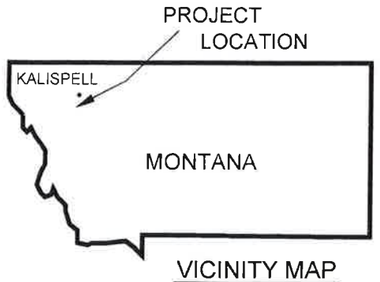
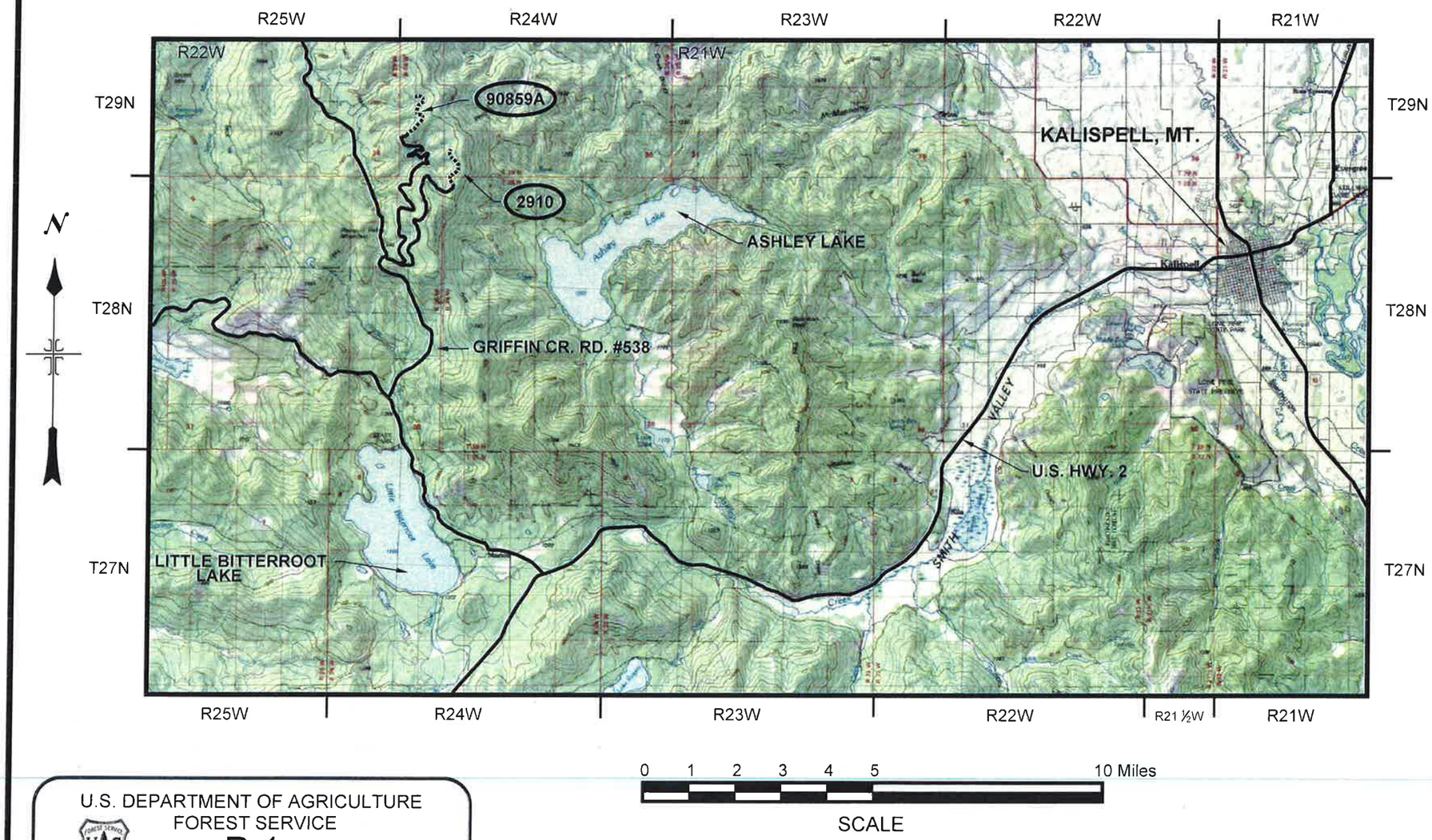
FLATHEAD NATIONAL FOREST

CONSTRUCTION DRAWINGS FOR:

McGRIFFIN TIMBER SALE ROAD CONSTRUCTION



VICINITY MAP



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15	STANDARD LIVESTOCK GATE DETAIL

Submitted By:

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Recommended By:

4-14-15

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4/01/15

Forest Engineer Date

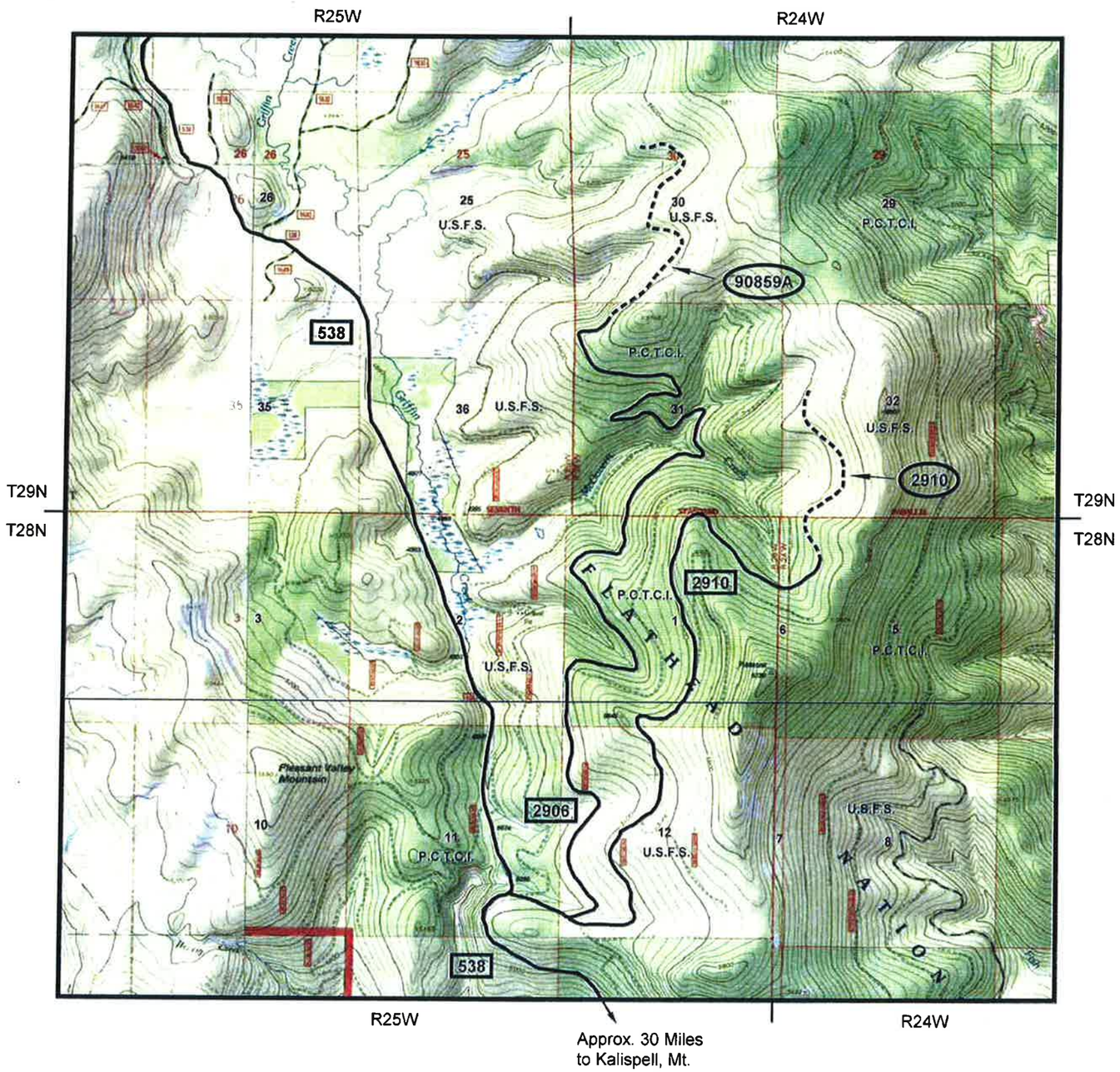
Approved By:

