

Eastpark Commerce Center

PROJECT NAME: Phase 111

DATE: Nov. 1997

TYPE: Red 1500 1st/4th

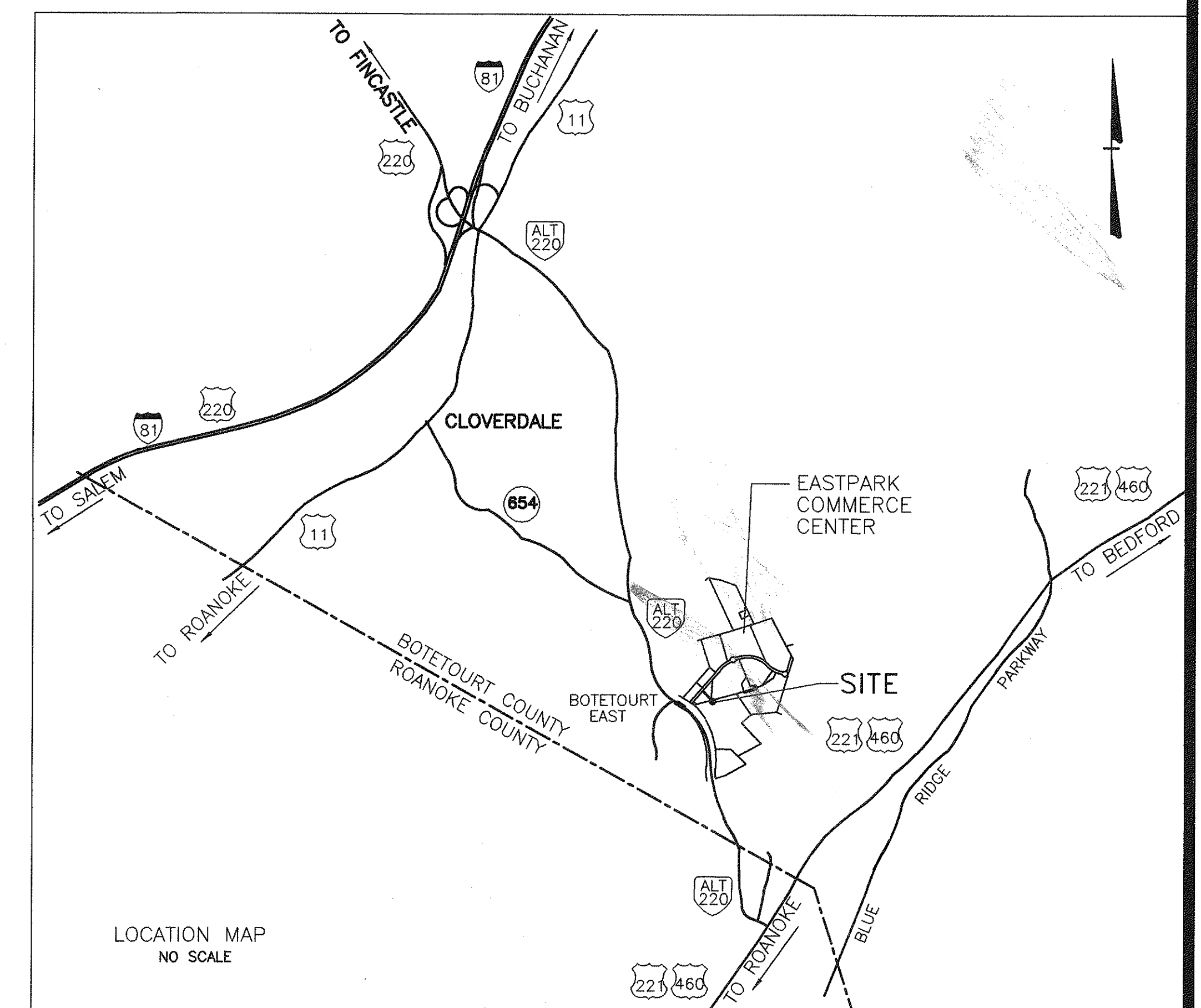
LOCATION: EP 11/2200

TOTAL # SHEETS: 11

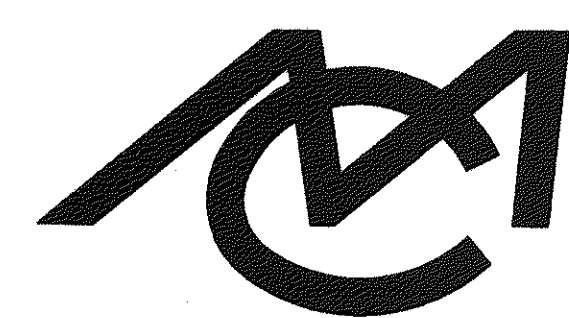
A/E FIRM: MJC

OF SETS: 1

1. COVER SHEET
2. ABBREVIATIONS AND LEGEND
3. SHEET INDEX & GENERAL NOTES
4. ACCESS ROAD PLAN – DRAINAGE & GRADING PLAN
5. ACCESS ROAD & WATER LINE PROFILES
6. STORM DRAIN & SEWER PROFILES
7. STORMWATER DETENTION BASIN – MISCELLANEOUS DETAILS
8. EROSION AND SEDIMENT CONTROL PLAN
9. VA FIBERGLASS PRODUCTS – DRAINAGE & GRADING PLAN
10. SOIL EROSION & SEDIMENT CONTROL DETAILS
11. SOIL EROSION & SEDIMENT CONTROL DETAILS
12. SOIL EROSION & SEDIMENT CONTROL DETAILS
13. SPECIAL DESIGN SHOULDER SLOT INLET
14. LANDSCAPE PLAN



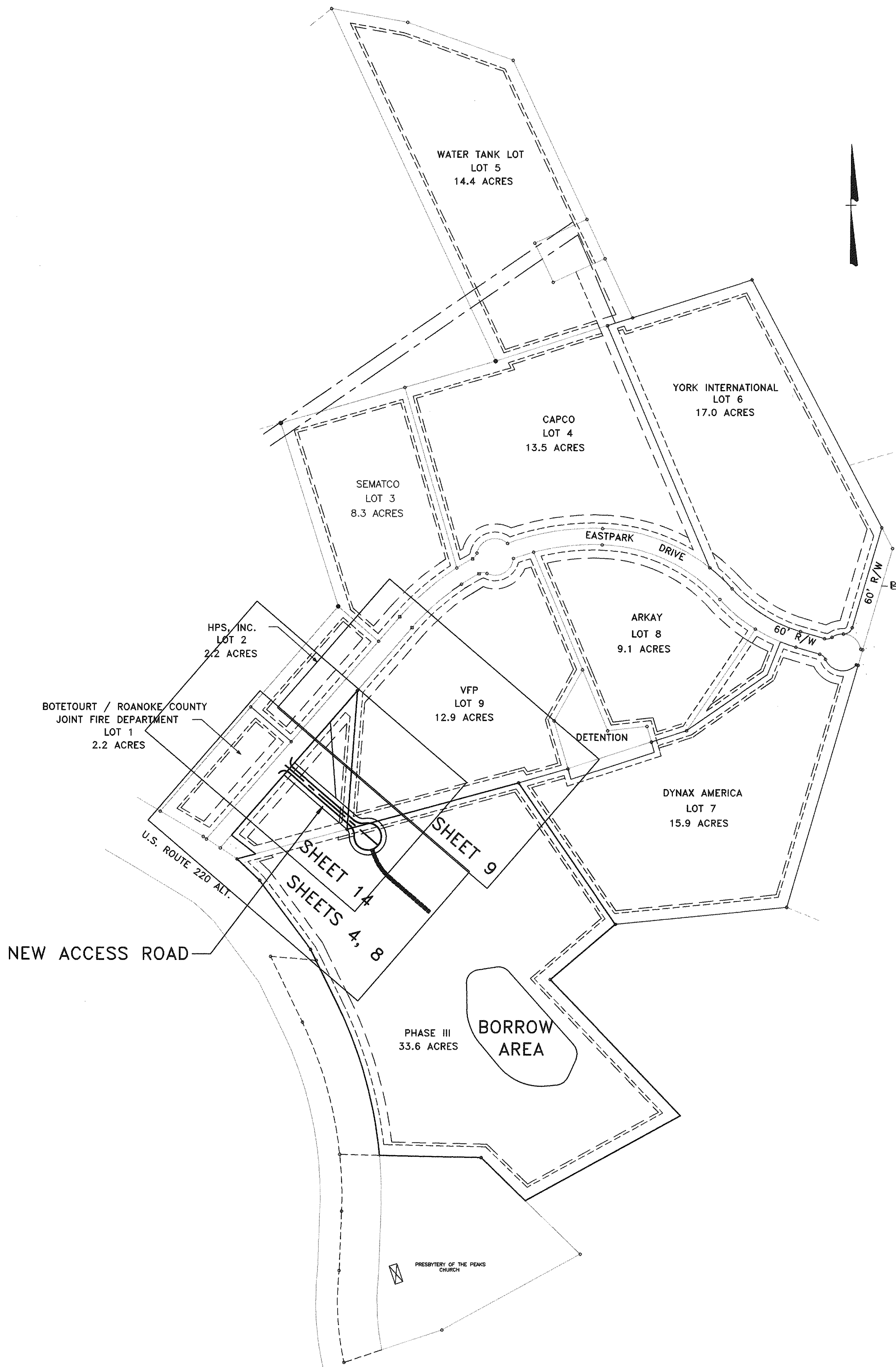
SCALE: NONE



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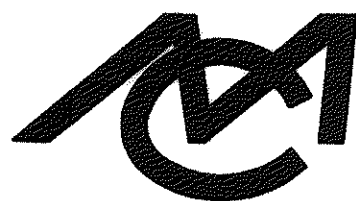
SET NO. _____

A circular detail symbol is shown. The circle is divided into two horizontal sections. The top section is labeled 'C3.1' and the bottom section is labeled 'C4'. To the right of the circle, there are three labels with arrows pointing to the circle: 'SHEET WHERE SECTION IS DRAWN' points to the top section, 'DETAIL NUMBER' points to the circle's boundary, and 'SHEET WHERE SECTION IS CUT' points to the bottom section. To the left of the circle, there is a vertical arrow pointing upwards, which is part of a larger symbol (likely a section line) that is partially cut off on the left side.



