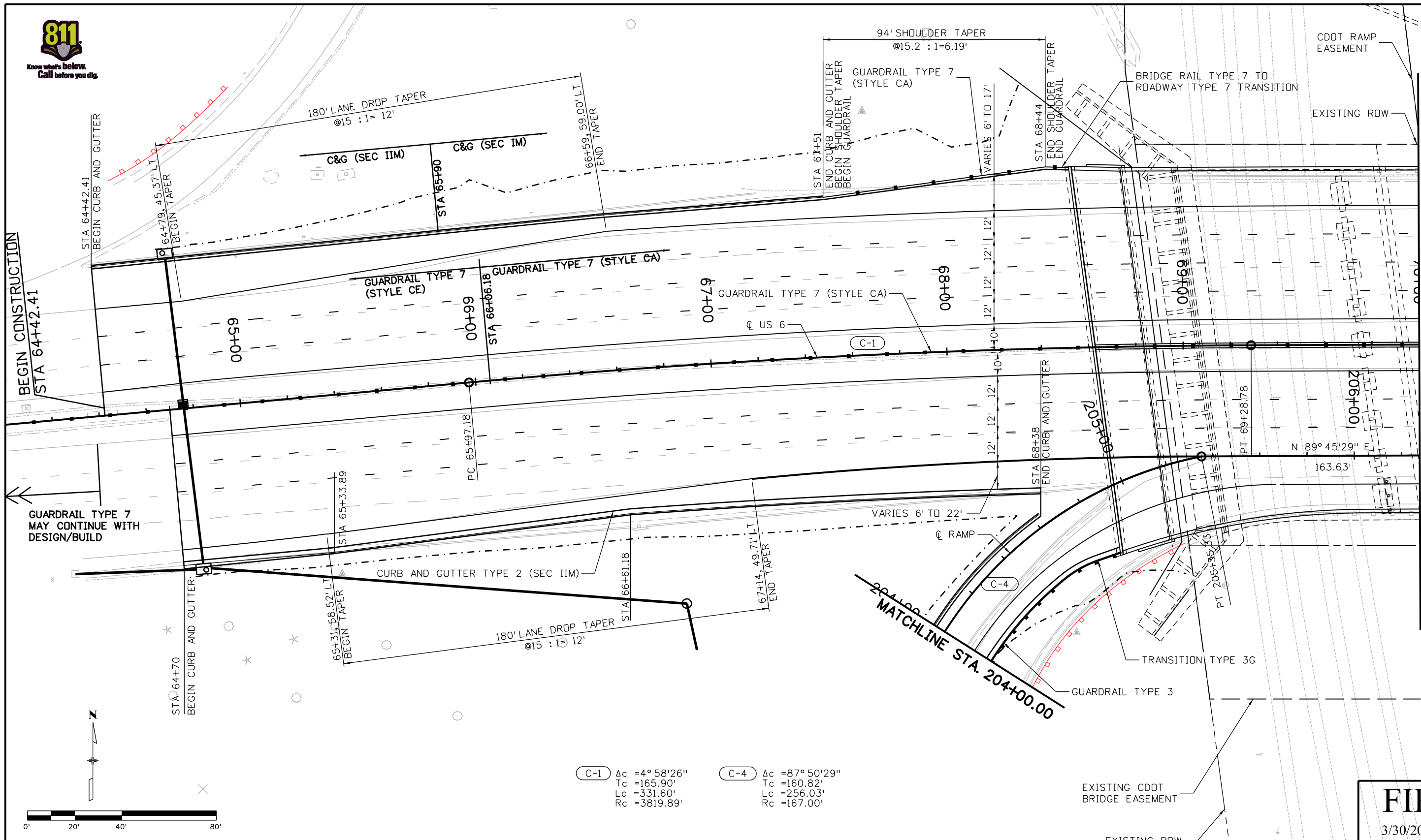
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18202
Sheet Number 10

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Colorado Department of Transportation

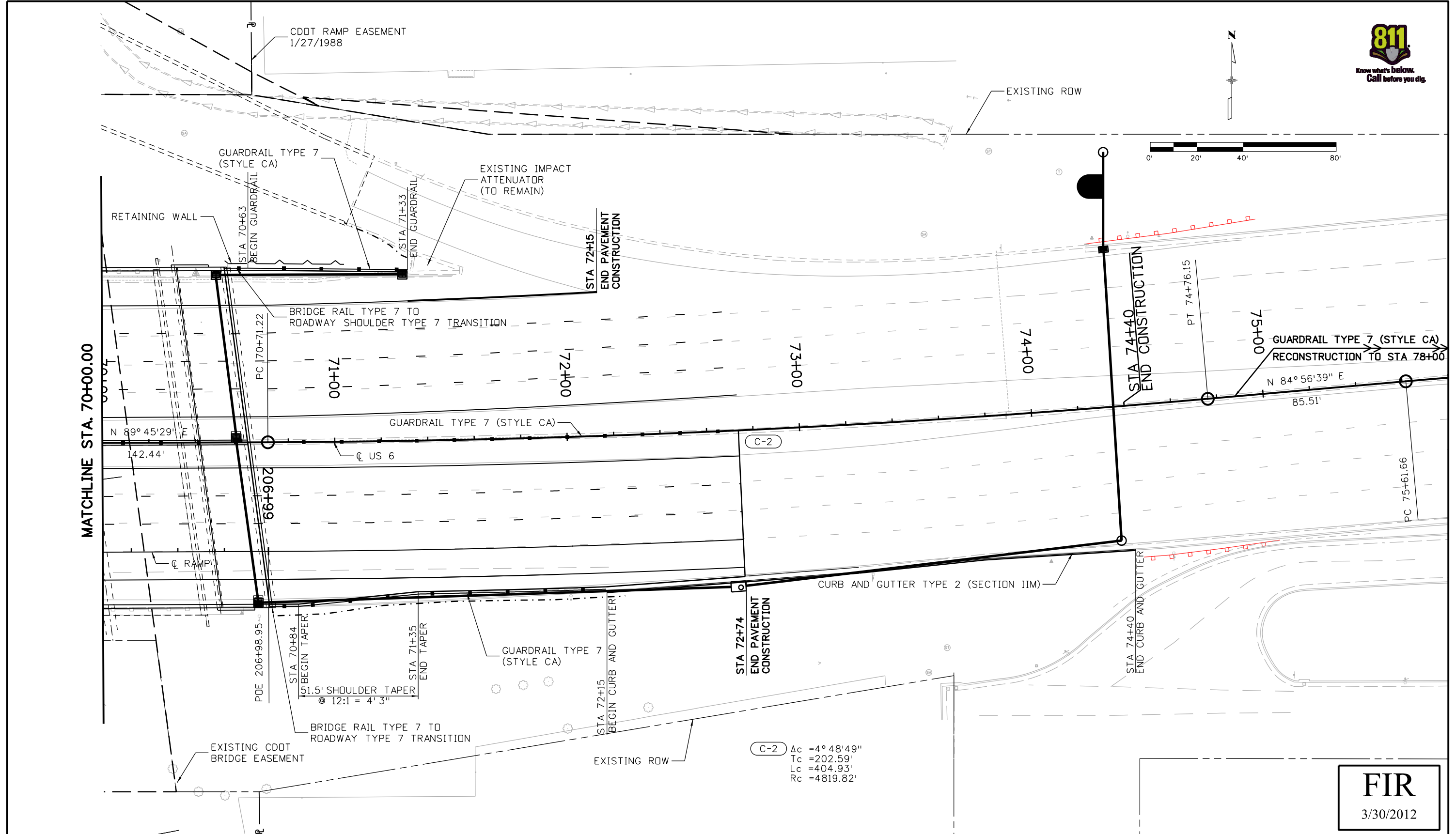
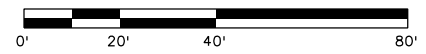
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ROADWAY PLAN US 6			
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Detailer:	JBK	Numbers	
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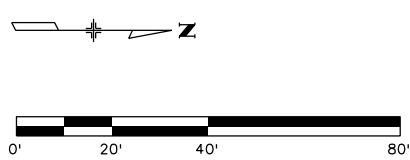
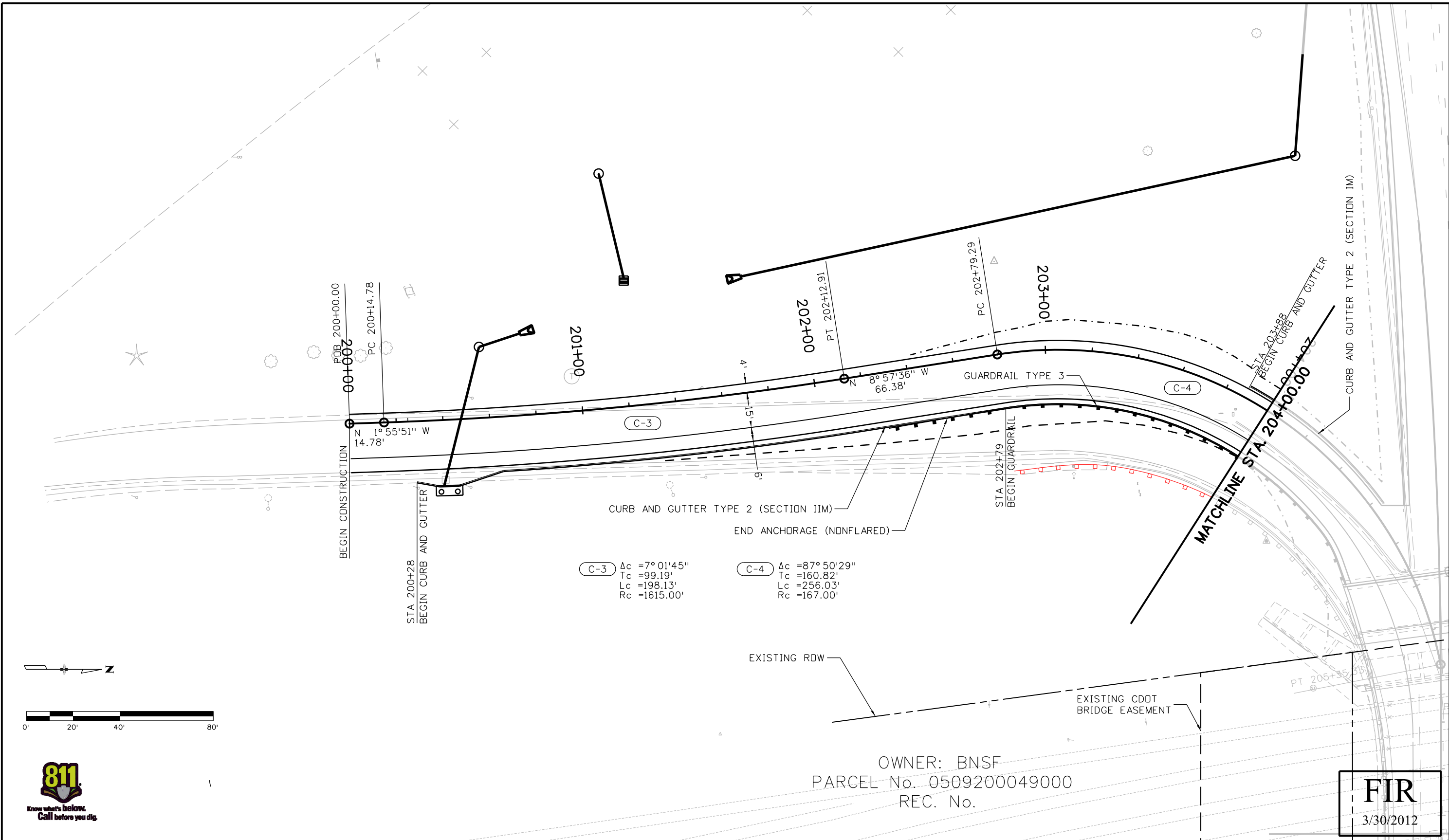
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US 6
 Designer: JBK
 Detailer: JBK
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 18202
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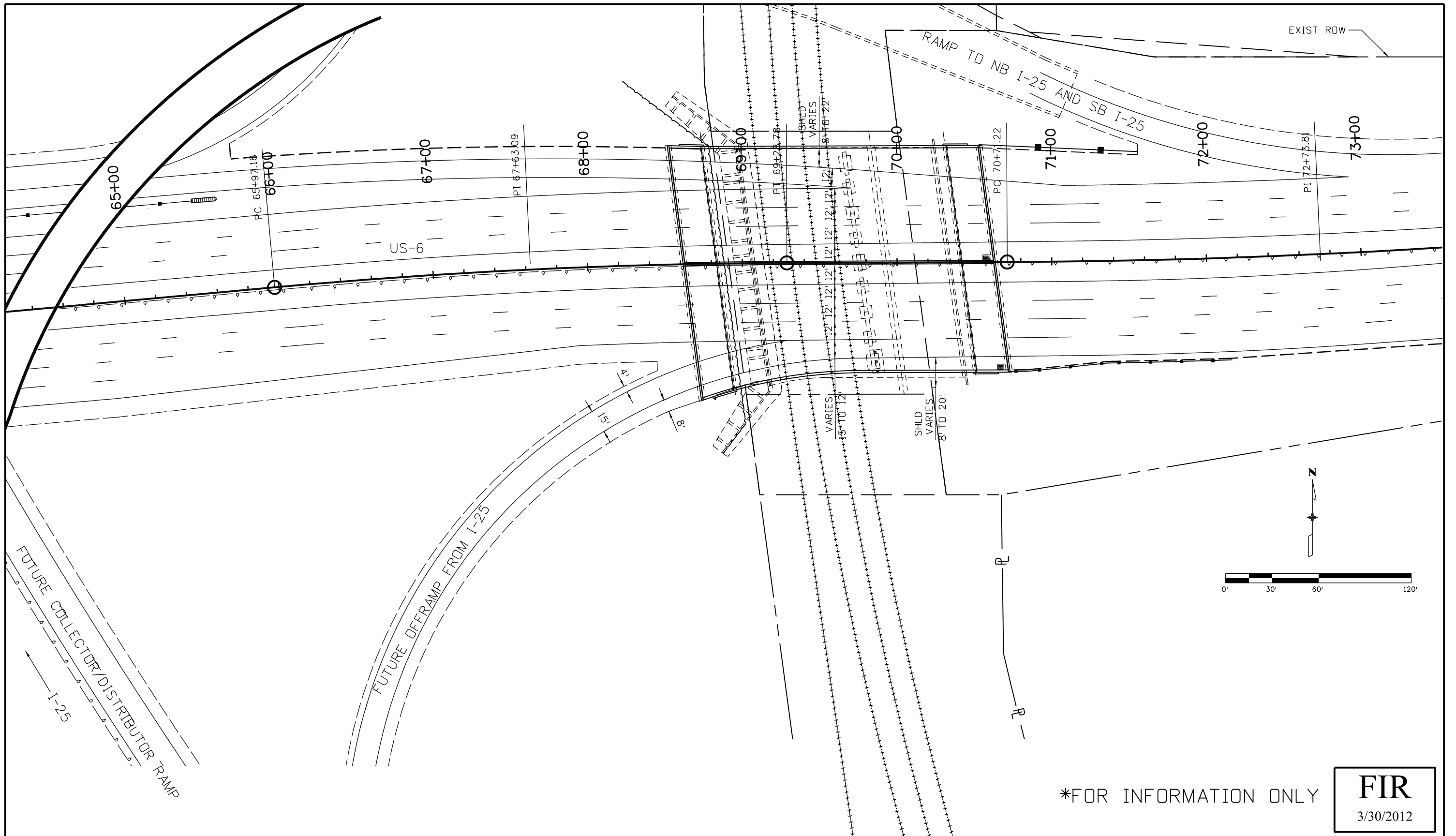
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OWNER: BNSF
 PARCEL No. 0509200049000
 REC. No.

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Unit Information Unit Leader Initials
 WILSON & COMPANY <small>Engineers & Architects</small>

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Colorado Department of Transportation



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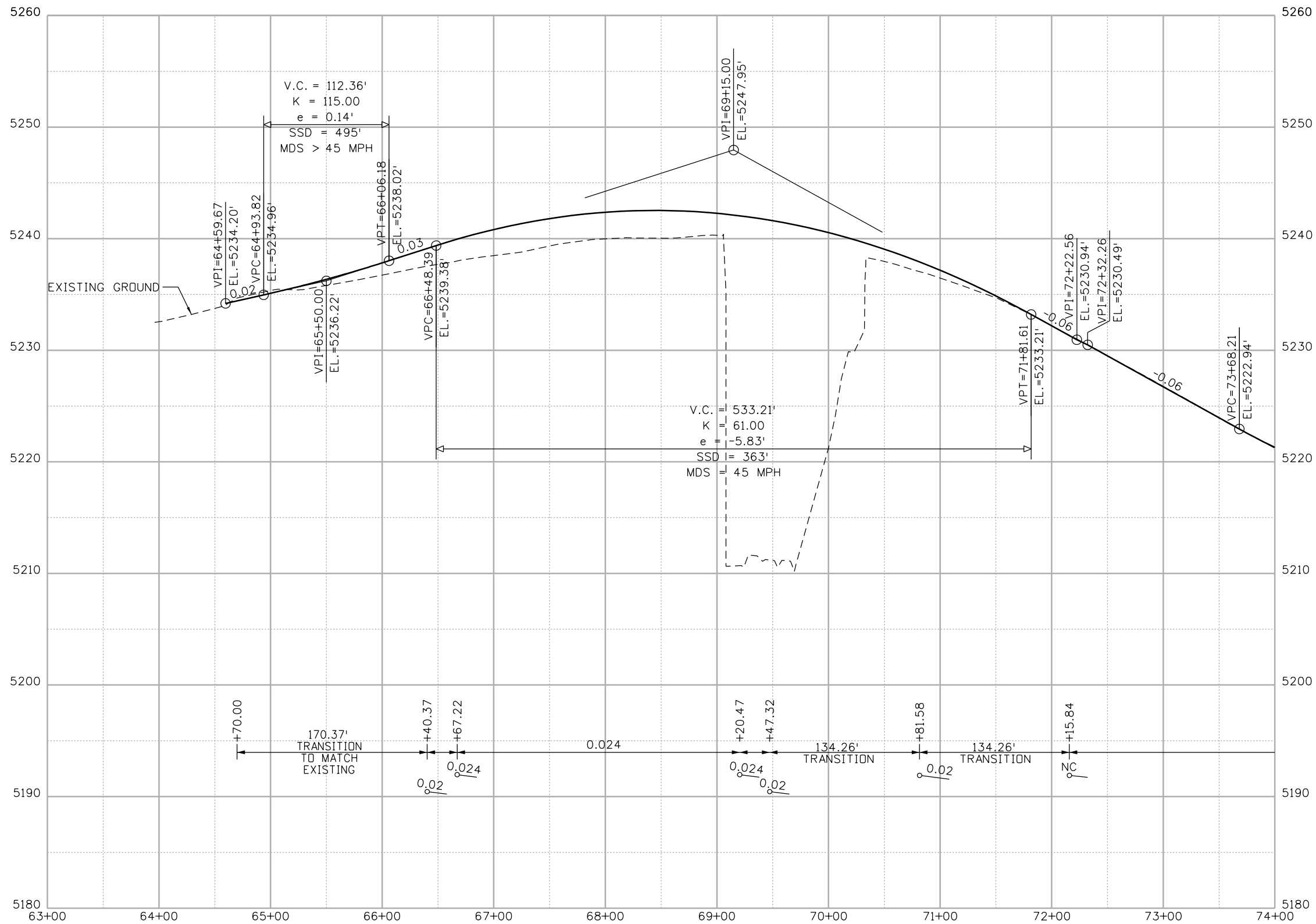
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 Unit Information Unit Leader Initials

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Colorado Department of Transportation
 8833 South Wadsworth Court
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 Region 6 MP