Sharon LaBrecque 4/16/15

Forest Supervisor Date

U.S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE
R-1
NORTHERN REGION

McGRIFFIN TIMBER SALE ROAD CONSTRUCTION AREA MAP



N

LEGEND		
ROAD CONSTRUCTION	- - - - - -	2910
EXISTING ACCESS ROADS	———	538

0 1/4 1/2 1 2 Miles

SCALE

SHEET NO. 2 OF 15

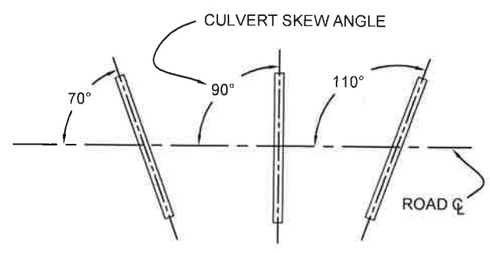
McGRIFFIN ROADS

SUMMARY OF ESTIMATED QUANTITIES

ITEM NO.	DESCRIPTION	MEASUREMENT METHOD	MEASUREMENT UNIT	RD. #90859A (1.34 Mi.)	RD. #2910 (1.03 Mi.)	TOTAL ESTIMATED QUANTITIES
201(01)	CLEARING & GRUBBING	DQ	ACRE	5.50	3.95	9.45
203(01)	EXCAVATION, PLACEMENT METHOD 1	DQ	CU.YDS.	4170	2270	6440
203(17)	DRAINAGE EXCAVATION, TYPE DRAIN DIP	AQ	EACH	6	2	8
601(01)	MOBILIZATION	LSQ	LUMP SUM	1	1	ALL REQ'D.
603(01)	18-INCH CORRUGATED STEEL PIPE, 0.064-INCH THICKNESS	AQ	LIN.FT.	26	56	82
603(02)	42-INCH x 29-INCH CORRUGATED STEEL PIPE ARCH, 0.064-INCH THICKNESS	AQ	LIN.FT.	42		42
625(01)	SEEDING, DRY METHOD (WITHOUT MULCH)	DQ	ACRE	1.45	0.90	2.35
640(01)	FURNISH & INSTALL 12 FT. STANDARD LIVESTOCK GATE	AQ	EACH	1	1	2

CULVERT LISTING

ROAD NO.	STATION	LENGTH FEET	STEEL --- 2-⅔" X ½" CORRUGATIONS SIZE	STEEL --- 2-⅔" X ½" CORRUGATIONS THICKNESS	SKEW	CATCH BASIN	DITCH BLOCK	REMARKS
90859A	30+33	26'	18"	0.064"	90°	X	X	Dry Draw
90859A	57+80	42'	42" X 29"	0.064"	With Draw			Stream (Through Fill)
2910	5+94	28'	18"	0.064"	110°	X	X	Cross Drain
2910	21+57	28'	18"	0.064"	70°	X	X	Cross Drain

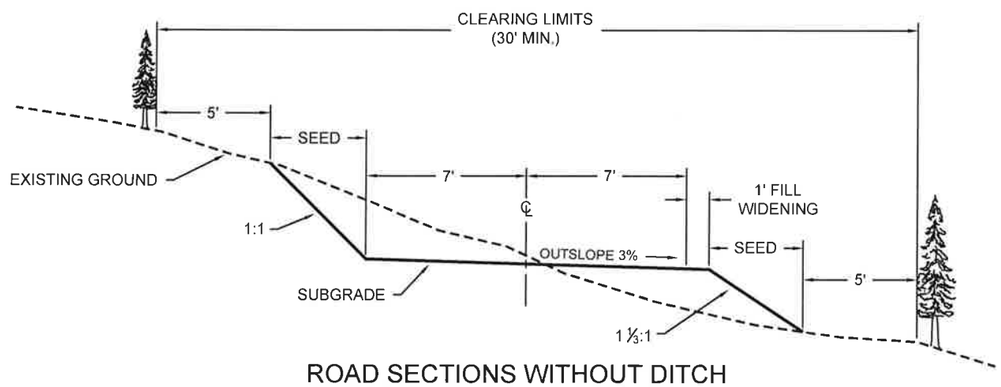


FOR ALL PIPE INSTALLATIONS, CONSERVE ROCK FROM THE PIPE AND/OR CATCH BASIN EXCAVATION AND PLACE AS RIPRAP AT PIPE INLETS & OUTLETS. ARMOR CATCH BASINS WHEN SHOWN ON THE DRAWINGS. (CONSERVING & PLACING RIPRAP IS CONSIDERED INCIDENTAL TO PIPE INSTALLATION).

TYPICAL SECTIONS & GENERAL NOTES

TYPICAL CLEARING & GRUBBING LIMITS

Not to Scale



ROAD SECTIONS WITHOUT DITCH

GENERAL NOTES

1. INITIAL CLEARING LIMITS AND CONSTRUCTION STAKES WILL BE SET BY THE GOVERNMENT. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN AND PRESERVE ALL STAKES AND OTHER MARKS SET BY THE GOVERNMENT.

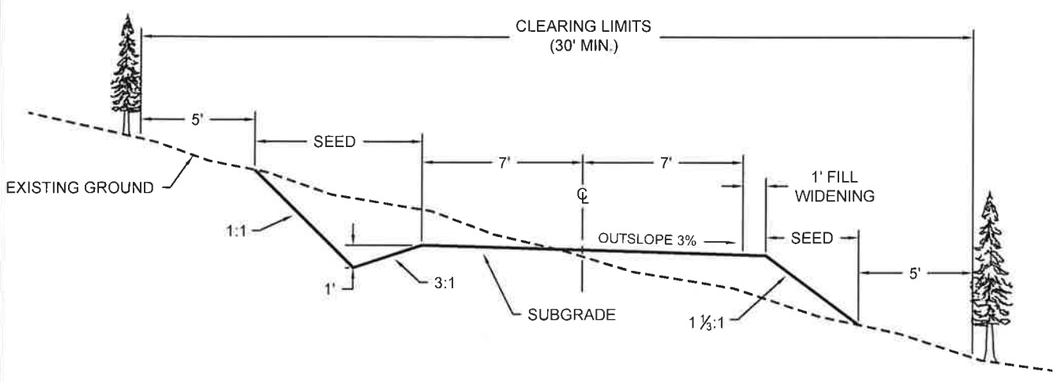
2. ITEM 201(01) --- CLEARING & GRUBBING **(U.S. FOREST SERVICE PROPERTY)** --- {UTILIZATION OF TIMBER - METHOD (1) --- DISPOSE OF MERCHANTABLE TIMBER IN ACCORDANCE WITH THE PROVISIONS OF THE TIMBER SALE CONTRACT} --- {SLASH TREATMENT - METHOD (11) PILING --- ALL TOPS & LIMBS, CULL LOGS, AND OTHER VEGETATIVE MATERIAL WITHIN THE CLEARING LIMITS, WITH THE EXCEPTION OF STUMPS, SHALL BE CLEARED, GRUBBED, REMOVED, AND PILED IN CLEAN PILES ADJACENT TO THE CLEARING LIMITS AT DESIGNATED LOCATIONS FOR LATER BURNING BY THE FOREST SERVICE. SLASH PILES SHALL BE CONSTRUCTED USING AN EXCAVATOR AND MATERIAL IN PILES SHALL BE ORIENTED PARALLEL AS MUCH AS PRACTICABLE IN ORDER TO FACILITATE BURNING. THE PILES SHALL BE COMPACT, FREE OF SOIL AND OF SUFFICIENT SIZE TO FACILITATE BURNING. PILES WILL BE A MINIMUM HEIGHT OF 8 FEET. ALL MATERIAL EXTENDING MORE THAN 5 FEET BEYOND THE OUTSIDE PERIMETER OF THE PILE SHALL BE SEVERED AND RETURNED TO THE PILE. CLEARING REQUIRED FOR BURNING BAYS IS CONSIDERED INCIDENTAL TO THIS PAY ITEM. PLACE AND CONSTRUCT PILES SO FUTURE BURNING WILL NOT DAMAGE REMAINING TREES. --- SLASH TREATMENT - METHOD (4) SCATTERING --- ALL STUMPS SHALL BE SCATTERED IN ACCORDANCE WITH SUBSECTION 201.05, (B) SPECIFIC METHODS, (4) SCATTERING}.