GENERAL NOTES

1. THE LOCATION OF EXISTING UTILITIES, INCLUDING UNDERGROUND UTILITIES, IS INDICATED ON THE DRAWINGS INSOFAR AS THEIR EXISTENCE AND LOCATION WERE KNOWN AT THE TIME OF PREPARATION OF THE DRAWINGS. HOWEVER, NOTHING IN THESE CONTRACT DOCUMENTS SHALL BE CONSTRUED AS A GUARANTEE THAT SUCH UTILITIES ARE IN THE LOCATION INDICATED OR THAT THEY ACTUALLY EXIST, OR THAT OTHER UTILITIES ARE NOT WITHIN THE AREA OF OPERATIONS. THE CONTRACTOR SHALL MAKE ALL NECESSARY INVESTIGATIONS TO DETERMINE THE EXISTENCE AND LOCATIONS OF SUCH UTILITIES. THE CONTRACTOR SHALL PAY FOR ANY DAMAGE TO AND FOR MAINTENANCE AND PROTECTION OF EXISTING UTILITIES AND STRUCTURES. EXISTING WATERLINE LOCATIONS ARE APPROXIMATE AND CONTRACTOR SHALL ADJUST WATERLINE TO SUIT FIELD VERIFIED LOCATIONS.
2. THE CONTRACTOR IS DIRECTED TO DIG AND LOCATE ALL UTILITIES, IN ADVANCE OF ANY CONSTRUCTION, TO ALLOW FOR ADJUSTMENTS, DUE TO CONFLICTS WITH THE UTILITIES, IN THE HORIZONTAL AND VERTICAL LOCATION OF ANY STRUCTURES OR PIPES.
3. SURVEY INFORMATION OBTAINED BY MATTERN & CRAIG, INC. FALL, 1996.



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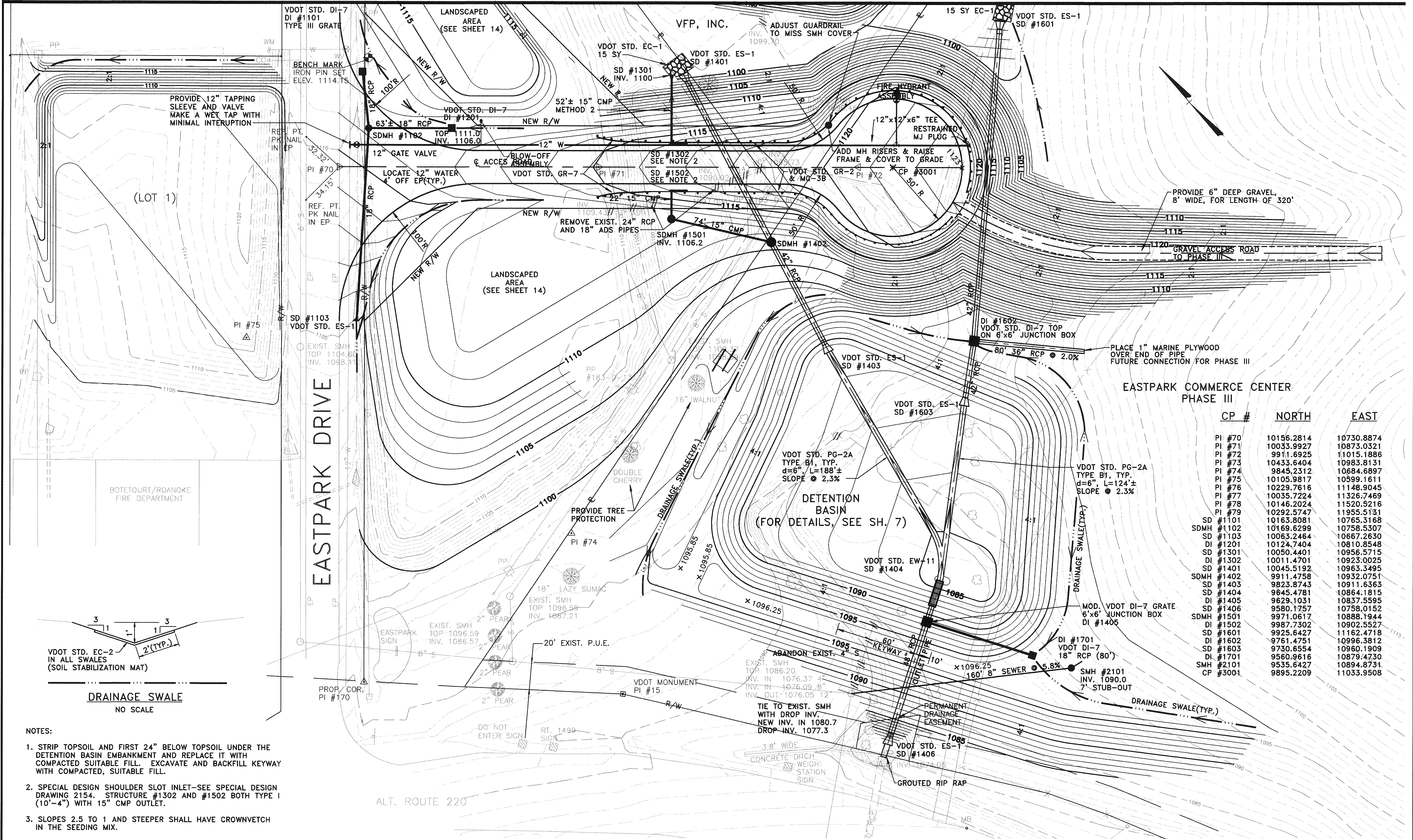
DSGN	DSG	REV	DATE	DESCRIPTION	BY	APP
		△	NOV. 1997	RECORD DRAWINGS	DSG	
DRAWN	DSG					
CHKD	SWH					

EASTPARK COMMERCE CENTER – PHASE III

SHEET INDEX & GENERAL NOTES

BOTETOURT, VIRGINIA

SCALE: 1"=250'
COMM. NO. 1034FD
DATE: FEB., 1997
SHEET 3 OF 14



	CP #	NORTH	EAST
	PI #70	10156.2814	10730.8874
	PI #71	10033.9927	10873.0321
	PI #72	9911.6925	11015.1886
	PI #73	10433.6404	10983.8131
	PI #74	9845.2312	10684.6897
	PI #75	10105.9817	10599.1611
	PI #76	10229.7616	11148.9045
	PI #77	10035.7224	11326.7469
	PI #78	10146.2024	11520.5216
	PI #79	10292.5747	11955.5131
SD	#1101	10163.8081	10765.3168
SDMH	#1102	10169.6299	10758.5307
SD	#1103	10063.2464	10667.2630
DI	#1201	10124.7404	10810.8548
SD	#1301	10050.4401	10956.5715
DI	#1302	10011.4701	10923.0025
SD	#1401	10045.5192	10963.3495
SDMH	#1402	9811.4758	10932.0751
SD	#1403	9823.8743	10911.6363
SD	#1404	9645.4781	10864.1815
DI	#1405	9629.1031	10837.5595
SD	#1406	9580.1757	10758.0152
SDMH	#1501	9971.0617	10888.1944
DI	#1502	9987.7302	10902.5527
SD	#1601	9925.6427	11162.4718
DI	#1602	9761.4751	10996.3812
SD	#1603	9730.6554	10960.1909
DI	#1701	9560.9616	10879.4730
SMH	#2101	9535.6427	10894.8731
CP	#3001	9895.2209	11093.9508

EASTPARK COMMERCE CENTER - PHASE III

ACCESS ROAD PLAN DRAINAGE AND GRADING PLAN

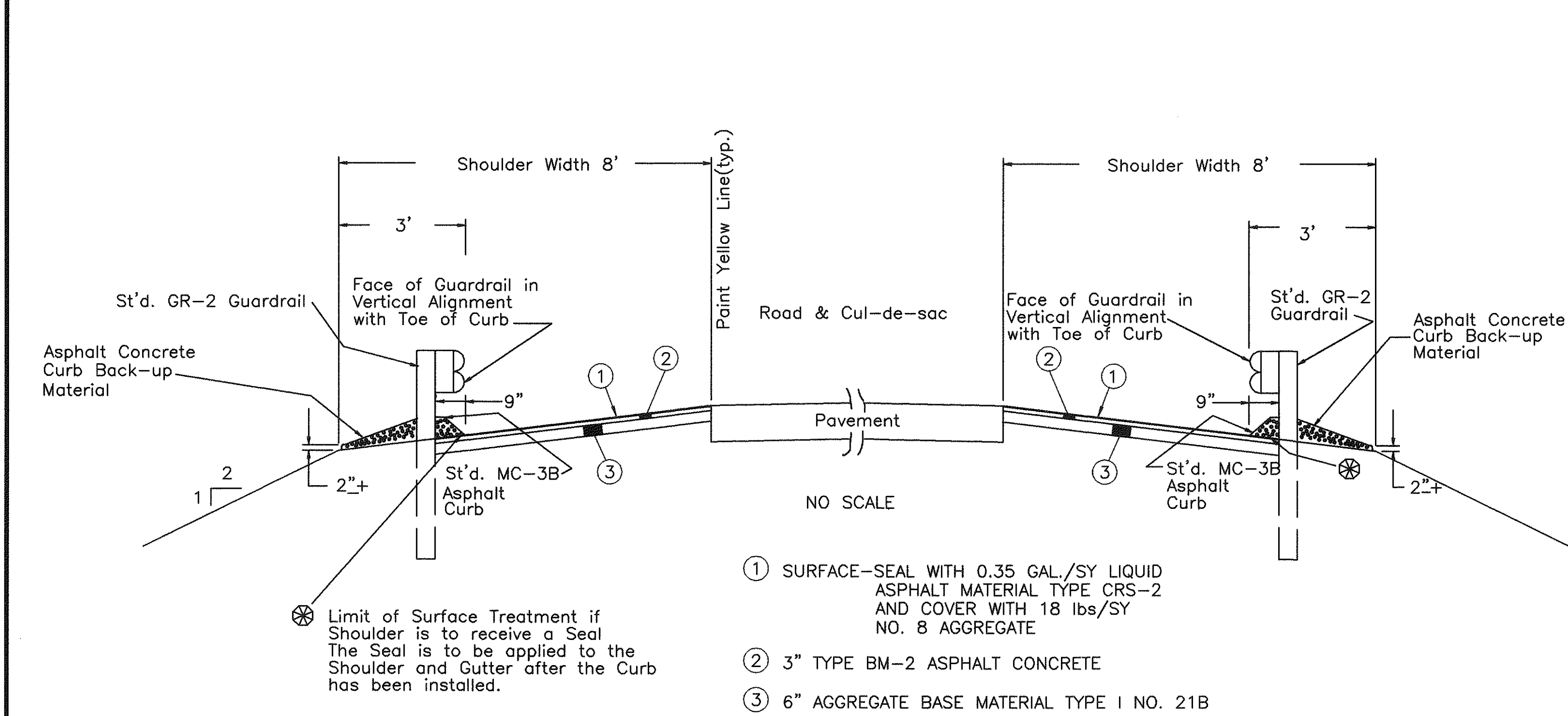
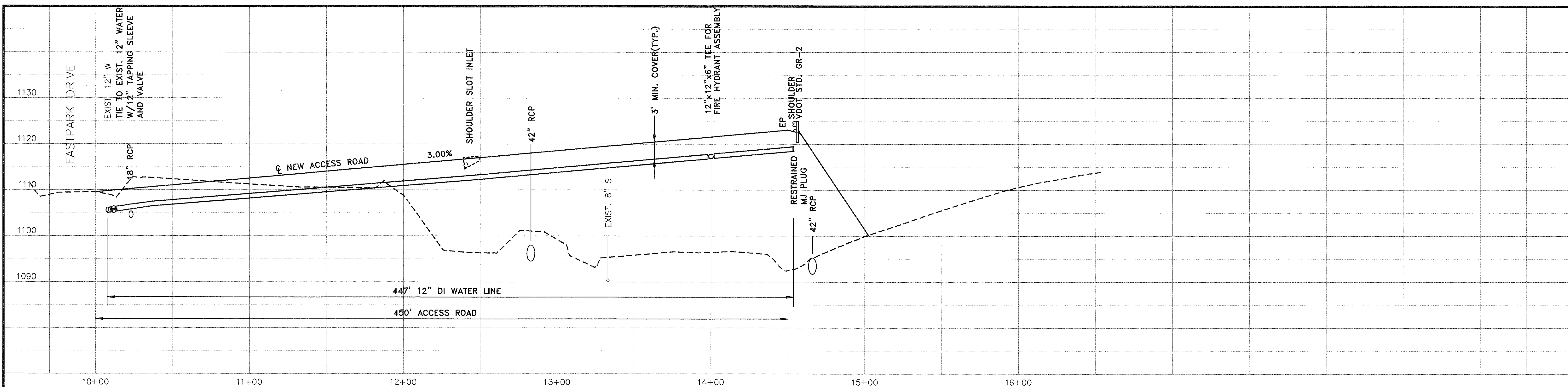
BOTETOURT COUNTY, VIRGINIA