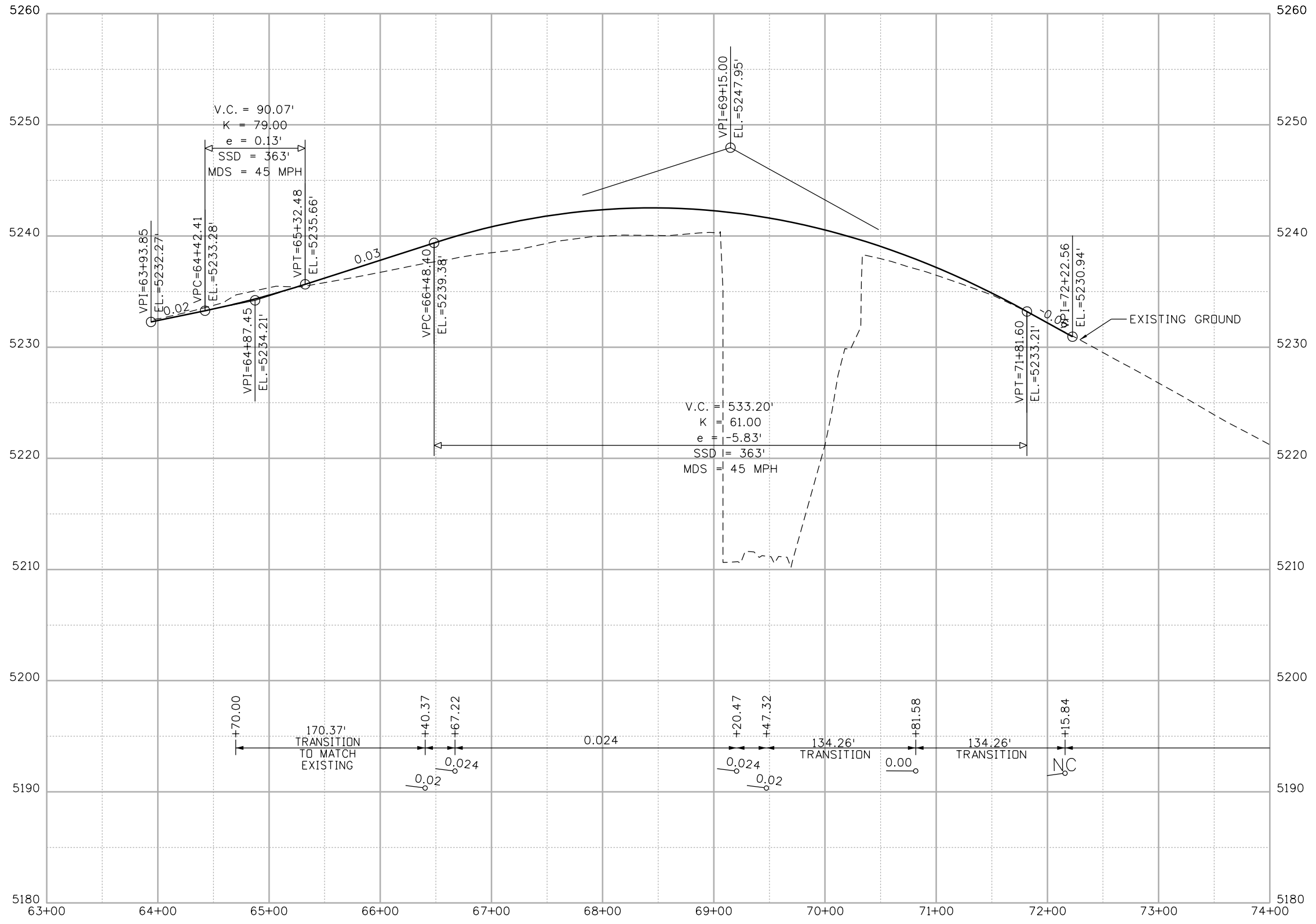
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EB US 6
 Designer: JBK
 Detailer: JBK
 Sheet Subset: PROFILE
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Project No./Code
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 18202
 Sheet Number 15




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Colorado Department of Transportation

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Region 6 **MP**

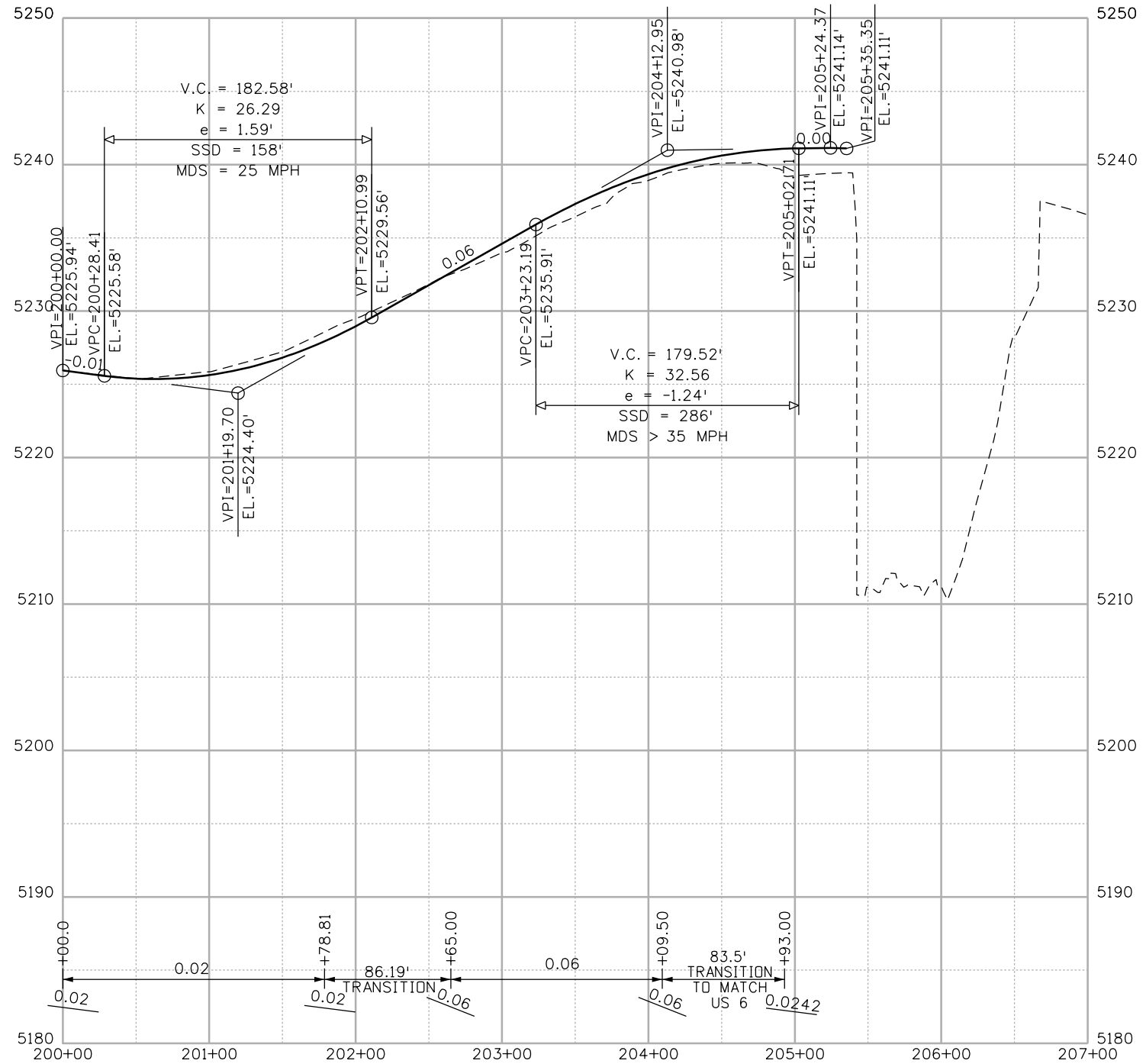
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WB US 6
 Designer: BSH Structure
 Detailer: JBK Numbers
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Project No./Code
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 8833 South Wadsworth Court
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Region 6 **MP**

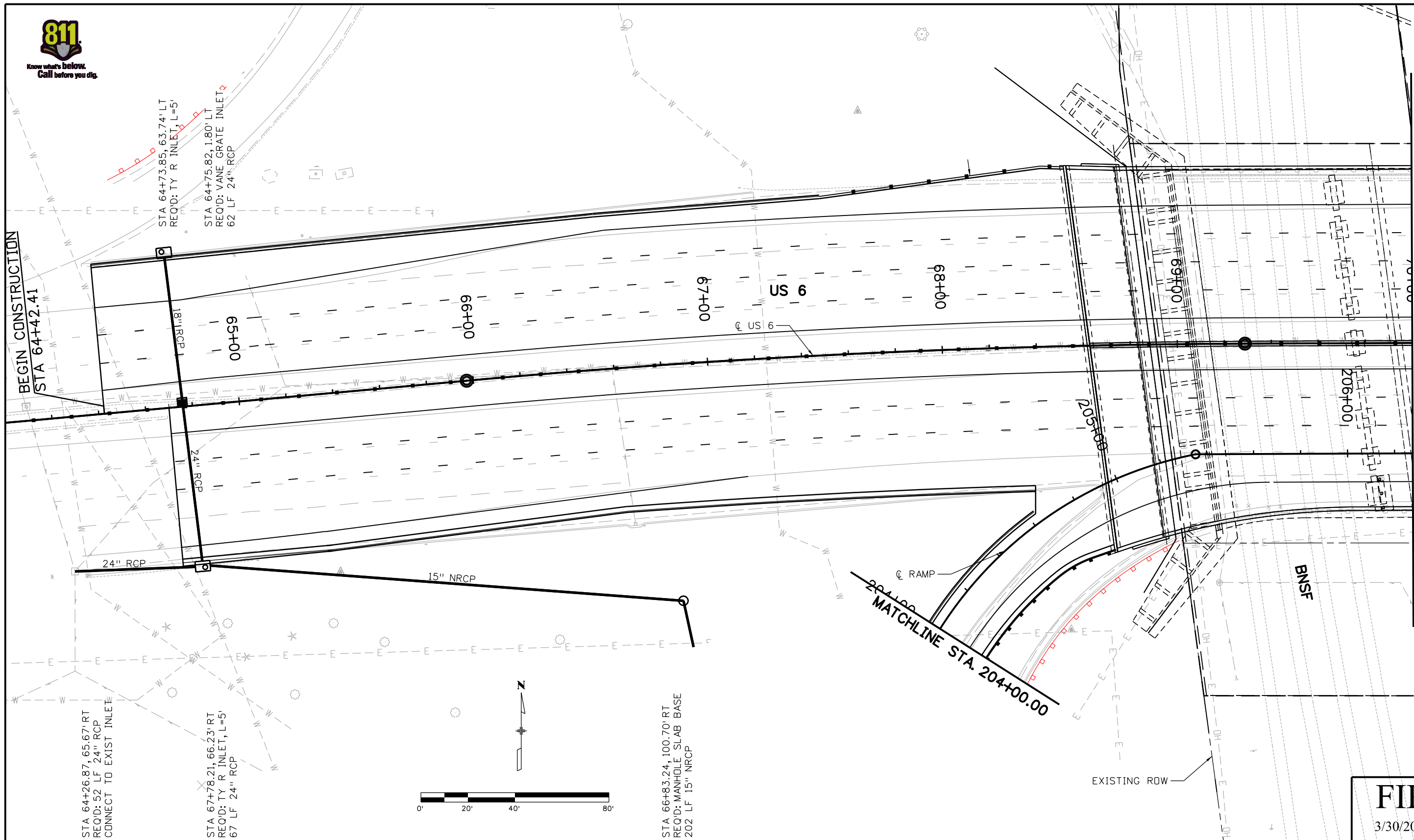
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ROADWAY PROFILE
RAMP D
 Designer: JBK
 Detailer: JBK
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Project No./Code
 FBR 0062-026
 18202
 Sheet Number 17

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STA 64+73.85, 63.74' LT
REQ'D: TY R INLET, L=5'

STA 64+75.82, 1.80' LT
REQ'D: VANE GRATE INLET,
62 LF 24" RCP

STA 64+26.87, 65.67' RT
REQ'D: 52 LF 24" RCP
CONNECT TO EXIST INLET

STA 67+78.21, 66.23' RT
REQ'D: TY R INLET, L=5'
67 LF 24" RCP

STA 66+83.24, 100.70' RT
REQ'D: MANHOLE SLAB BASE
202 LF 15" NRCP

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3/30/2012

Print Date: 3/30/2012

File Name: 18202_Drain_Sheet_01.dgn

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Unit Information

Unit Leader Initials

WILSON & COMPANY
999 18TH STREET, SUITE 2600
DENVER, CO 80202
PHONE: 303-297-2976
FAX: 303-297-2693

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Sheet Revisions

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Region 6

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**DRAINAGE PLAN
US 6**

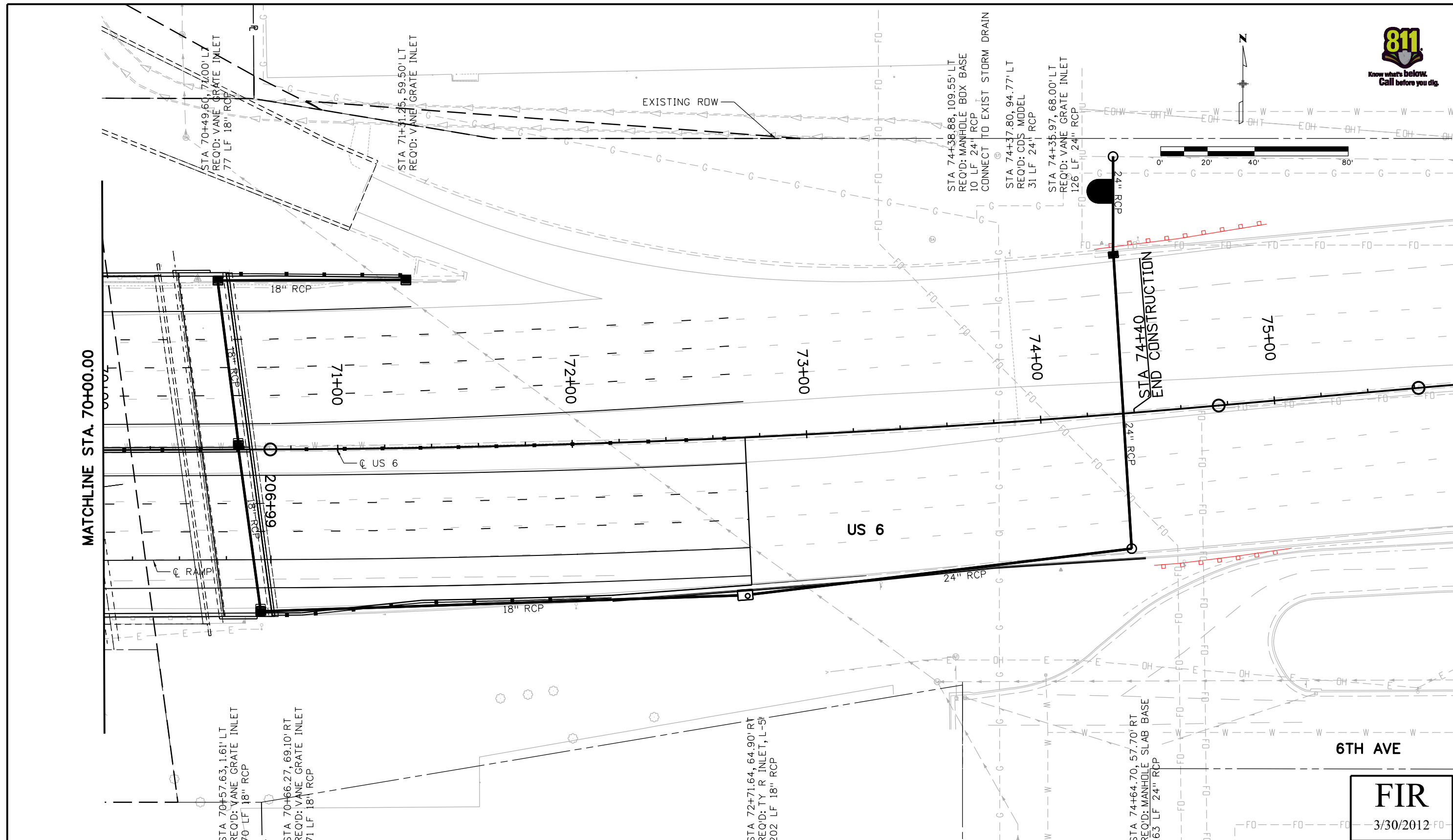
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FBR 0062-026

18202

Sheet Number 18



MATCHLINE STA. 70+00.00

END CONSTRUCTION STA 74+40

US 6

6TH AVE

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Print Date: 3/30/2012
 File Name: 18202_Drain_Sheet_02.dgn
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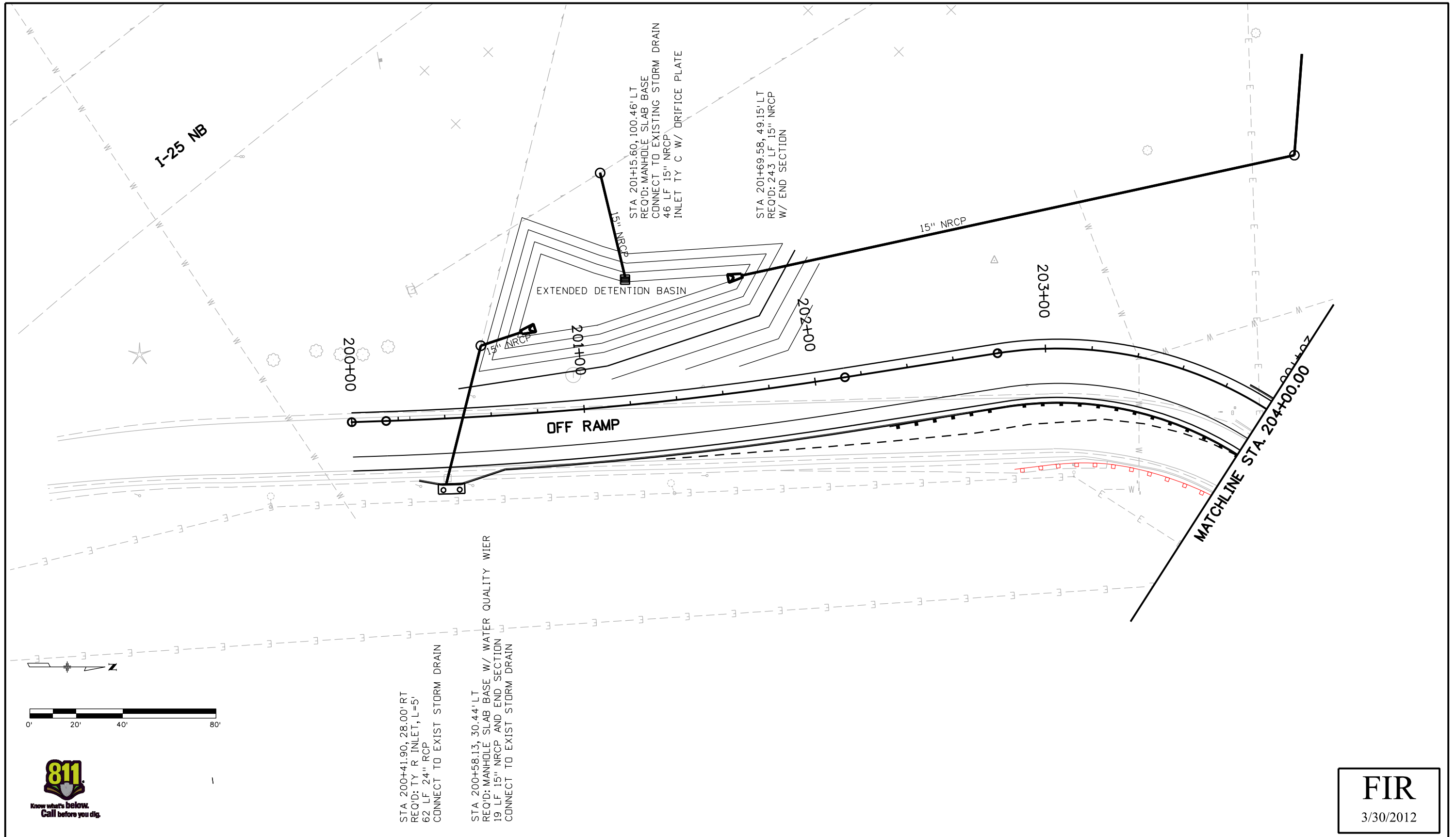
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Project No./Code
 FBR 0062-026
 18202
 Sheet Number 19



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Unit Information Unit Leader Initials		Void:		Detailer: TDS Subsets		Sheet Number 20						
 999 18TH STREET, SUITE 2600 DENVER, CO 80202 PHONE: 303-297-2976 FAX: 303-297-2693		Sheet Subset: DRAIN Subsets: 3 of 3										

1. Site Description

Additional information for permitted projects. For information only to fulfill the CDPS-SCP (Colorado Discharge Permit System - Stormwater Construction Permit)

A. Project Site Description: This project involves replacing the 6th Avenue bridge and approaches over the BNSF. Some pavement structure reconstruction and resurfacing is also included.

B. Proposed Sequencing For Major Activities:

1. Install perimeter BMPs (silt fence and stabilized construction entrance) and inlet protection on existing inlets.
2. Shift traffic to westbound lanes, construct new off ramp, eastbound lanes, and south portion of bridge.
3. Shift traffic to outside lanes, construct center portion of bridge
4. Shift traffic to eastbound lanes, construct westbound lanes and north portion of bridge.
5. Final stabilization (seeding with soil retention blanket or mulch (weed free) and mulch tackifier)

C. Acres Of Disturbance:

1. Total area of construction site: 4.3 acres
2. Total area of disturbance: 4.3 acres (includes roadway and bridge pavement disturbances)
3. Acreage of seeding: 0.6 acre

D. Existing Soil Data:

The existing soil is primarily imported road base with the surrounding areas consisting of loams and gravelly sand. Erosion potential is classified as slight to moderate.

E. Existing Vegetation, Including Percent Cover:

Existing Cover is primarily asphalt and concrete cover with naturally vegetated slopes ranging from 2% to 33% embankment slopes.

Documentation is required to support that the site has been stabilized to 70% of the pre-disturbance cover and does not show signs of accelerated erosion. Prior to construction the contractor shall create photographic documentation and measure existing plant cover according to the CDDT specifications.

1. Date of Survey: To be conducted as a preconstruction activity by Contractor.

F. Potential Pollutants Sources:

See First Construction Activities under Potential Pollutants Sources. The ECS shall prepare a list of all potential pollutants and their locations in accordance with subsection 107.25.