3. ITEM 201(01) --- CLEARING & GRUBBING **(PLUM CREEK TIMBER COMPANY, INC. PROPERTY)** --- {UTILIZATION OF TIMBER - METHOD (2) --- LIMB AND DECK MERCHANTABLE TIMBER CUT FROM P.C.T.C.I. PROPERTY AT APPROVED LOCATIONS ON P.C.T.C.I. PROPERTY. USE THE SAME UTILIZATION STANDARDS FOR MERCHANTABLE TIMBER CUT ON U.S. FOREST SERVICE PROPERTY} --- {SLASH TREATMENT - USE THE SAME SLASH TREATMENT METHOD ON P.C.T.C.I. PROPERTY AS USED ON U.S. FOREST SERVICE PROPERTY AS LISTED IN NOTE #2 ABOVE WITH THE EXCEPTION OF SLASH PILE PLACEMENT LOCATIONS. ALL SLASH SHALL BE PACKED TO AND PILED ON U.S. FOREST SERVICE PROPERTY FOR LATER BURNING BY THE FOREST SERVICE. ALL STUMPS SHALL BE PACKED TO AND SCATTERED ON U.S. FOREST SERVICE PROPERTY}.

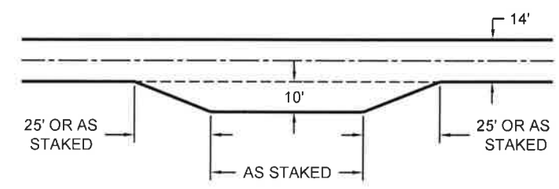
4. ITEM 203(01) --- EXCAVATION, EMBANKMENT, & HAUL --- TOLERANCE CLASS G --- ROADBED FINISHING METHOD A - (SHAPE AND FINISH THE ROADBED TO A "MOTOR GRADER FINISH". ROCK PROTRUSIONS LESS THAN 1" ABOVE THE FINISHED ROAD SURFACE WILL BE ALLOWED. GRADE ALL DRAIN DIPS AND DRAIN SAGS TO EFFECTIVELY DRAIN WATER FROM THE ROAD SURFACE). --- EMBANKMENT PLACEMENT METHOD (1) --- SIDE CASTING & END DUMPING.

5. ITEM 625(01) --- SEEDING & MULCHING --- APPLY SEED AND FERTILIZER AT THE RATES SPECIFIED TO ALL DISTURBED AREAS OUTSIDE OF THE ROAD SHOULDERS (INCLUDES FILL SLOPES, CUT SLOPES, DRAIN DIP OUTLETS, ETC.).

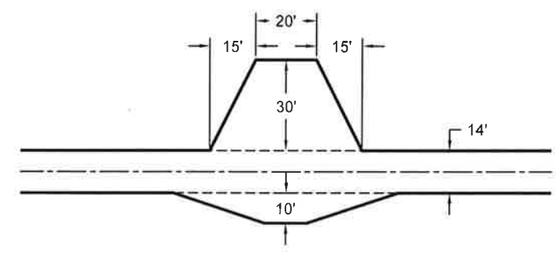
6. ITEM 640(01) --- FURNISH & INSTALL 12 FT. STANDARD LIVESTOCK GATES --- GATES SHALL BE INSTALLED ON U.S. FOREST SERVICE PROPERTY AT LOCATIONS DESIGNATED ON THE GROUND AS SOON AS PRACTICAL AFTER CLEARING AND EXCAVATION IS COMPLETE AT THE INSTALLATION SITE.



ROAD SECTIONS WITH DITCH



TURNOUT LEFT OR RIGHT



TURN-A-ROUND

TYPICAL SECTIONS & GENERAL NOTES

CATCH BASIN & DITCH BLOCK TYPICAL

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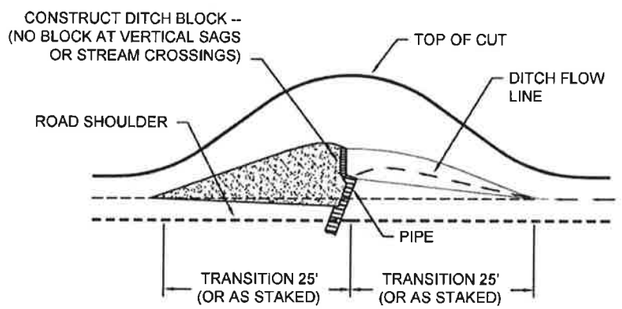

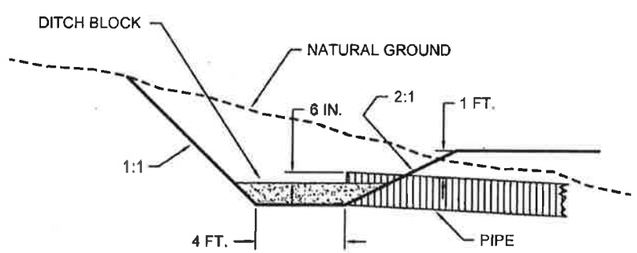

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DRAIN DIP

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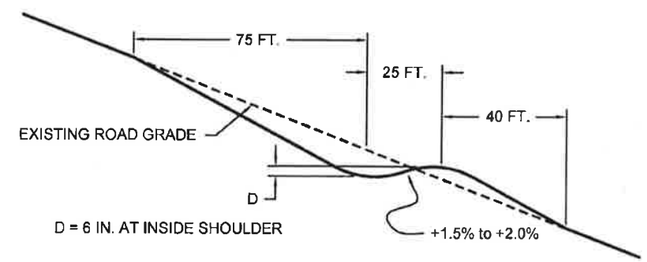


1. CONSTRUCTED DRAIN DIPS SHALL NOT HAVE PROTRUSIONS OR DEPRESSIONS GREATER THAN 2 IN. FROM THE TYPICAL SECTION --- (MOTOR GRADER FINISH).