SCALE: 1"=30'

COMM.
NO. 1034FD

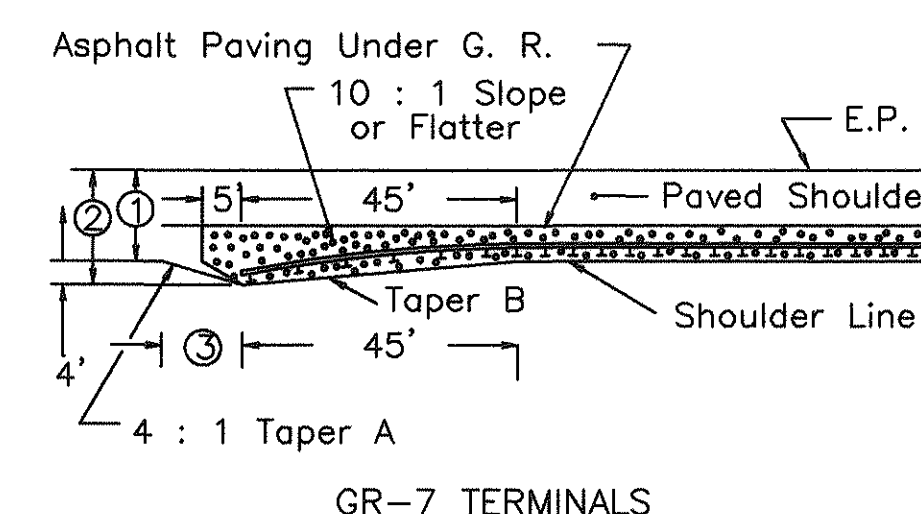
DATE: FEB., 1997

SHEET 4 OF 14

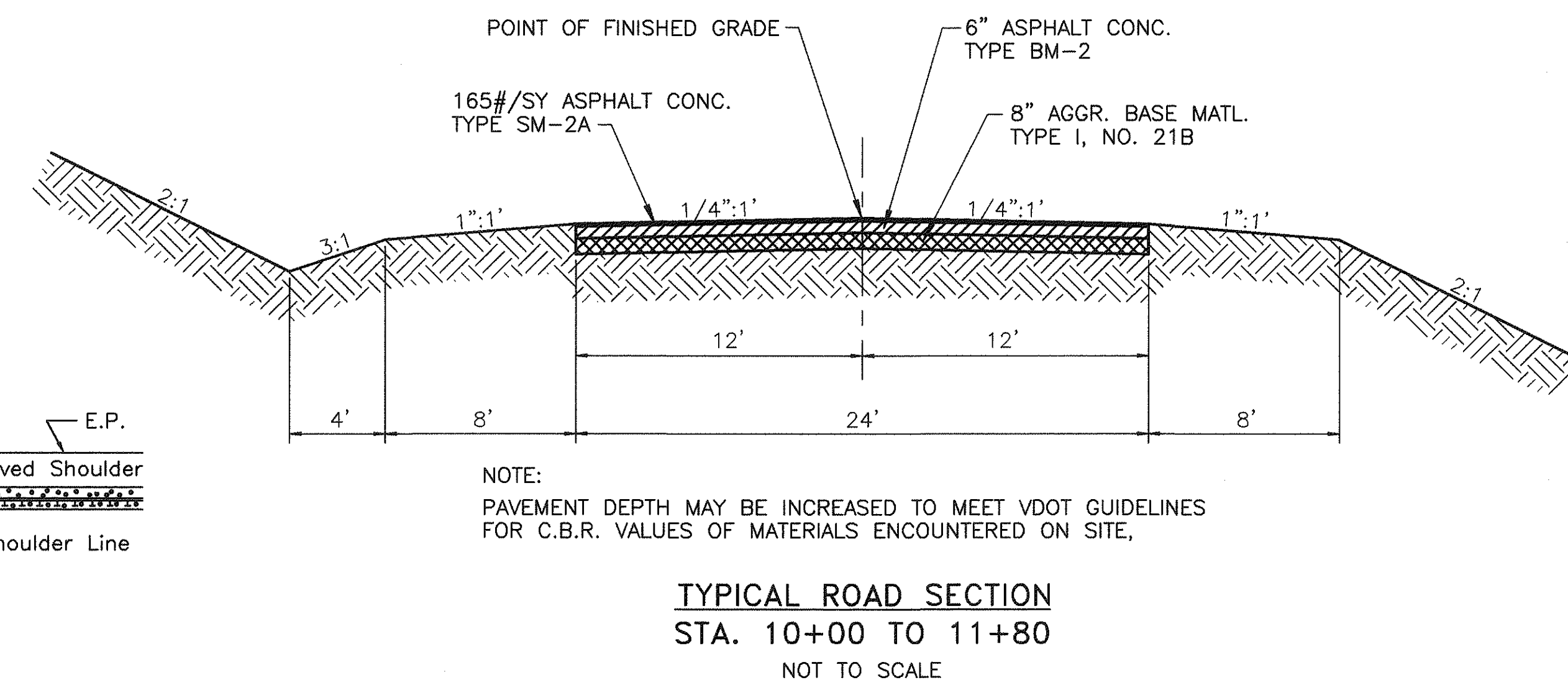


ST'D. GR-2 & MC-3B (9") ASPHALT CURB INSTALLATION

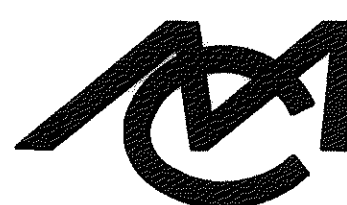
SHOULDER WIDTHS AND TAPER REQUIREMENTS		
Normal Width For G. R.	Width @ Terminal	Taper A
①	②	③
FT.	FT.	FT.
15	19	16
13	17	16
12	16	16
11	15	16
9	13	16
8	12	16



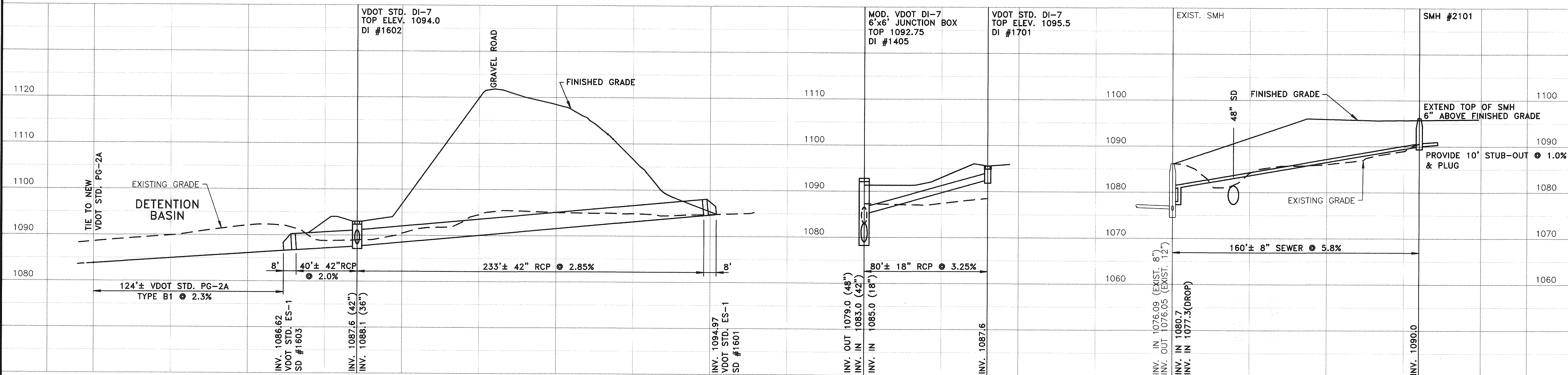
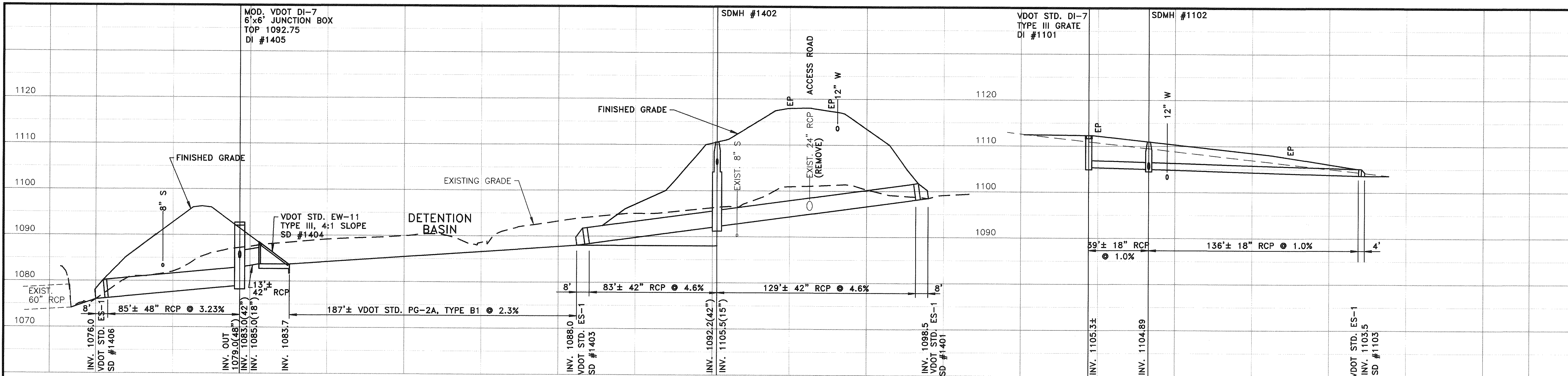
Methods for Beginning & Ending Asphalt Paving under Guardrail and Guardrail installation site preparation requirements for GR-7 & GR-8 Type 1.



