

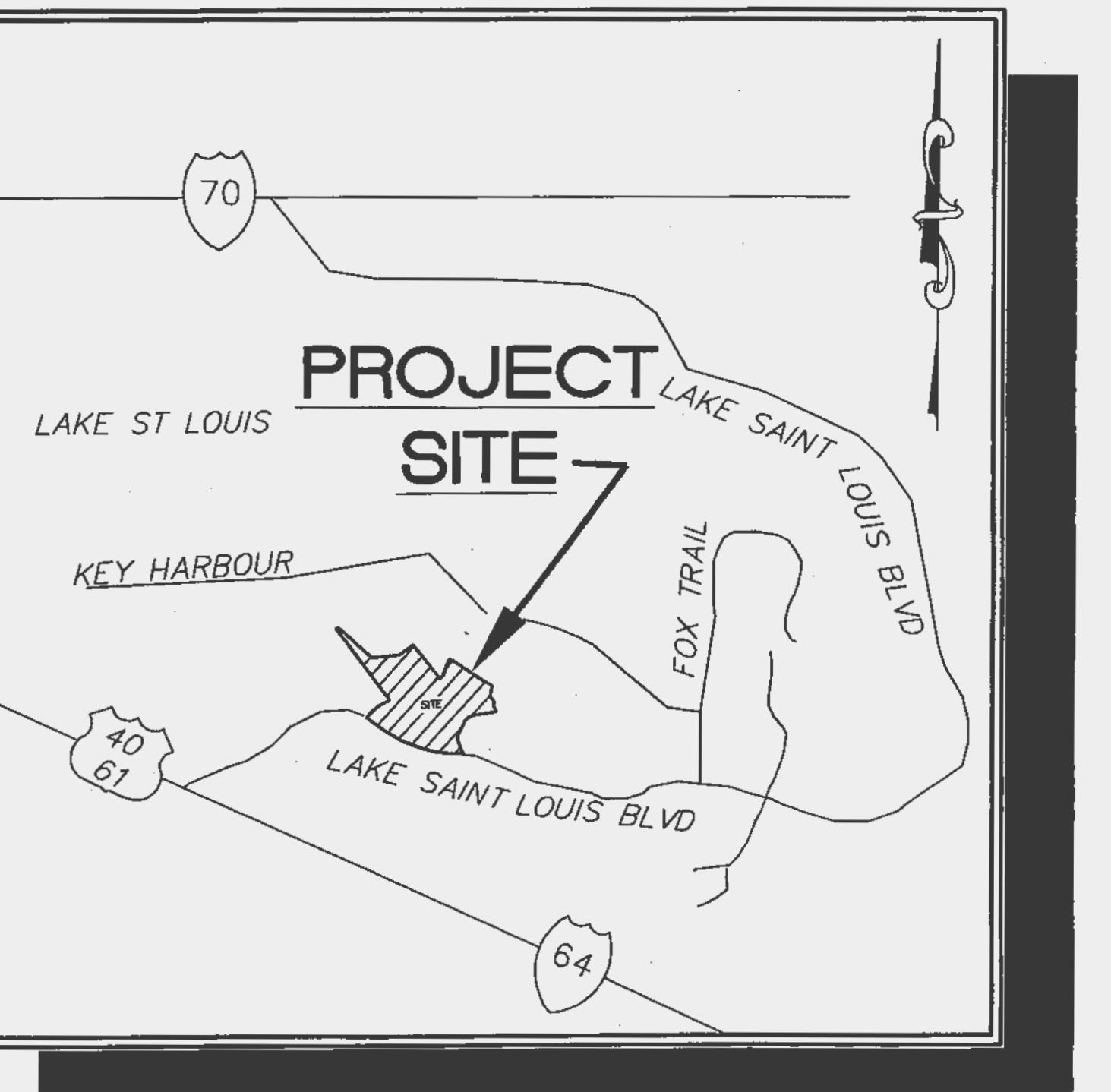
# BRECKENRIDGE

A TRACT OF LAND BEING PART OF U.S. SURVEY 929  
AND U.S. SURVEY 1782 AND PART OF FRAC. SECTION 34  
TOWNSHIP 47 NORTH, RANGE 2 EAST,  
CITY OF LAKE ST. LOUIS, MISSOURI