2. SKEW TROUGH AND CREST OF THE DIP 10 DEGREES FROM PERPENDICULAR TO THE ROAD CENTERLINE.

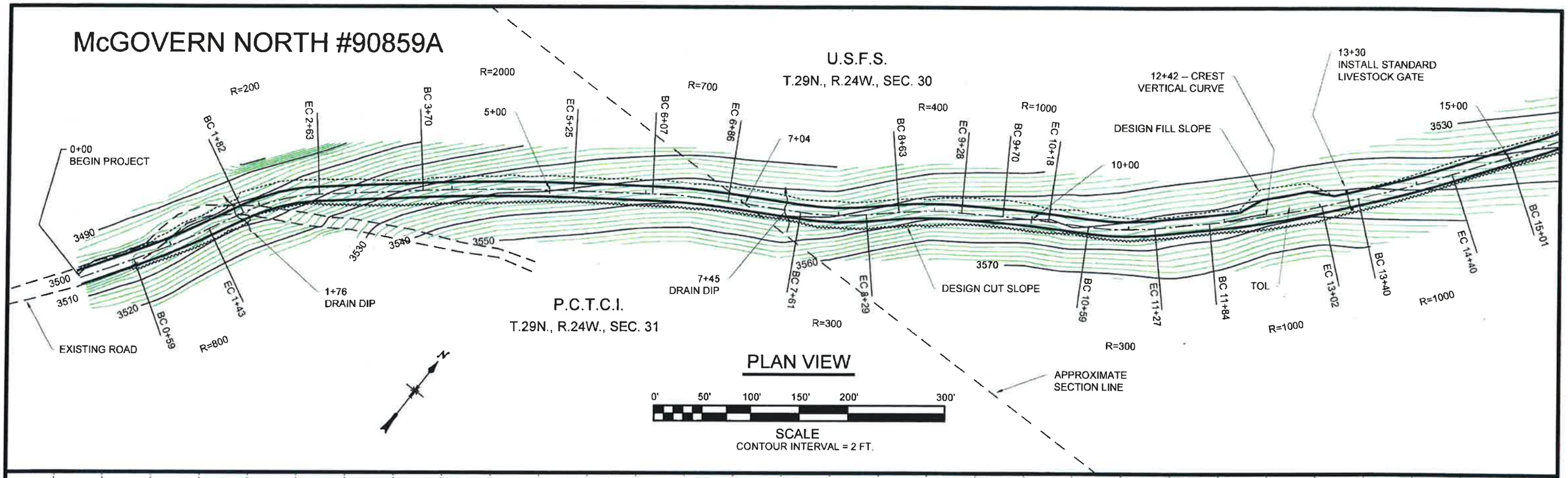
3. CROSS DRAIN SLOPE OF THE DIP SHALL BE OUTSLOPED 5% TO 8%.

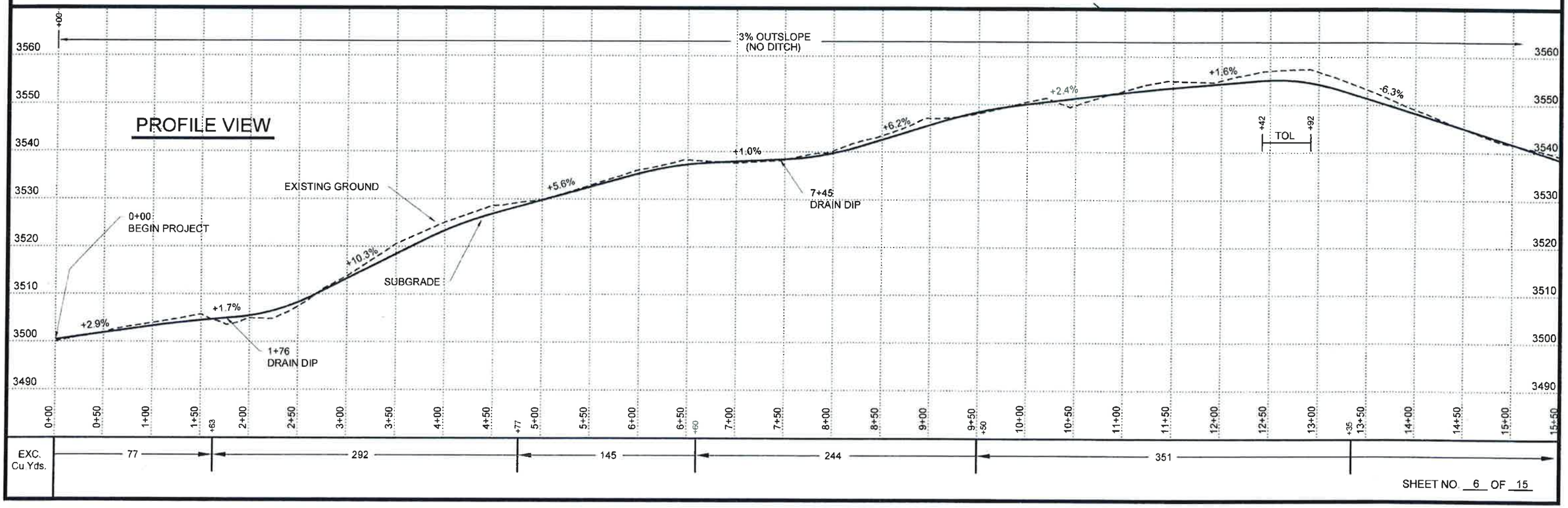
4. ALL DIP TRANSITIONS SHALL BE SHAPED SMOOTH AND UNIFORM AS DIRECTED.