SPECIAL DESIGN ASPHALT CURB AND GUTTER & ASPHALT PAVING UNDER GUARDRAIL
STA. 11+80 TO END
NOT TO SCALE

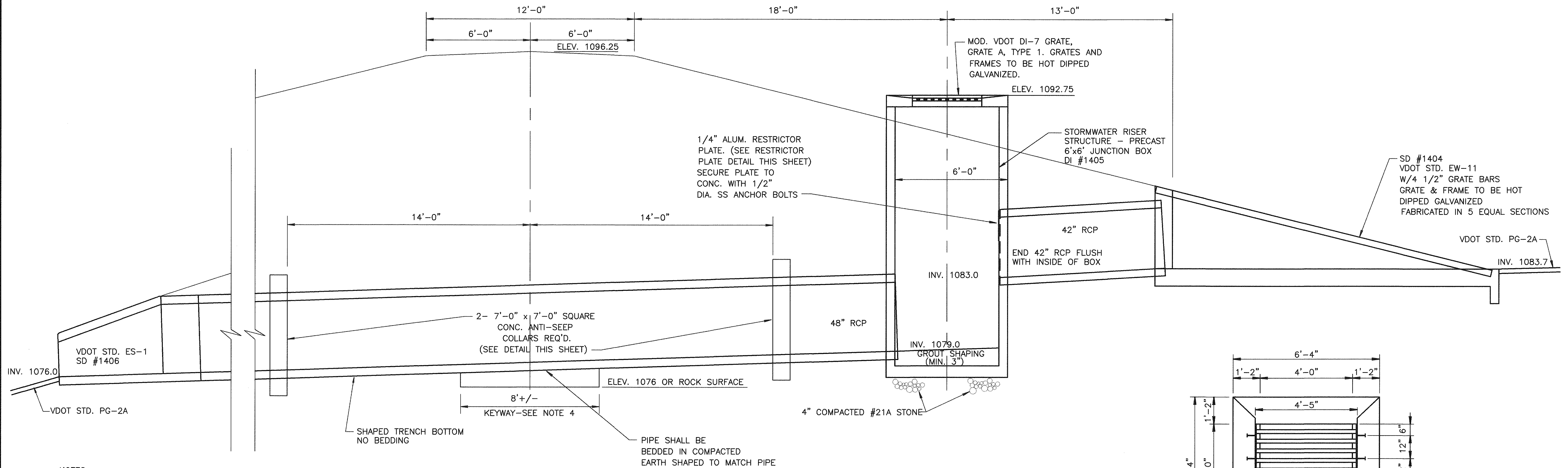
 Mattern & Craig, Inc. CONSULTING ENGINEERS • SURVEYORS 701 FIRST STREET, S.W. ROANOKE, VIRGINIA 24016 (540) 345-9942 (540) 345-7691 FAX	DSGN	DSG	REV	DATE	DESCRIPTION	BY	APP	EASTPARK COMMERCE CENTER – PHASE III ACCESS ROAD & WATER LINE PROFILES BOTETOURT COUNTY, VIRGINIA			1"=10' VERT. SCALE: 1"=30' HORIZ.
	DRAWN	DSG		NOV. 1997	RECORD DRAWINGS	DSG					COMM. NO. 1034FD
	CHKD	SWH									DATE: FEB., 1997
											SHEET 5 OF 14

N:\5 Tue Dec 23 10:36:36 1997



SEWER PROFILE

Mattern & Craig, Inc. CONSULTING ENGINEERS • SURVEYORS 701 FIRST STREET, S.W. ROANOKE, VIRGINIA 24016 (540) 345-9342 (540) 345-7691 FAX	DSGN DSG	REV DATE NOV. 1997	DESCRIPTION RECORD DRAWINGS	BY DSG	APP	EASTPARK COMMERCE CENTER – PHASE III STORM DRAIN & SEWER PROFILES BOTETOURT COUNTY, VIRGINIA			1"=10' VERT. SCALE: 1"=30' HORIZ. COMM. NO. 1034FD DATE: FEB., 1997 SHEET 6 OF 14
	DRAWN DSG								
	CHKD SWH								

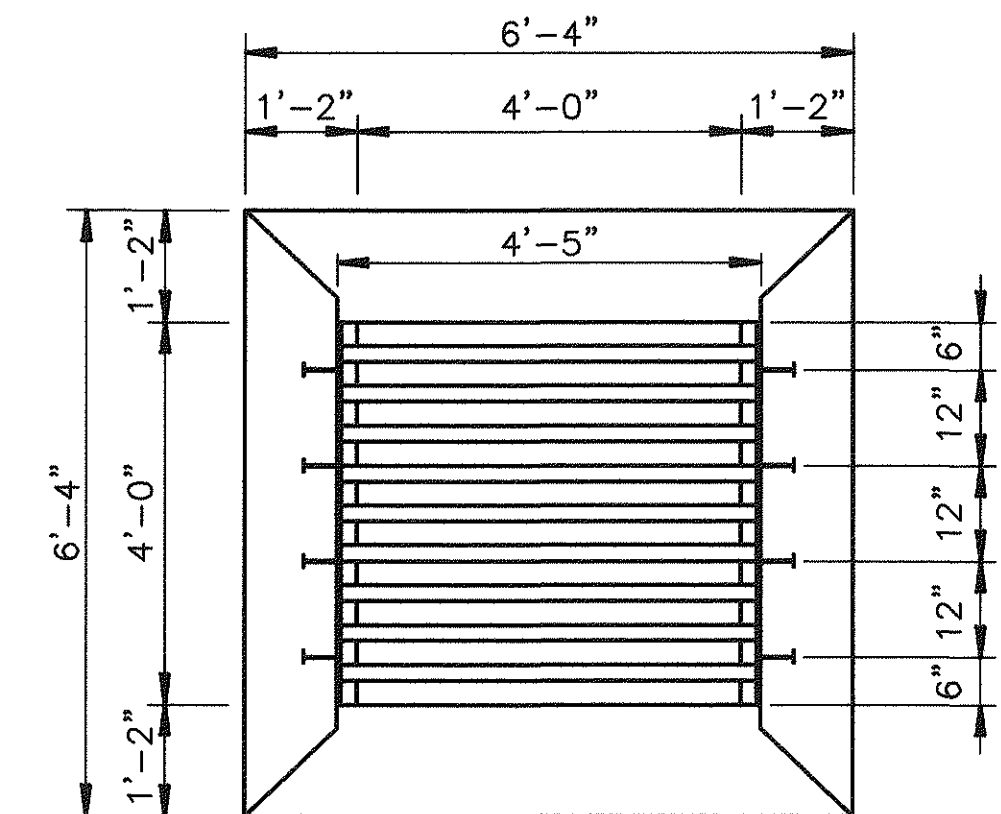


NOTES:

1. THE EMBANKMENT SHALL BE CONSTRUCTED TO ELEVATION 1086± PRIOR TO EXCAVATING THE NECESSARY TRENCH FOR THE BARREL PIPE.
2. SEAL ALL PIPE OPENINGS IN STRUCTURES W/ GROUT AND BACKFILL W/ CLAY MATERIAL
3. ANTI-SEEP COLLARS SHALL NOT BE LOCATED WITHIN 2 FEET OF A PIPE JOINT.
4. CONTRACTOR TO EXCAVATE KEYWAY BELOW DAM EMBANKMENT. KEYWAY TO BE EXCAVATED TO THE DEPTH INDICATED, PROOF ROLLED AND INSPECTED BY THE ENGINEER. PRIOR TO BACKFILLING WITH SUITABLE MATERIAL, ENGINEER SHALL APPROVE COMPACTED SURFACE.