G. Receiving Water:

1. Outfall locations: Inlets and storm sewer along US 6. (CDDT and CCD facilities).

SIZE	TYPE	LOCATION	OUTFALL	RECEIVING WATERS
24"	RCP	64+26, RT	CDDT Storm Drain	South Platte River
24"	RCP	74+38, LT	CCD Storm Drain	South Platte River
15"	NRCP	201+15, LT	CDDT Storm Drain	South Platte River

2. Names of receiving water(s) on site and the ultimate receiving water: South Platte River
3. Distance ultimate receiving water is from project: 1,000'
4. Does the receiving water have an approved TMDL? Yes/No, ____
No impairments are contributed by this project.

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H. Allowable Non-Stormwater Discharges:

1. Discharges to the ground of water from construction dewatering activities may be authorized provided that:
 - A. The source is groundwater and/or groundwater combined with stormwater that does not contain pollutants.
 - B. The source and BMP's are identified in the SWMP.
 - C. Discharges do not leave the site as surface runoff or to surface waters.
2. If discharges do not meet the above criteria, a separate permit from the Department of Health will be required. Contaminated groundwater requiring coverage under a separate permit may include groundwater contaminated with pollutants from a landfill, mining activities, industrial pollutant plumes, underground storage tank, etc.

I. Environmental Impacts:

1. Wetland Impacts: No
2. Stream Impacts: No
3. Threatened and Endangered Species: No

2. Site Map Components:

Pre-construction

- A. Construction Site Boundaries See Erosion Control Plan / SWMP Site Map
- B. All Areas Of Ground Surface Disturbance See Erosion Control Plan / SWMP Site Map
- C. Areas Of Cut And Fill See Erosion Control Plan / SWMP Site Map
- D. Location Of All Structural BMP's Identified In The SWMP See Erosion Control Plan / SWMP Site Map
- E. Location Of Non-Structural BMP's As Applicable In The SWMP See Erosion Control Plan / SWMP Site Map
- F. Springs, Streams, Wetlands And Other Surface Water See Erosion Control Plan / SWMP Site Map
- G. Protection Of Trees, Shrubs, Cultural Resources And Mature Vegetation See Erosion Control Plan / SWMP Site Map
- H. Areas used for storing and stockpiling of materials, staging areas (field trailer, fueling, etc) and batch plants

3. SWMP Administrator For Design:

The original SWMP design for this project has been designed by the following Engineer:

SWMP Engineering Firm: Wilson & Company, Inc. Engineers and Architects
 SWMP Engineer: Troy D. Slocum, PE, CFM
 Address: 999 18th Street, Suite 2600
 Denver, CO 80202
 Phone: 303-297-2976

Once the Contractor takes ownership of the SWMP they will become the Owner and assume responsibility for all design changes to the SWMP, implementation, and maintenance.

4. Stormwater Management Controls First Construction Activities

The contractor shall perform the following:

A. Designate A SWMP Administrator/Erosion Control Supervisor (To be filled out at time of construction; designate the individual(s) responsible for implementing, maintaining and revising SWMP, including the title and contact information. The activities and responsibilities of the administrator shall address all aspects of the project's SWMP.)

Name/Title: _____

Contact information: _____

B. Potential Pollutant Sources

Evaluate, identify and describe all potential sources of pollutants at the site in accordance with subsection 107.25 and place in the SWMP notebook. All BMP's related to potential pollutants shall be shown on the SWMP site map by the contractor's ECS.

C. Best Management Practices (BMP'S) For Stormwater Pollution Prevention

Phased BMP Implementation, Application, and Narrative:

During Design: "BMP as Designed" boxes are marked when used in the SWMP. During construction: the ECS shall update the narratives, include new narratives and update the "In use on site" boxes to match which BMPs are currently in use on site. Clearly describe the relationship between the phases of construction and the implementation of BMP controls.

Print Date: 3/30/2012	0000	Sheet Revisions			Colorado Department of Transportation  8833 South Wadsworth Court Littleton, CO 80128 Phone: 303-972-9112 FAX: 303-972-9114 Region 6 MP	As Constructed	STORMWATER MANAGEMENT PLAN SHEET			Project No./Code
File Name: 18202_swmp01.dgn		Date:	Comments	Init.		No Revisions:				FBR 0062-026
Horiz. Scale: 1:100 Vert. Scale: As Noted						Revised:	Designer: TDS	Structure Numbers		18202
Unit Information Unit Leader Initials						Void:	Detailer: TDS			Sheet Number 21
 999 18TH STREET, SUITE 2600 DENVER, CO 80202 PHONE: 303-297-2976 FAX: 303-297-2693										

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STRUCTURAL and NONSTRUCTURAL BMPs that may be potentially used on the project for erosion and sediment control; practices may include, but are not limited to:

Structural BMPs and Application	Narrative	BMP As Designed	In Use On Site	First Construction Activities	During Construction	Interim/Final Stabilization
Earth Berm/Stockpile	Placed around toe to contain sediment around stockpile					
Earth Berm/Toe of fill	Placed prior to earthwork within specified distance of toe to capture sediment and protect undisturbed areas					
Earthberm/Diversion	Placed to divert drainage and subdivide runoff volume from less than 10 acre sub basins. Temp feature to be removed upon final stabilization					
*Rock Check Dams/Ditch	Velocity checks in ditches placed immediately after ditch grading					
Silt Fence/Sediment Control	Placed on contour to contain construction runoff	X		X	X	
Silt Fence/Protection of Vegetation	Placed to protect undisturbed area and delineate boundary of protected area	X		X	X	
Erosion Logs, Silt Berms or Silt Dikes/Ditch Checks	Erosion Control checks in ditches placed immediately after ditch grading to reduce flow velocity of runoff in ditch					
Erosion Logs/ Existing Inlet	Placed prior to disturbance at existing inlets where disturbance may be occurring to cause sediment laden water to enter pipe					
Erosion Logs/culvert inlet or outlet	Placed on culvert to filter or prevent sediment from entering pipe. If disturbance occurs above pipe then erosion logs are placed above pipe	X		X	X	
Erosion Logs/Sediment Control	Placed to protect undisturbed area and delineate boundary of protected area	X		X	X	
Storm Drain Inlet Protection/Sediment Control	Placed to protect storm drain inlets to filter or prevent sediment from entering drainage system	X		X	X	
Temporary Sediment Trap/Basin	Contain and filter sediment laden water from < 5 acre sub basins within construction disturbance					
Permanent Sediment Trap/Basin	Utilized during construction to act as temporary sediment containment. Outlet structure shall be modified for construction runoff					
Embankment Protection or Temp Slope Drain	Placed as a conduit or chute to drain runoff down slope and prevent erosion of slope					
Outlet Protection	Material placed as energy dissipation device to prevent erosion at outlet structure					
Concrete Washouts/Construction Control	Construction waste management of concrete washout material	X		X	X	
Vehicle Tracking Pad	Placed to prevent tracking of sediment from disturbance to offsite surface	X		X	X	
Sweeping/Construction or Source Control	Utilized to remove sediment on pavement surface and to prevent sediment from entering drainage system	X		X	X	
Dewatering/ Construction Control	Sediment control to remove or filter sediment from construction dewatering					
Temporary Stream Crossing/ Construction Control	Constructed over stream or drainage to prevent discharge of pollutants from construction equipment into stream					
Clean water diversion	Placed to divert clean surface or ground water from mixing with construction runoff or activity					

Structural BMPs and Application	Narrative	BMP As Designed	In Use On Site	First Construction Activities	During Construction	Interim/Final Stabilization
Gravel Bag	Placed on impervious surfaces to be used as a check dam to slow flow and prevent pollutants from entering storm drain. May also be used as additional storm drain inlet protection. A gravel bag shall be mobile and may be used more than once if not damaged.					
Erosion Bale (weed free)	Placed on pervious surfaces to be used as a check dam or inlet protection.					
Other						

Non Structural BMPs and Application	Narrative	BMP As Designed	In Use On Site	First Construction Activities	During Construction	Interim/Final Stabilization
Surface Roughening/Grading Techniques	Interim and temp stabilization of disturbance and to minimize wind and erosion	X			X	X
Seeding Permanent/Final Stabilization	Reduce runoff and control erosion on disturbed areas	X				X
Seeding Temporary	Over wintering of disturbance or used to control erosion for areas scheduled for future construction	X			X	X
Mulch/Mulch Tackifier/ Temp or Final Stabilization	Placed as a surface cover for erosion control and or seeding establishment	X			X	X
Soil Retention Blanket /Temp or Final Stabilization	Placed as surface cover for erosion control and seeding establishment	X			X	X
Turf Reinforcement Mat/ Final Stabilization	Placed in channels or on slopes for erosion control, channel liner and seeding establishment					
Soil Binder/Temp Stabilization	Placed as surface treatment to provide temp erosion control	X			X	
Spray on mulch blanket/ Temp or Final Stabilization	Placed cover on slopes to control erosion and seeding establishment					
Vegetative Buffer Strips	Filter sediment laden runoff from disturbance area					
Protection Of Trees/Protected Resources -Fence Plastic	Placed prior to construction to protect existing vegetation to remain	X		X	X	
Preservation Of Mature Vegetation/Work access and grading plans	Used to protect existing stable cover and minimize impact to vegetation	X		X	X	

*Check dams may be rock, erosion logs, silt dike, silt berm, etc. as indicated in the narratives and SWMP site map. Erosion control devices are used to limit the amount of soil loss on site. Sediment control devices are designed to capture sediment on the project site. Construction control are BMPs related to construction access and staging. BMP locations are indicated on the SWMP site map. BMP details and narratives not covered by the SWMP or Standard Plan M-208-1 shall be added to the SWMP notebook by the ECS.

- D. Offsite Drainage (Run On Water)
 1. Describe and record BMPs on the SWMP site map that has been implemented to address off site run-on water in accordance with subsection 208.03.
- E. Stabilized Construction Entrance/Vehicle Tracking Control
 1. BMP's shall be implemented in accordance with subsection 208.04.
- F. Perimeter Control
 1. Perimeter control shall be established as the first item on the SWMP to prevent the potential for pollutants leaving the construction site boundaries, entering the stormwater drainage system, or discharging to state waters.
 2. Perimeter control may consist of vegetation buffers, berms, silt fence, erosion logs, existing landforms, or other BMPs as approved.
 3. Perimeter control shall be in accordance with subsection 208.04.


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 FAX: 303-297-2693

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Region 6 **MP**

As Constructed	STORMWATER MANAGEMENT PLAN SHEET		Project No./Code
No Revisions:			FBR 0062-026
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		Subset Sheets: 2 of 6	

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5. During Construction

RESPONSIBILITIES OF THE SWMP ADMINISTRATOR/EROSION CONTROL SUPERVISOR DURING CONSTRUCTION

The SWMP should be considered a *living document* that is continuously reviewed and modified. During construction, the following items shall be added, updated, or amended as needed by the SWMP Administrator/Erosion Control Supervisor (ECS) in accordance with Section 208.

During construction, indicate how items that have not been addressed during design are being handled in construction. If items are covered in the template or other sections of the SWMP notebook indicate below what section the discussion takes place.

- A. STOCKPILE MANAGEMENT - shall be done in accordance with subsection 101.95 and 208.07
- B. CONCRETE WASHOUT - Concrete wash out water or waste from field laboratories and paving equipment shall be contained in accordance with subsection 208.05 .
- C. SAW CUTTING - shall be done in accordance with subsection 101.95, 208.04, 208.05
- D. STREET CLEANING - shall be done in accordance with subsection 208.04

6. Inspections

A. Inspections shall be in accordance with subsection 208.03 (c).

7. BMP Maintenance

A. Maintenance shall be in accordance with subsection 208.04 (f).

8. Record Keeping

A. Records shall be kept in accordance with subsection 208.03 (c).

9. Interim And Final Stabilization

A. Seeding Plan

Soil preparation, soil conditioning or topsoil, seeding (native), mulching (weed free), and mulch tackifier will be required for an estimated X acre of disturbed area within the right-of-way limits which are not surfaced. The following types and rates shall be used:

Common Name	Botanical Name	Pounds PLS/Acre
Sideoats grama, Vaughn	Bouteloua curtipendula	3.0
Blue grama, Hachita	Bouteloua gracilis	2.0
Green needlegrass	Stipa viridula v. Lordom	3.0
Switchgrass	Panicum virgatum "Dacotah"	4.0
Junegrass, native	Koeleria macrantha	0.2
Western wheatgrass, Arriba	Pascopyrum smithii	6.0
Little bluestem, Posturo	Schizachyrium scoparium	3.0
Prairie coneflower	Rotibida columnifera	0.3
Purple prairie clover	Ratibida columnaris	0.5
Gaillarda	Gaillardia aristata	1.0
Regreen / Triticum	Aestivum xElytrigia elongate	3.0
Total		26

B. SEEDING APPLICATION: Drill seed 0.25 inch to 0.5 inch into the soil. In small areas not accessible to a drill, hand broadcast at double the rate and rake 0.25 inch to 0.5 inch into the soil.

C. MULCHING APPLICATION: Apply a minimum of 1 1/2 tons of certified weed free hay per acre and in accordance with Section 213, and mechanically crimp it into the soil in combination with an organic mulch tackifier.

D. SPECIAL REQUIREMENTS: Due to high failure rates, hydromulching and/or hydroseeding will not be allowed

E. Topsoil shall comply with PSP 207 Topsoil.

F. BLANKET APPLICATION: On slopes and ditches requiring a blanket, the blanket shall be placed in lieu of mulch and mulch tackifier. See SWMP for blanket locations.

G. RESEEDING OPERATIONS/CORRECTIVE STABILIZATION

Prior to final acceptance.

1. Seeded areas shall be reviewed during the 14 day inspections by the Erosion Control Supervisor for bare soils caused by surface or wind erosion. Bare areas caused by surface or gully erosion, blown away mulch, etc. shall be regraded, seeded, mulched and have mulch tackifier (or blanket) applied as necessary, at no additional cost to the project.
2. Areas where seed has not germinated after one season shall be evaluated by the Engineer and CDDT Landscape Architect. Areas that have not germinated shall have seed, mulch and mulch tackifier (or blanket) reapplied. Work shall be paid for by the appropriate bid item.
3. The Contractor shall maintain seeding/mulch/tackifier, mow to control weeds or apply herbicide to control weeds in the seeded areas until Final Acceptance.

10. Prior To Final Acceptance

- A. Final Acceptance shall be in accordance with CDDT Construction Details subsection 208.10.
- B. All erosion bales (weed free) shall be removed or replaced with erosion logs prior to final acceptance.



11. Tabulation Of Stormwater Quantities

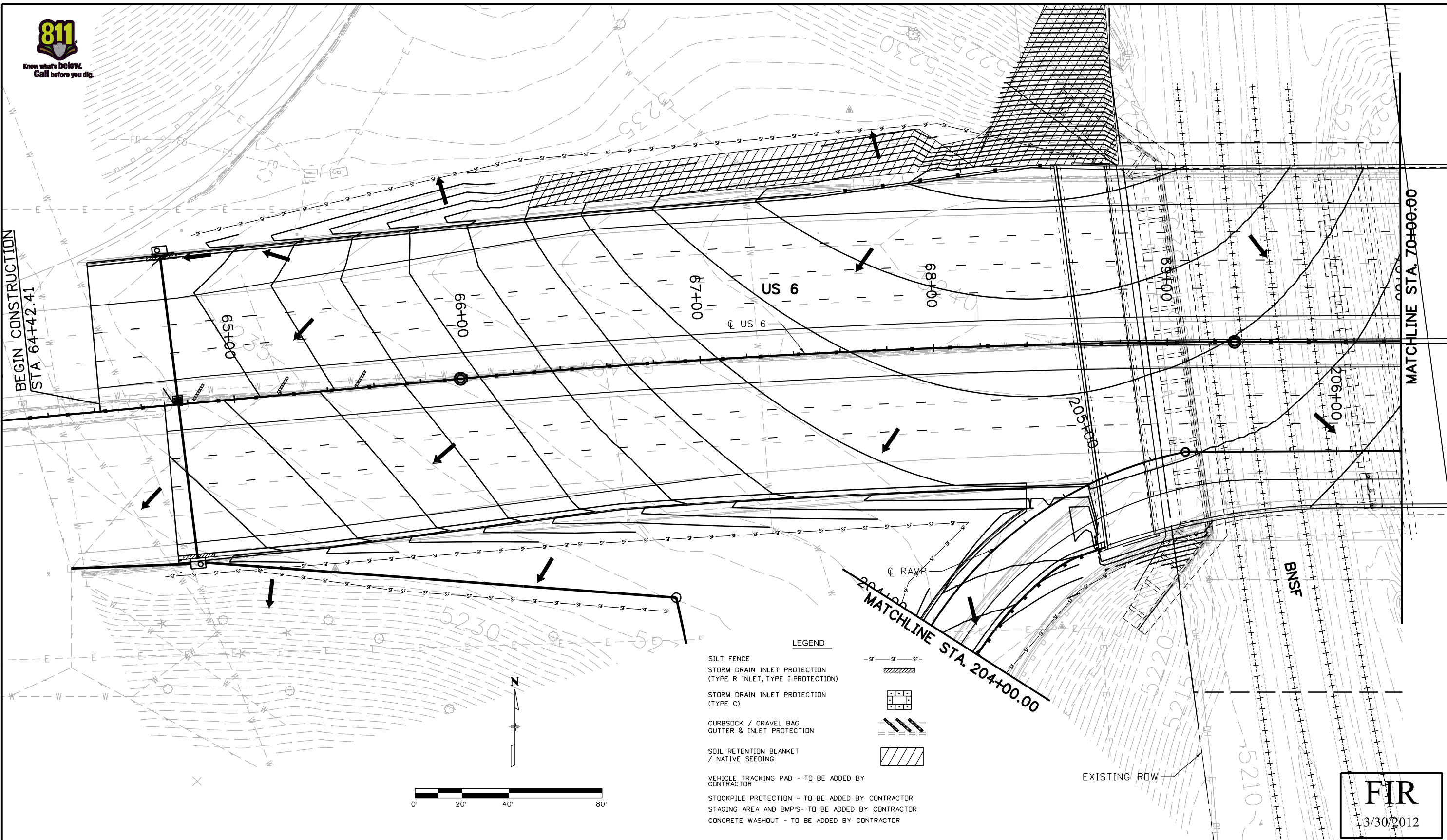
Pay Item	Description	Unit	Quantity
			Total
203	Blading	Hour	120
203	Sweeping (Pick-up-broom)	Hour	40
208	Erosion Log (12 Inch)	LF	300
208	Silt Fence	LF	3310
208	Gravel Bag	LF	50
208	Concrete Washout Structure	Each	4
208	Storm Drain Inlet Protection (TYPE I)	LF	25
208	Erosion Bale (Weed Free)	Each	50
208	Vehicle Tracking Pad	Each	2
208	Sediment Removal and Disposal (Equipment)	Hour	80
208	Sediment Removal and Disposal (Labor)	Hour	80
208	Erosion Control Supervisor	Day	450
212	Seeding (Native)	Acre	0.6
212	Tree Retention and Protection	LS	1
207	Topsoil	CY	480
216	Soil Retention Covering / Blanket	SY	440
700	Erosion Control	FA	1

*It is anticipated that additional BMPs and BMP quantities not shown on the SWMP Site Maps shall be required on the project for unforeseen conditions and replacement of items that are beyond their useful service life, see subsection 208.03 and 208.04 (e). Quantities for all BMPs shown above are estimated, and have been increased for unforeseen Project conditions.

- A. BMP sediment removal and disposal shall be paid for as: 208 Removal and Disposal of Sediment (Equipment) and 208 Removal and Disposal of Sediment (Labor). All other BMP maintenance shall be included in the cost of the BMP Device.
- B. It is estimated that 120 hours of labor, blading (150 horsepower), dozing (150 horsepower), combination loader (98 horsepower) and/or backhoe (98 horsepower) may be required for miscellaneous erosion control work as directed by the Engineer. Work shall be paid for as: 203 Labor, 203 Blading, 203 Dozing, 203 Combination Loader or 203 Backhoe.
- C. Maintenance of seeded areas shall be included in the price of the work.