## GENERAL NOTES

- Gas, water and other underground utilities shall not conflict with the depth or horizontal locations of existing and proposed sanitary and storm sewers, including house laterals.
- Underground utilities have been plotted from available information and therefore their locations must be considered approximate only. The verification of the location of all underground utilities, either shown or not shown on these plans, shall be the responsibility of the contractor and shall be located prior to grading or construction of improvements.
- All filled places under buildings, proposed sanitary and storm sewer lines, and/or paved areas including trench backfills shall be compacted to at least 90% of maximum dry density as determined by the "Modified A.A.S.H.T.O. T-180 Compaction Test," (ASTM D-1557) unless otherwise specified by the local governing authority specifications. All tests will be verified by a Soils Engineer.
- All filled places in paved State, County or City roads (highways) shall be compacted to at least 90% of the maximum dry density as determined by the "Modified A.A.S.H.T.O. T-180 Compaction Test," (ASTM D-1557), unless otherwise specified by local governing authority specifications. All tests will be verified by a Soils Engineer.
- Earth subgrade for paved areas must be compacted to 90% of maximum dry density as determined by the "Modified A.A.S.H.T.O. T-180 Compaction Test," (ASTM D-1557), and must be inspected and approved by a representative of the City, before paving can commence.
- All grading on City of Lake St. Louis' right-of-way shall be seeded and mulched and all disturbed right-of-way markers shall be reset at the completion of grading.
- No area shall be cleared without permission of the developer.
- All grades shall be within 0.2 feet more or less of those shown on the grading plan.
- No slope shall be greater than 3:1 and shall be either sodded or seeded and mulched.
- The developer shall contract with a soil consultant firm registered in the State of Missouri during the grading operation to monitor cut and fill and to verify proper compaction has been achieved. A report shall be prepared by the soils consultant and provided to the City for verification of the grading operation.
- Owner/Developer assumes full responsibility as to the performance of the grading operation and assurance that all properties and roads will be adequately protected.
- The total yardage for this project is based on a 15.0% shrinkage factor.
- The shrinkage factor is subject to change, due to soil conditions, (types and moisture content), weather conditions, and the percentage of compaction achieved at the time of grading is performed. As a result, adjustments in final grade may be required. If adjustments need to be made, the contractor shall contact the project engineer, prior to completion of the grading.
- If straw bales or silt fences are destroyed by heavy rains, vandalism, etc., they are to be replaced promptly by Contractor.
- All fills under and within 15 feet of the building areas that are deeper than 6 feet shall be compacted to at least 92 percent of the maximum dry density as determined by a modified proctor test. Fills less than 6 feet in building areas should be compacted to at least 90 percent of the maximum dry density as determined by a modified proctor test.
- All utilities shall be placed underground.
- Proposed construction schedule (rough dates):
  - 9-15-2003 - 9-16-2003 a. Clearing (estimated duration of exposed area).
  - 9-17-2003 - 10-3-2003 b. Grading and construction (Installation of temporary sediment control, storm drainage).
  - 10-6-2003 - 10-12-2003 c. Final Grading and Landscaping (vegetative cover).
- Where natural vegetation is removed during grading, vegetation shall be re-established in such a density as to prevent erosion. Permanent type grasses shall be established as soon as possible or during the next seeding period after grading has been completed.
- When grading operations are completed or suspended for more than 30 days, permanent grass must be established at sufficient density to provide erosion control from the site. Between permanent grass seeding periods, temporary cover shall be provided according to the designated officials recommendation.
- All finished grades (area of 20% slopes 5:1) shall be improved in excess the rate of 100 pounds per 1,000 square feet when seeded.

## IMPROVEMENT PLANS



## LOCATION MAP

- Each contractor, subcontractor, and/or utility company shall be responsible for the maintenance and preservation of any siltation control placed on the development by the developer and shall not disturb the siltation control except as absolutely necessary, in the event of any such disturbance of siltation control, then the contractor, subcontractor, or utility company, as applicable, disturbing such siltation control shall immediately replace the same with controls, devices, and utility equipment as applicable expenses. In the event of any fines or penalties being levied as a result of the disturbance of any such siltation control, the party disturbing such siltation control shall be liable for payment of same and shall indemnify and hold developer harmless from any and all liabilities, damages, demands, liabilities, damages, demands, penalties, fine fees, claims, causes of action, judgements, costs and expenses, including, without limitation, attorney's fees, arising from or in connection with any such disturbance.
- THE SEDIMENT CONTROL PLAN MUST BE IMPLEMENTED BEFORE GRADING BEGINS. NO GRADED AREA IS TO REMAIN WITHOUT AT LEAST SEVENTY-FIVE (75) PERCENT OF VEGETATIVE GROUND COVER FOR MORE THAN THIRTY (30) DAYS WITHOUT BEING SEEDED AND MULCHED OR SOODED. ALSO, POSITIVE STEPS MUST BE EXERCISED TO PREVENT TRANSPORTED SOIL FROM DAMAGING ADJACENT PROPERTY AND BEING DEPOSITED IN THE FORM OF SILT IN STORM DRAINAGE SYSTEMS WHETHER ON-SITE OR OFF-SITE.
- THE CITY ENGINEER SHALL BE CONTACTED AFTER THE INSTALLATION OF THE SILTATION CONTROL DEVICES AND AT LEAST TWENTY-FOUR (24) HOURS PRIOR TO THE COMMENCEMENT OF ANY GRADING OPERATIONS.
- ANY DEPOSITING OF SILTS OR MUD ONTO NEW OR EXISTING PAVEMENT OR IN NEW OR EXISTING STORM SEWERS OR SWALES SHALL BE REMOVED AFTER EACH RAIN AND AFFECTED AREAS CLEANED TO THE SATISFACTION OF THE CITY OF LAKE ST. LOUIS.
- THE DEVELOPER SHALL CAUSE THE "AS-BUILT" LOCATION OF EACH STORM-SEWER OUTFALL OF THE PROJECT TO BE DISPLAYED ON THE "AS-BUILT" PLANS WITH HORIZONTAL COORDINATES OF THE END POINT OF THE OUTFALL CLEARLY LABELED AND REFERENCED TO THE MISSOURI COORDINATE SYSTEM OF 1983 AS DEFINED BY R.S. MO 60.401 AND SHALL DISPLAY THE PROJECT GRID FACTOR. IN ADDITION, THE VERTICAL ELEVATION OF EACH OUTFALL SHALL BE LABELED ON THE "AS-BUILT" PLANS AND SHALL BE REFERENCED TO THE PROJECT VERTICAL DATUM. ONE MYLAR SET, TWO PAPER SETS, AND ONE DIGITAL COPY IN AUTOCAD FORMAT OF THE "AS-BUILT" PLANS SHALL BE SUBMITTED TO THE CITY ENGINEER BEFORE THE CITY SHALL RELEASE THE ESCROW ESTABLISHED INSURING OR GUARANTEEING THE STABILIZATION AND REVEGETATION OF THE SITE.
- ALL P.V.C. SANITARY SEWER PIPE SHALL BE SDR-35 OR EQUAL WITH CRUSHED STONE BEDDING UNIFORMLY GRADED BETWEEN 1" & 1/4" SIZE. THIS BEDDING SHALL EXTEND FROM 6" BELOW THE PIPE TO 7/10 OF THE PIPE DIAMETER ABOVE THE BOTTOM OF THE PIPE.
- EXISTING ZONING - SR-1.