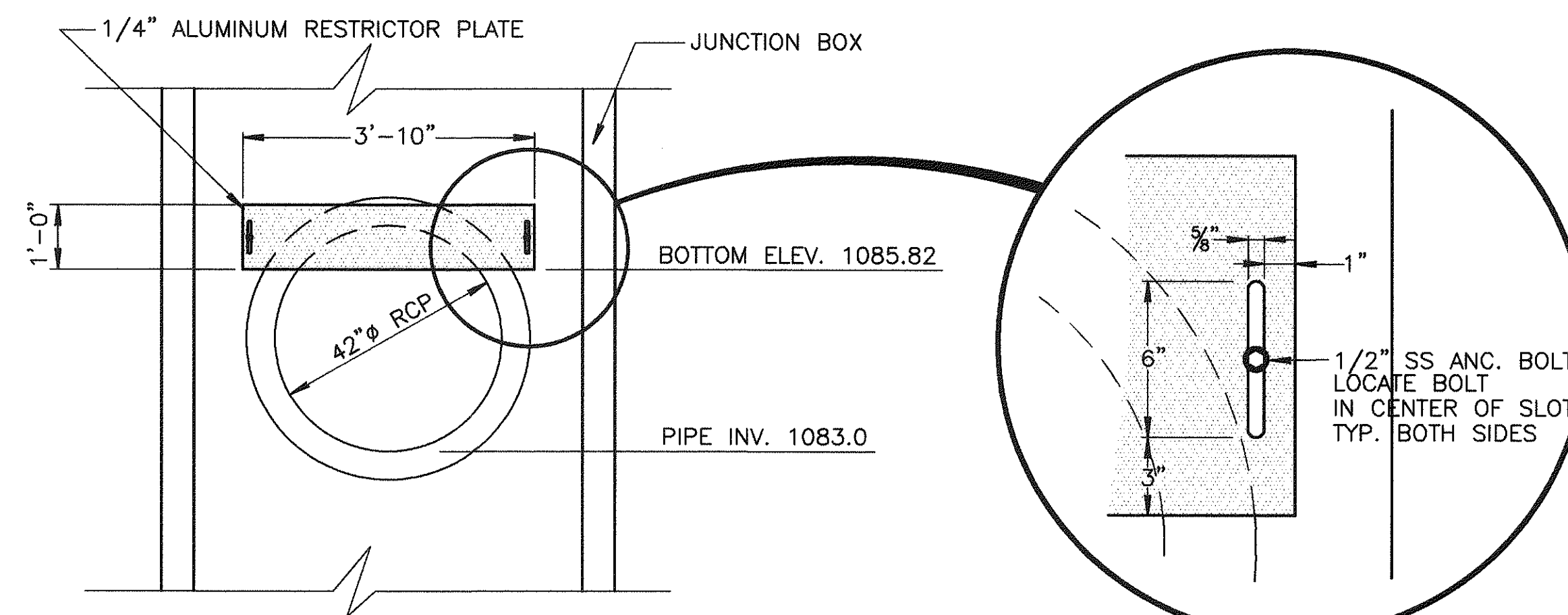
PRINCIPAL SPILLWAY DETAIL- SECTION

SCALE: NONE



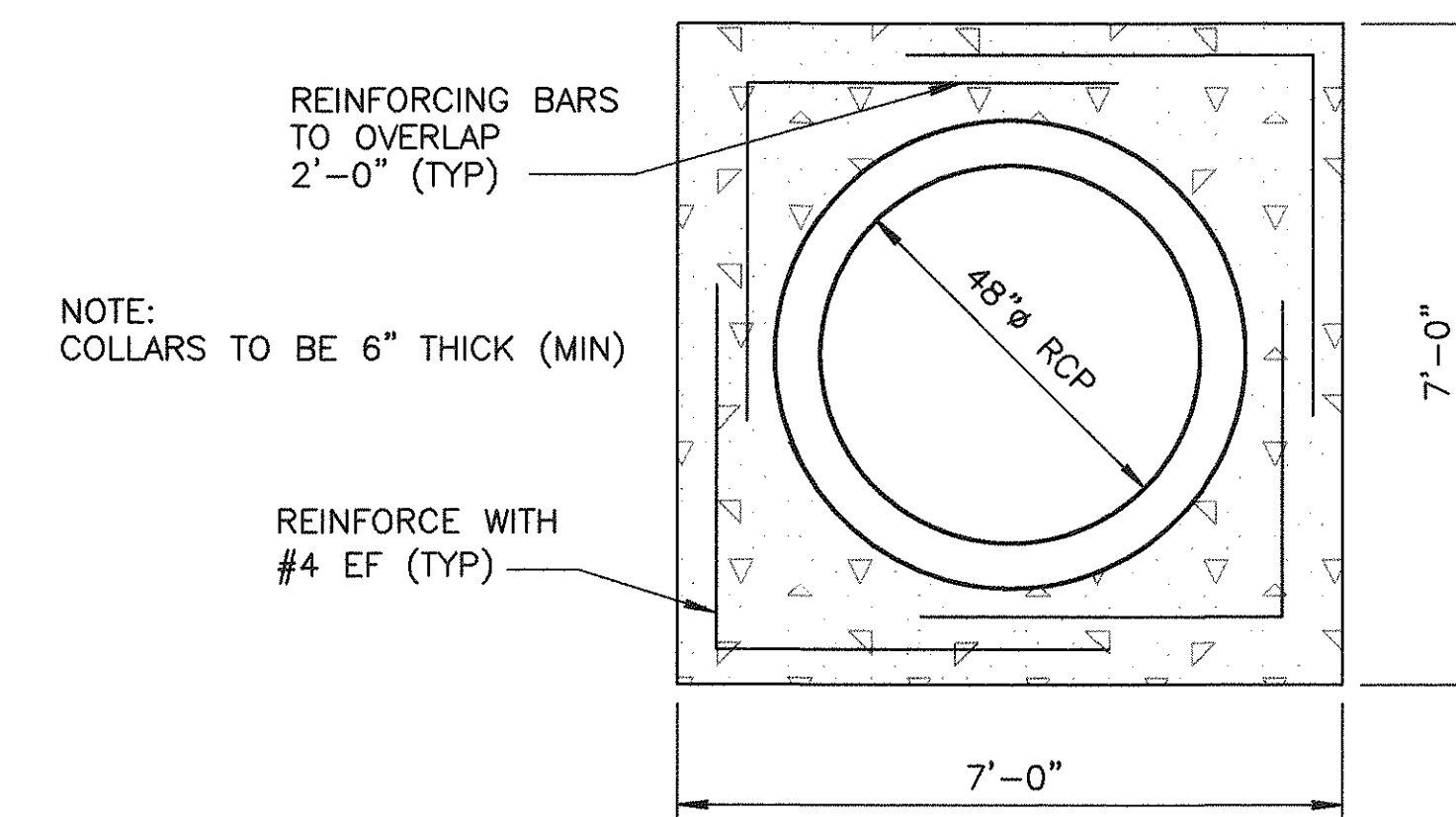
DI-7 GRATE DETAIL

NO SCALE



RESTRICTOR PLATE DETAIL

SCALE: NONE



ANTI-SEEP COLLAR DETAIL

SCALE: NONE



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DSGN	DSG	REV	DATE	DESCRIPTION	BY	APP
		1	NOV. 1997	RECORD DRAWINGS	DSG	
DRAWN	DSG					
CHKD	SWH					

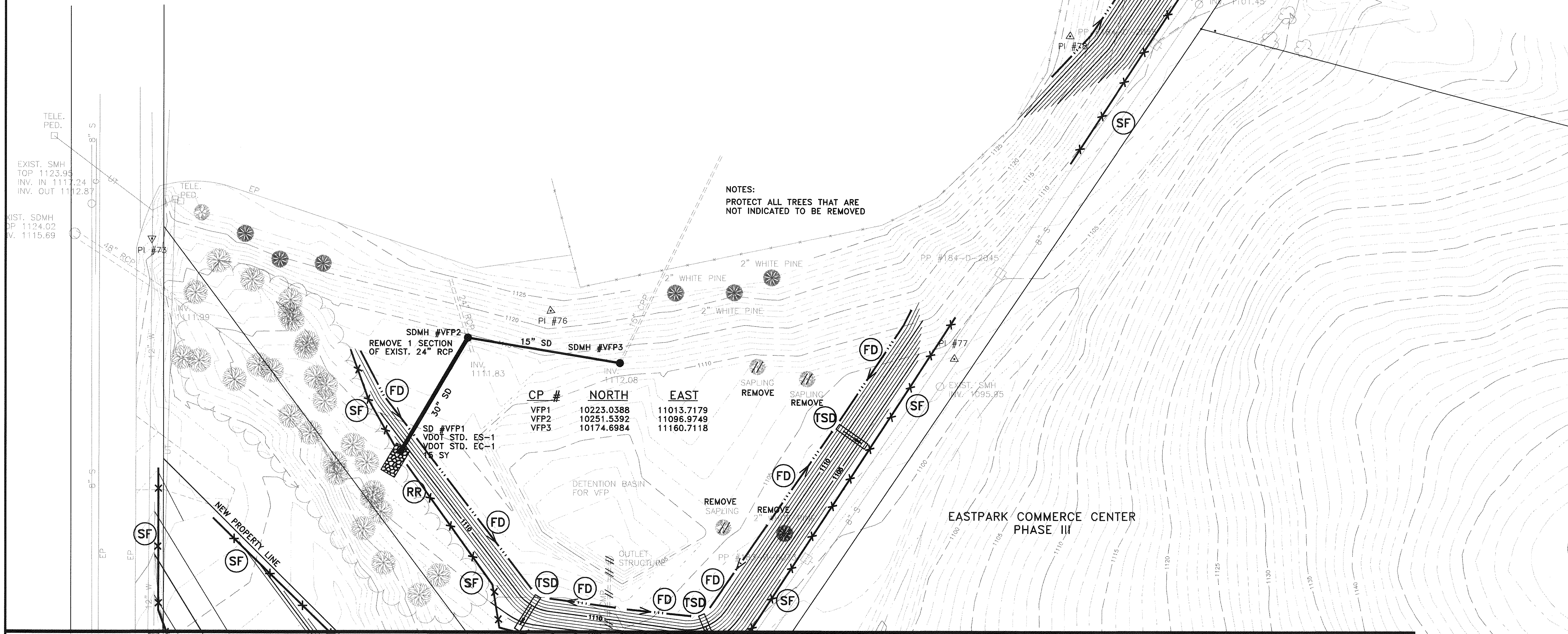
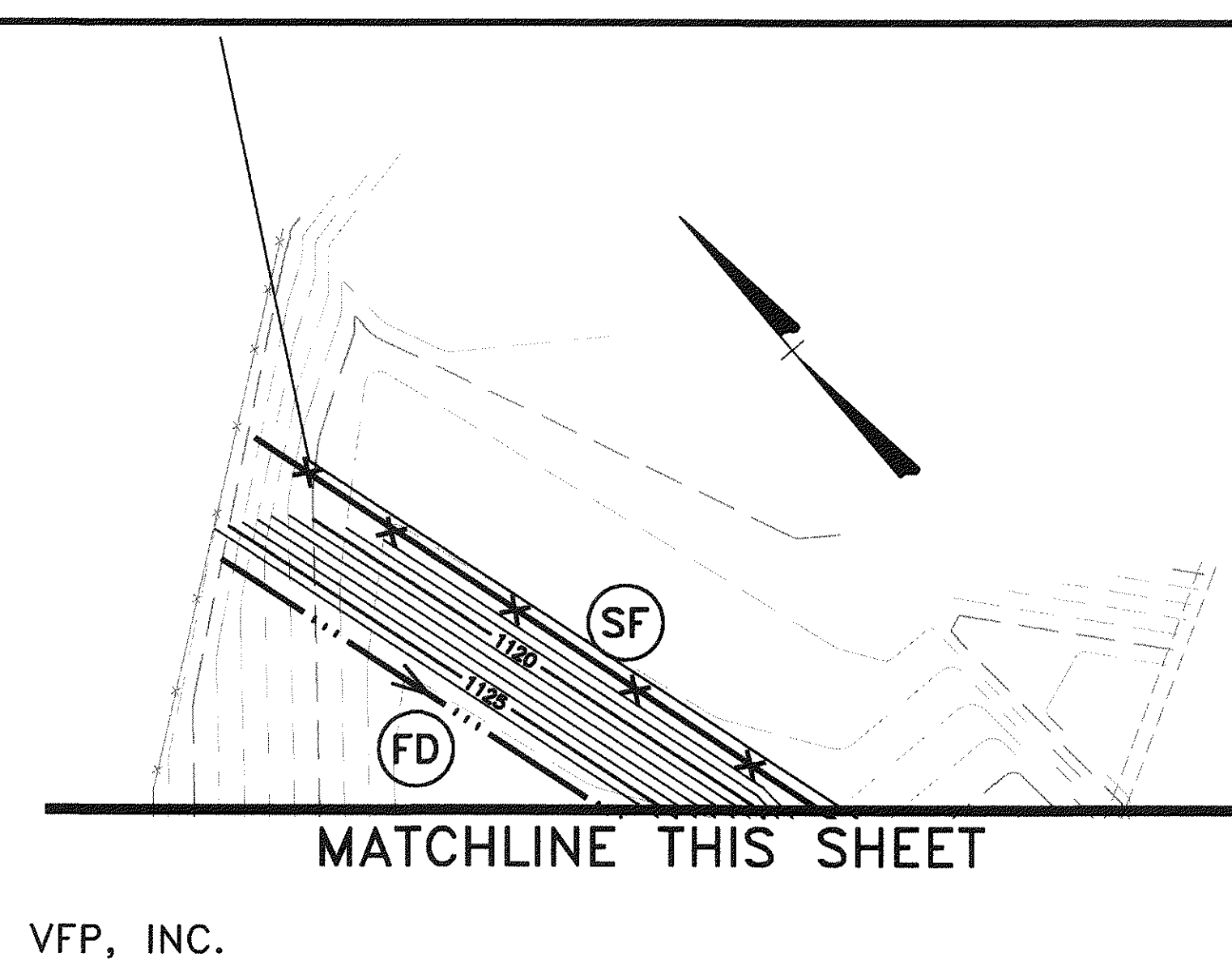
EASTPARK COMMERCE CENTER - PHASE III
STORMWATER DETENTION BASIN
MISCELLANEOUS DETAILS
BOTETOURT COUNTY, VIRGINIA