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Unit Information	Unit Leader Initials			Void:	Detailer: TDS	Sheet Number 23
				8833 South Wadsworth Court Littleton, CO 80128 Phone: 303-972-9112 FAX: 303-972-9114		
		Region 6		MP		
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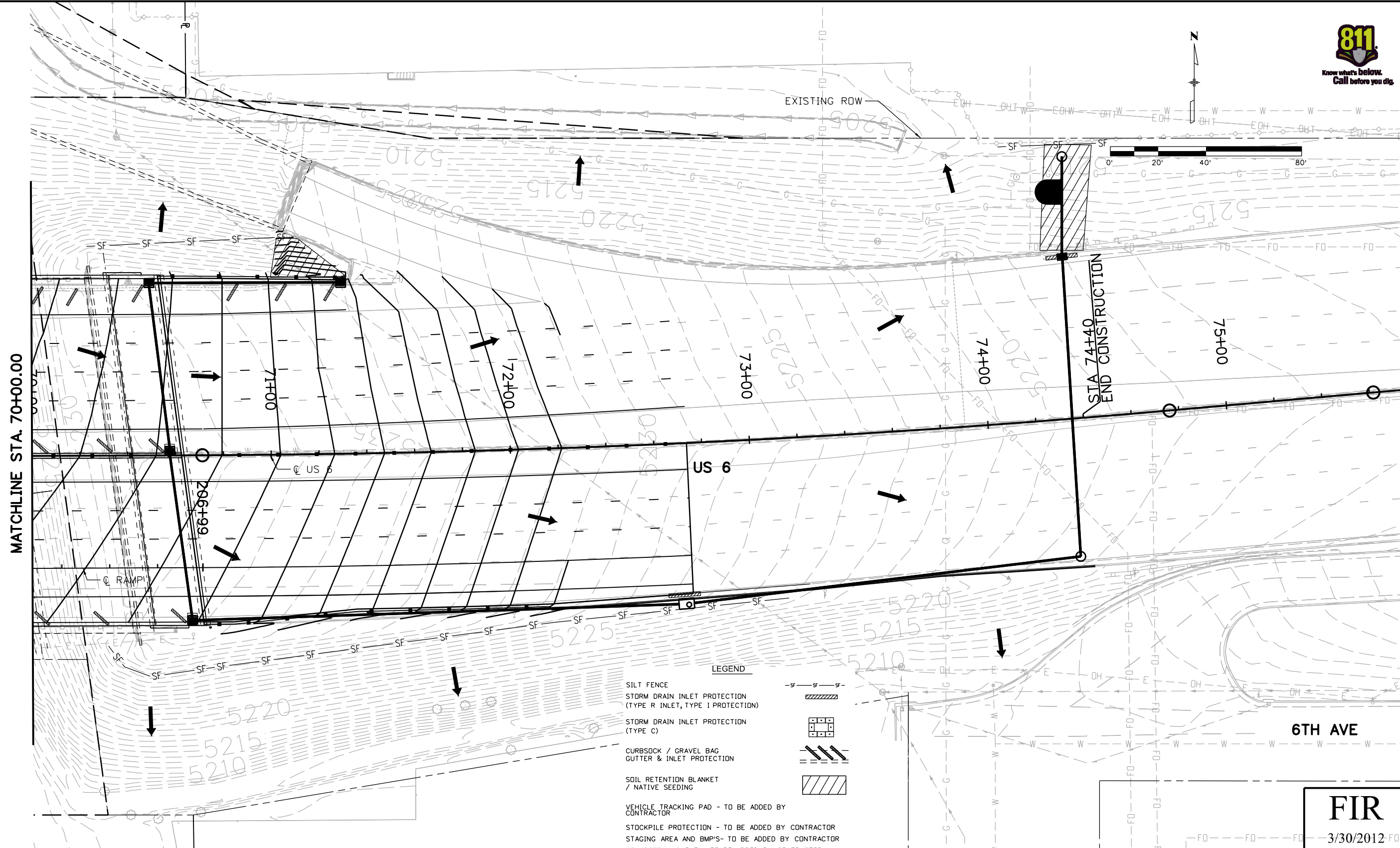
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SWMP PLAN SITE MAP US 6			
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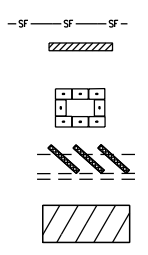


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END CONSTRUCTION

LEGEND

- SILT FENCE
- STORM DRAIN INLET PROTECTION (TYPE R INLET, TYPE I PROTECTION)
- STORM DRAIN INLET PROTECTION (TYPE C)
- CURBSOCK / GRAVEL BAG GUTTER & INLET PROTECTION
- SOIL RETENTION BLANKET / NATIVE SEEDING
- VEHICLE TRACKING PAD - TO BE ADDED BY CONTRACTOR
- STOCKPILE PROTECTION - TO BE ADDED BY CONTRACTOR
- STAGING AREA AND BMP'S - TO BE ADDED BY CONTRACTOR
- CONCRETE WASHOUT - TO BE ADDED BY CONTRACTOR

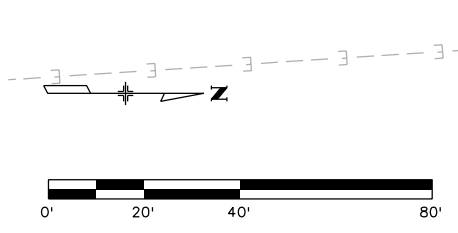
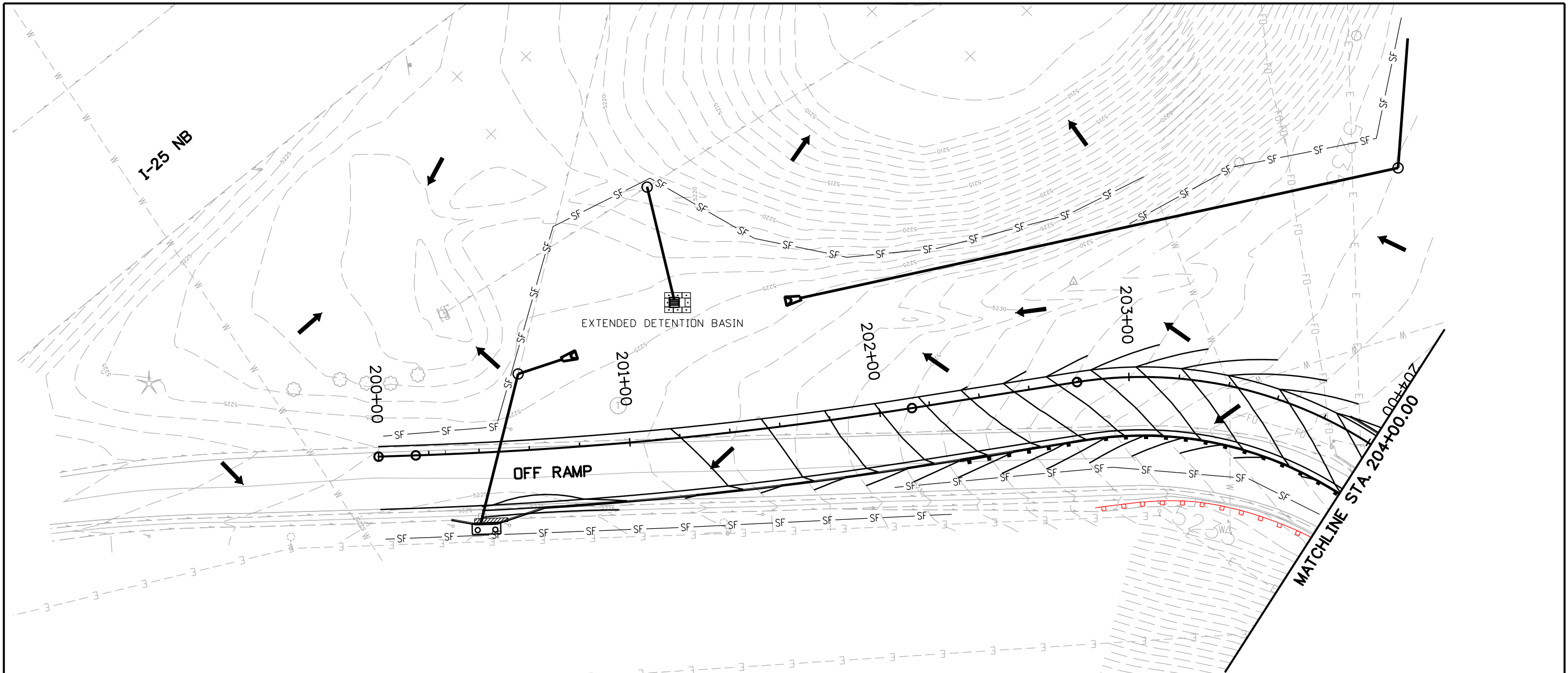


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STORM DRAIN INLET PROTECTION (TYPE C)	
CURBSOCK / GRAVEL BAG GUTTER & INLET PROTECTION	
SOIL RETENTION BLANKET / NATIVE SEEDING	
VEHICLE TRACKING PAD - TO BE ADDED BY CONTRACTOR	
STOCKPILE PROTECTION - TO BE ADDED BY CONTRACTOR	
STAGING AREA AND BMP'S- TO BE ADDED BY CONTRACTOR	
CONCRETE WASHOUT - TO BE ADDED BY CONTRACTOR	



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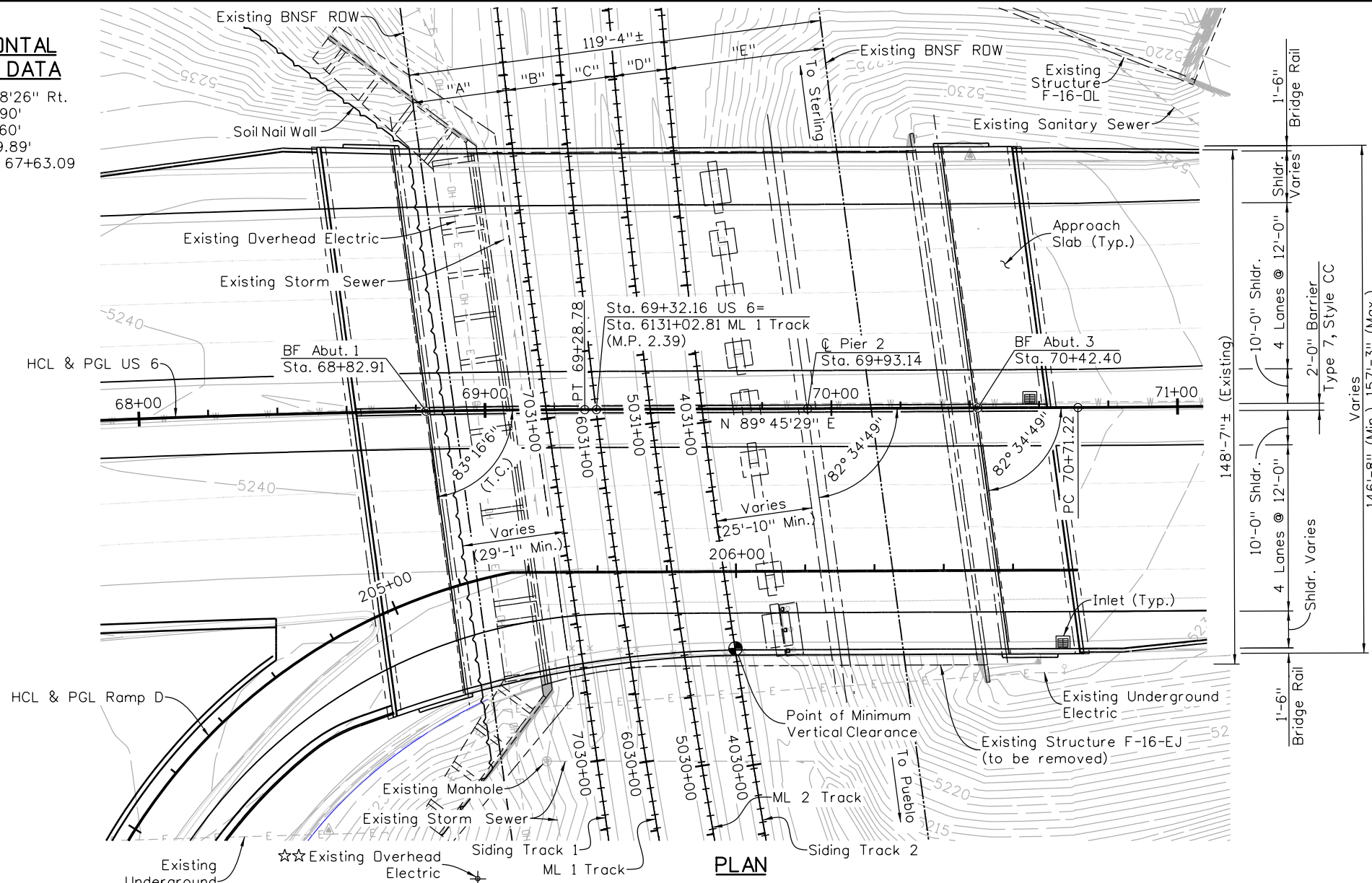
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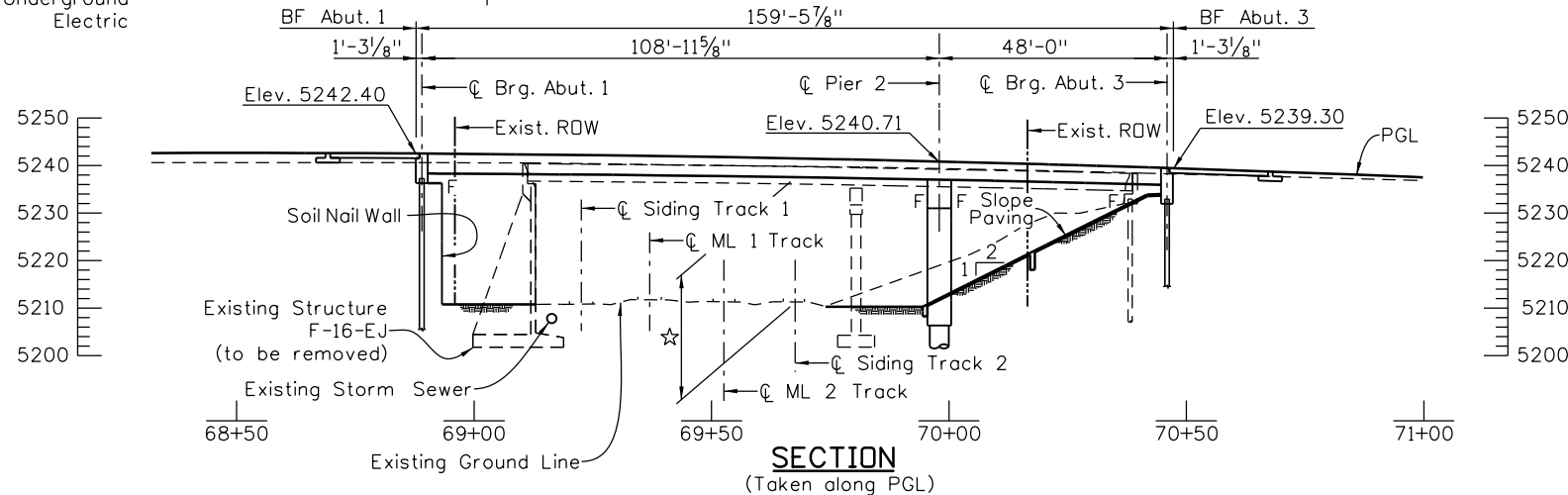
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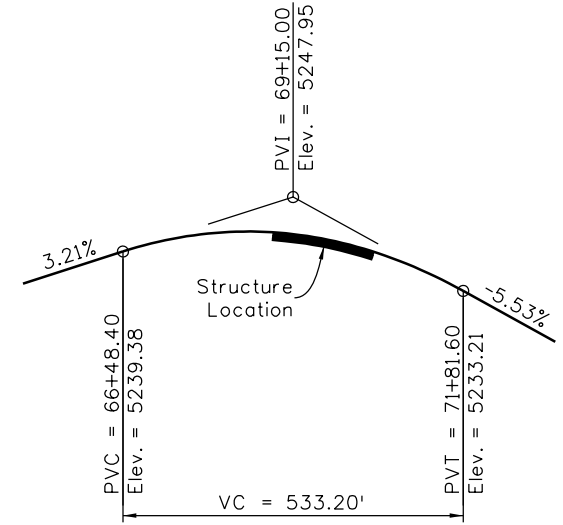


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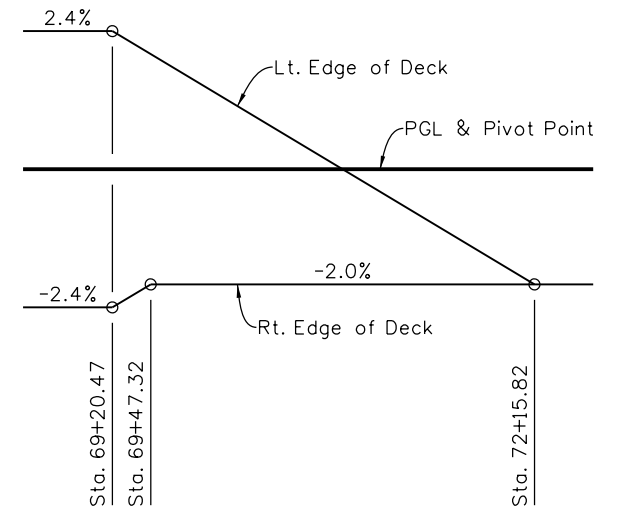
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TRACK CLEARANCE TABLE

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US 6 PROFILE GRADE



SUPERELEVATION DIAGRAM

- ☆ Minimum Vertical Clearance:
23'-9" Concrete Alternate
23'-6" Steel Alternate
- ☆☆ Minimum Vertical Clearance
to Existing Overhead Electric
at HCL = 47'-6"

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**US 6 OVER BNSF
GENERAL LAYOUT**

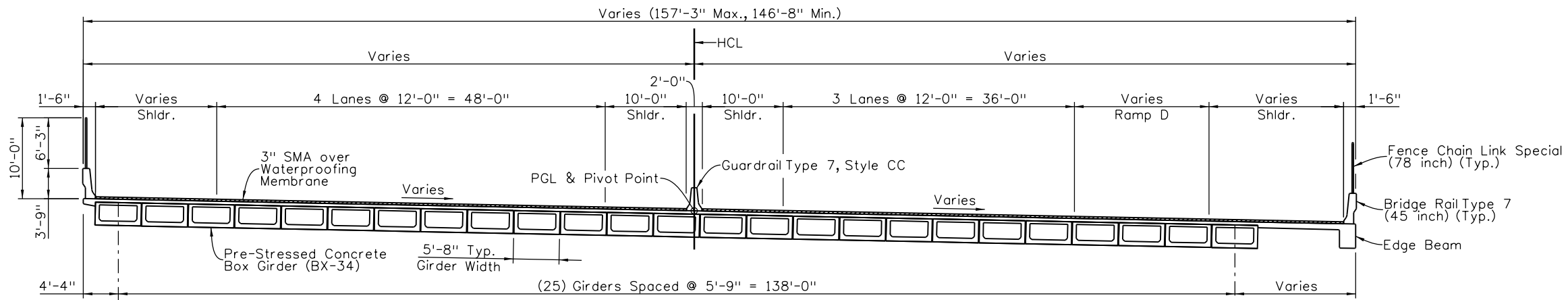
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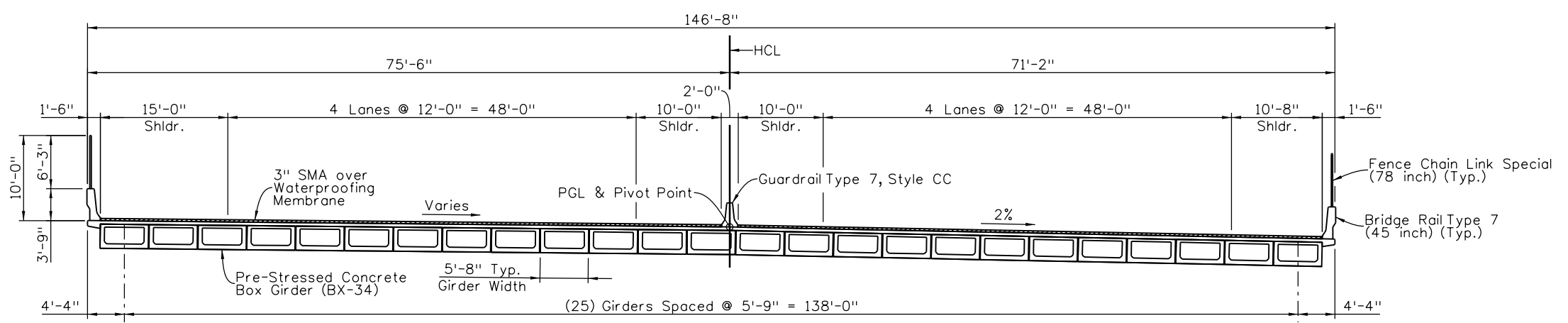
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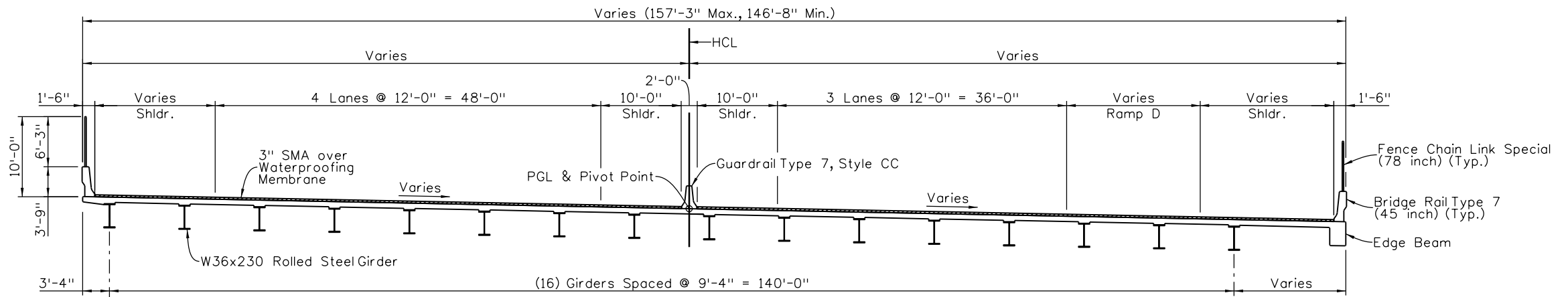
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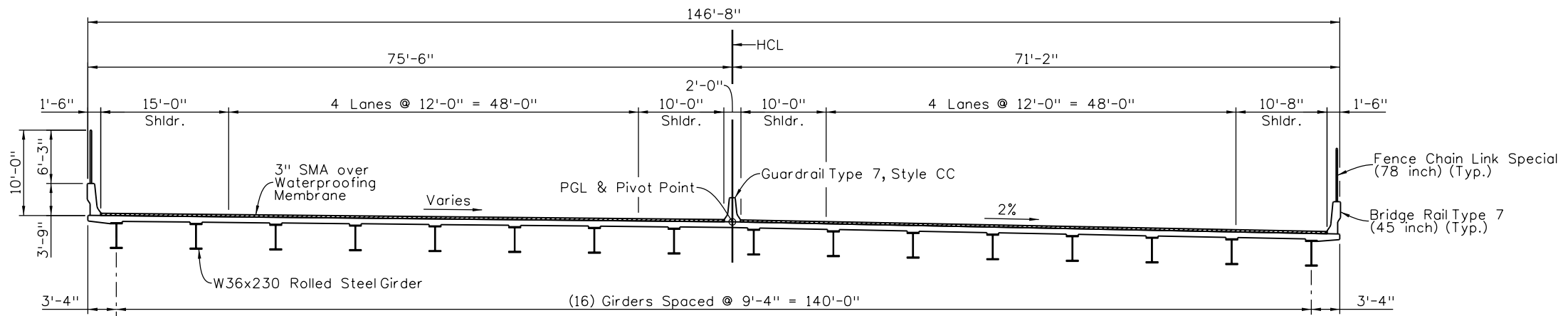
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 Staff Bridge Branch - Unit 022X Unit Leader Initials



Sheet Revisions

Date:	Comments	Init.