## DRAWING INDEX

Sheet	Description
1	COVER SHEET
2-3	SITE PLAN
4-5	GRADING PLAN
6	WATER PLAN
7-8	STREET PROFILES
9-10	SANITARY SEWER PROFILES
11-12	STORM SEWER PROFILES
13-14	DRAINAGE AREA MAP
15-20	CONSTRUCTION DETAILS
21-23	SILTATION CONTROL PLAN

## LEGEND

● Sanitary Sewer (Proposed)	▀ Sanitary Structure	R.C.P.	Reinforced Concrete Pipe
○ Sanitary Sewer (Existing)	▀ Storm Structure	C.M.P.	Corrugated Metal Pipe
- - - Storm Sewer (Proposed)	● Test Hole	C.I.P.	Cast Iron Pipe
== Storm Sewer (Existing)	▲ Power Pole	P.V.C.	Polyvinyl Chloride
— Water Line & Size	◊ Light Standard	V.C.P.	Vitrified Clay Pipe
— Existing water line	● Double Water Meter Setting	C.I.	Curb Inlet
— Tee & Valve	○ Single Water Meter Setting	C.O.	Clean Out
■ Hydrant	● Gas Meter	V.T.	Vent Trap
— Cap	■ Skewed Curb Inlet	T.B.R.	To Be Removed
18 Lot or Building Number	● Double Curb Inlet	T.B.R.&R	To Be Removed & Relocated
— x Existing Fence Line	● Grade Inlet	T.B.P.	To Be Protected
— Area Inlet	● Area Inlet	T.B.A.	To Be Abandoned
— Street Sign	● Double Area Inlet	B.C.	Base Of Curb
— Existing Contour	● Concrete Collar	T.C.	Top Of Curb
— Proposed Contour	● Flared End Section	T.W.	Top Of Wall
— Rip-Rap	● End Pipe	B.W.	Base Of Wall
— End of Lateral	● Energy Dissipater	(TYP.)	Typical
— Asphalt Pavement	● Manhole	U.N.O.	Unless Noted Otherwise
— Concrete Pavement	● Concrete Pipe	U.I.P.	Use In Place
— Utility Easement	● Over Land Flow Path		
— Flow Path Arrow			

## PROJECT BENCH MARK

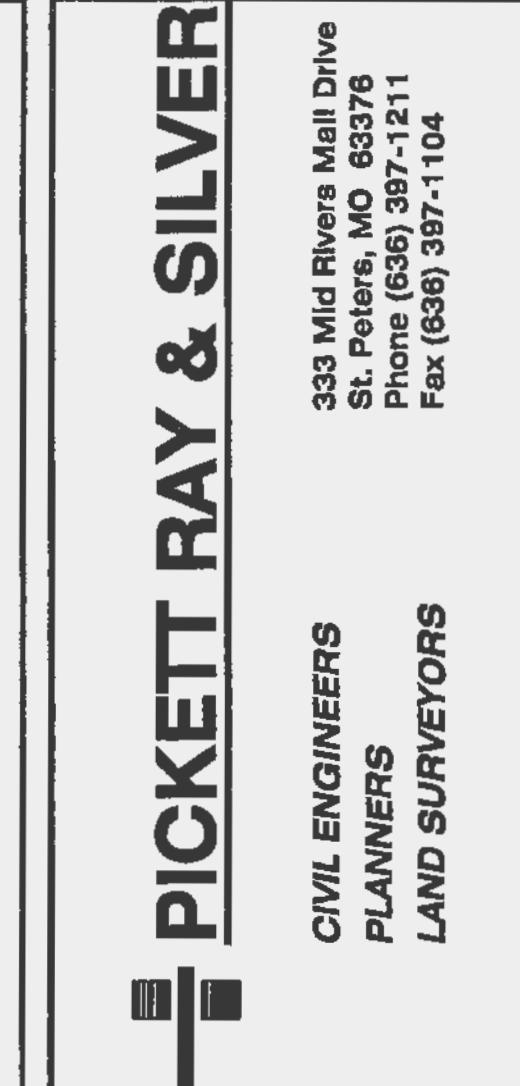
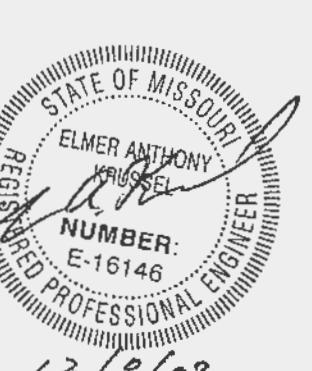
BM: CHISELED CROSS (+) ON NORTHWEST WINGWALL ON U.S. HIGHWAY 40-61 BRIDGE WESTBOUND LANES OVER PERUQUE CREEK AT SOUTH END OF LAKE SAINT LOUIS.