SCALE: 1"=30'
COMM. NO. 1034FD
DATE: FEB., 1997
SHEET 7 OF 14

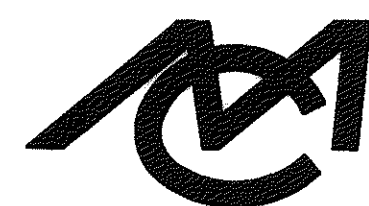
1. CONTRACTOR SHALL PROVIDE ROCK DUST ON PAVEMENT PRIOR TO MOVING VEHICLES FROM ONE SITE TO THE OTHER ACROSS THE ROAD TO PROTECT THE ROAD SURFACE FROM THE VEHICLES AND MUD. ALL SOIL AND ROCK DUST SHALL BE REMOVED FROM THE PAVEMENT UPON COMPLETION OF GRADING ON LOT 1.

		REV	DATE	DESCRIPTION	BY	APP
DSGN	DSG		NOV. 1997	RECORD DRAWINGS	DSG	
DRAWN	DG					
CHKD	SWH					

SCALE: 1"=30'
COMM. NO. 1034FD
DATE: FEB., 1997
SHEET 8 OF 14



MATCHLINE SHEETS 4 & 8



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		REV	DATE	DESCRIPTION	BY	APP
DSGN	DSG		NOV. 1997	RECORD DRAWINGS	DSG	
DRAWN	DSG					
CHKD	SWH					

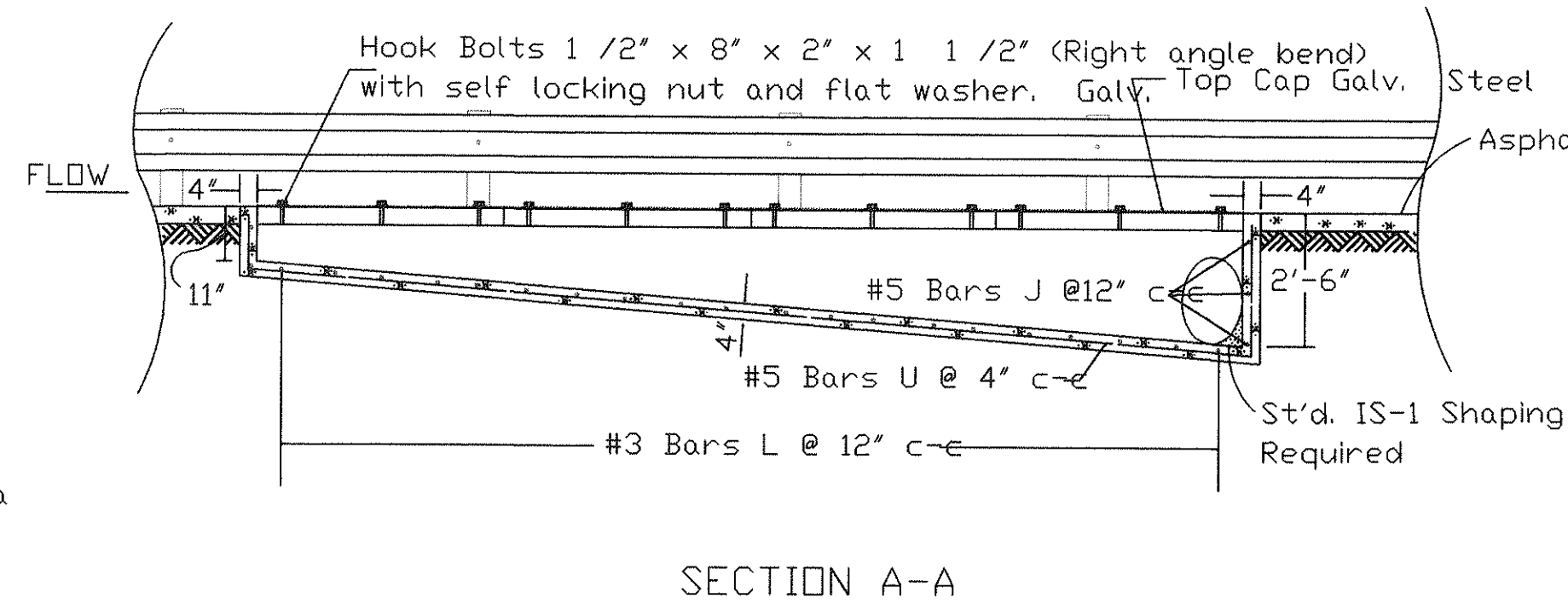
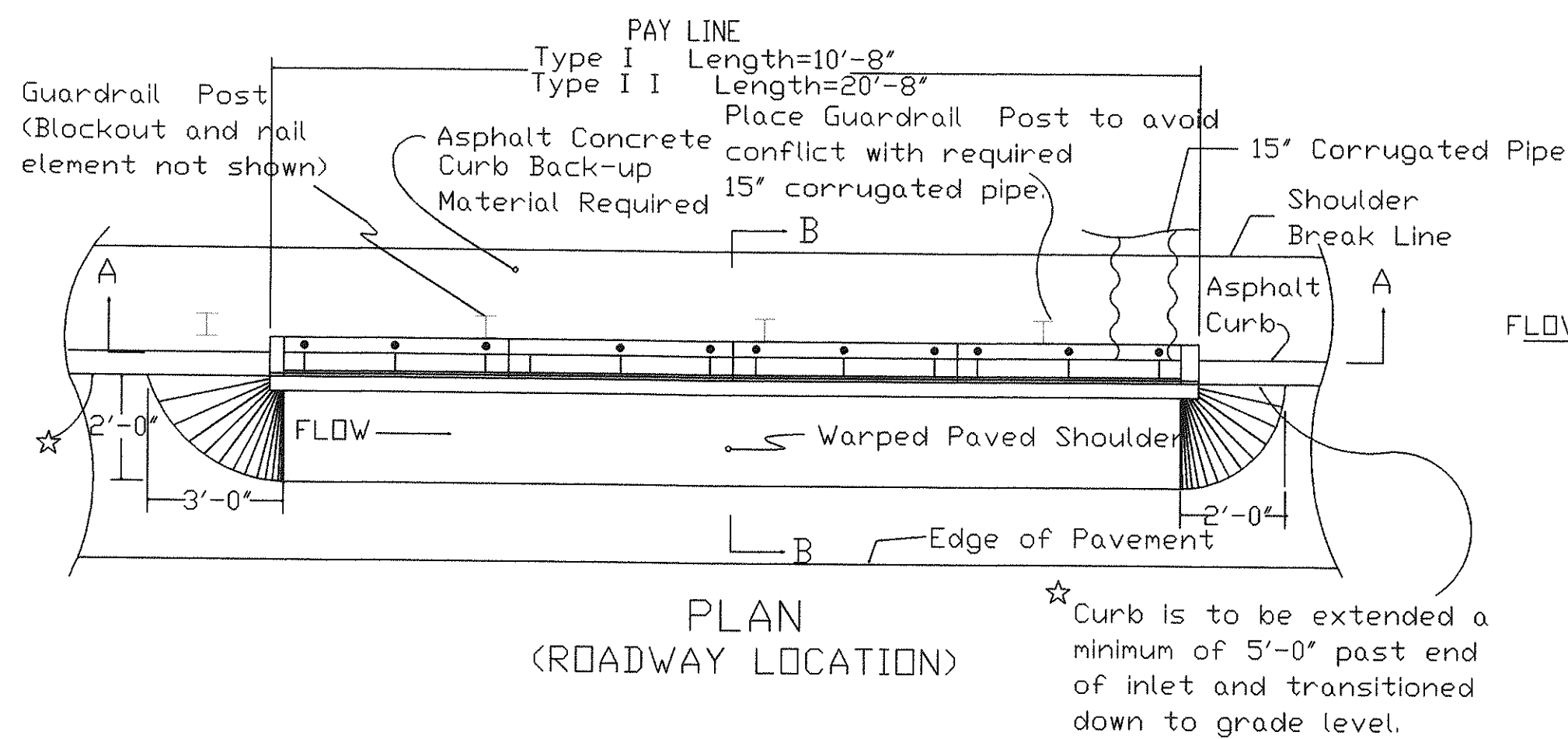
EASTPARK COMMERCE CENTER - PHASE III
VA FIBERGLASS PRODUCTS, INC.
DRAINAGE AND GRADING PLAN
BOTETOURT COUNTY, VIRGINIA