Colorado Department of Transportation



Region 6

8833 South Wadsworth Court
 Littleton, CO 80128
 Phone: 303-972-9112 FAX: 303-972-9114

MP

As Constructed

No Revisions:

Revised:

Void:

**US 6 OVER BNSF
 TYPICAL SECTION
 STEEL ALTERNATE**

Designer:	B. Allen	Structure Numbers	F-16-YJ
Detailer:	B. Allen	Subset Sheets:	B3 of BX

Project No./Code

FBR 0062-026

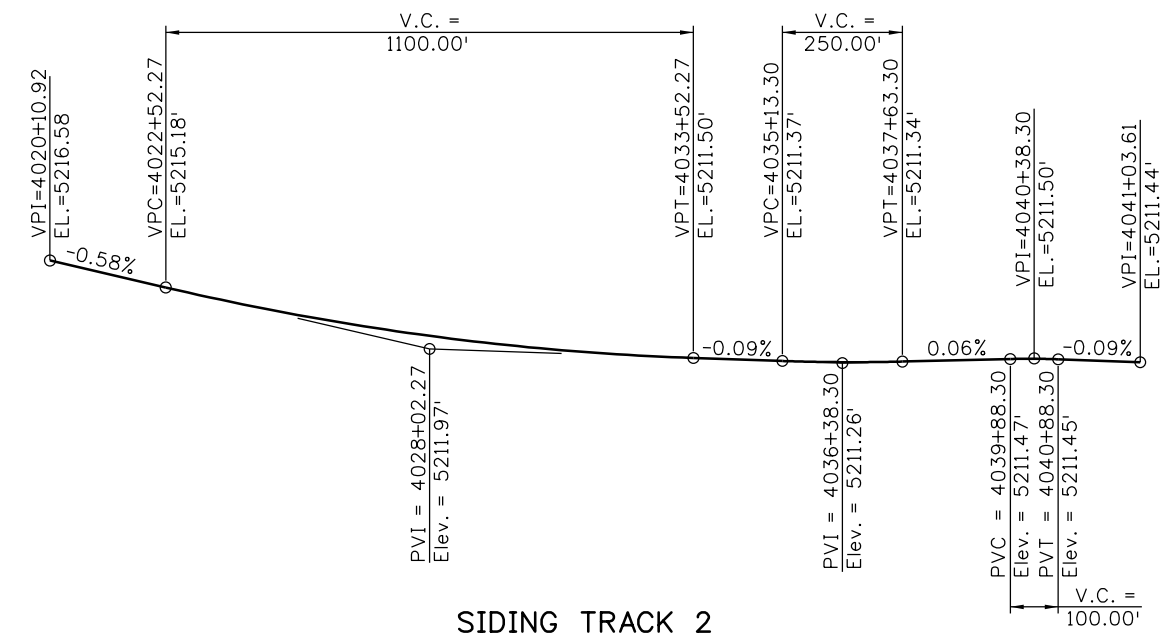
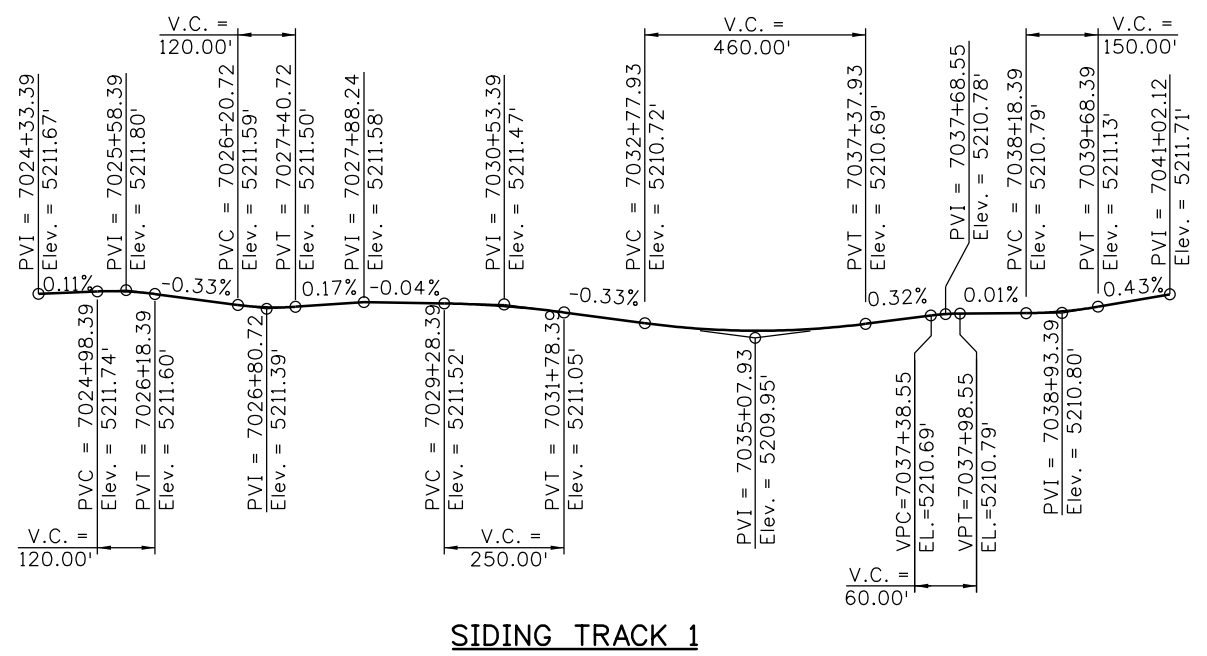
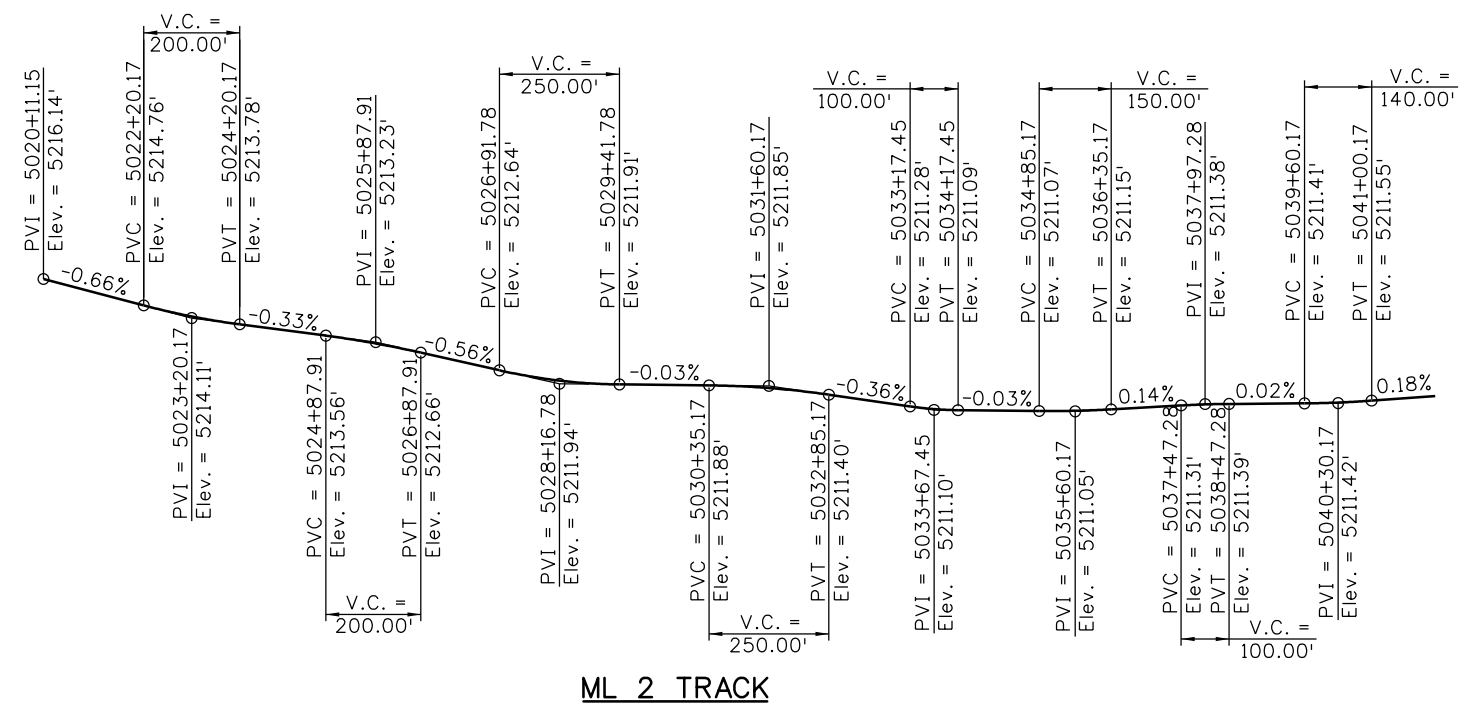
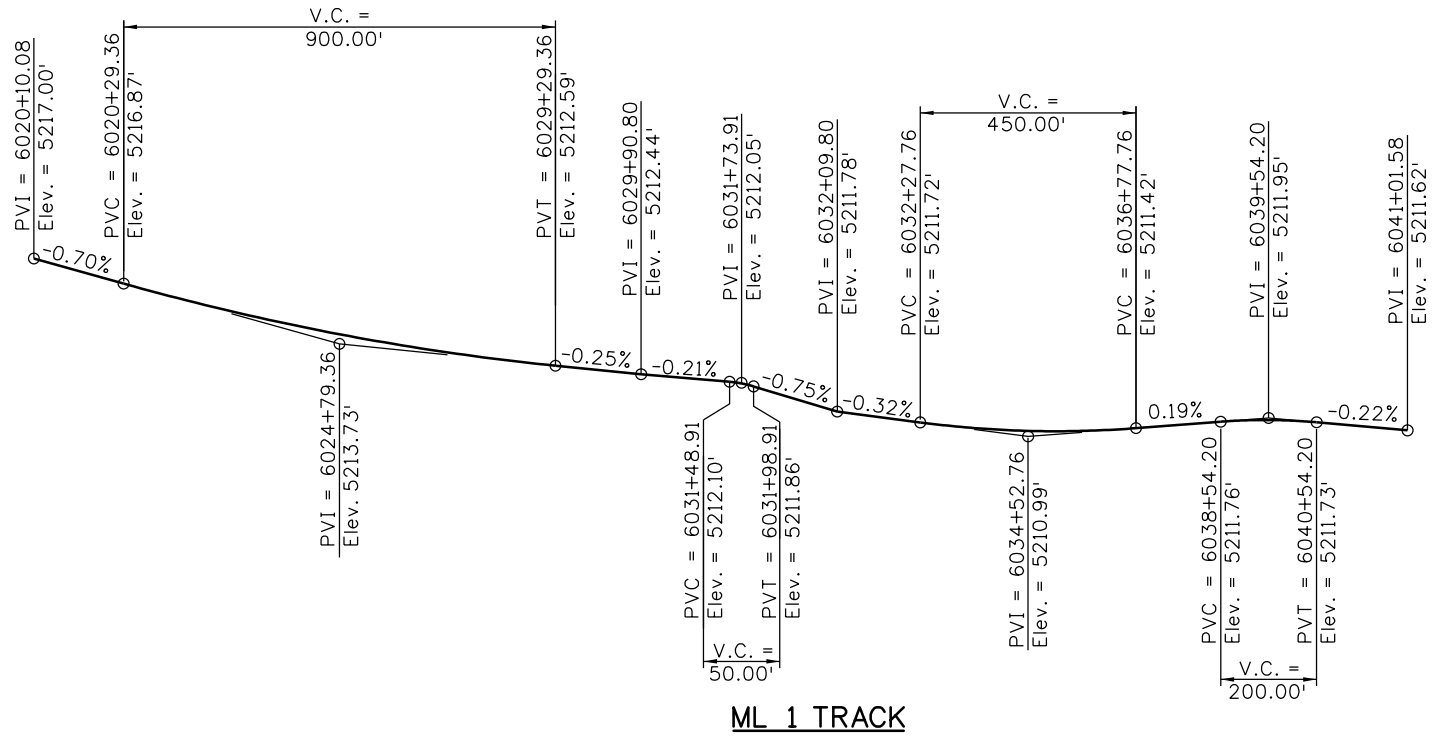
18202

Sheet Number 29

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Design		Detail		Quantities	
INITIAL	DATE	INITIAL	DATE	INITIAL	DATE
Designed By		Detailed By		Quantities By	
Checked By		Checked By		Checked By	



FIR
3/30/2012

Print Date: 3/29/2012
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 Staff Bridge Branch - Unit 022X Unit Leader Initials

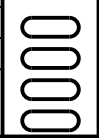
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Date:	Comments	Init.	

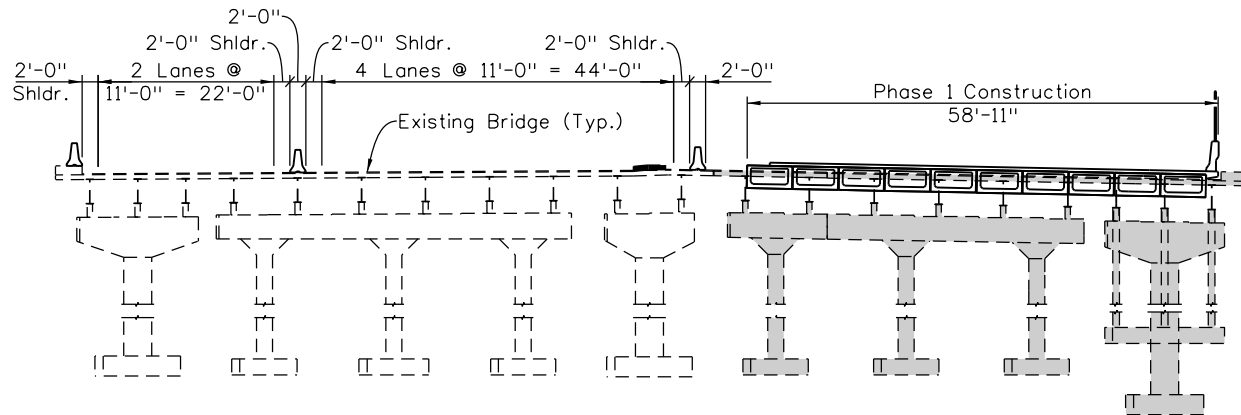
Colorado Department of Transportation

 8833 South Wadsworth Court
 Littleton, CO 80128
 Phone: 303-972-9112 FAX: 303-972-9114
Region 6 **MP**

As Constructed
 No Revisions:
 Revised:
 Void:

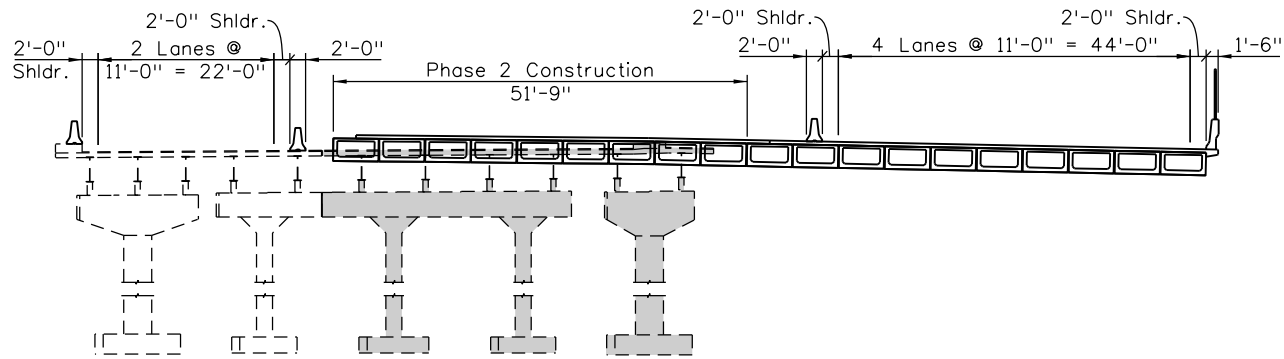
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 Designer: B. Allen
 Detailer: D. Anderson
 Sheet Subset: BRIDGE
 Structure Numbers: F-16-YJ
 Subset Sheets: B4 of BX

Project No./Code
 FBR 0062-026
 18202
 Sheet Number 30

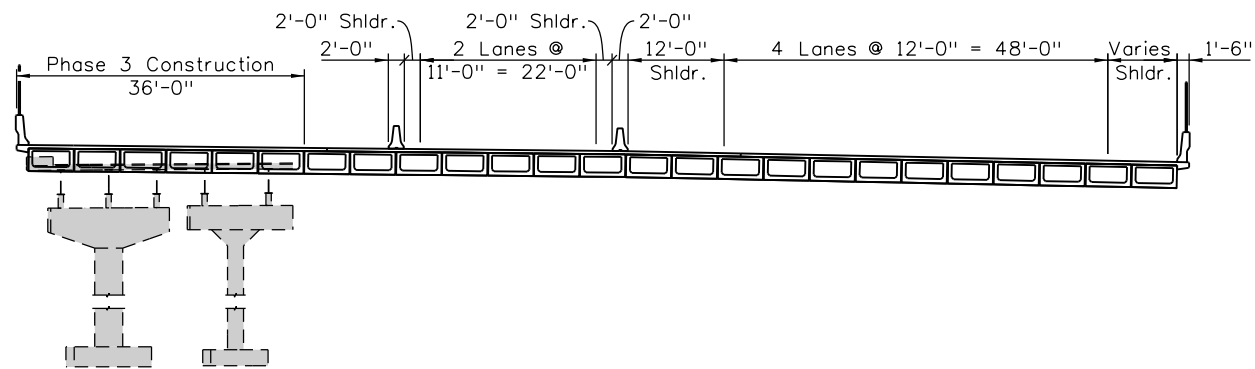




PHASE 1 CONSTRUCTION



PHASE 2 CONSTRUCTION



PHASE 3 CONSTRUCTION

Indicates removal during phase

FIR
3/30/2012

Design		Detail		Quantities	
INITIAL	DATE	INITIAL	DATE	INITIAL	DATE
Desig. By	JAR	DRA	JAR	Quantities By	JAR
Checked By	BJA	Checked By	BJA	Checked By	BJA
	12/11		12/11		12/11

Print Date: 3/29/2012
 File Name: 18202BRDG_PhaseConstr_01.dgn
 Horiz. Scale: 1:12 Vert. Scale: As Noted
 Staff Bridge Branch - Unit 022X Unit Leader Initials



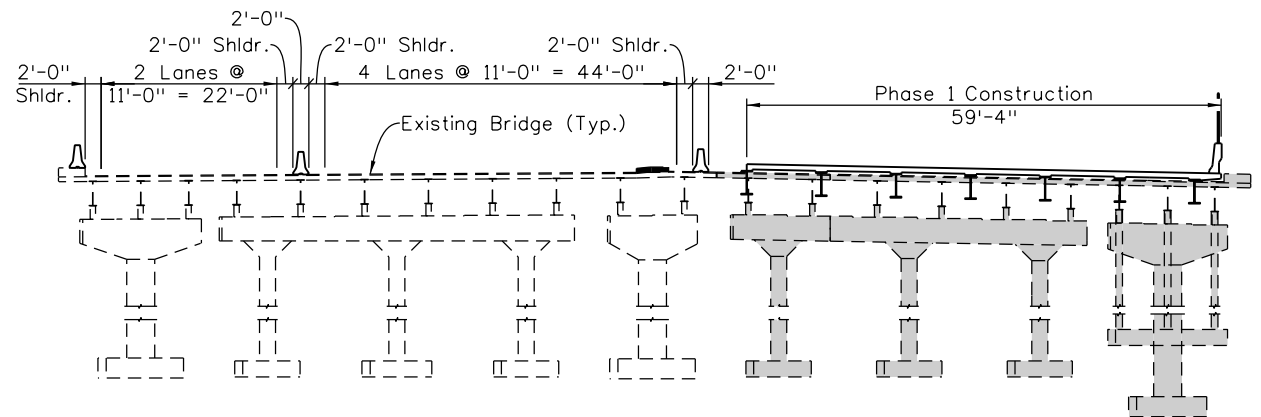
Sheet Revisions		
Date:	Comments	Init.