ELEVATION = 508.91

## SITE BENCH MARK

BM: CHISELED CROSS (+) ON SIDEWALK OF SOUTHEAST CORNER AT INTERSECTION OF LAKE SAINT LOUIS BOULEVARD AND FOX HOUND DRIVE.

ELEVATION = 581.24



REVISIONS	DESCRIPTION	BY	MK
1	PER COMMENTS CITY OF LAKE ST. LOUIS		
2	PER COMMENTS CITY OF LAKE ST. LOUIS		
3	PER COMMENTS CITY OF LAKE ST. LOUIS		

DRAWN	CSA	DATE
CHECKED	EAK	8/25/03

PROJECT #	FIELD
90055.TAMO.00R	X

SHEET	OF
1	23



# PICKETT RAY & SILVER

**CIVIL ENGINEERS  
PLANNERS  
LAND SURVEYORS**

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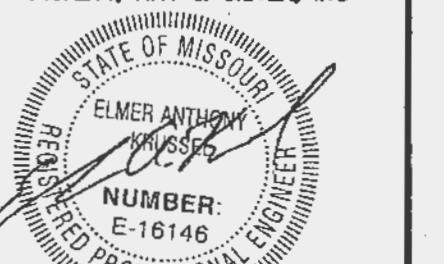
# BRECKENRIDGE FLAT PLAN

Prepared For:



TAYLOR  
H

**EEERS AUTHENTICATION**  
The responsibility for professional  
engineering liability on this project  
is hereby limited to the set of plans  
authenticated by the seal, signature,  
date hereunder attached.  
Responsibility is disclaimed for all  
other engineering plans involved in  
the project and specifically excludes  
those after this date unless  
reauthenticated.



AWN	DATE
DKL	08/25/03
ECKED	DATE
EAK	08/25/03
JECT # 90055TAMO.00R	
K # 7	FIELD BOOK X

**BRECKENRIDGE  
FLAT PLAN**

GRAPHIC SCALE  
( IN FEET )  
1 inch = 50 ft.

25' BUFFER/SCREENING EASEMENT  
TO BE MAINTAINED BY THE  
HOME OWNERS ASSOCIATION

NOTE:  
LOT AREAS SHOWN ARE  
PRELIMINARY SUBJECT TO  
CHANGE WHEN PLAT IS  
RECORDED



## BRECKENRIDGE FLAT PLAN

Prepared For:  
**TAYLOR MORLEY HOME**



## PICKETT RAY & SILVER

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REVISIONS		
NO.	DATE	PER COMMENTS CITY OF LAKE ST. LOUIS
1	10/22/03	PER COMMENTS CITY OF LAKE ST. LOUIS
2	11/21/03	PER COMMENTS CITY OF LAKE ST. LOUIS
3	12/05/03	PER COMMENTS CITY OF LAKE ST. LOUIS

ENGINEERS AUTHENTICATION  
The responsibility of the professional engineer's liability on this project is hereby limited to the set of plans authenticated by the seal, signature, and date hereunder attached.  
For liability of the engineer on all other engineering plans involved in this project and specifically excludes revisions after this date unless reauthenticated.



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EAK	08/25/03
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TASK # 7	
FIELD	
BOOK X	

BRECKENRIDGE FLAT PLAN

SHEET 3 OF 23

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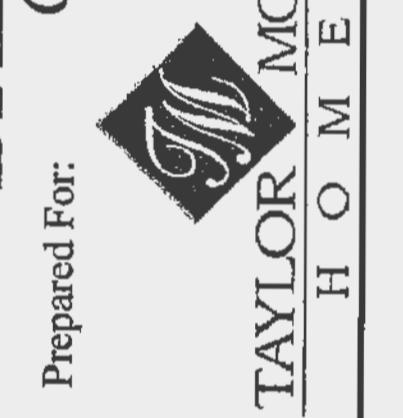
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# BRECKENRIDGE

## GRADING PLAN

Prepared For:



PREVISIONS	
NO.	DATE
1	10/22/03
2	11/21/03
3	12/09/03

PER COMMENTS CITY OF LAKE ST. LOUIS  
PER COMMENTS CITY OF LAKE ST. LOUIS  
PER COMMENTS CITY OF LAKE ST. LOUIS

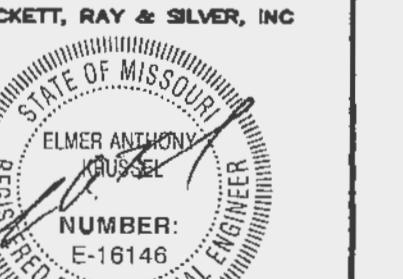
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GRADING PLAN

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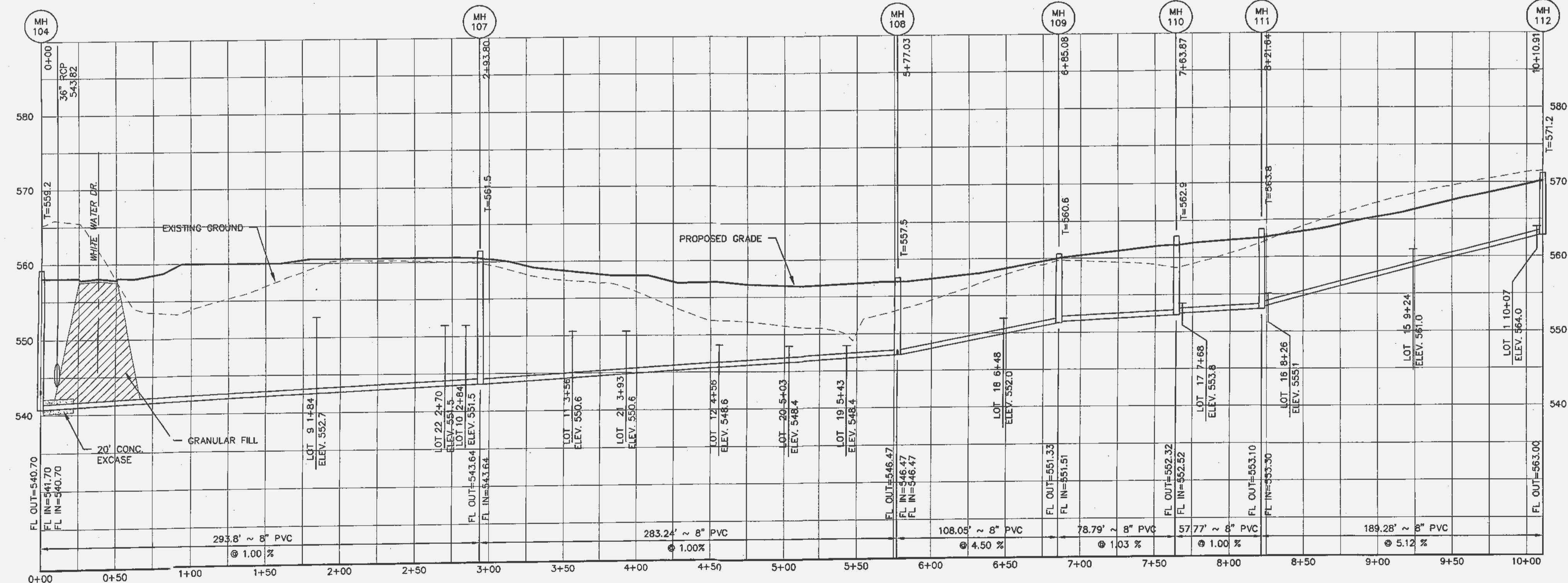
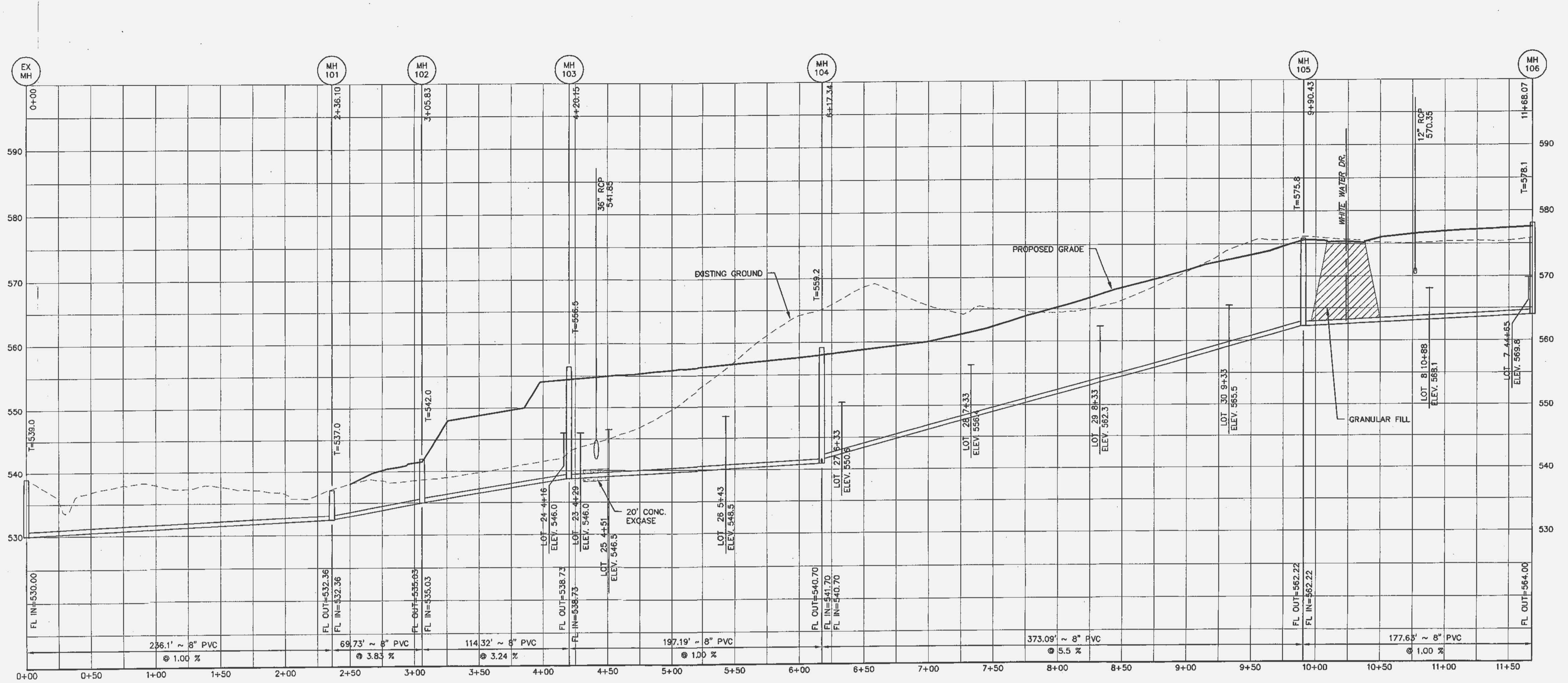
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STATE OF MISSOURI  
ELMER ANTHONY  
NUMBER: E-16146  
LICENSED PROFESSIONAL ENGINEER  
08/01/03