5. CONSERVE ROCK FROM DIP EXCAVATION AND PLACE AT DIP OUTFALL TO SERVE AS ENERGY DISSIPATER.

6. UNLESS SHOWN OTHERWISE ON THE DRAWINGS, ON DITCHED ROADS DO NOT INTERCEPT THE DITCH LINE WITH THE DRAIN DIPS.

McGOVERN NORTH #90859A

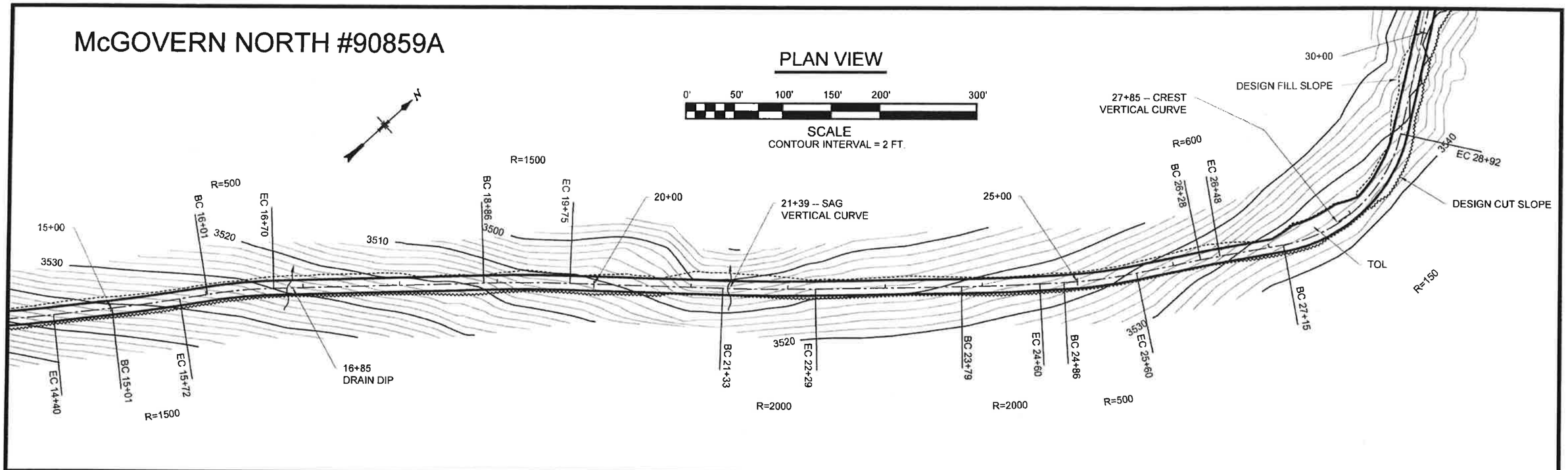




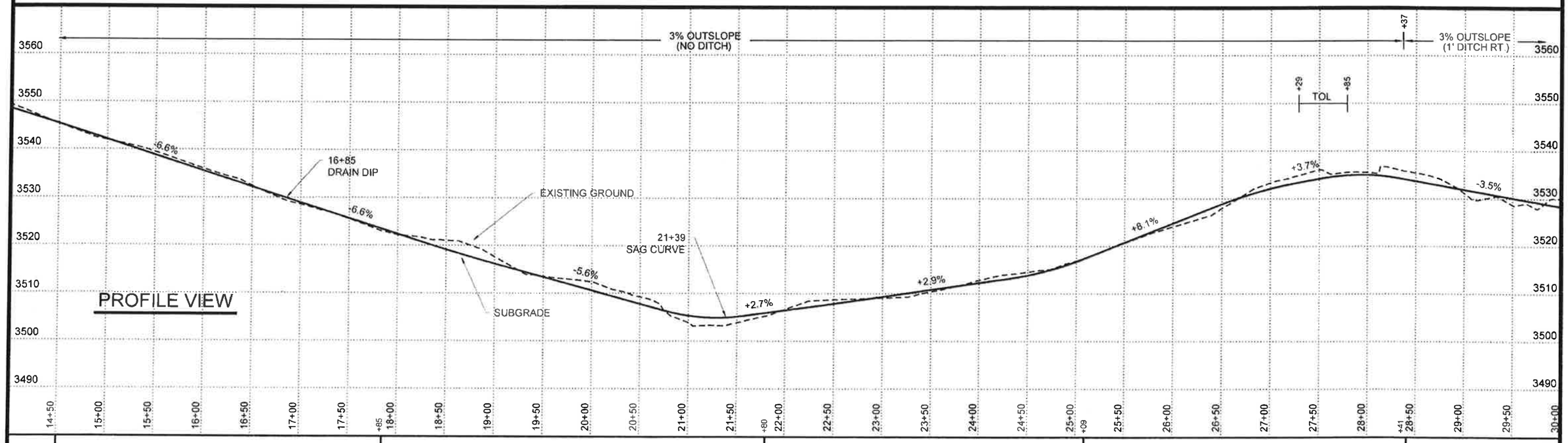
SHEET NO. 6 OF 15