Colorado Department of Transportation
 8833 South Wadsworth Court
 Littleton, CO 80128
 Phone: 303-972-9112 FAX: 303-972-9114
 Region 6 MP

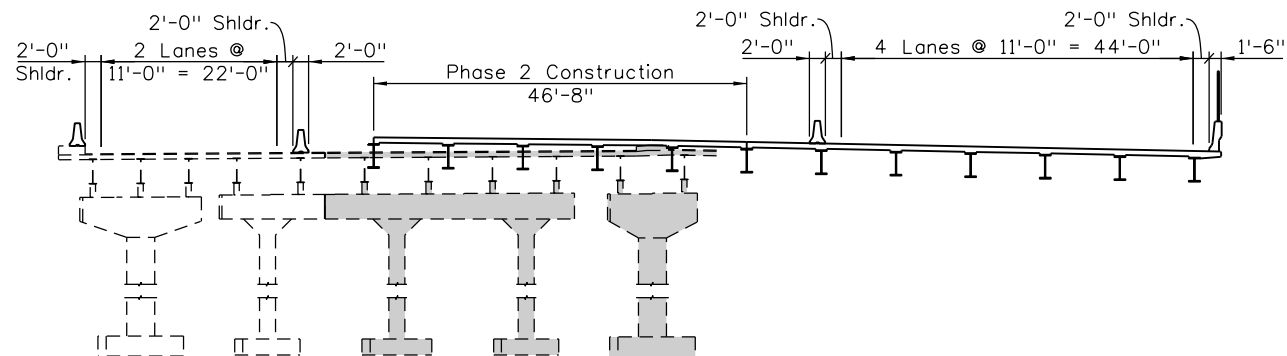
As Constructed
 No Revisions:
 Revised:
 Void:

US 6 OVER BNSF
 CONSTRUCTION PHASING
 CONCRETE ALTERNATE
 Designer: B. Allen
 Detailer: D. Anderson
 Sheet Subset: BRIDGE
 Structure Numbers: F-16-YJ
 Subset Sheets: B5 of BX

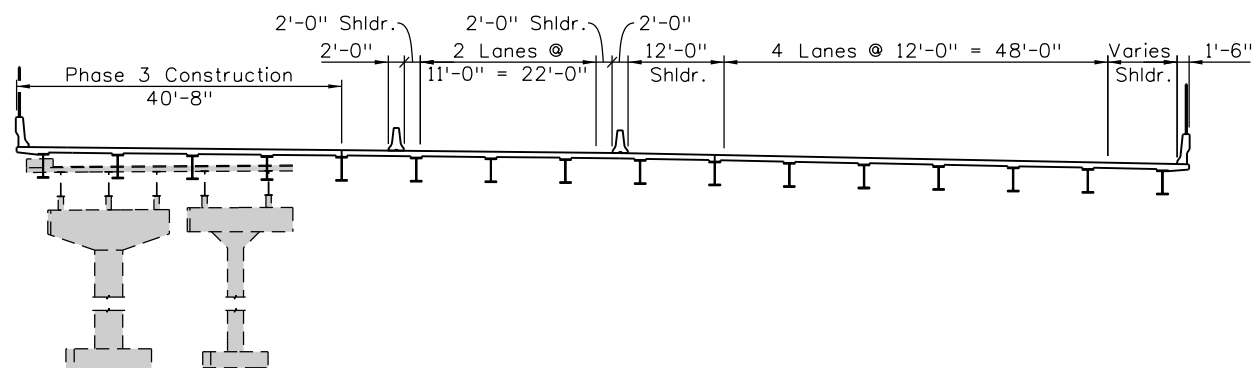
Project No./Code
 FBR 0062-026
 18202
 Sheet Number 31



PHASE 1 CONSTRUCTION



PHASE 2 CONSTRUCTION



PHASE 3 CONSTRUCTION

Indicates removal during phase

FIR
3/30/2012

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INITIAL	DATE	INITIAL	DATE	INITIAL	DATE
Designed By JAR	12/11	Detailed By BJA	12/11	Quantities By JAR	12/11
Checked By		Checked By		Checked By BJA	12/11

Print Date: 3/29/2012	
File Name: 18202BRDG_PhaseConstr_02.dgn	
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Staff Bridge Branch - Unit 022X Unit Leader Initials	

Sheet Revisions		
Date:	Comments	Init.

Colorado Department of Transportation

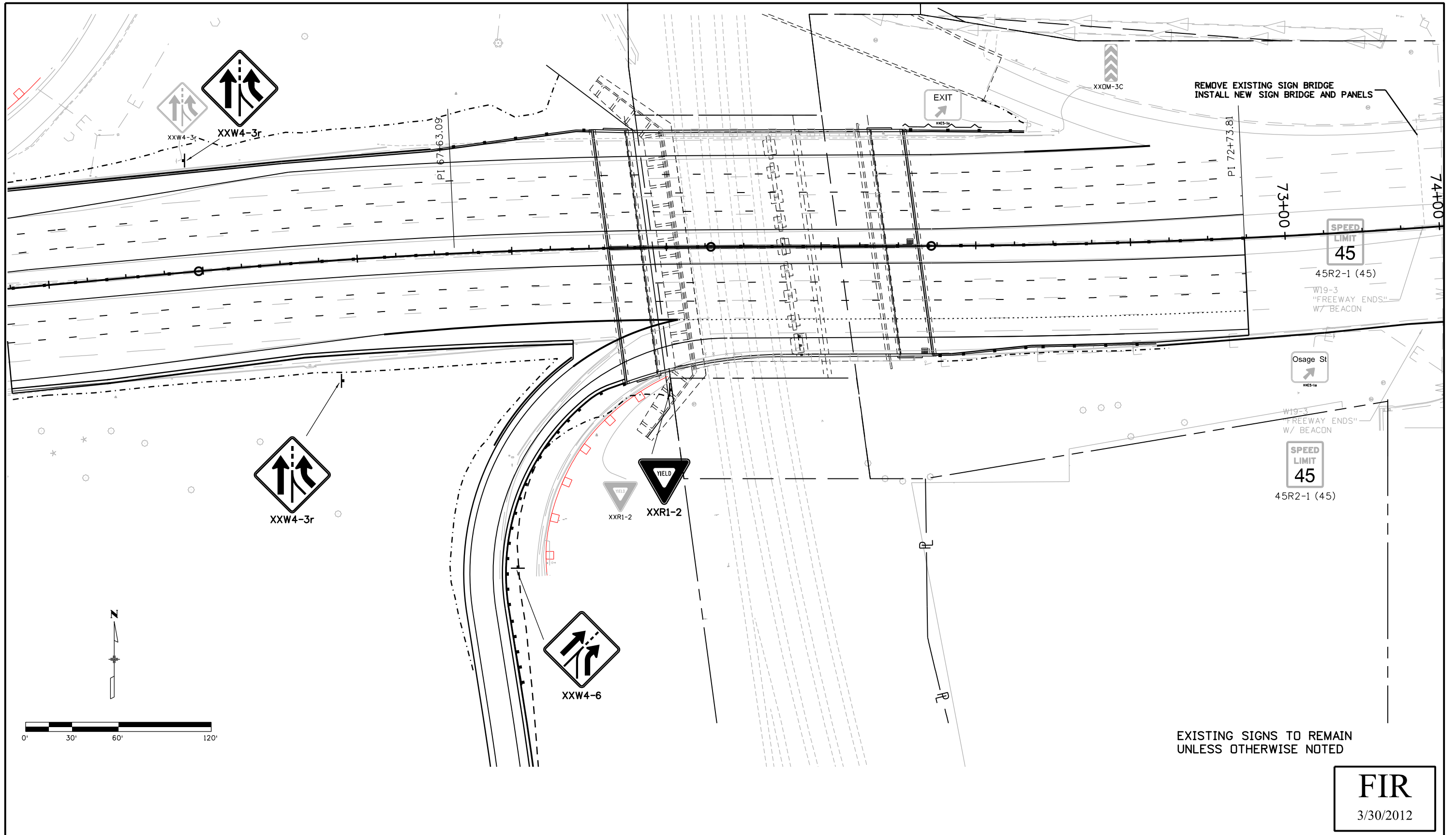
8833 South Wadsworth Court
Littleton, CO 80128
Phone: 303-972-9112 FAX: 303-972-9114

Region 6 MP

As Constructed
No Revisions:
Revised:
Void:

US 6 OVER BNSF CONSTRUCTION PHASING STEEL ALTERNATE			
Designer:	B. Allen	Structure Numbers	F-16-YJ
Detailer:	D. Anderson	Subset Sheets:	B6 of BX
Sheet Subset:	BRIDGE		


Project No./Code
FBR 0062-026
18202
Sheet Number 32



FIR
3/30/2012

Print Date: 3/30/2012
 File Name: 18202_Single_Sign.dgn
 Horiz. Scale: 1:60 Vert. Scale: As Noted
 Unit Information Unit Leader Initials

Sheet Revisions		
Date:	Comments	Init.

Colorado Department of Transportation

 8833 South Wadsworth Court
 Littleton, CO 80128
 Phone: 303-972-9112 FAX: 303-972-9114
 Region 6 MP

As Constructed
 No Revisions:
 Revised:
 Void:

SIGNING PLAN
US 6 OVER BNSF

Designer:	JBK	Structure Numbers	
Detailer:	JBK		
Sheet Subset:	SIGN	Subset Sheets: 1	of 1

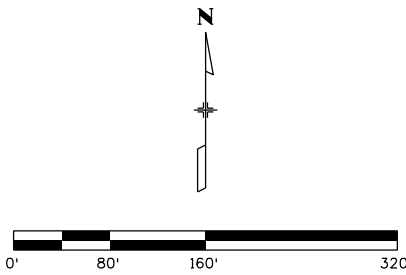
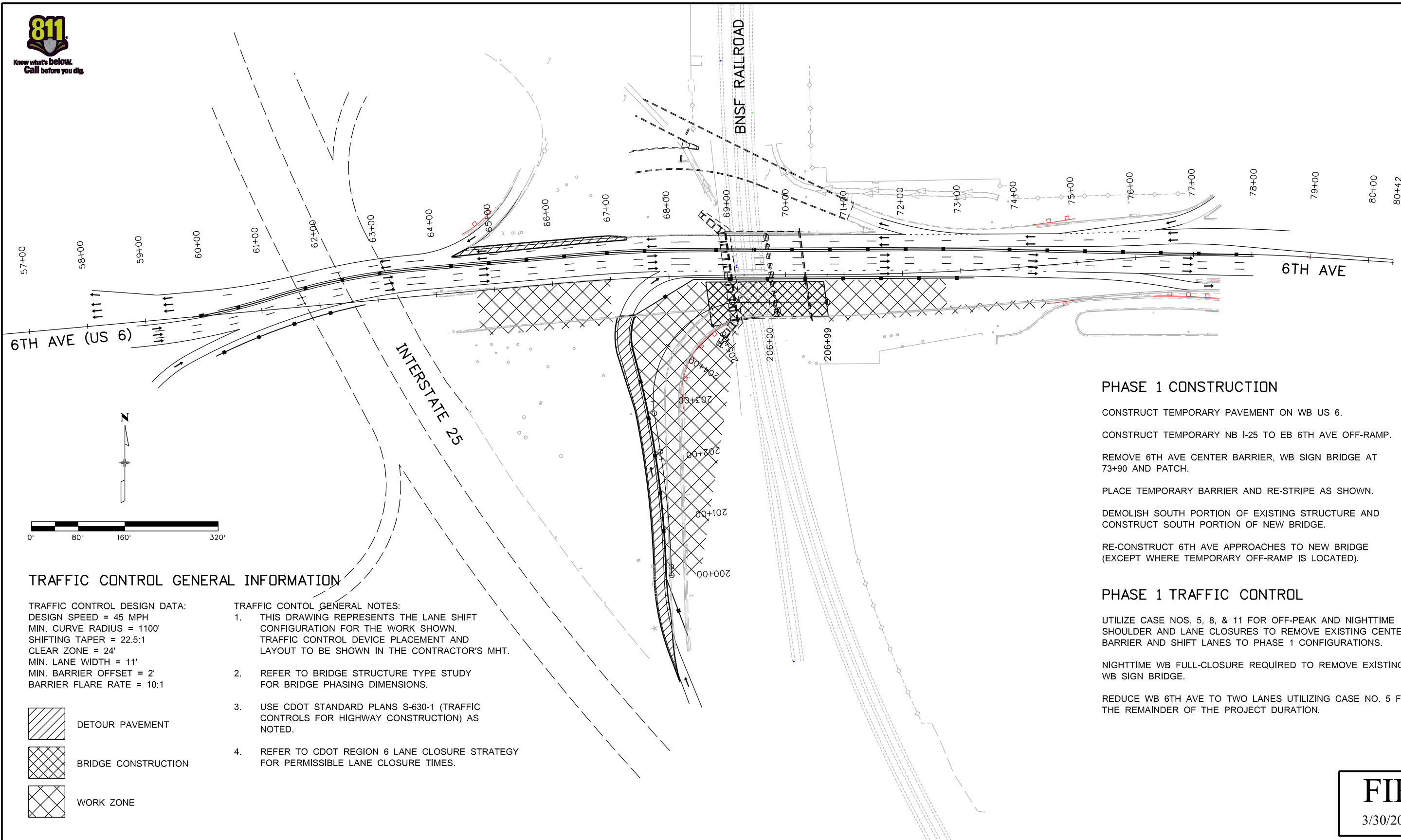
Project No./Code
 FBR 0062-026
 18202
 Sheet Number 33

WILSON & COMPANY
 Engineers & Architects
 999 18TH STREET, SUITE 2600
 DENVER, CO 80202
 PHONE: 303-297-2976
 FAX: 303-297-2693

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




Know what's below.
Call before you dig.



TRAFFIC CONTROL GENERAL INFORMATION

TRAFFIC CONTROL DESIGN DATA:
DESIGN SPEED = 45 MPH
MIN. CURVE RADIUS = 1100'
SHIFTING TAPER = 22.5:1
CLEAR ZONE = 24'
MIN. LANE WIDTH = 11'
MIN. BARRIER OFFSET = 2'
BARRIER FLARE RATE = 10:1

-  DETOUR PAVEMENT
-  BRIDGE CONSTRUCTION
-  WORK ZONE

- TRAFFIC CONTROL GENERAL NOTES:
- THIS DRAWING REPRESENTS THE LANE SHIFT CONFIGURATION FOR THE WORK SHOWN. TRAFFIC CONTROL DEVICE PLACEMENT AND LAYOUT TO BE SHOWN IN THE CONTRACTOR'S MHT.
 - REFER TO BRIDGE STRUCTURE TYPE STUDY FOR BRIDGE PHASING DIMENSIONS.
 - USE CDOT STANDARD PLANS S-630-1 (TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION) AS NOTED.
 - REFER TO CDOT REGION 6 LANE CLOSURE STRATEGY FOR PERMISSIBLE LANE CLOSURE TIMES.

PHASE 1 CONSTRUCTION

- CONSTRUCT TEMPORARY PAVEMENT ON WB US 6.
- CONSTRUCT TEMPORARY NB I-25 TO EB 6TH AVE OFF-RAMP.
- REMOVE 6TH AVE CENTER BARRIER, WB SIGN BRIDGE AT 73+90 AND PATCH.
- PLACE TEMPORARY BARRIER AND RE-STRIPES AS SHOWN.
- DEMOLISH SOUTH PORTION OF EXISTING STRUCTURE AND CONSTRUCT SOUTH PORTION OF NEW BRIDGE.
- RE-CONSTRUCT 6TH AVE APPROACHES TO NEW BRIDGE (EXCEPT WHERE TEMPORARY OFF-RAMP IS LOCATED).

PHASE 1 TRAFFIC CONTROL

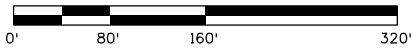
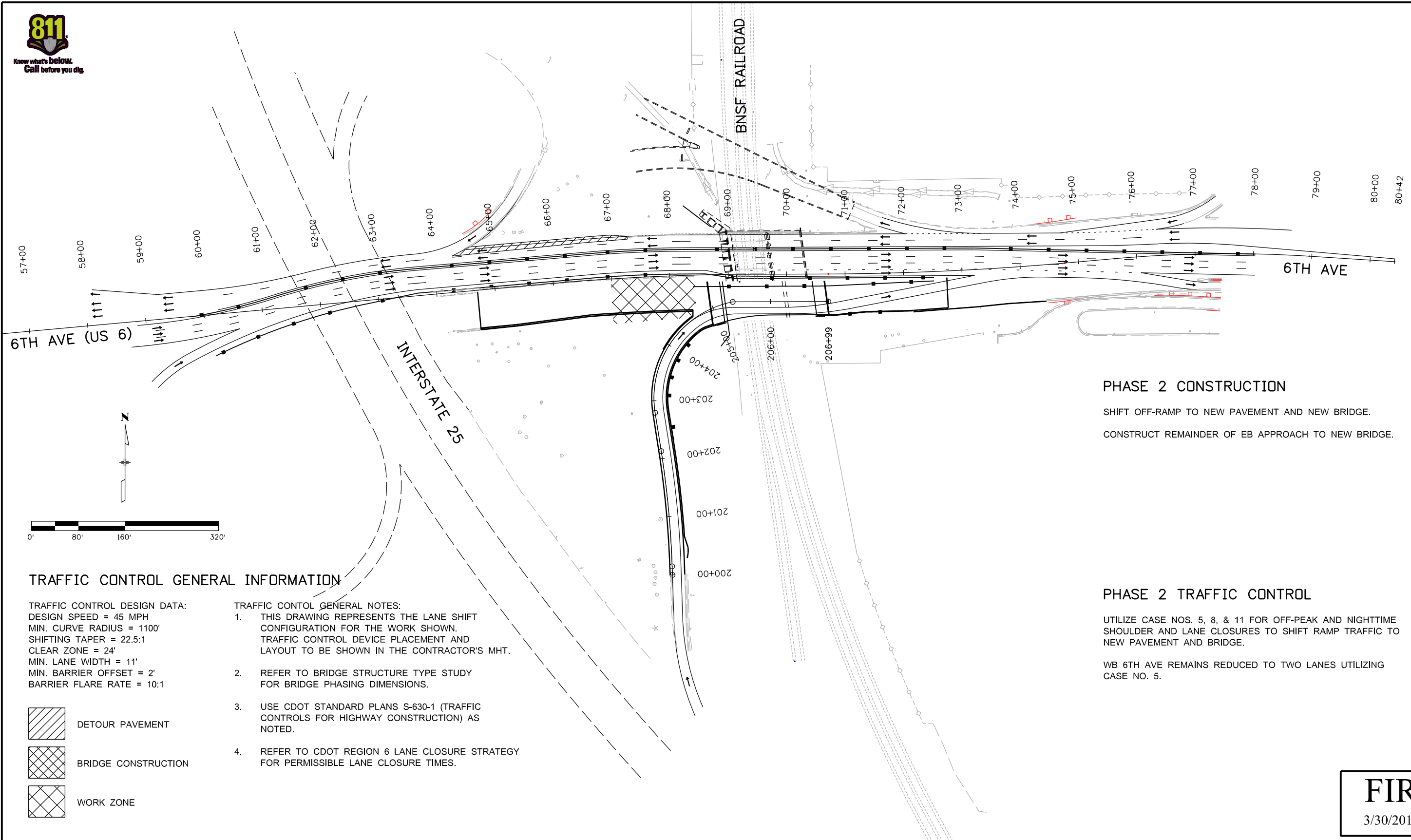
- UTILIZE CASE NOS. 5, 8, & 11 FOR OFF-PEAK AND NIGHTTIME SHOULDER AND LANE CLOSURES TO REMOVE EXISTING CENTER BARRIER AND SHIFT LANES TO PHASE 1 CONFIGURATIONS.
- NIGHTTIME WB FULL-CLOSURE REQUIRED TO REMOVE EXISTING WB SIGN BRIDGE.
- REDUCE WB 6TH AVE TO TWO LANES UTILIZING CASE NO. 5 FOR THE REMAINDER OF THE PROJECT DURATION.

FIR
3/30/2012

Print Date: 3/30/2012	Sheet Revisions			Colorado Department of Transportation	As Constructed	US 6 TRAFFIC CONTROL PLAN PHASE 1			Project No./Code	
File Name: 18202_TCP_01.dgn	Date:	Comments	Init.						FBR 0062-026	
Horiz. Scale: 1:160	Unit Information				Revised:	Designer: MAK		Structure Numbers	18202	
Vert. Scale: As Noted	Unit Leader Initials					8833 South Wadsworth Court Littleton, CO 80128 Phone: 303-972-9112 FAX: 303-972-9114			Detailer: MAK	
				Region 6	Void:	Sheet Subset: PHASING		Subset Sheets: 1 of 4		34






Know what's below. Call before you dig.