SCALE: 1"=30'	
COMM. NO.	1034FD
DATE: FEB., 1997	
SHEET	9 OF 14

1034ED\9.02

SUPERVISED BY
DESIGNED BY
CADD OPERATOR
REVISED BY

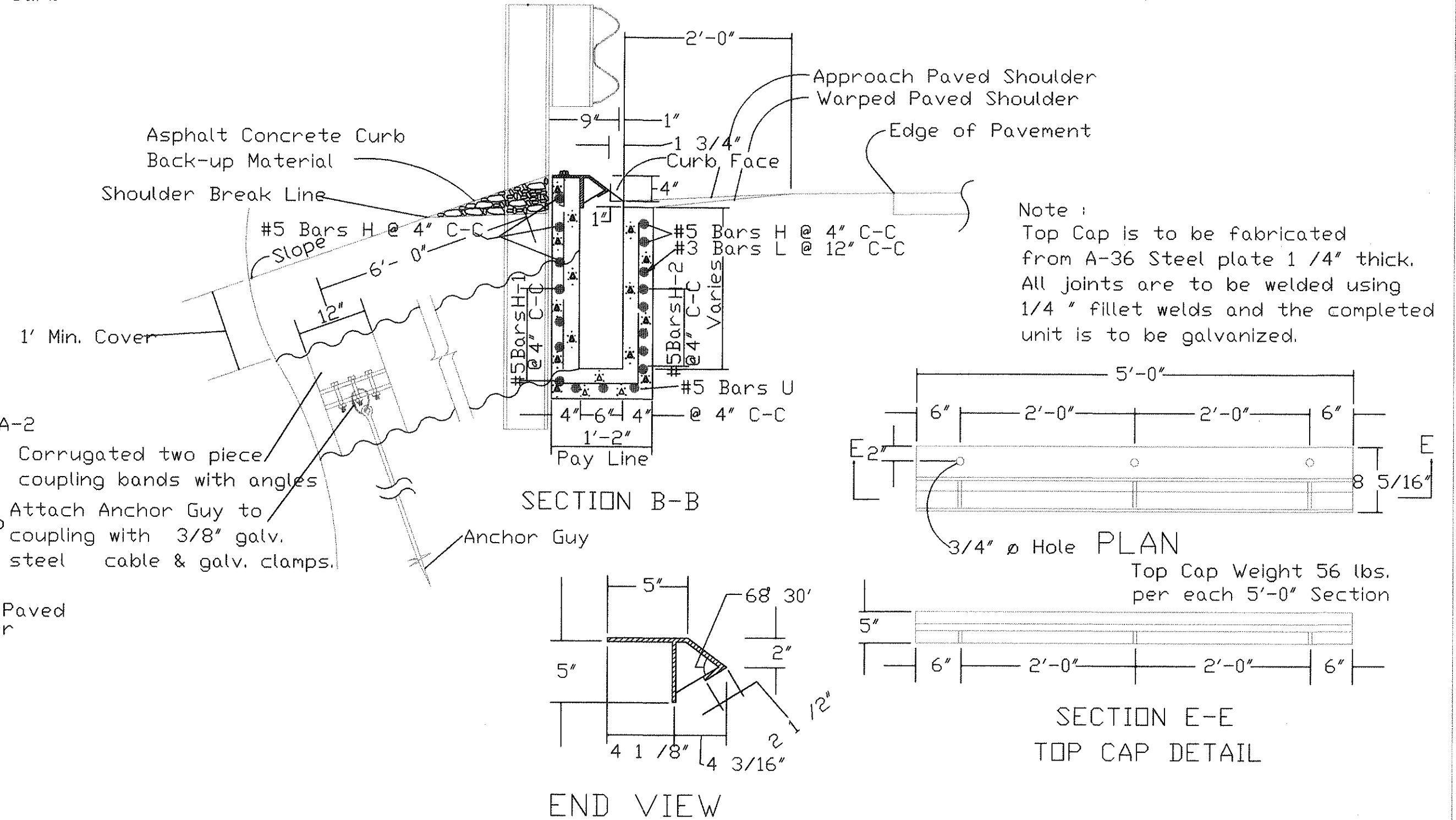
\$TIME\$STAMP\$



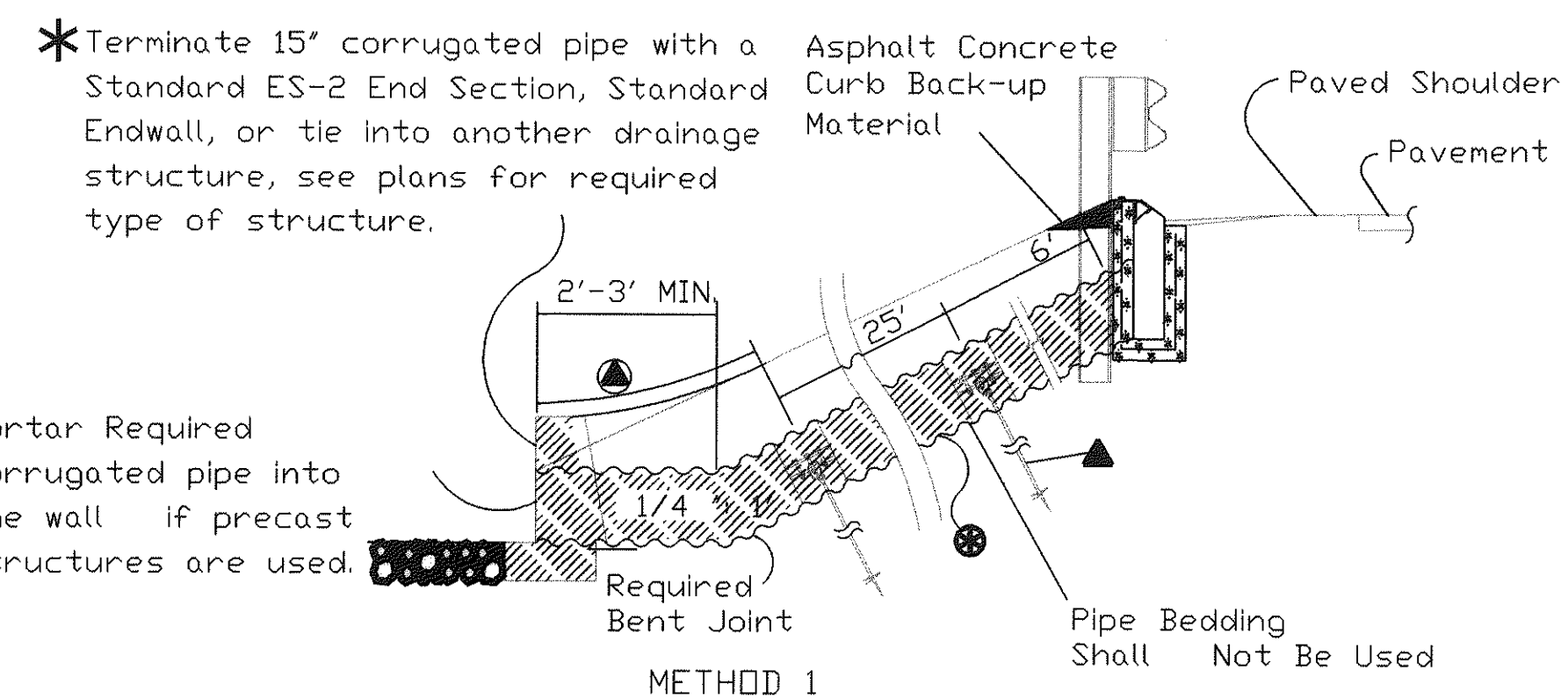
DESIGN FEATURES RELATING TO CONSTRUCTION
OR TO REGULATION AND CONTROL OF TRAFFIC
MAY BE SUBJECT TO CHANGE AS DEEMED
NECESSARY BY THE DEPARTMENT

REVISED	FHWA REGION	STATE	FEDERAL AID PROJECT	ROUTE	STATE PROJECT	SHEET NO.
	3	VA.				

Guardrail St'd. GR-2, as Specified
on plans. See Special Design drawing
number 2154-A plan sheet No.



TYPICAL METHOD OF INSTALLATION
FOR PIPE ON FILL SLOPE



NOTES

- ▲ Anchor Guy Screws are Not to be used with the coupling bands when the pipe lengths are less than 50'. When pipe lengths exceed 50', two (2) anchor guy screws are to be used with each coupling band spaced at 25' c-c maximum.
- Two (2) Anchor Guy screws, (3/4" Ø Rod X 5'-6", 6" Dia. Helix), to be used with each Coupling Band, when pipe length exceeds 50'.
- When the spacing of the lower coupling falls closer than 25' to the Storm System structure the distance is to be added to the last full 25' space and the coupling is to be spaced mid-way of the total distance.
- Required 15' corrugated pipe. See plans for Lin. Ft. quantities. The Lin. Ft. cost for the pipe is to include furnishing and placing couplings and anchor guys. Corrugated polyethylene pipe lengths greater than 50' may be used as an alternate provided the coupling band anchorage design is submitted, by the manufacturer, for the Engineer's review and approval.

- * Required 15' corrugated pipe must be terminated at the toe of the fill slope with an appropriate end treatment. For 3:1 slopes and flatter the pipe may be terminated with a Standard ES-2 End Section or tied into another drainage structure. For slopes 3:1 and steeper (Maximum 1 1/2:1) the 15' pipe must have one of the following end treatments:
- Method 1. Terminate pipe with a standard endwall or other drainage structure, to be approved by the Engineer. For pipe lengths longer than 50', coupling bands with anchor guys are to be used at 25' C-C maximum spacing.
- Method 2. Terminate pipe with a standard ES-2 end section anchored with coupling band and anchor guys. Additional coupling bands and anchor guys are to be placed 25' C-C maximum for the remaining length of pipe.