McGOVERN NORTH #90859A

PLAN VIEW

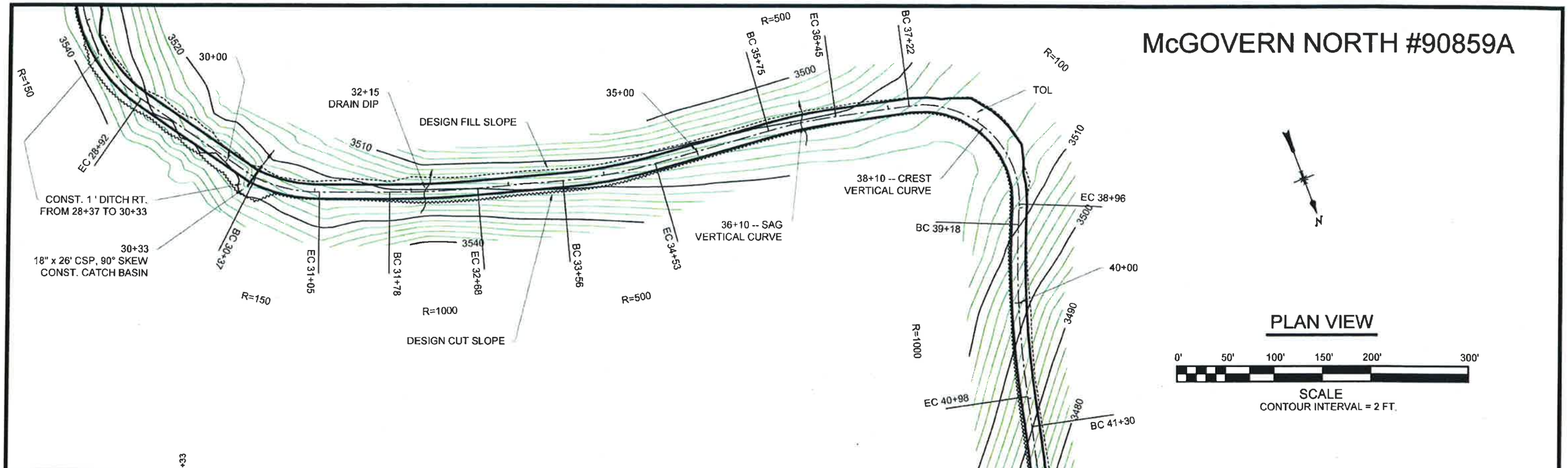


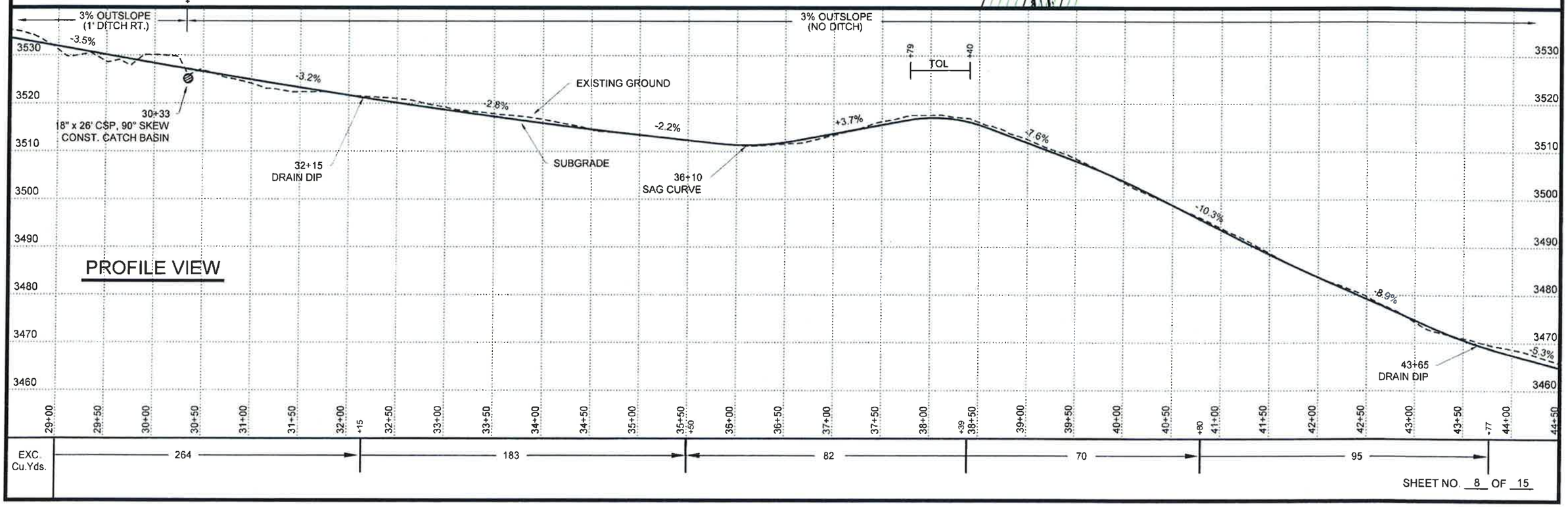
PROFILE VIEW



SHEET NO. 7 OF 15

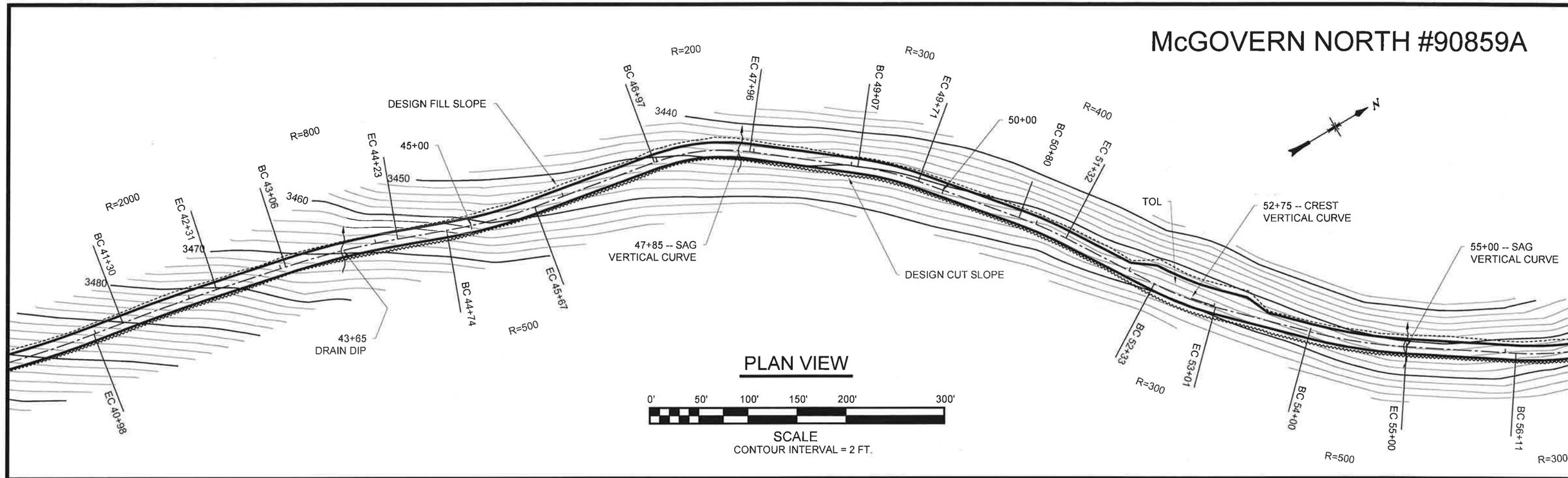
McGOVERN NORTH #90859A

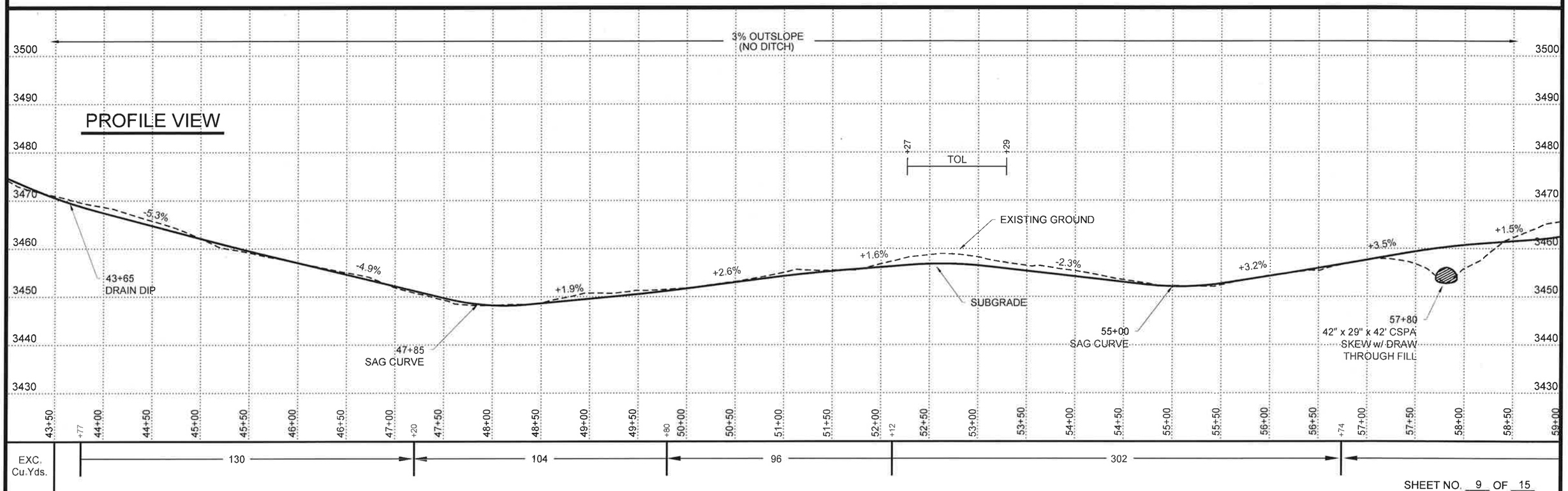




SHEET NO. 8 OF 15

McGOVERN NORTH #90859A

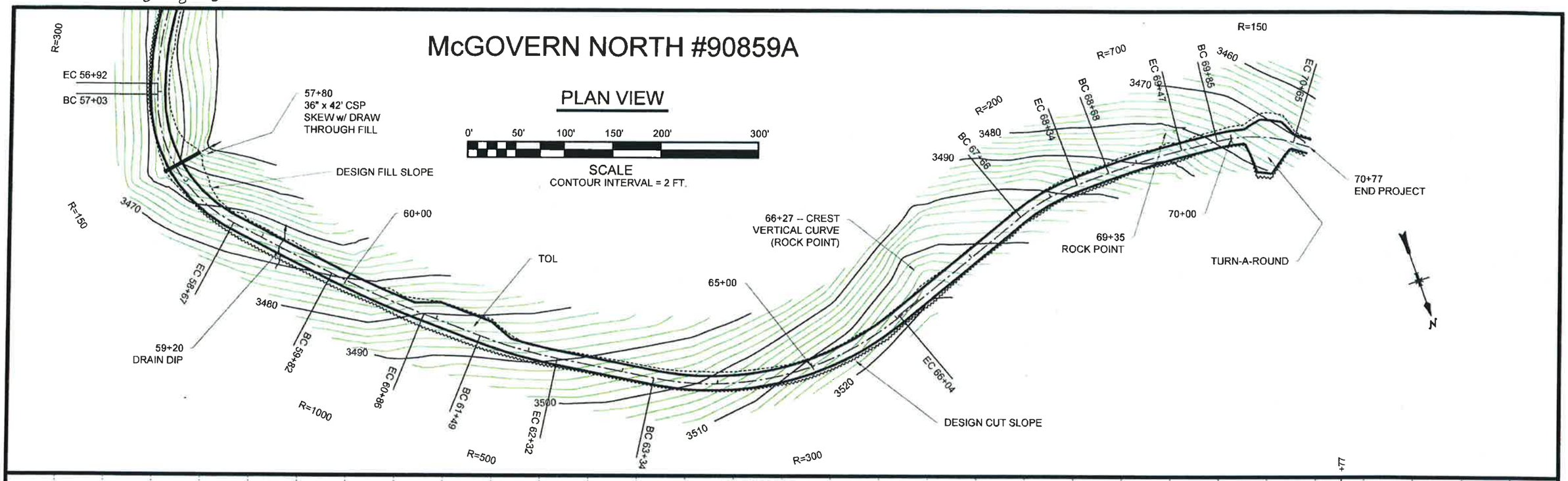