TRAFFIC CONTROL GENERAL INFORMATION

TRAFFIC CONTROL DESIGN DATA:
DESIGN SPEED = 45 MPH
MIN. CURVE RADIUS = 1100'
SHIFTING TAPER = 22.5:1
CLEAR ZONE = 24'
MIN. LANE WIDTH = 11'
MIN. BARRIER OFFSET = 2'
BARRIER FLARE RATE = 10:1

- TRAFFIC CONTROL GENERAL NOTES:
1. THIS DRAWING REPRESENTS THE LANE SHIFT CONFIGURATION FOR THE WORK SHOWN. TRAFFIC CONTROL DEVICE PLACEMENT AND LAYOUT TO BE SHOWN IN THE CONTRACTOR'S MHT.
 2. REFER TO BRIDGE STRUCTURE TYPE STUDY FOR BRIDGE PHASING DIMENSIONS.
 3. USE CDOT STANDARD PLANS S-630-1 (TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION) AS NOTED.
 4. REFER TO CDOT REGION 6 LANE CLOSURE STRATEGY FOR PERMISSIBLE LANE CLOSURE TIMES.

-  DETOUR PAVEMENT
-  BRIDGE CONSTRUCTION
-  WORK ZONE

PHASE 2 CONSTRUCTION

SHIFT OFF-RAMP TO NEW PAVEMENT AND NEW BRIDGE.
CONSTRUCT REMAINDER OF EB APPROACH TO NEW BRIDGE.


PHASE 2 TRAFFIC CONTROL

UTILIZE CASE NOS. 5, 8, & 11 FOR OFF-PEAK AND NIGHTTIME SHOULDER AND LANE CLOSURES TO SHIFT RAMP TRAFFIC TO NEW PAVEMENT AND BRIDGE.
WB 6TH AVE REMAINS REDUCED TO TWO LANES UTILIZING CASE NO. 5.

FIR
3/30/2012

Print Date: 3/30/2012
File Name: 18202_TCP_02.dgn
Horiz. Scale: 1:160 Vert. Scale: As Noted
Unit Information Unit Leader Initials
 999 18TH STREET, SUITE 2600 DENVER, CO 80202 PHONE: 303-297-2976 FAX: 303-297-2693

Sheet Revisions		
Date:	Comments	Init.

Colorado Department of Transportation

 8833 South Wadsworth Court
 Littleton, CO 80128
 Phone: 303-972-9112 FAX: 303-972-9114
Region 6 **MP**

As Constructed
No Revisions:
Revised:
Void:

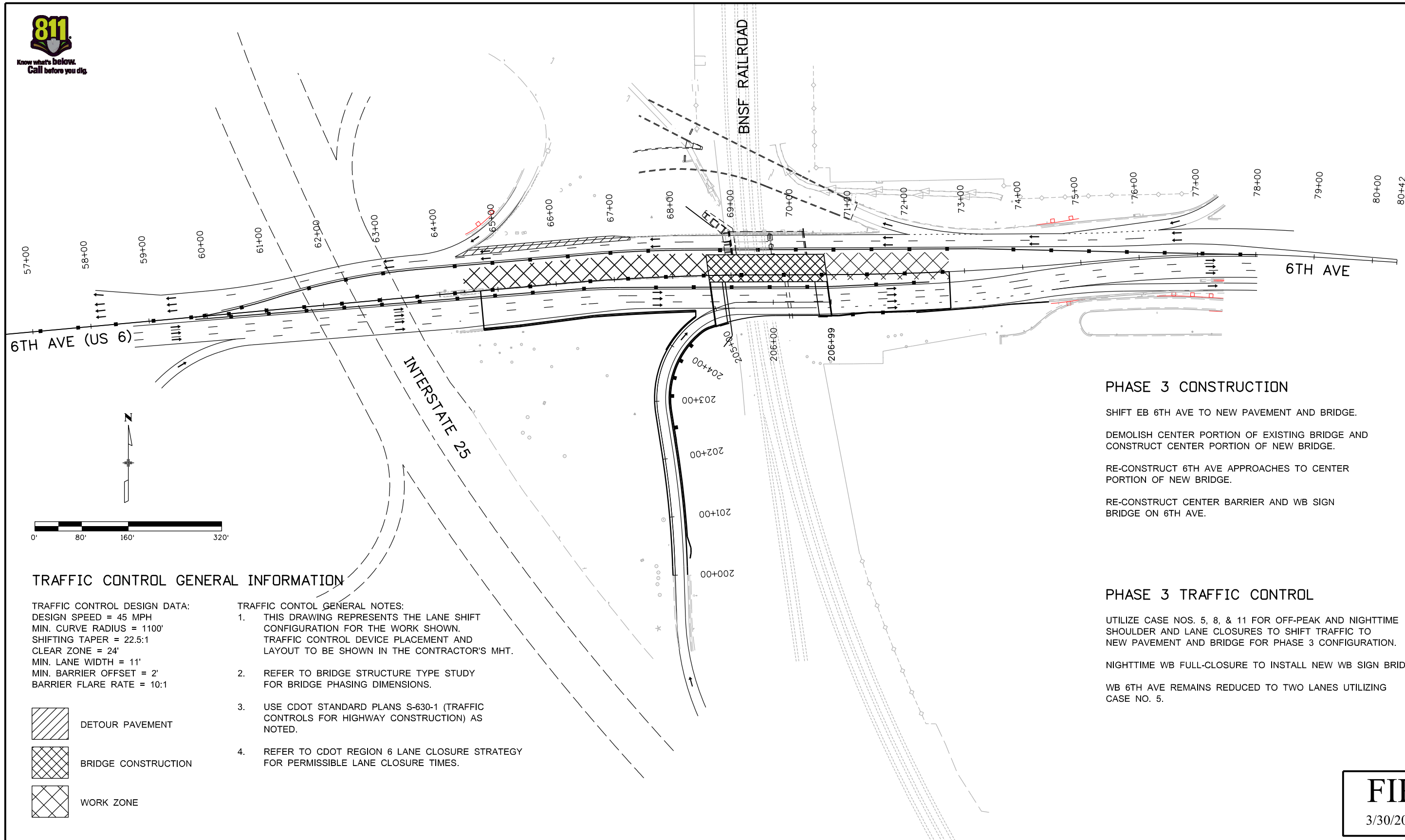
US 6 TRAFFIC CONTROL PLAN PHASE 2			
Designer:	MAK	Structure	
Detailer:	MAK	Numbers	
Sheet Subset:	PHASING	Subset Sheets:	2 of 4

Project No./Code
FBR 0062-026
18202
Sheet Number 35

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Know what's below.
Call before you dig.



PHASE 3 CONSTRUCTION

SHIFT EB 6TH AVE TO NEW PAVEMENT AND BRIDGE.

DEMOLISH CENTER PORTION OF EXISTING BRIDGE AND CONSTRUCT CENTER PORTION OF NEW BRIDGE.

RE-CONSTRUCT 6TH AVE APPROACHES TO CENTER PORTION OF NEW BRIDGE.

RE-CONSTRUCT CENTER BARRIER AND WB SIGN BRIDGE ON 6TH AVE.

PHASE 3 TRAFFIC CONTROL

UTILIZE CASE NOS. 5, 8, & 11 FOR OFF-PEAK AND NIGHTTIME SHOULDER AND LANE CLOSURES TO SHIFT TRAFFIC TO NEW PAVEMENT AND BRIDGE FOR PHASE 3 CONFIGURATION.

NIGHTTIME WB FULL-CLOSURE TO INSTALL NEW WB SIGN BRIDGE.




WB 6TH AVE REMAINS REDUCED TO TWO LANES UTILIZING CASE NO. 5.

TRAFFIC CONTROL GENERAL INFORMATION

TRAFFIC CONTROL DESIGN DATA:
DESIGN SPEED = 45 MPH
MIN. CURVE RADIUS = 1100'
SHIFTING TAPER = 22.5:1
CLEAR ZONE = 24'
MIN. LANE WIDTH = 11'
MIN. BARRIER OFFSET = 2'
BARRIER FLARE RATE = 10:1

TRAFFIC CONTROL GENERAL NOTES:

1. THIS DRAWING REPRESENTS THE LANE SHIFT CONFIGURATION FOR THE WORK SHOWN. TRAFFIC CONTROL DEVICE PLACEMENT AND LAYOUT TO BE SHOWN IN THE CONTRACTOR'S MHT.
2. REFER TO BRIDGE STRUCTURE TYPE STUDY FOR BRIDGE PHASING DIMENSIONS.
3. USE CDOT STANDARD PLANS S-630-1 (TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION) AS NOTED.
4. REFER TO CDOT REGION 6 LANE CLOSURE STRATEGY FOR PERMISSIBLE LANE CLOSURE TIMES.

-  DETOUR PAVEMENT
-  BRIDGE CONSTRUCTION
-  WORK ZONE

FIR

3/30/2012

Print Date: 3/30/2012

File Name: 18202_TCP_03.dgn

Horiz. Scale: 1:160

Vert. Scale: As Noted

Unit Information

Unit Leader Initials

WILSON & COMPANY
999 18TH STREET, SUITE 2600
DENVER, CO 80202
PHONE: 303-297-2976
FAX: 303-297-2693

Sheet Revisions

Date:	Comments	Init.

Colorado Department of Transportation



8833 South Wadsworth Court
Littleton, CO 80128
Phone: 303-972-9112 FAX: 303-972-9114

Region 6

MP

As Constructed

No Revisions:

Revised:

Void:

US 6 TRAFFIC CONTROL PLAN

PHASE 3

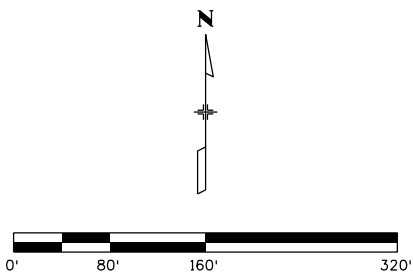
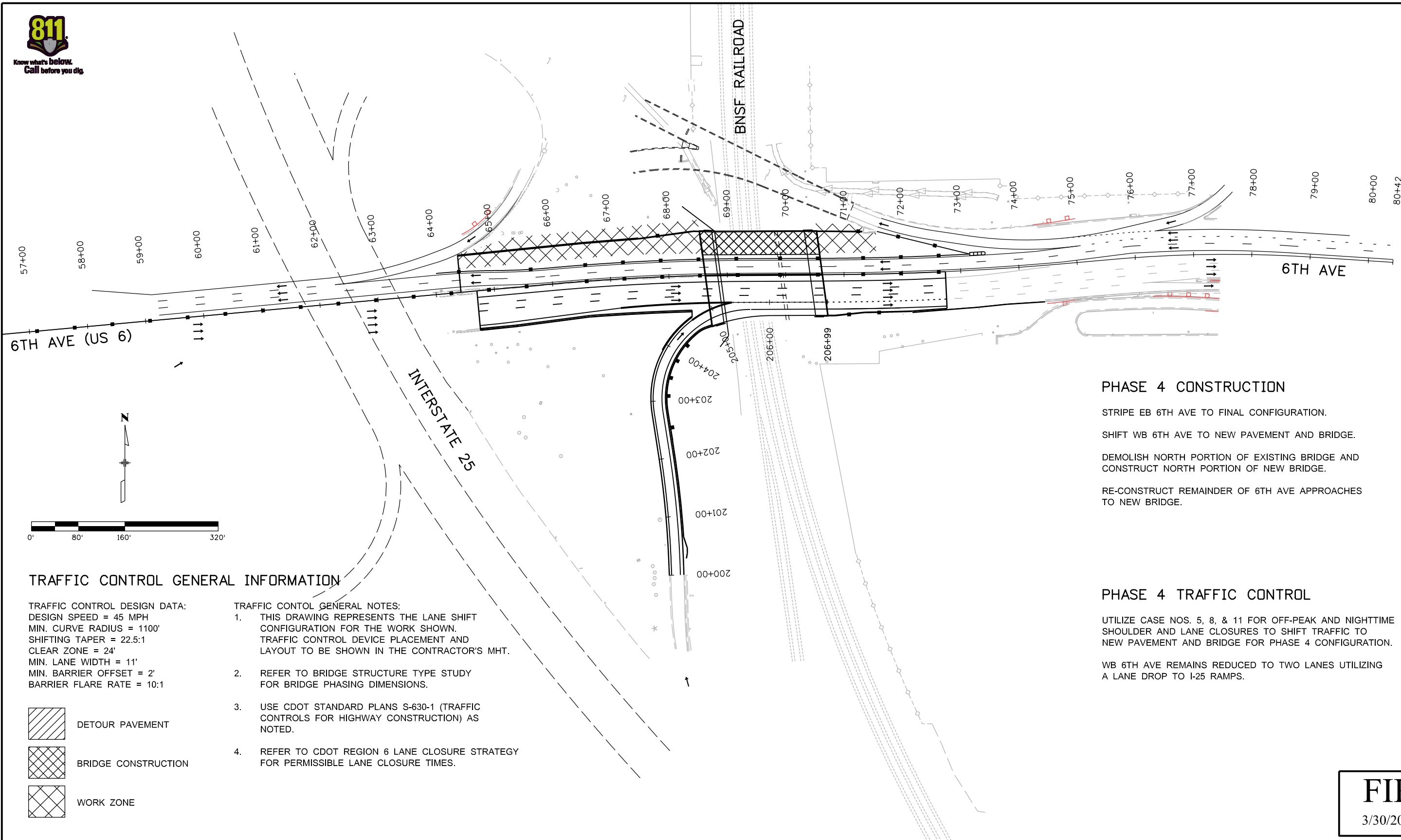
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Detailer:	MAK		
Sheet Subset:	PHASING	Subset Sheets:	3 of 4

Project No./Code

FBR 0062-026

18202

Sheet Number 36



TRAFFIC CONTROL GENERAL INFORMATION

TRAFFIC CONTROL DESIGN DATA:
 DESIGN SPEED = 45 MPH
 MIN. CURVE RADIUS = 1100'
 SHIFTING TAPER = 22.5:1
 CLEAR ZONE = 24'
 MIN. LANE WIDTH = 11'
 MIN. BARRIER OFFSET = 2'
 BARRIER FLARE RATE = 10:1

- DETOUR PAVEMENT
- BRIDGE CONSTRUCTION
- WORK ZONE

- TRAFFIC CONTROL GENERAL NOTES:
1. THIS DRAWING REPRESENTS THE LANE SHIFT CONFIGURATION FOR THE WORK SHOWN. TRAFFIC CONTROL DEVICE PLACEMENT AND LAYOUT TO BE SHOWN IN THE CONTRACTOR'S MHT.
 2. REFER TO BRIDGE STRUCTURE TYPE STUDY FOR BRIDGE PHASING DIMENSIONS.
 3. USE CDOT STANDARD PLANS S-630-1 (TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION) AS NOTED.
 4. REFER TO CDOT REGION 6 LANE CLOSURE STRATEGY FOR PERMISSIBLE LANE CLOSURE TIMES.

PHASE 4 CONSTRUCTION

- STRIPE EB 6TH AVE TO FINAL CONFIGURATION.
- SHIFT WB 6TH AVE TO NEW PAVEMENT AND BRIDGE.
- DEMOLISH NORTH PORTION OF EXISTING BRIDGE AND CONSTRUCT NORTH PORTION OF NEW BRIDGE.
- RE-CONSTRUCT REMAINDER OF 6TH AVE APPROACHES TO NEW BRIDGE.

PHASE 4 TRAFFIC CONTROL

- UTILIZE CASE NOS. 5, 8, & 11 FOR OFF-PEAK AND NIGHTTIME SHOULDER AND LANE CLOSURES TO SHIFT TRAFFIC TO NEW PAVEMENT AND BRIDGE FOR PHASE 4 CONFIGURATION.
- WB 6TH AVE REMAINS REDUCED TO TWO LANES UTILIZING A LANE DROP TO I-25 RAMPS.

FIR
3/30/2012

Print Date: 3/30/2012	Sheet Revisions	Colorado Department of Transportation	As Constructed	US 6 TRAFFIC CONTROL PLAN PHASE 4		Project No./Code
File Name: 18202_TCP_04.dgn	Date: Comments Init.	8833 South Wadsworth Court Littleton, CO 80128 Phone: 303-972-9112 FAX: 303-972-9114 Region 6 MP	No Revisions:	Designer: MAK Structure Detailer: MAK Numbers		FBR 0062-026
Horiz. Scale: 1:160 Vert. Scale: As Noted			Revised:			18202
Unit Information Unit Leader Initials			Void:	Sheet Subset: PHASING Subset Sheets: 4 of 4	Sheet Number 37	



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Sheet Revisions		
Date	Description	Initials

Sheet Revisions		
Date	Description	Initials

Sheet Revisions		
Date	Description	Initials



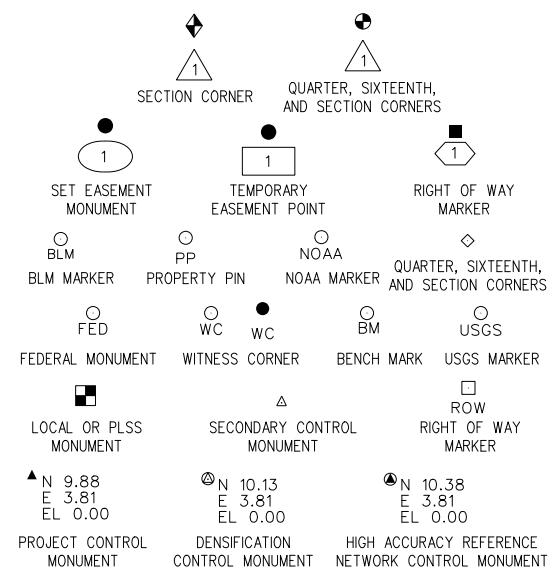
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Project Number: .			
Project Location: 6th AVEBNU AT BNSF RAILROAD			
Project Code:	Last Mod. Date:	Subset	Sheet No.
.	02-24-2012	4.01 of 4.03	4.01

DEPARTMENT OF TRANSPORTATION STATE OF COLORADO

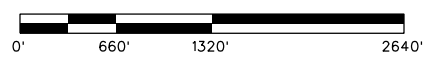
SHEET NO.	INDEX OF SHEETS
4.01	(1) Title Sheet
4.02	(1) Monument Coordinate Tables
4.03-4.04	(2) Plan Sheet
	(4) Total Sheets

LAND SURVEY CONTROL DIAGRAM

6th Avenue at BNSF Railroad
Sections 4 and 9
Township 4 South, Range 68 West
of the 6th Principal Meridian
City and County of Denver



PROJECT LOCATION MAP



Basis of Bearings: Bearings used in the calculations of coordinates are based on a grid bearing of S80°59'51"W from NGS Control Point "RUBY" a standard NGS Disk to NGS Control Point "TRANSPORTATION" a standard NGS Disk. The survey data was obtained from a Global Positioning System (GPS) survey based on the Colorado High Accuracy Reference Network (CHARN).

Basis of Elevations: Project elevations are based on Benchmark K 394, PID: KK1277, a stainless steel rod, with a NAVD 88 elevation of 5242.47 ft. K 394 is a first order class II benchmark.

COORDINATE DATUM: Project coordinates are modified Colorado State Plane Cental Zone NAD '83/(92) coordinates. The combined elevation/scale factor used to modify the coordinates from state plane to project coordinates is 1.000251977.

General Notes:

1. This Land Survey Control Diagram is not a boundary survey of the adjoining property and is prepared for Colorado department of Transportation purposes only.
2. Title policy, title commitment, and title research are not part of this survey, therefore easements, rights, and restrictions of record were not researched and are not shown on this diagram. The verification of the physical evidence with relation to easements, rights of ways, property boundaries, and restrictions, as described in the instruments of record, were not included in this land survey control diagram.
3. This plan set is subject to change and may not be the most current set. It is the user's responsibility to verify with CDOT that this set is the most current. The information contained on the attached drawing is not valid unless this copy bears an original signature of the Professional Land Surveyor hereon named.
4. Refer to the M-629-1 Survey Monuments of the Standard Plans dated July, 2006 found in The Colorado Department of Transportation, M & S Standards for typical survey monument descriptions.

NOTICE: According to Colorado law you must commence any legal action based upon any defect in this survey within three years after you first discover such defect. In no event may any action based upon any defect in this survey be commenced more than ten years from the date of the certification shown hereon.

Note: For a complete listing of symbology used within this set of plans, please refer to the M-100-1 Standard Symbols of the Colorado Department of Transportation M&S Standards Publication dated July 2006. Existing features are shown as screened weight (gray scale). Proposed or new features are shown as full weight without screening.