Note: Payment for pipe and end treatments are not
included in cost for Special Design Shoulder Slot Inlets.

Rev. 2-95

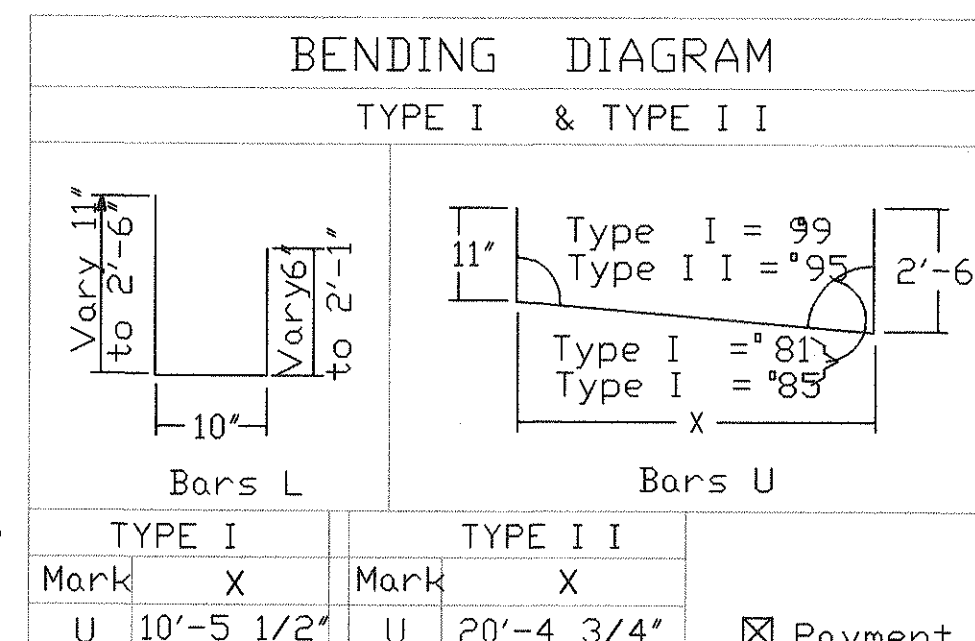
SPECIAL DESIGN SECTION
DRAWING NO. 2154

REINFORCING STEEL SCHEDULE									
TYPE I					TYPE I I				
MARK	SIZE	NO.	SPA.	LENGTH	MARK	SIZE	NO.	SPA.	LENGTH
H	#5	6	4"	10'-4"	H	#5	6	4"	20'-4"
H-1	#5	4	4"	8'-11" to 2'-8"	H-1	#5	4	4"	12'-8" to 2'-8"
H-2	#5	4	4"	8'-11" to 2'-8"	H-2	#5	4	4"	12'-8" to 2'-8"
J	#5	5	12"	0'-10"	J	#5	5	12"	0'-10"
L	#3	1	12"	5'-5" to 2'-3"	L	#3	21	12"	5'-5" to 2'-3"
U	#5	3	4"	13'-10"	U	#5	3	4"	23'-10"

BASIS OF PAYMENT to be Special Design Shoulder Slot Inlet to be placed
each, complete-in-place and is to include the cost of furnishing
and placing all concrete Class A-4, Reinforcing Steel, Top Caps,
Excavation, Backfill, Asphalt Conc. Curb Back-up Material, and all
materials necessary for construction.

Reinforcing Steel to be grade 60.

This Unit may be precast or cast in place, use 4000 P.S.I.
concrete if precast, Class A-4 concrete when cast in place.



Payment for asphalt concrete curb St'd. MC-3B
Lin. Ft. and asphalt concrete curb back-up material Tons
located 11' before and 5' past the inlet.

Inlets are not to be located
within the limits of the GR-FDA-2
Guardrail Terminal Treatments.

Pipes are to be placed on the down
grade or lower end of inlet as shown
in section A-A & D-D, Right Hand.

Precast units must be furnished with
pipe placed to the right or left
according to the flow down grade,
when facing the inlet from the center
of the road.

When this inlet is used in a sag
location either a Right Hand
or Left Hand unit may be used.

Backfill to be placed and compacted in
accordance with Section 303.09 of the
Road and Bridge Specifications.

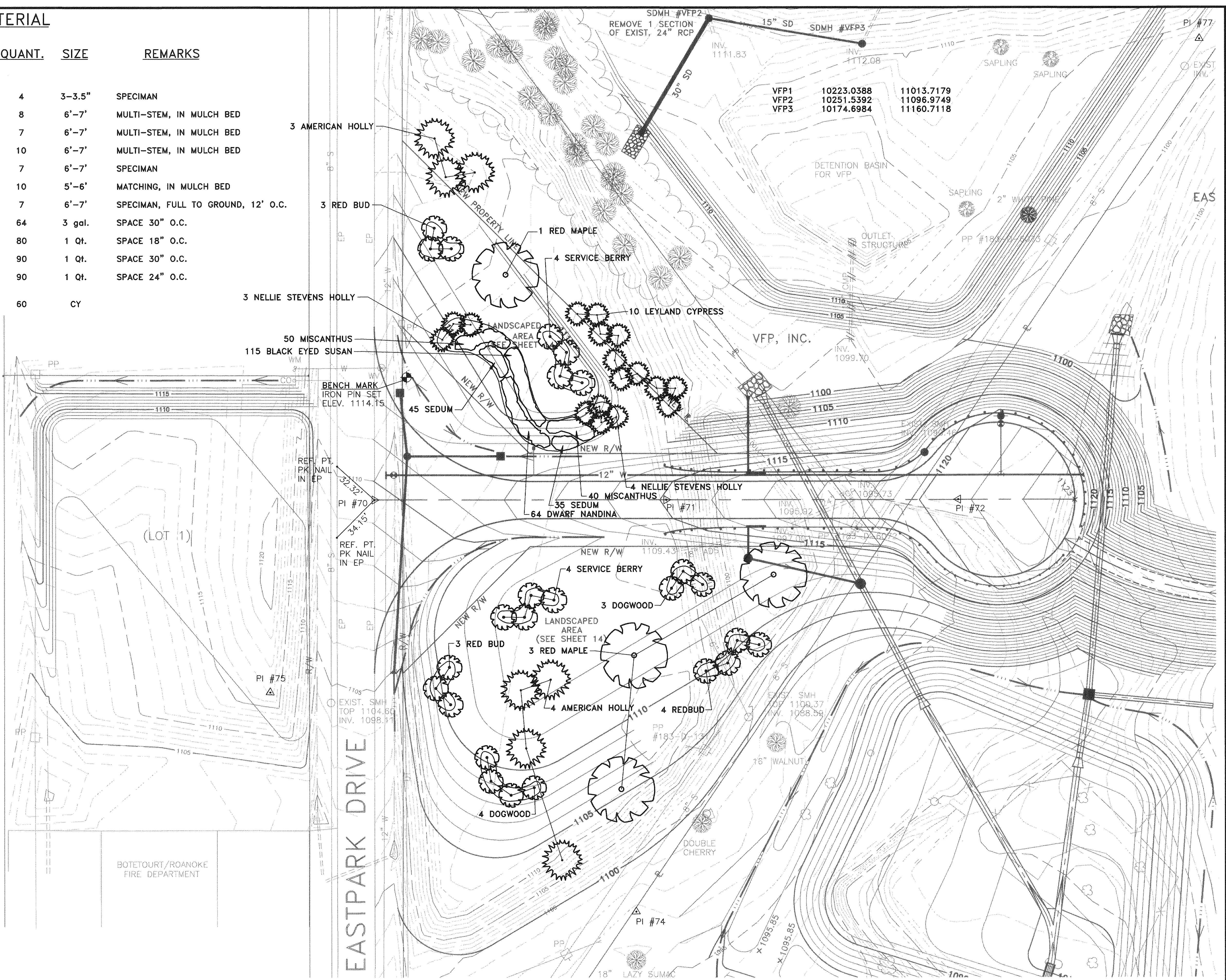
SPECIAL DESIGN SHOULDER SLOT INLET

RECORD DRAWINGS

PLAN NO.	PROJECT	FILE NO.	SHEET NO.
A			

LANDSCAPE MATERIAL

COMMON NAME	BOTANICAL NAME	QUANT.	SIZE	REMARKS
RED MAPLE 'RED SUNSET'	ACER RUBRUM	4	3'-3.5"	SPECIMAN
SERVICEBERRY 'AUTUMN BR.'	AMELANCHIER GRANDIFLORA	8	6'-7'	MULTI-STEM, IN MULCH BED
FLOWERING DOGWOOD	CORNUS FLORIDA	7	6'-7'	MULTI-STEM, IN MULCH BED
EASTERN REDBUD	CERCIS CANADENSIS	10	6'-7'	MULTI-STEM, IN MULCH BED
AMERICAN HOLLY 'GREENLEAF'	ILEX OPACA	7	6'-7'	SPECIMAN
LEYLAND CYPRESS	X CUPRESSOCYPARIS LEYLANDII	10	5'-6'	MATCHING, IN MULCH BED
NELLIE STEVENS HOLLY	ILEX 'NELLIE R. STEVENS'	7	6'-7'	SPECIMAN, FULL TO GROUND, 12' O.C.
DWARF NANDINA	NANDINA DOM. 'FIRE POWER'	64	3 gal.	SPACE 30" O.C.
SEDUM 'AUTUMN JOY'	DENNSTAEDIA PUNCTILOBULA	80	1 Qt.	SPACE 18" O.C.
RED SILVER GRASS	MISCANTHUS S. 'PURPURASCENS'	90	1 Qt.	SPACE 30" O.C.
BLACK EYED SUSAN 'GOLDSTURM'	RUDBEKIA 'GOLDSTURM'	90	1 Qt.	SPACE 24" O.C.
SHREDDED HARDWOOD MULCH		60	CY	





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DSGN	REV	DATE	DESCRIPTION	BY	APP
	1	NOV. 1997	RECORD DRAWINGS	DSG	
DRAWN					
CHKD					

EASTPARK COMMERCE CENTER – PHASE III
LANDSCAPE PLAN
BY WHITESELL ORRISON, INC.
BOTETOURT COUNTY, VIRGINIA

SCALE: 1"=30'
COMM. NO. 1034FD
DATE: FEB., 1997
SHEET 14 OF 14