**PICKETT RAY & SILVER**  
**CIVIL ENGINEERS**  
**PLANNERS**  
**LAND SURVEYORS**  
**2001 AMERICA'S BEST BUILDER**  
**TAYLOR MORLEY HOMESES**

BRECKENRIDGE  
 Prepared For: SANITARY SEWER PROFILES

REVISIONS  
 NO. DATE  
 DRAWN RDW DATE 08/25/03  
 CHECKED EAK DATE 08/25/03  
 PROJECT # 90055TAM000R  
 TASK # 7 FIELD BOOK X

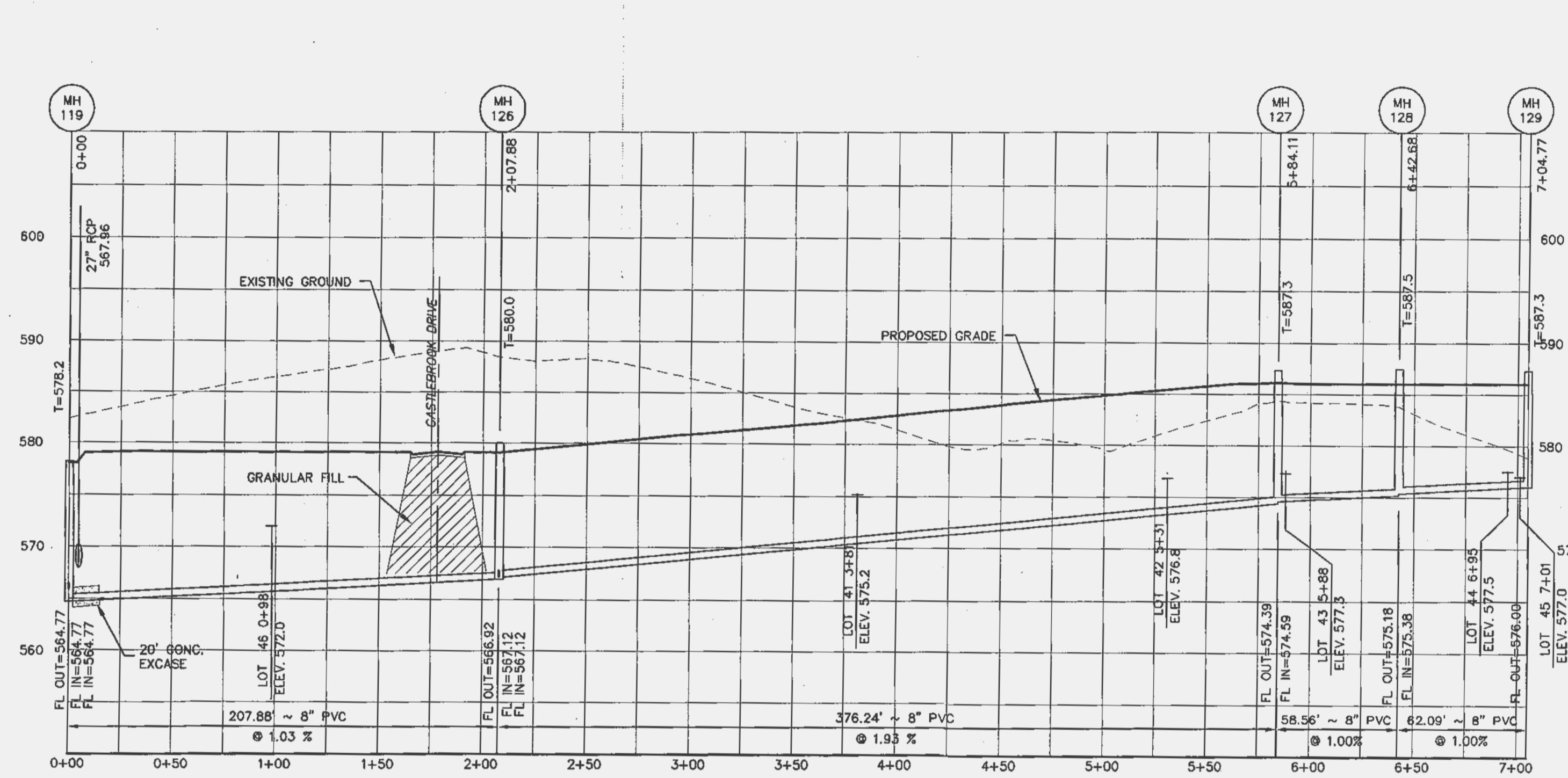
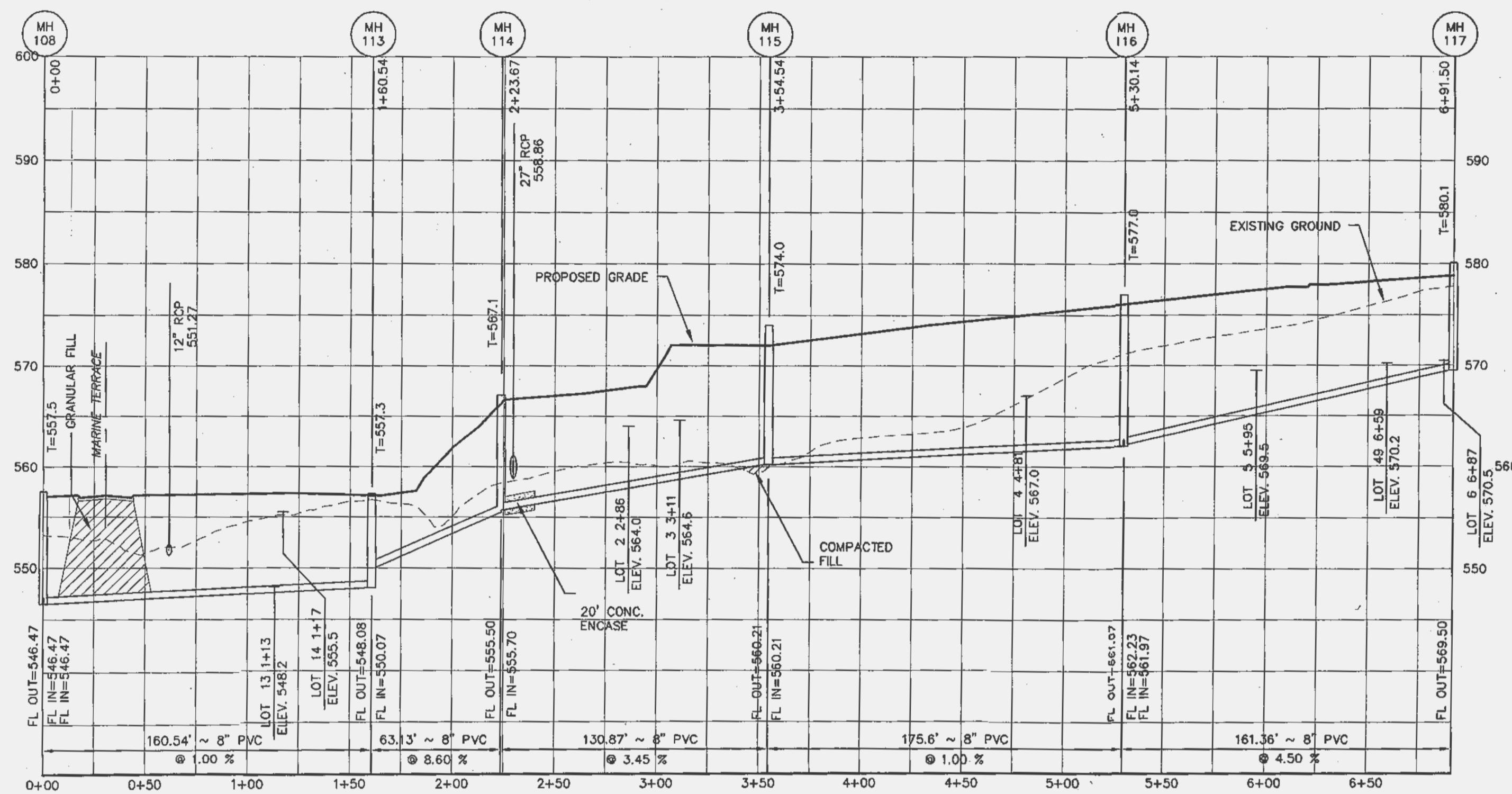
BRECKENRIDGE  
 SANITARY PROFILES