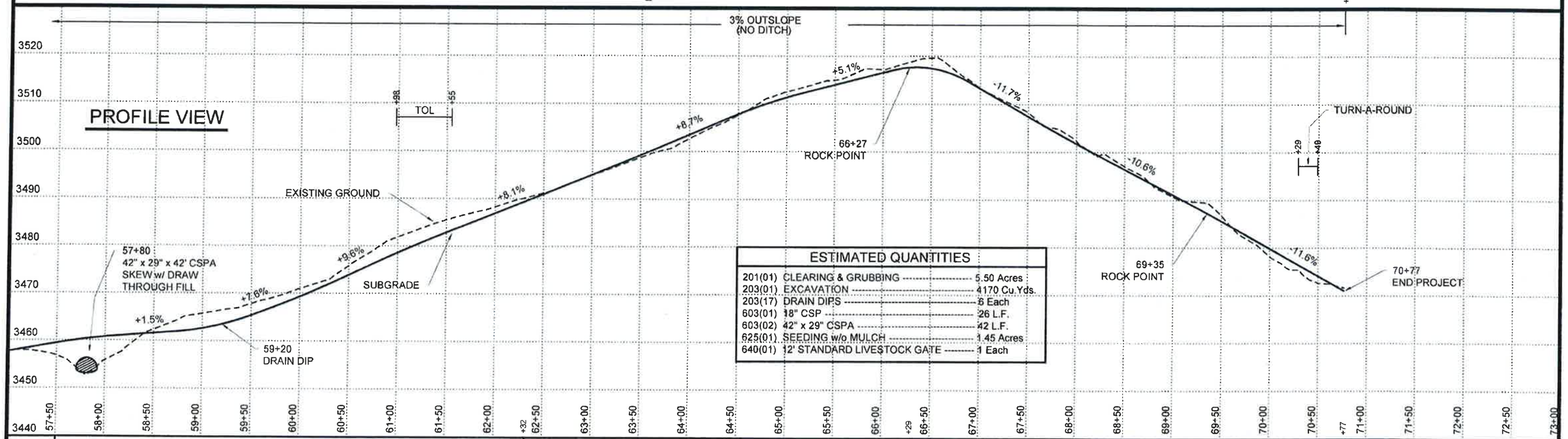


SHEET NO. 9 OF 15

McGOVERN NORTH #90859A

PLAN VIEW

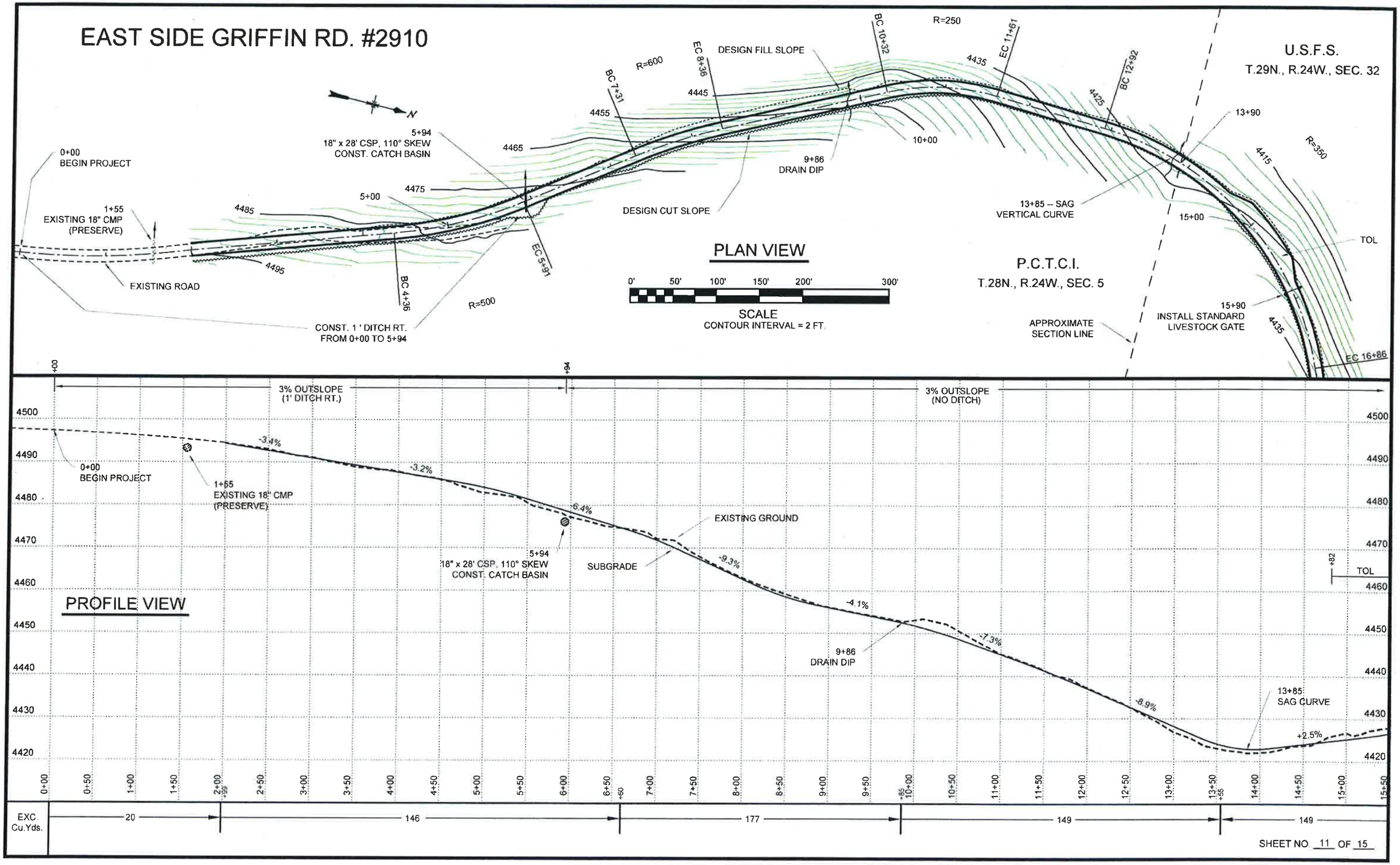




ESTIMATED QUANTITIES

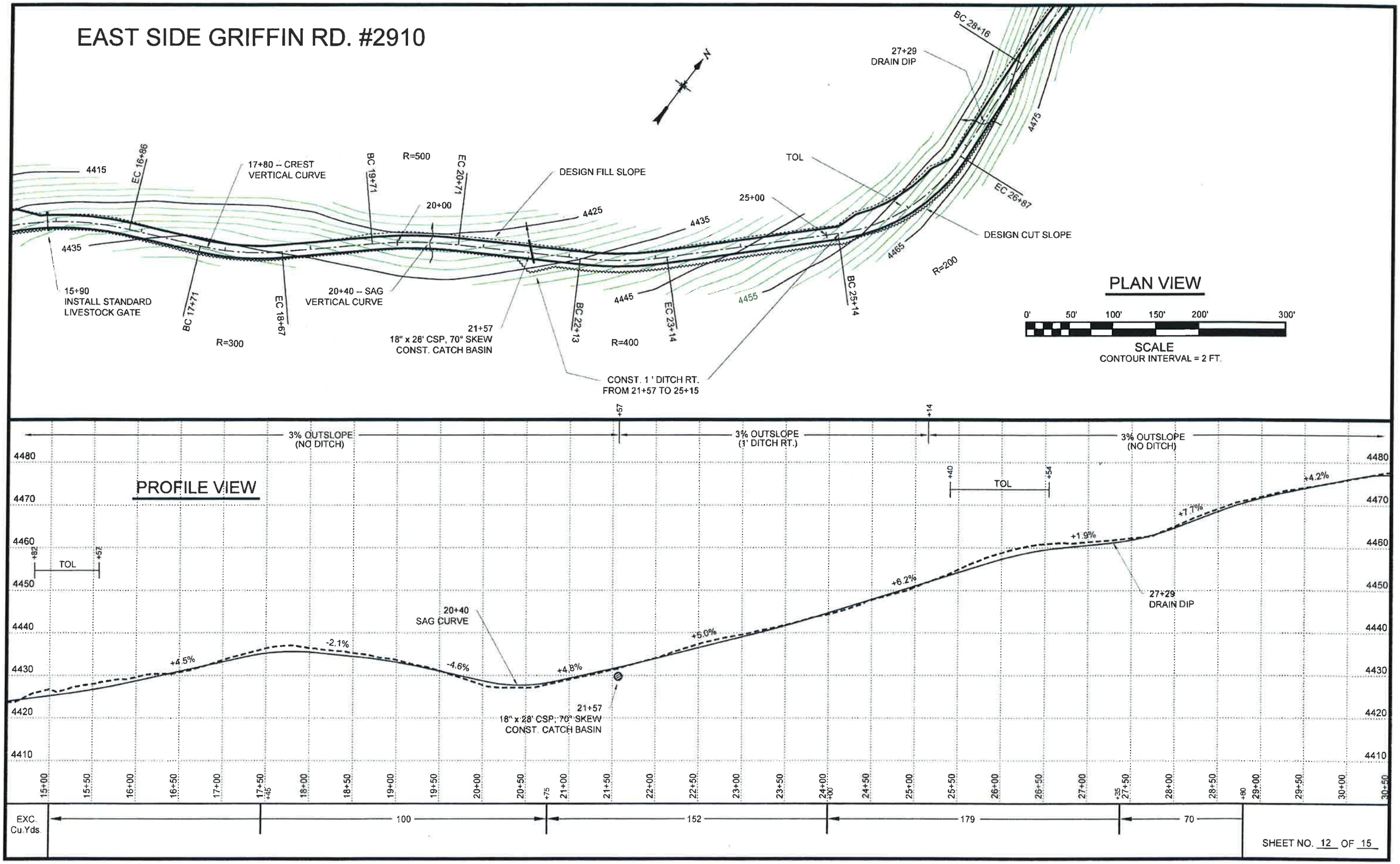
201(01)	CLEARING & GRUBBING	5.50 Acres
203(01)	EXCAVATION	4170 Cu.Yds.
203(17)	DRAIN DIPS	6 Each
603(01)	18" CSP	26 L.F.
603(02)	42" x 29" CSPA	42 L.F.