SURVEYOR STATEMENT (LAND SURVEY CONTROL DIAGRAM)	
I, _____, a professional land surveyor licensed in the State of Colorado, do hereby state to the Colorado Department of Transportation this Land Survey Control Diagram was prepared and the field survey it represents was performed under my responsible charge and, based upon my knowledge, information and belief is in accordance with applicable standards of practice defined by Colorado Department of Transportation publications. This statement is not a guaranty or warranty, either expressed or implied.	
PLS No. _____	

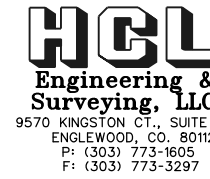
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Sheet Revisions		
Date	Description	Initials

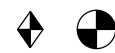
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Date	Description	Initials

Sheet Revisions		
Date	Description	Initials



9570 KINGSTON CT., SUITE 310
ENGLEWOOD, CO. 80112
P: (303) 773-1605
F: (303) 773-3297

Land Survey Control Diagram Monument Coordinate Tables			
Project Number: .			
Project Location: 6th AVENUE AT BNSF RAILROAD			
Project Code:	Last Mod. Date	Subset	Sheet No.
18023	02-24-2012	4.01 to 4.03	4.02



FOUND ALIQUOT MONUMENT COORDINATE TABLE			
Point No.	Northing(ft)	Easting(ft)	Description
500A	690052.32	955441.71	FND 2-1/2" ALUM CAP, WC (186.42') TO W 1/4 CORNER, SEC 4, T4S, R68W, 6th PM
500B	690312.17	955439.34	FND 2-1/2" ALUM CAP, WC (181.59') TO S 1/4 CORNER, SEC 4, T4S, R68W, 6th PM
503	684922.20	959315.94	FND 2-1/2" ALUM CAP IN RANGE BOX, E 1/16 CORNER, SEC 9, T4S, R68W, 6th PM
504A	687621.69	957924.22	FND 3-1/4" ALUM CAP, WC (81.36') TO S 1/4 CORNER, SEC 4, T4S, R68W, 6th PM
504B	687612.38	958024.77	FND 3-1/4" ALUM CAP, WC (72.44') TO S 1/4 CORNER, SEC 4, T4S, R68W, 6th PM
507	684909.48	956666.05	FND 6"x6" STONE WITH 2-12" ALUM CAP, W 1/16 CORNER, SEC 9, T4S, R68W, 6th PM
509A	687543.67	955417.80	FND 2-1/2" ALUM CAP, WC (85.00') TO SW CORNER, SEC 4, T4S, R68W, 6th PM
509B	687533.66	955344.02	FND CHISELLED 'X', TIE (15.07') TO SW CORNER, SEC 4, T4S, R68W, 6th PM
510	686223.65	955337.72	FND 2" ALUM CAP, N 1/16 CORNER, SEC 9, T4S, R68W, 6th PM
511	684903.47	955342.35	FND 6"x6" STONE WITH CHISELLED 'X' IN RANGE BOX, E 1/4 CORNER, SEC 8, T4S, R68W, 6th PM
526	687566.04	959295.93	FND 3-1/4" ALUM CAP IN RANGE BOX, E 1/16 CORNER, SEC 4, T4S, R68W, 6th PM
527A	686333.80	956659.71	FND AXLE, TIE (102.14') TO CENTER OF NW 1/4, SEC 9, T4S, R68W, 6th PM
527B	686131.35	956660.59	FND AXLE, TIE (100.14') TO CENTER OF NW 1/4, SEC 9, T4S, R68W, 6th PM



PROJECT CONTROL COORDINATE TABLE				
Point No.	Northing(ft)	Easting(ft)	Elevation(ft)	Description
700	687455.01	956287.96	5234.27	SET #5 REBAR WITH 2" ALUMINUM CONTROL CAP
701	687430.45	956598.88	5237.15	SET #5 REBAR WITH 2" ALUMINUM CONTROL CAP
702	687479.12	956803.95	5236.98	SET #5 REBAR WITH 2" ALUMINUM CONTROL CAP
703	687501.43	957152.22	5220.22	SET #5 REBAR WITH 2" ALUMINUM CONTROL CAP
704	687660.18	957486.95	5817.76	SET #5 REBAR WITH 2" ALUMINUM CONTROL CAP
705	687640.65	957169.64	5218.38	SET #5 REBAR WITH 2" ALUMINUM CONTROL CAP
706	687625.49	956784.15	5237.69	SET #5 REBAR WITH 2" ALUMINUM CONTROL CAP
707	687651.20	956507.96	5237.10	SET #5 REBAR WITH 2" ALUMINUM CONTROL CAP
708	686564.41	957071.45	5211.35	SET #5 REBAR WITH 2" ALUMINUM CONTROL CAP
709	687833.06	956756.22	5207.67	SET #5 REBAR WITH 2" ALUMINUM CONTROL CAP
710	688267.22	956596.58	5207.74	SET #5 REBAR WITH 2" ALUMINUM CONTROL CAP

FOUND PRIMARY CONTROL MONUMENT COORDINATE TABLE						
Point No.	Latitude (NAD 83)	Longitude (NAD 83)	Ellipsoid Height (m)	Northing(ft)	Easting(ft)	Description
RUBY	39° 34' 05.17592" N	105° 00' 26.65783" W	1626.856	510312.25	956659.21	NGS MONUMENT ON CONCRETE POST, STAMPED "RUEY 1936"
TRANSPORTATION	39° 41' 30.20353" N	104° 56' 17.89956" W	1643.354	511250.53	962581.27	NGS MONUMENT ON CONCRETE POST, STAMPED "TRANSPORTATION 1995"

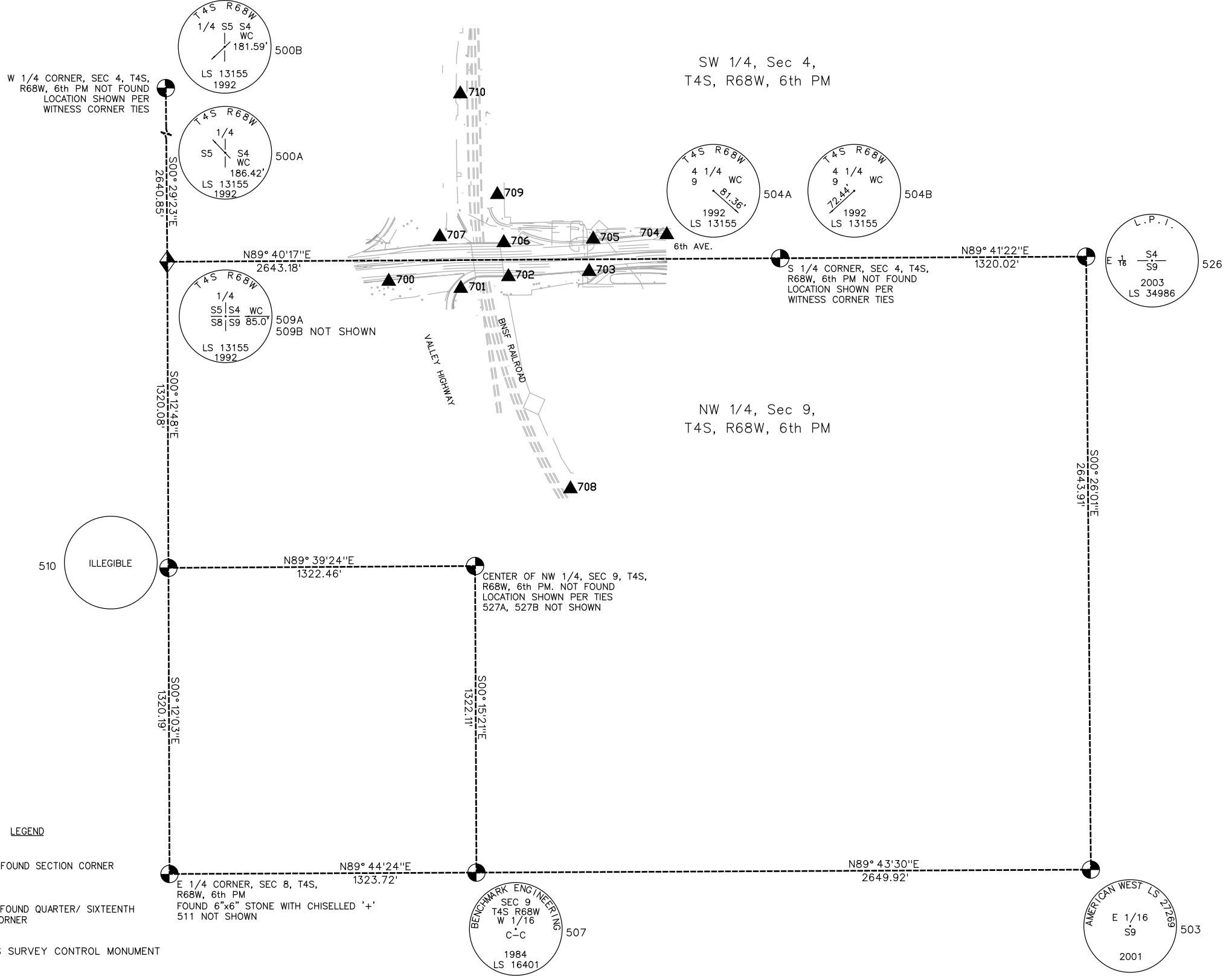
Sheet Revisions		
Date	Description	Initials

Sheet Revisions		
Date	Description	Initials

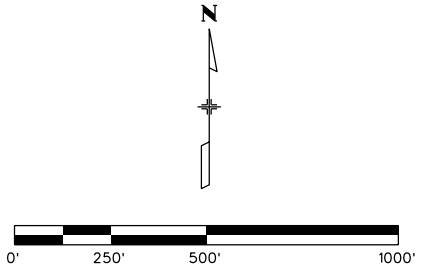
Sheet Revisions		
Date	Description	Initials

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Engineering & Surveying, LLC
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Land Survey Control Diagram			
Plan Sheet			
Project Number: .			
Project Location: 6th AVENUE AT BNSF RAILROAD			
Project Code:	Last Mod. Date:	Subset:	Sheet No.:
.	02-24-2012	4.01 to 4.03	4.03



- LEGEND**
- INDICATES FOUND SECTION CORNER
 - INDICATES FOUND QUARTER/ SIXTEENTH SECTION CORNER
 - INDICATES SURVEY CONTROL MONUMENT



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2000 South Holly
Denver, CO 80222
Phone: 303-757-9922 FAX: 303-757-9390

Region 6

Sheet Revisions			Sheet Revisions			Sheet Revisions		
Date	Description	Initials	Date	Description	Initials	Date	Description	Initials

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Right of Way Plans			
Title Sheet			
Project Number: .			
Project Location: 6th AVENUE AT BNSF			
Project Code:	Last Mod. Date:	Subset	Sheet No.
.	02-24-2012	1.01 of 1.01	1.01

DEPARTMENT OF TRANSPORTATION STATE OF COLORADO

RIGHT OF WAY PLANS OF PROPOSED FEDERAL AID PROJECT NO. 6th Avenue at BNSF Railroad SW 1/4 OF SEC. 4 AND NW 1/4 OF SEC. 9, T4S, R68W, 6th PM CITY AND COUNTY OF DENVER

SHEET NO.	INDEX OF SHEETS
1.01	(1) Title Sheet
2.01-2.02	(2) Tabulation of Properties
4.01-4.03	(3) Land Survey Control Diagram
	(6) Total Sheets

Scales of Original 11x17 Drawings
Plan Sheets 1"=40'

Basis of Bearings: Bearings used in the calculations of coordinates are based on a grid bearing of S80°59'51"W from NGS Control Point "RUBY" a standard NGS Disk to NGS Control Point "TRANSPORTATION" a standard NGS Disk. The survey data was obtained from a Global Positioning System (GPS) survey based on the Colorado High Accuracy Reference Network (CHARN).

- This Right-of-Way Plan is not a boundary survey of the adjoining property and is prepared for the Colorado Department of Transportation purposes only.
- No title information was referenced in the preparation of this plan set.
- This plan set is subject to change and may not be the most current set. It is the user's responsibility to verify with CDOT that this set is the most current. The information contained on the attached drawing is not valid unless this copy bears an original signature of the Professional Land Surveyor hereon named.

NOTICE: According to Colorado law you must commence any legal action based upon any defect in this survey within three years after you first discover such defect. In no event may any action based upon any defect in this survey be commenced more than ten years from the date of the certification shown hereon.

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

ROW PLANS AUTHORIZED: _____ DATE _____

DIVISION ADMINISTRATOR

SURVEYOR STATEMENT (ROW PLAN)

I, _____, a professional land surveyor licensed in the State of Colorado, do hereby state to the Colorado Department of Transportation that based upon my knowledge, information and belief, research, calculations and evaluation of the survey evidence were performed and this Right-of-Way Plan was prepared under my responsible charge in accordance with applicable standards of practice defined by Colorado Department of Transportation publications. This statement is not a guaranty or warranty, either expressed or implied.

PLS No. _____

SECTION CORNER	QUARTER, SIXTEENTH, AND SECTION CORNERS
SET EASEMENT MONUMENT	TEMPORARY EASEMENT POINT
RIGHT OF WAY MARKER	QUARTER, SIXTEENTH, AND SECTION CORNERS
BLM MARKER	PROPERTY PIN
NOAA MARKER	WITNESS CORNER
FEDERAL MONUMENT	BENCH MARK
USGS MARKER	USGS MARKER
LOCAL OR PLSS MONUMENT	SECONDARY CONTROL MONUMENT
PROJECT CONTROL MONUMENT	HIGH ACCURACY REFERENCE NETWORK CONTROL MONUMENT
DENSIFICATION CONTROL MONUMENT	RIGHT OF WAY MARKER

N 9.88
E 3.81
EL 0.00
PROJECT CONTROL MONUMENT

N 10.13
E 3.81
EL 0.00
DENSIFICATION CONTROL MONUMENT

N 10.38
E 3.81
EL 0.00
HIGH ACCURACY REFERENCE NETWORK CONTROL MONUMENT

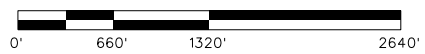
PERMANENT, PROPERTY, SLOPE, & UTILITY EASEMENT LINE
 TEMPORARY EASEMENT LINE (EXISTING)
 PROPERTY BOUNDARY LINE (EXISTING AND PROPOSED)
 ACCESS CONTROL LINE
 BARRIER ACCESS CONTROL LINE
 RIGHT OF WAY LINE
 VIRGIN RIGHT OF WAY LINE (PROPOSED)
 CITY LIMIT LINE (EXISTING)
 COUNTY LINE (EXISTING)
 QUARTER SECTION LINE
 SECTION LINE
 SIXTEENTH SECTION LINE
 STATE LINE (EXISTING)
 TOWNSHIP LINE (EXISTING)

SURVEY/ROW

R.O.W. Length of Project = Miles
Const. Length of Project = Miles



PROJECT LOCATION MAP



Note: For a complete listing of symbology used within this set of plans, please refer to the M-100-1 Standard Symbols of the Colorado Department of Transportation M&S Standards Publication dated July 2006. Existing features are shown as screened weight (gray scale), except as noted with the word (existing). Proposed or new features are shown as full weight without screening, except as noted with the word (proposed).

FILING CERTIFICATION: DEPOSITED THIS _____ DAY OF _____, 20____, AT _____ M., IN BOOK _____ OF THE COUNTY LAND SURVEYS/RIGHT OF WAY SURVEYS AT PAGE _____, RECEPTION NUMBER _____
 SIGNED _____ DEPT. _____
 3/1/2012 redervreen 3:35:48 PM H:\12420.00 6th Avenue over BNSF\12420.ROW_Survey Drawings\ROW_SCD_Plans\ROW_TitleSht_1.01.dgn



Sheet Revisions

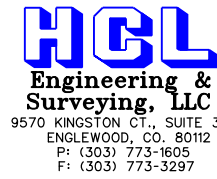
Date	Description	Initials

Sheet Revisions

Date	Description	Initials

Sheet Revisions

Date	Description	Initials



Right of Way Plans

Tabulation of Properties

Project Number: .			
Project Location: 6th AVENUE AT BNSF RAILROAD			
Project Code:	Last Mod. Date:	Subset:	Sheet No.:
.	02-24-2012	2.01 to 2.01	2.01

R.O.W. TABULATION OF PROPERTIES IN DENVER COUNTY- 6th AVENUE AT BNSF RAILROAD

Parcel No.	Ownership Name and Mailing Address	Site Address	Location	Area In Square Feet (Acres)					Title Commitment No.	Remarks
				Area Of Parcel	Existing ROW	Net Area	Remainder Left	Remainder Right		
1	UFP Technologies 172 East main Street Georgetown, MA 01833-2119	2038 West 7th Avenue Denver, CO 80204	SW 1/4 Sec. 4, T.4S., R.68W., 6TH P.M.							
2	Burlington Railroad Company PO Box 961089 Fort Worth, TX 76161-0089	500 Tejon Street (approx) Denver, CO 80204	SW 1/4 Sec. 4, T.4S., R.68W., 6TH P.M.							
3	Sears Logistics Services 3333 Beverly Road Hoffman Estates, IL 60179-0001	701 Osage Street Denver, CO 80204	SW 1/4 Sec. 4, T.4S., R.68W., 6TH P.M.							
4	City and County of Denver 1600 West 12th Street Denver, CO 80204-3412		NW 1/4 Sec. 9, T.4S., R.68W., 6TH P.M.							
5	Crescent Realty Corp PO Box 500 East Dubuque, IL 61025-4418	1780 West 6th Avenue Denver, CO 80204	NW 1/4 Sec. 9, T.4S., R.68W., 6TH P.M.							
6	Leo L Proctor, LLC 501 Raritan Way Denver, CO 80204-4919	Same	NW 1/4 Sec. 9, T.4S., R.68W., 6TH P.M.							

Sheet Revisions

Date	Description	Initials

Sheet Revisions

Date	Description	Initials

Sheet Revisions

Date	Description	Initials

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Right of Way Plans

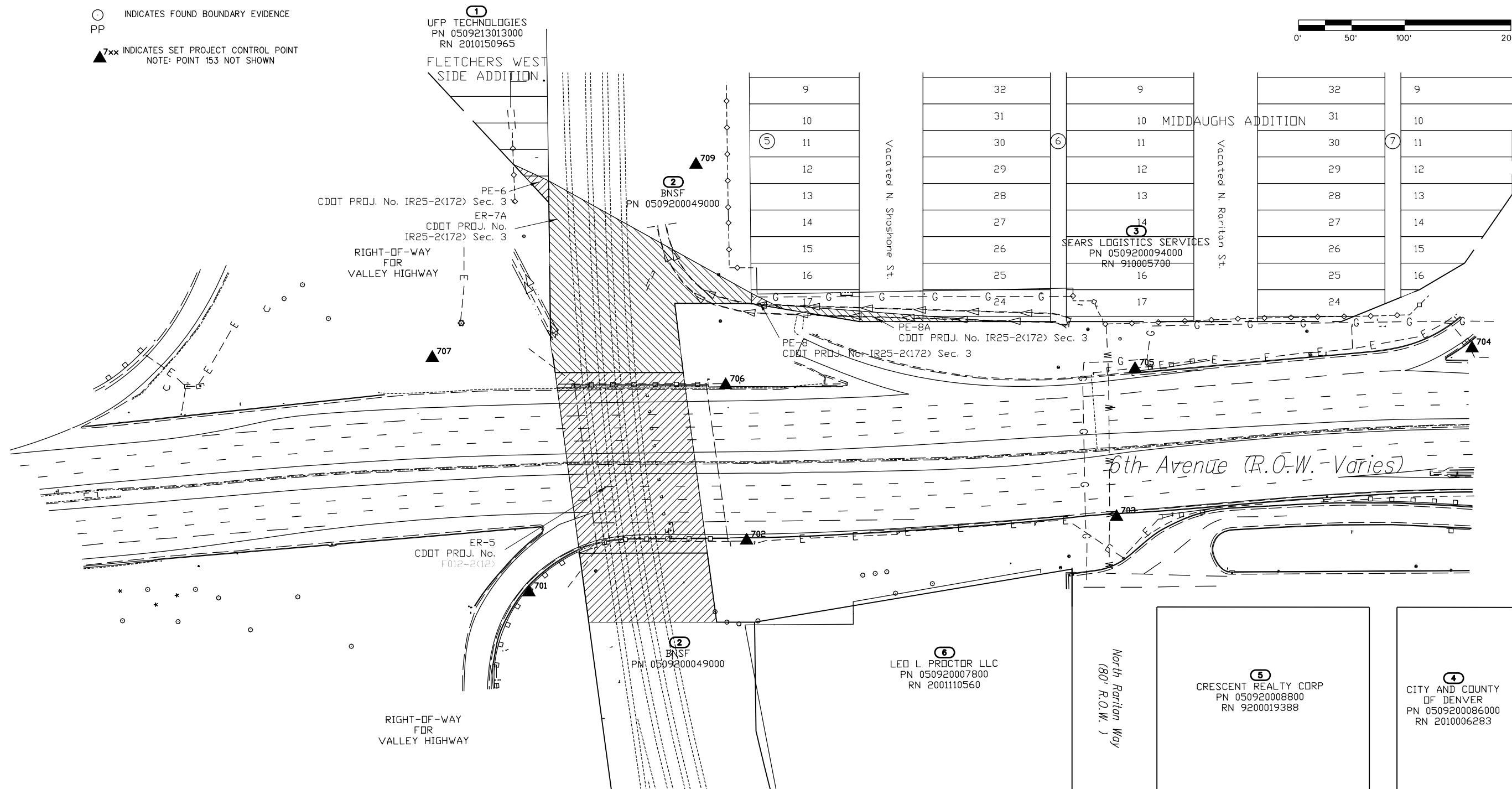
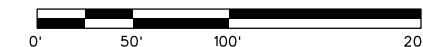
Ownership Map

Project Number: .
Project Location: 6th AVENUE AT BNSF RAILROAD

Project Code	Last Mod. Date	Subset	Sheet No.
	02-24-2012	2.01 to 2.02	2.02

LEGEND

- ⊙ INDICATES FOUND QUARTER/ SIXTEENTH SECTION CORNER
- INDICATES FOUND BOUNDARY EVIDENCE
- PP
- ▲^{7xx} INDICATES SET PROJECT CONTROL POINT
NOTE: POINT 153 NOT SHOWN



3/29/2012 2:59:36 PM H:\112420.00 6th Avenue over BNSF\12420.ROW_Survey\Drawings\ROW_SCD_Plans\LSCD_2.02.dgn