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 (636) 454-2000

SCALE: 1"=10' VERTICAL  
1"=50' HORIZONTAL



# BRECKENRIDGE

# BRECKENRIDGE

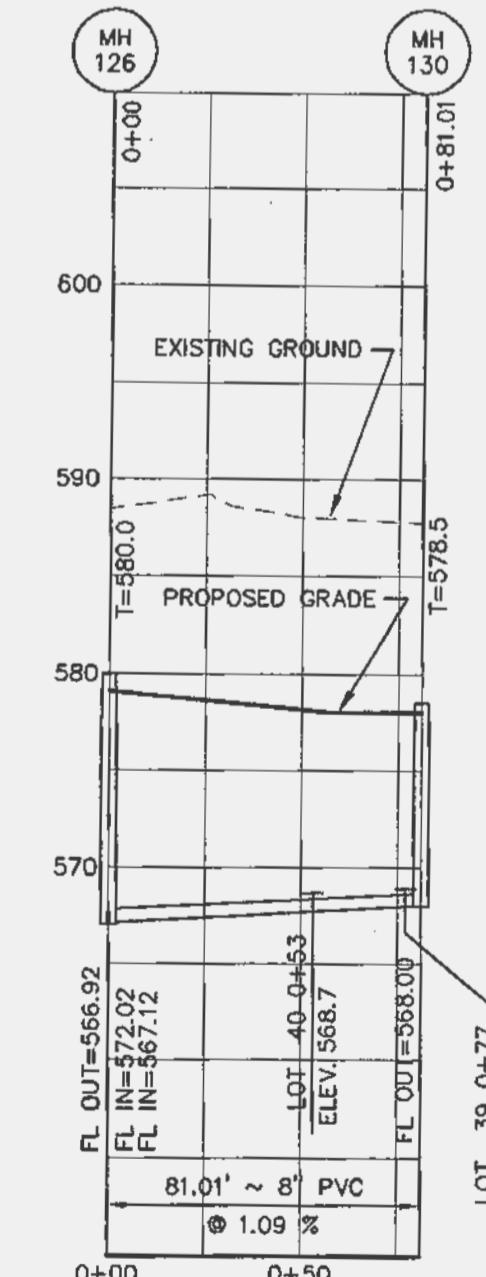
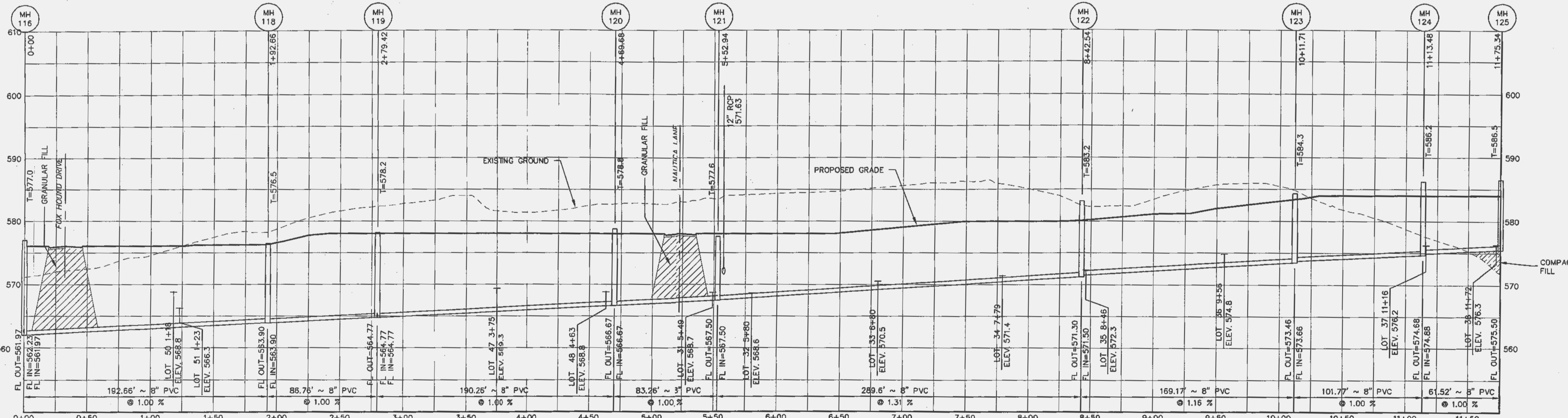


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The logo consists of a diamond shape containing the text "2001 AMERICA'S BEST SEWER PROFILES". The word "AMERICA'S" is written vertically along the left side of the diamond. The year "2001" is positioned above the word "AMERICA'S". The word "BEST" is written vertically along the right side of the diamond. Below the diamond, there is a decorative banner with the words "STAINLESS STEEL" and "SEWER PIPE" repeated twice.



DRAWN RDW	DATE 08/25/03
CHECKED EAK	DATE 08/25/03
PROJECT # 90055TAM000R	
TASK # 7	FIELD X BOOK

BRECKENRIDGE  
SANITARY PROFILES