625(01)	SEEDING w/o MULCH	1.45 Acres
640(01)	12' STANDARD LIVESTOCK GATE	1 Each

EAST SIDE GRIFFIN RD. #2910



SHEET NO. 11 OF 15

EAST SIDE GRIFFIN RD. #2910



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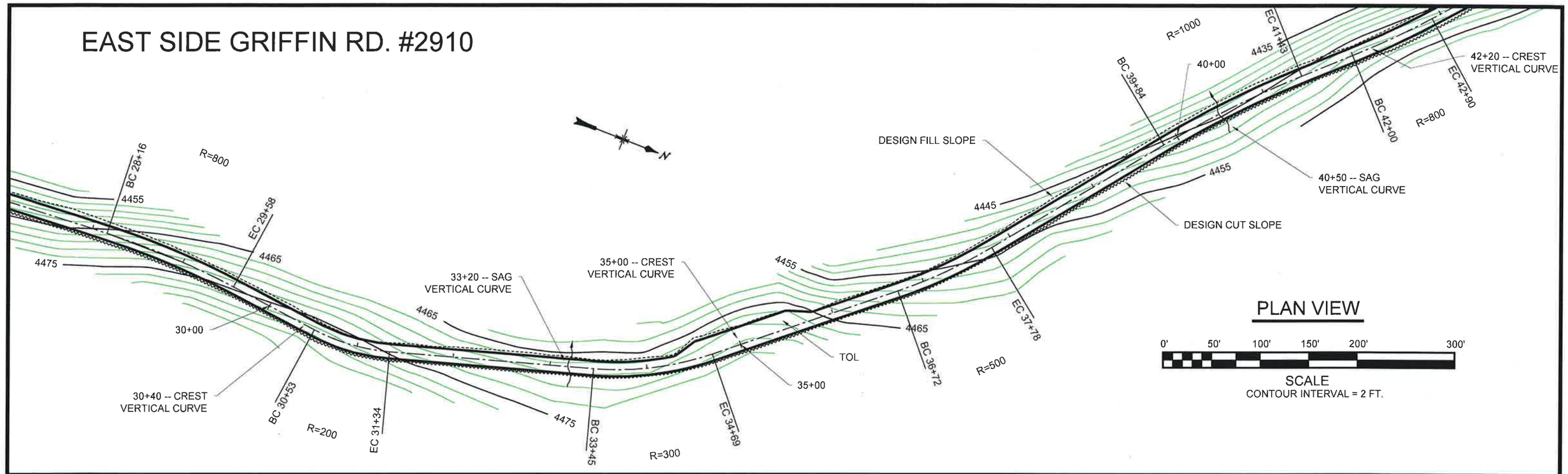
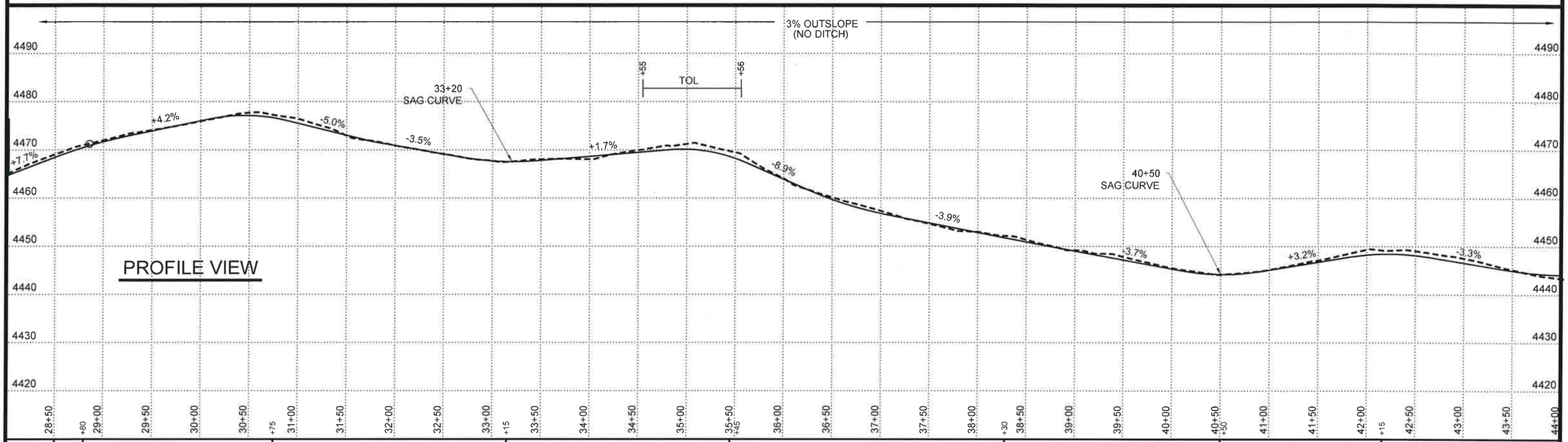
EAST SIDE GRIFFIN RD. #2910





SHEET NO. 13 OF 15